OS/390

MVS System Messages
Volume 1 (ABA - ASA)

GC28-1784-09

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Note

Before using this information and the product it supports, be sure to read the general information under Appendix A, “Notices” on page A-1.

Tenth Edition, December 1999

This is a major revision of GC28-1784-08.

This edition applies to OS/390 Version 2 (5647-A01), OS/390 Version 1 (5645-001), MVS/ESA System Product Version 5 (5655-068 or 5655-069), and to all subsequent releases and modifications until otherwise indicated in new editions.

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- Title and order number of this book
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About This Book

The MVS System Messages books primarily describe messages that are issued to the system operator at the system console and system messages that are logged. These include:

- Operator messages issued by the BCP and DFSMS/MVS.
- Log messages issued by the BCP and DFSMS/MVS.
- Some SYSOUT messages issued by the BCP and DFSMS/MVS. SYSOUT messages are issued by utilities that normally run in batch, such as SPZAP.
- Batch job messages issued by the BCP. Messages issued by JES2 or JES3 for batch jobs are in the JES messages books.

For the most part, messages issued at interactive terminals (like TSO/E and CICS terminals) are documented by the specific elements and products that support those terminals.

The titles of the MVS System Messages books indicate the range of message prefixes in the books:

- *OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
- *OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
- *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
- *OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787
- *OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788

If you do not know which book describes a particular message, try searching the messages and codes bookshelf. Here are some of the books on that bookshelf:

- The MVS System Messages books
- *OS/390 MVS Dump Output Messages*, GC28-1749
- *OS/390 MVS System Codes*, GC28-1780
- *OS/390 MVS Routing and Descriptor Codes*, GC28-1778
- *OS/390 HCD Messages*, GC28-1849
- *OS/390 JES2 Messages*, GC28-1796
- *OS/390 JES3 Messages*, GC28-1804
- *OS/390 TSO/E Messages*, GC28-1978
- *OS/390 UNIX System Services Messages and Codes*, SC28-1908

For a list of message books sorted by message prefix, see “Message Directory” on page viii.

Who Should Use These MVS System Messages Books

The system messages books are for all people who receive messages from the system. Usually, these people are system operators, system programmers, and application programmers who do any of the following tasks:

- Initialize the operating system and its subsystems
- Monitor system activity
- Keep the system running correctly
- Diagnose and correct system problems
- Diagnose and correct errors in problem programs

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How to Use These Books

The system messages books contain descriptions of messages, along with the following:

- “Message Library” on page viii tells how to create a customized message library
- “Message Directory” on page viii lists all message prefixes and the books containing the message descriptions
- “Introduction” on page INTRO-1 describes how the system issues messages, where it places them, and their formats

Message Descriptions: Message chapters are arranged alphabetically by the message prefixes. In each chapter, the messages are arranged numerically by the numbers following the prefix. The description for each message:

- Explains why the system issued the message.
- Identifies the component, subsystem, or product issuing the message.
- Describes the actions taken by the system.
- Suggests actions that the operator, user, application programmer, or system programmer can take, if appropriate, in response to the message.

The system programmer responses assume that the programmer has performed the customary diagnosis described in the *OS/390 MVS Diagnosis: Procedures*.

Where to Find the Most Current Message Information

The MVS System Messages books are cumulative. As messages are added to the system they are added to the books. Similarly, when messages are changed on the system, they are changed in the books. However, when a message is deleted from the system (no longer issued), the message is *not* deleted from the book. This means that users can look in the most recent message books for the most current descriptions of system messages.

To find the most current edition of a book, you can look on the Web. Point your browser to the OS/390 home page and click on the Library icon:

`http://www.ibm.com/s390/os390/`

When you are in the OS/390 library area, use the messages and codes database to search for the message ID you are interested in.

Where to Find More Information

Many message descriptions refer to:

- **Data areas and control blocks**: See *OS/390 MVS Data Areas, Vol 1 (ABEP-DALT)*, *OS/390 MVS Data Areas, Vol 2 (DCCB-ITTCTE)*, *OS/390 MVS Data Areas, Vol 3 (IVT-RCWK)*, *OS/390 MVS Data Areas, Vol 4 (RD-SRRA)*, and *OS/390 MVS Data Areas, Vol 5 (SSAG-XTLST)*.
- **Dumps**: For examples of ABEND, stand-alone, and SVC dumps and how to read them, see *OS/390 MVS Diagnosis: Tools and Service Aids*. For examples of component output from dumps LY28=1813 --> and how to read and request it, see *OS/390 MVS Diagnosis: Reference*.
- **Identification of a component, subsystem, or product**: See the *OS/390 MVS Diagnosis: Reference* to identify the component, subsystem, or product from the name of an IBM module or for a macro. The module prefix and macro tables give the program identifier to be used in a PIDS symptom in a search argument.
- **System completion and wait state codes**: See *OS/390 MVS System Codes*.
- **Logrec data set error records**: For the formatted records, see *OS/390 MVS Diagnosis: Reference*.

- **Trace output**: For the formats and the meaning of the information in the generalized trace facility (GTF) trace, instruction address trace, master trace, system trace, and component trace, see *OS/390 MVS Diagnosis: Tools and Service Aids.*

The following tables list books that contain information related to the information contained in the MVS System Messages books. For the titles and order numbers of books not in the tables, see the *OS/390 Information Roadmap*.

Use the appropriate *Principles of Operation* book for the hardware you have installed.

When the MVS System Messages books reference information in other books, the shortened version of the book title is used. The following tables show the complete titles and order numbers of the books that you might need while you are using the MVS System Messages books.

Subsystem, Product, and Hardware Books

Title	Order Number
ACF/TCAM Base Installation Guide	SC30-3132
Asynchronous Adapter Device Driver Table	N/A
C/370 Programming Guide	N/A
CICS Family: General Information	N/A
CICS Recovery and Restart Guide	SC33-1698
Common I/O-Device Commands	SA22-7204
CPI Communications Reference	SC26-4399
DATABASE 2 Application Programming Guide	SC26-4293
DFSMS/MVS DFSMSdfp Diagnosis Reference	LY27-9606
DB2 Application Programming Guide for TSO and Batch Users	SC26-4081
DATABASE 2 General Information Manual	GC26-4073
IBM DATABASE 2 Messages	SC23-0592
IBM DATABASE 2 Version 2 Messages and Codes	SC26-4113
IBM DATABASE 2 Version 2 Release 3 Messages and Codes	SC26-4379
IBM Graphics Access Method/SP Messages and Codes	SC33-0143
ES/9000: Operating Your System	SA24-4350
FileNet OSAR Library Unit Product Description	PN9000102
IBM 3290 Information Panel Description and Reference	SR23-6155
IBM 3990/9390 Operations and Recovery Guide	GA32-0253
IBM 3990/9390 Storage Contro Planning, Installation, and Storage Administration Guide	GA32-0100
IBM 3990 Storage Control Reference for Model 6	GA32-0099
IBM 9340 Direct Access Storage Subsystems Reference	GC26-4647
*LASERDRIVE** 1200 Engineering Specification*	N/A
*LASERDRIVE** 1200 Intelligent Digital Optical Disk Drive with SCSI Engineering Specification*	N/A
Maintaining IBM Storage Subsystem Media	GC26-4495
Maintenance Information for the 9037 Sysplex Timer	SY27-2605
Maintaining IBM Storage Subsystem Media	GC26-4495
OS/2 Programming Tools and Info V-1.3 Manage Macro Assembler/2	Z91F-9269
OS/2 WARP Control Program Programming Reference	N/A
Portable Netware System Messages	SC23-2424
Print Services Access Facility/MVS User's Guide and Reference	S544-3100

Title	Order Number
IBM Enterprise Systems Architecture/390 Principles of Operation	SA22-7201
Remote Copy Administrator's Guide and Reference	SC35-0169
SCSI Adapter Completion Code Table	N/A
RT SCSI Adapter Device Driver Table	N/A
Sysplex Timer 9037 Maintenance	SY27-2605
VM/ESA CP Command and Utility Reference	SC24-5519
VM/ESA General User Command Reference	SC24-5433

Message Library

The message library is designed so that operators and programmers in an installation can build their own libraries of the message and code information that fits their specific needs. Each person can place into binders the chapters and books containing only the messages and codes he or she could receive.

Basic Books

Each installation requires at least one copy of each of the MVS System Messages books and of *OS/390 MVS Dump Output Messages*. Regardless of your specific system's options, you will receive at the console or in listings some subset of the messages in these books.

Each installation also requires at least one copy of *OS/390 MVS System Codes*, which contains the 3-digit hexadecimal system completion codes (abend codes) and the wait state codes produced by all the components of the system.

Note: 4-digit decimal user completion codes appear in books for the component, subsystem, or product that produces the codes. Codes produced by installation-provided programs do not appear in IBM books.

All programming and operations personnel need access to the basic books, although application programmers might not need to have their own copies.

Optional Books

| For information about message changes for multiple OS/390 elements including JES2, JES3, RACF, TCP/IP, and others, see *OS/390 Summary of Message Changes*.

An installation's system programmer needs *OS/390 MVS Routing and Descriptor Codes* for the routing and descriptor codes for the messages that have these codes.

CD-ROM Collection

A comprehensive source of messages for IBM products is contained in the *IBM Online Library Productivity Edition: Messages and Codes Collection, SK2T-2068*.

Message Directory

To use a message prefix to locate the book containing a specific message, see the following table.

Prefix	Component	Book Title - Order Number
ABA	DFSMShsm	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
ACP	LANRES	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
ADF	Time Sharing Option Extensions (TSO/E) session manager	*OS/390 TSO/E User's Guide*, SC28-1968 *OS/390 TSO/E Command Reference*, SC28-1881 *OS/390 TSO/E Messages*, GC28-1978

Prefix	**Component**	**Book Title - Order Number**
ADM	Graphical data display manager	*GDDM Messages*, SC33-0869
ADR	DFDSS	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
ADRY	DFDSS	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
ADY	Dump analysis and elimination (DAE)	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
AEM	Graphical data display manager	*GDDM Messages*, SC33-0869
AFB	VSFORTRAN	*VSFORTRAN Version 2 Language and Library Reference*, SC26-4221
AHL	Generalized trace facility (GTF)	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784 *OS/390 MVS Dump Output Messages*, GC28-1749
AMA	SPZAP service aid	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
AMB	LIST service aid	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
AMD	Stand-alone dump	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
AMS	Availability manager	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784 *RMF Messages and Codes*, GC28-1948
ANT	Remote Copy	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
ANF	Starting with Release 8: Infoprint Server	*OS/390 Infoprint Server Messages and Diagnosis*, G544-5690
AOF	System Automation for OS/390	*System Automation for OS/390 Messages and Codes*, GC28-1569
AOM	Administrative operations manager	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
AOP	Infoprint server	*OS/390 Infoprint Server Messages and Diagnosis OS/390 Infoprint Server Messages and Diagnosis*, G544-5690
API	Starting with Release 8: Infoprint Server	*OS/390 Infoprint Server Messages and Diagnosis*, G544-5690
APS	Print services facility (PSF)	*Print Services Facility Messages*, S544-3675
ARC	DFSMShsm	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
ARRP	System Control Program (SCP)	See message 52099 in *Enterprise System/9000 Models 190, 210, 260, 320, 440, 480, 490, 570, and 610 Messages Part 2* for a complete message explanation and appropriate responses; see GA23-0378
ASA	MVS Reuse	*OS/390 MVS System Messages, Vol 1 (ABA-ASA)*, GC28-1784
ASB	Advanced Program-to-Program Communications/MVS (APPC/MVS)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749

Prefix	Component	Book Title - Order Number
ASD	LANRES	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
ASM	Auxiliary storage manager (ASM)	*OS/390 MVS Dump Output Messages*, GC28-1749
ASMA	High Level Assembler for MVS & VM & VSE	*HLASM Programmer's Guide*, SC26-4941
ASR	Symptom record (SYMREC)	*OS/390 MVS Dump Output Messages*, GC28-1749
ATB	Advanced Program-to-Program Communications/MVS (APPC/MVS)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749
ATR	Resource recovery services (RRS)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749
AVM	Availability manager	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
BFS	IBM LAN server for MVS	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
BLG	Information System, Information Management	*The Information/Management Library Messages and Codes*, SC34-4459
BLM	Information System, Information Management	*The Information/Management Library Messages and Codes*, SC34-4459
BLS	Interactive problem control system (IPCS)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749
BLX	Information System, Information Management	*The Information/Management Library Messages and Codes*, SC34-4459
BLW	Loadwait/Restart	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
BNH	Network Problem Determination Application (NPDA)	*NPDA Messages*, SC34-2115
BPX	UNIX System Services	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749
CBDA	Hardware configuration definition (HCD)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 HCD Messages*, GC28-1849
CBR	Object access method (OAM)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
CEE	Language Environment	*OS/390 Language Environment Debugging Guide and Run-Time Messages*, SC28-1942
CHS	MVSSERV messages for the user and system programmer	*OS/390 TSO/E Messages*, GC28-1978
CMP	Compression management services	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785

Prefix	Component	Book Title - Order Number
CNL	MVS message service (MMS)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749
COF	Virtual lookaside facility (VLF)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749 *OS/390 TSO/E Messages*, GC28-1885
CSQ	MQSeries	*MQSeries for OS/390 V2R1 Messages and Codes*, GC34-5375
CSR	Callable services requests (CSR)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749
CSV	Contents supervision, virtual fetch, fetch	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749
CSY	OPC/A Production Control System	*OPC/A Messages*, SH19-6448
CSZ	OPC/A Network Event Communicator	*OPC/A Messages*, SH19-6448
DFH	Customer Information Control System/Virtual Storage (CICS/VS)	*CICS/ESA Messages and Codes*, SC33-0672
DMO	Device Manager	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *OS/390 MVS Dump Output Messages*, GC28-1749
DQD	Cache RMF Reporter (CRR)	*Cache RMF Reporter Program Description/Operations Manual*, SH20-6295
DRK	OPC/A Event Manager Subsystem	*OPC/A Messages*, SH19-6448
DSI	NetView	*TME 10 NetView for OS/390 Messages*, SC31-8237
DSM	Document Composition Facility	*DCF: Messages*, SH35-0048
DSM	Document Library Facility	*DCF: Messages*, SH35-0048
DSN	Database 2	*DB2 Universal Database for OS/390 Messages and Codes*, GC26-9011
DZI	Overlay Generation Language	*IBM Overlay Generation Language/370 User's Guide and Reference*, S544-3702
DZJ	Print Management Facility	*Print Management Facility User's Guide and Reference*, SH35-0059
EDC	C/C++ Run-time Library	*OS/390 Language Environment Debugging Guide and Run-Time Messages*, SC28-1942
EDG	DFSMSrmm	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
EQQ	OPC/ESA	*OPC/ESA Messages and Codes*, SH19-6719

Prefix	**Component**	**Book Title - Order Number**
ERB	Resource Measurement Facility (RMF)	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785 *RMF Messages and Codes*, GC28-1948
ERX	Graphical data display manager	*GDDM Messages*, SC33-0869
EWX	LANRES	*OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
EZA	OS/390 SecureWay Communication Server — IP	*OS/390 eNetwork Communications Server: IP Messages, Vol 1*, SC31-8517
EZB	OS/390 SecureWay Communication Server — IP	*OS/390 eNetwork Communications Server: IP Messages, Vol 2*, SC31-8570
EZM	Application Enabling Technology (AET)/Auto UNIX System	*OS/390 Application Enabling Technology: Administration and Programming*, GC28-1993 *OS/390 Application Enabling Technology: Customization Guide*, GC28-1994 *OS/390 MVS System Messages, Vol 2 (ASB-EZM)*, GC28-1785
EZY	OS/390 SecureWay Communication Server — IP	*OS/390 eNetwork Communications Server: IP Messages, Vol 3*, SC31-8674
EZZ	OS/390 SecureWay Communication Server — IP	*OS/390 eNetwork Communications Server: IP Messages, Vol 3*, SC31-8674
FLM	Software configuration and library manager	*OS/390 ISPF Messages and Codes*, GC28-1326
FOR	LE FORTRAN Library	*IBM Language Environment for MVS & VM FORTRAN Run-Time Migration Guide*, SC26-8499
GDE	Distributed FileManager/MVS (DFM/MVS)	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
GFSA	Network File System Server	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
GFSC	Network File System Server Client Messages	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
GIM	SMP/E	*OS/390 SMP/E Messages and Codes*, SC28-1738
GQD	Graphical data display manager	*GDDM Messages*, SC33-0869
GQF	Graphical data display manager	*GDDM Messages*, SC33-0869
HASP	JES2, network job entry facility for JES2	*OS/390 JES2 Messages*, GC28-1796
IAR	Real storage manager (RSM)	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786 *OS/390 MVS Dump Output Messages*, GC28-1749
IAT	JES3	*OS/390 JES3 Messages*, GC28-1804
ICE	DFSORT sort program	*DFSORT Messages, Codes and Diagnosis Guide R14*, SC26-7050
ICH	Resource Access Control Facility (RACF)	*OS/390 Security Server (RACF) Messages and Codes*, SC28-1918
ICK	Device Support Facilities	*Device Support Facilities User's Guide and Reference*, GC35-0033
ICN	NCP/SSP/EP	*NCP/SSP/EP Messages and Codes*, SC30-3169

Prefix	Component	Book Title - Order Number
ICP	Input/Output Configuration Program (IOCP)	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786 *Input/Output Configuration Program User's Guide and Reference*, GC28-1027
ICQA	Information Center Facility administrator messages	*OS/390 TSO/E Messages*, GC28-1978
ICQC	Information Center Facility user messages	*OS/390 TSO/E Messages*, GC28-1978
ICT	Programmed Cryptographic Facility	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
ICU	Cryptographic Unit Support	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
IDA	Virtual storage access method (VSAM) control block expansion	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
IDC	Access method devices	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
IEA	• Allocation/unallocation • Auxiliary storage manager (ASM) • Contents supervision • Communications task (COMMTASK) • Data Facility Product (DFP) components • Generalized trace facility (GTF) • Initial program load (IPL) • Input/output supervisor (IOS) • Master scheduler • Nucleus initialization program (NIP) • Program Call authorization (PC/AUTH) service routines • Reconfiguration • Recovery termination manager (RTM) • Supervisor control • System resources manager • System trace • Timer supervision • Virtual storage management (VSM)	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786 *OS/390 MVS Dump Output Messages*, GC28-1749
IEB	Data Facility Product (DFP) utilities	*OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, GC28-1786
IEC	Data Facility Product (DFP) components	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787 *DFSMS/MVS DFSMSdfp Diagnosis Reference*, LY27-9606

Prefix	Component	Book Title - Order Number
IEE	• Auxiliary storage manager (ASM) • Communications task (COMMTASK) • Data Facility Product (DFP) components • JES2 • JES3 • Master scheduler • Reconfiguration • Recovery termination manager (RTM) • Supervisor control • System management facilities (SMF) • System resources manager (SRM) • System trace • Task management • Timer supervision	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787 *OS/390 MVS Dump Output Messages*, GC28-1749
IEF	• Allocation/unallocation • Converter/interpreter • Data Facility Product (DFP) components • Initial program load (IPL) • Initiator/terminator • JES/scheduler services • JES2 • Master scheduler • Master subsystem/subsystem interface (MSI) • Reconfiguration • Scheduler JCL facilities (SJF) • Scheduler restart • Scheduler services (ENF) • System management facilities (SMF)	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787 *OS/390 MVS Dump Output Messages*, GC28-1749
IEFC	Converter	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787
IEFI	Converter/interpreter	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787
IEH	Data Facility Product (DFP) utilities	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787
IEV	Assembler H	*Assembler H Version 2 Application Programming: Guide*, SC26-4036
IEW	Data Facility Product (DFP) linkage editor and loader	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787
IFA	System management facilities (SMF)	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787 *OS/390 MVS Dump Output Messages*, GC28-1749

Prefix	Component	Book Title - Order Number
IFB	Input/output environment recording routines: OBR and SVC 76	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787
IFC	IFCDIP00 service aid for the logrec data set IFCEREP0 and IFCEREP1 service aids	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787 *Environmental Record Editing and Printing Program (EREP) User's Guide and Reference*, GC28-1378
IFD	Online test executive program (OLTEP)	*OS/390 MVS System Messages, Vol 4 (IEC-IFD)*, GC28-1787
IFL	Network Control Program (NCP) Advanced Communications Function (ACF) for Network Control Program (NCP)	*3704 and 3705 Control Program Generation and Utilities Guide and Reference Manual*, GC30-3008 *Network Control Program/System Support Programs/Emulation Programs Messages and Codes*, SC30-3169
IFO	MVS Assembler	*OS/VS - VM/370 Assembler Programmer's Guide*, GC33-4021
IGD	Storage management subsystem (SMS) of Data Facility Product (DFP)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IGF	Dynamic device reconfiguration (DDR) Machine check handler (MCH)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
IGGN	Data Facility Product (DFP)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
IGV	Virtual storage management (VSM)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
IGW	Data Facility Product (DFP) Storage management subsystem (SMS)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IGY	VS COBOL II	*VS COBOL II Application Programming Guide*, SC26-4045
IGZ	VS COBOL II	*VS COBOL II Application Programming: Debugging*, SC26-4049, *OS/390 Language Environment Debugging Guide and Run-Time Messages*, SC28-1942
IHJ	Data Facility Product (DFP) checkpoint/scheduler restart	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
IKF	VS COBOL II	*VS COBOL II Application Programming: Debugging*, SC26-4049
IKJ	Time Sharing Option Extensions (TSO/E)	*OS/390 TSO/E Messages*, GC28-1978 *OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IKM	Programming Language/I (PL/I) syntax checker	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
IKT	Time Sharing Option Extensions (TSO/E) Advanced Communications Function for Virtual Telecommunications Access Method (ACF/VTAM)	*OS/390 TSO/E Messages*, GC28-1978, SC27-0614, SC27-0470, SC23-0114 *VTAM Messages and Codes*, SC31-6333

Prefix	Component	Book Title - Order Number
ILR	Auxiliary storage manager (ASM)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
ILX	VS FORTRAN Compiler	*VS FORTRAN Version 2 Programming Guide for CMS and MVS*, SC26-4222
IHV	System Automation for OS/390	*System Automation for OS/390 Messages and Codes*
ING	System Automation for OS/390	*System Automation for OS/390 Messages and Codes*
ISQ	System Automation for OS/390	*System Automation for OS/390 Messages and Codes*
INM	Interactive Data Transmission Facility (IDTF) TRANSMIT and RECEIVE commands	*OS/390 TSO/E Messages*, GC28-1978
IOP	Input/output configuration program (IOCP)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *ES/3090 Processor Complex IOCP User's Guide and Reference*, SC38-0066
IOS	Input/output supervisor (IOS)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IPD	FORTRAN syntax checker	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
IRA	System resources manager (SRM)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IRD	ESCON Director Device Support (EDDS)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
IRR	Resource Access Control Facility (RACF)	*OS/390 Security Server (RACF) Messages and Codes*, SC28-1918
IRX	Time Sharing Option Extensions (TSO/E) restructured extended executor language (REXX)	*OS/390 TSO/E Messages*, GC28-1978
ISG	Global resource serialization	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
ISN	Service Processor Interface	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
ISP	Interactive system productivity facility	*Interactive System Productivity Facility (ISPF) Messages and Codes*, SC34-4450
ISQ	System Automation for OS/390	*System Automation for OS/390 Messages and Codes*
ISRB	Interactive system productivity facility	*Interactive System Productivity Facility (ISPF) Messages and Codes*, SC34-4450
ISRL	Library management facility	*Interactive System Productivity Facility (ISPF) Messages and Codes*, SC34-4450

Prefix	Component	Book Title - Order Number
IST	Advanced Communications Function for Virtual Telecommunications Access Method (ACF/VTAM)	*Advanced Communications Function for VTAM Messages and Codes*, SC27-0614, SC27-0470, SC23-0114
ITA	TOLTEP for Advanced Communications Function for Virtual Telecommunications Access Method (ACF/VTAM)	*Advanced Communications Function for VTAM Messages and Codes*, SC27-0614, SC27-0470, SC23-0114
ITT	Component trace	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
ITV	Data-in-virtual	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IXC	Cross-system coupling facility (XCF)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IXG	System logger (SCLOG)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788
IXL	Cross System Extended Services (XES)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IXP	Input/output configuration program (IOCP)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *ES/9000 ES/3090 IOCP User's Guide Volume A04*, GC38-0097
IXZ	JES common coupling services (JESXCF)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *OS/390 MVS Dump Output Messages*, GC28-1749
IZP	Input/output configuration program (IOCP)	*OS/390 MVS System Messages, Vol 5 (IGD-IZP)*, GC28-1788 *ES/9000 IOCP User's Guide and ESCON CTC Reference Volume A04*, GC38-0401

Message Translation

Through the MVS message service (MMS), you can translate MVS system messages into other languages. Messages that cannot be translated include the following:

- Initialization messages
- DFSMS/MVS messages
- JES3 messages
- Some complicated multiple-line messages

See *OS/390 MVS Planning: Operations* and *OS/390 MVS Programming: Assembler Services Guide* for information about using the MMS.

Summary of Changes

Summary of Changes
for GC28-1784-09
as Updated December, 1999
online only for SK2T-6700-15

The following changes appear only in the online version of this publication. A vertical bar (|) in the left margin indicates changes to the text and illustrations.

This revision reflects the deletion, addition, or changing of information from service items and maintenance.

Summary of Changes
for GC28-1784-08
OS/390 Version 2 Release 8

This book contains information previously presented in GC28-1784-07, which supports OS/390 Version 2 Release 7.

This book includes terminology, maintenance, and editorial changes. Technical changes or additions to the text and illustrations are indicated by a vertical line to the left of the change.

Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes.

This revision reflects the deletion, addition, or changing of information to support the following APAR:

- OW37106

New Information

The following are the new message identifiers for this major revision:

- AMB188I
- ANTX5119E
- ANTX5120W
- ANTX5121E
- ANTA8123I
- ANTA8124I
- ANTA8125I
- ANTA8126I
- ANTA8127I
- ANTA8128I
- ANTA8129E
- ANTQ8264I
- ANTQ8285I
- ANTX8955I
- ANTX8960I
- ANTX8961I
- ANTX8962I
- ANTX8963I

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- ANTP0010I
- ANTP0012I
- ANTP0013I
- ANTP0090I
- ANTP0091I
- ANTP0095I
- ANTP0096I
- ARC1621I

Changed Information

Changes have been made to the following messages:

- ANTT0022A
- ANTT0025A
- ANTT0028A
- ANTT0039I
- ANTT0040I
- ANTX5000E
- ANTX5001E
- ANTX5011E
- ANTX5106E
- ANTX5108E
- ANTS5110E
- ANTX5112E
- ANTX5115E
- ANTM6000I
- ANTM6001I
- ANTM6002W
- ANTM6003E
- ANTA8004I
- ANTI8023I
- ANTX8030W
- ANTX8032W
- ANTX8050I
- ANTA8101I
- ANTX8119W
- ANTX8120I
- ANTX8121I
- ANTA8122W
- ANTQ8206I
- ANTQ8213I
- ANTQ8216I
- ANTQ8217I
- ANTQ8218I

- ANTQ8231I
- ANTQ8235I
- ANTQ8238I
- ANTQ8239I
- ANTQ8241I
- ANTQ8242I
- ANTQ8243I
- ANTQ8261I
- ANTQ8281I
- ANTQ8282I
- ANTQ8283I
- ANTQ8284I
- ANTX8913I
- ANTX8927I
- ANTX8958I
- ANTP0003I
- ANTP0115I
- ANTP0116I
- ANTP0200I
- ANTP0211I
- ARC0120I
- ARC0134I
- ARC0158I
- ARC0425I
- ARC0436I
- ARC0654I
- ARC1900I
- ARC6164E

Also, the following sections have changes:

- “System Data Mover Return Codes” on page ANT-41
- “SDM Reason Codes from IXFP Errors” on page ANT-60
- Table 19 on page ARC-289

Summary of Changes
for GC28-1784-07
as Updated June, 1999
online only for SK2T-6700-13

The following changes appear only in the online version of this publication. A vertical bar (|) in the left margin indicates changes to the text and illustrations.

This revision reflects the deletion, addition, or changing of information from service items and maintenance, including the following APARs:

- OW37106

Summary of Changes
for GC28-1784-06
OS/390 Version 2 Release 7

This book contains information previously presented in GC28-1784-06, which supports OS/390 Version 2 Release 6.

This book includes terminology, maintenance, and editorial changes.

Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes.

New Information

The following are the new message identifiers for this major revision:

- ADR032W
- ADR474I
- ADR922E
- ADR923W
- ADR960E
- ADR961W
- ANTA8122W
- ANTQ8206I
- ANTQ8216I
- ANTQ8217I
- ANTQ8218I
- ANTQ8238I
- ANTQ8239I
- ANTQ8281I
- ANTQ8282I
- ANTQ8283I
- ANTQ8284I
- ANTT0039I
- ANTT0040I
- ANTX8120I
- ANTX8121I
- ARC0062I
- ARC0338I
- ARC0655I
- ARC0789I
- ARC0791I
- ARC0797I
- ARC0799I
- ARC0990I
- ARC1500I
- ARC1520I
- ARC1521I

- ARC1522I
- ARC1523I
- ARC1524I
- ARC1525I

Changed Information

Changes have been made to the following messages:

- ADR050I
- ADR285E
- ADR337E
- ADR379E
- ADR380E
- ADR385E
- ADR416E
- ADR473E
- ADR778E
- ADRY1711I
- AHL102A
- AHL103I
- AHL104A
- AHL105A
- AHL106A
- AHL107A
- AHL108A
- AHL109A
- AHL110A
- AHL111A
- AHL112A
- AHL113A
- AHL114A
- AHL115A
- AHL116A
- AHL117A
- AHL120A
- AHL124I
- AHL125A
- AHL126A
- AHL135A
- AHL140D
- AHL141D
- AHL142D
- AHL143D
- AHL144D

- AMA106I
- AMD095I
- ANTA8004I
- ANTA8101I
- ANTM6000I
- ANTM6001I
- ANTM6002W
- ANTM6003E
- ANTP0003I
- ANTP0116I
- ANTP0211I
- ANTQ8213I
- ANTQ8235I
- ANTQ8241I
- ANTQ8242I
- ANTQ8243I
- ANTS5110E
- ANTX5108E
- ANTX5112E
- ARC0032I
- ARC0103I
- ARC0120I
- ARC0123I
- ARC0125I
- ARC0130I
- ARC0132I
- ARC0142I
- ARC0143I
- ARC0161I
- ARC0167I
- ARC0241I
- ARC0242I
- ARC0245I
- ARC0271I
- ARC0310A
- ARC0405I
- ARC0425I
- ARC0500I
- ARC0505D
- ARC0570I
- ARC0640I
- ARC0643I
- ARC0650I

- ARC1008I
- ARC1110I
- ARC1207I
- ARC1247I
- ARC1316I
- ARC1347I
- ARC1396I
- ARC6158E

Also, the following sections have changes:

- “System Data Mover Return Codes” on page ANT-41
- “SDM Reason Codes from IXFP Errors” on page ANT-60
- Table 13 on page ARC-286
- Table 14 on page ARC-287
- Table 19 on page ARC-289

Summary of Changes for GC28-1784-06 OS/390 Version 2 Release 6

This book contains information previously presented in GC28-1784-04, which supports OS/390 Version 2 Release 5.

This book includes terminology, maintenance, and editorial changes.

Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes.

This revision reflects the deletion, addition, or changing of information to support the following APAR:

- OW08005

New Information

The following are the new message identifiers for this major revision:

- ARC0789I
- ARC0791I
- ARC0797I
- ARC6179E
- ARC6327E
- ASA100I
- ASA104I

Changed Information

Changes have been made to the following messages:

ARC0012I
Explanation has changed.

ARC0024I
System action and programmer response have changed.

ARC0033E
Explanation has changed.

ARC0099E
System programmer response has changed.

ARC0152I
Message text has changed.

ARC0158I
Message text and explanation have changed.

ARC0159I
Message text has changed.

ARC0161I
Message text and explanation have changed.

ARC0167I
Explanation has changed.

ARC0241I
Message text has changed.

ARC0715I
Message text and explanation have changed.

ARC0744E
Explanation has changed.

ARC0791I
Explanation has changed.

ARC0797I
Explanation has changed.

ARC0948I
Message text has changed.

ARC1008I
Explanation has changed.

ARC1112I
System programmer response has changed.

ARC1155I
Explanation has changed.

ARC1158I
Explanation has changed.

ARC1199I
Programmer response has changed.

ARC6191E
Explanation has changed.

As part of the name change of OpenEdition to OS/390 UNIX System Services, occurrences of OpenEdition have been changed to OS/390 UNIX System Services or its abbreviated name, OS/390 UNIX.

Summary of Changes for GC28-1784-04 OS/390 Version 2 Release 5

This book contains information previously presented in GC28-1784-03, which supports OS/390 Version 2 Release 4.

This book includes terminology, maintenance, and editorial changes.

Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes.

This revision reflects the deletion, addition, or changing of information to support the following APARs:

- OW08005

New Information

The following are the new message identifiers for this major revision:

- ADR049E
- ADR806I
- ADR823W
- ANTT0009I
- ANTT0014I
- ANTT0015I
- ANTT0023I
- ANTT0027I
- ANTT0028A
- ANTI5013E
- ANTX5108E
- ANTX5117E
- ANTX5118E
- ANTM6000I
- ANTM6001I
- ANTM6002W
- ANTM6003E
- ANTA8004I
- ANTX8118I
- ANTX8119W
- ANTQ8215I
- ANTX8904I
- ANTX8922I
- ANTX8923I
- ANTX8928I
- ANTX8932I
- ANTX8937I
- ANTX8938I
- ANTX8939I
- ANTX8958I
- ANTX8959I
- ANTP0009I
- ANTP0011I

- ANTP0025I
- ANTP0030I
- ANTP0050I
- ANTP0080I
- ANTP0122I
- ARC0572I
- ARC0654I
- ARC0789I
- ARC0791I
- ARC0797I
- ARC0812I
- ARC0849I
- ARC0875I

Changed Information Changes have been made to the following topics:

- **Where to Find More Information**
- **Subsystem, Product, and Hardware Books**
- **Message Directory**
- **XRC Return Codes**
- **XRC System Codes**

The following are the changed message identifiers for this major revision, including a *portion* of the message text and an explanaton of the change made to the message:

ADR148I
Explanation has changed.

ADR299E
System programmer response has changed.

ADR322E
Explanation has changed.

ADR348E
Explanation has changed.

ADR367E
Explanation has changed.

ADR389E
Message and explanation have changed.

ADR427E
Message and system action have changed.

ADR466E
Message, explanation, and system programmer response have changed.

ADR468E
Explanation and system programmer response have changed.

ADR475I
System action has changed.

ADR701E
Explanation and system action have changed.

ADR707E
Programmer response has changed.

ADR732E
Explanation has changed.

ADR735W
Explanation, programmer response, and system action have changed.

ADR736E
Explanation has changed.

ADR739E
System action has changed.

ADY002I
Explanation has changed.

AHL088I
System programmer response has changed.

AMD048I
Explanation, system action, and operator response have changed.

ANTT0010II
Explanation and system programmer response have changed.

ANTT0017I
Explanation and system programmer response have changed.

ANTT0019I
Explanation and system programmer response have changed.

ANTT0030I
Explanation has changed.

ANTT0034I
Explanation has changed.

ANTT0035I
Explanation has changed.

ANTU2513I
Explanation has changed.

ANTU2514W
Explanation has changed.

ANTX5000E
Explanation and system action have changed.

ANTX5001E
System programmer response has changed.

ANTX50002E
Explanation has changed.

ANTX5011E
Explanation and system programmer response have changed.

ANTX5020E
Message has changed.

ANTX5027W
Explanation and system programmer response have changed.

ANTS5100E
Message and system programmer response have changed.

ANTX5105E
System programmer response has changed.

ANTX5106E
Explanation and system programmer response have changed.

ANTX5113W
Explanation has changed.

ANTX5114W
Explanation and system programmer response have changed.

ANTX5115E
System programmer response has changed.

ANTX5116E
Explanation has changed.

ANTE8008I
Explanation has changed.

ANTI8023I
Explanation has changed.

ANTI8024I
Explanation has changed.

ANTD8025I
Explanation has changed.

ANTX8030W
System programmer response has changed.

ANTX8032W
System programmer response has changed.

ANTX8052I
Explanation, system action, and system programmer response have changed.

ANTX8053I
Explanation has changed.

ANTS8100I
Message and explanation have changed.

ANTA8101I
Message has changed.

ANTR8102I
Explanation has changed.

ANTX8104I
Message has changed.

ANTE8105I
Message has changed.

ANTE8106I
Message has changed.

ANTR8108I
Explanation has changed.

ANTV8109I
Message has changed.

ANTV8110I
Message has changed.

ANTX8111I
Message has changed.

ANTX8112I
Message has changed.

ANTX8113I
Message has changed.

ANTV8114I
System programmer response has changed.

ANTV8115I
Message has changed.

ANTX8117I
Explanation has changed.

ANTQ8201I
Message has changed.

ANTQ8202I
Message has changed.

ANTQ8213I
Explanation has changed.

ANTQ8214I
Explanation has changed.

ANTQ8231I
Explanation has changed.

ANTQ8233I
Message has changed.

ANTQ8235I
Explanation has changed.

ANTQ8236I
Message has changed.

ANTQ8237I
Explanation has changed.

ANTQ8243I
Explanation has changed.

ANTQ8261I
Explanation has changed.

ANTQ8262I
Explanation has changed.

ANTX8913I
Explanation and system programmer response have changed.

ANTX8914I
Explanation has changed.

ANTX8918I
Explanation has changed.

ANTX8924I
Explanation has changed.

ANTX8927I
Explanation and system action have changed.

ANTX8936I
Message, explanation, system action, and system programmer respone have changed.

ANTX8950I
System action has changed.

ANTX8956I
Explanation has changed.

ANTX8957I
Explanation has changed.

ANTP0001I
System programmer response has changed.

ANTP0119I
System programmer response has changed.

ANTP0200I
Explanation has changed.

ARC0161I
Message and explanation have changed.

ARC0167I
Message and explanation have changed.

ARC0260I
Message, explanation, and application programmer response have changed.

ARC0500I
Message, explanation, and application programmer response have changed.

ARC0503I
Message and explanation have changed.

ARC0506I
Message and explanation have changed.

ARC0507I
Explanation has changed.

ARC0635I
Explanation has changed.

ARC0752I
Message, system action, and application programmer response have changed.

ARC0837I
Message has changed.

ARC1008I
Message and explanation have changed.

ARC1188I
Explanation and application programmer response have changed.

ARC6004I
Explanation has changed.

ARC6024I
Explanation has changed.

ARC6164E
Message and explanation have changed.

Deleted Information

The following are the deleted message identifiers for this major revision:

- ADR501W
- ADR502A
- ADR503A
- ADR504W
- ADR505A
- ADR506A
- ADR507A
- ADR510I
- ADR511I
- ADR551A
- ADR552W
- ADR553A
- ADR554A
- ADR555A
- ADR556A
- ADR557A
- ADR558A
- ADR559A
- ADR560A
- ADR561A
- ADR563A
- ADR565A
- ADR568I
- ADR569A
- ADR570A
- ADR571I
- ADR601W
- ADR602A
- ADR603W
- ADR604W
- ADR605W
- ADR606W
- ADR608W
- ADR609W
- ADR610W
- ADR611W
- ADR612W
- ADR614W
- ADR616I
- ADR617W
- ADR618W
- ADR619W

- ADR620W
- ADR621W
- ADR622W
- ADR624W
- ADR625W
- ADR626W
- ADR627W
- ADR628W
- ADR629W
- ADR630W
- ADR632W
- ADR633W
- ADR634W
- ADR635W
- ADR642W
- ADR643W
- ADR649W
- ADR655W
- ADR656W

Summary of Changes
for GC28-1784-03
as Updated December, 1997
online only for SK2T-6700-07

The following changes appear only in the online version of this publication.

This revision also reflects the deletion, addition, or modification of information to support miscellaneous maintenance items and the following APARs:

- OW27844

Summary of Changes
for GC28-1784-03
OS/390 Version 2 Release 4

This book contains information previously presented in GC28-1784-03, which supports OS/390 Version 1 Release 3.

This book includes terminology, maintenance, and editorial changes.

Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes.

New Information

The following are the new message identifiers for this major revision, including a *portion* of the message text and an explanation of when the message is issued:

AMB119I INVALID LOAD MODULE: NO CESD RECORDS FOUND, LOAD MODULE MARKED
The load module specified on the LISTDIR control statement does not contain any CESD records, but was marked editable. See the explanation of AMB119I.

AMB131I Load module does not contain any CESD records
The load module specified on the LISTIDR control statement does not contain any CESD records. See the explanation of AMB131I.

AMD108I DUMPING OF {SUMMARY|SWAPPED IN} ADDRESS SPACES COMPLETED.
When SUMMARY appears in the message text, it indicates that the first pass through the MVS address space vector table is complete, and address spaces designated as summary address spaces have been successfully dumped. See the explanation of AMD108I.

ARC0364I DATA SET ENTRY FOR DSN=*dsname* CANNOT BE FOUND
The data set entry for *dsname* has not been found during an attempt to invalidate the data set entry in the tape tale of contents (TTOC) record. See the explanation of ARC0364I.

Changed Information

The following are the changed message identifiers for this major revision, including a *portion* the message text and an explanation of the change made to the message:

C AMD005I DUMPING OF REAL STORAGE {NOW IN PROGRESS. } {COMPLETED[(MINIMAL)]} { [(SUMMARY)]} { [(IN-USE)]}

Changed message. See the explanation of AMD005I.

The message text and explanation have changed. C AMD062I AMDSADMP RESIDENCE VOLUME INITIALIZATION COMPLETED.

Changed message. See the explanation of AMD062I.

The explanation has changed. C AMD095I {REAL|VIRTUAL} DUMP *xx*% COMPLETED. TOTAL MEGABYTES DUMPED: *yy*

Changed message. See the explanation of AMD095I.

The message text and explanation have changed. C ARC0425I COPY OF *volser* FAILED — REASON=*reascode*

Changed message. See the explanation of ARC0425I.

The explanation has changed.

Deleted Information

The following are the deleted message identifiers for this major revision and if applicable the identifier of the message that replaces the deleted message.

ADR318I
Deleted Message.

ADR448I
Deleted Message.

ADR501W
Deleted Message.

ADR502W
Deleted Message.

ADR503W
Deleted Message.

ADR504W
Deleted Message.

ADR505W
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ADR506W
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ADR507W
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ADR508W
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ADR509W
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ADR510W
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ADR511W
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ADR512W
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ADR524W
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ADR525W
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ADR526W
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ADR527W
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ADR528W
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ADR529W
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ADR530W
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ADR531W
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ADR532W
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ADR533W
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ADR534W
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ADR535W
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ADR536W
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ADR537W
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ADR538W
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ADR539W
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ADR540W
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ADR541W
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ADR542W
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ADR543W
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ADR544W
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ADR545W
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ADR546W
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ADR566W
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ADR567W
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ADR569W
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ADR580W
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ADR581W
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ADR582W
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ADR583W
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ADR584W
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ADR619W
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ADR620W
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ADR621W
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ADR622W
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ADR623W
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ADR624W
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ADR625W
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ADR626W
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ADR627W
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ADR628W
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ADR629W
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ADR630W
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ADR631W
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ADR632W
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ADR633W
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ADR634W
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ADR635W
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ADR652W
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ADR653W
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ADR654W
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ADR655W
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ADR656W
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Summary of Changes for GC28-1784-02 as Updated June, 1997 online only for SK2T-6700-05

The following changes appear only in the online version of this publication.

This revision also reflects the deletion, addition, or modification of information to support miscellaneous maintenance items.

Summary of Changes for GC28-1784-02 OS/390 Version 1 Release 3

This book contains information previously presented in GC28-1784-01, which supports OS/390 Version 1 Release 2.

This book includes terminology, maintenance, and editorial changes.

Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes. New Information

The following are the new message identifiers for this major revision, including a *portion* of the message text and an explanation of when the message is issued:

ADR050I *(xxx)-mmmmm(yy)***,**
An application used the DFSMSdss cross memory application interface to invoke DFSMSdss.

ADR151E *(xxx)-mmmmm(yy)***,**
An application is using the DFSMSdss cross memory application interface to invoke DFSMSdss and an allocation error occurred during SYSIN processing.

ADR795E *(xxx)-mmmmm(yy)***,**
While processing the given PDSE data set, the IGWNOTIF macro was called to invalidate a storage copy of the data set.

ADR965E *(xxx)-mmmmm(yy),* **DATA SET** *dsname* **IN CATALOG**
The data set is opened for record level sharing (RLS) access and therefore cannot be copied and deleted.

ADR966E *(xxx)-mmmmm(yy),* **DATA SET** *dsname* **IN CATALOG**
The data set was previously opened for record level sharing (RLS) access, has lost or retained locks associated with it, and therefore cannot be copied and deleted.

ADR967W *(xxx)-mmmmm(yy),* **DATA SET** *dsname* **IN CATALOG**
The data set is opened for record level sharing (RLS) access and therefore cannot be deleted.

ADR968W *(xxx)-mmmmm(yy),* **DATA SET** *dsname* **IN CATALOG**
The data set was previously opened for record level sharing (RLS) access, has lost or retained locks associated with it, and therefore cannot be deleted.

AMD002A DUMP DATA SET=
For a DASD output device, the stand-alone dump program prompts for a DASD dump data set.

AMD094I *dev volser dsname* **IS VALID, HOWEVER,**
The predefined output dump data set passed validity checks, however, the first record in the data set does not match the record written by the stand-alone dump REXX utility, AMDSADDD.

AMD106I MODESET FAILURE. [*message_text*]
Stand-alone dump (SADMP) detected an error while trying to issue the MODESET command to a 3590 tape drive.

ARC1191I ERROR UNCATALOGING DATA SET
During RECOVERY or RESTORE command processing, the catalog macro has failed while attempting to uncatalog a data set.

ARC1398I SOURCE BACKUP COPY COULD NOT BE SCRATCHED WHILE MOVING
While trying to move a backup copy from one device to another, the scratch of the source data set failed.

ASA2000I SUBSYSTEM *ssname***:**
This is a proprietary statement concerning the use of the product.

ASA2005I SUBSYSTEM JOBNAME *jobname* **IS NOT VALID. COMPONENT**
The job name/procedure name, which is used as the name of the subsystem, is not a valid subsystem name.

ASA2006I *ssname* **INPUT COMMAND PREFIX IS NOT VALID. DEFAULT PREFIX USED.**
A command prefix value that was specified as input to the subsystem *ssname* is not valid.

ASA2007I *ssname* **COMMAND PREFIX IS** *cmdprefix***. COMPONENT**
The command prefix that is in use for subsystem *ssname* is *cmdprefix*.

ASA2008I SUB=*ssname* **WAS NOT SPECIFIED. COMPONENT ID=***compid*
When the subsystem was started, the START command did not specify SUB=*ssname*.

ASA2011I *ssname* **INITIALIZATION COMPLETE. COMPONENT ID=***compid*
Subsystem *ssname* has completed its initialization.

ASA2012I *ssname* **ENDED. COMPONENT ID=***compid*
The subsystem *ssname* has completed shutting itself down.

ASA2013I *ssname* **INITIALIZATION FAILED. COMPONENT ID=***compid*
The system could not initialize subsystem *ssname* successfully.

ASA2014I *ssname* **ALREADY ACTIVE. COMPONENT ID=***compid*
One instance of subsystem *ssname* already exists.

ASA2016I *ssname* **IS NOT A VALID SUBSYSTEM. COMPONENT ID=***compid*
Subsystem *ssname* is not a defined subsystem name that the system recognizes.

ASA2326I SUBSYSTEM *ssname* **ALTERED TO USE THE PRIMARY SUBSYSTEM.**
Subsystem *ssname* has been set to indicate that it is to be started only under the primary subsystem.

ASA2432I *ssname* **PARMLIB MEMBER** *memname* **READ. COMPONENT**
Parmlib member *mname* was successfully read and processed.

ASA2960I *ssname* **SUBSYSTEM FUNCTIONS DISABLED. COMPONENT**
During the process of terminating either normally or abnormally, subsystem *ssname* disabled the subsystem functions it normally provides for jobs.

ASA2962I *ssname* **SUBSYSTEM FUNCTION DISABLEMENT FAILED. COMPONENT**
During the process of terminating either normally or abnormally, subsystem *ssname* attempted to disable the subsystem functions it normally provides.

Changed Information

The following are the changed message identifiers for this major revision, including a *portion* the message text and an explanation of the change made to the message:

1.2.0 ADR009T *(xxx)-mmmmm(yy)*, **INVALID {LINECNT | SIZE | TYPRUN | PAGENO | ABEND | AMSGCNT | TRACE | UTILMSG | XABUFF | RACFLOG} VALUE SPECIFIED IN PARM STATEMENT**

1.3.0 ADR009T *(xxx)-mmmmm(yy)*, **INVALID {LINECNT | SIZE | TYPRUN | PAGENO | ABEND | AMSGCNT | TRACE | UTILMSG | XABUFF | RACFLOG | SDUMP | SMSGCNT | TMPMSGDS | WORKVOL | WORKUNIT} VALUE SPECIFIED IN PARM STATEMENT**
Changed message.

The message text and explanation have changed.

1.2.0 ADR253E *(xxx)-mmmmm(yy)*, **UNABLE TO DETERMINE FREE SPACE ON VOLUME {***volser***}**

1.3.0 ADR253E *(xxx)-mmmmm(yy)*, **UNABLE TO DETERMINE FREE SPACE ON VOLUME** *volser*
Changed message.

The explanation, system action and application programmer response have changed.

1.2.0 ADR284W *(xxx)-mmmmm(yy)*, **UNEXPECTED RETURN CODE FROM LSPACE MACRO:** *xxx-yyy*, **WHILE CALCULATING FREE SPACE ON VOLUME** *volume_serial_number*

1.3.0 ADR284W *(xxx)-mmmmm(yy)*, **UNEXPECTED RETURN CODE FROM LSPACE MACRO:** *xxx-yyy*, **WHILE CALCULATING FREE SPACE ON VOLUME** *volume_serial_number*
Changed message.

The explanation has changed.

1.2.0 ADR436E *(xxx)-mmmmm(yy)*, **LOGICAL ERROR IN BUFFER ON VOLUME** *volume_serial_number*, **TRACK** *cchh*

1.3.0 ADR436E *(xxx)-mmmmm(yy)*, **LOGICAL ERROR IN BUFFER ON VOLUME** *volume_serial_number*, **TRACK** *cchh*
Changed message.

The explanation has changed.

1.2.0 ADR440E *(xxx)-mmmmm(yy)*, **UNEXPECTED RETURN CODE FROM** *external_name*: *return_code-reason_code*, **WHILE PROCESSING DATA SET** *dsname*

1.3.0 ADR440E *(xxx)-mmmmm(yy)*, **UNEXPECTED RETURN CODE FROM** *external_name*: *return_code-reason_code*, **WHILE PROCESSING DATA SET** *dsname*
Changed message.

The explanation has changed.

1.2.0 ADR477E *(xxx)-mmmmm(yy)*, **VVDS/VVR/CELL ERRORS ENCOUNTERED FOR CLUSTER** *cluster_name*

1.3.0 ADR477E *(xxx)-mmmmm(yy)*, **VVDS/VVR/CELL ERRORS ENCOUNTERED FOR CLUSTER** *cluster_name*
Changed message.

The explanation, system action and application programmer response have changed.

1.2.0 ADR701E *(xxx)-mmmmm(yy)*, **UNEXPECTED RETURN CODE FROM** *external_name*: *return_code-reason_code*.

1.3.0 ADR701E *(xxx)-mmmmm(yy)*, **UNEXPECTED RETURN CODE FROM** *external_name*: *return_code-reason_code*.
Changed message.

The explanation has changed.

1.2.0 ADR778E *(xxx)-mmmmm(yy)*, **DATA SET** *dsname* **WAS NOT SELECTED BECAUSE THE DATA SET TYPE IS NOT SUPPORTED IN THIS RELEASE,** *reason_code*

1.3.0 ADR778E *(xxx)-mmmmm(yy)*, **DATA SET** *dsname* **WAS NOT SELECTED BECAUSE THE DATA SET TYPE IS NOT SUPPORTED IN THIS RELEASE,** *reason_code*
Changed message.

The explanation has changed.

1.2.0 AMD001A SPECIFY OUTPUT DEVICE ADDRESS (*nnn***)**

1.3.0 AMD001A SPECIFY OUTPUT DEVICE ADDRESS (*nnn***)**
Changed message.

The system action and operator response have changed.

1.2.0 AMD033I I/O ERROR ON *dev* **CMD =** *cmd* **STATUS =** *stat* **COND =** *err*

1.3.0 AMD033I I/O ERROR ON *dev* **CMD =** *cmd* **STATUS =** *stat* **COND =** *err*
Changed message.

The explanation has changed.

1.2.0 AMD055I AMDSADMP TERMINATED BY OPERATOR REQUEST

1.3.0 AMD055I AMDSADMP TERMINATED BY OPERATOR REQUEST
Changed message.

The operator response has changed.

1.2.0 AMD091I *dev volser dsname* **IS NOT USABLE; DATA SET IS NOT FOUND.**

1.3.0 AMD091I *dev volser dsname* **IS NOT USABLE; DATA SET IS NOT FOUND.**
Changed message.

The message text, explanation, operator response and system programmer response have changed.

1.2.0 AMD092I *dev volser dsname* **IS NOT USABLE; DATA SET IS NOT VALID.**

1.3.0 AMD092I *dev volser dsname* **IS NOT USABLE; DATA SET IS NOT VALID.**
Changed message.

The message text, explanation, system action, operator response and system programmer response have changed.

1.2.0 AMD093I *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP. THE INSTALLATION CHOSE TO NEVER REUSE THE DUMP DATA SET.**

1.3.0 AMD093I *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP. THE INSTALLATION CHOSE TO NEVER REUSE THE DUMP DATA SET.**
Changed message.

The message text, explanation, system action, operator response and system programmer response have changed.

1.2.0 AMD096A *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP. REPLY 'R' TO REUSE OR 'U' TO USE ANOTHER DATA SET.**

1.3.0 AMD096A *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP. REPLY 'R' TO REUSE OR 'U' TO USE ANOTHER DATA SET.**
Changed message.

The message text, explanation, system action and operator response have changed.

1.2.0 AMD099I *dev volser dsname* **IS FULL. TO CONTINUE DUMPING, SPECIFY ANOTHER OUTPUT DEVICE.**

1.3.0 AMD099I *dev volser dsname* **IS FULL. TO CONTINUE DUMPING, SPECIFY ANOTHER OUTPUT DEVICE.**
Changed message.

The system action and operator response have changed.

1.2.0 AMD100I PAGING DEVICE *dev volser* **CANNOT BE USED. IT IS AN OUTPUT DEVICE.**

1.3.0 AMD100I PAGING DEVICE *dev volser* **CANNOT BE USED. IT IS AN OUTPUT DEVICE.**
Changed message.

The system action has changed.

1.2.0 AMD101I OUTPUT DEVICE *dev volser dsname* **SENSE ID DATA:** *b0 cutype cumodel devtype devmodel* **BLOCKSIZE:** *blocksiz*

1.3.0 AMD101I OUTPUT DEVICE *dev volser dsname* **SENSE ID DATA:** *b0 cutype cumodel devtype devmodel* **BLOCKSIZE:** *blocksiz*
Changed message.

The message text and explanation have changed.

1.2.0 AMD103I *dev volser dsname* **WAS ALREADY USED FOR THIS DUMP AS DATA SET (***nnn***).**

1.3.0 AMD103I *dev volser dsname* **WAS ALREADY USED FOR THIS DUMP AS DATA SET (***nnn***).**
Changed message.

The explanation, system action and operator response have changed.

1.2.0 AMD104I DEVICE VOLUME USED DATA SET NAME *nnn*
dev volser amt dsname

1.3.0 AMD104I DEVICE VOLUME USED DATA SET NAME *nnn*
dev volser amt dsname
Changed message.

The system programmer response has changed.

1.2.0 ARC0019I THE TOTAL NUMBER OF OUTSTANDING GETMAINS FOR CPOOL TABLE ENTRY NUMBER *entry#* **is** *number*

1.3.0 ARC0019I CELL POOL *entry#* ENCOUNTERED A SHORTAGE OF *number* CELLS. PERFORMANCE IS DEGRADED.
Changed message.

The message text has changed.

1.2.0 ARC0380A RECALL WAITING FOR VOLUME *volser* IN USE BY HOST *procid*. FUNCTION *function* REPLY WAIT, CANCEL, OR MOUNT

1.3.0 ARC0380A RECALL WAITING FOR VOLUME *volser* IN USE BY HOST *procid*, FUNCTION *function*. REPLY WAIT, CANCEL, OR MOUNT
Changed message.

The message text and explanation have changed.

1.2.0 ARC0758I VSAM BACKUP FAILED FOR VOLUME=*volser*, RC=*retcode*, REASON=*reascode*

1.3.0 ARC0758I VSAM BACKUP FAILED FOR VOLUME=*volser*, RC=*retcode*, REASON=*reascode*
Changed message.

The explanation has changed.

1.2.0 ARC0938I PARTIAL RELEASE OF UNUSED DASD SPACE FOR DATA SET *dsname* WAS NOT SUCCESSFULLY PROCESSED, RC=*retcode*, REASON=*reascode*

1.3.0 ARC0938I PARTIAL RELEASE OF UNUSED DASD SPACE FOR DATA SET *dsname* WAS NOT SUCCESSFULLY PROCESSED, RC=*retcode*, REASON=*reascode*
Changed message.

The explanation and application programmer response have changed.

1.2.0 ARC6259E THE OPERATOR HAS REPLIED NO TO A REQUEST TO RETRY ALLOCATION FOR A TAPE VOLUME THAT IS BUSY

1.3.0 ARC6259E THE OPERATOR HAS REPLIED NO TO A REQUEST TO RETRY ALLOCATION FOR A TAPE VOLUME THAT IS BUSY
Changed message.

The application programmer response has changed.

1.2.0 ARC6296I CONFLICT RESOLUTION ACTION *action* FROM THE {CONFLICT RESOLUTION DATA SET | DATASETCONFLICT PARAMETER | INSTALLATION-WIDE EXIT ARCCREXT} {IS INVALID | DID NOT RESOLVE THE CONFLICT | IS NOT AUTHORIZED} FOR DATA SET *datasetname* FROM *listtype* LIST DURING AGGREGATE RECOVERY

1.3.0 ARC6296I CONFLICT RESOLUTION ACTION *action* FROM THE {CONFLICT RESOLUTION DATA SET | DATASETCONFLICT PARAMETER | INSTALLATION-WIDE EXIT ARCCREXT} {IS INVALID | DID NOT RESOLVE THE CONFLICT | IS NOT AUTHORIZED} FOR DATA SET *datasetname* FROM *listtype* LIST DURING AGGREGATE RECOVERY
Changed message.

The explanation has changed.

Summary of Changes
for GC28-1784-01
OS/390 Version 1 Release 2

This book contains information previously presented in GC28-1784-00, which supports OS/390 Version 1 Release 1.

This book includes terminology, maintenance, and editorial changes.

Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes. New Information

The following are the new message identifiers for this major revision, including a *portion* of the message text and an explanation of when the message is issued:

ADR252I *(xxx)-mmmmm(yy)***, DEFAULT PROCESSING**
The installation has set the patch byte at offset `X'43'` in ADRPATCH to `X'FF'`.

ADR253E *(xxx)-mmmmm(yy)***, UNABLE TO DETERMINE FREE SPACE ON VOLUME**
DEFRAG is unable to determine the location of free space extents on the volume being processed.

AMD002A DUMP DATA SET=
For a DASD output device, the stand-alone dump program prompts for a DASD dump data set.

AMD094I *dev volser dsname* **IS VALID, HOWEVER,**
The predefined output dump data set passed validity checks, however, the first record in the data set does not match the record written by the stand-alone dump REXX utility, AMDSADDD.

AMD107I *dev volser dsname* **INCORRECT DUMP DATA SET NAME.** *reason*
The DASD dump data set name, specified in response to message AMD002A or specified on the OUTPUT= keyword on the AMDSADMP macro, is incorrect.

ANTP0007I CSUSPEND OPERATION REJECTED- QUIESCE OPTION HAS BEEN DISABLED
The QUIESCE option of the CSUSPEND command has been disabled by APAR OW15247 or APAR OW15248.

ANTX5027E ANTX5027E XRC SESSION *session_id* **VIRTUAL BUFFER SHORTAGE**
XRC has acquired and is using all of the allowable data buffers in the XRC session.

ANTX8053I ANTX8053I XRC SESSION *session_id* **VIRTUAL BUFFER**
XRC has accumulated enough buffer space to offload the updates from the primary volume’s storage control.

ANTX8931I *storage_control_data*
An MVS SCDATA operation has completed.

ANTX8956I DUMP OF ADDRESS SPACE REQUESTED
XRC has sent a request to the operating system to generate an SVM dump of the SDM address space.

ANTX8957I DUMP OF ADDRESS SPACE AND TRACE DATA SPACE REQUESTED
XRC has sent a request to the operating system to generate an SVM dump of the SDM address space and the associated trace data space.

ANTX8958I *device_number* **STORAGE CONTROL STATE SAVE REQUESTED FOR SESSION** *session_number*
XRC has sent a request to the storage control that device *device_number* is attached to.

ANTX8959I UCBLOOK RC *return_code* **FOR DEVICE**
The XRC function called the MVS service UCBLOOK for the specified device.

ANTX8960I DUMP OF SIDEFILE DATA SPACE *data_space_name* **REQUESTED**
XRC has sent a request to MVS to dump concurrent copy sidefile data space *data_space_name*.

ARC0041I MEMBER *yyyyyyy* **USED IN** *parmdsname*
The parmlib member *yyyyyyy* is being used during DFSMShsm startup.

ARC0042I *msgtext*
DFSMShsm has invoked the MVS concatenated PARMLIB service to locate the requested ARCCMD*xx* member.

ARC0105I INITIALIZATION COMMAND MEMBER *membername* **NOT**
During DFSMShsm initialization, an attempt was made to read DFSMShsm initialization commands from the specified member *membername*, which was not found.

ARC0282I INVALID COMBINATION OF FROM DATE AND TO DATE
A REPORT command was issued with FROMDATE() and TODATE().

ARC0283I MM/DD/YY DATE FORMAT NOT VALID AFTER 1999
The RECOVER command with DATE(mm/dd/yy), or the REPORT command with FROMDATE(mm/dd/yy) or TODATE(mm/dd/yy), was issued before 1 January 2000.

ARC0284I YY/MM/DD DATE FORMAT NOT VALID AFTER 1999
The DEFINE command with CYCLESTARTDATE(yy/mm/dd) was issued before 1 January 2000.

ARC0397I ACCESS TO THE FILTER OUTPUT DATA SET *dsname* **HAS**
An ABACKUP command has been issued with the FILTEROUTPUTDATASET or FODS (dsname) parameter.

ARC0825D RECYCLE TAPE LIST CREATED, DSN=*dsname***. DO YOU WISH**
Because a RECYCLE command has the EXECUTE and TAPELIST parameters specified, DFSMShsm writes the tape list output into a data set or SYSOUT file and deallocates the data set.

ARC0970I TAPE ALLOCATION REQUEST DENIED BY ARCTEEXT EXIT FOR ALLOCATION
Installation-wide exit ARCTEEXT has returned a return code 8, which indicates that tape allocation should not be attempted.

ARC1067I MM/DD/YY DATE FORMAT NOT VALID AFTER 1999
The HRECOVER command was issued before 1 January 2000 with DATE(mm/dd/yy).

ARC1159I RECOVERY FAILED — ERROR DELETING
Recovery of a VSAM data set has been in progress when either a deletion of the existing data set fails for a reason other than its catalog entry has not been found, or an allocation error has occurred.

ARC1310I ERROR DEALLOCATING BACKUP VOLUME OR UPDATING BVR ENTRY
The data set was being processed when it became necessary to select a new backup volume.

ARC2006I INCORRECT DATE yyddd
The ARCPRPDO program was invoked with a START(yyddd) or END(yyddd) option.

ARC2007I INCORRECT DATE RANGE
The ARCPRPDO program was invoked with both START(yyddd) and END(yyddd) options.

ARC2008I INCORRECT TIME hhmmss
The ARCPRPDO program was invoked with a START(yyddd,hhmmss) or END(yyddd,hhmmss) option.

ARC2009I INCORRECT TIME RANGE
The ARCPRPDO program was invoked with a START(yyddd,hhmmss) and END(yyddd,hhmmss) options.

ARC6123E DATA SET
During aggregate recovery, a preallocated target with record level sharing (RLS) attributes was found.

ARC6149E DATA SET *datasetname* **SPECIFIED IN THE {INCLUDE |**

A partially qualified data set name specified in an INCLUDE, ALLOCATE, or ACCOMPANY list in one of the selection data sets for this aggregate group encountered an error during LOCATE processing.

ARC6321E AN ADDVOL FOR TAPE VOLUME *volser* **WAS REJECTED BY**

Changed Information

The following are the changed message identifiers for this major revision, including a *portion* the message text and an explanation of the change made to the message:

1.1.0 ADR140E *(xxx)-mmmmm(yy)*, **INVALID ‘BY’ CRITERIA**

1.2.0 ADR140E *(xxx)-mmmmm(yy)*, **INVALID ‘BY’ CRITERIA**

Changed message.

The explanation has changed.

1.1.0 ADR285E *(xxx)-mmmmm(yy)*, **DATA SET** *dsname* **WAS NOT PROCESSED BECAUSE PREALLOCATED DATA SET TYPE IS NOT SUPPORTED IN THIS RELEASE,** *reason_code*

1.2.0 ADR285E *(xxx)-mmmmm(yy)*, **DATA SET** *dsname* **WAS NOT PROCESSED BECAUSE PREALLOCATED DATA SET TYPE IS NOT SUPPORTED IN THIS RELEASE,** *reason_code*

Changed message.

The explanation has changed.

1.1.0 ADR726W *(xxx)-mmmmm(yy)*, **DATA SET** *dsname* **WAS A BACKUP-WHILE-OPEN DATA SET BUT WAS RESTORED TO A NON-SMS-MANAGED TARGET. RECOVERY DATA IS (***yyddd hh:mm:ss.t***)**

1.2.0 ADR726W *(xxx)-mmmmm(yy)*, **DATA SET** *dsname* **WAS A BACKUP-WHILE-OPEN DATA SET BUT WAS RESTORED TO A NON-SMS-MANAGED TARGET. RECOVERY DATA IS (***yyyyddd hh:mm:ss.t***)**

Changed message.

The message text and explanation have changed.

1.1.0 ADR778E *(xxx)-mmmmm(yy)*, **DATA SET** *dsname* **WAS NOT SELECTED BECAUSE THE DATA SET TYPE IS NOT SUPPORTED IN THIS RELEASE,** *reason_code*

1.2.0 ADR778E *(xxx)-mmmmm(yy)*, **DATA SET** *dsname* **WAS NOT SELECTED BECAUSE THE DATA SET TYPE IS NOT SUPPORTED IN THIS RELEASE,** *reason_code*

Changed message.

The explanation has changed.

1.1.0 ADR878E *(xxx)-mmmmm(yy)*, **THE FOLLOWING DATA SETS ON VOLUME** *volume_serial_number* **{WILL NOT BE | WERE NOT} SUCCESSFULLY PROCESSED** *dsname* **CATALOG:** *catalog_name*

1.2.0 ADR878E *(xxx)-mmmmm(yy)*, **THE FOLLOWING DATA SETS ON VOLUME** *volume_serial_number* **{WILL NOT BE | WERE NOT} SUCCESSFULLY PROCESSED** *dsname* **CATALOG:** *catalog_name*

Changed message.

The explanation and application programmer response have changed.

1.1.0 ADR962I *(xxx)-mmmmm(yy),* **CLUSTER** *cluster_name* **WAS DUMPED AS A BACKUP-WHILE-OPEN DATA SET USING RECORD LEVEL SHARING ACCESS. LOCAL TIMESTAMP IS:** *yyddd hh:mm:ss.t* **GMT TIMESTAMP IS:** *yyddd hh:mm:ss.t*

1.2.0 ADR962I *(xxx)-mmmmm(yy),* **CLUSTER** *cluster_name* **WAS DUMPED AS A BACKUP-WHILE-OPEN DATA SET USING RECORD LEVEL SHARING ACCESS. LOCAL TIMESTAMP IS:** *yyyyddd hh:mm:ss.t* **GMT TIMESTAMP IS:** *yyyyddd hh:mm:ss.t*
Changed message.

The message text and explanation have changed.

1.1.0 ADR963I *(xxx)-mmmmm(yy),* **CLUSTER** *cluster_name* **WAS DUMPED USING RECORD LEVEL SHARING ACCESS. LOCAL TIMESTAMP IS:** *yyddd hh:mm:ss.t* **GMT TIMESTAMP IS:** *yyddd hh:mm:ss.t*

1.2.0 ADR963I *(xxx)-mmmmm(yy),* **CLUSTER** *cluster_name* **WAS DUMPED USING RECORD LEVEL SHARING ACCESS. LOCAL TIMESTAMP IS:** *yyyyddd hh:mm:ss.t* **GMT TIMESTAMP IS:** *yyyyddd hh:mm:ss.t*
Changed message.

The message text and explanation have changed.

1.1.0 AMD001A SPECIFY OUTPUT DEVICE ADDRESS (*nnn***)**

1.2.0 AMD001A SPECIFY OUTPUT DEVICE ADDRESS (*nnn***)**
Changed message.

The system action and operator response have changed.

1.1.0 AMD055I AMDSADMP TERMINATED BY OPERATOR REQUEST

1.2.0 AMD055I AMDSADMP TERMINATED BY OPERATOR REQUEST
Changed message.

The operator response has changed.

1.1.0 AMD091I DEVICE *dev* **IS NOT USABLE; DATA SET SYS1.SADMP NOT FOUND**

1.2.0 AMD091I *dev volser dsname* **IS NOT USABLE; DATA SET IS NOT FOUND.**
Changed message.

The message text, explanation, operator response and system programmer response have changed.

1.1.0 AMD092I DEVICE *dev* **IS NOT USABLE; DATA SET SYS1.SADMP NOT VALID**

1.2.0 AMD092I *dev volser dsname* **IS NOT USABLE; DATA SET IS NOT VALID.**
Changed message.

The message text, explanation, system action, operator response and system programmer response have changed.

1.1.0 AMD093I DEVICE *dev* **IS NOT USABLE; DATA SET SYS1.SADMP IS NOT INITIALIZED**

1.2.0 AMD093I *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP. THE INSTALLATION CHOSE TO NEVER REUSE THE DUMP DATA SET.**
Changed message.

The message text, explanation, system action, operator response and system programmer response have changed.

1.1.0 AMD096A SYS1.SADMP ON DEVICE *dev* **IS NOT INITIALIZED REPLY 'R' TO REUSE OR 'U' TO USE ANOTHER DATA SET**

1.2.0 AMD096A *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP. REPLY 'R' TO REUSE OR 'U' TO USE ANOTHER DATA SET.**
Changed message.

The message text, explanation, system action and operator response have changed.

1.1.0 AMD099I *dev volser dsname* **IS FULL. TO CONTINUE DUMPING, SPECIFY ANOTHER OUTPUT DEVICE.**

1.2.0 AMD099I *dev volser dsname* **IS FULL. TO CONTINUE DUMPING, SPECIFY ANOTHER OUTPUT DEVICE.**
Changed message.

The system action and operator response have changed.

1.1.0 AMD100I PAGING DEVICE *dev volser* **CANNOT BE USED. IT IS AN OUTPUT DEVICE.**

1.2.0 AMD100I PAGING DEVICE *dev volser* **CANNOT BE USED. IT IS AN OUTPUT DEVICE.**
Changed message.

The system action has changed.

1.1.0 AMD101I OUTPUT DEVICE (*nnn***)** *dev volser* **BLOCKSIZE:** *blocksiz* **SENSE ID DATA:** *b0 cutype cumodel devtype devmodel*

1.2.0 AMD101I OUTPUT DEVICE *dev volser dsname* **SENSE ID DATA:** *b0 cutype cumodel devtype devmodel* **BLOCKSIZE:** *blocksiz*
Changed message.

The message text and explanation have changed.

1.1.0 AMD103I *dev volser dsname* **WAS ALREADY USED FOR THIS DUMP AS DATA SET (***nnn***).**

1.2.0 AMD103I *dev volser dsname* **WAS ALREADY USED FOR THIS DUMP AS DATA SET (***nnn***).**
Changed message.

The explanation, system action and operator response have changed.

1.1.0 AMD104I DEVICE VOLUME USED DATA SET NAME *nnn*
dev volser amt dsname

1.2.0 AMD104I DEVICE VOLUME USED DATA SET NAME *nnn*
dev volser amt dsname
Changed message.

The explanation and system programmer response have changed.

1.1.0 ANTE8028I XEND COMPLETE. XRC SESSION *session_id* **INACTIVE. CONSISTENCY TIME =** *timestamp*

1.2.0 ANTE8028I XEND COMPLETE. XRC SESSION *session_id* **INACTIVE. CONSISTENCY TIME =** *timestamp*
Changed message.

The explanation and system programmer response have changed.

1.1.0 ANTP0001I *command_name* **COMMAND** *ending_status***. COMPLETION CODE:** *hh*

1.2.0 ANTP0001I *command_name* **COMMAND** *ending_status* **FOR DEVICE(***device_number***). COMPLETION CODE:** *hh*
Changed message.

The message text and explanation have changed.

1.1.0 ANTP0113I ESTAB. PATHS FAILED- WOULD EXCEED UNITS/PATHS LIMITS

1.2.0 ANTP0113I ESTAB. PATHS FAILED- WOULD EXCEED UNITS/PATHS LIMITS
Changed message.

The system programmer response has changed.

1.1.0 ANTP0117I FAILED TO ESTAB. ONE OR MORE PATHS TO SECONDARY

1.2.0 ANTP0117I FAILED TO ESTAB. ONE OR MORE PATHS TO SECONDARY
Changed message.

The system programmer response has changed.

1.1.0 ANTP0200I AOM DETECTED I/O ERROR. MSG FRMT = *h***, MSG NMBR =** *h***, REAS:** *hh*

1.2.0 ANTP0200I AOM DETECTED I/O ERROR. MSG FRMT = *a***, MSG NMBR =** *b***, REAS:** *hh*
Changed message.

The explanation and system programmer response have changed.

1.1.0 ANTR8007I XRECOVER COMPLETE FOR SESSION *session_id***. CONSISTENCY TIME =** *timestamp*

1.2.0 ANTR8007I XRECOVER COMPLETE FOR SESSION *session_id***. CONSISTENCY TIME =** *timestamp*
Changed message.

The system programmer response has changed.

1.1.0 ANTT0099I *cmdname* **COMMAND ACCEPTED**

1.2.0 ANTT0099I *cmdname* **COMMAND ACCEPTED**
Changed message.

The system programmer response has changed.

1.1.0 ARC0005I ERROR IN INITIALIZATION COMMANDS — RESTART DFSMShsm

1.2.0 ARC0005I ERROR IN INITIALIZATION COMMANDS — RESTART DFSMSHSM
Changed message.

The message text has changed.

1.1.0 ARC0006I DFSMShsm ALREADY ACTIVE

1.2.0 ARC0006I DFSMSHSM ALREADY ACTIVE

Changed message.

The message text has changed.

1.1.0 ARC0007I THERE ARE NO VOLUMES IN THE DFSMShsm GENERAL POOL

1.2.0 ARC0007I THERE ARE NO VOLUMES IN THE DFSMSHSM GENERAL POOL

Changed message.

The message text has changed.

1.1.0 ARC0008I DFSMShsm INITIALIZATION SUCCESSFUL

1.2.0 ARC0008I DFSMSHSM INITIALIZATION SUCCESSFUL

Changed message.

The message text has changed.

1.1.0 ARC0009I DFSMShsm STARTUP ATTEMPT FAILED, NOT A STARTED TASK

1.2.0 ARC0009I DFSMSHSM STARTUP ATTEMPT FAILED, NOT A STARTED TASK

Changed message.

The message text has changed.

1.1.0 ARC0010I INVALID PARAMETER FIELD — RESTART DFSMShsm

1.2.0 ARC0010I INVALID PARAMETER FIELD — RESTART DFSMSHSM

Changed message.

The message text has changed.

1.1.0 ARC0011I TOO MANY VOLUMES OF ONE DEVICE TYPE TO RETURN THE ENTIRE DFSMShsm GENERAL POOL

1.2.0 ARC0011I TOO MANY VOLUMES OF ONE DEVICE TYPE TO RETURN THE ENTIRE DFSMSHSM GENERAL POOL

Changed message.

The message text has changed.

1.1.0 ARC0012I {TAPE VOLUME TABLE | DASD L2 AVAILABLE TABLE} COULD NOT BE CREATED-RESTART DFSMShsm

1.2.0 ARC0012I {TAPE VOLUME TABLE | DASD L2 AVAILABLE TABLE} COULD NOT BE CREATED — RESTART DFSMSHSM

Changed message.

The message text has changed.

1.1.0 ARC0014I VTOC/VVDS INTERFACE MODULE IGDCSP00 COULD NOT BE LOADED, ABEND CODE=*xx*. DFSMShsm CANNOT MIGRATE OR BACK UP SMS MANAGED VOLUMES

1.2.0 ARC0014I VTOC/VVDS INTERFACE MODULE IGDCSP00 COULD NOT BE LOADED, ABEND CODE=*xx*. DFSMSHSM CANNOT MIGRATE OR BACK UP SMS MANAGED VOLUMES

Changed message.

The message text has changed.

1.1.0 ARC0015I DFSMSdss COULD NOT BE LOADED, ABEND CODE=*xxx*, REASON CODE=*xxx*. DFSMSdss CANNOT BE USED AS DFSMShsm DATA MOVER.

1.2.0 ARC0015I DFSMSdSS COULD NOT BE LOADED, ABEND CODE=*xxx*, REASON CODE=*xxx*. DFSMSDSS CANNOT BE USED AS DFSMSHSM DATA MOVER.
Changed message.

The message text has changed.

1.1.0 ARC0016I DFSMShsm SHUTDOWN HAS BEEN REQUESTED

1.2.0 ARC0016I DFSMSHSM SHUTDOWN HAS BEEN REQUESTED
Changed message.

The message text has changed.

1.1.0 ARC0018I DFSMShsm IS NOT LICENSED FOR USE ON THIS SYSTEM

1.2.0 ARC0018I DFSMSHSM IS NOT LICENSED FOR USE ON THIS SYSTEM
Changed message.

The message text has changed.

1.1.0 ARC0021I DFSMShsm LOGGING FUNCTION DISABLED

1.2.0 ARC0021I DFSMSHSM LOGGING FUNCTION DISABLED
Changed message.

The message text has changed.

1.1.0 ARC0022I DFSMShsm LOG RENAME ERROR *type* DATA SET NAME *dsname* TO *type* DATA SET NAME *dsname*. RC=*retcode*, REAS=*reascode*

1.2.0 ARC0022I DFSMSHSM LOG RENAME ERROR *type* DATA SET NAME *dsname* TO *type* DATA SET NAME *dsname*. RC=*retcode*, REAS=*reascode*
Changed message.

The message text has changed.

1.1.0 ARC0025I DFSMShsm JOURNAL NOT OPENED

1.2.0 ARC0025I DFSMSHSM JOURNAL NOT OPENED
Changed message.

The message text has changed.

1.1.0 ARC0026E JOURNALING DISABLED DUE TO *errortext*. MIGRATION, BACKUP, DUMP, TAPECOPY, TAPEREPL, RECYCLE, ARECOVER, AUDIT, AND EXPIREBV HELD

1.2.0 ARC0026E JOURNALING DISABLED DUE TO *errortext*. MIGRATION, BACKUP, DUMP, TAPECOPY, TAPEREPL, RECYCLE, ARECOVER, AUDIT, AND EXPIREBV HELD
Changed message.

The application programmer response has changed.

1.1.0 ARC0027I DFSMShsm LOG SWITCHED

1.2.0 ARC0027I DFSMSHSM LOG SWITCHED
Changed message.

The message text has changed.

1.1.0 ARC0032I RENAME ERROR SWITCHING DFSMShsm PROBLEM DETERMINATION OUTPUT DATA SETS, OLD DATA SET NAME = *olddsn*, **NEW DATA SET NAME =** *newdsn*, **RC=***retcode*, **REAS=***reascode*

1.2.0 ARC0032I RENAME ERROR SWITCHING DFSMSHSM PROBLEM DETERMINATION OUTPUT DATA SETS, OLD DATA SET NAME = *olddsn*, **NEW DATA SET NAME =** *newdsn*, **RC=***retcode*, **REAS=***reascode*
Changed message.

The message text has changed.

1.1.0 ARC0033E DFSMShsm INITIALIZATION FAILED, REASON=*retcode*

1.2.0 ARC0033E DFSMSHSM INITIALIZATION FAILED, REASON=*retcode*
Changed message.

The message text has changed.

1.1.0 ARC0034I {I/O ERROR | nnn ABEND} PROCESSING DFSMShsm PROBLEM DETERMINATION OUTPUT DATA SET

1.2.0 ARC0034I {I/O ERROR | nnn ABEND} PROCESSING DFSMSHSM PROBLEM DETERMINATION OUTPUT DATA SET
Changed message.

The message text has changed.

1.1.0 ARC0036I I/O {INHIBITED | DISABLED} FOR DFSMShsm PROBLEM DETERMINATION OUTPUT DATA SET, REAS=*reascode*

1.2.0 ARC0036I I/O {INHIBITED | DISABLED} FOR DFSMSHSM PROBLEM DETERMINATION OUTPUT DATA SET, REAS=*reascode*
Changed message.

The message text has changed.

1.1.0 ARC0037I DFSMShsm PROBLEM DETERMINATION OUTPUT DATA SETS SWITCHED

1.2.0 ARC0037I DFSMSHSM PROBLEM DETERMINATION OUTPUT DATA SETS SWITCHED
Changed message.

The message text has changed.

1.1.0 ARC0040I COMMAND SENT TO DFSMShsm, REQUEST NUMBER=*request number*

1.2.0 ARC0040I COMMAND SENT TO DFSMSHSM, REQUEST NUMBER=*request number*
Changed message.

The message text has changed.

1.1.0 ARC0046I DFSMShsm ADDRESS SPACE HAS ISSUED THE MVS START COMMAND *start command text* **TO RESTART DFSMShsm**

1.2.0 ARC0046I DFSMSHSM ADDRESS SPACE HAS ISSUED THE MVS START COMMAND *start command text* **TO RESTART DFSMSHSM**

Changed message.

The message text has changed.

1.1.0 ARC0047I DFSMShsm AUTOMATIC RESTART SEQUENCE FAILED

1.2.0 ARC0047I DFSMSHSM AUTOMATIC RESTART SEQUENCE FAILED

Changed message.

The message text has changed.

1.1.0 ARC0050A DFSMShsm IS NOT ACTIVE — START DFSMShsm

1.2.0 ARC0050A DFSMSHSM IS NOT ACTIVE — START DFSMSHSM

Changed message.

The message text has changed.

1.1.0 ARC0051A JOB *jobname* **WAITING FOR DFSMShsm TO RECALL DSN=***dsname*

1.2.0 ARC0051A JOB *jobname* **WAITING FOR DFSMSHSM TO RECALL DSN=***dsname*

Changed message.

The message text has changed.

1.1.0 ARC0052A JOB *jobname* **WAITING ON DFSMShsm**

1.2.0 ARC0052A JOB *jobname* **WAITING ON DFSMSHSM**

Changed message.

The message text has changed.

1.1.0 ARC0056A JES3 JOB FAILED — START DFSMShsm

1.2.0 ARC0056A JES3 JOB FAILED — START DFSMSHSM

Changed message.

The message text has changed.

1.1.0 ARC0057I CSA USAGE BY DFSMShsm HAS REACHED DFSMShsm INACTIVE THRESHOLD OF *xxxxxx***K BYTES, REQUEST FAILED**

1.2.0 ARC0057I CSA USAGE BY DFSMSHSM HAS REACHED DFSMSHSM INACTIVE THRESHOLD OF *xxxxxx***K BYTES, REQUEST FAILED**

Changed message.

The message text has changed.

1.1.0 ARC0058I CSA USAGE BY DFSMShsm HAS REACHED THE ACTIVE THRESHOLD OF *xxxxxx***K BYTES, ALL BUT BATCH WAIT REQUESTS FAILED**

1.2.0 ARC0058I CSA USAGE BY DFSMSHSM HAS REACHED THE ACTIVE THRESHOLD OF *xxxxxx***K BYTES, ALL BUT BATCH WAIT REQUESTS FAILED**

Changed message.

The message text has changed.

1.1.0 ARC0059I CSA USAGE BY DFSMShsm HAS REACHED MAXIMUM LIMIT OF *xxxxxx***K BYTES, JOB=***jobname* **FAILED**

1.2.0 ARC0059I CSA USAGE BY DFSMSHSM HAS REACHED MAXIMUM LIMIT OF *xxxxxx*K BYTES, JOB=*jobname* FAILED
Changed message.

The message text has changed.

1.1.0 ARC0060I WARNING: DFSMShsm IS NOT ACTIVE

1.2.0 ARC0060I WARNING: DFSMSHSM IS NOT ACTIVE
Changed message.

The message text has changed.

1.1.0 ARC0075E RECALL OF DATASET *dsname* FAILED, ORIGINAL DEVICE = *unitname*.

1.2.0 ARC0075E RECALL OF DATASET *dsname* FAILED, ORIGINAL DEVICE = *unitname*.
Changed message.

The message text has changed.

1.1.0 ARC0089I SETSYS TAPEFORMAT(MULTIFILE) IS NOT SUPPORTED FOR TAPE CARTRIDGES. TAPEFORMAT IS NOT CHANGED.

1.2.0 ARC0089I SETSYS TAPEFORMAT(MULTIFILE) IS NOT SUPPORTED FOR TAPE CARTRIDGES. TAPEFORMAT IS NOT CHANGED.
Changed message.

The message text has changed.

1.1.0 ARC0090I FAILURE TRYING TO ATTACH MODULE *name1* BY *name2*

1.2.0 ARC0090I FAILURE TRYING TO ATTACH MODULE *name1* BY *name2*
Changed message.

The message text has changed.

1.1.0 ARC0091I ARCCKEY CALLED WITH INVALID TYPE='*type*'X KEY=*key*

1.2.0 ARC0091I ARCCKEY CALLED WITH INVALID TYPE='*type*'X KEY=*key*
Changed message.

The message text has changed.

1.1.0 ARC0103I INVALID SETSYS PARAMETER {AMSTART | ABSTART | ADSTART | ARECOVERPERCENTUTILIZED | TAPEMAXRECALL TASKS | TAPEMAXRECALL TASKS > MAXRECALL TASKS | SMALLDATASETPACKING | MAXBACKUPTASKS | MOUNTWAITTIME | MAXMIGRATIONTASKS | MAXINTERVALTASKS ...

1.2.0 ARC0103I INVALID SETSYS PARAMETER {AMSTART | ABSTART | ADSTART | ARECOVERPERCENTUTILIZED | TAPEMAXRECALL TASKS | TAPEMAXRECALL TASKS > MAXRECALL TASKS | SMALLDATASETPACKING | MAXBACKUPTASKS | MOUNTWAITTIME | MAXMIGRATIONTASKS | MAXINTERVALTASKS ...
Changed message.

The explanation and application programmer response have changed.

1.1.0 ARC0106I INVALID DFSMShsm PARAMETER LIST *parameter* — RESTART DFSMShsm

1.2.0 ARC0106I INVALID DFSMSHSM PARAMETER LIST *parameter* — RESTART DFSMSHSM
Changed message.

The message text has changed.

1.1.0 ARC0124I CAUTION — VSAM SMALL-DATA-SET-PACKING DATA SET WAS NOT FOUND ON VOLUME *volser*, THE VOLUME WILL BE ADDED TO DFSMShsm WITH THE NOSDSP ATTRIBUTE, RC = *retcode* REAS = *reascode*

1.2.0 ARC0124I CAUTION — VSAM SMALL-DATA-SET-PACKING DATA SET WAS NOT FOUND ON VOLUME *volser*, THE VOLUME WILL BE ADDED TO DFSMSHSM WITH THE NOSDSP ATTRIBUTE, RC = *retcode* REAS = *reascode*
Changed message.

The message text has changed.

1.1.0 ARC0126I ADDVOL *volser* REJECTED — TYPE INCONSISTENT WITH DFSMShsm CDS, RC = *retcode*

1.2.0 ARC0126I ADDVOL *volser* REJECTED — TYPE INCONSISTENT WITH DFSMSHSM CDS, RC = *retcode*
Changed message.

The message text has changed.

1.1.0 ARC0141I ERROR ALLOCATING OUTPUT DATA SET

1.2.0 ARC0141I ERROR ALLOCATING OUTPUT DATA SET
Changed message.

The system action has changed.

1.1.0 ARC0143I PARMLIB MEMBER=ARCCMD*xx*, DFSMShsm AUTHORIZED USERID=*uid*, HOSTID=*procid*, PRIMARY HOST={YES | NO}, LOGSW={YES | NO}, STARTUP={YES | NO}, EMERGENCY={YES | NO}, CDSQ={YES | NO}, CDSR={YES | NO}, PDA={YES | NO}, RESTART={IS SPECIFIED | NOT SPECIFIED}

1.2.0 ARC0143I PARMLIB MEMBER=ARCCMD*xx*, DFSMSHSM AUTHORIZED USERID=*uid*, HOSTID=*procid*, PRIMARY HOST={YES | NO}, LOGSW={YES | NO}, STARTUP={YES | NO}, EMERGENCY={YES | NO}, CDSQ={YES | NO}, CDSR={YES | NO}, PDA={YES | NO}, RESTART={IS SPECIFIED | NOT SPECIFIED}
Changed message.

The message text has changed.

1.1.0 ARC0147I BUDENSITY=*density*, BUUNIT=*unit*, BU RECYCLE PERCENTAGE=*percent*%, MOUNT WAIT TIME=*min* MINUTE(S),

1.2.0 ARC0147I BUDENSITY=*density*, BUUNIT=*unit*, BU RECYCLE PERCENTAGE=*percent*%, MOUNT WAIT TIME=*min* MINUTE(S), TAPESPANSIZE(*mbytes*)
Changed message.

The message text and explanation have changed.

1.1.0 ARC0148I {MCDS | BCDS | OCDS | JOURNAL} TOTAL SPACE=*kbytes* K-BYTES CURRENTLY ABOUT *percent*% FULL, WARNING THRESHOLD=*thresh*%, TOTAL FREESPACE=*percent*%

1.2.0 ARC0148I {MCDS | BCDS | OCDS | JOURNAL} TOTAL SPACE=*kbytes* K-BYTES CURRENTLY ABOUT *percent*% FULL, WARNING THRESHOLD=*thresh*%, TOTAL FREESPACE=*percent*%
Changed message.

The explanation has changed.

1.1.0 ARC0152I MAXRECALLTASKS=*tasks*, RECALL={ANYSTORAGEVOLUME(LIKE | UNLIKE) | PRIVATEVOLUME(LIKE | UNLIKE)}, MAXEXTENTS=*extents*, CONVERSION={NO | REBLOCKBASE | REBLOCKTOANY | REBLOCKTOUNLIKE}, EXPORTESDS={RECORDMODE | CIMODE}

1.2.0 ARC0152I MAXRECALLTASKS=*tasks*, RECALL={ANYSTORAGEVOLUME(LIKE | UNLIKE) | PRIVATEVOLUME(LIKE | UNLIKE)}, MAXEXTENTS=*extents*, CONVERSION={NO | REBLOCKBASE | REBLOCKTOANY | REBLOCKTOUNLIKE}, VOLCOUNT={*NONE* | ANY}
Changed message.

The message text has changed.

1.1.0 ARC0152I MAXRECALLTASKS=*tasks*, RECALL={ANYSTORAGEVOLUME(LIKE | UNLIKE) | PRIVATEVOLUME(LIKE | UNLIKE)}, MAXEXTENTS=*extents*, CONVERSION={NO | REBLOCKBASE | REBLOCKTOANY | REBLOCKTOUNLIKE}, EXPORTESDS={RECORDMODE | CIMODE}

1.2.0 ARC0152I MAXRECALLTASKS=*tasks*, RECALL={ANYSTORAGEVOLUME(LIKE | UNLIKE) | PRIVATEVOLUME(LIKE | UNLIKE)}, MAXEXTENTS=*extents*, CONVERSION={NO | REBLOCKBASE | REBLOCKTOANY | REBLOCKTOUNLIKE}, VOLCOUNT={*NONE* | ANY}
Changed message.

The message text and explanation have changed.

1.1.0 ARC0154I MAXBACKUPTASKS=*tasks*, ABSTART=(*time1 time2 time3*), VERSIONS=*versions*, FREQUENCY=*days*, SKIPABPRIMARY= {YES | NO}, BACKUP PREFIX=*bprefix*, INCREMENTALBACKUP={CHANGEDONLY | ORIGINAL}, PROFILEBACKUP={YES | NO} INUSE=(RETRY={NO | YES}, DELAY=*min*, SERIALIZATION={PREFERRED | REQUIRED})

1.2.0 ARC0154I MAXBACKUPTASKS=*tasks*, ABSTART=(*time1 time2 time3*), VERSIONS=*versions*, FREQUENCY=*days*, SKIPABPRIMARY= {YES | NO}, BACKUP PREFIX=*bprefix*, INCREMENTALBACKUP={CHANGEDONLY | ORIGINAL}, PROFILEBACKUP={YES | NO} INUSE=(RETRY={NO | YES}, DELAY=*min*, SERIALIZATION={PREFERRED | REQUIRED})
Changed message.

The explanation has changed.

1.1.0 ARC0166I NO DFSMShsm REQUEST FOUND FOR QUERY

1.2.0 ARC0166I NO DFSMSHSM REQUEST FOUND FOR QUERY
Changed message.

MGS

1.1.0 ARC0178I VOLUME *volser* NOT IN DFSMShsm MIGRATION CONTROL DATA SET

1.2.0 ARC0178I VOLUME *volser* NOT IN DFSMSHSM MIGRATION CONTROL DATA SET
Changed message.

MGS

1.1.0 ARC0184I ERROR WHEN {READING | WRITING} THE DFSMShsm CONTROL DATA SET *type* RECORD FOR *key*, RC=*retcode*

1.2.0 ARC0184I ERROR WHEN {READING | WRITING} THE DFSMSHSM CONTROL DATA SET *type* RECORD FOR *key*, RC=*retcode*
Changed message.

MGS

1.1.0 ARC0187I I/O ERROR {POSITIONING TO | READING NEXT} DFSMShsm CONTROL DATA SET *type* **RECORD, KEY=***key***, RC=***retcode*

1.2.0 ARC0187I I/O ERROR {POSITIONING TO | READING NEXT} DFSMSHSM CONTROL DATA SET *type* **RECORD, KEY=***key***, RC=***retcode*

Changed message.

MGS

1.1.0 ARC0188I ERROR DELETING DFSMShsm CONTROL DATA SET *type* **RECORD, KEY=***key***, RC=***retcode*

1.2.0 ARC0188I ERROR DELETING DFSMSHSM CONTROL DATA SET *type* **RECORD, KEY=***key***, RC=***retcode*

Changed message.

MGS

1.1.0 ARC0189I NO DFSMShsm CONTROL DATA SET C RECORD FOUND FOR BACKUP VERSION *bdsname* **OF {CATALOGED | UNCATALOGED} DATA SET** *dsname***, BACKUP VERSION ENTRY DELETED FROM DFSMShsm BACKUP CONTROL DATA SET B RECORD**

1.2.0 ARC0189I NO DFSMShsm CONTROL DATA SET C RECORD FOUND FOR BACKUP VERSION *bdsname* **OF {CATALOGED | UNCATALOGED} DATA SET** *dsname***, BACKUP VERSION ENTRY DELETED FROM DFSMSHSM BACKUP CONTROL DATA SET B RECORD**

Changed message.

MGS

1.1.0 ARC0216I DUMPCLASS DEFINITION {SUCCESSFUL | MODIFIED | DISABLED | UNSUCCESSFUL}, CLASS=*class***, RC=***retcode*

1.2.0 ARC0216I DUMPCLASS DEFINITION {SUCCESSFUL | MODIFIED | DISABLED | UNSUCCESSFUL}, CLASS=*class***, RC=***retcode*

Changed message.

The explanation has changed.

1.1.0 ARC0247I {AUTO BACKUP | AUTO DUMP | PRIMARY SPACE MANAGEMENT | INTERVAL MIGRATION | NO AUTOMATIC FUNCTION} IS CURRENTLY PROCESSING DFSMShsm MANAGED VOLUMES

1.2.0 ARC0247I {AUTO BACKUP | AUTO DUMP | PRIMARY SPACE MANAGEMENT | INTERVAL MIGRATION | NO AUTOMATIC FUNCTION} IS CURRENTLY PROCESSING DFSMSHSM MANAGED VOLUMES

Changed message.

The message text has changed.

1.1.0 ARC0252I INVALID RECOVER COMMAND — TWO OR MORE OPTIONS ARE INCONSISTENT, RC=*retcode*

1.2.0 ARC0252I INVALID RECOVER COMMAND — TWO OR MORE OPTIONS ARE INCONSISTENT, RC=*retcode*

Changed message.

The explanation has changed.

1.1.0 ARC0281I INVALID DATE SPECIFIED

1.2.0 ARC0281I INVALID DATE SPECIFIED
Changed message.

The explanation has changed.

1.1.0 ARC0303I DATA SET *dsname* **WILL BE {RECALLED | RECOVERED} USING {DFSMSdss DETERMINED VALUE |** *blocksize***} FOR THE BLOCKSIZE**

1.2.0 ARC0303I DATA SET *dsname* **WILL BE {RECALLED | RECOVERED} USING {DFSMSDSS DETERMINED VALUE |** *blocksize***} FOR THE BLOCKSIZE**
Changed message.

The message text has changed.

1.1.0 ARC0309I TAPE VOLUME *volser* **REJECTED, {VOLUME ALREADY CONTAINS VALID DFSMShsm DATA | VOLUME RACF-PROTECTED BUT DOES NOT APPEAR IN DFSMShsm’S TAPE VOLUME SET | VOLUME IS A BACKUP VOLUME, MIGRATION VOLUME REQUIRED | VOLUME IS A MIGRATION VOLUME, BACKUP VOLUME REQUIRED | VOLUME IS A DUMP VOLUME, MIGRATION VOLUME REQUIRED | VOLUME IS A DUMP VOLUME, BACKUP VOLUME REQUIRED | VOLUME IS A BACKUP VOLUME, DUMP VOLUME REQUIRED | VOLUME IS A MIGRATION VOLUME, DUMP VOLUME REQUIRED | DUMP CLASS CONFLICT | VOLUME HAS ALREADY BEEN USED FOR OUTPUT ON ALLOCATED DEVICE}**

1.2.0 ARC0309I TAPE VOLUME *volser* **REJECTED, {VOLUME ALREADY CONTAINS VALID DFSMSHSM DATA | VOLUME RACF-PROTECTED BUT DOES NOT APPEAR IN DFSMSHSM.’S TAPE VOLUME SET | VOLUME IS A BACKUP VOLUME, MIGRATION VOLUME REQUIRED | VOLUME IS A MIGRATION VOLUME, BACKUP VOLUME REQUIRED | VOLUME IS A DUMP VOLUME, MIGRATION VOLUME REQUIRED | VOLUME IS A DUMP VOLUME, BACKUP VOLUME REQUIRED | VOLUME IS A BACKUP VOLUME, DUMP VOLUME REQUIRED | VOLUME IS A MIGRATION VOLUME, DUMP VOLUME REQUIRED | DUMP CLASS CONFLICT | VOLUME HAS ALREADY BEEN USED FOR OUTPUT ON ALLOCATED DEVICE}**
Changed message.

The message text has changed.

1.1.0 ARC0353I TAPE VOLUME *volser* **SUCCESSFULLY {ADDED TO | REMOVED FROM} DFSMShsm’S RACF TAPE VOLUME SET**

1.2.0 ARC0353I TAPE VOLUME *volser* **SUCCESSFULLY {ADDED TO | REMOVED FROM} DFSMSHSM’S RACF TAPE VOLUME SET**
Changed message.

The message text has changed.

1.1.0 ARC0355I ERROR {READING | WRITING} DFSMShsm CONTROL DATA SET *type* **RECORD FOR KEY=***key***, RC=***retcode***. DFSMShsm RECORD UPDATING CONTINUES FOR THIS DATA SET**

1.2.0 ARC0355I ERROR {READING | WRITING} DFSMSHSM CONTROL DATA SET *type* **RECORD FOR KEY=***key***, RC=***retcode***. DFSMSHSM RECORD UPDATING CONTINUES FOR THIS DATA SET**
Changed message.

The message text has changed.

1.1.0 ARC0358I EXTENSION RECORD WITH KEY=*key* **MISSING FROM DFSMShsm CDS, {MIGRATION COPY | BACKUP VERSION} OF DSN=***dsname* **NOT ADDED TO T RECORD**

1.2.0 ARC0358I EXTENSION RECORD WITH KEY=*key* **MISSING FROM DFSMSHSM CDS, {MIGRATION COPY | BACKUP VERSION} OF DSN=***dsname* **NOT ADDED TO T RECORD**
Changed message.

The message text has changed.

1.1.0 ARC0359I ERROR {ADDING | REMOVING} TAPE VOLUME *volser* **{TO | FROM} DFSMShsm'S RACF TAPE VOLUME SET, RC=***retcode***, REAS={***reascode* **| ABEND}**

1.2.0 ARC0359I ERROR {ADDING | REMOVING} TAPE VOLUME *volser* **{TO | FROM} DFSMSHSM'S RACF TAPE VOLUME SET, RC=***retcode***, REAS={***reascode* **| ABEND}**
Changed message.

The message text has changed.

1.1.0 ARC0368I VOLUME *volser* **HAS BEEN MARKED FULL**

1.2.0 ARC0368I VOLUME *volser* **HAS BEEN MARKED FULL**
Changed message.

The message text and explanation have changed.

1.1.0 ARC0370I FAILED TO RESET HOSTID IN DFSMShsm CONTROL DATA SET *type* **RECORD, KEY=***key***, I/O OPERATION={READING | WRITING}, RC=***retcode*

1.2.0 ARC0370I FAILED TO RESET HOSTID IN DFSMSHSM CONTROL DATA SET *type* **RECORD, KEY=***key***, I/O OPERATION={READING | WRITING}, RC=***retcode*
Changed message.

The message text has changed.

1.1.0 ARC0371I DFSMShsm CONTROL DATA SET *type* **RECORD IN USE BY HOST** *procid***, KEY=***recordkey*

1.2.0 ARC0371I DFSMSHSM CONTROL DATA SET *type* **RECORD IN USE BY HOST** *procid***, KEY=***recordkey*
Changed message.

The message text has changed.

1.1.0 ARC0372I {NON-SMS | SMS} VSAM DATA SET *dsname* **{TO BE UNCATALOGED | CATALOGED | IMPORTED | RESTORED BY DFSMSdss} FOR RECALL, VOLSER=** *volser*

1.2.0 ARC0372I {NON-SMS | SMS} VSAM DATA SET *dsname* **{TO BE UNCATALOGED | CATALOGED | IMPORTED | RESTORED BY DFSMSDSS} FOR RECALL, VOLSER=** *volser*
Changed message.

The message text has changed.

1.1.0 ARC0424I *volser* **NOT COPIED — REASON=***reascode*

1.2.0 ARC0424I *volser* **NOT COPIED — REASON=***reascode*
Changed message.

The explanation has changed.

1.1.0 ARC0430I {TAPECOPY | TAPEREPL} COMMAND FAILED — *reascode*.

1.2.0 ARC0430I {TAPECOPY | TAPEREPL} COMMAND FAILED — *reascode*.
Changed message.

The explanation has changed.

1.1.0 ARC0509E DFSMShsm JOURNAL DATA SET IS ALLOCATED AS A STRIPED DATA SET. THIS IS NOT ALLOWED. DFSMShsm IS SHUTTING DOWN.

1.2.0 ARC0509E DFSMSHSM JOURNAL DATA SET IS ALLOCATED AS A STRIPED DATA SET. THIS IS NOT ALLOWED. DFSMSHSM IS SHUTTING DOWN.
Changed message.

The message text has changed.

1.1.0 ARC0510I DFSMShsm CONTROLLED VOLUME *volser* **NOT** *fct***, A READ OR WRITE ERROR OCCURRED ON THE MCV RECORD, CODE=***retcode*

1.2.0 ARC0510I DFSMSHSM CONTROLLED VOLUME *volser* **NOT** *fct***, A READ OR WRITE ERROR OCCURRED ON THE MCV RECORD, CODE=***retcode*
Changed message.

The message text has changed.

1.1.0 ARC0518I SECONDARY SPACE MANAGEMENT {ENDED SUCCESSFULLY | COMPLETED, ENDING TIME REACHED | ENDED PRIOR TO COMPLETION, {DFSMShsm SHUTDOWN | AUTO SPACE MANAGEMENT HELD | DFSMShsm IN EMERGENCY MODE | RESOURCES NOT AVAILABLE | MORE THAN 10 BAD MCDS RECORDS WERE ENCOUNTERED}}

1.2.0 ARC0518I SECONDARY SPACE MANAGEMENT {ENDED SUCCESSFULLY | COMPLETED, ENDING TIME REACHED | ENDED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | AUTO SPACE MANAGEMENT HELD | DFSMSHSM IN EMERGENCY MODE | RESOURCES NOT AVAILABLE | MORE THAN 10 BAD MCDS RECORDS WERE ENCOUNTERED}}
Changed message.

The message text has changed.

1.1.0 ARC0521I PRIMARY SPACE MANAGEMENT {ENDED SUCCESSFULLY | COMPLETED, ENDING TIME REACHED | ENDED PRIOR TO COMPLETION, {DFSMShsm SHUTDOWN | AUTO SPACE MGMT HELD | | DFSMShsm IN EMERGENCY MODE | RESOURCES NOT AVAILABLE}}

1.2.0 ARC0521I PRIMARY SPACE MANAGEMENT {ENDED SUCCESSFULLY | COMPLETED, ENDING TIME REACHED | ENDED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | AUTO SPACE MGMT HELD | | DFSMSHSM IN EMERGENCY MODE | RESOURCES NOT AVAILABLE}}
Changed message.

The message text, explanation and application programmer response have changed.

1.1.0 ARC0534I MIGRATION HELD, {NO MIGRATION LEVEL 1 VOLUME AVAILABLE | NO MIGRATION LEVEL 1 VOLUME AND NO TAPE MIGRATION VOLUME AVAILABLE | NO TAPE MIGRATION VOLUME AVAILABLE}

1.2.0 ARC0534I MIGRATION HELD, {NO MIGRATION LEVEL 1 VOLUME AVAILABLE | NO MIGRATION LEVEL 1 VOLUME AND NO TAPE MIGRATION VOLUME AVAILABLE | NO TAPE MIGRATION VOLUME AVAILABLE}, ABEND IN

INSTALLATION-WIDE EXIT.
Changed message.

The message text and application programmer response have changed.

1.1.0 ARC0540I MIGRATE REJECTED — INVALID USE OF CONVERT PARAMETER, {*volser1* IS A DFSMShsm OWNED VOLUME | SPACE MANAGEMENT ATTRIBUTE NOT MIGRATE FOR *volser1* | MIGRATIONLEVEL2 NOT VALID WITH CONVERT | *volser2* NON-MANAGED VOLUME AND UNITTYPE NOT SPECIFIED | CONVERT UNIT DIFFERENT THAN DFSMShsm VOLUME RECORD | CONVERT PARAMETER NOT ALLOWED IN DIRECT TO TAPE ENVIRONMENT}

1.2.0 ARC0540I MIGRATE REJECTED — INVALID USE OF CONVERT PARAMETER, {*volser1* IS AN HSM OWNED VOLUME | SPACE MANAGEMENT ATTRIBUTE NOT MIGRATE FOR *volser1* | MIGRATIONLEVEL2 NOT VALID WITH CONVERT | *volser2* NON-MANAGED VOLUME AND UNITTYPE NOT SPECIFIED | CONVERT UNIT DIFFERENT THAN DFSMSHSM VOLUME RECORD | CONVERT PARAMETER NOT ALLOWED IN DIRECT TO TAPE ENVIRONMENT}
Changed message.

The message text has changed.

1.1.0 ARC0550I *count* DATA SETS REMAIN ON VOLUME *volser*

1.2.0 ARC0550I *count* DATA SETS ON VOLUME *volser*, WERE NOT PROCESSED BY FREEVOL
Changed message.

The message text, explanation and application programmer response have changed.

1.1.0 ARC0559I SPACE MANAGEMENT OF {*volser* | ALL LEVEL 1 MIGRATION VOLUME} WILL NOT TARGET {MIGRATION LEVEL 1 | MIGRATION LEVEL 2 DASD | MIGRATION LEVEL 2 TAPE} UNTIL THE REQUESTED VOLUME TYPE IS MADE AVAILABLE

1.2.0 ARC0559I SPACE MANAGEMENT OF {*volser* | ALL LEVEL 1 MIGRATION VOLUME} WILL NOT TARGET {MIGRATION LEVEL 1 | MIGRATION LEVEL 2 DASD | MIGRATION LEVEL 2 TAPE} UNTIL THE REQUESTED VOLUME TYPE IS MADE AVAILABLE
Changed message.

The explanation, system action and application programmer response have changed.

1.1.0 ARC0561I PRIMARY-DAYS-NON-USAGE VALUE *value* SPECIFIED FOR MANAGEMENT CLASS *mgtclassname* CONFLICTS WITH DFSMShsm INTEGRITY AGE *value*

1.2.0 ARC0561I PRIMARY-DAYS-NON-USAGE VALUE *value* SPECIFIED FOR MANAGEMENT CLASS *mgtclassname* CONFLICTS WITH DFSMSHSM INTEGRITY AGE *value*
Changed message.

The message text has changed.

1.1.0 ARC0570I {PRIMARY SPACE MANAGEMENT | INTERVAL MIGRATION | COMMAND | MIGRATION | AUTOMATIC BACKUP | COMMAND BACKUP | AUTOMATIC DUMP | COMMAND DUMP | RESTORE | RECOVERY} FOR {ALL | *volser*} SMS OR NON SMS MANAGED VOLUME(S) TERMINATED, RC=*retcode*, REASON=*reascode*

1.2.0 ARC0570I {PRIMARY SPACE MANAGEMENT | INTERVAL MIGRATION | COMMAND MIGRATION | AUTOMATIC BACKUP | COMMAND BACKUP | AUTOMATIC DUMP | COMMAND DUMP | RESTORE | RECOVERY} FOR {ALL SMS

MANAGED | *volser***} VOLUME(S) TERMINATED, RC=***retcode***, REASON=***reascode*
Changed message.

The message text and application programmer response have changed.

1.1.0 ARC0581I INTERVAL MIGRATION {ENDED SUCCESSFULLY | ENDED PREMATURELY, {DFSMShsm SHUTDOWN | SPACE MGMT HELD | DFSMShsm IN EMERGENCY MODE | RESOURCES NOT AVAILABLE}}

1.2.0 ARC0581I INTERVAL MIGRATION {ENDED SUCCESSFULLY | ENDED PREMATURELY, {DFSMSHSM SHUTDOWN | SPACE MGMT HELD | DFSMSHSM IN EMERGENCY MODE | RESOURCES NOT AVAILABLE}}
Changed message.

The message text has changed.

1.1.0 ARC0624I {DUMP | RECOVER | RESTORE} OF VOLUME *volser* **TERMINATED PRIOR TO COMPLETION, {DFSMShsm SHUTDOWN | DFSMShsm IN EMERGENCY MODE | BACKUP DISABLED | DUMP HELD | AUTODUMP HELD | UNABLE TO MOUNT A TAPE | DFSMShsm SHUTDOWN REQUESTED WHILE WAITING FOR A TAPE MOUNT | OUTPUT VOLUME LIMIT EXCEEDED | RECOVERY HELD | DFSMSdss FAILING RC=***retcode***}**

1.2.0 ARC0624I {DUMP | RECOVER | RESTORE} OF VOLUME *volser* **TERMINATED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP DISABLED | DUMP HELD | AUTODUMP HELD | UNABLE TO MOUNT A TAPE | DFSMSHSM SHUTDOWN REQUESTED WHILE WAITING FOR A TAPE MOUNT | OUTPUT VOLUME LIMIT EXCEEDED | RECOVERY HELD | DFSMSdss FAILING RC=***retcode***}**
Changed message.

The message text has changed.

1.1.0 ARC0625I AUTOMATIC DUMP TERMINATED PRIOR TO COMPLETION, {DFSMShsm SHUTDOWN | DFSMShsm IN EMERGENCY MODE | BACKUP DISABLED | DUMP HELD | AUTODUMP HELD | QUIESCE TIME REACHED}

1.2.0 ARC0625I AUTOMATIC DUMP TERMINATED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP DISABLED | DUMP HELD | AUTODUMP HELD | QUIESCE TIME REACHED}
Changed message.

The message text has changed.

1.1.0 ARC0651I SMS MANAGED VOLUMES CANNOT BE DUMPED OR RESTORED, INSUFFICIENT LEVEL OF DFSMSdss INSTALLED

1.2.0 ARC0651I SMS MANAGED VOLUMES CANNOT BE DUMPED OR RESTORED, INSUFFICIENT LEVEL OF DFSMSDSS INSTALLED
Changed message.

The message text has changed.

1.1.0 ARC0682I EXPIRE {BACKUP | ABARS} VERSIONS TERMINATED PRIOR TO COMPLETION, {DFSMShsm SHUTDOWN | DFSMShsm IN EMERGENCY MODE | BACKUP DISABLED | EXPIREBV HELD | TASK ABENDED | MANAGEMENT CLASS NOT FOUND FOR ASSOCIATED AGGREGATE GROUP | TOO MANY BCDS I/O ERRORS}

1.2.0 ARC0682I EXPIRE {BACKUP | ABARS} VERSIONS TERMINATED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP DISABLED | EXPIREBV HELD | TASK ABENDED | MANAGEMENT CLASS

NOT FOUND FOR ASSOCIATED AGGREGATE GROUP | TOO MANY BCDS I/O ERRORS}
Changed message.

The message text has changed.

1.1.0 ARC0714I {BACKUP | SPILL | CLEANUP | FREEVOL } OF VOLUME *volser* **TERMINATED, DFSMShsm {SHUTDOWN | IN EMERGENCY MODE | BACKUP HELD | AUTOBACKUP HELD | BACKUP DISABLED}**

1.2.0 ARC0714I {BACKUP | SPILL | CLEANUP | FREEVOL } OF VOLUME *volser* **TERMINATED, DFSMSHSM {SHUTDOWN | IN EMERGENCY MODE | BACKUP HELD | AUTOBACKUP HELD | BACKUP DISABLED}**
Changed message.

The message text has changed.

1.1.0 ARC0715I {MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, {DFSMShsm SHUTDOWN | DFSMShsm IN EMERGENCY MODE | BACKUP HELD | BACKUP DISABLED}

1.2.0 ARC0715I {MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP HELD | BACKUP DISABLED}
Changed message.

The message text has changed.

1.1.0 ARC0717I {AUTOMATIC | COMMAND} BACKUP TERMINATED PRIOR TO COMPLETION, {DFSMShsm SHUTDOWN | DFSMShsm IN EMERGENCY MODE | BACKUP HELD | AUTOBACKUP HELD | QUIESCE TIME REACHED | BACKUP DISABLED}

1.2.0 ARC0717I {AUTOMATIC | COMMAND} BACKUP TERMINATED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP HELD | AUTOBACKUP HELD | QUIESCE TIME REACHED | BACKUP DISABLED}
Changed message.

The message text has changed.

1.1.0 ARC0734I ACTION=*action* **FRVOL=***volser1* **TOVOL=***volser2* **{BLOCKS=***blocks* **| TRACKS=***tracks***} RC=***retcode***, REASON=***reascode***, AGE=***days***, DSN=***dsname*

1.2.0 ARC0734I ACTION=*action* **FRVOL=***volser1* **TOVOL=***volser2* **{BLOCKS=***blocks* **| TRACKS=***tracks***} RC=***retcode***, REASON=***reascode***, AGE=***days***, DSN=***dsname*
Changed message.

The explanation has changed.

1.1.0 ARC0776I THE DATA SET {dsname} WAS RECOVERED BUT DFSMSdss ENCOUNTERED A MINOR ERROR WHILE PERFORMING DATA MOVEMENT.

1.2.0 ARC0776I THE DATA SET {dsname} WAS RECOVERED BUT DFSMSDSS ENCOUNTERED A MINOR ERROR WHILE PERFORMING DATA MOVEMENT.
Changed message.

The message text has changed.

1.1.0 ARC0801I DFSMShsm AUDIT STARTING

1.2.0 ARC0801I DFSMSHSM AUDIT STARTING

Changed message.

The message text has changed.

1.1.0 ARC0802I DFSMShsm AUDIT ENDING

1.2.0 ARC0802I DFSMSHSM AUDIT ENDING

Changed message.

The message text has changed.

1.1.0 ARC0814I LIST {USER | TTOC | DATA SETS | VOLUME | BACKUPVOLUME | PRIMARYVOLUME | DUMP VOLUMES | DUMP CLASSES | AGGREGATE} PROCESSING TERMINATING EARLY, RC=*retcode*

1.2.0 ARC0814I LIST {USER | TTOC | DATA SETS | VOLUME | BACKUPVOLUME | PRIMARYVOLUME | DUMP VOLUMES | DUMP CLASSES | AGGREGATE} PROCESSING TERMINATING EARLY, RC=*retcode*

Changed message.

The explanation has changed.

1.1.0 ARC0816I NO DFSMShsm CONTROL DATA SET RECORDS FOUND CONTAINING HOSTID=*procid*

1.2.0 ARC0816I NO DFSMSHSM CONTROL DATA SET RECORDS FOUND CONTAINING HOSTID=*procid*

Changed message.

The message text has changed.

1.1.0 ARC0833I RECYCLE ENDED ON VOLUME *volser*, *number* **DATA SETS MOVED, TIME** *time*, **RC=***retcode*, **REAS=***reascode*

1.2.0 ARC0833I RECYCLE ENDED ON VOLUME *volser*, *number* **DATA SETS MOVED, TIME** *time*, **RC=***retcode*, **REAS=***reascode*

Changed message.

The explanation has changed.

1.1.0 ARC0835I RECYCLE TERMINATED EARLY, RC=*retcode*, **EXPLANATION=***xpl*

1.2.0 ARC0835I RECYCLE TERMINATED EARLY, RC=*retcode*, **REAS=***reascode*

Changed message.

The explanation has changed.

1.1.0 ARC0837I NO VOLUMES FOUND TO BE ELIGIBLE FOR RECYCLE, CRITERIA USED FOR ML2=*percent***%, CRITERIA USED FOR BACKUP=***percent***%**

1.2.0 ARC0837I NO VOLUMES FOUND TO BE ELIGIBLE FOR RECYCLE, CRITERIA USED FOR ML2=*percent***%, CRITERIA USED FOR BACKUP=***percent***%**

Changed message.

The explanation has changed.

1.1.0 ARC0844I RECYCLE COMMAND INVALID, EITHER ‘EXECUTE’ OR ‘DISPLAY’ MUST BE SPECIFIED

1.2.0 ARC0844I RECYCLE COMMAND INVALID. ‘EXECUTE’, ‘VERIFY’, OR ‘DISPLAY’ MUST BE SPECIFIED
Changed message.

The explanation and application programmer response have changed.

1.1.0 ARC0850I DFSMShsm CONTROL DATA SET UPDATE STARTING

1.2.0 ARC0850I DFSMSHSM CONTROL DATA SET UPDATE STARTING
Changed message.

The message text has changed.

1.1.0 ARC0851I DFSMShsm CONTROL DATA SET UPDATE COMPLETED {SUCCESSFULLY | UNSUCCESSFULLY}

1.2.0 ARC0851I DFSMSHSM CONTROL DATA SET UPDATE COMPLETED {SUCCESSFULLY | UNSUCCESSFULLY}
Changed message.

The message text has changed.

1.1.0 ARC0852I DFSMShsm CDS UPDATE TERMINATED { I/O ERROR ON | INVALID } JOURNAL DATA SET

1.2.0 ARC0852I DFSMSHSM CDS UPDATE TERMINATED { I/O ERROR ON | INVALID } JOURNAL DATA SET
Changed message.

The message text has changed.

1.1.0 ARC0900I DFSMShsm ERROR CODE *retcode* **IN MODULE** *modname* **TYPE {LOG | SNAP | ABEND | FATAL | SNAP FAILED}**

1.2.0 ARC0900I DFSMSHSM ERROR CODE *retcode* **IN MODULE** *modname* **TYPE {LOG | SNAP | ABEND | FATAL | SNAP FAILED}**
Changed message.

The message text has changed.

1.1.0 ARC0901I DFSMShsm DEBUG, MOD=*name***, CODE=***x*

1.2.0 ARC0901I DFSMSHSM DEBUG, MOD=*name***, CODE=***x*
Changed message.

The message text has changed.

1.1.0 ARC0903I VSAM CONTROL INTERVAL BUSY TOO LONG ON READ-FOR-UPDATE OF DFSMShsm RECORD TYPE=*type***, KEY=***key*

1.2.0 ARC0903I VSAM CONTROL INTERVAL BUSY TOO LONG ON READ-FOR-UPDATE OF DFSMSHSM RECORD TYPE=*type***, KEY=***key*
Changed message.

The message text has changed.

1.1.0 ARC0904I VSAM CONTROL INTERVAL BUSY TOO LONG ON THE WRITE OF DFSMShsm RECORD TYPE=*type***, KEY=***key*

1.2.0 ARC0904I VSAM CONTROL INTERVAL BUSY TOO LONG ON THE WRITE OF DFSMSHSM RECORD TYPE=*type***, KEY=***key*
Changed message.

The message text has changed.

1.1.0 ARC0905E ERROR UPDATING DATA SET VTOC ENTRY FOR *dsname*, **RC=** *retcode*

1.2.0 ARC0905E ERROR UPDATING DATA SET VTOC ENTRY FOR *dsname*, **RC=** *retcode*
Changed message.

The explanation and application programmer response have changed.

1.1.0 ARC0941I THE {NUMBER OF BACKUP VERSIONS (DATA SET EXISTS)| NUMBER OF BACKUP VERSIONS (DATA SET DELETED)} VALUE SPECIFIED FOR {*management class name***} IS GREATER THAN THE DFSMShsm MAXIMUM ALLOWABLE NUMBER OF BACKUP VERSIONS — VERSIONS IS SET TO {***maximum allowable number of backup versions***}**

1.2.0 ARC0941I THE {NUMBER OF BACKUP VERSIONS (DATA SET EXISTS)| NUMBER OF BACKUP VERSIONS (DATA SET DELETED)} VALUE SPECIFIED FOR {*management class name***} IS GREATER THAN THE DFSMSHSM MAXIMUM ALLOWABLE NUMBER OF BACKUP VERSIONS — VERSIONS IS SET TO {***maximum allowable number of backup versions***}**
Changed message.

The message text has changed.

1.1.0 ARC1004I DFSMShsm NOT ACTIVE — REQUEST *rnumber* **QUEUED**

1.2.0 ARC1004I DFSMSHSM NOT ACTIVE — REQUEST *rnumber* **QUEUED**
Changed message.

The message text has changed.

1.1.0 ARC1005I DFSMShsm NOT ACTIVE — REQUEST REJECTED

1.2.0 ARC1005I DFSMSHSM NOT ACTIVE — REQUEST REJECTED
Changed message.

The message text has changed.

1.1.0 ARC1006I DFSMShsm REJECTED REQUEST, RC=*retcode*

1.2.0 ARC1006I DFSMSHSM REJECTED REQUEST, RC=*retcode*
Changed message.

The message text has changed.

1.1.0 ARC1007I {COMMAND | MIGRATE | DELETE | BACKVOL | BACKDS | RECALL | RECOVER} REQUEST *rnumber* **SENT TO DFSMShsm**

1.2.0 ARC1007I {COMMAND | MIGRATE | DELETE | BACKVOL | BACKDS | RECALL | RECOVER} REQUEST *rnumber* **SENT TO DFSMSHSM**
Changed message.

The message text has changed.

1.1.0 ARC1009I JES3 C/I REQUEST FAILED BY DFSMShsm FOR DSN= *dsname***,RC=***mwerc* **REAS=***mwereas*

1.2.0 ARC1009I JES3 C/I REQUEST FAILED BY DFSMSHSM FOR DSN= *dsname***,RC=***mwerc* **REAS=***mwereas*
Changed message.

The message text has changed.

1.1.0 ARC1020I DFHSM IS RECALLING FROM {TAPE | DASD | UNKNOWN} DSN=*dsname*, { YOU MAY CONVERT THE WAIT FOR RECALL BY PRESSING THE ATTENTION KEY | PLEASE RETRY THE USER REQUEST AFTER THE RECALL HAS COMPLETED.}

1.2.0 ARC1020I DFSMSHSM IS RECALLING FROM {TAPE | DASD | UNKNOWN} DSN=*dsname*, {YOU MAY CONTINUE THE RECALL IN THE BACKGROUND AND FREE YOUR TSO SESSION BY PRESSING THE ATTENTION KEY | PLEASE RETRY THE USER REQUEST AFTER THE RECALL HAS COMPLETED.}
Changed message.

The message text, explanation, system action and application programmer response have changed.

1.1.0 ARC1025A DO YOU WISH TO CANCEL DFSMShsm LIST REQUEST? Enter Y or N

1.2.0 ARC1025A DO YOU WISH TO CANCEL DFSMSHSM LIST REQUEST? Enter Y or N
Changed message.

The message text has changed.

1.1.0 ARC1101I ERROR READING DFSMShsm CONTROL DATA SET DURING RECALL/RECOVER/RESTORE/ DELETE

1.2.0 ARC1101I ERROR READING DFSMShsm CONTROL DATA SET DURING RECALL/RECOVER/RESTORE/ DELETE
Changed message.

The message text has changed.

1.1.0 ARC1109I ERROR UPDATING DFSMShsm CONTROL DATA SET DURING RECALL/ RECOVER/DELETE

1.2.0 ARC1109I ERROR UPDATING DFSMSHSM CONTROL DATA SET DURING RECALL/ RECOVER/DELETE
Changed message.

The message text has changed.

1.1.0 ARC1110I DELETE OF MIGRATED DATA SET FAILED

1.2.0 ARC1110I DELETE OF MIGRATED DATA SET FAILED
Changed message.

The explanation and application programmer response have changed.

1.1.0 ARC1151I ANOTHER DFSMShsm FUNCTION ACTIVE FOR DATA SET, RECALL REJECTED

1.2.0 ARC1151I ANOTHER DFSMSHSM FUNCTION ACTIVE FOR DATA SET, RECALL REJECTED
Changed message.

The message text has changed.

1.1.0 ARC1158I RECOVER DATA SET FAILED

1.2.0 ARC1158I RECOVER DATA SET FAILED
Changed message.

The explanation has changed.

1.1.0 ARC1158I RECOVER DATA SET FAILED

1.2.0 ARC1158I RECOVER DATA SET FAILED
Changed message.

The explanation, system action and application programmer response have changed.

1.1.0 ARC1162I DFSMSdss NOT AT SUFFICIENT LEVEL

1.2.0 ARC1162I DFSMSDSS NOT AT SUFFICIENT LEVEL
Changed message.

The message text has changed.

1.1.0 ARC1169I RECALL/RECOVER FAILED DUE TO AN ERROR IN DFSMSdss

1.2.0 ARC1169I RECALL/RECOVER FAILED DUE TO AN ERROR IN DFSMSDSS
Changed message.

The message text has changed.

1.1.0 ARC1170I DFSMShsm ENCOUNTERED AN SMS-RELATED ERROR WHILE PROCESSING A DATA SET

1.2.0 ARC1170I DFSMSHSM ENCOUNTERED AN SMS-RELATED ERROR WHILE PROCESSING A DATA SET
Changed message.

The message text has changed.

1.1.0 ARC1172I DFSMShsm ENCOUNTERED AN SMS-RELATED ERROR WHILE SELECTING A TARGET VOLUME

1.2.0 ARC1172I DFSMSHSM ENCOUNTERED AN SMS-RELATED ERROR WHILE SELECTING A TARGET VOLUME
Changed message.

The message text has changed.

1.1.0 ARC1178I DFSMShsm NOT AT SUFFICIENT LEVEL

1.2.0 ARC1178I DFSMSHSM NOT AT SUFFICIENT LEVEL
Changed message.

The message text has changed.

1.1.0 ARC1186I RECALL/RECOVER/RESTORE FAILED — DFSMShsm SHUTDOWN OCCURRED WHILE WAITING FOR A TAPE MOUNT

1.2.0 ARC1186I RECALL/RECOVER/RESTORE FAILED — DFSMSHSM SHUTDOWN OCCURRED WHILE WAITING FOR A TAPE MOUNT
Changed message.

The message text has changed.

1.1.0 ARC1192I TERMINATING DFSMShsm RECALL/RECOVERY WAIT REQUEST, DFSMShsm SHUTTING DOWN

1.2.0 ARC1192I TERMINATING DFSMSHSM RECALL/RECOVERY WAIT REQUEST, DFSMSHSM SHUTTING DOWN
Changed message.

The message text has changed.

1.1.0 ARC1206I DUPLICATE DATA SET NAME IN DFSMShsm DATA BASE

1.2.0 ARC1206I DUPLICATE DATA SET NAME IN DFSMSHSM DATA BASE
Changed message.

The message text has changed.

1.1.0 ARC1225I ERROR READING DFSMShsm CONTROL DATA SET DURING MIGRATION

1.2.0 ARC1225I ERROR READING DFSMSHSM CONTROL DATA SET DURING MIGRATION
Changed message.

The message text has changed.

1.1.0 ARC1226I DFSMShsm CONTROL DATA SET ENTRY IN USE, MIGRATION TERMINATED

1.2.0 ARC1226I DFSMSHSM CONTROL DATA SET ENTRY IN USE, MIGRATION TERMINATED
Changed message.

The message text has changed.

1.1.0 ARC1251I ANOTHER DFSMShsm FUNCTION ACTIVE FOR DATA SET, MIGRATION REJECTED

1.2.0 ARC1251I ANOTHER DFSMSHSM FUNCTION ACTIVE FOR DATA SET, MIGRATION REJECTED
Changed message.

The message text has changed.

1.1.0 ARC1253I DATA SET NEEDS BACKUP SO IT WAS NOT EXPIRED

1.2.0 ARC1253I DATA SET NEEDS BACKUP SO IT WAS NOT EXPIRED
Changed message.

The explanation has changed.

1.1.0 ARC1270I AN ERROR OCCURRED WHILE DFSMShsm WAS PROCESSING AN SMS MANAGED DATA SET

1.2.0 ARC1270I AN ERROR OCCURRED WHILE DFSMSHSM WAS PROCESSING AN SMS MANAGED DATA SET
Changed message.

The message text has changed.

1.1.0 ARC1272I DFSMShsm ENCOUNTERED AN SMS-RELATED ERROR WHILE OBTAINING AN MVT ENTRY FOR AN SMS-MANAGED VOLUME

1.2.0 ARC1272I DFSMSHSM ENCOUNTERED AN SMS-RELATED ERROR WHILE OBTAINING AN MVT ENTRY FOR AN SMS-MANAGED VOLUME
Changed message.

The message text has changed.

1.1.0 ARC1284I CONVERT OPTION FOR DATA SET MIGRATE NOT ALLOWED IN A DIRECT TO TAPE ENVIRONMENT

1.2.0 ARC1284I CONVERT OPTION FOR DATA SET MIGRATE NOT ALLOWED IN A DIRECT TO TAPE ENVIRONMENT
Changed message.

The explanation has changed.

1.1.0 ARC1286I MIGRATION FAILED — DFSMShsm SHUTDOWN OCCURRED WHILE WAITING FOR A TAPE MOUNT

1.2.0 ARC1286I MIGRATION FAILED — DFSMSHSM SHUTDOWN OCCURRED WHILE WAITING FOR A TAPE MOUNT
Changed message.

The message text has changed.

1.1.0 ARC1292I TERMINATING DFSMShsm MIGRATION WAIT REQUEST, DFSMShsm SHUTTING DOWN

1.2.0 ARC1292I TERMINATING DFSMShsm MIGRATION WAIT REQUEST, DFSMSHSM SHUTTING DOWN
Changed message.

The message text has changed.

1.1.0 ARC1299I UNSUPPORTED DATA SET FOR MIGRATION

1.2.0 ARC1299I UNSUPPORTED DATA SET FOR MIGRATION
Changed message.

The explanation has changed.

1.1.0 ARC1311I ERROR CREATING OR UPDATING RECORD IN DFSMShsm CONTROL DATA SET

1.2.0 ARC1311I ERROR CREATING OR UPDATING RECORD IN DFSMSHSM CONTROL DATA SET
Changed message.

The message text has changed.

1.1.0 ARC1324I DFSMShsm CONTROL DATA SET ERROR DURING BACKUP

1.2.0 ARC1324I DFSMSHSM CONTROL DATA SET ERROR DURING BACKUP
Changed message.

The message text has changed.

1.1.0 ARC1325I ERROR READING DFSMShsm CONTROL DATA SET DURING BACKUP

1.2.0 ARC1325I ERROR READING DFSMSHSM CONTROL DATA SET DURING BACKUP
Changed message.

The message text has changed.

1.1.0 ARC1344I TAPE VOLUME CANNOT BE ADDED FOR BACKUP, VOLUME ALREADY CONTAINS VALID DFSMShsm DATA

1.2.0 ARC1344I TAPE VOLUME CANNOT BE ADDED FOR BACKUP, VOLUME ALREADY CONTAINS VALID DFSMSHSM DATA
Changed message.

The message text has changed.

1.1.0 ARC1345I ERROR DELETING A DFSMShsm CDS RECORD

1.2.0 ARC1345I ERROR DELETING A DFSMSHSM CDS RECORD
Changed message.

The message text has changed.

1.1.0 ARC1356I BACKUP FAILED FOR DATA SET

1.2.0 ARC1356I BACKUP FAILED FOR DATA SET
Changed message.

The message text has changed.

1.1.0 ARC1356I BACKUP FAILED FOR DATA SET

1.2.0 ARC1356I BACKUP FAILED FOR DATA SET
Changed message.

The explanation has changed.

1.1.0 ARC1368I BACKUP FAILED DUE TO AN ERROR IN DFSMSdss

1.2.0 ARC1368I BACKUP FAILED DUE TO AN ERROR IN DFSMSDSS
Changed message.

The message text has changed.

1.1.0 ARC1372I DFSMShsm ENCOUNTERED AN SMS-RELATED ERROR WHILE OBTAINING AN MVT ENTRY FOR AN SMS MANAGED VOLUME

1.2.0 ARC1372I DFSMSHSM ENCOUNTERED AN SMS-RELATED ERROR WHILE OBTAINING AN MVT ENTRY FOR AN SMS MANAGED VOLUME
Changed message.

The message text has changed.

1.1.0 ARC1392I TERMINATING DFSMShsm BACKUP WAIT REQUEST, DFSMShsm SHUTTING DOWN

1.2.0 ARC1392I TERMINATING DFSMSHSM BACKUP WAIT REQUEST, DFSMSHSM SHUTTING DOWN
Changed message.

The message text has changed.

1.1.0 ARC1492I TERMINATING DFSMShsm LIST WAIT REQUEST, DFSMShsm SHUTTING DOWN

1.2.0 ARC1492I TERMINATING DFSMSHSM LIST WAIT REQUEST, DFSMSHSM SHUTTING DOWN
Changed message.

The message text has changed.

1.1.0 ARC1604I COMMAND NOT AUTHORIZED FOR USER

1.2.0 ARC1604I COMMAND NOT AUTHORIZED FOR USER
Changed message.

The explanation has changed.

1.1.0 ARC1800I DFSMShsm WAIT REQUEST CANCELLED BY ATTENTION

1.2.0 ARC1800I DFSMSHSM WAIT REQUEST CANCELLED BY ATTENTION
Changed message.

The message text has changed.

1.1.0 ARC1900I DFSMShsm ABEND *code* OCCURRED PROCESSING REQUEST

1.2.0 ARC1900I DFSMSHSM ABEND *code* OCCURRED PROCESSING REQUEST
Changed message.

The message text has changed.

1.1.0 ARC6003E DFSMSdss IS NOT AT THE PROPER LEVEL TO PERFORM AGGREGATE BACKUP/RECOVERY, FUNCTIONS ARE DISABLED

1.2.0 ARC6003E DFSMSDSS IS NOT AT THE PROPER LEVEL TO PERFORM AGGREGATE BACKUP/RECOVERY, FUNCTIONS ARE DISABLED
Changed message.

The message text has changed.

1.1.0 ARC6006E VOLUME *volser* TO BE ADDED AS DFSMShsm {PRIMARY | BACKUP | ML1 | ML2 | DUMP} VOLUME ALREADY DEFINED TO AGGREGATE RECOVERY AS {ML1VOL | L0VOL}, ADDVOL FAILED

1.2.0 ARC6006E VOLUME *volser* TO BE ADDED AS DFSMSHSM {PRIMARY | BACKUP | ML1 | ML2 | DUMP} VOLUME ALREADY DEFINED TO AGGREGATE RECOVERY AS {ML1VOL | L0VOL}, ADDVOL FAILED
Changed message.

The message text has changed.

1.1.0 ARC6012I STOP COMMAND ISSUED AND DFSMShsm SECONDARY ADDRESS SPACE(S) ACTIVE. STOP WILL TAKE EFFECT WHEN SECONDARY ADDRESS SPACE(S) COMPLETE PROCESSING.

1.2.0 ARC6012I STOP COMMAND ISSUED AND DFSMSHSM SECONDARY ADDRESS SPACE(S) ACTIVE. STOP WILL TAKE EFFECT WHEN SECONDARY ADDRESS SPACE(S) COMPLETE PROCESSING.
Changed message.

The message text has changed.

1.1.0 ARC6022I DFSMShsm ADDRESS SPACE HAS BEEN SET TO {NON-SWAPPABLE | SWAPPABLE}

1.2.0 ARC6022I DFSMSHSM ADDRESS SPACE HAS BEEN SET TO {NON-SWAPPABLE | SWAPPABLE}
Changed message.

The message text has changed.

1.1.0 ARC6023E INCORRECT DFSMShsm SECONDARY ADDRESS SPACE INVOCATION

1.2.0 ARC6023E INCORRECT DFSMSHSM SECONDARY ADDRESS SPACE INVOCATION
Changed message.

The message text has changed.

1.1.0 ARC6027I DFSMShsm PRIMARY ADDRESS SPACE ISSUED '*command*' TO CANCEL A SECONDARY ADDRESS SPACE. [AGGREGATE {BACKUP | RECOVERY} IS HELD.]

1.2.0 ARC6027I DFSMSHSM PRIMARY ADDRESS SPACE ISSUED '*command*' TO CANCEL A SECONDARY ADDRESS SPACE. [AGGREGATE {BACKUP | RECOVERY} IS HELD.]
Changed message.

The message text has changed.

1.1.0 ARC6032E FAILURE IN CANCELLING A DFSMShsm SECONDARY ADDRESS SPACE USING *'command'*. AGGREGATE {BACKUP | RECOVERY} IS HELD

1.2.0 ARC6032E FAILURE IN CANCELLING A DFSMSHSM SECONDARY ADDRESS SPACE USING *'command'*. AGGREGATE {BACKUP | RECOVERY} IS HELD
Changed message.

The message text has changed.

1.1.0 ARC6034E DFSMSdss {DUMP | RESTORE} RETURN CODE *retcode* RECEIVED DURING AGGREGATE {BACKUP | RECOVERY}

1.2.0 ARC6034E DFSMSDSS {DUMP | RESTORE} RETURN CODE *retcode* RECEIVED DURING AGGREGATE {BACKUP | RECOVERY}
Changed message.

The message text and application programmer response have changed.

1.1.0 ARC6036I AGGREGATE {BACKUP | RECOVERY | BACKUP/RECOVERY} {*parmname*} = {*parmvalue*}

1.2.0 ARC6036I AGGREGATE {BACKUP | RECOVERY | BACKUP/RECOVERY} *parmname* = *parmvalue*
Changed message.

The message text and explanation have changed.

1.1.0 ARC6059E ERROR OCCURRED IN OBTAINING DFSMShsm CONTROL DATA SET RECORDS FOR DATA SET *datasetname* BEING PROCESSED FOR AGGREGATE GROUP *agname* — RECORD TYPE THAT FAILED IS {MCA | MCD | MCO | MCV}

1.2.0 ARC6059E ERROR OCCURRED IN OBTAINING DFSMSHSM CONTROL DATA SET RECORDS FOR DATA SET *datasetname* BEING PROCESSED FOR AGGREGATE GROUP *agname* — RECORD TYPE THAT FAILED IS {MCA | MCD | MCO | MCV}
Changed message.

The message text has changed.

1.1.0 ARC6087I GDG BASE *gdgbasename* HAS BEEN SUCCESSFULLY DEFINED FOR (CONTROL | DFSMSdss DATA | INTERNAL I/O DATA | INSTRUCTION) FILE *datasetname2* USING DFSMShsm DEFAULT ATTRIBUTES DURING AGGREGATE RECOVERY

1.2.0 ARC6087I GDG BASE *gdgbasename* HAS BEEN SUCCESSFULLY DEFINED FOR (CONTROL | DFSMSDSS DATA | INTERNAL I/O DATA | INSTRUCTION) FILE *datasetname2* USING DFSMSHSM DEFAULT ATTRIBUTES DURING AGGREGATE RECOVERY
Changed message.

The message text has changed.

1.1.0 ARC6088E DEFINED FAILED FOR GDG BASE *gdgbasename1* FOR CONTROL | DFSMSdss DATA | INTERNAL I/O DATA | INSTRUCTION FILE *datasetname2* - AGGREGATE RECOVERY FAILED

1.2.0 ARC6088E DEFINED FAILED FOR GDG BASE *gdgbasename1* FOR CONTROL | DFSMSDSS DATA | INTERNAL I/O DATA | INSTRUCTION FILE *datasetname2* - AGGREGATE RECOVERY FAILED
Changed message.

The message text has changed.

1.1.0 ARC6113E ERROR OCCURRED IN WRITING A DFSMShsm CONTROL DATA SET RECORD FOR DATA SET *datasetname1* USING CONTROL FILE DATA SET *datasetname2* — RECORD TYPE THAT FAILED IS {MCA | MCD | MCO}

1.2.0 ARC6113E ERROR OCCURRED IN WRITING A DFSMSHSM CONTROL DATA SET RECORD FOR DATA SET *datasetname1* USING CONTROL FILE DATA SET *datasetname2* — RECORD TYPE THAT FAILED IS {MCA | MCD | MCO}
Changed message.

The message text has changed.

1.1.0 ARC6254A ABACKUP CANNOT ALLOCATE TAPE VOLUME *volser* BECAUSE IT IS IN USE BY ANOTHER DFSMShsm FUNCTION. RETRY ? REPLY Y OR N

1.2.0 ARC6254A ABACKUP CANNOT ALLOCATE TAPE VOLUME *volser* BECAUSE IT IS IN USE BY ANOTHER DFSMSHSM FUNCTION. RETRY ? REPLY Y OR N
Changed message.

The message text has changed.

1.1.0 ARC6280E {INSTRUCTION | ACTIVITY LOG} DATASET CANNOT BE RECOVERED FROM OUTPUT CREATED PRIOR TO DFSMShsm RELEASE 1.1.0, AGGREGATE RECOVERY WILL CONTINUE

1.2.0 ARC6280E {INSTRUCTION | ACTIVITY LOG} DATASET CANNOT BE RECOVERED FROM OUTPUT CREATED PRIOR TO DFSMSHSM RELEASE 1.1.0, AGGREGATE RECOVERY WILL CONTINUE
Changed message.

The message text has changed.

1.1.0 ARC6391E ERROR DELETING DFSMShsm CONTROL DATA SET *type* RECORD, KEY=*key*, RC=*retcode*

1.2.0 ARC6391E ERROR DELETING DFSMSHSM CONTROL DATA SET *type* RECORD, KEY=*key*, RC=*retcode*
Changed message.

The message text has changed.

1.1.0 ARC6394E ERROR OCCURRED IN WRITING AGGREGATE VERSION RECORD *aggregate key* TO THE DFSMShsm BACKUP CONTROL DATA SET

1.2.0 ARC6394E ERROR OCCURRED IN WRITING AGGREGATE VERSION RECORD *aggregate key* TO THE DFSMSHSM BACKUP CONTROL DATA SET
Changed message.

The message text has changed.

1.1.0 ARC9998I INTERNAL DFSMShsm FAILURE, PARAMETER LIST ERROR

1.2.0 ARC9998I INTERNAL DFSMSHSM FAILURE, PARAMETER LIST ERROR
Changed message.

The message text has changed.

Deleted Information

The following are the deleted message identifiers for this major revision and if applicable the identifier of the message that replaces the deleted message.

ATB100I
Deleted message. Replaced by message ATB103I.

Summary of Changes for GC28-1784-00, OS/390 Version 1 Release 1

This book contains information previously presented in *MVS/ESA System Messages, Volume 1 (ABA-ASA)*, GC28-1480, which supports MVS/ESA System Product Version 5.

Please note that any new, changed, or deleted messages can affect your installation's automation package. Ensure that your installation's automation package is updated with these changes.

New Information

The following are the new message identifiers for this major revision, including a *portion* of the message text and an explanation of when the message is issued:

ADR990E *(xxx)-mmmmm(yy)*, INSUFFICIENT ACCESS AUTHORITY TO CREATE
To use IPL(DASD) with the BUILDSA command, you must either use the ADMINISTRATOR keyword or you must have DASDVOL access at the UPDATE level to the DASD volume.

ADR992E *(xxx)-mmmmm(yy)*, OUTPUT IPL DATA SET NOT PROPERLY DEFINED
The output data set is not properly defined.

ADR994E *(xxx)-mmmmm(yy)*, ERROR PROCESSING DATA SET, DDNAME
An error occurred while processing the data set with the *ddname* indicated.

ADR995E *(xxx)mmmmm(yy)*, UNABLE TO OPEN DATA SET, DDNAME
The data set could not be opened.

AMB165I LONG NAME FOUND AND IGNORED
Either a primary or alias name longer that is supported on this level of DFSMS system has been encountered and ignored by DIRECTORY SERVICES.

AMB165I LONG NAME FOUND AND IGNORED
Either a primary or alias name longer that is supported on this level of DFSMS system has been encountered and ignored by DIRECTORY SERVICES.

This book includes terminology, maintenance, and editorial changes.

Introduction

The OS/390 operating system issues messages from OS/390 elements and features, and from program products and application programs running on the system. The system issues messages in different ways and to different locations:

- Most messages are issued through WTO and WTOR macros to one of the following locations:
  - Console
  - Hard-copy log
  - Job log
  - SYSOUT data set

  Routing codes determine where the messages are displayed or printed. The routing codes for messages issued by the operating system are in the *OS/390 MVS Routing and Descriptor Codes* book.
- Other messages are issued through the WTL macro or the LOG operator command to the system log (SYSLOG).
- Dump messages are issued through the dumping services routines and can appear in:
  - SVC dumps, stand-alone dumps, or SYSMDUMP ABEND dumps formatted by the interactive problem control system (IPCS)
  - Trace data sets formatted by the interactive problem control system (IPCS)
  - ABEND dumps or SNAP dumps produced by the dumping services

  In dump or trace data sets formatted by IPCS, the messages appear interactively on a terminal or in a printed dump.
- Some messages are issued through DFSMS/MVS access methods directly to one of the following locations:
  - Output data set
  - Display terminal

Locations

Console

Messages sent to a multiple console support (MCS) console or an extended MCS console are intended for the operators. Operations can control which messages are displayed. See the *OS/390 MVS Planning: Operations* book for information about controlling message display.

The system writes in the hard-copy log all messages sent to a console, whether the message is displayed or not.

Hard-Copy Log

A record of all system message traffic, which consists of the following:

- Messages to and from all consoles
- Commands and replies entered by the operator

In a dump, these messages appear in the master trace. For information about the master trace, see *OS/390 MVS Diagnosis: Tools and Service Aids*.

With JES3, the hard-copy log is always written to the system log. With JES2, the hard-copy log is usually written to the system log, but an installation can specify that the system write the hard-copy log to a console printer.

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System Log

The system log (SYSLOG) is a SYSOUT data set provided by the job entry subsystem (either JES2 or JES3). SYSOUT data sets are output spool data sets on direct access storage devices (DASD). An installation usually prints the system log periodically. The system log consists of:

- All messages issued through WTL macros
- All messages entered by operator LOG commands
- Usually, the hard-copy log
- Any messages routed to the system log from any system component or program

Job Log

Messages sent to the job log are intended for the programmer who submitted a job. The job log is specified in the system output class on the MSGCLASS parameter of the JCL JOB statement.

SYSOUT Data Set

Messages sent to a SYSOUT data set are intended for a programmer. These messages are issued by an assembler or compiler, the linkage editor and loader, and an application program. If the SYSOUT data set and the MSGCLASS parameter on the JCL JOB statement specify the same class, all messages about a program will appear in the same SYSOUT listing.

Messages

A displayed or printed message can appear by itself or with other information, such as a time stamp. The following topic shows the format of the message. Then the topics show the information accompanying the message on the MCS console and on the hard-copy log in a JES2 system and a JES3 system.

Message Format

```
id CCCnnn text
id CCCnnns text
id CCCnnnns text
id CCCnnnnns text
id CCCSnnns text
```

id Reply identifier: It is optional. It appears if an operator reply is required. The operator specifies it in the reply.

CCCnnn, CCCnnns, CCCnnnns, CCCnnnnns, CCCSnnns
Message identifier.

CCC
A prefix to identify the component, subsystem, or product that produced the message. The prefix is three characters.

S The subcomponent identifier, which is an optional addition to the prefix to identify the subcomponent that produced the message. The subcomponent identifier is one character.

nnn, nnnn, nnnnn
A serial number to identify the individual message. The serial number is three, four, or five decimal digits.

s An optional type code, which is one of the following:

A **Action**: The operator must perform a specific action.

D **Decision**: The operator must choose an alternative.

E	**Eventual action**: The operator must perform action when time is available.
I	**Information**: No operator action is required. Most information messages are for a programmer.
S	**Severe error**: Severe error messages are for a programmer.
W	**Wait**: Processing stops until the operator performs a required action.

For messages with the prefix ADR, the type codes depend on whether the message is issued to the operator console or to SYSPRINT. For console messages, the type codes indicate the operator action:

A	Action: Operator must perform a specific action.
D	Decision: Operator must choose an alternative action.
I	Information: No operator action is required.
W	Attention: No operator action is required, but an error occurred.

For SYSPRINT messages, the type code indicates the severity:

I	Informational message.
W	Attention message. Task continues, but an error occurred.
E	Error message. The particular task might end or might continue without completing all requests.
T	Termination message. DFSMSdss ends.

For messages with the prefix BFS, the type codes indicate the severity of the detected error and are:

E	**Error**. Operator action is required.
I	**Information**
W	**Attention**

For messages with the EWX prefix, an 11-character message exists of the form **EWXfffnnnns**:

EWX	LANRES product code
fff	Function (module) identifier
nnnn	Message number
s	Severity code. Severity codes can be:

E	Error. Action is required.
I	Information. Action is not required.
S	Severe Error. Action is required.
W	Attention. Action may be required.

In the EWX messages, the three-character function identifiers are as follows:

Table 1. EWX Message Module Identifiers

Module ID	Function	Sending Command
ADM	Administration	EWXADMIN commands
COM	Host communications	All commands
DSK	Disk serving	Disk serving commands
DST	Distribution	EWXDS commands
PHL	Host-to-LAN print	EWXHLSRV
PLH	LAN-to-host print	EWXLHSRV
RES	Host session initialization	EWXCONN
SRV	NetWare service	EWXNWSRV

Note: When the term “MMC” is used in the messages, it is also referring to the System/370 Parallel Channel Adapter feature of the IBM 3172-3 interconnect controller.

For messages with the prefix CNLC, the type codes indicate the severity of the detected error and are:

E	**Error**
I	**Information**
S	**Severe**
W	**Attention**

For messages with the prefix IEW and message numbers in the range 2000 through 2999, the type codes indicate the severity of the detected error and are:

E	**Error**: Severity 8
I	**Information**: Severity 0
S	**Severe error**: Severity 12
T	**Terminating error**: Severity 16
W	**Attention**: Severity 4

For messages with the prefix IGW01, the type codes indicate the severity of the detected error and are:

E	**Error**: Return code 8
I	**Information**: Return code 0
S	**Severe**: Return code 16
T	**Ending**: Return code 12
W	**Attention**: Return code 4

text

Text: The text provides information, describes an error, or requests an operator action.

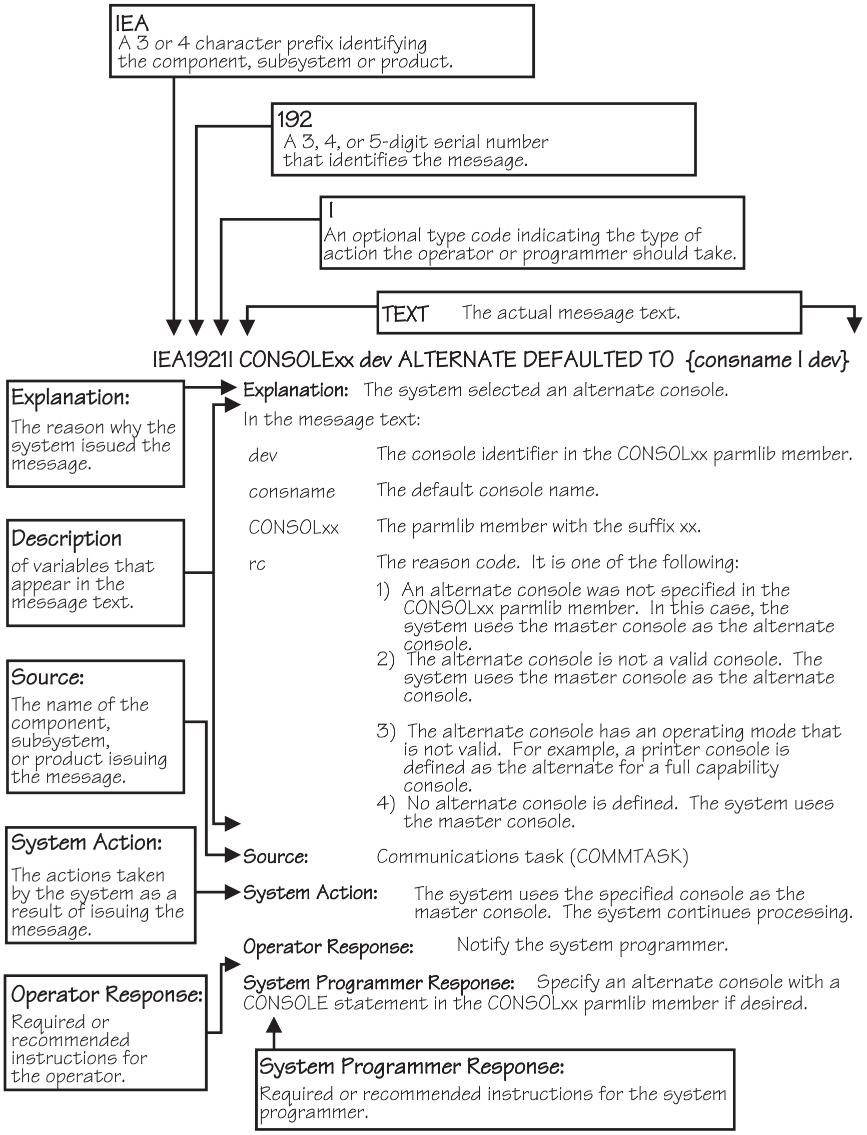
Messages with the prefix IDA are preceded by a 2-digit severity code:

04	**Attention**: Processing may be successful.
08	**Error**: Processing may fail.
12	**Serious error**: Processing will probably fail.

Some messages have asterisks (*) before or after the message identifier. Two asterisks after the message identifier for IDC messages indicates a second-level message that further explains a preceding message.

Message Explanation Format

The following figure shows how message explanations appear in this book:



IEA
A 3 or 4 character prefix identifying the component, subsystem or product.

192
A 3, 4, or 5-digit serial number that identifies the message.

I
An optional type code indicating the type of action the operator or programmer should take.

TEXT The actual message text.

IEA192I CONSOLExx *dev* ALTERNATE DEFAULTED TO {*consname* | *dev*}

Explanation: The reason why the system issued the message.

Description of variables that appear in the message text.

Source: The name of the component, subsystem, or product issuing the message.

System Action: The actions taken by the system as a result of issuing the message.

Operator Response: Required or recommended instructions for the operator.

System Programmer Response: Required or recommended instructions for the system programmer.

Explanation: The system selected an alternate console.

In the message text:

dev	The console identifier in the CONSOLxx parmlib member.
consname	The default console name.
CONSOLxx	The parmlib member with the suffix xx.
rc	The reason code. It is one of the following:

1) An alternate console was not specified in the CONSOLxx parmlib member. In this case, the system uses the master console as the alternate console.
2) The alternate console is not a valid console. The system uses the master console as the alternate console.
3) The alternate console has an operating mode that is not valid. For example, a printer console is defined as the alternate for a full capability console.
4) No alternate console is defined. The system uses the master console.

Source: Communications task (COMMTASK)

System Action: The system uses the specified console as the master console. The system continues processing.

Operator Response: Notify the system programmer.

System Programmer Response: Specify an alternate console with a CONSOLE statement in the CONSOLxx parmlib member if desired.

Messages Sent to MCS Consoles

Messages sent to MCS consoles from the base control program, JES2, JES3 on local processors, or DFP appear in one of the following formats:

- The MFORM parameter in the OPERPARM segment in the CONSOLxx parmlib member
- The MFORM parameter on the CONTROL S operator command.

```
hh.mm.ss sysname jobname message
hh.mm.ss sysname message
hh.mm.ss jobname message
hh.mm.ss message
sysname jobname message
sysname message
jobname message
message
```

Messages sent to JES3 consoles (attached to JES3 global processors only) appear in the format:

```
hhmmsst i f jobname text
```

hh.mm.ss
hhmmsst
Time stamp: the hour (00-23), minute (00-59), second (00-59), and, for JES3, tenth of a second (0-9).

sysname
System name for the system that issued the message.

jobname
Job name for the task that issued the message. This field is blank if a job did not issue the message.

i Indicator from the JES3 spool access method (JSAM).

f A screen character to indicate the status of certain messages, as follows:

|	The operator has performed the action required for the message. The message has been deleted.
-	The message is for information only; no operator action is required. The message was issued by the system or by a problem program.
*****	The message requires specific operator action and was issued by a WTOR or by an authorized program. The message has a descriptor code of 1, 2, or 11.
@	The message requires specific operator action and was issued by a WTOR or by a problem program. The message has a descriptor code of 1, 2, or 11.
+	The message requires no specific operator action and was issued by a problem program using a WTO macro.
blank	The message requires no specific operator action.

Note: See the *OS/390 MVS Routing and Descriptor Codes* book for the descriptor codes.

message
Reply identifier, message identifier, and text.

Messages Sent to Hard-Copy Log in JES2 System

Multiple console support (MCS) handles message processing in:

- A JES2 system
- A JES3 system on a local processor
- A JES3 system on a global processor, if JES3 has failed

MCS sends messages with routing codes 1, 2, 3, 4, 7, 8, and 10 to the hard-copy log when display consoles are used or more than one console is active. All other messages can be routed to the hard-copy log by a system option or a VARY HARDCPY operator command.

Messages sent to the hard-copy log appear in the format:

```
tcrrrrrrr sysname yyddd hh:mm:ss.th ident msgflags  message
t                                                   message
t                                lid                message
```

t The first character on the line indicates the record type:

D Data line of a multiple-line message; this line may be the last line of the message.

E End line or data-end line of a multiple-line message.

L Label line of a multiple-line message.

M First line of a multiple-line message.

N Single-line message that does not require a reply.

O Operator LOG command.

S Continuation of a single-line message or the first line of a multi-line message. This continuation may be required because of the record length for the output device.

W A multi-line message that requires a reply and sent only to the hard-copy log.

X A log entry that did not originate with a LOG command or a system message.

Note: This field does not appear when the hard-copy log is printed on a console in a JES2 system.

c The second character on the line indicates whether the line was generated because of a command:

C Command input.

R Command response.

I Command issued internally. The job identifier contains the name of the internal issuer.

blank Neither command input nor command response.

Note: This field does not appear when the hard-copy log is printed on a console in a JES2 system.

rrrrrrr
Hexadecimal representation of the routing codes 1 through 28. To understand this hexadecimal number, convert it to binary; each binary 1 represents a routing code. For example, X'420C' represents routing codes 2, 7, 13, and 14 as shown here:

```
Hexadecimal:      4         2          0           C
Binary:        0 1 0 0   0 0 1 0   0  0  0  0   1  1  0  0
Routing Codes: 1 2 3 4   5 6 7 8   9 10 11 12   13 14 15 16
```

sysname
The system name from the SYSNAME parameter in the IEASYSxx parmlib member.

yyddd
The Julian date, given as the year (00-99) and the day of the year (000-366).

Note: If HCFORMAT(CENTURY) is specified in the CONSOLxx parmlib member, the Julian date appears as *yyyyddd*.

hh:mm:ss.th
Time stamp, given as the hour (00-23), minute (00-59), second (00-59), and hundredths of a second (00-99).

ident
The job identifier for the task that issued the message, if the second character on the line is blank.

If the second character on the line is C or R, this field contains one of the following:

jobid	The job identifier of the task that issued the message, if it was issued by a job.
consname	Console name of the console which issued the command or received the message.
INTERNAL	For a command generated by a problem program or the system.
INSTREAM	For a command read from the input stream.
blank	If MCS could not determine the source or destination for the message.

lid Multiple-line identifier for the second and succeeding lines of a multiple-line message. This field appears after the message text (1) on the first line or (2) in the message area and not followed by text on a continuation of the first line. The identifier appears on all lines of the same message.

msgflags
Installation exit and message suppression flags. For mapping of these flags, see WQEXMOD in *OS/390 MVS Data Areas, Vol 5 (SSAG-XTLST)*. For information about the description of the hardcopy log message flags, see HCL in *OS/390 MVS Data Areas, Vol 2 (DCCB-ITTCTE)*.

message
Reply identifier, message identifier, and text. The reply identifier and message identifier appear only on the first line of a multiple-line message.

Messages Sent to Hard-Copy Log in JES3 System

Messages sent to the JESMSG hard-copy log in a JES3 system appear in the format:

```
hh:mm:sst message
```

Messages sent to the MLOG/DLOG hard-copy log in a JES3 system appear as follows:

```
MLG           90131 1734486  SY1 R= SYSLOG   IEF196I IEF237I JES3 ALLOCATED TO SYSLOG02
MLG           90131 1734492  SY1 R= SYSLOG   IEF196I IEF285I    +MASTER+.SYSLOG.JOB00001.D000000A.?          SYSOUT
JES  CN3E1    90131 1734492  SY1 R= SYSLOG   IEE043I A SYSTEM LOG DATA SET HAS BEEN QUEUED TO SYSOUT CLASS A
MLG           90131 1734492  SY1 R=          0000000 SY1      90131 17 34 49.36 SYSLOG   00000000  IEE042I SYSTEM LOG
MLG           90131 1734492  SY1 R=          DATA SET INITIALIZED
LOG           90131 1734501  IAT7001 JOB SYSLOG (JOB00001) IS ON WRITER PRT002(002),RECORDS=1343
LOG           90131 1734517  IAT7007 JOB SYSLOG (JOB00001) ON WRITER PRT002 (002), DSN=
LOG           90131 1734517  IAT7007 +MASTER+.SYSLOG.JOB00001.D000000A.?, PURGED.
     CN3E1    90131 1735017 +E
     MASTER   90131 1735238 +I O
     MASTER   90131 1735239  IAT8541 NAME    ADDR  LV ALT      MAIN     SWITCH   DEPTH DEPQD
     MASTER   90131 1735239  IAT8542 CN3E1   (3E1) 15 CN310    SY1               050  00000
     MASTER   90131 1735239  IAT8542 MASTER  (3E0) 15 -------- -------- TYPE=MCS  ---  -----
     MASTER   90131 1735239  IAT8542 MCS15   (320) 15 -------- -------- TYPE=MCS  ---  -----
     MASTER   90131 1735239  IAT8542 MCS10   (321) 10 -------- -------- TYPE=MCS  ---  -----
     MASTER   90131 1735239  IAT8542 MCS05   (3DC) 05 -------- -------- TYPE=MCS  ---  -----
     MASTER   90131 1735239  IAT8542 MCS00   (3DD) 00 -------- -------- TYPE=MCS  ---  -----
     MASTER   90131 1735239  IAT8542 MCS302  (302) 15 -------- -------- TYPE=MCS  ---  -----
     MASTER   90131 1735239  IAT8542 MCS303  (303) 15 -------- -------- TYPE=MCS  ---  -----
     MASTER   90131 1735240  IAT8542 AUTOMCS (   ) 15 -------- -------- TYPE=MCS  ---  -----
     MASTER   90131 1735240  IAT8542 CN310   (310) 15 CN3E1    SY1      CN3E1     050  00000
     MASTER   90131 1735240  IAT8542 CN311   (311) 15 CN3E1    SY1      CN3E1     050  00000
     MASTER   90131 1735240  IAT8542 DUMMY   (   ) 15 NONE     NONE              032  00000
     MASTER   90131 1735506 +T SY2 D R,L
MLG           90131 1735506  SY2 R= JES3     D R,L
     MASTER   90131 1735522  SY2 R=          IEE112I 17.35.50 PENDING REQUESTS 427
     MASTER   90131 1735522  SY2 R=          RM=0    IM=0     CEM=1     EM=0     RU=0    IR=0    AMRF
     MASTER   90131 1735522  SY2 R=          ID R/K T SYSNAME  JOB ID   MESSAGE TEXT
     MASTER   90131 1735522  SY2 R=               2 C SY1               *IAT6360  CHECKPOINT DATA SET <CHKPNT2>
     MASTER   90131 1735522  SY2 R=                                     UNAVAILABLE - CHKPNT2 DD NOT DEFINED.
     CN3E1    90131 1735590 +T SY1 D R,L
     CN3E1    90131 1735590 -D R,L
     CN3E1    90131 1736007  SY1 R=          IEE112I 17.35.59 PENDING REQUESTS 603
     CN3E1    90131 1736007  SY1 R=          RM=0    IM=0     CEM=2     EM=0     RU=0    IR=0    AMRF
     CN3E1    90131 1736007  SY1 R=          ID R/K T SYSNAME  JOB ID   MESSAGE TEXT
     CN3E1    90131 1736007  SY1 R=              11 C SY1      JES3     *IAT5525 272 DUPLICATE VOLUME DETECTED, CAN
     CN3E1    90131 1736007  SY1 R=                                      NOT MOVE VOLUME SPOOL1 ON SY2
     CN(15)   90131 1736049 +Z LOG NEXT COMMAND IS FROM A MCS-ONLY CONSOLE
LOG           90131 1736050  IAT7150 CN(15)   NEXT COMMAND IS FROM A MCS-ONLY CONSOLE
     CN(15)   90131 1736126 -D T
     CN(15)   90131 1736126  SY1 R=          IEE136I LOCAL  TIME=17.36.12 DATE=90.131  GMT  TIME=21.36.12 DATE=90.131
     CN(101)  90131 1736353 +Z LOG NEXT COMMAND IS FROM AN EXTENDED MCS-ONLY CONSOLE
LOG           90131 1736354  IAT7150 CN(101)  NEXT COMMAND IS FROM AN EXTENDED MCS-ONLY CONSOLE
     CN(101)  90131 1736374 +I Q
     CN(101)  90131 1736374  IAT8674 JOB SYSLOG   (JOB00001) P=15 CL=A        MAIN(EXECUTING-SY1)
     CN(101)  90131 1736374  IAT8674 JOB VTAM220  (JOB00004) P=15 CL=A        MAIN(EXECUTING-SY1)
     CN(101)  90131 1736374  IAT8674 JOB TCAS     (JOB00005) P=15 CL=A        MAIN(EXECUTING-SY1)
     CN(101)  90131 1736374  IAT8674 JOB SYSLOG   (JOB00007) P=15 CL=A        MAIN(EXECUTING-SY2)
     CN(101)  90131 1736374  IAT8674 JOB SUPERU   (JOB00009) P=15 CL=A        MAIN(EXECUTING-SY1)
```

Messages sent to the MLOG/DLOG hard-copy log appear in the format:

```
dest console  yyddd hhmmsstia[prefix] message
```

dest
JES3 destination class, which corresponds to the MVS routing code.

console
JES3 console name or MVS console identifier, as follows:

blank	For a message issued without a console identifier.
nnnnnnnn	The JES3 console name (JNAME) from the JES3 initialization stream.
CN(xx) or CN(xxx)	The MCS console identifier, where **xx** or **xxx** is the unit control module (UCM) identifier.
INTERNAL	For a command generated by a problem program or operating system routine.
INSTREAM	For a command read from the input stream.
NETWORK	For a message issued to the network job entry (NJE) console.
RMT-NS	For a message with a JES3 remote console identifier that is incorrect.

UNKNOWN	For a message issued with extended MCS console identifier 255.
NOTFOUND	For a message issued with a console identifier for which JES3 could not determine the destination.

yyddd
The Julian date, given as the year (00-99) and the day of the year (000-366).

Note: If HCFORMAT(CENTURY) is specified in the CONSOLxx parmlib member, the Julian date appears as *yyyyddd*.

hhmmsst
Time stamp, given as the hour (00-23), minute (00-59), second (00-59), and tenth of a second (0-9).

i Attention indicator for JES3 space constraints, as follows:

blank	Normal output or no action required.
#	The message is rerouted automatically or by a command from another console.
%	Minimum space (track) situation (JSAM).
=	Marginal space (track) situation (JSAM).
<	Minimum buffer situation (JSAM).

Note: The above four symbols can be changed by a CONSTD statement in the JES3 initialization stream.

a Action prefix character, as follows:

blank	Normal message.
+	JES3 input command, issued on the global processor.
-	MVS input command, issued on the global processor.
	Operator action required.

prefix
sysname R=jobname

Optional prefix for messages issued outside the JES3 address space or on a local processor, as follows:

sysname
The name of the system where the issuing program is running. JES3 determines the name from the ID, RID, or SID parameters on the MAINPROC statement in the JES3 initialization stream.

jobname
The job name of the issuing program. It is all blanks for an system routine.

message
Reply identifier, message identifier, and text.

Messages Sent to the Job Log, to Other Data Sets, and to Display Terminals

Messages sent to the job log, to other data sets, and to display terminals appear in the format designed by the program that issued them.

Truncated Data in Multi-line Messages

When a message is being transported from one system to another in a sysplex, the system might encounter an unexpected error which prevents the entire message text from appearing. This can be caused by any of the following:

- The issuing system is stopped or quiesced.
- The issuing system fails to end a multi-line message.
- The issuing system has a persistent XCF buffer shortage.
- A disruption occurs in sysplex communication.

For any multi-line message, one of the following messages can appear within the message text, indicating such an error:

LOSS OF DATA - MESSAGE COMPLETION FORCED
LOSS OF INTERMEDIATE MESSAGE DATA

If a program issues a multi-line WTO message but does not end the message by issuing an endline, the target console might stop receiving message traffic. The system will detect this condition and end the message automatically.

To end a multi-line WTO message when it detects that no data line or endline has been issued for the message after an interval of 30 seconds, the system issues the following endline:

MESSAGE TIMED OUT - MESSAGE COMPLETION FORCED

When this text appears in a multi-line message, perform the action which produced the message again, if necessary. If the text appears again, contact your system programmer, who should then contact the IBM Support Center.

When 100% WTO buffer utilization has been reached, as indicated in message IEA404A, a limit is imposed on the number of lines allowed in multi-line WTO messages. When the line limit is reached for multi-line WTO messages, the following is appended onto the multi-line message:

- MESSAGE TRUNCATED DURING WQE BUFFER SHORTAGE

A Method for Finding Changes to MVS and TSO/E Message Texts

Automation routines are sensitive to changes to message text between releases. You can find changes to message texts in the following ways:

- The Summary of Changes of the related messages book can be helpful when you go from one release to the next.
- Data set SYS1.MSGENU contains data that can help you identify changes to message texts more accurately. This method allows you to find message text changes between your current release and whatever release you choose to migrate to. This method is described below.

Using SYS1.MSGENU to Find Message Text Changes

IBM supplies a data set containing the text of system messages that are translated. This data set, called SYS1.MSGENU, contains the text of system messages in the form of message skeletons. (For more information, see *OS/390 MVS Planning: Operations*.)

Note that this method will not show changes to:

- MVS system messages that are not translated, such as IPL and NIP messages (which are issued before the MVS message service is available)
- Other product messages that are not translated, such as DFSMS/MVS messages, and JES3 messages.
- For JES2 messages, use the appropriate SYS1.VnRnMn.SHASMENU data set.

Also, this method works better if the “old” copy of SYS1.VnRnMn.SHASMENU has the same level of service as the system from which you are migrating.

Once you have installed the OS/390 Release 4 or higher level of the data set you are comparing, you can compare the new data set with the data set on the system from which you are migrating. Depending on how you do the comparison, you can get output like the following.

For new messages, the output might show an I (for Insert) on the left:

```
I - IEA403I     VALUE OF RMAX HAS BEEN CHANGED TO 99
```

For messages whose text has changed, the output might show both an I and a D, indicating that a record in the message file has been replaced:

```
I - IEE162I 46  &NNN. ROLL &A. MESSAGES (DEL=R OR RD)
D - IEE162I 46  &NNN. ROLL &A. MESSAGES (DEL=R, RD)
```

This means that, in message IEE162I, `(DEL=R, RD)` was replaced by `(DEL=R OR RD)`.

Using this information, you can decide if your automation routines need to be changed.

ABA Messages

ABA001I AGGREGATE BACKUP ASSIST V1.O STARTING — *ll*

Explanation: This is an informational message to alert you that ABA is starting. *ll* is the update level of ABA.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA002S OPEN ERROR ON FILE *ddname*

Explanation: A data set required by ABA was not opened successfully. The *ddname* is the DD name of the data set.

Source: DFSMShsm

System Action: ABA discontinues processing.

Operator Response: Verify the data set is defined correctly in the JCL.

ABA003S UNABLE TO OBTAIN SUFFICIENT STORAGE. *nnnnnnnn* BYTES REQUIRED. RS=*ssss*

Explanation: ABA was unable to obtain sufficient storage for its internal work areas.

- *nnnnnnnn* is the amount of storage requested.
- *ssss* indicates what the storage is for and is not meaningful to the operator.

Source: DFSMShsm

System Action: ABA discontinues processing.

Operator Response: Rerun ABA with a larger region size.

ABA004I JOB NAMES FOUND IN SMF DATA BY ABA:

Explanation: This message is followed by the job names that have been found by ABA when searching SMF records. This information is useful in verifying that the generic job names you specified have been able to correctly identify the desired job names.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA005S ERROR RETURN FROM DFSORT. RETURN CODE *cc*

Explanation: The call to DFSORT has been unsuccessful. The return code returned by DFSORT is *cc*.

Source: DFSMShsm

System Action: ABA discontinues processing.

Application Programmer Response: None.

ABA006S INVALID SELECTION DATA SET SPECIFIED. RECORD FORMAT NOT FIXED, FIXED BLOCK, OR RECORD LENGTH NOT 80

Explanation: To be consistent with ABARS requirements a selection data set must have fixed length records 80 bytes in length. The data set you specified on the SELECTDS DD statement in the JCL does not meet these requirements.

Source: DFSMShsm

System Action: ABA discontinues processing.

Operator Response: Correct the SELECTDS DD statement specification and rerun ABA.

ABA007S INPUT JOB NAME FILTER HAS INVALID FORMAT: *ffffffff*

Explanation: The generic job name identified by *ffffffff* is not in a format accepted by ABA.

Source: DFSMShsm

System Action: ABA discontinues processing.

Operator Response: Refer to *DFSMS/MVS DFSMShsm Storage Administration Guide* “Aggregate Backup and Recovery Support (ABARS)” for ABA generic job names syntax. Correct the SYSIN input and rerun ABA.

ABA008I SYSIN INPUT DATA:

Explanation: This message is followed by an echo of the SYSIN input stream.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA009I TOTAL NUMBER OF DATA SETS FOUND: *nnnnnnnn*

Explanation: The number of data set names written to the output selection data set is *nnnnnnnn*.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA010I TOTAL NUMBER OF JOBS FOUND: *nnnnnnnn*

Explanation: The number of jobs found in the SMF data that meets the input criteria is *nnnnnnnn*. The actual job names follow message ABA004I.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA020I STORAGE USED, LOCATION — ANY: *nnnnnnnn* bytes

Explanation: The number of bytes of storage used by ABA for in-storage tables and program buffers, which may reside above or below the 16M line, is *nnnnnnnn*. This value does not include the storage required to hold the ABA module, the access method buffers for each data set, the storage required by DFSORT, or the normal overhead required by MVS.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

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ABA021I STORAGE USED, LOCATION — BELOW: *nnnnnnnn* **BYTES**

Explanation: The number of bytes of storage used by ABA for in-storage tables and program buffers which must reside below the 16M line is *nnnnnnnn*. This value does not include the storage required to hold the ABA module, the access method buffers for each data set, the storage required by DFSORT, or the normal overhead required by MVS.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA030I NUMBER OF RECORDS PASSED TO SORT: *nnnnnnnn*

Explanation: The number of data set name records passed to DFSORT for sorting is *nnnnnnnn*.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA031I NUMBER OF RECORDS RECEIVED FROM SORT: *nnnnnnnn*

Explanation: The number of data set name records that DFSORT has passed back to the ABAE35 exit module is *nnnnnnnn*.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA032E ERROR, RECORDS LOST DURING SORT PROCESSING

Explanation: An error occurred during sort processing. The number of records passed to the DFSORT program does not match the number received from DFSORT. Refer to messages ABA030I and ABA031I for the number of records passed to and received from DFSORT.

Refer to message ABA033I for the sort control statement used.

Source: DFSMShsm

System Action: ABA continues processing. However, data set records may be lost.

Operator Response: Run ABA again and specify DISP KEEP or CATLG on the SORTIN DD statement. Then run DFSORT against this data set outside of ABA control. This may give you a sort failure which is independent of the ABA utility.

Contact the support group for the DFSORT program.

ABA033I SORT CNTL STMT: *ssssssss....*

Explanation: The sort control statement passed to DFSORT is *ssssssss.....* This message is printed along with message ABA032I to assist in diagnosing possible sort program problems.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA040W WARNING, RECORD FORMAT ERRORS FOUND IN SMF DATA SET

Explanation: This message is issued whenever ABA finds an incomplete SMF record. The usual cause of the error is a system failure which occurs while SMF is writing to the SMF data set.

Source: DFSMShsm

System Action: ABA will discard all or part of the bad SMF record and continue processing. This may result in missing data set name entries.

Application Programmer Response: None.

ABA050I AGGREGATE BACKUP ENTERING {SMF PROCESSING | LOCATE PROCESSING | SORT PROCESSING} *yy.ddd.hh.mm.ss*

Explanation: This message informs the user of the progress of ABA processing. Each message is time stamped with the current system date and time.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA098I ABA ENDING

Explanation: ABA has successfully finished processing.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ABA099S ABA TERMINATING

Explanation: ABA is discontinuing processing because of an error. The message preceding this message indicates what the error is.

Source: DFSMShsm

System Action: ABA discontinues processing.

Operator Response: See the message preceding this message for any possible operator actions you may need to take.

ADR Messages

ADR is the message prefix for system DFSMSdss messages (messages ADR001T through ADR499I, and from ADR701E through ADR911W) and for stand-alone restore messages (messages ADR501W through ADR656W). The format of these messages varies, as follows.

Format of System DFSMSdss Messages

ADRDSSU is the program that produces system DFSMSdss messages. For programmers, ADRDSSU produces the messages in the SYSPRINT data set, and for operators, by way of the console.

Note: The system messages are from ADR001T through ADR499I, and from ADR701E through ADR911W.

The format of messages written to SYSPRINT is:

```
ADRnnnt (xxx)-mmmmm(yy), message text
```

The format of messages written to the console is:

```
zzADRnnnt (xxx)-mmmmm(yy), message text
```

Figure 1 illustrates the format of a system DFSMSdss message.

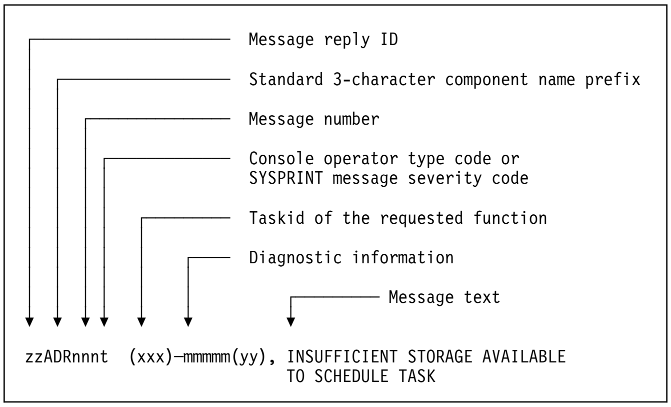
Message reply ID
Standard 3-character component name prefix
Message number
Console operator type code or
SYSPRINT message severity code
Taskid of the requested function
Diagnostic information
Message text
zzADRnnnt (xxx)—mmmmm(yy), INSUFFICIENT STORAGE AVAILABLE
TO SCHEDULE TASK

Figure 1. Format of a System DFSMSdss Message

Standard character representations for system DFSMSdss messages are:

- **zz** Message reply identification (absent if reply is not required).
- **ADR** Standard 3-character component name prefix.
- **nnn** Message number. This three-digit number is unique to each message.
- **t** Type code. This one character code identifies either the console operator type or the SYSPRINT message severity. For console messages, the types are:
  - **A** Action: Operator must perform a specific action.
  - **D** Decision: Operator must choose an alternative action.
  - **I** Information: No operator action is required.
  - **W** Attention: No operator action is required, but an error occurred.

  For SYSPRINT messages, the type code indicates the severity:
  - **I** Informational message.
  - **W** Attention message. Task continues, but an error occurred.
  - **E** Error message. The particular task might end or might continue without completing all requests.
  - **T** Termination message. DFSMSdss ends.
- **(xxx)** The task ID of the requested function. For each function requested in the input control statements, a task ID is assigned. Each message related to a task contains this task ID in the message. If the message is general (that is, not relating to a particular function), this field is omitted.
- **mmmmm(yy)** Diagnostic information used by IBM service representatives as an aid in problem determination.

The text of the message itself follows the diagnostic information and completes the standard format for system DFSMSdss messages.

As a function completes, two values are set: LASTCC and MAXCC. LASTCC contains the return code of the completing task until the task following this task completes. Then the LASTCC value is assigned from the subsequent completed task. MAXCC is set whenever a completing task has a return code greater than the previous value of MAXCC.

For any task, the return code is set equal to the maximum level message issued for that task. Return codes represent an error (16, 12, or 8), an attention (4), or information (0). General return codes and their explanations are:

- **0** Operation was successful.
- **4** Operation completed, but an attention (W) message was issued during processing.
- **8** Either (1) a function did not execute or began execution but ended prematurely, or (2) an error (E) message was issued during processing.
- **12** A terminating (T) message was issued. No functions were performed.

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16 A function executed leaving at least one volume or data set in an unusable condition (for example, a DUMP or a full volume RESTORE prematurely ended).

Note to Application Programmers: Some of the text under “Explanation,” “System Action,” and “Application Programmer Response” is oriented toward system programmers, data administrators, or data management personnel. Contact the appropriate person in your facility if an explanation is necessary.

Format of Stand-Alone Restore Messages

ADRDMPRS is the program that produces stand-alone restore messages.

Note: The stand-alone restore messages are from ADR501W through ADR656W.

Figure 2 illustrates the format of a stand-alone DFSMSdss restore message.

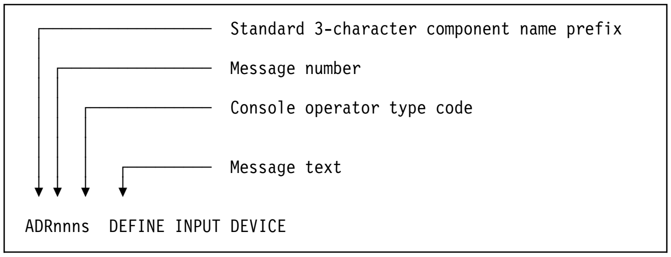
Standard 3-character component name prefix
Message number
Console operator type code
Message text
ADRnnns DEFINE INPUT DEVICE

Figure 2. Display Format of a Stand-Alone Restore Message

Standard character representations for stand-alone restore messages are:

ADR	Standard 3-character component name prefix.
nnn	Message number. This three-digit number is unique to each message.
s	Console operator type code. This one character code identifies the console operator type:

A	Action: Operator must perform a specific action.
I	Information: No operator action is required.
W	Attention: No operator action is required, but an error occurred.

The text of the message itself follows the console operator type code and completes the standard format for stand-alone restore messages.

Note: During stand-alone restore operation, the operator is sometimes required to use the **interrupt key**. For more information, see the introductory section of the ADR messages in *OS/390 MVS System Messages, Vol 1 (ABA-ASA).*

ADR Message Explanations

ADR001T (*ttt*)-*mmmmm*(*yy*), OPEN FAILED FOR DDNAME *ddname*

Explanation: The DD statement *ddname* does not exist or is coded incorrectly. This message is printed if a SYSPRINT DD (or alternative as indicated in the message) is not found or cannot be opened.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Probable user error. Verify that a SYSPRINT (or acceptable alternative) DD statement is present in the step. Correct the error, and resubmit the job.

Operator Response: None.

ADR002T (*ttt*)-*mmmmm*(*yy*), INSUFFICIENT MAIN STORAGE AVAILABLE TO INITIALIZE PROGRAM

Explanation: Not enough main storage was available to perform the initialization functions of DFSMSdss. Message ADR018I follows this message to indicate the storage needed.

Source: DFSMSdss

System Action: Processing ends. The return code is 12.

Application Programmer Response: Probable user error. One of the following responses is appropriate:

- Increase REGION value in the JOB or EXEC statement to at least the value indicated by message ADR018I, and retry.
- If the SIZE= parameter was specified, increase the parameter value. This value must not exceed the storage available in the REGION value.

Operator Response: None.

ADR004I (*ttt*)-*mmmmm*(*yy*), {USER ABEND 0001 WILL BE ISSUED ON | AN SVC DUMP WILL BE REQUESTED FOR} OCCURRENCE *n* OF MESSAGE ADR*nnn*

Explanation: The PARM statement contains the ABEND= or SDUMP= keywords. An abend or SVC dump is generated at the *n*th occurrence of the indicated message.

Source: DFSMSdss

System Action: Processing continues until the nth occurrence of the indicated message is encountered. DFSMSdss will issue a USER ABEND 0001 for the ABEND= keyword and terminate. DFSMSdss will request an SVC dump for the SDUMP= keyword and continue processing.

Application Programmer Response: None.

Operator Response: None.

ADR005T (*ttt*)-*mmmmm*(*yy*), NO SYSIN FILE

Explanation: A SYSIN DD statement (or acceptable alternative ddname) was not present in the job stream.

Source: DFSMSdss

System Action: Processing ends. The return code is 12.

Application Programmer Response: Probable user error. Make certain a SYSIN DD statement is present, and retry the job.

Operator Response: None.

ADR006I **(***ttt***)-***mmmmm***(***yy***),** *date_and_time* **EXECUTION {BEGINS | ENDS | HALTED}**

Explanation: This message gives the date and time a particular task begins or ends processing.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR007E **(***ttt***)-***mmmmm***(***yy***), TASK CONTAINS AN INVALID NUMBER OF I/O FILE REQUESTS**

Explanation: The number of input or output files specified in the control statements was incorrect. The following are possible conditions:

- A full or tracks restore or copy did not have exactly one input and one output file.
- A full or tracks DUMP had more than one input volume.
- A DEFRAG function specified more than one volume.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the statement, and rerun the job.

Operator Response: None.

ADR008E **(***ttt***)-***mmmmm***(***yy***), INSUFFICIENT STORAGE AVAILABLE TO SCHEDULE TASK**

Explanation: Insufficient storage space was available for this function. Message ADR018I follows this message to indicate the storage for this task.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Probable user error. Correct the error as indicated by message ADR018I, and resubmit the job.

Operator Response: None.

ADR009T **(***ttt***)-***mmmmm***(***yy***), INVALID {LINECNT | SIZE | TYPRUN | PAGENO | ABEND | AMSGCNT | TRACE | UTILMSG | XABUFF | RACFLOG | SDUMP | SMSGCNT | TMPMSGDS | WORKVOL | WORKUNIT} VALUE SPECIFIED IN PARM STATEMENT**

Explanation: The indicated parameter on the EXEC statement was incorrectly specified.

LINECNT	Must be between 1 and 9999
SIZE	Must be less than or equal to 9999K bytes
TYPRUN	Must be TYPRUN=SCAN or TYPRUN=NORUN
PAGENO	Must be between 0 and 9999
ABEND	Must be between 0 and 999
AMSGCNT	Must be between 1 and 9999
TRACE	Must be YES or not specified at all
UTILMSG	Must be either YES or NO or ERROR
XABUFF	Must be either ABOVE16 or BELOW16
RACFLOG	Must be either YES or NO
SDUMP	Must be between 0 and 999
SMSGCNT	Must be between 1 and 9999
TMPMSGDS	Must be either YES or NO
WORKVOL	Must be a valid volume serial number
WORKUNIT	Must be a valid esoteric DASD unit name, a generic DASD unit name, or a specific DASD address

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Make sure that the indicated value is valid. Check for spelling errors. Correct any errors, and resubmit the job.

Operator Response: None.

ADR010I **(***ttt***)-***mmmmm***(***yy***), SIZE VALUE OF** *size* **WILL BE USED FOR GETMAIN**

Explanation: This message indicates the value of the SIZE parameter that the requester specifies. The value does not include the storage acquired by the programs or utilities that DFSMSdss calls.

Source: DFSMSdss

System Action: The storage used by DFSMSdss does not exceed the indicated value.

Application Programmer Response: None.

Operator Response: None.

ADR011I **(***ttt***)-***mmmmm***(***yy***), LINECNT VALUE OF** *line_count* **WILL BE USED**

Explanation: This message indicates the value of the LINECNT parameter that the requester specifies.

Source: DFSMSdss

System Action: SYSPRINT output is printed at the indicated lines per page. If a value of 9999 is specified, no page eject occurs.

Application Programmer Response: None.

Operator Response: None.

ADR012I **(***ttt***)-***mmmmm***(***yy***),** *date_and_time* **DFSMSdss PROCESSING COMPLETE. HIGHEST RETURN CODE IS** *return_code* **[FROM:]**

Explanation: This message is issued after a DFSMSdss job step completes. The MAXCC, or highest condition code (*return_code*), set during the job step is printed (see message ADR013I) and returned to the DFSMSdss invoker in register 15. If the highest condition code is not zero, a list of the tasks completed with that code is printed. If the highest condition code is received from the syntax checking of the control statements, the word *SYNTAX* is printed. If the highest condition code is generated by a SET command, the words *SET COMMAND* are printed.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR013I (*ttt*)-*mmmmm*(*yy*), *date_and_time* TASK {COMPLETED | ABENDED} WITH {RETURN | SYSTEM ABEND | USER ABEND} CODE {*return_code* | *abend_code*}

Explanation: If the command did not abend, the *return_code* is the condition code generated during processing of the command. If the command abended, the abend code (*abend_code*) is also printed. The system abend code is in hexadecimal, and the user abend code is in decimal.

Source: DFSMSdss

System Action: If the command abended, LASTCC is set to 8, or it is set to the *return_code*. If MAXCC is less than LASTCC, MAXCC is set so it is equal to LASTCC.

Application Programmer Response: None.

Operator Response: None.

ADR014I (*ttt*)-*mmmmm*(*yy*), *date_and_time* ALL PREVIOUSLY SCHEDULED TASKS COMPLETED. {SERIAL|PARALLEL} MODE NOW IN EFFECT

Explanation: A switch was made from serial mode to parallel mode or from parallel mode to serial mode (at the request of the user in the control statement or by the installation-wide options exit routine).

Source: DFSMSdss

System Action: All previously scheduled tasks either running or waiting to run have completed. Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR015I (*ttt*)-*mmmmm*(*yy*), {MAXIMUM CONDITION CODE | RETURN CODE OF TASK} HAS BEEN RESET FROM *return_code_1* TO *return_code_2*

Explanation: A SET command was encountered and successfully reset a condition code (*return_code_1* and *return_code_2*). The text indicates which task ID was affected, what the return code was before and after the reset, and to what the return code was reset.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR016I (*ttt*)-*mmmmm*(*yy*), RACF LOGGING OPTION IN EFFECT FOR THIS TASK

Explanation: RACF logging for volume and data set authorizations by DFSMSdss will be performed in accordance with the resource profile specifications. The option is in effect because RACFLOG=YES was specified or the installation-wide options exit forced it.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR017E (*ttt*)-*mmmmm*(*yy*), *date_and_time* TASK NOT SCHEDULED DUE TO ERROR. TASK RETURN CODE *return_code*

Explanation: The task is not performed.

Source: DFSMSdss

System Action: Processing continues with the next control statement. The return code (*return_code*) is 8.

Application Programmer Response: None.

Operator Response: None.

ADR018I (*ttt*)-*mmmmm*(*yy*), STORAGE REQUIRED *nK1.* STORAGE AVAILABLE *nK2*

Explanation: A task was not performed or the job did not start because of lack of storage. This message follows either message ADR002T or ADR008E and indicates the approximate amount of storage required (*nK1*) when the job is rerun and the storage available (*nK2*). The values refer only to the failure indicated in message ADR002T or ADR008E and do not take into account storage required for subsequent task scheduling.

Source: DFSMSdss

System Action: Message ADR002T or ADR008E indicates the return code and system action.

Application Programmer Response: None.

Operator Response: None.

ADR019E (*ttt*)-*mmmmm*(*yy*), THE {INPUT | OUTPUT} FILE HAS AN INVALID DEVICE TYPE FOR THE COMMAND SPECIFIED

Explanation: The DASD device is not supported for the command specified.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Probable user error. Correct the error, and resubmit the job.

Operator Response: None.

ADR020E (*ttt*)-*mmmmm*(*yy*), DDNAME *ddname* NOT FOUND

Explanation: A *ddname* specified in a DFSMSdss control statement has no corresponding ddname in a DD statement. Either a necessary DD statement is missing, or a ddname is misspelled in an existing DD statement.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Probable user error. Correct the error, and resubmit the job.

Operator Response: None.

ADR021I **(***ttt***)-***mmmmm***(***yy***), THE ALLOCATION OF THE MESSAGE DATA SET HAS FAILED. DYNAMIC ALLOCATION ERROR CODE:** *error_code***, INFORMATION CODE:** *information_code***. MESSAGES WILL BE SPOOLED TO SYSPRINT.**

Explanation: DFSMSdss attempted to allocate a temporary data set to store task-related messages. If the WORKUNIT or the WORKVOL parameters, or both, were specified, they will be used to allocate the temporary data set. The error code (*error_code*) and information code (*information_code*) are returned by dynamic allocation. The codes are listed in the *OS/390 MVS Programming: Authorized Assembler Services Guide*. An undocumented error code may be displayed if an installation-wide validation exit is used to deny dynamic allocation but fails to get a reason code returned by dynamic allocation.

Source: DFSMSdss

System Action: Messages may not be grouped according to task, if DFSMSdss is running in parallel mode.

Application Programmer Response: Correct the problem as indicated by *error_code* and *information_code*, or specify a different volume or esoteric name with the WORKUNIT or WORKVOL parameters or both.

Operator Response: None.

ADR022T **(***ttt***)-***mmmmm***(***yy***), INVALID DCB SPECIFIED FOR {SYSPRINT |** *ddname***}**

Explanation: The DCB for the SYSPRINT file (or its acceptable alternative) must have a RECFM of VB or VBA. The logical record length (LRECL) must have a value between 84 and 137. The BLKSIZE must have a value of at least 4 greater than the LRECL. The actual printed line will be 5 less than the LRECL. If the LRECL is greater than 137, it is changed to 137 and message ADR030W is printed.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Probable user error. Correct the error, and resubmit the job. The BLKSIZE, LRECL, and RECFM need not be specified and can default. If they are specified, RECFM must be VB or VBA; LRECL must be between 84 and 137 (inclusive); and BLKSIZE must be at least 4 greater than the LRECL.

Operator Response: None.

ADR024E **(***ttt***)-***mmmmm***(***yy***), TRACKS/OUTTRACKS VALUE IS INVALID FOR DEVICE. VALID CYLINDER RANGE IS 0 TO** *cccc***. VALID TRACK RANGE IS 0 TO** *hhhh*

Explanation: The following values are not valid for the specified device types: (1) the range specified in the TRACKS keyword of a DUMP, COPY, RESTORE, or PRINT, or (2) the range specified for the OUTTRACKS keyword for COPY or RESTORE. The TRACKS values must fall within the cylinder and track range indicated in the message. The *cccc* and *hhhh* are high cylinder and head numbers, respectively, in decimal notation.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the error, and rerun the job.

Operator Response: None.

ADR025E **(***ttt***)-***mmmmm***(***yy***), {INPUT | OUTPUT} DEVICE TYPE IS INVALID FOR TASK**

Explanation: The input or output device type for the command is not allowed. For a DUMP or a CONVERTV, input must be DASD. For a RESTORE, output must be DASD. For a copy, both input and output must be DASD. For a PRINT, input must be DASD. For a DEFRAG, the volume must be DASD. For BUILDSA, the output device type must be one of the device types supported for stand-alone services IPL.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the error, and reissue the command.

Operator Response: None.

ADR026E **(***ttt***)-***mmmmm***(***yy***), {***volume_serial_number* **|** *ddname***} IS INVALID AS OBJECT DDNAME**

Explanation: A reference was made to an incorrect *volume_serial_number* or *ddname*. The following restrictions apply to DD references from the control statements:

- SYSPRINT (or its alternative) can be referred to only from the PRINT command.
- SYSIN (or its alternative) cannot be referred to at all.
- The indicated volume serial number was specified more than once for the INDYNAM parameter on a COPY, CONVERTV, or DUMP command.
- The volume serial number associated with the indicated ddname was specified more than once for the INDDNAME or OUTDDNAME parameter on a COPY, CONVERTV, or DUMP command.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the error, and reissue the command.

Operator Response: None.

ADR027T **(***ttt***)-***mmmmm***(***yy***), DFSMSdss IS NOT SUPPORTED BY THE CURRENT SCP**

Explanation: DFSMSdss 1.2.0 runs only on DFSMS/MVS 1.2.0

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Resubmit the job with the correct level of DFSMS/MVS and DFSMSdss.

Operator Response: None.

ADR028I **(***ttt***)-***mmmmm***(***yy***), TYPRUN=SCAN REQUESTED. ONLY CONTROL CARD SYNTAX CHECKING WILL BE DONE**

Explanation: No tasks will be performed. Only checking of the input control statements will be done.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR029T **(*ttt*)-*mmmmm*(*yy*), KEYWORD PRECEDING POSITION *nn* IN PARM STATEMENT IS INVALID**

Explanation: In the EXEC statement, the keyword preceding the = sign in the indicated position of the parameter of the PARM keyword is not recognized as a valid keyword option.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Correct the error in the PARM statement, and rerun the job. The valid parameter keywords are shown in *DFSMS/MVS DFSMSdss Storage Administration Reference*.

Operator Response: None.

ADR030W **(*ttt*)-*mmmmm*(*yy*), DCB VALUES HAVE BEEN MODIFIED FOR *ddname***

Explanation: In the DCB information you specified, either the LRECL or the BLKSIZE value was outside the allowable range. The LRECL and the BLKSIZE are set to default values of 137 and 141, respectively.

Source: DFSMSdss

System Action: The job continues with the modified DCB for the *ddname*. The return code is 4.

Application Programmer Response: In the future, supply a correct DCB or let the DCB for the ddname default to its allowable values.

Operator Response: None.

ADR031I **(*ttt*)-*mmmmm*(*yy*), TYPRUN=NORUN REQUESTED. TASKS WILL EXECUTE IN NORUN MODE**

Explanation: TYPRUN=NORUN was specified in the EXEC statement parameter. Subtasks will run in NORUN mode.

Source: DFSMSdss

System Action: All subtasks except CONVERTV, DEFRAG, and data set DUMP and RESTORE bypass processing. Data set DUMP and RESTORE only do only data set filtering and not DUMP or RESTORE functions. CONVERTV does data set filtering and volume and data set eligibility tests, but does not actually convert any volumes. DEFRAG prints the fragmentation index but does not relocate data set extents. Message ADR040I for the scheduled tasks follows this message.

Application Programmer Response: None.

Operator Response: None.

ADR032W **(*ttt*)-*mmmmm*(*yy*), INSTALLATION-WIDE OPTIONS EXIT SPECIFIED CONFLICTING KEYWORDS *xxxx* and *yyyy*.**

Explanation: The installation-wide options exit changed keyword settings that will result in a conflict. Some commands contain parameters that are defined to be mutually exclusive. For such commands, if one parameter is specified, the other parameter is not allowed. *xxxx* and *yyyy* are the keywords that conflict.

Source: DFSMSdss

System Action: Processing continues. The conflicting keywords are reset to the values specified in the command SYSIN stream.

Application Programmer Response: Correct the source of the conflict and reissue the command.

Operator Response: None.

ADR033W **(*ttt*)-*mmmmm*(*yy*), INSUFFICIENT STORAGE AVAILABLE FOR OPTIMIZE *n*. OPTIMIZE *n*-1 WILL BE ATTEMPTED**

Explanation: Not enough storage was available to schedule the function with the indicated OPTIMIZE value *n*. The OPTIMIZE value is reduced by 1, and another attempt is made. This message can appear more than once as the OPTIMIZE value is decreased.

Source: DFSMSdss

System Action: The function performs with a reduced OPTIMIZE value. The return code is 4.

Application Programmer Response: For the next run, either reduce the OPTIMIZE value in the control statement or increase the available storage.

Operator Response: None.

ADR035I **(*ttt*)-*mmmmm*(*yy*), INSTALLATION EXIT ALTERED *keyword* {DEFAULT | REQUEST | OPTION | VALUE } [TO *xxxxx*]**

Explanation: The installation-wide options exit routine has changed the default or requested option or value to *xxxxx*. See *OS/390 MVS Installation Exits* for details.

Source: DFSMSdss

System Action: The DFSMSdss function runs with the altered options.

Application Programmer Response: To get the desired result from the installation-wide exit routine, check with your system programmer.

Operator Response: None.

ADR036W **(*ttt*)-*mmmmm*(*yy*), TASK NOT SCHEDULED AT REQUEST OF INSTALLATION EXIT**

Explanation: The installation-wide exit requested that this task not be performed.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Check with your system programmer for restrictions placed by the exit.

Operator Response: None.

ADR037E **(*ttt*)-*mmmmm*(*yy*), FAILURE WHILE ATTACHING TASK, [ATTACH. RETURN CODE IS *return_code* | INSUFFICIENT STORAGE TO ATTEMPT ATTACH.]**

Explanation: A task could not be attached because one of the following conditions existed:

- The system-attach macro returned a nonzero return code (*return_code*) while attaching a task. Probably not enough storage was available to attach the task.
- Not enough storage was available to even attempt the attach for the task.

For information on the ATTACH return codes, see *OS/390 MVS Programming: Authorized Assembler Services Reference ALE-DYN*.

Source: DFSMSdss

System Action: Processing is attempted on other tasks. Final return code is set to 8.

Application Programmer Response: Either increase the region size, specify a smaller size parameter, or both, then rerun the job.

Operator Response: None.

ADR039W **(***ttt***)-***mmmmm***(***yy***), INSTALLATION-WIDE OPTIONS EXIT SPECIFIED INVALID VALUE (***value***) FOR** *keyword*

Explanation: The installation-wide options exit routine attempted to alter the value of the specified keyword. However, the value specified by the exit is not valid for the keyword. The result is as if the exit requested the default value.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: The installation-wide options exit routine is in error. For information on how to write the exit, see *OS/390 MVS Data Areas, Vol 4 (RD-SRRA)*. For information on the valid values for the keyword, see the appropriate keyword description in the *DFSMS/MVS DFSMSdss Storage Administration Reference*.

Operator Response: None.

ADR040I **(***ttt***)-***mmmmm***(***yy***), PROCESSING BYPASSED DUE TO NORUN OPTION**

Explanation: Further processing is bypassed because TYPRUN=NORUN was specified in an EXEC statement parameter. This option results in the following:

- BUILDSA - Task ends.
- COPY FULL/TRACKS - Task ends.
- COPY DATA SET - Filtering is performed and the names of the selected data sets are printed; data sets are not copied.
- COPYDUMP - Task ends.
- DEFRAG - Only volume statistics are printed; data set extents are not relocated.
- DUMP FULL/TRACKS - Task ends.
- DUMP DATA SET - Filtering is performed and the names of the selected data sets are printed; data sets are not dumped.
- PRINT - Task ends.
- RESTORE FULL/TRACKS - Task ends.
- RESTORE DATA SET - Filtering is performed and the names of the selected data sets are printed; data sets are not restored.
- COMPRESS and RELEASE - Filtering is performed and the names of the selected data sets are printed; data sets are not compressed or released.

Source: DFSMSdss

System Action: Further processing is bypassed for the volume or task.

Application Programmer Response: None.

Operator Response: None.

ADR041I **(***ttt***)-***mmmmm***(***yy***), I/O BUFFER {ABOVE | BELOW} 16MB VIRTUAL REQUESTED**

Explanation: You requested that the DFSMSdss I/O buffers reside above or below 16 megabytes virtual address.

Source: DFSMSdss

System Action: If you requested that buffer storage reside above 16 megabytes virtual address, DFSMSdss attempts to allocate storage for the buffers above 16 megabytes virtual address.

Application Programmer Response: None.

Operator Response: None.

ADR042I **(***ttt***)-***mmmmm***(***yy***), {I/O | APPLICATION INTERFACE} BUFFER WAS OBTAINED BELOW 16MB VIRTUAL ADDRESS**

Explanation: Not enough storage was available above 16 megabytes virtual address to satisfy the buffer request.

Source: DFSMSdss

System Action: The buffer is obtained below 16 megabytes virtual address, and DFSMSdss processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR045T **(***ttt***)-***mmmmm***(***yy***), DFSMSdss IS NOT LICENSED FOR USE ON THIS SYSTEM.**

Explanation: The DFSMS/MVS license agreement does not allow execution of DFSMSdss.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: If you are licensed to use DFSMSdss, update the IGDDFPKG member of SYS1.PARMLIB to set the correct value that enables DFSMSdss to be used.

Characteristics and syntax rules for IGDDFPKG are given in the *OS/390 MVS Initialization and Tuning Reference*. Instructions for updating IGDDFPKG are also provided in the Program Directory of your level of DFSMS/MVS.

Operator Response: None.

ADR049E **(***ttt***)-***mmmmm***(***yy***), DFSMSdss FUNCTION TASK ABEND RECOVERY ROUTINE WAS ENTERED. {SYSTEM ABEND | USER ABEND} CODE=***nnnn*

Explanation: A function task may request that an abend request be recovered and control returned to the function task for cleanup processing before terminating. This message is issued when an abend occurs and the function task abend recovery routine has successfully returned control to the function task.

Source: DFSMSdss

System Action: An SVCDUMP is requested by the recovery function and the system is directed to return control to the function task. The function task performs any necessary cleanup processing and terminates.

Application Programmer Response: Determine the cause of the abend. Correct and rerun if applicable.

Operator Response: None.

ADR050I **(***ttt***)-***mmmmm***(***yy***), DFSMSdss INVOKED VIA [CROSS MEMORY] APPLICATION INTERFACE**

Explanation: An application used the DFSMSdss application interface to invoke DFSMSdss.

Source: DFSMSdss

System Action: DFSMSdss interacts with the application's UIM via the DFSMSdss application interface

Application Programmer Response: None.

Operator Response: None.

ADR101I **(***ttt***)-***mmmmm***(***yy***), TASKID** *xxx* **HAS BEEN ASSIGNED TO COMMAND '***command***'**

Explanation: The indicated task ID was assigned to the indicated command. All future messages related to this command will contain the indicated task ID following the message number.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR102I **(***ttt***)-***mmmmm***(***yy***), COMMAND BYPASSED DUE TO CONDITION CODES**

Explanation: An IF-THEN-ELSE command sequence caused the command to be bypassed. When you specify an IF-THEN-ELSE command sequence, either the THEN or the ELSE clause is performed, and the one not performed is bypassed.

Source: DFSMSdss

System Action: The bypassed portion of the command sequence is checked for syntax errors but is not performed. DFSMSdss processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR103W **(***ttt***)-***mmmmm***(***yy***), A 'DO' OR 'END' WAS ENCOUNTERED OUTSIDE OF AN IF-THEN-ELSE TEST**

Explanation: A DO was encountered without a preceding IF-THEN-ELSE test.

Source: DFSMSdss

System Action: A DO encountered when there is no IF-THEN-ELSE in effect does not cause DFSMSdss to take special action. However, it must have a matching END command. DFSMSdss processing continues. The return code is 4.

Operator Response: None.

ADR104E **(***ttt***)-***mmmmm***(***yy***), AN IMPROPERLY PLACED COMMA HAS BEEN ENCOUNTERED**

Explanation: An improperly placed comma was found in the command. Commas cannot indicate the omission of positional parameters. The omission of leading positional parameters is not permitted.

Source: DFSMSdss

System Action: The command is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR105W **(***ttt***)-***mmmmm***(***yy***), COMMAND-END DELIMITER APPEARS WITHIN APOSTROPHES**

Explanation: A quoted string contains the optional command delimiter (a semicolon). A closing single quotation mark might be omitted.

Source: DFSMSdss

System Action: The usage is accepted, and the semicolon is treated as a valid character instead of a delimiter. The return code is 4.

Application Programmer Response: Check the usage of the semicolon, and correct if necessary.

Operator Response: None.

ADR106W **(***ttt***)-***mmmmm***(***yy***), TOO MANY RIGHT PARENTHESES FOUND. EXCESS IGNORED**

Explanation: Too many closing parentheses were found at the end of the command or following a first-level parameter.

Source: DFSMSdss

System Action: The excess is ignored, and the processing is continued for the command. The return code is 4.

Application Programmer Response: Remove the excess parentheses.

Operator Response: None.

ADR107E **(***ttt***)-***mmmmm***(***yy***), TOO FEW RIGHT PARENTHESES FOUND AT END OF COMMAND**

Explanation: Too few closing parentheses were found at the end of the command to properly close the subparameter lists. This message may also be issued when the continuation character is omitted in a list of subkeywords.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR108I **(***ttt***)-***mmmmm***(***yy***),** *date_and_time* **EOJ ENCOUNTERED. ALL TASKS WILL QUIESCE**

Explanation: An EOJ command was encountered. A subsequent message, ADR013I, indicates when all tasks are completed.

Source: DFSMSdss

System Action: After performing tasks before the EOJ command, DFSMSdss ends.

Application Programmer Response: None.

Operator Response: None.

ADR109I **(***ttt***)-***mmmmm***(***yy***),** *date_and_time* **INITIAL SCAN OF USER CONTROL STATEMENTS COMPLETED**

Explanation: All control statements were scanned for correct function name and IF/DO/END balancing.

Source: DFSMSdss

System Action: Processing phase now begins.

Application Programmer Response: None.

Operator Response: None.

ADR110W **(***ttt***)-***mmmmm***(***yy***), WRITE TO OPERATOR MESSAGE HAS BEEN TRUNCATED**

Explanation: A WTO command longer than 72 characters was encountered.

Source: DFSMSdss

System Action: The excess was truncated although the WTO was issued. The return code is 4.

Application Programmer Response: Shorten the WTO text, or issue multiple WTO commands to accommodate the text.

Operator Response: None.

ADR115W (*ttt*)-*mmmmm*(*yy*), AN IMPROPERLY PLACED COMMENT DELIMITER HAS BEEN ENCOUNTERED

Explanation: An improperly placed comment delimiter was found in the command.

Source: DFSMSdss

System Action: Command processing continues.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR120E (*ttt*)-*mmmmm*(*yy*), TOO MANY POSITIONAL PARAMETERS AFTER '*xxxx*'

Explanation: Too many positional parameters are specified following the characters *xxxx* for a parameter list.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Remove the excess parameters from the command, and reissue the command.

Operator Response: None.

ADR121E (*ttt*)-*mmmmm*(*yy*), CONSTANT '*xxxx*' EXCEEDS CHARACTER LENGTH LIMIT

Explanation: The constant (*xxxx*) contains more characters than the maximum permitted by the command syntax.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the constant, and reissue the command.

Operator Response: None.

ADR122E (*ttt*)-*mmmmm*(*yy*), INCORRECT NUMBER OF CONSTANTS/ENTRIES IN LIST BEGINNING AT '*yyyy*'

Explanation: An incorrect number of constants (or entries) was found in the list beginning at *yyyy*.

Source: DFSMSdss

System Action: The command is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR123E (*ttt*)-*mmmmm*(*yy*), ITEM '*xxxx*' DOES NOT ADHERE TO RESTRICTIONS

Explanation: The indicated parameter (*xxxx*) does not conform to the required naming conventions. For example, a ddname contains invalid characters. Check the password data set for syntax errors.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the parameter error, and reissue the command.

Operator Response: None.

ADR124E (*ttt*)-*mmmmm*(*yy*), DELIMITER '*xxxx*' IS NOT PROPERLY PRECEDED BY A CONSTANT OR KEYWORD

Explanation: A delimiter (*xxxx*) was found where a subparameter list or data was expected. The delimiter is improperly used. Parentheses might be improperly positioned, or a positional parameter might be missing.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the syntax error, and reissue the command.

Operator Response: None.

ADR125E (*ttt*)-*mmmmm*(*yy*), LEFT PARENTHESIS MISSING FOLLOWING KEYWORD '*keyword*'

Explanation: An opening parenthesis, which should begin the required subparameter list or value associated with the command keyword, does not follow the keyword.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Check the requirements of the keyword, correct the syntax, and reissue the command.

Operator Response: None.

ADR126E (*ttt*)-*mmmmm*(*yy*), RIGHT PARENTHESIS MISSING AFTER '*xxxx*'

Explanation: A closing parenthesis was not found where expected, or a subparameter list was not properly delimited.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR127E (*ttt*)-*mmmmm*(*yy*), INVALID PARENTHESIS FOR SPECIFYING REPEATED SUBPARAMETER LIST

Explanation: Parentheses used for delimiting repeated subparameter lists are missing or not matched.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR128E (*ttt*)-*mmmmm*(*yy*), INVALID LEFT PARENTHESIS AFTER '*xxxx*'

Explanation: An opening parenthesis that appeared to delimit the positional parameter *xxxx* was found, but the positional parameter was not a constant or a list of constants.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR129E (*ttt*)-*mmmmm*(*yy*), KEYWORD '*keyword*' IS IMPROPER

Explanation: The command contains a misspelled, improperly specified, or inapplicable keyword.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR130E (*ttt*)-*mmmmm*(*yy*), KEYWORD '*keyword*' APPEARS TOO OFTEN

Explanation: The keyword appeared too often in the command. A parameter list might be incorrectly specified.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax by removing the keyword, and reissue the command.

Operator Response: None.

ADR131E (*ttt*)-*mmmmm*(*yy*), ABOVE TEXT BYPASSED UNTIL NEXT COMMAND

Explanation: An error was encountered during the syntax check of this command, and syntax checking ended. Messages printed before this message indicate the nature of the error.

Source: DFSMSdss

System Action: Processing continues with the next control statement. If this task was to be performed, it will not be, and a return code of 8 is set. If the command was being bypassed (see message ADR102I), the return code is not reset by this error.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR132E (*ttt*)-*mmmmm*(*yy*), IMPROPER PASSWORD ENCOUNTERED AFTER '*xxxxxxxx*'

Explanation: A password, denoted by a slash (/), was encountered where a password was not allowed; an expected password was missing; or a password longer than 8 characters was specified. This is not a verification of the password but an error in the syntax.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR133E (*ttt*)-*mmmmm*(*yy*), TOO MANY REPEATED SUBPARAMETER LISTS APPEAR IN THE COMMAND

Explanation: Too many repeated subparameter lists appear in the command.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR134E (*ttt*)-*mmmmm*(*yy*), A HEX OR BINARY CONSTANT IS IMPROPERLY SPECIFIED

Explanation: A hexadecimal or binary constant is not specified in the correct format: `X'hh...hh'` or `B'bb...bb'`, respectively.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR135E (*ttt*)-*mmmmm*(*yy*), IMPROPER NUMERIC DIGIT FOUND IN '*xxxx*'

Explanation: The constant (*xxxx*) contains an invalid character. A decimal number can be specified only with the symbols 0 through 9; a hexadecimal number can be specified only with the symbols 0 through 9 and A through F; and a binary number can be specified only with the symbols 0 and 1.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR136E (*ttt*)-*mmmmm*(*yy*), CONSTANT '*xxxx*' IS NOT WITHIN VALUE RANGE

Explanation: The value of the constant (*xxxx*) is outside the range of values allowed for the associated parameter.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Check the command syntax for allowed values, correct the error, then reissue the command.

Operator Response: None.

ADR137E (*ttt*)-*mmmmm*(*yy*), TOO MANY CONSTANTS/ENTRIES IN LIST BEGINNING AT '*yyyy*'

Explanation: Too many constants or entries are specified in the command beginning at *yyyy*.

Source: DFSMSdss

System Action: The command is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR138E **(*ttt*)-*mmmmm*(*yy*), REQUIRED (SUB) PARAMETER OF '*xxxx*' IS MISSING**

Explanation: A required parameter or subparameter (*xxxx*) is missing.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Add the missing parameter, and rerun the job.

Operator Response: None.

ADR139E **(*ttt*)-*mmmmm*(*yy*), INCONSISTENT PARAMETERS INVOLVING '*xxxx*'**

Explanation: Some commands contain parameters defined as mutually exclusive. For such commands, if one parameter is specified, the other parameter is not allowed. *xxxx* is the first parameter specified.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR140E **(*ttt*)-*mmmmm*(*yy*), INVALID 'BY' CRITERIA**

Explanation: A value in the BY keyword is incorrect for the item being tested.

For selection characteristics CREDT, EXPDT, and REFDT, possible errors include:

- Date is not five or seven digits.
- Seven-digit date is less than 1900001 but not 0000000.
- LT operator is specified with an all-zero date.
- GT operator is specified with a never-expire date.
- Optional modifier is not 1–4 digits with optional sign.
- Modifier is specified with a date that cannot be modified (for example, a date of all zeroes or a never-expire date).
- Modified five-digit date is outside range of 1950–2049.

For all selection characteristics, possible errors include:

- Selection characteristic is not valid. It may be misspelled.
- Operator is not valid. It may be misspelled.
- Operator is not valid for the specified selection characteristic. For example, some selection characteristics require either the EQ or the NE operator.
- Argument that must be numeric is nonnumeric.
- Argument is not valid for the item being tested. For example, you can specify CATLG, DSCHA, and MULTI only with the arguments 0, 1, YES, or NO.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR141E **(*ttt*)-*mmmmm*(*yy*), ERROR IN DATA SET NAME** *dsname*

Explanation: A data set name was specified incorrectly for one of the following reasons:

- The length might be greater than 44 characters.
- If the data set name is not in quotation marks, a qualifier might be longer than 8 characters.
- The GDG might be incorrectly specified.
- GDG relative generation filtering was used with RENAME or RENAMEUNCONDITIONAL.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the command syntax and reissue the command.

Operator Response: None.

ADR142I **(*ttt*)-*mmmmm*(*yy*), KEYWORD** *keyword* **HAS BEEN IGNORED**

Explanation: The keyword does not apply and was ignored for one of the following reasons:

- LOGICALNESS—The input data set was created by a logical data set DUMP.
- WORKSIZE—This keyword is no longer required.

Source: DFSMSdss

System Action: The keyword is ignored.

Application Programmer Response: Omit the keyword on future runs.

Operator Response: None.

ADR143E **(*ttt*)-*mmmmm*(*yy*), INVALID SYNTAX IN DATA SET SPECIFIED BY DDNAME** *ddname*

Explanation: Invalid data exists in the data set associated with the DD statement specified by the FILTERDD keyword.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the parameters in error, and rerun the job.

Operator Response: None.

ADR144E **(*ttt*)-*mmmmm*(*yy*), INCOMPLETE SPECIFICATION IN DATA SET REFERENCED BY DDNAME** *ddname*

Explanation: An end-of-file (EOF) condition was encountered in scanning the character string contained in the *ddname* specified as a PASSWORD, FILTERDD, or EXCLUDE parameter. This condition can be caused by incorrect continuation syntax or by missing records in the input stream.

Source: DFSMSdss

System Action: The task is not performed. The return code is 8.

Application Programmer Response: Correct the command syntax, or add the missing records, then resubmit the job.

Operator Response: None.

ADR146I **(***ttt***)-***mmmmm***(***yy***), OBSOLETE KEYWORD** *keyword1* **SPECIFIED.** *keyword2* **WILL BE USED.**

Explanation: The keyword *keyword1* is no longer used by DFSMSdss. The current keyword is *keyword2*.

Source: DFSMSdss

System Action: The DFSMSdss function runs with the altered option.

Application Programmer Response: Verify that *keyword2* produces the expected results. If the job is to be run again in the future, remove *keyword1* from the control statement and add *keyword2*.

Operator Response: None.

ADR147W **(***ttt***)-***mmmmm***(***yy***), INSTALLATION EXIT ATTEMPTED TO ALTER OBSOLETE KEYWORD** *keyword1***. REQUEST IGNORED**

Explanation: The installation options exit routine attempted to alter the option or value for the obsolete keyword *keyword1*. See *DFSMS/MVS Installation Exits* for details.

Source: DFSMSdss

System Action: DFSMSdss runs with the current option.

Application Programmer Response: The installation options exit should be changed to not alter the option or value of the obsolete keyword.

Operator Response: None.

ADR148I **(***ttt***)-***mmmmm***(***yy***), MULTIVOLUME DATA SET** *dsname* **NOT SELECTED.**

Explanation: The data set was not selected for processing because of one of the following conditions:

- One or more volumes of a multivolume data set were not included in the input volume list and SELECTMULTI(ALL) was specified.
- The first volume of a multivolume data set was not included in the input volume list and SELECTMULTI(FIRST) was specified.

Source: DFSMSdss

System Action: The data set is excluded from further processing.

Application Programmer Response: If the data set should have been selected, take one of the following actions and rerun the job:

- Specify SELECTMULTI(FIRST) and include the first volume of the data set in the input volume list. For VSAM data sets, you must include the first volume of the data component in the input volume list.
- Specify SELECTMULTI(ALL) (this is the default if you do not specify SELECTMULTI) and include all volumes of the data set in the input volume list.
- Specify SELECTMULTI(ANY) and include at least one primary or candidate-with-space volume of the data set in the input volume list.
- Do not specify an input volume list.

Operator Response: None.

ADR150E **(***ttt***)-***mmmmm***(***yy***), TASK TERMINATED DUE TO INSUFFICIENT MAIN STORAGE**

Explanation: Not enough storage was available to set up the commands in the input stream for the indicated task.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Either increase REGION size or increase the SIZE parameter, or both, then retry the job.

Operator Response: None.

ADR151E **(***ttt***)-***mmmmm***(***yy***), UNABLE TO ALLOCATE DATA SET REFERENCED BY DDNAME** *ddname*

Explanation: An application is using the DFSMSdss cross memory application interface to invoke DFSMSdss and an allocation error occurred during SYSIN processing.

Source: DFSMSdss

System Action: DFSMSdss will not schedule the requested function task for execution.

Application Programmer Response: If the ddname being passed in the SYSIN statement is less than 8 characters, either use 8 character ddnames or leave enough blank space after the ddname to allow DFSMSdss cross memory application interface logic to substitute a unique 8 character system generated ddname. Ask the operator to provide information about any associated allocation error messages appearing on the system console log. Refer to the explanation of any allocation error messages produced.

Operator Response: Note associated allocation error messages appearing on the system console log and provide this information to the application programmer.

ADR169T **(***ttt***)-***mmmmm***(***yy***), NO RECORDS IN SYSIN STREAM**

Explanation: The SYSIN stream was empty.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Ensure that the SYSIN (or acceptable alternative ddname) DD statement refers to a nonempty file, and retry the job.

Operator Response: None.

ADR170T **(***ttt***)-***mmmmm***(***yy***), ERROR OPENING DDNAME** *ddname*

Explanation: The SYSIN (or acceptable alternative *ddname*) file cannot be opened.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Reestablish the SYSIN file, and resubmit the job.

Operator Response: None.

ADR171T (*ttt*)-*mmmmm*(*yy*), MAXIMUM NUMBER OF TASKS EXCEEDED

Explanation: The SYSIN stream contains more than 255 tasks.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: If necessary, run multiple job steps to accommodate the number of requested tasks.

Operator Response: None.

ADR172T (*ttt*)-*mmmmm*(*yy*), ERROR DURING INITIAL SCAN

Explanation: During the initial scan of the control statements, an error was encountered.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Correct the problem as indicated by the previous message, and retry the job.

Operator Response: None.

ADR173T (*ttt*)-*mmmmm*(*yy*), I/O ERROR WHILE READING *ddname*, *xxxx*

Explanation: An I/O error was encountered in reading the SYSIN file (or acceptable alternative *ddname*). The *ddname* is followed by the SYNAD information (*xxxx*) obtained by the SYNADAF macro.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Correct the cause of the error or reestablish the SYSIN file, and retry the job.

Operator Response: None.

ADR174T (*ttt*)-*mmmmm*(*yy*), REMAINDER OF COMMAND INPUT STREAM WAS IGNORED

Explanation: An error occurred that prohibits further scanning of the command stream. Messages printed before this message indicate the nature of the error.

Source: DFSMSdss

System Action: The program ends. The return code is 12. The condition code (MAXCC) is always set to 12 when this situation is encountered.

Application Programmer Response: Correct the error, and resubmit the job.

Operator Response: None.

ADR175T (*ttt*)-*mmmmm*(*yy*), COMMAND *command* IS UNKNOWN

Explanation: The command name is not recognized.

Source: DFSMSdss

System Action: The program ends. The return code is 12.

Application Programmer Response: Reissue the command with the correct command name.

Operator Response: None.

ADR176T (*ttt*)-*mmmmm*(*yy*), AN ‘ELSE’ COMMAND IS IMPROPERLY PLACED

Explanation: An ELSE clause appeared in the command without a corresponding IF statement.

Source: DFSMSdss

System Action: The remainder of the stream is ignored. DFSMSdss processing ends. The return code is 12.

Application Programmer Response: Correct the command syntax and resubmit the job.

Operator Response: None.

ADR177T (*ttt*)-*mmmmm*(*yy*), AN ‘END’ COMMAND IS INVALID

Explanation: An END statement was encountered without a matching DO statement.

Source: DFSMSdss

System Action: The remainder of the stream is ignored. DFSMSdss processing ends. Message ADR172T follows this message. The return code is 12.

Application Programmer Response: Correct the DO-END sequence, and resubmit the job.

Operator Response: None.

ADR178T (*ttt*)-*mmmmm*(*yy*), AN ‘IF’ COMMAND IS INVALID

Explanation: The sequence of the IF-THEN-ELSE statement is incorrect. Only the system variables LASTCC and MAXCC can be specified, and the values must be decimal numbers from 0 through 99999. However, a value greater than 16 will be reduced to 16. If the variable LASTCC is specified, a function command must have been previously encountered in the input command stream.

Source: DFSMSdss

System Action: The remainder of the stream is ignored. DFSMSdss processing ends. Message ADR172T follows this message. The return code is 12.

Application Programmer Response: Check the requirements of the IF-THEN-ELSE statement sequence, correct the error, then reissue the command.

Operator Response: None.

ADR179T (*ttt*)-*mmmmm*(*yy*), A ‘SET’ COMMAND IS INVALID

Explanation: An invalid SET command was encountered. Only the system variables LASTCC and MAXCC can be specified, and the values must be decimal numbers from 0 through 99999. However, a value greater than 16 will be reduced to 16. If the variable LASTCC is specified, a function command must have been previously encountered in the input command stream.

Source: DFSMSdss

System Action: The remainder of the command stream is ignored. The return code is 12.

Application Programmer Response: Check the requirements of the SET statement, correct the error, then resubmit the job.

Operator Response: None.

ADR180T (*ttt*)-*mmmmm*(*yy*), IMPROPER OR MISSING 'THEN'

Explanation: The THEN clause of the IF-THEN-ELSE command sequence is missing or is misspelled.

Source: DFSMSdss

System Action: The remainder of the command stream is ignored. The return code is 12.

Application Programmer Response: Correct the error, and reissue the command.

Operator Response: None.

ADR181T (*ttt*)-*mmmmm*(*yy*), TOO MANY LEVELS OF 'IF' COMMAND NESTING

Explanation: More than 10 IF statements were nested, or an unended DO group was discovered when the command input stream ended.

Source: DFSMSdss

System Action: The remainder of the command stream is ignored. The return code is 12.

Application Programmer Response: Restructure the command stream to avoid the excessive nesting and to end all DO groups, then resubmit the job.

Operator Response: None.

ADR182T (*ttt*)-*mmmmm*(*yy*), INPUT STREAM END-OF-FILE FOUND BEFORE END OF COMMAND

Explanation: An end-of-file (EOF) condition was encountered while scanning the command. This condition can be caused by incorrect command-continuation syntax or by missing records in the input stream.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Correct the command syntax, or add the missing records, then resubmit the job.

Operator Response: None.

ADR183I (*ttt*)-*mmmmm*(*yy*), THE REPLACE KEYWORD REPLACES THE PURGE KEYWORD FOR A DATA SET RESTORE

Explanation: The REPLACE keyword replaces the PURGE keyword for a data set RESTORE.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR184W (*ttt*)-*mmmmm*(*yy*), RESET IS IGNORED WHEN CONCURRENT IS SPECIFIED

Explanation: You specified both RESET and CONCURRENT with the DUMP command. RESET is ignored, and the data set change indicators will not be reset.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: DFSMSdss provides a patch that your installation may use to specify that RESET should not be ignored when CONCURRENT is also specified with the DUMP command. Refer to the documentation for this patch in Appendix B of the *DFSMS/MVS DFSMSdss Diagnosis Guide*.

Operator Response: None.

ADR199E (*ttt*)*mmmmm*(*yy*), UNITADDRESS SPECIFIED INCORRECTLY: *device_number*

Explanation: The UNITADDRESS is not correctly specified. *device_number* is the incorrectly specified UNITADDRESS. Either a 3-digit or 4-digit UNITADDRESS (*device_number*) is required.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the error and reissue the command.

Operator Response: None.

ADR201E (*ttt*)-*mmmmm*(*yy*), VTOC IN ERROR PRIOR TO PROCESSING

Explanation: An error occurred in processing the VTOC. The error condition can be caused by one of the following:

- An I/O error occurred. This is usually accompanied by system I/O error messages.
- A logical error occurred during indexed VTOC processing. When extents are relocated on an indexed volume, a recovery environment is set up by DFSMSdss. If DEFRAG ends before completing the relocation, the audit trail left by the recovery routines indicates to a subsequent DEFRAG operation that a mismatch exists between the VTOC index records and the extents.
- A failure occurred during LSPACE(SVC 78) processing.
- The VTOC structure is incompatible. Message ADR210E accompanies this message. More than one of the extents, either data set or free space, points to the same location on the volume.
- A prior DEFRAG run or a DADSM function ended before updating the VTOC free-space maps.

Source: DFSMSdss

System Action: The DEFRAG function ends. The return code is 8.

Application Programmer Response: Do the following when applicable, then rerun the DEFRAG function:

- If I/O error messages accompany this message, take corrective action recommended at your site for the type of error.
- If message ADR210E accompanies this message, recover by either deleting one of the overlapping data sets or by using AMASPZAP to change the incorrect extent pointer to a correct known value.
- If message ADR226W or ADR229W was issued previously, the volume may contain an orphan VTOC entry. Run the IEHLIST/LISTVTOC utility. If there is an orphan entry, correct the VTOC.
- In all other cases, allocate a temporary data set. This invokes DADSM modules to rebuild the free-space map or to correct the mismatch error.
- If a previous DEFRAG was interrupted, leaving the temporary DEFRAG data set (SYS1.DFDSS.DEFRAG.*xxxxxx*.volser.DUMMY) on the volume, and the volume has an indexed VTOC, convert the volume to nonindexed format, rerun the DEFRAG job, and convert the volume back to indexed format.

Operator Response: None.

ADR204W **(***ttt***)-***mmmmm***(***yy***), ERROR ENCOUNTERED ON EXTENT** *nnn* **OF** *dsname***. EXTENT IS BYPASSED.**

Explanation: An I/O error occurred in processing an extent of the data set for a DEFRAG operation.

Source: DFSMSdss

System Action: The extent is not moved. Processing is continued with the next data set extent. The return code is 4.

Application Programmer Response: Use the PRINT command to print the contents of the track or use IEHATLAS or ICKDSF to recover the data and assign an alternate track. If a system I/O error message accompanies this message, take the appropriate action recommended at your site for the error.

Operator Response: None.

ADR205I **(***ttt***)-***mmmmm***(***yy***), EXTENT** *nnn* **OF DATA SET** *dsname* **IS ALLOCATED BY CYLINDER, BUT IT IS NOT ON A CYLINDER BOUNDARY**

Explanation: The VTOC entry indicates that the data set is either allocated by cylinder or has the round attribute. However, the extent does not begin or end on a cylinder boundary.

Source: DFSMSdss

System Action: DEFRAG attempts to relocate the extent so that it begins and ends on a cylinder boundary. If DEFRAG is successful, the VTOC entry remains unchanged. If DEFRAG is unsuccessful, the extent is relocated as though it were originally allocated by tracks, and the VTOC entry is updated accordingly.

If this message is issued because the round bit is set, the round bit is not turned off. In either case, the message can be received on subsequent DEFRAG operations for the same data set.

Application Programmer Response: None.

Operator Response: None.

ADR206E **(***ttt***)-***mmmmm***(***yy***), I/O ERROR OCCURRED WHILE READING VTOC. FUNCTION IS TERMINATED**

Explanation: An I/O error occurred in reading the VTOC.

Source: DFSMSdss

System Action: The function ends. The return code is 8.

Application Programmer Response: Use IEHATLAS or ICKDSF to recover the data, assign an alternate track, and rerun the job.

Operator Response: None.

ADR207E **(***ttt***)-***mmmmm***(***yy***), ERROR WHILE SETTING FREE SPACE INVALID IN THE VTOC DURING DEFRAG. TASK IS TERMINATED**

Explanation: On a nonindexed VTOC, DEFRAG sets the DS4DOSBT bit on and the DS4EFVLD bit off in the VTOC before it starts processing and resets them at the end. This message appears if the setting or resetting cannot be done.

Source: DFSMSdss

System Action: DEFRAG ends. The return code is 8.

Application Programmer Response: On a nonindexed VTOC, if the DS4DOSBT bit is on and the DS4EFVLD bit is off, allocate a temporary data set on the volume to allow DADSM to rebuild the free space information, then scratch the temporary data set.

Operator Response: None.

ADR208I **(***ttt***)-***mmmmm***(***yy***),** *date_and_time* **BEGINNING STATISTICS ON** *volume_serial_number***:**

Explanation:

```
FREE CYLINDERS                      cccc
FREE TRACKS                         tttt
FREE EXTENTS                        nnnn
LARGEST FREE EXTENT  (CYL,TRK)   cccc,tttt
FRAGMENTATION INDEX                0.fff
PERCENT FREE SPACE                    pp
```

The DEFRAG function issues this message at the beginning of the task. This message is also issued when the CHECKVTOC keyword is specified for DUMP or COPY. The following values are in decimal:

- *cccc* the number of complete free cylinders
- *tttt* the number of free tracks in addition to free cylinders
- *nnnn* the number of free extents on the volume
- *cccc,tttt* the size of the largest free extent in cylinders and additional tracks
- *.fff* the fragmentation index. This index can be a value between 0.000 and 1.000, for which a higher value indicates a higher level of fragmentation.
- *pp* the percentage of free space on the volume

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR209I **(***ttt***)-***mmmmm***(***yy***),** *date_and_time* **MOVED EXTENT** *nnn* **FROM** *cc***:***hh1***-***cc***:***hh2* **TO** *cc***:***hh3***-***cc***:***hh4* **FOR** *dsname*

Explanation: The *nnn*th extent of data set (*dsname*) was successfully relocated from the original *cc*:*hh1*-*cc*:*hh2* to a new *cc*:*hh3*-*cc*:*hh4*. This message gives the date and time the extent was moved.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR210E **(***ttt***)-***mmmmm***(***yy***), {FREE SPACE |** *dsname***} AND {FREE SPACE |** *dsname***} OVERLAP FROM CC:HH** *cchh1* **TO CC:HH** *cchh2*

Explanation: The indicated data set names or FREE SPACEs overlap on the volume according to the VTOC. The VTOC is in error.

Source: DFSMSdss

System Action: If this message is issued during DEFRAG processing, then the DEFRAG function ends with a return code of 8. No extents will be moved by DEFRAG. If this message is issued as a result of the CHECKVTOC keyword during DUMP or COPY processing, then the continuation of the DUMP or COPY processing is determined by the CANCELERROR keyword specification.

Application Programmer Response: Recover by either deleting one of the overlapping data sets or by using AMASPZAP to change the incorrect extent pointer to a correct value, if known.

Operator Response: None.

ADR211I (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* {IN USE | NOT MOVEABLE | IN LINKLIST | FAILED AUTHORIZATION CHECK} AND WAS NOT MOVED

Explanation: DEFRAG could not move the data set for the indicated reason. DEFRAG considers a data set to be IN USE when it is unable to obtain an enqueue for the data set. NOT MOVEABLE means an indicator is on in the VTOC entry for the data set, indicating that the data set was open during a checkpoint or that a PDSE can not be moved because it appears to be in use on this or some other system in the complex. IN LINKLIST means DEFRAG obtained an enqueue for the data set but the data set is contained within the linklist. FAILED AUTHORIZATION CHECK means authorization checking was performed but failed.

Notes:

1. VSAM data sets that are not cataloged in an ICF catalog will fail the authorization check.
2. The flags DS1CPOIT and DS1DSGU in the VTOC entry of a physical sequential SMS data set indicate a checkpoint was taken while the data set was open.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: To move checkpointed data sets, specify the keyword FORCECP and its parameter.

Operator Response: None.

ADR212I (*ttt*)-*mmmmm*(*yy*), EXTENT DISTRIBUTION MAP FOR *volume_serial_number*:

Explanation:

```
EXTENT  *FREE SPACE BEFORE*  *FREE SPACE AFTER*  * ALLOCATED *
 SIZE
  IN        NO.   CUM.           NO.   CUM.        NO.   CUM.
TRACKS     EXTS  PCT/100        EXTS  PCT/100     EXTS  PCT/100
  ttt     eeee   n.nnn         eeee   n.nnn      eeee   n.nnn
   -
   -
```

The distribution map indicates the free-space fragmentation before and after the run and the distribution by size of data set extents. The map following this message lists the number of FREE SPACE BEFORE extents (*eeee*) and the number of FREE SPACE AFTER extents (*eeee*) for each given size in tracks (*ttt*), and the number of ALLOCATED extents (*eeee*). A cumulative percentage of allocated extents is also provided for each of the three categories (*n.nnn*).

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR213I (*ttt*)-*mmmmm*(*yy*), *date_and_time* ENDING STATISTICS ON *volume_serial_number*:

Explanation:

```
  DATA SET EXTENTS RELOCATED         nnnn
  TRACKS RELOCATED                   tttt
  FREE CYLINDERS                     cccc
  FREE TRACKS                        tttt
  FREE EXTENTS                       eeee
  LARGEST FREE EXTENT (CYL,TRK) cccc,tttt
  FRAGMENTATION INDEX                .fff
  [*** = NON-STANDARD O/S VOLUME]
```

This message, printed at the end of the DEFRAG run, indicates the numbers of relocated data set extents and tracks. Message ADR208I describes the other values. An *LSPACE* SVC obtains the values indicated in FREE CYLINDERS, FREE TRACKS, FREE EXTENTS, and LARGEST FREE EXTENT. When asterisks (***) appear for these values, the target is a nonstandard OS volume or a DOS/VSE volume.

Source: DFSMSdss

System Action: None.

Application Programmer Response: When asterisks appear in the message, verify that the DIRF bit of the volume is off in the VTOC entry.

Operator Response: None.

ADR220I (*ttt*)-*mmmmm*(*yy*), INTERVAL BEGINS AT CC:HH *cc*:*hh1* AND ENDS AT CC:HH *cc*:*hh2*

Explanation: An area of DASD was selected from which a data set extent can be relocated. The interval begins at the first *cc*:*hh1* and ends at the second *cc*:*hh2*.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR221E (*ttt*)-*mmmmm*(*yy*), OVERLAP ENCOUNTERED ON EXTENT *nnn* OF *dsname*

Explanation: The *nnn*th extent of data set *dsname* overlaps another data set extent on the volume according to the VTOC. Message ADR210E accompanies this message.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: Refer to ADR210E.

Operator Response: None.

ADR226W (*ttt*)-*mmmmm*(*yy*), CCHH RANGE *cchh1* TO *cchh2* IS UNACCOUNTED FOR IN VTOC

Explanation: The range *cchh1* to *cchh2* is not described in the VTOC. This range is ignored.

Source: DFSMSdss

System Action: Processing continues on the remainder of the volume. The return code is 4.

Application Programmer Response: Check VTOC for orphan format 3 DSCB.

Operator Response: None.

ADR227E (*ttt*)-*mmmmm*(*yy*), CVAF ERROR ON VOLUME *volume_serial_number*, CODE *fcec*

Explanation: An error was encountered during a common VTOC access facility (CVAF) call for the volume. The *fc* is the CVAF function code, and *ec* is the CVAF error code. See the *DFSMS/MVS DFSMSdfp Diagnosis Guide* and the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the error codes.

Source: DFSMSdss

System Action: The function ends. The return code is 8.

Application Programmer Response: If the CVAF function code-error code (*fcec*) is `X'0C00'`, allocate a temporary data set on the volume to cause DADSM to repair the VTOC; then rerun the job. For other errors, take the appropriate action recommended by CVAF.

Operator Response: None.

ADR228W **(*ttt*)-*mmmmm*(*yy*), THE DEFRAG FUNCTION COULD NOT FURTHER REDUCE THE FREE SPACE FRAGMENTATION OF THE VOLUME**

Explanation: The DEFRAG function determined one of the following:

- The volume was insufficiently fragmented to process the function.
- If there is fragmented free space on the volume, DEFRAG cannot relocate extents with its algorithms to further reduce the fragmentation.
- If there is fragmented free space on the volume and MAXMOVE(*n*) was specified, DEFRAG cannot further reduce the fragmentation of the volume without relocating more than *n* tracks of data.
- DEFRAG may not have been able to relocate any extents because they are the type of data set extent which DEFRAG does not process (for example, VVDS, VTOCIX, and so on), or they may be extents of data sets for which the requestor does not have read authorization.

If MAXMOVE(*n,p*) was specified, message ADR228W will be issued when the current pass cannot further DEFRAG the volume. Previous passes may have performed some defragmentation of the volume and issued message ADR213I indicating that data set extents were relocated on one or more of the previous passes.

Source: DFSMSdss

System Action: DEFRAG does not further alter the volume. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR229W **(*ttt*)-*mmmmm*(*yy*), VOLUME** *volume_serial_number* **HAS TRACKS UNACCOUNTED FOR. THE VTOC WILL INDICATE THAT THE FREE SPACE IS INVALID FOLLOWING PROCESSING**

Explanation: On a nonindexed VTOC, the DEFRAG function encountered undefined data or free space. This space is not processed. However, the DS4DOSBT bit remains on and the DS4EFVLD bit remains off following the run. After the DEFRAG run, when the DADSM function allocates or scratches a data set on the volume, the free space information will be rebuilt, reclaiming the unaccountable space as free space.

Source: DFSMSdss

System Action: The remainder of the volume is processed. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR230I **(*ttt*)-*mmmmm*(*yy*), MAXMOVE VALUE EXCEEDS THE NUMBER OF FREE TRACKS ON THE VOLUME. IT HAS BEEN ADJUSTED TO THE LOWER VALUE OF** *nnnn* **TRACKS**

Explanation: The MAXMOVE value must be less than or equal to the number of free tracks (*nnnn*) on the volume being processed. In this case, the value exceeds the number and is adjusted to the lower value.

Source: DFSMSdss

System Action: Processing continues with a MAXMOVE value equal to the number of free tracks on the volume.

Application Programmer Response: The MAXMOVE value, if not specified, defaults to the total number of free tracks on the volume.

Operator Response: None.

ADR231E **(*ttt*)-*mmmmm*(*yy*), ERROR WHILE ACCESSING VVDS FOR DATA SET** *dsname* **ON VOLUME** *volume_serial_number***. OP=***operation_code***, VVDS RC=***return_code*

Explanation: The VVDS is accessed for the specified call during a DUMP, DEFRAG, CONVERTV, or data set RESTORE. The operation code can be:

0	Insert VVR/NVR
1	Get a VVR/NVR for update
2	Put a VVR/NVR for update
3	Generic read of components of a cluster
4	Read a VVR/NVR.

The *return_code* is the return code from the VVDS manager. See the reason code under return code 50 in message IDC3009I.

Source: DFSMSdss

System Action: If the operation is DEFRAG, the extent is not relocated. If the operation is data set RESTORE, the affected data set is not restored. Other messages identifying the affected data set accompany this message. The return code is set to 8.

Application Programmer Response: Take the appropriate action recommended for the reason codes listed under message IDC3009I.

Operator Response: None.

ADR232E **(*ttt*)-*mmmmm*(*yy*), VVDS DOES NOT MATCH VTOC {EXTENTS | DSORG | null} FOR COMPONENT** *component_name***, CLUSTER** *cluster_name* **ON VOLUME** *volume_serial_number*

Explanation: DEFRAG detected a mismatch between the VTOC and the VVDS.

null (neither EXTENTS nor DSORG): The VVDS contains more than one VVR for the same VTOC entry.

EXTENTS: The number or locations of extents for this component as reported in the VVDS do not match the number or locations of extents reported in the VTOC. A VSAM extend operation on the component might have been interrupted because of a program or system failure.

DSORG: DEFRAG detected a VVDS entry for a VSAM component which is named the same as a VTOC, non-VSAM entry.

Source: DFSMSdss

System Action: The component is not relocated. Final return code is set to 8.

Application Programmer Response: null or EXTENTS: Run access method services DIAGNOSE for the component, and fix the problem by using the procedure recommended in *DFSMS/MVS Access Method Services for ICF*.

DSORG: Dump or copy the contents of the offending cluster. Then run access method services to delete and recreate the offending cluster. Finally, run RESTORE or COPY to replace the contents.

Operator Response: None.

ADR233W (*ttt*)-*mmmmm*(*yy*), ACTUAL FRAGMENTATION INDEX IS LESS THAN THE REQUESTED VALUE ON VOLUME *volume_serial_number*

Explanation: The volume is not fragmented to the extent indicated in the user input. If MAXMOVE(*n,p*) has been specified, this message may be issued for multiple passes after the fragmentation index criteria has been met. Processing continues until all of the specified passes have been completed because the fragmentation index of the volume may change due to the activity on the volume between the DEFRAG passes.

Source: DFSMSdss

System Action: DEFRAG ends. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR234I (*ttt*)-*mmmmm*(*yy*), SEQUENCE CCHH1–CCHH2 EXTENT DESCRIPTION

Explanation: This is the message header for ADR235I. This message is issued when TYPRUN=NORUN is specified for DEFRAG, or when the CHECKVTOC keyword and TYPRUN=NORUN are specified for DUMP or COPY.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR235I (*ttt*)-*mmmmm*(*yy*), *nnnn cc***:***hh1 cc***:***hh2 eee* **{FREE SPACE |** *dsname* **| ***UNACCOUNTED FOR***}**

Explanation: This is the volume extent mapping message. This message is issued when TYPRUN=NORUN is specified for DEFRAG, or when the CHECKVTOC keyword and TYPRUN=NORUN are specified for DUMP or COPY. One message is issued for each extent on the volume. *nnnn* is the relative sequence in which the extent was encountered during VTOC analysis, *cc*:*hh1 cc*:*hh2* is the range the extent occupies on the volume, and *eee* is the extent number of the data set or free space or unaccounted for extent.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR236W (*ttt*)-*mmmmm*(*yy*), VTOC ON VOLUME *volume_serial_number* **DOES NOT CONTAIN ENOUGH FREE DSCBs** *nnn*

Explanation: For a DEFRAG, protected data set relocation cannot be done because DEFRAG requires a free DSCB for processing protected data sets. For a DUMP, *nnn* free DSCBs are required to successfully complete a subsequent RESTORE FULL operation.

Source: DFSMSdss

System Action: For DEFRAG, only unprotected data sets are relocated, and the final return code is 4. For DUMP, the DUMP FULL operation continues, and the final return code is 4.

Application Programmer Response: If temporary data sets exist on the volume, you can scratch them. If no temporary data sets or not enough space exists on the volume, you can dump one or more data sets to free a DSCB and rerun the job. If there is enough space on the volume, you can also use ICKDSF REFORMAT EXTVTOC to enlarge the VTOC and then rerun the job.

Operator Response: None.

ADR237W (*ttt*)-*mmmmm*(*yy*), NOT ENOUGH FREE SPACE DSCBS AVAILABLE

Explanation: On a nonindexed VTOC, DEFRAG cannot find enough space DSCBs in the VTOC to rebuild the free space information at the end of DEFRAG to reflect the free space on the volume.

Source: DFSMSdss

System Action: In the VTOC, the DS4DOSBT bit is left on and the DS4EFVLD bit is left off. The return code is set to 4.

Application Programmer Response: Allocate a temporary data set so DADSM can rebuild the free space information.

Operator Response: None.

ADR238I (*ttt*)-*mmmmm*(*yy*), NO DATA SETS WERE MOVED DURING THIS PASS. PROCESSING CONTINUES.

Explanation: No data sets could be moved by DEFRAG. This may be due to data sets that are in use, on the link list, or extents too large for the available free space area.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR239W (*ttt*)-*mmmmm*(*yy*), FORMAT 3 DSCB POINTER MISSING FOR DATA SET *dsname***, ONLY FIRST THREE EXTENTS PROCESSED.**

Explanation: The Format 1 DSCB for the data set (*dsname*) indicates that there are more than three extents for the data set, but the pointer to the Format 3 DSCB for the additional extents is invalid. Only the first three extents of this data set are processed. If there are more than three extents for this data set, then MSGADR226W is also issued.

Source: DFSMSdss

System Action: The defrag of the volume continues. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR240W (*ttt*)-*mmmmm*(*yy*), INSUFFICIENT FREE SPACE EXTENTS TO PROCESS DEFRAG FUNCTION. TASK IS TERMINATED.

Explanation: There were less than 2 free space extents on the volume. DEFRAG requires at least 2 free space extents to process. If MAXMOVE(*n,p*) has been specified, this message may be issued for each pass that the DEFRAG function runs when the volume has less than two free space extents. The DEFRAG function continues to run until all of the specified passes have been completed because the number of free space extents may change due to the activity on the volume between the DEFRAG passes.

Source: DFSMSdss

System Action: DEFRAG ends without altering the volume. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR241I **(***ttt***)-***mmmmm***(***yy***), TARGET VTOC [INDEX] BEGINNING AT** *cc***:***hh1* **AND ENDING AT** *cc***:***hh2* **IS {BEING USED | OVERLAID}**

Explanation: Either the target VTOC or index VTOC in the range *cc*:*hh1* to *cc*:*hh2* is being preserved, or the source VTOC location was used for the target VTOC.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR242I **(***ttt***)-***mmmmm***(***yy***), CHECKVTOC KEYWORD IGNORED. NO INPUT VOLUMES SPECIFIED**

Explanation: The CHECKVTOC keyword was specified with the DUMP or COPY command, but no input volumes were specified. No VTOC analysis is performed.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: Specify an input volume via the INDDNAME or INDYNAM keywords.

Operator Response: None.

ADR243W **(***ttt***)-***mmmmm***(***yy***), VTOC ERRORS FOUND ON VOLUME** *volume_serial_number***. PROCESSING CONTINUES**

Explanation: The CHECKVTOC keyword was specified with the DUMP or COPY command, and VTOC errors were encountered on the specified volume. Because the CANCELERROR keyword was not specified, the dump or copy operation proceeds.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: Refer to the attention and error messages preceding this message.

Operator Response: None.

ADR244E **(***ttt***)-***mmmmm***(***yy***), PROCESSING BYPASSED DUE TO CANCELERROR KEYWORD AND VTOC ERRORS FOUND ON VOLUME** *volume_serial_number*

Explanation: The CHECKVTOC keyword was specified with the DUMP or COPY command, and VTOC errors were encountered on the specified volume. Because the CANCELERROR keyword is specified, the dump or copy operation is terminated.

Source: DFSMSdss

System Action: Processing ends. The return code is 8.

Application Programmer Response: Refer to the attention and error messages preceding this message.

Operator Response: None.

ADR245W **(***ttt***)-***mmmmm***(***yy***), AN ENQUEUE LOCKOUT CONDITION WAS DETECTED FOR DATA SET** *dsname* **{IN CATALOG** *catalog_name***}**

Explanation: During DFSMSdss DEFRAG processing on the named data set, an enqueue lockout was detected. This condition can occur when DFSMSdss does a reserve on the VTOC and then performs a catalog management function. A second job may have exclusive control of the catalog that DFSMSdss needs while DFSMSdss has control of the VTOC that the second job needs.

Source: DFSMSdss

System Action: The named data set is bypassed and is not moved. Processing continues on the remainder of the volume. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR246E **(***ttt***)-***mmmmm***(***yy***), AN ERROR OCCURRED DURING CVAF VTOC ACCESS FOR DATA SET** *dsname* **ON VOLUME** *volume_serial_number***,** *xx-yyyy*

Explanation: An error occurred while using one of the CVAF VTOC access macros. *xx* is the CVAF return code (see *DFSMS/MVS DFSMSdfp Advanced Services* for a description of these codes). *yyyy* is the CVSTAT return code (see *DFSMS/MVS DFSMSdfp Diagnosis Reference* for a description of these codes).

Source: DFSMSdss

System Action: The data set is not processed. Processing continues with the next data set. The return code is 8.

Application Programmer Response: Take the action recommended by CVAF.

Operator Response: None.

ADR247W **(***ttt***)-***mmmmm***(***yy***), A PREVIOUS DEFRAG OF VOLUME** *volser* **WAS INTERRUPTED WHILE PROCESSING EXTENT** *nnn* **OF** *dsname*

Explanation: DEFRAG analysis detected that a prior DEFRAG was interrupted while it was relocating the indicated data set extent.

Source: DFSMSdss

System Action: DEFRAG cleanup is performed and DEFRAG restarted.

Application Programmer Response: Verify the data integrity of the indicated data set.

Operator Response: None.

ADR248E **(***ttt***)-***mmmmm***(***yy***), VTOC DADSM INTERRUPT FLAG (DIRF) IS ON**

Explanation: The VTOC DIRF flag is on, indicating that the last DADSM request against this volume was prematurely interrupted, leaving the VTOC in a partially updated state.

Source: DFSMSdss

System Action: DEFRAG processing ends.

Application Programmer Response: Verify the data integrity of the volume. Correct the DIRF setting before rerunning DEFRAG.

Operator Response: None.

ADR252I **(***ttt***)-***mmmmm***(***yy***), DEFAULT PROCESSING OF CHECKPOINT INDICATED DATA SETS MODIFIED BY INSTALLATION PATCH BYTE**

Explanation: The installation has set the patch byte at offset `X'43'` in ADRPATCH to `X'FF'`. This patch byte indicates DEFRAG default processing of checkpoint indicated data sets is modified to relocate extents even if the associated data set VTOC entry has its DS1CPOIT flag set on.

Source: DFSMSdss

System Action: DEFRAG does *not* issue message ARD211I when it encounters this condition. DEFRAG instead will move any selected extent for a data set, even when the checkpoint indicated flag is set.

Application Programmer Response: None.

Operator Response: None.

ADR253E **(***ttt***)-***mmmmm***(***yy***), UNABLE TO DETERMINE FREE SPACE ON VOLUME** *volser*

Explanation: DEFRAG is unable to determine the location of free space extents on the volume being processed. The probable cause is that DEFRAG failed to find one or more free space entries in the VTOC. The free space entries are either missing or reside beyond the range of used entries in the VTOC.

Source: DFSMSdss

System Action: DEFRAG processing ends.

Application Programmer Response: Determine if any free space entries are missing or reside beyond the range of used entries in the VTOC. If so, correct the problem and rerun DEFRAG. If appropriate free space entries exist and are within the range of used entries in the VTOC, contact IBM for support.

Operator Response: None.

ADR283W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **WAS NOT SELECTED,** *reason_code*

Explanation: The data set was not selected for processing. The reason codes (*reason_code*) are:

1 A catalog error occurred while obtaining the information necessary to filter the data set. Catalog management returned to DFSMSdss with return code 4, reason code 108. This may mean that an alias for the data set exists in the master catalog, but the user catalog that the alias points to is unavailable.

2 DFSMSdss was unable to allocate one or more volumes on which the data set resides. Message ADR405E will precede this message, indicating the allocation failure.

Source: DFSMSdss

System Action: The data set is not selected. The return code is 4.

Application Programmer Response: Take the following action, depending on the reason code:

1 See message IDC3009I for an explanation of catalog management's return code 4, reason code 108. If there is an alias pointing to an unavailable catalog, either make the catalog available or delete the alias and rerun the job.

2 Correct the problem indicated by message ADR405E and rerun the job.

Operator Response: None.

ADR284W **(***ttt***)-***mmmmm***(***yy***), UNEXPECTED RETURN CODE FROM LSPACE MACRO:** *xxx-yyy***, WHILE CALCULATING FREE SPACE ON VOLUME** *volume_serial_number*

Explanation: An unexpected return code was encountered from the LSPACE macro while trying to calculate free space on the indicated volume. The return code and reason code are printed in hexadecimal.

System Action: The volume is not selected. The return code is 4.

Application Programmer Response: See LSPACE return code information in the *DFSMS/MVS DFSMSdfp Diagnosis Reference*.

Operator Response: None.

ADR285E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **WAS NOT PROCESSED BECAUSE PREALLOCATED DATA SET TYPE IS NOT SUPPORTED IN THIS RELEASE,** *reason_code*

Explanation: The data set was not processed because a preallocated target data set exists that is not supported in this release. The *reason_code* identifies the data set type:

1	Extended sequential
2	Compressible extended sequential
3	HFS file
4	Extended format VSAM
5	Data set with extended attributes
6	Multivolume extended sequential
7	Extended addressable VSAM
8	Integrated catalog facility tape volume catalog
9	VSAM data set with RLS information
10	Extended format multi-striped VSAM
11	Extended format non-keyed VSAM
12	Extended addressable non-keyed VSAM
13	Multivolume HFS

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Notify the system programmer.

Operator Response: None.

ADR286E **(***ttt***)-***mmmmm***(***yy***), ERROR READING F4 DSCB ON VOLUME** *volser*

Explanation: An error occurred when DFSMSdss attempted to read the F4 DSCB on volume *volser*.

Source: DFSMSdss

System Action: The processing ends. The return code is 8.

Application Programmer Response: See accompanying messages, if any, for additional information.

Operator Response: None.

ADR297I **(***ttt***)-***mmmmm***(***yy***), CHECKPOINTED DATA SET** *dsname* **IS SELECTED FOR PROCESSING**

Explanation: The data set *dsname* is marked as an SMS checkpointed data set and has been selected for processing.

Source: DFSMSdss

System Action: The data set will be processed. The *checkpointed* designation will be removed from the target data set during RESTORE, COPY, CONVERTV, DEFRAG, and RELEASE.

Application Programmer Response: None.

Operator Response: None.

ADR298E (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* is CHECKPOINTED AND WILL NOT BE PROCESSED BY {DUMP | COPY | RELEASE | RESTORE}

Explanation: The data set *dsname* is marked as an SMS checkpointed data set, and is not available for the indicated operation unless FORCECP is specified with the appropriate *days* parameter.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Confirm that the checkpointed data set is no longer required for a restart, specify FORCECP with the appropriate *days* parameter and rerun the job.

Operator Response: None.

ADR299E (*ttt*)-*mmmmm*(*yy*), CORRECT SIZE (IN CYLINDERS) OF VOLUME *volser* CANNOT BE DETERMINED. VOLUME IS NOT PROCESSED. SIZE FROM DEVTYPE MACRO IS *nnnnnn*. SIZE FROM RDC DATA IS *nnnnnn*. SIZE FROM VTOC IS *nnnnnn*. SIZE FROM VTOC INDEX IS *nnnnnn*.

Explanation: DFSMSdss detected that either the size of the volume in the VTOC does not match the size of the volume in the VTOC index, or a seek in the high cylinder of the volume (as indicated in the VTOC) failed. The seek failure means that the volume is smaller than indicated in the VTOC. The sizes are represented in decimal and include both primary and alternate cylinders. A zero value indicates that the size was not available. (For example, if the volume does not contain a VTOC index, the size from the VTOC index will be zero.)

Source: DFSMSdss

System Action: The volume is not processed. Data sets which reside on this volume will not be processed. Processing continues with any other volumes or data sets. The return code is 8.

Application Programmer Response: Determine the proper size of the device, correct the problem, and rerun the job. If the size of the volume in the VTOC or VTOC index or both is incorrect, you can use ICKDSF REFORMAT REFVTOC to correct the problem. Additionally, you may need to refresh the operating system's internal control structure for the device using the following DEVSERV operator command:

```
DEVSERV QDASD,device_number,1,VALIDATE
```

where *device_number* is the device number. If these actions do not resolve the problem, contact IBM for programming support.

Operator Response: None.

ADR301E (*ttt*)-*mmmmm*(*yy*), AN ERROR WAS ENCOUNTERED WHILE FILTERING DATA SETS ON VOLUME *volume_serial_number*. VOLUME WAS NOT PROCESSED.

Explanation: I/O or logical errors were encountered in accessing the VTOC or VVDS on the specified volume during a data set dump, copy, or convert operation.

Source: DFSMSdss

System Action: The specified volume is bypassed. Processing continues with the next volume, if any. The return code is 8.

Application Programmer Response: For I/O errors, follow your site's recommendations for I/O errors, and resubmit the job. For logical errors encountered in the VVDS, run access method services DIAGNOSE against the indicated volume and correct the problem.

Operator Response: None.

ADR302E (*ttt*)-*mmmmm*(*yy*), INPUT AND OUTPUT DEVICE TYPES DO NOT MATCH. UCB TYPE OF INPUT *xxxx1*, OUTPUT *xxxx2*

Explanation: The source and target volumes of a TRACKS or FULL volume COPY or RESTORE are not of like or similar device types. The devices types (*xxxx1* and *xxxx2*) are given in hexadecimal.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Probable user error. Select a matching device type, correct the control statement in error, and rerun the job. If you want to copy to an unlike device, specify DATASET on your COPY command.

Operator Response: None.

ADR303E (*ttt*)-*mmmmm*(*yy*), COMMAND NOT SUPPORTED WITH SYSTEM RESIDENCE VOLUME

Explanation: A full volume RESTORE of, COPY to, or DEFRAG of the system residence volume is not allowed. The system residence volume was specified for output.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: This is a user error. Do not RESTORE, COPY onto, or DEFRAG the system residence volume. Correct the control statement in error, and rerun the job.

Operator Response: None.

ADR304E (*ttt*)-*mmmmm*(*yy*), ERROR ENCOUNTERED WHILE ACCESSING {VTOC | VVDS} IMAGE OF VOLUME *volume_serial_number* ON DDNAME *ddname*, *xxxx*

Explanation: An error (logical or I/O) was encountered in analyzing the image of the VTOC or VVDS on the dumped tape during data set RESTORE processing. The types of possible logical errors can be:

- A non-VTOC or non-VVDS record
- An invalid format of the VVDS
- No data on track
- I/O errors encountered on the track during the DUMP
- An end-of-file (EOF) during the VTOC or VVDS search.

If physical I/O errors were encountered, other I/O error messages precede this message. The *xxxx* in the message is the SYNAD information passed by the access method routines.

Source: DFSMSdss

System Action: The volume is bypassed. The return code is 8.

Application Programmer Response: Make sure the function completed normally during the DUMP process. If the error is in the VVDS, non-VSAM data sets can be restored when you specify DSORG NE VSAM in the BY criteria. Use a different backup copy to do the RESTORE.

Operator Response: None.

ADR305E **(***ttt***)-***mmmmm***(***yy***), UNABLE TO SERIALIZE {VTOC | VVDS} ON VOLUME** *volume_serial_number*

Explanation: DFSMSdss failed to get exclusive control of the associated DASD volume via enqueuing of the volume's VOLID or VVDS during a DUMP/RESTORE/COPY/CONVERTV/DEFRAG operation, or a TRACKS or VTOC PRINT operation even after a specified or defaulted number of retries. If the resource is VTOC, DADSM functions might have been performing while DFSMSdss was trying to serialize the use of the DASD volume. If the resource is VVDS, catalog or VSAM functions might have been accessing the VVDS.

Source: DFSMSdss

System Action: For all operations except logical DUMP/RESTORE, the function ends with a return code of 8. A logical data set dump with LOGINDD or LOGINDY specified also ends with a return code of 8. Processing continues with the next control statement. For a data set DUMP/RESTORE operation without LOGINDD or LOGINDY specified, the volume is bypassed; a return code of 8 is set, but processing continues on any other volumes.

Application Programmer Response: Either code VOL=(PRIVATE,SER=xxxxxx) in the associated DD statement or request the operator to issue a mount command for the volume with the USE=PRIVATE subparameter to reduce the possibility of other jobs allocating to (or accessing) the volume. Change the WAIT parameters to increase the WAIT seconds and the retry count. When system activity on the volume is reduced, rerun or resubmit the job.

Operator Response: Mount the volume with USE=PRIVATE before rerunning the job.

ADR306E **(***ttt***)-***mmmmm***(***yy***), UNABLE TO {COPY | RESTORE} THE VOLUME BECAUSE OUTPUT VOLUME** *volume_serial_number* **IS IN USE. TASK IS TERMINATED**

Explanation: A FULL volume COPY or RESTORE was attempted on the volume, but another job is using the volume. It is possible that another job is accessing a data set on the volume. This message can also be issued during a data set COPY when INDD is specified. In this case, the VTOC on the volume was already enqueued.

Source: DFSMSdss

System Action: The task ends. The return code is 8.

Application Programmer Response: Either code VOL=(PRIVATE,SER=xxxxxx) in the associated DD statement or request the operator to issue a mount command with the USE=PRIVATE subparameter to reduce the possibility of other jobs allocating (or accessing) the volume. In the case of data set COPY, remove the INDD keyword and rerun the job.

The volume could be in use because there might be a user catalog on it that is allocated to the catalog address space (CAS). For more information, see the *DFSMS/MVS DFSMSdss Storage Administration Guide* under “Restoring Volumes”, subheading of “Specifying Output Volumes.”

Operator Response: Mount the volume with USE=PRIVATE before rerunning the job.

ADR307E **(***ttt***)-***mmmmm***(***yy***), UNABLE TO OPEN VOLUME** *volume_serial_number***,** *reason_code return_code*

Explanation: DFSMSdss is unable to OPEN volume *volume_serial_number* for the reason indicated by the reason code (*reason_code*). OBTAIN, RDJFCB, or OPEN passed the return code (*return_code*). The possible reason codes are:

4	OBTAIN failure on VTOC's VTOC entry.
6	The VTOC's VTOC entry is not the first record in the VTOC.
8	RDJFCB failure.
12	OPEN failure.
16	The VM-formatted volume does not have an OS-compatible VTOC beginning on track zero, record five.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Take the following action, depending on the reason code (*reason_code*):

4	See *DFSMS/MVS DFSMSdfp Advanced Services* for an explanation of the OBTAIN return code.
6	If the volume is VM-formatted, specify the CPVOLUME keyword. Otherwise, DFSMSdss does not support this volume format.
8	See *DFSMS/MVS DFSMSdfp Advanced Services* for an explanation of the RDJFCB return code.
12	See *DFSMS/MVS Using Data Sets* for an explanation of the OPEN return code.
16	If the volume is OS-formatted, do not specify the CPVOLUME keyword. Otherwise, DFSMSdss does not support this volume format.

Operator Response: None.

ADR308E **(***ttt***)-***mmmmm***(***yy***), ACCESS DENIED FOR VOLUME** *volume_serial_number*

Explanation: One of the following explanations applies:

- The user was unable to obtain the necessary RACF or password access:
  - To the volume during a data set DUMP/COPY/CONVERTV/PRINT/RESTORE operation
  - To the volume during a COMPRESS or RELEASE operation
  - To a data set on the volume for a full or tracks DUMP/RESTORE/COPY/PRINT operation.
- The installation-wide exit routine denied access to the volume.
- The operator denied access to a checkpoint/restart, RACF-protected, or system data set on the volume.
- I/O errors were encountered during checking authorization of the volume, and the operator denied further processing.

Source: DFSMSdss

System Action: The task ends on a full or tracks operation. The volume is bypassed for a data set operation or for a COMPRESS or RELEASE. The return code is 8.

Application Programmer Response: Obtain proper access authority, and retry the job.

Operator Response: If the programmer has proper authority, reply *U* to ADR369D or ADR371D.

ADR309E **(*ttt*)-*mmmmm*(*yy*), SOURCE AND TARGET DEVICE CAPACITIES DO NOT MATCH. CYLINDER CAPACITY OF SOURCE VOLUME *nnnn*, TARGET VOLUME *nnnn***

Explanation: The capacity of the source volume is greater than that of the target volume. The *nnnn* is the highest cylinder number in hexadecimal.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Check whether the source or target volume is:

- An MVS-formatted VM minidisk
- A 3380E (source) and a 3380D (target)
- A 3380K (source) and a 3380E or 3380D (target)
- A 3380E (source) and a 3390-1 (target in 3380 compatibility mode)
- A 3380K (source) and a 3390-1 or -2 (target in 3380 compatibility mode)
- A 3390-2 (source) and a 3390-1 (target)
- A 3390-3 (source) and a 3390-1 or 3390-2 (target)
- A 9345 model 2 (source) and a 9345 model 1 (target)

Such conditions are not allowed on a full volume operation, or if the range falls outside the capacity of the volume on a tracks operation. Select the correct input and output volumes, correct the statement in error, and rerun the job.

Operator Response: None.

ADR310W **(*ttt*)-*mmmmm*(*yy*), ERROR FOUND IN VTOC. UNALLOCATED SPACE WILL BE PROCESSED FOR VOLUME *volume_serial_number***

Explanation: This message is printed for the following reasons:

- A volume without an indexed VTOC indicates no valid free space information entries exist in the VTOC.
- On a volume without an indexed VTOC, a nonzero return code was received from OBTAIN because an I/O error occurred, the DSCB was not found, or an invalid work area pointer was passed to OBTAIN.
- A nonzero return code was passed by DFSMSdfp on a volume with an indexed VTOC.
- The DIRF bit is ON; or, on a volume without an indexed VTOC, the DOS bit is ON.

Source: DFSMSdss

System Action: The entire volume, including unallocated space, is dumped or copied. The return code is 4.

Application Programmer Response: For an I/O error, take the corrective action recommended at your site. If the DOS bit is on for a volume without an indexed VTOC, allocate a temporary data set to let DADSM rebuild the free space information.

Operator Response: None.

ADR311E **(*ttt*)-*mmmmm*(*yy*), TRACKS OPERATION MUST SPECIFY PURGE TO OVERLAY {TRACK ZERO | VTOC | VVDS | VTOCIX}**

Explanation: The PURGE parameter was not specified for a TRACKS COPY or RESTORE on track 0, the VTOC, the VVDS, or the VTOC index data set.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: If you want to overlay any of these, specify the PURGE keyword in the command, and rerun the job.

Operator Response: None.

ADR312W **(*ttt*)-*mmmmm*(*yy*), DURING A TRACKS OPERATION, THE VTOC OR TRACK 0 WAS OVERLAID**

Explanation: For an attempted TRACKS COPY or RESTORE on the VTOC or track 0, the location and extents of the VTOC on the source and target volumes did not match.

Source: DFSMSdss

System Action: The VTOC or track 0 is overlaid. The COPY or RESTORE continues. The return code is 4.

Application Programmer Response: Make sure that the overlay was intended. If not, restore the output volume from a prior backup.

Operator Response: None.

ADR313E **(*ttt*)-*mmmmm*(*yy*), OPERATOR DENIED OVERLAY OF {TRACK ZERO | VTOC | VVDS | VTOCIX} ON VOLUME *volume_serial_number***

Explanation: A TRACKS COPY or RESTORE was attempted on track 0, VTOC, VVDS, or VTOC index data set. The operator was prompted for the necessary authorization, but the authorization was denied.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Rerun the job, and have the operator allow the VTOC or track 0 to be overlaid.

Operator Response: If you have sufficient authority to overlay track 0 or VTOC, reply *U* to message ADR345D.

ADR314E **(*ttt*)-*mmmmm*(*yy*), ERROR ENCOUNTERED WHILE ACCESSING {VTOC | VVDS} ON *volume_serial_number*. PROCESSING CONTINUES**

Explanation: An I/O error was encountered in dumping the VTOC or VVDS of the specified volume.

Source: DFSMSdss

System Action: A return code of 8 or 16 is set on the input or output error, respectively. Processing continues on input errors and ends on output errors. If CANCELERROR is specified, processing ends on input errors but continues for subsequent volumes on a data set DUMP.

Application Programmer Response: For a data set operation, use IEHATLAS or ICKDSF to recover the bad VTOC or VVDS track and rerun the job. If it is the VVDS, follow the procedure recommended at your site for VVDS errors (run access method services DIAGNOSE and take appropriate action). On a data set DUMP, you can recover the logical volumes that were successfully dumped by running a COPYDUMP operation and specifying the volume serial numbers in the LOGICALVOLUME parameter.

Operator Response: None.

ADR315I **(*ttt*)-*mmmmm*(*yy*), REQUIRED CHANNEL COMMANDS NOT SUPPORTED ON VOLUME** *volume_serial_number***. OPTIMIZE(1) WILL BE USED**

Explanation: The device does not support the Read Multiple Count, Key, and Data or Read Track channel commands; or I/O errors were encountered in testing whether the Read Multiple Count, Key, and Data and Read Track channel commands are supported on the device. OPTIMIZE(2), OPTIMIZE(3), and OPTIMIZE(4) are applicable only if one of these channel commands is supported. This can also occur if the device can be accessed via multiple control units. Some control units support either channel command and others do not.

Source: DFSMSdss

System Action: OPTIMIZE(1) is used to run the DUMP function.

Application Programmer Response: To get the performance advantages, ensure that all control units attached to the device support the Read Multiple Count, Key, and Data or Read Track channel commands.

Operator Response: None.

ADR316W **(*ttt*)-*mmmmm*(*yy*), AN {I/O | LOGICAL} ERROR WAS ENCOUNTERED ON THE {VOLUME LABEL TRACK | VTOC | VVDS | DATA TRACKS}, AND ONE OR MORE TRACKS WERE NOT PROCESSED**

Explanation: An error occurred on the specified track or tracks on the source volume and CANCELERROR was not specified. Other messages that precede this message indicate the track or tracks that had the error. CANCELERROR is ignored and this message is issued, for the following types of errors on a DASD volume: equipment check, command reject, intervention required, and busout parity.

Source: DFSMSdss

System Action: The tracks that had the errors were not processed. If you are doing a DUMP and the error was on VVDS, a data set RESTORE cannot be done for VSAM data sets. If the error was on the VTOC, a data set RESTORE cannot be done for any data set, but a full or tracks RESTORE is possible. If the error was on the volume label track and track zero is to be copied or restored, correct the error and rerun the job. The return code is 4.

Application Programmer Response: If you are doing a DUMP and the output is intended for a data set RESTORE, correct the error and rerun the job. If it is a logical error on the VVDS, VTOC, or volume label track, do a TRACKS PRINT of the VVDS, VTOC, or volume label track to check their format. Also, if it is the VVDS, run access method services DIAGNOSE on the VVDS to determine the nature of the problem. Correct the error.

Operator Response: None.

ADR317I **(*ttt*)-*mmmmm*(*yy*), THE DEVICE SIZE FIELD IN THE VTOC IS INCORRECT IF VOLUME** *volume_serial_number* **IS NOT A MINIVOLUME. DEVICE SIZE OF** *nnnn* **CYLINDERS WILL BE USED**

Explanation: If the volume indicated by *volume_serial_number* is not a minivolume, the device size field in the VTOC is incorrect.

Source: DFSMSdss

System Action: The device size of *nnnn* (in hexadecimal) cylinders is used.

Application Programmer Response: If it is not a minivolume and the nnnn value is incorrect, the DFSMSdss function completed in error. Run AMASPZAP or ICKDSF REFORMAT REFVTOC to correct the device size field in the VTOC to reflect the actual size of the volume, and then rerun the job. If it is a minivolume, action by DFSMSdss is correct. Verify that your minivolume size equals the size indicated in the message.

Operator Response: None.

ADR318I **(*ttt*)-*mmmmm*(*yy*),** *y* **TRACKS OUT OF** *x* **WERE DUMPED FROM VOLUME** *volume_serial_number* **USING NON-OPTIMIZE CHANNEL PROGRAM AFTER ENCOUNTERING TRACK OVERFLOW RECORDS**

Explanation: OPTIMIZE channel programs fail on tracks that have overflow records. An attempt was made to dump *x* tracks using optimize channel program chain. Of these *x* tracks, *y* tracks were dumped using a nonoptimized channel program chain because track overflow records were encountered in using optimize channel programs.

Source: DFSMSdss

System Action: The y tracks are processed using normal channel programs. This results in performance degradation.

Application Programmer Response: If the number is large, the names of data sets not marked as track overflow data sets in the VTOC must be specified in the TRACKOVERFLOW keyword if OPTIMIZE(2), (3), or (4) is specified. If ALLDATA or ALLEXCP is specified for a data set, the allocated tracks beyond the end of the used data might have residual track overflow records. If so, do not code ALLDATA or ALLEXCP for these data sets.

Operator Response: None.

ADR319W **(*ttt*)-*mmmmm*(*yy*), VOLUME SERIAL NOT CHANGED ON VOLUME** *volume_serial_number*

Explanation: An I/O error was encountered in trying to read track 0 from the target volume at the end of the COPY or RESTORE. Message ADR348E precedes this message. The rest of the tracks were successfully copied or restored.

Source: DFSMSdss

System Action: Processing ends. The return code is 4.

Application Programmer Response: The COPY or RESTORE completed successfully but the volume serial did not change. Use AMASPZAP to update the serial number of the volume, or COPY or RESTORE track 0 again. If an alternate track can be assigned to track 0, use Device Support Facilities to do so. Rerun the job.

Operator Response: None.

ADR320I **(*ttt*)-*mmmmm*(*yy*), VOLUME SERIAL** *volume_serial_number_1* **ON UNIT** *device_number* **IS CHANGED TO** *volume_serial_number_2*

Explanation: The volume serial (*volume_serial_number_1*) was changed to (*volume_serial_number_2*) upon user's request. The operator is notified of the change.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR321E (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* NOT ON VOLUME *volume_serial_number*

Explanation: The requested data set is not on the volume. This message may also be issued for a data set that is being migrated when DFSMSdss tries to process the data set.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 8.

Application Programmer Response: Correct the data set name or locate the correct volume, and rerun the job.

Operator Response: None.

ADR322E (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* WAS NOT SELECTED DUE TO DUPLICATE NAME

Explanation: Two or more data sets with the same name were found. This message can also appear when output volumes are specified and data sets of the same name as an input data set exist on more than one output volume. One of the data sets can be the input data set if the volume on which it resides is in the specified output volume list. In all cases, the cataloged input data set is correctly processed.

Source: DFSMSdss

System Action: If the data sets with the same names are on input volumes, the data set is not selected. If the data sets with the same names are on output volumes, the cataloged input data set is processed. The return code is 8. Processing continues for other data sets.

Application Programmer Response: Redefine the data set with a unique name or select only that volume to process by specifying the input volumes. Rerun the job.

Operator Response: None.

ADR323E (*ttt*)-*mmmmm*(*yy*), ACCESS DENIED FOR DATA SET *dsname* ON VOLUME *volume_serial_number*

Explanation: The user does not have password or RACF access to the data set, or the operator denied access to the checkpoint/restart or system data set.

Source: DFSMSdss

System Action: The PRINT task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Acquire authorization to access the data set, and rerun the job.

Operator Response: If the user has authorization to access the data set, reply *U* to message ADR369D or ADR371D.

ADR324E (*ttt*)-*mmmmm*(*yy*), THE VOLUME/DATA SET SPECIFIED BY {DDNAME *ddname* | VOLUME *volume_serial_number*} HAS BECOME UNUSABLE

Explanation: A RESTORE, COPY, DUMP or COPYDUMP has not completed successfully, consequently leaving the output volume or data set in questionable condition. For a COPY or RESTORE, the volume serial number defines the device that has become unusable. For a DUMP or COPYDUMP, the DD statement *ddname* defines the tape or DASD data set that has become unusable. The data set has become unusable because either data set control information was written to the data set and no valid data sets were copied or an error condition left the data set unusable for performing any restores from it. Other messages indicating the cause of the error precede this message.

Source: DFSMSdss

System Action: For RESTORE and COPY, the current task ends with a return code of 16, and processing continues with the next task. For DUMP and COPYDUMP, output is halted to the indicated *ddname* but continues for other *ddnames*, provided the installation-wide options exit does not force the DUMP or COPYDUMP function to end if a write error occurs on any of the output copies. If the installation-wide options exit forces such a cancellation, the task ends with a return code of 16, and processing continues with the next task.

Application Programmer Response: If this message is accompanied by I/O error messages, take corrective action recommended at your site for such errors and rerun the job. If the error is on the output DASD during a COPY or RESTORE, a rerun might fail during authorization checking of the volume. In this case, initialize the volume offline to clean the volume before rerunning the COPY or RESTORE.

Operator Response: None.

ADR325E (*ttt*)-*mmmmm*(*yy*), VOLUME *volume_serial_number* HAS UNEXPIRED DATA SETS

Explanation: A full or tracks COPY or RESTORE tried to overlay unexpired data sets.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: If overlay is intended, specify the PURGE option, and rerun the job.

Operator Response: None.

ADR327W (*ttt*)-*mmmmm*(*yy*), NO DATA SETS PROCESSED FROM {VOLUME *volume_serial_number* | LOGICAL VOLUME *volume_serial_number*}

Explanation: One of the following applies:

- A data set DUMP, COPY, CONVERTV, or RESTORE did not select any data sets that matched the filtering criteria.
- The selected data sets cannot be processed because of failure to ENQ or to allocate.
- The selected data sets cannot be processed because of failure to access the protected data sets.
- For a RELEASE, no data sets were selected because none have releasable space.
- For a COMPRESS, no data sets were selected because none are eligible for compression.

Source: DFSMSdss

System Action: Processing continues on the next volume. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR328E (*ttt*)-*mmmmm*(*yy*), ERROR DURING DATA SET SELECTION. VOLUME *volume_serial_number* IS BYPASSED

Explanation: A data set DUMP, COPY, CONVERTV, or RESTORE with filtering failed on the indicated volume during VTOC or VVDS processing. For a RESTORE, the *volume_serial_number* is the volume serial of the source volume.

Source: DFSMSdss

System Action: Processing continues on the next source volume. The return code is 8.

Application Programmer Response: Determine the failure from the previous messages associated with this task ID.

Operator Response: None.

ADR329I **(***ttt***)-***mmmmm***(***yy***), DATA SET DUMP OF VOLUME** *volume_serial_number* **{BEGINS | ENDS} ON TAPE** *serial_number* **SEQUENCE** *sequence_number*

Explanation: A data set DUMP for volume *volume_serial_number* started or ended on the specified tape (*serial_number*) and on the specified data sequence number (*sequence_number*).

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR330W **(***ttt***)-***mmmmm***(***yy***), OUTPUT VOLUME** *volume_serial_number* **IN USE. PROCESSING CONTINUED**

Explanation: The output volume was in use by other jobs in the system during a tracks COPY or RESTORE. Some of the data sets mapped by these tracks might have been in use while DFSMSdss was processing the volume.

Source: DFSMSdss

System Action: The tracks operation is continued. If the data sets mapped by these tracks were in use, the contents of these tracks are unpredictable. The return code is set to 4.

Application Programmer Response: Analyze the job log to check if the data sets mapped by the tracks were in use at the time of the COPY or RESTORE. If they were, rerun the COPY or RESTORE if necessary. The volume could be in use because there might be a user catalog on it that is allocated to the catalog address space (CAS). For more information, see the *DFSMS/MVS DFSMSdss Storage Administration Guide* under “Restoring Volumes”, subheading of “Specifying Output Volumes.”

Operator Response: None.

ADR331E **(***ttt***)-***mmmmm***(***yy***), OUTPUT BLKSIZE** *nnnn1* **FOR DATA SET ON DDNAME** *ddname* **IS SMALLER THAN INPUT BLKSIZE** *nnnn2*

Explanation: The block size specified in the JCL (or, if not specified, the defaulted block size) for output on DASD is smaller than the block size of the input volume created during the DUMP. This is not allowed. The *nnnn1* and *nnnn2* are in decimal notation.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Do not specify block size in the JCL, or, if a DASD data set is required, use a DASD that allows a larger block size.

Operator Response: None.

ADR332E **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **(IN CATALOG** *catalog_name***) NOT RESTORED. PHYSICAL DATA SET RESTORE DOES NOT SUPPORT RENAME OF VSAM DATA SETS**

Explanation: During a physical data set restore, RENAME or RENAMEUNCONDITIONAL was specified, and the named VSAM data set met the RENAME filtering criteria. DFSMSdss does not support RENAME processing for VSAM data sets during physical data set restore.

Source: DFSMSdss

System Action: The data set is not processed, and processing continues with the next data set. The return code is 8.

Application Programmer Response: Specify RENAME or RENAMEUNCONDITIONAL old name filtering criteria that do not select VSAM data set names, and rerun the job.

Operator Response: None.

ADR333W **(***ttt***)-***mmmmm***(***yy***), DATA SET CHANGE INDICATOR NOT RESET FOR {***dsname* **|** *cluster_name componentname***} ON** *volume_serial_number***, {OBTAIN ERROR,** *error_code* **| I/O ERROR | CVAFDIR ERROR | NOT ENQUEUED}**

Explanation: DFSMSdss was unable to reset the data set change indicator in the data set's VTOC entry on the specified volume. Either DADSM OBTAIN failed, an I/O error occurred while writing the data set VTOC entry, a CVAFDIR error occurred while reading or writing the data set VTOC entry, or the data set was not enqueued by DFSMSdss. *error_code* is the error code passed by the OBTAIN service.

Source: DFSMSdss

System Action: The data set change indicator is still on for the data set. The return code is 4.

Application Programmer Response: Either rerun the job, or use AMASPZAP to reset the data change indicator.

Operator Response: None.

ADR335W **(***ttt***)-***mmmmm***(***yy***), DATA SET CHANGE INDICATOR NOT RESET FOR ANY DATA SET ON A VTOC TRACK ON VOLUME** *volume_serial_number*

Explanation: An input I/O error was encountered on a VTOC track when the data set change indicator was being reset in the VTOC entries.

Source: DFSMSdss

System Action: The data set change indicator is not reset in any of the VTOC entries on the track. The return code is 4.

Application Programmer Response: Wait until the next run to reset the change indicator, or run IEHLIST to list the VTOC and use AMASPZAP to reset the VTOC entries.

Operator Response: None.

ADR336I **(***ttt***)-***mmmmm***(***yy***), LOGICAL ERROR WHILE READING VOLUME** *volume_serial_number***, TRACK** *cchh***, CCW** *operation_code*

Explanation: An unexpected error was encountered during a read operation that used the Read Multiple Count, Key, and Data or Read Track channel command. Normally, you need not take any action; however, see “Application Programmer Response”.

Source: DFSMSdss

System Action: The track is reread using other channel commands.

Application Programmer Response: If you get this message too many times in a job, then either the DASD ERP program that retries a temporary data check or DFSMSdss might be in error.

Operator Response: None.

ADR337E (*ttt*)-*mmmmm*(*yy*), THE DUMP DATA SET IS EMPTY

Explanation: An attempt has been made to restore from an empty dump data set.

Source: DFSMSdss

System Action: The return code is 8.

Application Programmer Response: Rerun the job with a good dump data set.

Operator Response: None.

ADR338W (*ttt*)-*mmmmm*(*yy*), DATA SET CHANGE INDICATOR NOT RESET FOR ANY DATA SET ON VOLUME *volume_serial_number*

Explanation: DFSMSdss was unable to acquire exclusive access of the VTOC on the specified volume for resetting the data set change indicator in the VTOC entries.

Source: DFSMSdss

System Action: The data set change indicator is not reset for any data set on the volume. The return code is 4.

Operator Response: None.

ADR339W (*ttt*)-*mmmmm*(*yy*), I/O ERRORS WERE ENCOUNTERED ON THE FOLLOWING DATA SETS DURING PROCESSING FROM *volume_serial_number*

Explanation: A data set DUMP or COPY was specified, but one or more data sets encountered I/O errors. The list of data sets following this message indicates which data sets did not dump or copy successfully because of I/O errors.

Source: DFSMSdss

System Action: If DELETE or RESET options were indicated in the control statements, the data sets indicated in the list are not deleted and the data set change indicator is not reset. The return code is 4.

Application Programmer Response: If a RESTORE is attempted for these data sets, the tracks that had the error are not restorable and will be cleared.

Operator Response: None.

ADR340E (*ttt*)-*mmmmm*(*yy*), OUTPUT I/O ERROR ENCOUNTERED ON VOLUME *volume_serial_number* **DURING RESET OF THE DATA SET CHANGE INDICATOR IN THE VTOC**

Explanation: A permanent output error was encountered on the input volume while the data set change indicator was being reset during a full DUMP. The output from the DUMP is still usable. An I/O error message indicating the nature of the error precedes this message.

Source: DFSMSdss

System Action: Processing continues with the next control statement. The return code is 8.

Application Programmer Response: If the I/O error message indicates that the volume is usable, take the same action as in message ADR333W; otherwise, restore the volume.

Operator Response: None.

ADR342I (*ttt*)-*mmmmm*(*yy*), DATA SET CHANGE INDICATOR HAS BEEN RESET FOR ALL QUALIFIED DATA SETS ON VOLUME *volume_serial_number*

Explanation: For all VTOC entries that had the indicator on, the data set change indicator was reset during a full volume DUMP.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR343E (*ttt*)-*mmmmm*(*yy*), VTOC IS FULL ON THE SINGLE TARGET VOLUME. NO MORE DATA SETS WILL BE PROCESSED.

Explanation: DFSMSdss cannot continue to allocate data sets on the volume specified by the user because the volume's VTOC or VTOC index is full.

Source: DFSMSdss

System Action: The job ends. The return code is 8.

Application Programmer Response: Use ICKDSF or a similar product to expand the VTOC or VTOC index of the target volume, and rerun the job or specify additional target volumes.

Operator Response: None.

ADR344I (*ttt*)-*mmmmm*(*yy*), VOLSER ON UCB *device_number* **IS A DUPLICATE. VOLUME MADE UNAVAILABLE.**

Explanation: A RESTORE or COPY resulted in a duplicate volume serial number in the specified UCB (*device_number*).

Source: DFSMSdss

System Action: The volume on the UCB is made unavailable to the system. Message ADR320I precedes this message.

Application Programmer Response: None.

Operator Response: To make the new volume available to the system, the old volume with this volume serial must be unloaded or varied offline before the new volume is made available to the system.

ADR345D (*ttt*)-*mmmmm*(*yy*), REQUEST AUTHORIZATION TO OVERLAY {TRACK ZERO | VTOC | VTOC INDEX | VVDS} ON UCB *device_number*, *job_name*, *step_name*, *procedure_name*. **REPLY U OR T**

Explanation: A TRACKS COPY or RESTORE is being attempted on a portion of the VTOC or on track zero.

Source: DFSMSdss

System Action: Processing continues according to the operator's response.

Application Programmer Response: Instruct the operator to let DFSMSdss continue processing, and rerun the job.

Operator Response: A response of *R zz, U* allows DFSMSdss to overlay track 0 or the VTOC. A response of *R zz, T* ends the operation, and processing continues with the next function.

ADR346I **(***ttt***)-***mmmmm***(***yy***), VTOC INDEX WILL BE DISABLED ON VOLUME** *volume_serial_number*

Explanation: The installation-wide exit requested that the VTOC index not be reconstructed.

Source: DFSMSdss

System Action: The DFSMSdss function continues processing. The SYS1.VTOCIX.volser data set is not reconstructed by ICKDSF.

Application Programmer Response: The ICKDSF program can be performed separately from DFSMSdss.

Operator Response: None.

ADR347E **(***ttt***)-***mmmmm***(***yy***), PERMANENT I/O ERROR ON DDNAME** *ddname***,** *xxxx*

Explanation: A permanent I/O error occurred on the indicated DD statement. The *ddname* is followed by the SYNAD information passed by EXCP (*xxxx*).

Source: DFSMSdss

System Action: A DUMP ends with a return code of 16. Continuation of a RESTORE depends on the CANCELERROR option coded by the user. If CANCELERROR is coded, the RESTORE ends with a return code of 16; otherwise, recovery is attempted but results are unpredictable. Processing continues with the next input control statement if a return code of 16 is set.

Application Programmer Response: For a DUMP, take appropriate corrective action, and rerun the job. For a RESTORE, use a different version of the backup copy.

Operator Response: None.

ADR348E **(***ttt***)-***mmmmm***(***yy***), PERMANENT {INPUT | OUTPUT} ERROR ON VOLUME** *volume_serial_number cchh operation_code csw sense ecb_status* **[***return_code***-***reason_code***]**

Explanation: The DASD device contained a permanent I/O error. The *cchh*, *operation_code*, *csw*, *sense*, and *ecb_status* are printed in hexadecimal digits. If the track was being read with DFSMSdss I/O routines, only the first eight bytes of sense are printed. If the track was being read as part of a concurrent copy operation, 32 bytes of sense and the System Data Mover return code (*return_code*) and reason code (*reason_code*) are supplied as diagnostic aids. See Table 2 on page ADR-100 for explanations of the System Data Mover return and reason codes.

Source: DFSMSdss

System Action: Another message explaining the ending action, if any, follows this message. The return code is 8.

Application Programmer Response: Take appropriate action recommended at your site for the error identified by the sense information in the message. For ecb_status of `X'42'`, contact IBM for programming support.

Operator Response: None.

ADR349W **(***ttt***)-***mmmmm***(***yy***), ERROR ENCOUNTERED WHILE REBUILDING FREE SPACE ON VOLUME** *volume_serial_number*

Explanation: An error occurred when a temporary DFSMSdss data set, SYS1.VTOCIX.DSS.TEMP.volser, was to be allocated.

Source: DFSMSdss

System Action: The free space information in the VTOC of this volume may be incorrect.

Application Programmer Response: Use the IEHLIST utility program to determine the VTOC accuracy. Try to allocate a data set on the volume to rebuild the free space information in the VTOC. If there were other DFSMSdss or allocation error messages, you might need to perform the copy or restore job again.

Operator Response: None.

ADR350E **(***ttt***)-***mmmmm***(***yy***), {I/O | LOGICAL ERROR} ENCOUNTERED ON {VVDS | VVDS IMAGE} ON** *volume_serial_number*

Explanation: One of the following applies:

- I/O errors were encountered while the VVDS tracks were being read.
- Logical errors were encountered while the VVDS was being scanned for authorization checking on a TRACKS or FULL volume operation.
- Logical errors were encountered while data sets were being selected during a data set DUMP or RESTORE.

Source: DFSMSdss

System Action: If this error occurs during a FULL volume or TRACKS operation while checking authorization, other messages accompany this message. If this error occurs during data set selection, the volume is bypassed. The return code is 8.

Application Programmer Response:

- For a logical error during DUMP: Run access method services DIAGNOSE on the volume to determine the problem, and correct it by using the procedure recommended by the *DFSMS/MVS Access Method Services for ICF* manual.
- For a logical or physical error during RESTORE: Use a previous backup copy to restore the desired VSAM data set.
- For a physical I/O error during DUMP: Take the appropriate action recommended at your site, or contact your system programmer.

Operator Response: None.

ADR351E **(***ttt***)-***mmmmm***(***yy***), UNEXPECTED END OF FILE ON DDNAME** *ddname*

Explanation: An unexpected end-of-file (EOF) was encountered before the normal end of processing. The input used might have been created in a DUMP that abnormally ended.

Source: DFSMSdss

System Action: The task ends. The output volume or data sets may be unusable. Processing continues with the next control statement. The return code is 8 or 16.

Application Programmer Response: Use a good copy of the backup, and rerun the job.

Operator Response: None.

ADR352W **(***ttt***)-***mmmmm***(***yy***), VOLID ON UNIT** *device_number***, THAT HAD VSAM DATA SETS, HAS BEEN CHANGED FROM** *volume_serial_number_1* **TO** *volume_serial_number_2* **DURING A TRACKS OPERATION**

Explanation: The output volume contains VSAM data sets. The VOLID was changed on the volume. If the tracks mapping these data sets were not copied or restored, these data sets might be inaccessible because of the change in the VOLID.

Source: DFSMSdss

System Action: The VOLID was changed. The return code is 4.

Application Programmer Response: If the data sets are inaccessible, reset the VOLID to the original value.

Operator Response: None.

ADR353I **(***ttt***)-***mmmmm***(***yy***), THE FOLLOWING DATA SETS WERE SELECTED FROM VOLUME** *volume_serial_number*

Explanation: TYPRUN=NORUN was specified in the EXEC statement parameter, and in data sets, the list of names that follows this message met the filtering criteria on the volume.

Source: DFSMSdss

System Action: The data sets are not processed.

Application Programmer Response: None.

Operator Response: None.

ADR354W **(***ttt***)-***mmmmm***(***yy***), ERRORS ENCOUNTERED WHILE PROCESSING {VVDS | VTOC} ON VOLUME** *volume_serial_number*

Explanation: Errors were encountered while the VVDS or VTOC were being processed.

Source: DFSMSdss

System Action: If the error is on the VTOC, you cannot do a data set RESTORE on VSAM data sets. Only full or tracks RESTORE can be done from the DUMP output. The return code is 4.

Application Programmer Response: Other error messages accompany this message. If you want to do a data set RESTORE from the DUMP output, take the appropriate action and rerun the job.

Operator Response: None.

ADR355W **(***ttt***)-***mmmmm***(***yy***), CHANGE VOLID ON UNIT** *device_number* **FROM** *volume_serial_number_1* **TO** *volume_serial_number_2*

Explanation: A full COPY or RESTORE onto the volume was done from the source volume without specifying COPYVOLID. The VVDS data set name in the VTOC and the volume serial of the VVR for the VVDS on the output volume were carried over from the input volume. This does not agree with the volume serial of the output volume.

Source: DFSMSdss

System Action: The VSAM data sets on the receiving volume cannot be accessed until the volume serial of the receiving volume is changed. The return code is 4.

Application Programmer Response: If you want to access VSAM data sets, use Device Support Facilities to change the volume serial of the receiving volume. Do not rerun the COPY or RESTORE job until the volume serial is changed because authorization checks may fail.

Operator Response: None.

ADR356E **(***ttt***)-***mmmmm***(***yy***), TASK TERMINATED BY UIM EXIT (***nn***)**

Explanation: The indicated User Interaction Module exit point, *nn*, ended the related DFSMSdss function before normal completion.

Source: DFSMSdss

System Action: The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR359W **(***ttt***)-***mmmmm***(***yy***), UTILITY PROCESSING FOR DATA SET** *dsname* **COMPLETED WITH WARNINGS.**

Explanation: The utility successfully processed the data set but issued attention messages during processing. These messages are not spooled to SYSPRINT unless the DFSMSdss parameter *UTILMSG=YES* is specified.

Source: DFSMSdss

System Action: Processing continues. Return code is 4.

Application Programmer Response: Specify DFSMSdss parameter *UTILMSG=YES,* and rerun the job to view utility messages.

Operator Response: None.

ADR360I **(***ttt***)-***mmmmm***(***yy***), PROCESSING LOCKED USER CATALOG** *catalog_name*

Explanation: The corresponding VVR for the integrated catalog facility user catalog being processed had the lock indicator set on.

Source: DFSMSdss

System Action: The function continues processing.

Application Programmer Response: None.

Operator Response: None.

ADR362T **(***ttt***)-***mmmmm***(***yy***), NO BUFFER AVAILABLE & NONE IN WRITE**

Explanation: The DFSMSdss I/O modules cannot find a free buffer. There are outstanding requests for waits or checks.

Source: DFSMSdss

System Action: The job ends. The return code is 12.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR363E **(***ttt***)-***mmmmm***(***yy***), SOURCE DATA SET** *dsname* **{IS EMPTY | HAS AN UNSUPPORTED DSORG}. IT WILL NOT BE COPIED TO PREALLOCATED TARGET DATA SET.**

Explanation: The data set will not be copied to the preallocated target data set for one of the following reasons:

- It is empty.
- It has a BLKSIZE of 0 and the target volume is of unlike device.
- It has an unsupported DSORG and the target volume is of unlike device.

Source: DFSMSdss

System Action: The data set was not copied. Processing continues. The return code is 8.

Application Programmer Response: To have the data set copied, do one of the following:

- For an empty data set, use ALLDATA or ALLEXCP to force copy of all allocated space in the data set. Make sure that the selected target volume is of like device and that the data set is not being reblocked.
- For a data set with a BLKSIZE = 0, make sure that the selected target volume is of like device.
- For a data set with an unsupported DSORG, make sure that the target volume is of like device. For a data set with an unsupported DSORG going to an unlike target device, specify the

PROCESS keyword with the UNDEFINED subkeyword. The specified or chosen target device must have a track capacity equal to or greater than the source.

Operator Response: None.

ADR364W **(***ttt***)-***mmmmm***(***yy***), TRACK CANNOT BE RESTORED DUE TO DATA CHECK DURING DUMP. CCHH** *cchh***, DDNAME** *ddname*

Explanation: An error was encountered on a DASD volume during the DUMP. Because CANCELERROR was not coded, a dummy record was dumped. This record is recognized during the RESTORE.

Source: DFSMSdss

System Action: The indicated track (*cchh*) is not restored. Processing continues for other tracks. The return code is 4.

Application Programmer Response: Restore the data by an alternate means, if possible.

Operator Response: None.

ADR365E **(***ttt***)-***mmmmm***(***yy***), THE CATALOG** *catalog_name* **SPECIFIED IN {RECATALOG | INCAT} IS NOT AVAILABLE. THE {COPY | DUMP | RESTORE | CONVERTV} TASK IS TERMINATED.**

Explanation: The catalog specified in the RECATALOG or INCAT parameter does not exist or is not available on the system.

Source: DFSMSdss

System Action: Performance of the task ends. The return code is 8.

Application Programmer Response: Ensure that the catalog name is correct and available, and rerun the job.

Operator Response: None.

ADR366W **(***ttt***)-***mmmmm***(***yy***), TRACK** *cchh* **WRITTEN TO VOLUME** *volume_serial_number* **WITH INVALID TRACK FORMAT**

Explanation: Track *cchh* had an invalid track format on the source volume during DUMP or COPY. It was restored or copied with the same condition to the indicated target volume. When this track is accessed on the target volume, the invalid-track-format condition will recur. Or, a direct data set that could not be accessed by relative block address (that is, it had a standard user label or its record format was not fixed or fixed block) was being copied from a smaller-capacity DASD to a larger-capacity DASD. A track of data from the smaller-capacity device could not fit on the track of the larger-capacity device. This condition can occur when the data set without fixed or fixed-block record format has a large maximum blocksize but the actual blocks are so small that the track of the larger-capacity device cannot contain all the smaller blocks because of the increased inner-block gap size of the larger-capacity device. This message is issued for each track copied that will not fit on the track of the larger-capacity device, and the copy will continue. (You can stop the copying of such data sets by using the CANCELERROR keyword. Refer to the use of CANCELERROR in the *DFSMS/MVS DFSMSdss Storage Administration Reference* manual and in message ADR367E in this manual.)

Source: DFSMSdss

System Action: Operation continues and the remaining tracks, if any, are restored. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR367E **(***ttt***)-***mmmmm***(***yy***), {R0 COUNT FIELD | INVALID TRACK FORMAT} ERROR ON {INPUT|OUTPUT} VOLUME** *volume_serial_number cchh operation_code csw sense ecb_status* **[***return_code-reason_code***]**

Explanation: Either the *cchh* track had an invalid track format, or a search ID for R0 on this track failed. If the track was being read with DFSMSdss I/O routines, only the first eight bytes of sense are printed. If the track was being read as part of a concurrent copy operation, 32 bytes of sense and the System Data Mover return code (*return_code*) and reason code (*reason_code*) are supplied as diagnostic aids. See Table 2 on page ADR-100 for explanations of the System Data Mover return and reason codes.

Source: DFSMSdss

System Action: If the R0 count field error is encountered on an input volume and CANCELERROR was specified, the function ends with a return code of 16; otherwise, processing continues and a return code of 4 is set.

If the invalid-track-format condition was encountered on an input volume, all the data that DFSMSdss was able to read from this track is written to the output volume (COPY and DUMP), and the track is marked as having an invalid-track-format condition on the output tape (DUMP only). In this case, the return code is set to 8. If the invalid-track-format condition was encountered on an output volume, the track image that DFSMSdss attempted to write is in error, not the original target track.

Also, this message is issued instead of ADR366W when copying direct data sets when an invalid-track-format error occurs on a write to an output volume if the keyword CANCELERROR has been specified. The COPY or RESTORE of the data set receiving the invalid-track-format error is stopped, and the DFSMSdss-allocated target data set is deleted. Because of the concurrent processing of the output buffers on the WRITEs, as many as three invalid tracks might be written before processing of the data set can be ended (that is, three ADR367E messages might be issued before the copy can be ended). The COPY job will continue to process any subsequent data sets. If a FULL or TRACKS COPY or RESTORE with CANCELERROR specified encounters the invalid-track-format condition, message ADR367E is issued and the task is ended. No subsequent tracks are processed.

Application Programmer Response: If the function ends because of the R0 count field error, correct the R0 record using Device Support Facilities and rerun the job. For an invalid-track-format condition, the user needs to reconstruct the track in error after the RESTORE.

If CANCELERROR has been specified, the invalid track format track is erased from the target and the target data set is deleted during COPY or RESTORE processing.

Operator Response: None.

ADR368E **(***ttt***)-***mmmmm***(***yy***), I/O ERROR ON DDNAME** *ddname* **WHILE {PROCESSING VTOC | ADVANCING TO NEXT TRAILER RECORD}** *xxxx*

Explanation: An I/O error was encountered in processing the VTOC or in bypassing the file for a data set restore. The *xxxx* is the SYNAD information passed by the access method routines.

Source: DFSMSdss

System Action: If the operation was to process the VTOC, the restore ends and no further processing is performed. If the operation was to advance to the next trailer record, the restore continues because the I/O error occurred on a record that was not needed for this restore. The return code is 8.

Application Programmer Response: If the operation was to process the VTOC, use a different version of the backup copy. If the operation was to advance to the next trailer record, permanent errors will result if a future RESTORE is attempted to restore the record that had the I/O error.

Operator Response: None.

ADR369D **(***ttt***)-***mmmmm***(***yy***), AUTHORIZE FOR {READ | WRITE} ACCESS {A CHECKPOINT/RESTART DATA SET | A RACF DATA SET ON NON-RACF SYSTEM|A VVDS | A VTOCIX | ICF VSAM DATA SET ON NON-ICF SYSTEM} ON** *volume_serial_number***,***job_name***,***step_name***, REPLY U OR T**

Explanation: The requested authorization is for:

- A checkpoint/restart data set
- A RACF data set on a non-RACF system
- A VVDS or VTOCIX data set
- An integrated catalog facility-cataloged VSAM data set on a non-integrated catalog facility system.

Source: DFSMSdss

System Action: Processing continues according to the operator action. If the operator replies *T*, a full or tracks operation ends and, on a data set operation, the data set is not processed. A reply of *U* authorizes the data set to be processed.

Application Programmer Response: Instruct the operator to authorize the processing via a reply of *U*, and rerun the job.

Operator Response: Respond *R zz,U* to cause DFSMSdss to continue processing the data set or volume. Respond *R zz,T* to end the function and cause processing to continue for the next data set or next control statement.

ADR370E **(***ttt***)-***mmmmm***(***yy***), INVALID SEQUENCE NUMBER ON DDNAME** *ddname* **LAST** *nnnn1* **NEXT** *nnnn2*

Explanation: During a RESTORE, the sequence number of the record read, *nnnn2* (in hexadecimal) did not match the previous record processed, *nnnn1* (in hexadecimal). If there is an end of volume involved, a tape might have been mounted in the wrong sequence.

Source: DFSMSdss

System Action: Processing continues with the next control statement. If the output volume was updated, a return code of 16 is set; otherwise, a return code of 8 is set.

Application Programmer Response: Probable user error. Mount the proper restore tape, or use the correct dump data set.

Operator Response: None.

ADR371D **(***ttt***)-***mmmmm***(***yy***), I/O ERROR ON** *volume_serial_number* **DURING AUTH CHECKING FOR {INPUT | OUTPUT} ACCESS,** *job_name***,** *step_name***, REPLY U OR T**

Explanation: An I/O error was encountered while the VTOC was accessed for authorization checking.

Source: DFSMSdss

System Action: Processing continues, depending on the response from the operator. A reply of T ends the function with a return code of 8.

Application Programmer Response: Instruct the operator to let DFSMSdss continue processing, and rerun the job.

Operator Response: If the user has authorization to access the volume, reply *R zz,U* to continue the function. Otherwise, reply *R zz,T* to end the function.

ADR372W **(***ttt***)-***mmmmm***(***yy***), ALIAS** *dsname* **NOT RESTORED FOR USER CATALOG** *catalog_name***,** *reason_code*

Explanation: The user catalog alias was not restored for the restored user catalog. The reason code (*reason_code*) indicates why, as follows:

00	User catalog aliases are not restored when the user catalog is restored to a nonempty preallocated target.
04	The user catalog for this alias was not restored successfully.
08	A duplicate name exists in the master catalog for the alias.
12	A catalog error other than duplicate data set name occurred while the alias was being restored.

Source: DFSMSdss

System Action: The user catalog alias is not restored. Processing continues with the next data set. The system return code is 4.

Application Programmer Response: The user catalog was restored. To define the alias, do the following according to the reason code:

00	Use the IDCAMS DEFINE ALIAS command to define the alias if it does not exist and is desired.
04	Other messages indicate why the user catalog was not restored. Correct the problem and rerun the restore.
08	If the duplicate name in the master catalog is an alias for the restored user catalog, no action is necessary. If the duplicate name is not an alias, correct the problem. If the alias is required, define it using the IDCAMS DEFINE ALIAS command.
12	Determine the error from message ADR497E that precedes this message and correct the problem. Then define the alias using the IDCAMS DEFINE ALIAS command.

Operator Response: None.

ADR373E **(***ttt***)-***mmmmm***(***yy***), REQUESTED TRACK {***cchh* **| (SOME)} NOT ON INPUT DDNAME** *ddname*

Explanation: The track requested for the RESTORE (*cchh*) is not on the input file. It was probably not dumped. If the track is not printed, some of the requested tracks are not on the input volume.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8 if the task is a data set RESTORE or a full or tracks RESTORE that does not result in an unusable output volume. The return code is 16 if a full or tracks RESTORE results in an unusable output volume. Subsequent tracks are not restored.

Application Programmer Response: Either change the track range requested, or RESTORE from a different copy of the backup.

Operator Response: None.

ADR374E **(***ttt***)-***mmmmm***(***yy***), UNABLE TO OPEN DDNAME** *ddname***,** *reason_code return_code*

Explanation: DFSMSdss was unable to OPEN the indicated data set for the indicated reason code (*reason_code*). RDJFCB passed the return code (*return_code*) The possible reason codes are:

8	RDJFCB failure.

10 Invalid parameters passed in JCL. The following are the probable reasons:

- SYSIN/SYSOUT data set
- DISP=MOD coded for the output data set
- DISP=SHR coded for the output data set
- BLKSIZE less than 7892 bytes
- DSORG other than PS
- BUFNO specified.

12 OPEN failure.

14 Invalid file format passed in the JCL. One of the following is true:

- RECFM is not FB or F
- RECLEN is not 80
- BLKSIZE is not a multiple of the record length.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the parameters in error, and rerun the job.

Operator Response: None.

ADR375E **(*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* IS PARTITIONED, BUT HAS NO DIRECTORY. IT CAN ONLY BE {COPIED | RESTORED} TO A LIKE DEVICE**

Explanation: The data set is partitioned, but has no directory. It can be copied or restored only to a like device, but no like devices were available or usable.

Source: DFSMSdss

System Action: Function fails for that data set. The return code is 8.

Application Programmer Response: Rerun the job, ensuring that a like device with sufficient space is available.

Operator Response: None.

ADR376E **(*ttt*)-*mmmmm*(*yy*), UNABLE TO ACQUIRE ADDITIONAL STORAGE FOR THE TASK**

Explanation: Additional storage was required to continue the function, but it was not available.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8. An abend 80A might occur during DFSMSdss postprocessing.

Application Programmer Response: Provide adequate storage by increasing either the REGION size, the SIZE parameter, or both, or respecify the filtering criteria to reduce the number of data sets for the operation. Rerun the job. See the *DFSMS/MVS DFSMSdss Storage Administration Guide* under “Storage Requirements” for more information on storage estimates.

Operator Response: None.

ADR377W **(*ttt*)-*mmmmm*(*yy*), COMMAND IS NOT SUPPORTED FOR DATA SET *dsname* ON VOLUME *volume_serial_number***

Explanation: The COPY, DUMP, or data set RESTORE command does not support the data set organization of the indicated data set. The volume indicated is the logical volume during a RESTORE. The PRINT command does not support split-cylinder data sets or nonintegrated catalog facility VSAM data sets. The DUMP command does not support multi-volume data sets when they have a standard user label.

Source: DFSMSdss

System Action: Processing continues for other data sets. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR378I **(*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS WERE SUCCESSFULLY PROCESSED FROM VOLUME *volume_serial_number***

Explanation: A list of data set names follows this message. The volume indicated is the logical volume for a RESTORE.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR379E **(*ttt*)-*mmmmm*(*yy*), {OBTAIN ERROR *xxxx* | NO F2/F3 DSCB | NOT F2/F3 DSCB | ERROR IN F1 DSCB | ERROR IN F3 DSCB | TOO MANY EXTENTS | NO EXTENTS} [AT CCHH *cchh*] ON VOLUME *volume_serial_number* FOR {DSNAME|CLUSTERNAME *name* COMPONENTNAME *component_name*}**

Explanation: Errors were encountered when the extents for the data set were accessed. The possible errors are:

- OBTAIN failed while the extents for the data set were retrieved.
- The VTOC entry indicated that the data set had more than three extents, but the additional extent descriptions could not be located. The VTOC entry for an indexed sequential data set did not include the ISAM-specific information.
- The record retrieved from the VTOC was not of the expected type.
- The description for one of the first three extents had errors.
- The descriptions for extents beyond the third extent had errors.
- The number of extents was more than the number supported (16 for a non-VSAM data set and 123 for a VSAM data set, a PDSE, or an extended format sequential data set).
- The extent information in the VTOC entry is null.
- The primary and/or alternate cylinder information in the VTOC is incorrect.

During a RESTORE, the volume serial is the logical volume.

Source: DFSMSdss

System Action: For non-VSAM data sets, only the retrieved extents are processed. If the error occurred during a data set DUMP and the data set is restored during a subsequent data set RESTORE, only the successfully dumped extents are restored. If the error occurred on a VSAM data set, it is not processed. If the error occurred during the BUILDSA operation, the BUILDSA task ends. The return code is 8.

Application Programmer Response: Use IEHLIST to verify the DSCBs for the VTOC. If the VTOC does not contain errors, rerun the job to dump the data set. Use a prior backup copy of the dump to restore the data set if it occurs during a RESTORE.

If the primary and/or alternate cylinder information in the VTOC is incorrect, you can use ICKDSF REFORMAT REFVTOC to correct them. Additionally, you may need to refresh the operating system's internal control structure for the device using the following DEVSERV operator command:

```
DEVSERV QDASD,device_number,1,VALIDATE
```

where *device_number* is the device number.

Operator Response: None.

ADR380E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **NOT PROCESSED, {***reason_code* **|** *reason_code-xxx***} [VOLUME** *volser***]**

Explanation: The data set was not copied, restored, converted, or released. The reason codes (*reason_code* or *reason_code-xxx*) are:

0	An unmovable/ABSTR/ISAM data set was not preallocated. Either the system does not support allocation of these data sets, or you are attempting physical restore of a nonpreallocated unmovable/ABSTR/ISAM data set.
1	Replace was not specified for the unmovable data set.
2	There were unmatched extents on input and output for an unmovable/ABSTR/ISAM data set. The extents of the source unmovable data set are printed.
3-*xxx*	DADSM was unable to allocate a data set. The *xxx* indicates DADSM (SVC 32) return codes. See *DFSMS/MVS DFSMSdfp Advanced Services* or *DFSMS/MVS DFSMSdfp Diagnosis Guide* manual for more information.
3-004	The dsname of request already exists on this volume; initial allocation was not possible under the given name.
3-008	No room was available in the VTOC.
3-012	A permanent I/O error or an error returned by CVAF was encountered.
3-016	Direct access to the absolute track was unavailable.
3-020	The requested quantity was unavailable.
3-024	The average record length is greater than 65535 bytes.
3-048	The parameter list was invalid.
3-052	The JFCB was invalid or a partial DSCB pointer was specified.
3-072	The DOS VTOC cannot be converted to an OS VTOC.
3-076	No space parameter was given for a new data set, or zero space was requested at absolute track zero.
3-100	CYL and CONTIG requests conflict.
3-104	The space subparameter was invalid.
3-116	User labels were not supported.
3-120	DSSIZE=0 and minimum allocation unit is greater than 0.
3-124	DSSIZE is not a multiple of the minimum allocation unit.
3-128	During a PDS space allocation request, a directory size request was larger than the entire allocation request.
3-132	Space request must be ABSTR for a DOS volume.
3-148	Overlapping extents were in the VTOC.
3-152	Overlapping DOS split-cylinder extents were in the VTOC.
3-156	DADSM allocation ended because of possible VTOC errors.
3-164	Allocation ended because of DOS stacked pack format.
3-168	RACDEF failed; data already was defined.
3-172	The user was not authorized to define the data set.
3-176	The installation-wide exit rejected the request with a return code of 8.
3-180	The installation-wide exit rejected the request with a return code of 4.
3-184	RACF was defined with modeling specified; the model was not found.
4	The authorization check failed.
5	The block sizes of the target and source data sets do not match. This can be caused by attempting to move a data set created in an N*512 environment to a non-N*512 environment, or vice versa.
6	The volume sequence number did not match.
7	DSORG did not match.
8	There was an error in the rename filter.
9	The movable data set on the receiving volume is not the same size as the data set on the source volume. The data set is in use and cannot be scratched and reallocated. This might be caused by the initiator holding serialization for the data set because the data set is referenced in a subsequent job step.
10	The movable data set on the receiving volume is smaller than the data set on the source volume. Failure occurred in the scratch; the data set cannot be scratched and reallocated.
11-*xx*	The VVDS calls failed. See return code 50 under message IDC3009I.
12	The extents mapped by the VTOC and VVDS on DASD do not match the VVDS on the input logical volume.
13-*xxxx*	Retrieving the extents from the VTOC failed. *xxxx* is the obtain error code. See *DFSMS/MVS DFSMSdfp Advanced Services* for these codes.
14	Component names do not match. Either the component was redefined since the data set was backed up; or it is a multivolume data set, and

the input and output volumes are different volumes of a multivolume data set.

15 The number of components differs on input and output. Either the component was redefined since the data set was backed up; or it is a multivolume data set, and input and output volumes are different volumes of a multivolume data set.

16 The beginning RBA for the components does not match on input and output. The input and output volumes are different volumes of a multivolume data set.

17 Primary/secondary indicators do not match on input and output. The input and output volumes are different volumes of a multivolume data set.

18 REPLACE or RENAME (conditional or unconditional) was not specified for the movable non-VSAM data set, or REPLACE was not specified for a VSAM data set.

19 The extents mapped by the VTOC do not match the VVDS on the output volume.

20-*xxxx*,*yyyy* The data set on the output volume is smaller than on the input logical volume. *xxxx* = data component size in tracks (hexadecimal). *yyyy* = index component size in tracks (hexadecimal).

21 The VVDS, BCS, or VTOCIX cannot be restored to a different volume.

22 The location of where the unmovable data set is to be allocated is not free, and FORCE is not specified.

23 The indicated data set is a duplicate data set and exists on more than one input volume.

24 The preallocated target data set was defined with a larger control area (CA) size than the source data set.

25 DFSMSdss cannot restore data sets with a volume serial of *MIGRAT*.

26 CVOL cannot be replaced.

27 Input/output block cannot be built because one or more of the following conditions exists:

- Ddname is not found.
- Ddname is a SYSIN or SYSPRINT.
- Device is not DASD.
- Device is not supported.
- Incorrect ranges are specified for DASD.

28 The catalog return code was unexpected.

29 No output volumes were available because one of the following conditions exists:

- There are no volumes in the output volume list that fulfill the requirements of the target volumes (that is, same or like device type).
- Not all volumes of a preallocated multivolume data set are included in the output volume list.
- An attempt is made to restore an unmovable data set while output volumes are specified without at least as much space as is required by each corresponding source volume.
- The volumes on which the preallocated VSAM clusters reside do not match the volumes listed in the catalog entry for the cluster. This can happen, for example, if the preallocated cluster is cataloged outside the standard order of search or is not cataloged at all, while another cluster with the same name is cataloged in the standard order of search.
- A VSAM data set was preallocated on the target volumes, but no catalog entry was found.

30 The volume serials of the preallocated, cataloged multivolume data set do not match those of the first volume.

31 The VSAM data set was preallocated on source volumes, but the catalog entry was not found.

32 Space on the output volumes was insufficient to restore the data set.

33 Allocation errors were unexpected.

34 Data set not processed. Catalog entry for an SMS-managed data set was found but there was no corresponding VTOC entry.

35 The VSAM define failed.

36 Processing of an integrated catalog facility user catalog is not supported when input volumes are specified (using one of the INDDNAME, INDYNAM, LOGINDDNAME, or LOGINDYNAM keywords).

37 The new name specified with RENAME or RENAMEUNCONDITIONAL already exists on the volume. The REPLACE parameter cannot be specified with the RENAME or RENAMEUNCONDITIONAL keywords. REPLACE is ignored if it is specified.

38 The VVR for a component of the data set was found, but no corresponding DSCB was found.

39 RENAME/RENAMEUNCONDITIONAL is not supported for unmovable data sets.

40 A nonexistent catalog is specified in the RECATALOG parameter, but the target data set is not SMS-managed.

41 During physical restore, the target volume is not SMS-managed, but one of the following situations occurs:

- The ACS routine returned an SMS storage class.
- The user specified BYPASSACS with STORCLAS.
- The user specified BYPASSACS without STORCLAS, but the source data set was SMS-managed.

42 The NOPACKING keyword was specified for the data set, but the preallocated target was on an unlike device.

43 During physical restore, the target volume is SMS-managed, but one of the following situations occurs:

- The ACS routine returned NULL storage class.

- The user specified BYPASSACS with NULLSTORCLAS.
- The user specified BYPASSACS without NULLSTORCLAS, but the source data set was not SMS-managed.
- The data set is not supported by SMS.

44 The source component is multivolume, and the preallocated target is either a different size or is now single volume.

45 The number of tracks on the preallocated target does not match the number of source tracks, and it is not the first part of a multivolume data set.

46 Allocation of resource failed because DFSMSdss used a utility to perform data movement. Processing ends.

47 Locate failed for a component of the VSAM cluster that was named in the message as the data set that was not processed (*dsname*).

48 The data set must be copied with a utility, but DFSMSdss is unable to use utilities.

50 DFSMSdss is unable to determine the number of blocks per track for the target device because of an invalid source data set blocksize.

56 The requested data set is a PDSE, but SMSX is not currently available or the PDSE cannot be allocated and accessed at this time.

58 The requested data set is a PDSE or an extended sequential data set, but the target volume selected is not SMS-managed. A PDSE or an extended sequential data set can reside only on SMS-managed volumes.

59 The source data set for the operation is SMS-managed and has extended attributes. Allocation has selected a target volume that is not SMS-managed. Since the data set is not renamed, the requested operation would cause the attributes to be lost.

60 The requested data set is a PDSE, HFS or an extended sequential data set, but there is a preallocated target data set that is a different type or has different attributes.

61 The requested data set is a physical sequential data set or partitioned data set (PDS), but there is a preallocated target that is an extended sequential data set or a partitioned data set extended (PDSE).

62 An attempt was made to restore an extended sequential data set either to a non-ESCON attached device or to a device whose controller does not support extended sequential data sets.

63 The source data set for the operation is SMS-managed and has extended attributes, and the target data set has the same name as the source but is not SMS-managed. The requested operation would cause the extended attributes to be lost. The preallocated data set cannot be used.

64 The source data set has extended attributes, but the target data set does not have extended attributes. The preallocated data set cannot be used.

65 The target data set has extended attributes, but the source data set does not have extended attributes. The preallocated target cannot be used.

66 The catalog shows the index component of the preallocated cluster to be multivolume, while the dump data set shows it to be a single volume.

67 The preallocated target for the restore of a keyrange data set (KRDS) is currently defined with a different number of keyranges than the source dump.

68 During a restore, one or more keyranges of the preallocated target of a KRDS have extents on the overflow volumes.

69 For a preallocated KRDS, the VTOC entry was not found on the volume indicated by the catalog entry for the data set.

70 Dynamic allocation failed for DFSMSdss export data set.

71 The SMS indicator in the VTOC entry is off, showing that the data set is not SMS, but the volume is SMS-managed.

72 DFSMSdss does not provide support to perform a logical copy on hierarchical file system (HFS) data sets.

73 Hierarchical file system (HFS) data sets cannot be restored to non-SMS volumes.

74 An attempt was made to restore a compressed data set to a device whose controller does not support compressed data sets.

75 All volumes of a multivolume data set were not included in the input volume list and SELECTMULTI was not specified. A list of volumes associated with the data set may be printed after this message as additional information to assist the user.

77 The data set would be unusable after a restore because of the relationship between the high allocated RBA of the VSAM source data set and the target data set.

80 The preallocated data set was unusable because of one of the following conditions:

- The attributes of the preallocated target do not match those of the source data set. The target data set is single volume, and the source data set is multivolume, or vice-versa.
- The target data set is not cataloged and has never been opened. Therefore, DFSMSdss cannot determine if it is single volume or multivolume.

82 An error occurred during CVAF VTOC access for the data set. Message ADR246E may accompany this message and provide more information.

83 An error was detected while attempting to process the sequence set VVR of a VSAM KSDS with an imbedded index.

Source: DFSMSdss

System Action: The return code is 8. The data set is not processed.

Application Programmer Response: Take the following action, depending on the reason code (*reason_code*):

0 Preallocate the data set with the size and location of the extents to match those on the source volume, or specify FORCE. Rerun the job.

1 Specify REPLACE and rerun the job.

2 Copy/Restore of unmovable/ABSTR/ISAM data sets is allowed only if the size and location of the extents match and the data set is preallocated. Initialize a new DASD volume with the VTOC extent matching the input logical volume, do a TRACKS COPY/RESTORE to copy the VTOC and TRACK 0, and do a data set COPY/RESTORE of the failing data set. Use the appropriate utility for the type of data set to move the data set from the scratch volume to the failing volume.

3 Take appropriate action according to the DADSM return code.

4 Acquire adequate authorization (RACF or password). If it is a checkpoint/restart or system data set, instruct the operator to allow the function to continue. You can also change the user authorization exit routine to allow access to the data set. Rerun the job.

5 Copy or restore the data set in the same environment in which it was created.

6 For a multivolume non-VSAM data set, the volume sequence number must match. For a VSAM data set, the beginning RBA of the data set on the volume must match.

7 If it is the same data set, use AMASPZAP to modify the DSORG field in VTOC entry. Rerun the job.

8 Correct the RENAME filter specification. Rerun the job.

9 Rerun the job when the data set is not in use or do not reference the data set in the same job as the DFSMSdss step.

10 Scratch the data set and rerun the job.

11 See return code 50 under message IDC3009.

12 Use a different backup copy to restore the data set.

13 Contact your system programmer.

14 If it is not a multivolume data set, delete the data set on DASD and resubmit the job. If it is a multivolume data set and a RESTORE in which the data set is not restored from the correct input logical volume, resubmit the job to restore from the proper logical volume. If it is a COPY, pass the proper input or output volumes and rerun the job.

15 See reason code number 14.

16 See reason code number 14.

17 See reason code number 14.

18 Specify REPLACE, RENAME, or RENAMEUNCONDITIONAL (RESTORE only) if it is a non-VSAM data set. Specify REPLACE if it is a VSAM data set.

19 Run the DIAGNOSE command of access method services to determine the error.

20 Delete the data set and redefine it.

21 For non-SMS-managed data sets, restore to the correct DASD volume, or use the LVOL parameter to restore from the correct logical volume. For an SMS-managed user catalog, specify the correct DASD volume in the OUTDD/OUTDY parameter, and ensure that the volume is in a Storage Class with the guaranteed space attribute.

22 Specify FORCE or free the corresponding location on the target volume, and rerun the job.

23 If it is a multivolume data set, correct *the last volume indicator* and *the volume sequence number* fields in the VTOC, or catalog the data set in the proper sequence in the appropriate catalog. Rerun the job.

24 Specify RENAME or RENAMEUNCONDITIONAL or delete the preallocated target data set, then rerun the job.

25 Recall the data set and retry the restore operation.

26 Delete the CVOL from the target volume, then rerun the job.

27 Take one or more of the appropriate actions listed below, then rerun the job:

- Ensure that a DDNAME statement is present in job step.
- Ensure that the ddname is not that of a SYSIN or SYSPRINT.
- Ensure that the device specified is a DASD.
- Ensure that the device is supported on the system.
- Ensure that the correct ranges are specified for DASD.

28 Refer to message ADR497E, printed before this message, and take the appropriate action.

29 Take one of the actions listed below; then rerun the job:

- Supply a new choice of output volumes.
- Ensure that the data set is cataloged and the catalog volumes and output volumes on which it is preallocated match.
- Restore as a movable data set by specifying the FORCE keyword.
- Supply the name of the catalog in which the preallocated cluster resides, either by using JOBCAT/STEPCAT or the RECATALOG keyword. If the preallocated target cluster is not cataloged in any catalog, then either catalog it or delete it.
- Ensure that the preallocated target data set is cataloged in the standard order of search.

30 Ensure that the correct target volumes for the multivolume data set are specified in the output DD statements, then rerun the job.

31 Ensure that a STEPCAT DD or a JOBCAT DD statement exists for the catalog with the VSAM data set on it. If a STEPCAT DD or JOBCAT DD statement already exists, ensure that it points to the correct catalog, then rerun the job.

32 Provide a different choice of output volumes, then rerun the job.

33 Provide a different choice of output volumes, then rerun the job.

34 Delete the catalog entry for the failing data set. Full volume dump/restore does not allocate data sets. However, it does restore all of the data tracks as well as the VTOC. Thus, full volume restore can be used to restore cataloged SMS-managed data sets with no corresponding VTOC entries.

35 Choose a different name for the target data set or specify REPLACE, then rerun the job.

36 Do not specify input volumes, then rerun the job.

37 Ensure that the new name specified with RENAME or RENAMEUNCONDITIONAL does not already exist on the volume. If the new name already exists, it must be deleted or another new name must be specified before retrying the command. REPLACE is ignored if RENAME or RENAMEUNCONDITIONAL is used.

38 Delete the VVR for the failing component, and rerun the job.

39 Specify REPLACE to replace the unmovable data set under the old name, and rerun the job.

40 Ensure that the catalog name is correct and available if the target data set is not SMS-managed, and rerun the job.

41 Specify either an SMS target or a NULLSTORCLAS.

42 Delete and reallocate the target partitioned data set on a like device, or rerun the job without specifying NOPACKING for the data set.

43 Specify a non-SMS target.

44 Delete the data set on DASD, and resubmit the job.

45 Delete the data set on DASD, and resubmit the job.

46 Rerun the job when the data set is not in use.

47 Identify components of the VSAM cluster and ensure that they are named and cataloged correctly.

48 See preceding error messages (for example ADR476E) for information as to why DFSMSdss is unable to use utilities. Take appropriate action as described for those messages.

50 Ensure that the source data set has a valid blocksize or preallocate a target data set with a valid blocksize. Specify the REPLACE keyword.

56 Ensure that SMSX is available and that the PDSE can be allocated and accessed on the system. Rerun the job.

58 Ensure that the target volume for the PDSE or extended sequential data set is SMS-managed, or do not select the PDSE or extended sequential data set.

59 Either rename the data set and allow the operation to proceed against the non-SMS-managed volume or modify ACS filtering in such a way as to cause the target data set to reside on SMS volumes.

60 Process the PDSE, HFS, or extended sequential data set using the RENAME or RENAMEUNCONDITIONAL keywords, or rename the preallocated target data set, or delete the preallocated target data set.

61 Process the physical sequential data set or PDS using the RENAME/RENAMEUNCONDITIONAL keywords, or rename the preallocated target data set, or delete the preallocated target data set.

62 Change the target volume for the restore to a device that is both ESCON attached and whose controller supports extended sequential data sets.

63 Data sets with extended attributes cannot reside on non-SMS managed volumes. Either delete the preallocated target or restore with rename to a new data set.

64 Either delete the preallocated target and allow the data set to be allocated by DFSMSdss, or restore with rename to a new data set.

65 Either delete the preallocated target and allow the data set to be allocated by DFSMSdss, or restore with rename to a new data set.

66 Ensure that the attributes of the source and the data set now cataloged with the same name match.

67 Take one of the following actions:

- Delete and redefine the data set with the proper number of keyranges.
- Delete the preallocated target and let DFSMSdss determine the number of keyranges.

68 Take one of the following actions:

- Delete and redefine the data set. A candidate volume is acceptable in the redefine, but will be retained only if the new definition has a primary extent sufficient to contain the primary and secondary extents, including those on the overflow volumes.
- Delete the preallocated target. DFSMSdss will restore the data set to the volumes from which it was dumped.

69 Take one of the following actions:

- Delete and redefine the data set to ensure that the catalog and VTOC entries match.
- Delete the preallocated target and let DFSMSdss restore the data set to the volumes from which it was dumped.

70 Determine the condition that caused the allocation to fail (for example, authorization failure, and so on), correct the error condition, and rerun the job. To bypass the problem, the user must define a generic profile with ‘HLQ.*’

71 Correct the VTOC entry and rerun the job.

72 Use a data set dump and restore or a full volume tracks physical copy to move a hierarchical file system (HFS) data set.

73 Ensure that the target volume for the HFS data set is SMS-managed, or do not select the HFS data set.

74 Change the target volume for the restore to a device whose controller supports compressed data sets.

75 Specify all of the volumes for the data set or specify SELECTMULTI(ANY) and resubmit the job.

77 Delete the preallocated target, rerun the job, and issue an IDCAMS DEFINE RECATALOG to get the restarted data set cataloged.

80 Take the appropriate action listed below, and rerun the job:

- Ensure that the attributes of the source and the preallocated target match.
- Either catalog the preallocated target, or open/close the preallocated target so that DFSMSdss can determine whether it is single volume or multivolume.

82 Contact your system programmer.

83 Contact your system programmer.

Operator Response: None.

System Programmer Response: On a RESTORE, dump the VTOC track records on the input that are at the beginning of the file.

ADR381E (*ttt*)-*mmmmm*(*yy*), ALL OUTPUT VOLUMES INACCESSIBLE. DATA SETS NOT PROCESSED

Explanation: The OUTDD subparameter is missing, or the output volume cannot be opened for a data set COPY or RESTORE. Message ADR307E might precede this message.

Source: DFSMSdss

System Action: The task ends. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR382W (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS WERE NOT PROCESSED FROM VOLUME *volume_serial_number* DUE TO ERRORS

Explanation: The data sets in the list were not processed. Other messages that precede this message identify the error.

Source: DFSMSdss

System Action: The return code is 4.

Application Programmer Response: Correct the problem according to preceding messages.

Operator Response: None.

ADR383W (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* NOT SELECTED

Explanation: The data set was not selected. This condition can occur for several reasons including:

- The fully qualified data set name did not pass the EXCLUDE, or BY filtering criteria.
- The data set name was specified more than once in the INCLUDE list.
- Logical input volumes were specified during DUMP or COPY, and DFSMSdss was unable to locate the catalog in which the data set resides.
- A VSAM data or index component name was incorrectly specified instead of the cluster name. DFSMSdss only processes VSAM data sets at the cluster name level.
- The data set has been migrated *(volser=migrat)*.
- The data set may not exist.
- A migrated or tape data set was not selected by using a partially qualified name and setting the flag to ON at offset `X'17'` of ADRPATCH
- A generation data group (GDG) data set was not selected using GDG relative generation filtering.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 4.

Application Programmer Response: Rerun the job after doing one of the following:

- Use the proper filtering criteria.
- Do not duplicate data set names in the INCLUDE list.
- Ensure any VSAM data sets to be processed are cataloged in the standard order of search.
- Ensure that VSAM cluster names were specified in the filtering criteria.
- If the data set you want is not cataloged, use the correct volume serial number. If you want to operate on the migrated data set, issue a DFSMShsm RECALL command for the data set.
- Verify that the data set still exists.

Operator Response: None.

System Programmer Response: If it is a RESTORE, print the VTOC track records on the dump tape.

ADR384E (*ttt*)-*mmmmm*(*yy*), UNCATALOG FAILED FOR *dsname* ON *volume_serial_number*, {*return_code* | *return_code-reason_code*}

Explanation: The UNCATALOG operation failed for the indicated data set. The return code (*return_code*) and reason code (*reason_code*), if any, are from the system uncatalog operation.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: See the CAMLST macro in the *DFSMS/MVS Managing Catalogs* for an explanation of return and reason codes, and take the appropriate action.

Operator Response: None.

ADR385E (*ttt*)-*mmmmm*(*yy*), CATALOG FAILED FOR *dsname* ON *volume_serial_number*, {*return_code* | *return_code-reason_code*}

Explanation: The CATALOG operation failed for the indicated data set. The return code from the system catalog operation is given in *return_code* and the reason code, if any, in *reason_code*.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: If you are using an integrated catalog facility catalog, see message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* manual for specific return code and reason code information. For return code 40 or 44, either change the DFSMSdss filtering to reduce the number of selected CVOL-cataloged data sets to fewer than 1455, or increase the region size if you are selecting fewer than 1455 data sets; then rerun the job. See the CAMLST macro in the *DFSMS/MVS Managing Catalogs* for an explanation of return and reason codes, and take the appropriate action.

If you are using an OS CVOL catalog, see the section on using catalog management macro instructions in *DFSMS/MVS DFSMSdfp Advanced Services* for an explanation of return and reason codes, and take the appropriate action.

Operator Response: None.

ADR386W (*ttt*)-*mmmmm*(*yy*), UNIT NAME *xxxx* OF LOGICAL VOLUME *volume_serial_number* DOES NOT MATCH ANY OUTPUT VOLUME DEVICE TYPE

Explanation: None of the output DASD volumes matched the device type of the source volume on the input file. The *xxxx* is the esoteric unit name. This message is also issued if you try to restore to an unlike device from a physical data set dump tape.

Source: DFSMSdss

System Action: Processing continues with the next source volume, if any, on the input file. The return code is 4.

Application Programmer Response: Supply the matching output DASD volume, and rerun the job. If you want to restore to an unlike device, use a logical data set dump tape.

Operator Response: None.

ADR387E (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING LOGICAL VOLUMES DID NOT PROCESS FROM DUMP FILE:

Explanation: The user requested a data set RESTORE from the listed logical volumes from the input file, but the logical volumes are not on the input file. A list of volume serials follows the message.

Source: DFSMSdss

System Action: The return code is 8.

Application Programmer Response: If no source volume was processed, use the correct RESTORE file or the correct source volume serial numbers, and rerun the job.

Operator Response: None.

ADR388W (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* NOT ON ANY VOLUME.

Explanation: The requested data sets are not on the source volumes on the input file. Either the wrong input file was used, an incorrect data set name was passed, or all the VSAM data sets or all the non-VSAM data sets were rejected because of the DSORG filtering criteria. This message is printed if fully qualified names are passed and there are no allocated data sets by that name on those volumes.

Source: DFSMSdss

System Action: The return code is 4.

Application Programmer Response: Correct the error, and rerun the job.

Operator Response: None.

ADR389E (*ttt*)-*mmmmm*(*yy*), INVALID INPUT ON DDNAME *ddname*, {INPUT DATA SET NOT PRODUCED BY DFDSS OR DFSMSdss | DATA SET RESTORE NOT FEASIBLE FROM TRACKS DUMP | VSAM DATA SET RESTORE NOT FEASIBLE FROM RELEASE 1 DUMP | ONLY VSAM DATA SETS ON INPUT | ONLY NONVSAM DATA SETS ON INPUT | FULL RESTORE NOT FEASIBLE FROM TRACKS OR DATA SET DUMP | EXPECTED INPUT RECORD NOT FOUND | INPUT VOLUMES MOUNTED OFF SEQUENCE} [RECORD SEQUENCE NUMBER: EXPECTED=*nnnnnnnn*- RECEIVED=*mmmmmmmm*]

Explanation:

- INPUT DATA SET NOT PRODUCED BY DFDSS OR DFSMSdss | DATA SET RESTORE NOT FEASIBLE FROM TRACKS DUMP | VSAM DATA SET RESTORE NOT FEASIBLE FROM RELEASE 1 DUMP | ONLY VSAM DATA SETS ON INPUT | ONLY NONVSAM DATA SETS ON INPUT | FULL RESTORE NOT FEASIBLE FROM TRACKS OR DATA SET DUMP

  Either the input is invalid for the type of RESTORE desired or the input was not produced by DFSMSdss. (For example, a dump tape was created using a data set DUMP and you tried to restore it via a full RESTORE. Or a dump tape was produced by DFSMSdss and subsequently copied by a utility other than DFSMSdss COPYDUMP, resulting in an unusable input data set.

- EXPECTED INPUT RECORD NOT FOUND

  Record read is not next in sequence. If COPYDUMP is being performed, the input data set may have missing records.

- INPUT VOLUMES MOUNTED OFF SEQUENCE

  If unlabeled tapes were used, they may have been mounted in the wrong sequence.

Source: DFSMSdss

System Action: The task ends. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Take the appropriate action, depending on the error, and rerun the job.

Operator Response: None.

ADR390I (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* WAS SCRATCHED FROM *volume_serial_number* BECAUSE OF UNMATCHED SIZE. IT WILL BE REALLOCATED.

Explanation: The movable data set's SIZE (in tracks) on the DASD volume was not equal to the data set SIZE on the tape. Because REPLACE was specified instead of RENAME or RENAMEUNCONDITIONAL (on RESTORE), the data set was scratched to allocate the extents mapped in the input logical volume.

Source: DFSMSdss

System Action: Operation continues. If allocation is feasible on this volume, message ADR396I follows this message. If allocation is not feasible on this volume, message ADR380E or ADR472E or both follow this message.

Application Programmer Response: If reallocation fails, preallocate the data set with adequate space, and rerun the job.

Operator Response: None.

ADR391E (*ttt*)-*mmmmm*(*yy*), RESTORE OF *dsname* REQUIRES OUTPUT VOLUMES

Explanation: The named data set was not cataloged when dumped. Because neither the dump catalog information nor the original source volumes are available for allocation, the output volumes must be specified to restore the data set.

Source: DFSMSdss

System Action: Processing ends for the data set. The return code is 8.

Application Programmer Response: Specify at least one output volume using OUTDD or OUTDYNAM, and rerun the restore.

Operator Response: None.

ADR392E (*ttt*)-*mmmmm*(*yy*), *dsname1* EXISTS ON *volume_serial_number* WITH NEWNAME *dsname2*

Explanation: Allocation of the data set using the name generated from the RENAME parameter (*dsname1*) was attempted, but a data set with the new name (*dsname2*) exists on the volume.

Source: DFSMSdss

System Action: Message ADR380E might follow this message. The return code is 8.

Application Programmer Response: Either scratch the existing data set with the name created from the RENAME parameter, or use another name in the RENAME parameter to generate a data set name that does not exist on the volume. Rerun the job.

Operator Response: None.

ADR393I **(***ttt***)-***mmmmm***(***yy***), ALIAS** *dsname* **RESTORED FOR USER CATALOG** *catalog_name*

Explanation: The user catalog alias was restored for the catalog.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR394W **(***ttt***)-***mmmmm***(***yy***), UNABLE TO ALLOCATE** *dsname* **ON** *volume_serial_number* **WITH NEWNAME** *dsname*

Explanation: Allocation of the data set using the name generated from the RENAME parameter was attempted, but the allocation failed.

Source: DFSMSdss

System Action: This message is preceded by another error message, indicating the reason for the failure. The return code is 4.

Application Programmer Response: Appropriate responses are listed under the preceding message.

Operator Response: None.

ADR395I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **ALLOCATE [AS A PDS] WITH NEWNAME** *dsname* **[, IN CATALOG** *catalog_name***], ON VOLUME(S): {***volume_serial_number* **|** *volume_serial_number_list***}**

Explanation: The data set has been allocated on the volume or volumes listed with the NEWNAME generated from the RENAME parameter. If the data set is a VSAM cluster, the catalog name may be listed as well. If the target data set of a PDSE is allocated as a PDS, the new target type is listed as well, and the data set is converted to the new target type.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR396I **(***ttt***)-***mmmmm***(***yy***), DATA SET {***dsname* **| CLUSTER** *cluster_name* **COMPONENT** *component_name***} ALLOCATED [AS A PDS][, IN CATALOG** *catalog_name***] , ON VOLUME(S): {***volume_serial_number* **|** *volume_serial_number_list***}**

Explanation: The data set has been allocated on the volume or volumes listed. If the data set is a VSAM cluster, the catalog name may be listed as well. If the target data set of a PDSE is allocated as a PDS, the new target type is listed as well, and the data set is converted to the new target type.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR397E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **NOT {COPIED | RESTORED}. DATA BLOCKSIZE OF** *block_size* **EXCEEDS TARGET DEVICE TRACK CAPACITY OF** *track_size***.**

Explanation: DFSMSdss allocated or located the target data set on a DASD device with the indicated track capacity (*track_size*). This was done because the block size of the source data set was less than the track capacity of the target device. However, during processing, DFSMSdss encountered a data block (*block_size*) from the source data set that was larger than the track capacity of the target device. The data block cannot be placed on the target device, so the DFSMSdss function fails for the data set.

This situation can occur only when the track capacity of the target device is less than that of the source device. DFSMSdss allocates to such a device only when target volumes of same, like, or larger track capacity are not specified or are specified but do not have space available.

Source: DFSMSdss

System Action: The specified data set is not processed. If DFSMSdss allocated the target data set, it is deleted. The return code is 8.

Application Programmer Response: Perform one of the following actions, and rerun the job:

- Provide DFSMSdss with a target DASD device with a track capacity large enough to contain the block size specified in the message, by using OUTDD or OUTDYNAM. Specify only target volumes that have a track capacity larger than the block size specified in the message. This includes volumes of the same or a like device type as the source and any volumes of a device type with a large track capacity. You must also eliminate the REPLACE keyword if a preallocated target is located on a device with a smaller track capacity than the block size indicated in the message.
- Preallocate a target data set on a volume with a track capacity large enough to contain the block size specified in the message. Specify the volume to DFSMSdss by using OUTDD or OUTDYNAM and use the REPLACE keyword to force DFSMSdss to use the preallocated target. The target device should meet the conditions specified in the preceding solution.
- Specify the REBLOCK keyword. If the source data set can be reblocked and the source data set logical record length is less than the target track capacity, DFSMSdss reblocks the data set as it is copied or restored. Certain data sets cannot be reblocked, so one of the solutions described above must be used. Whether or not the data set can be reblocked can be tested by specifying REBLOCK and rerunning. If the function fails again, use one of the preceding solutions.
- If you were performing a COPY, you can update the source VTOC entry to reflect the block size specified in the message by using AMASPZAP if you are authorized to use it. When the job is rerun, DFSMSdss will select a usable target volume based on the updated block size.

Operator Response: None.

ADR398W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **BLOCKSIZE OF** *block_size_1* **IS INCORRECT. LARGEST BLOCKSIZE IS** *block_size_2*

Explanation: While performing a COPY or RESTORE of the data set, DFSMSdss encountered at least one data block whose size (*block_size_1*) exceeded the maximum block size (*block_size_2*) specified in the VTOC. The data set is copied or restored with the block size intact. The largest block size found is indicated.

Source: DFSMSdss

System Action: Processing continues for the specified data set. The return code is 4.

Application Programmer Response: Take appropriate actions to correct this situation.

Operator Response: None.

ADR399I **(***ttt***)-***mmmmm***(***yy***), NO MESSAGE TEXT FOUND FOR MESSAGE ADR***nnn*

Explanation: DFSMSdss tried to issue message *nnn* but no message text was found.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR401W **(***ttt***)-***mmmmm***(***yy***), UNEXPECTED RETURN CODE** *return_code* **REASON CODE** *reason_code* **FROM UCBLOOK MACRO. VOLUME ON UCB** *dev* **IS MADE UNAVAILABLE.**

Explanation: UCBLOOK macro returned an unexpected return code (*return_code*) and reason code (*reason_code*) while DFSMSdss was trying to check for a duplicate volume serial number. See *OS/390 MVS System Codes* for the return and reason codes, which are in decimal. *dev* represents the device number.

Source: DFSMSdss

System Action: Processing continues. Volume on UCB *nnnn* is made unavailable. The return code is 4.

Application Programmer Response: This message is not normally expected and indicates a programming or system problem. Ensure that no duplicate volume serial number exists.

Operator Response: None.

ADR402E **(***ttt***)-***mmmmm***(***yy***), AUTHORIZATION CHECK FAILED FOR** *dsname***, [ON VOLUME** *volume_serial_number***,]** *reason_code***{IN CATALOG** *catalog_name***}**

Explanation: The authorization check failed for the indicated reason code, (*reason_code*). The possible reason codes are:

1 The operator specified *T* to message ADR369D, which denies access to one of the following:

- A checkpoint/restart data set
- A RACF data set on a non-RACF system
- A VVDS or VTOCIX data set or an integrated catalog facility-cataloged VSAM data set on a nonintegrated catalog facility system

or,

Input/output errors were encountered on the VTOC or VVDS.

2 RACF UPDATE authorization failed for the data set name.

3 RACF authorization checking failed under one of the following circumstances:

- ALTER to the data set to check if you are authorized to create the data set.
- DEFINE verification to check if you have CREATE authority.
- ALTER to the data set to check if you are authorized to delete the data set.
- ALTER to the data set to check if you are authorized to overwrite a protected data set on the target volume during a FULL or TRACKS operation.

4 RACF READ authorization failed for the data set name.

5 The user authorization exit (ADRUPSWD) rejected the volume serial number.

6 The user authorization exit (ADRUPSWD) rejected the data set name.

7 The password was not supplied for the data set name.

8 READ password was specified, but WRITE password was required.

9 The password was incorrect for the data set name.

10 An error occurred while the PASSWORD data set was being accessed.

11 OPEN failed while verifying the password for the VSAM data set.

12 Duplicate or missing cluster entries for the data set in the VVDS.

14-*xxx***-***yyy* The authorization check failed for the VSAM data set. The *xxx* and *yyy* are the return codes and reason codes from catalog services. See return code/reason code under message IDC3009I for an explanation.

DFSMSdss requires the VSAM data set to be cataloged to perform authorization checking.

15 The return code from the user authorization exit is invalid.

16 No access to the volume was passed.

17 Unable to acquire storage for catalog authorization checking.

18 A catalog error occurred during catalog authorization checking.

19 RACF UPDATE authorization failed for the data set's catalog.

20 One of the following occurred:

- RACF ALTER authorization failed for the data set’s catalog.
- RACF ALTER authorization failed for the source data set, and catalog authorization checking could not be performed because either the data set was not cataloged, or it was cataloged in a CVOL. You need either ALTER to the data set or READ to the data set and ALTER to the catalog when DELETE is specified.

21 Catalog authorization could not be performed because the catalog's volume serial number could not be obtained.

22 Data set authorization could not be performed because the volume serial number of the VSAM data set's catalog could not be obtained.

23 Unable to acquire storage for data set authorization check.

24 The data set's catalog could not be found.

25 A catalog error occurred while attempting to locate the volume serial number of the data set's catalog.

26 DFSMSdss internal error. The catalog name was not available for VSAM data set authorization checking.

32 One of the following conditions occurred:

- Permanent error while reading the VTOC, VVDS, or the password data set and the operator denied permission to continue
- Unable to get the storage required
- Permanent error on the password data set.

Source: DFSMSdss

System Action: Other messages indicate the actions taken for the various conditions. The return code is 8.

Application Programmer Response: For reason code 14, see return code/reason code under message IDC3009I. For reason code 26, contact your IBM Support Center. For all other reason codes, correct the situation and rerun the job. (For codes 2, 3, 4, 19, and 20, authorization may have failed because of other attributes, for example, SECLEVEL).

Operator Response: To bypass authorization checking, see ADMIN keyword in the *DFSMS/MVS DFSMSdss Storage Administration Reference*.

ADR403E **(***ttt***)-***mmmmm***(***yy***), VOLUME** *volume_serial_number* **CANNOT BE PROCESSED DUE TO AN ERROR IN EXPIRATION DATE CHECKING FOR (DATA SET** *dsname* **| VSAM COMPONENT** *component_name***) (IN CLUSTER** *cluster_name***),***reason_code*

Explanation: The data set has an unexpired date, or an error was encountered during checking of the expiration date. To bypass expiration date checking, specify the PURGE keyword. The reason codes (*reason_code*), are:

1 The data set has an unexpired date.

2 Insufficient storage was available to build internal DFSMSdss control blocks.

3 Duplicate or missing cluster entries for the data set in the VVDS, or the VSAM data set is not cataloged.

4 An error occurred in building DFSMSdss internal control blocks.

5 Either the volume has no VVDS or the VSAM cluster is not cataloged in an integrated catalog facility catalog.

6 A catalog error occurred.

Source: DFSMSdss

System Action: The volume is not processed. The return code is 8.

Application Programmer Response: Depending on the reason code (*reason_code*), take the following action:

1 Change the expiration date on the data set or specify the PURGE keyword to overwrite the unexpired data set.

2 Increase the region size and rerun the job or specify the PURGE keyword to bypass expiration date checking.

3 Correct the catalog entry or specify the PURGE keyword to bypass expiration date checking.

4 Contact your IBM Support Center.

5 Ensure that there is a VVDS on the volume and that the cluster is cataloged in an integrated catalog facility catalog or specify the PURGE keyword to bypass expiration date checking.

6 Refer to message ADR402E for additional information, or specify the PURGE keyword to bypass expiration date checking.

Operator Response: None.

ADR404E **(***ttt***)-***mmmmm***(***yy***), COMMAND NOT ALLOWED ON AN OPEN CATALOG, CATALOG** *catalog_name*

Explanation: A COPY or RESTORE of a catalog is not allowed on an open integrated catalog facility catalog.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Run the job when the catalog is not active on the system.

Operator Response: None.

ADR405E **(***ttt***)-***mmmmm***(***yy***), DYNAMIC ALLOCATION OF {A TEMPORARY DATA SET [ON VOLUME** *volume_serial_number***] | DATA SET** *data_set_name* **[ON VOLUME** *volume_serial_number***] | VOLUME** *volume_serial_number***} FAILED. ERROR CODE** *error_code***. INFORMATION CODE** *information_code.* **[MESSAGES FOLLOW:]**

Explanation: DFSMSdss attempted to dynamically allocate the indicated dataset or volume and failed. *error_code* and *information_code* are returned by dynamic allocation and listed in the *OS/390 MVS Programming: Authorized Assembler Services Guide.* Error code `X'049C'` can result if the volume is online and not mounted. An undocumented error code can be displayed if an installation-wide validation exit is used to deny allocations for dynamic allocation but fails to get the reason code returned by dynamic allocation. If any additional messages are returned by dynamic allocation, they will follow this message.

System Action: If the failure was for a volume, the task or volume is bypassed. If the failure was for a data set, the data set is bypassed. The return code is 8.

Application Programmer Response: Correct the problem indicated by the error and information codes listed in the *OS/390 MVS Programming: Authorized Assembler Services Guide*.

Operator Response: None.

ADR406E **(***ttt***)-***mmmmm***(***yy***),** *dsname* **CANNOT BE RESTORED FROM** *ddname*

Explanation: The specified data set, *dsname*, cannot be restored from the logical dump data set assigned by *ddname*. This situation occurs when you attempt to restore one of the following:

- An indexed sequential data set
- A CVOL to an unlike device
- A direct data set to an unlike device with a target track capacity smaller than the source track capacity without specifying the FORCE keyword.

Source: DFSMSdss

System Action: The indicated data set is not restored. The return code is 8.

Application Programmer Response: If the data set is an indexed sequential data set or a CVOL, rerun the job, specifying a like device type as the target of RESTORE. If the data set is a direct data set, specify the FORCE keyword and rerun the job.

Operator Response: None.

ADR407E **(***ttt***)-***mmmmm***(***yy***), UNABLE TO FIND MODEL VOLSER FOR MODEL ENTITY {** *mentity* **|** *catalog_name***}**

Explanation: The model entity name (*mentity*) supplied was not found in the standard catalog search order or is a VSAM data set cataloged in a nonintegrated catalog facility VSAM catalog (*catalog_name*).

Source: DFSMSdss

System Action: The COPY or RESTORE is ended. The return code is 8.

Application Programmer Response: Verify that the spelling is correct for the MENTITY supplied and that it is cataloged in one of the catalogs used in the standard catalog search order; or ensure that the MENTITY is not cataloged in a VSAM catalog. Then rerun the job.

Operator Response: None.

ADR408E **(***ttt***)-***mmmmm***(***yy***), LOCATE FAILED FOR CATALOG** *catalog_name*

Explanation: An error occurred in attempting to locate the volume serial number of the catalog name containing the VSAM model entity (MENTITY) entry.

Source: DFSMSdss

System Action: The COPY or RESTORE is ended. The return code is 8.

Application Programmer Response: Use IDCAMS to define the catalog specified in this message, and rerun the job.

Operator Response: None.

ADR409E **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **HAS PRE DFP310 VVRS WHICH ARE INCOMPATIBLE WITH SMS**

Explanation: Cluster was created by a version of DFP prior to DFP 3.1.0. Therefore, the VVRS for the cluster do not contain all the fields necessary for SMS, even though an SMS subcell was added to the VVRS.

Source: DFSMSdss

System Action: The volume is left in its initial status. The return code is 8.

Application Programmer Response: REPRO the data out of the data set, delete the data set, then recreate the data set on DFP version 3.1.0 or later system. If you have a large number of these data sets, contact your IBM Support Center.

Operator Response: None.

ADR410E **(***ttt***)-***mmmmm***(***yy***), DATA SET {***dsname* **|** *cluster_name* **COMPONENT** *component_name***} [IN CATALOG** *catalog_name***] ON VOLUME** *volume_serial_number* **FAILED SERIALIZATION FOR DELETE**

Explanation: Copy with DELETE specified requires exclusive access to the data set to be deleted. When the data set being copied is to be renamed, either source or target data set being used will cause copy to fail and this message to be issued. The data set identified in the message represents either the source or target data set that is in use.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Rerun the job when the data set is not in use by other users or increase the WAIT parameters.

Operator Response: None.

ADR411W **(***ttt***)-***mmmmm***(***yy***), DATA SET {***dsname* **|** *cluster_name* **COMPONENT** *component_name***} [IN CATALOG** *catalog_name***] ON VOLUME** *volume_serial_number* **WAS NOT SERIALIZED ON REQUEST**

Explanation: An ENQ(EXCLUSIVE), ENQ(SHARE), or dynamic allocation with DISP=OLD or SHR failed after a specified (or defaulted) number of retries. TOL(ENQF) was specified by the installation-wide exit or by the user.

Source: DFSMSdss

System Action: If you were doing a COPY and DFSMSdss is moving the data itself, the data set is processed without the enqueue, and the return code is 4. If you were doing a COPY and DFSMSdss invokes a utility to move the data, the data set is not processed further, and the return code is 8. If you were doing a data set DUMP, the data set is processed without the enqueue, and the return code is 4. If you specified RESET on the data set dump, the data set is processed, but the data set changed indicator is not reset in the data set's VTOC entry.

Application Programmer Response: None.

Operator Response: None.

ADR412E **(***ttt***)-***mmmmm***(***yy***), DATA SET {***dsname* **|** *cluster_name* **COMPONENT** *component_name***} [IN CATALOG** *catalog_name***] ON VOLUME** *volume_serial_number* **FAILED SERIALIZATION**

Explanation: An ENQ(EXCLUSIVE), ENQ(SHARE), or dynamic allocation with DISP=OLD or SHR failed after a specified (or defaulted) number of retries. TOL(ENQF) was not specified by the user.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Rerun the job when the data set is not in use by other users. You can increase the WAIT parameters, and if you are not using the COMPRESS command to compress a PDS, you can specify TOL(ENQF).

Operator Response: None.

ADR413E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **ON VOLUME** *volume_serial_number* **WAS NOT {DELETED | UNALLOCATED,} {***xx* **|** *xx-yyyy* **:** *zzzz***}**

Explanation: The data set cannot be scratched, uncataloged, or unallocated via dynamic allocation. The error codes (*xx*) are:

0	dynamic allocation installation-wide validation routine denied the request. The reason code is *zzzz*.
1	dynamic allocation information error code is *yyyy*. The reason code is *zzzz*. The codes are explained in *OS/390 MVS Programming: Assembler Services Guide*.
2	IEFAB4C3 was called to release data set integrity but it failed.
3	The "DELETE NVR (non-VSAM record)" function failed for an uncataloged, non-VSAM data set.
4	The delete VVR of a component of an uncataloged AIX failed. The reason for the failure can be found in the preceding ADR497E message.

Source: DFSMSdss

System Action: The return code is 8.

Application Programmer Response: Scratch the data set by other means.

Operator Response: None.

ADR414E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **ON VOLUME** *volume_serial_number* **NOT SCRATCHED, {***xx* **|** *xx-yy,zzz***}**

Explanation: The data set cannot be scratched. The error codes (*xx*) are:

0	DEQ on the data set failed.
1	The initiator enqueued the data set.
2	The scratch failed. The *yy* is the return code or status code. The *zzz* is the reason code from DADSM SCRATCH, as described in *DFSMS/MVS DFSMSdfp Advanced Services*.

Source: DFSMSdss

System Action: The return code is 8.

Application Programmer Response: Scratch the data set by other means.

Operator Response: None.

ADR415W **(***ttt***)-***mmmmm***(***yy***), NO DATA SETS WERE COPIED, DUMPED, OR RESTORED FROM {ANY VOLUME | VOLUME** *volume_serial_number* **| LOGICALVOLUME** *volume_serial_number***}**

Explanation: A data set COPY, data set DUMP, or data set RESTORE did not select any data sets. One of the following applies:

- No data sets matched the filtering criteria.
- Data sets matched the filtering criteria but failed serialization or authorization and were not processed.
- Permanent I/O errors occurred on the output tape during the DUMP process.

Source: DFSMSdss

System Action: If I/O errors occurred on output during DUMP, the return code is set to 16; otherwise, it is set to 4. If there were no I/O errors, and if the failure was on one volume, other volumes will be processed.

Application Programmer Response: When input volumes are specified, ensure that all components of a cluster and all pieces of a multivolume data set are contained on the input volumes. Change filtering criteria, add a STEPCAT, or specify different input volumes, then rerun the job.

Operator Response: None.

ADR416E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **[IN CATALOG** *catalog_name***] WAS NOT DELETED,** *reason_code*

Explanation: The data set was not deleted. The reason code, (*reason_code*) is as follows:

0	It is a VSAM data set. DFSMSdss does not support DELETE for VSAM data sets during a physical data set dump.
1	I/O or other errors, such as authorization or enqueue failure, occurred on the data set, or no catalog entry was found for the data set.
2	Either the data set is not a single-volume data set, or it cannot be determined if the data set is single volume or multivolume and it is not presently cataloged.
3	The data set was not enqueued by DFSMSdss. If the data set being processed is an HFS, then the data set was quiesced by DFSMSdss, but it was already mounted by another application so it could not be deleted.
4	The data set was not processed. (It is probably an empty data set.)
5	The data set has not expired by the expiration date. If this return code is received for a data set COPY, the dsname appearing in the message is a temporary name that DFSMSdss generated to properly name the data set on the target volume. You must now delete the data set with the temporary name from the source volume.

Source: DFSMSdss

System Action: The data set is not deleted. The return code is 8.

Application Programmer Response: Delete the data set by other means. For reason code 5, specify PURGE to delete the unexpired data set.

Operator Response: None.

ADR417W **(***ttt***)-***mmmmm***(***yy***), COPY/RESTORE OF DATA SET** *dsname* **IS INCOMPLETE,** *reason_code*

Explanation: The data set was copied or restored. However, errors occurred during processing; or the data tracks were not copied or restored because the VTOC entry could not be reset; or the RACF indicator could not be set for the data set. The reason code, (*reason_code*) is as follows:

0	The protected data set was copied or restored, but definition of the RACF discrete profile failed.
1	The data set was copied or restored, but the VTOC entry cannot be retrieved for updating.
2	The data set was copied or restored but errors occurred while the VTOC entry was being updated.
3	For physical data set RESTORE, the data set is restored but I/O errors occurred on one or more tracks of the data set (resulting from errors during dump). For logical data set RESTORE and data set COPY, no further data is copied or restored. If the data set was not preallocated, it is deleted.

4 A RACF-protected data set was copied or restored to a system that does not support RACF.

5 The data set was not copied or restored because the VTOC entry cannot be retrieved to set the RACF indicator or be updated for the data set. This return code may indicate that the VTOC entry describing the characteristics of an indexed sequential data set on DASD does not exist.

6 The data set was not copied or restored because errors occurred while the VTOC entry was either being rewritten to reset the RACF indicator or being updated for the data set.

7 The target VSAM data set cannot be protected with a discrete RACF profile because it was not renamed, the target catalog resides on the same volume as the source catalog, and a discrete RACF profile already exists for the source data set.

8 The data set was not restored because a track overflow record was found in the data set.

9 During restore of an indexed VSAM data set, DFSMSdss could not obtain the dump record count stored in the dump data set. Message ADR788I provides the number of records processed by restore.

11 Restore of the data set failed because it was not dumped successfully.

12 Extended attributes were expected but not found for the source data set.

13 A failure occurred while adding extended attributes to the target data set.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: Take the following action, depending on the reason code (*reason_code*):

0 Define the data set to RACF.

1 Use AMASPZAP to reset the relevant fields in the VTOC entry for the data set, or scratch the data set and rerun the COPY or RESTORE.

2 See reason code 1.

3 On input errors, restore the data set from a backup copy. On output errors, take corrective action recommended in your site, and rerun the job.

4 Password-protect the data set.

5 Use AMASPZAP to reset the RACF indicator, and rerun the job.

6 Correct the problem for the system I/O error message that precedes this message, and rerun the job.

7 The data set does not have the RACF indicator set. If the source data set was deleted, define the target data set to RACF. If the source data set was not deleted, you can define the target data set to RACF with a generic profile. However, in an always call (RACF 1.5 or greater) environment, the data set is protected by the discrete RACF profile.

8 Specify REBLOCK(dsname) on the RESTORE command and rerun the job.

9 Determine if all records are restored. Contact your IBM Support Center.

11 Refer to the messages issued during the dump.

12 Either remove the Extended Attributes indicator from the Format 1 DCSB or add Extended Attributes to the data set.

13 See previous message ADR231E for additional information.

Operator Response: None.

ADR418I **(***ttt***)-***mmmmm***(***yy***), THE FOLLOWING COMPONENTS FOR CLUSTER** *cluster_name* **ON** *volume_serial_number* **MAY HAVE TO BE CATALOGED IN CATALOG** *catalog_name*

Explanation: The cluster that did not exist on the volume was copied or restored to the volume. VTOC and VVDS entries were created on the volume for the cluster. If the indicated catalog does not have entries for the cluster, you must recatalog the cluster before accessing the data set.

Source: DFSMSdss

System Action: None.

Application Programmer Response: Use the access method services DEFINE RECATALOG command to recatalog the components and cluster in the indicated catalog before accessing the data set.

Operator Response: None.

ADR419W **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **IN CATALOG** *catalog_name* **ON DASD WITH {INHIBIT UPDATE | OPEN} INDICATOR WILL BE COPIED OR RESTORED**

Explanation: A fully qualified name was passed for the data set. It is copied or restored although it has the indicated condition. The inhibit-update indicator means that the data set is a read-only copy of a data set. Open-for-update means that the data set was in the OPEN status. Either it was not closed correctly or it was in use by another job on the same processing unit.

Source: DFSMSdss

System Action: If the data set had the inhibit-update indicator in the VVR, this indicator is left on. If the data set had the OPEN indicator, this indicator is reset. If the input copy had the OPEN indicator, this is carried over to output DASD. The return code is 4.

Application Programmer Response: If message ADR411W accompanies this message, the data set was in use when the COPY or RESTORE was done. The data set on the target volume may therefore be invalid. Reprocess the data set without specifying TOL(ENQF).

Operator Response: None.

ADR420E **(***ttt***)-***mmmmm***(***yy***), {VVDS | VTOCIX} DATA SET CANNOT BE RESTORED WITH {OTHER VSAM | ANY OTHER} DATA SET(S)**

Explanation: Restore of the VVDS data set is not allowed with restore of other VSAM data sets from the same logical volume. Restore of the VTOCIX data set is not allowed with restore of other data sets from the same logical volume.

Source: DFSMSdss

System Action: The volume is not processed. The return code is 8.

Application Programmer Response: If the VVDS data set and other VSAM data sets need to be restored from the same input logical volume, rerun the job by passing two RESTORE commands. Restore the VVDS on the first RESTORE command, and restore other VSAM data sets on the second RESTORE command. If VTOCIX data set and other data sets need to be restored from the same input logical volume, rerun the job by passing two RESTORE commands. Restore the VTOCIX on the first RESTORE command, and restore other data sets on the second RESTORE command. The return code is 8.

Operator Response: None.

ADR421E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **NOT PROCESSED, FULLY QUALIFIED NAME NOT PASSED,** *reason_code*

Explanation: A fully qualified name was not passed for a data set COPY, DUMP, or RESTORE. The reason code (*reason_code*) can be:

1 For a VVDS during RESTORE

2 For a catalog during COPY, DUMP, or RESTORE

3 For a read-only data set during COPY or RESTORE

4 For a data set that has the open-for-update indicator during DUMP, COPY, or RESTORE. For RESTORE, the preallocated target data set has the open-for-update indicator on.

5 For the VTOCIX data set during RESTORE

6 For a fully qualified cluster name not passed when only the index component exists on the volume

7 For the VIO journaling data set during RESTORE

8 For a multivolume data set during DUMP.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Resubmit the job by passing the fully qualified name.

Operator Response: None.

ADR422I **(***ttt***)-***mmmmm***(***yy***), LOGICAL VOLUME** *volume_serial_number* **BYPASSED BECAUSE IT ONLY HAS {VSAM | NON-VSAM} DATA SETS**

Explanation: The requested type of data sets is not on the logical volume.

Source: DFSMSdss

System Action: The volume is bypassed. Data set RESTORE continues with other logical volumes.

Application Programmer Response: None.

Operator Response: None.

ADR423W **(***ttt***)-***mmmmm***(***yy***), SELECTED DATA SET** *dsname* **IS A MULTIVOLUME DATA SET**

Explanation: A fully qualified name was passed in the INCLUDE parameter of a data set DUMP or RESTORE command. This is a multivolume data set. The data set from all of the volumes might not have been processed.

Source: DFSMSdss

System Action: The return code is 4.

Application Programmer Response: Make sure that the entire data set from all of the volumes on which it resides was processed. If not, rerun the job by passing the LVOL parameter and corresponding DASD volumes to process the entire data set.

Operator Response: None.

ADR424E **(***ttt***)-***mmmmm***(***yy***), AN ERROR OCCURRED WHILE RETRIEVING {VVDS | VTOCIX} EXTENTS FROM VOLUME** *volume_serial_number***,** *error_code*

Explanation: DADSM OBTAIN returned an error code (*error_code*) while the VVDS or VTOC extents were being retrieved from the indicated volume. See *DFSMS/MVS DFSMSdfp Advanced Services* for an explanation of the OBTAIN error codes.

Source: DFSMSdss

System Action: If it is a data set COPY or DUMP, the volume is bypassed. The command is ended on a data set RESTORE. The return code is 8.

Application Programmer Response: Take corrective action for the error, and rerun the job.

Operator Response: None.

ADR425E **(***ttt***)-***mmmmm***(***yy***), CONFLICTING BY CRITERIA SPECIFIED**

Explanation: Either VSAM and non-VSAM data sets were not wanted or VSAM data set processing was not supported on the system.

Source: DFSMSdss

System Action: The command ends. The return code is 8.

Application Programmer Response: Correct the BY criteria in the command, and rerun the job.

Operator Response: None.

ADR426W **(***ttt***)-***mmmmm***(***yy***), EXTENT 1 SIZE OF OUTPUT PARTITIONED DATA SET** *dsname* **IS SMALLER THAN EXTENT 1 SIZE OF INPUT**

Explanation: The first extent of a target partitioned data set is smaller than the one that existed in the source data set. For partitioned data sets, the directory must be in the first extent. This message is issued because DFSMSdss cannot determine the size of the directory to verify that it can fit in the first allocated extent.

Source: DFSMSdss

System Action: The data set is copied or restored. The return code is 4.

Application Programmer Response: Check that the directory is in the first extent. Do this by running IEHLIST with the LISTPDS option. If the members cannot be listed, scratch the data set and try to obtain a larger contiguous extent by running DEFRAG, then rerun the copy or restore job.

Operator Response: None.

ADR427E **(***ttt***)-***mmmmm***(***yy***), ERROR IN {VVDS | VVDS IMAGE} ON {VOLUME | LOGICAL VOLUME}** *volume_serial_number* **WHILE ACCESSING COMPONENTS OF CLUSTER** *cluster_name* **IN CATALOG** *catalog_name*

Explanation: DFSMSdss found errors while retrieving components for the cluster. Some components cannot be located for the cluster in the VVDS or VVDS image, or, if it was a RESTORE, the VVDS was not dumped successfully during a full volume DUMP. Inconsistencies exist in the VVRs, or the VVRs have invalid formats.

Source: DFSMSdss

System Action: The data set is not copied, dumped, or restored. The return code is 8.

Application Programmer Response: If it is a RESTORE, use a different backup copy of the data set, and rerun the job. Otherwise, run access method services DIAGNOSE against the data set to determine the nature of the error, and take the action recommended.

Operator Response: None.

ADR428E (*ttt*)-*mmmmm*(*yy*), VTOC ENTRIES NOT FOUND FOR CLUSTER *cluster_name* **IN CATALOG** *catalog_name* **ON {VOLUME** *volume_serial_number* **| LOGICAL VOLUME** *volume_serial_number***}**

Explanation: VTOC entries are missing for one or more components of the cluster on the volume. For a logical volume, the error is in the source volume and was not detected during DUMP.

Source: DFSMSdss

System Action: The VSAM cluster is not processed. Processing continues with the next data set. The return code is 8.

Application Programmer Response: If the error occurs on the source volume of a restore operation (the message specifies “LOGICAL VOLUME”), use a previous backup copy and resubmit the job. Otherwise, run the access method services DIAGNOSE to detect the error and take the recommended actions.

Operator Response: None.

ADR429W (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* **WAS RESTORED TO AN SMS-MANAGED VOLUME BUT IT WAS NOT CATALOGED BECAUSE THE CATALOG KEYWORD WAS NOT SPECIFIED**

Explanation: The named non-VSAM data set was restored to an SMS-managed volume. Because the catalog keyword was not specified on the RESTORE command, DFSMSdss did not catalog the data set when it was restored.

Source: DFSMSdss

System Action: The data set is restored. The return code is 4.

Application Programmer Response: You must catalog the data set before it can be accessed because it is now under SMS management.

Operator Response: None.

ADR430E (*ttt*)-*mmmmm*(*yy*), ERROR IN CLUSTER *cluster_name* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number*

Explanation: A failure occurred during definition of the cluster components in the VVDS or VTOC during a data set COPY or RESTORE.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Run access method services DIAGNOSE on the data set on the volume, and take the appropriate action before rerunning the job.

Operator Response: None.

ADR431I (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* **[IN CATALOG** *catalog_name***] HAS BEEN DELETED**

Explanation: The data set was deleted on user request.

Source: DFSMSdss

System Action: The data set was deleted from the volume.

Application Programmer Response: If the data set was cataloged, it must be uncataloged by using other utilities.

Operator Response: None.

ADR432E (*ttt*)-*mmmmm*(*yy*), VVR FOR COMPONENT *component_name* **[IN CATALOG** *catalog_name***] IS IN ERROR**

Explanation: A VVR cell (for example, a data set information cell, AMDSB cell, or volume information cell) cannot be located in the VVR for the component in the VVDS or VVDS image (input to data set RESTORE). The format of the VVR may be in error.

Source: DFSMSdss

System Action: If possible, DFSMSdss continues to process the data set to which the component belongs. Other messages indicating the affected cluster that is not processed accompany this message. The return code is 8.

Application Programmer Response: If the failure is on a VVDS on DASD, run access method services DIAGNOSE to determine the nature of the error, and take the recommended action. If it is the input to the RESTORE, use a previous backup copy to restore the data set.

Operator Response: None.

ADR433E (*ttt*)-*mmmmm*(*yy*), LOGICAL ERROR IN BUFFER ON TRACK *cchh*

Explanation: A logical error was discovered in the track data after it had been read into the buffer and before writing it to DASD. The length of the track data does not match the sum of the count, key, and data fields of all records on the track in the buffer. This problem can arise if the track was not reconstructed correctly by DFSMSdss during the RESTORE or if the track was not written correctly during the DUMP or, similarly, during a COPY.

Source: DFSMSdss

System Action: The track is not processed. The return code is 8.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR434E (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* **[IN CATALOG** *catalog_name***] WAS NOT UNCATALOGED,** *reason_code*

Explanation: The data set was not uncataloged for one of the following reason codes, (*reason_code*):

0 It is a VSAM data set. (DFSMSdss does not support UNCATALOG for VSAM.)

1 I/O or other errors, such as authorization or enqueue failure, occurred on the data set, or no catalog entry was found for the data set.

2 Either the data set is not a single-volume data set, or it cannot be determined if the data set is single volume or multivolume and it is not presently cataloged.

3 The data set was not enqueued by DFSMSdss.

4 The data set was not processed. It is probably a null data set.

5 It is an SMS-managed data set. UNCATALOG is ignored for SMS-managed data sets.

6 The DELETECATALOGENTRY keyword was specified to uncatalog the phantom catalog entry, but the operation failed. See the preceding ADR497E and IDC3009I for the reason for the failure.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: Uncatalog the data set by other means.

Operator Response: None.

ADR435E (*ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **WAS NOT CATALOGED**

Explanation: The data set was not cataloged because either the data set is not a single-volume data set, or it cannot be determined whether the data set is a single-volume or multivolume data set, or an attempt to catalog the data set failed (for example, there is a duplicate entry).

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: Catalog the data set by other means.

Operator Response: None.

ADR436E (*ttt***)-***mmmmm***(***yy***), LOGICAL ERROR IN BUFFER ON VOLUME** *volume_serial_number***, TRACK** *cchh*

Explanation: A logical error was found in the track data after it had been read into the buffer and before writing it to tape.

Source: DFSMSdss

System Action: The track is not processed. The command is ended. The return code is 8.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR437E (*ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **[IN CATALOG** *catalog_name***] CANNOT BE {OPENED | CLOSED}** *return_code reason_code*

Explanation: The specified cluster cannot be opened or closed for VSAM I/O processing. VSAM responded with a return code and a reason code after processing had failed.

Source: DFSMSdss

System Action: The indicated data set is not restored. The return code is 8.

Application Programmer Response: Use *DFSMS/MVS Macro Instructions for Data Sets* to identify the problems indicated by the return code and the reason code. Take corrective actions, and rerun the job.

Operator Response: None.

ADR438E (*ttt***)-***mmmmm***(***yy***), VSAM I/O FAILED FOR** *cluster_name return_code reason_code*

Explanation: VSAM I/O processing failed for the specified cluster name. The failure could have been caused by VSAM growing during restore processing. VSAM provided a return code and a reason code after processing had failed.

Source: DFSMSdss

System Action: The indicated data set is not restored. The return code is 8.

Application Programmer Response: Use *DFSMS/MVS Macro Instructions for Data Sets* to identify the problems indicated by the return code and the reason code. Take corrective actions, then rerun the job. If the failure was caused by VSAM growing during restore processing, use FREESPACE (0,0) and allow more room for the data set to be restored to. For large VSAM data sets, do not use the NOVALIDATE keyword at dump time.

Operator Response: None.

ADR439E (*ttt***)-***mmmmm***(***yy***), PREALLOCATED DATA SET** *dsname* **WAS SELECTED BUT IS NOT USABLE,** *reason_code*

Explanation: DFSMSdss found a preallocated data set but determined that it was unusable for the following reason, (*reason_code*):

04 The preallocated cluster type does not match the source cluster type. Either the organization (indexed, numbered, linear) of the clusters or one of the following cluster attributes does not match:

- Extended format
- Compressible
- Extended addressable

08 An alternate index (AIX) is defined over the preallocated cluster.

12 The source data RECORDSIZE is incompatible with the target CISIZE and control area (CA) size attributes.

16 The preallocated target relative key position or key length is not equal to the source cluster values.

20 The preallocated keyed VSAM cluster is not empty or REUSABLE.

24 The preallocated KSDS KEYRANGES do not match those of the source cluster.

28 The index component of the preallocated target cluster does not have sufficient allocated space for the source index component.

32 At least one data component of the preallocated target cluster does not have sufficient allocated space for the corresponding source data component.

40 At least one component of the preallocated target cluster spans volumes.

44 An update of the target VTOC entry failed. The target must be updated to make the target data set look empty if a utility will do the data transfer.

48 The VSAM data set must be copied with utilities, which requires that both the source and the target data sets be cataloged in the standard order of search. However, because they both have the same name, this is not possible.

52 The preallocated, unmovable data set is not on the same or a like device type as the source data set.

56 The preallocated DSORG is not equal to the target DSORG.

60 The preallocated data set space is insufficient. This may occur when a non-preallocated partitioned-organized (PO) data set is copied without the ALLDATA keyword, and a second copy is attempted to the data set preallocated by the previous copy.

64 The preallocated PDS has an insufficient number of directory blocks to contain the source directory.

68 The preallocated data set checking could not be completed.

72 The preallocated data set extents do not match the source data set extents, and the source is an unmovable data set.

76 The direct data set cannot be preallocated to an unlike device type.

80 The preallocated data set has no SUL extent.

84 The preallocated SUL data set has only one extent.

88 An I/O error was encountered on the directory of the preallocated partitioned data set.

92 The data set being restored is a PDS with no directory blocks and cannot be restored to a preallocated data set.

96 The preallocated sphere does not match the source sphere.

97 The stripe attributes of the target and source data sets do not match.

98 The data set is an extended sequential data set (SAM striped).

100 The preallocated data set is unusable because the source block size is greater than the target device track capacity.

104 The NOPACKING keyword was specified for the data set, but the preallocated target was on an unlike device.

108 The high-used page value (HURPN) of the preallocated PDSE cannot be retrieved. DFSMSdss needs the HURPN to calculate the size of the preallocated target data set to ensure that it is usable.

112 The control interval size of the target data component is not equal to the source data set.

Either the source data set has extended attributes and the target data set does not, or the target data set has extended attributes and the source data set does not.

120 The first extent of the preallocated PDS was too small to contain the source directory.

124 Preallocated data set is either a tape or migrated data set.

128 The preallocated data set is marked as SMS checkpointed and cannot be replaced unless the appropriate FORCECP keyword is specified.

Source: DFSMSdss

System Action: The specified data set is not processed. The return code is 8.

Application Programmer Response: If use of a preallocated data set is not required, delete the preallocated target. If use of the preallocated data set is required, correct the problem as indicated by the reason code (*reason_code*) and rerun the job.

04 Delete and redefine the target cluster, ensuring that the cluster types are the same.

08 Delete any AIX and PATH associations defined over the target cluster.

12 Delete and redefine the target cluster using the source cluster RECORDSIZE attributes.

16 Either delete and redefine the target cluster using the source cluster KEY attributes, or ALTER the target cluster KEY attributes to equal the source.

20 Delete and redefine the target cluster. If the target is to be copied to repeatedly and is not a key range cluster, specify the REUSE attribute on the DEFINE.

24 Delete and redefine the target cluster, ensuring that the KEYRANGES(lowkey highkey) for target cluster are equal to the KEYRANGES(lowkey highkey) for the source cluster.

28 Delete and redefine the target cluster with at least as much primary index space as the source index has, or force the target cluster index to extend to at least as much space as the source index.

32 Delete and redefine the target cluster with at least as much primary data space as the largest source data component, or force the target cluster data components to extend to at least as much space as the source data components.

40 Delete and redefine the target cluster, ensuring that no components span volumes (CANDIDATE volumes excepted).

44 One of the following actions should be taken: delete the target and rerun DFSMSdss, allowing it to perform the allocation; delete the existing target and reallocate a new one, leaving it empty; or use AMASPZAP to alter the target data set VTOC entry to make the data set appear empty.

48 Do not preallocate the data set.

52 Allocate an unmovable target data set on the same or a like device type, or specify the FORCE keyword.

56 Ensure that the preallocated DSORG is equal to the source DSORG.

60 Ensure that the amount of space allocated for the preallocated data set is sufficient to contain the source data set. If the error is the result of successive copies of a PO data set without the ALLDATA keyword, delete the preallocated data set and rerun all copy steps specifying ALLDATA.

64 Ensure that the number of directory blocks defined for the preallocated PDS is sufficient to contain the source directory blocks.

68 Refer to the previous DFSMSdss message for the probable reason.

72 Ensure that the preallocated data set extents match the source data set extents.

76 Ensure that the RELBLOCKADDRESS keyword was specified and that the source:

- Is not a standard user label data set
- Has a RECFM of fixed or fixed block.

Or scratch and reallocate the target on the same device as the source or on a like device.

80 Allocate a preallocated data set with standard user labels.

84 Allocate a standard user label data set with more than just the standard user label extent.

88 Scratch and reallocate the target partitioned data set to either a different location on the target volume or a different target volume.

92	Scratch the target data set and allow DFSMSdss to allocate it during the restore operation.
96	Ensure that the preallocated sphere's AIX names, number of AIXs, number of paths, and path names match the source sphere's AIX names, number of AIXs, number of paths, and path names.
97	Delete the preallocated target data set, and rerun the restore operation.
98	Move or delete the data set from the volume.
100	Either reblock the data set or specify a target device that is large enough for the source block size.
104	Delete and reallocate the target partitioned data set on a like device, or rerun the job without specifying NOPACKING for the data set.
108	Ensure that the preallocated PDSE is usable and accessible.
112	Delete and redefine the target cluster using the CISIZE attributes of the source cluster.
116	Rename one of the data sets and retry the operation.
120	Ensure that the first extent of the preallocated PDS is large enough to contain the source directory.
124	If preallocated data set is migrated, issue RECALL and rerun the job. Tape data sets are not supported.
128	If the preallocated data set should be replaced, specify FORCECP with the appropriate days parameter.

Operator Response: None.

ADR440E **(***ttt***)-***mmmmm***(***yy***), UNEXPECTED RETURN CODE FROM** *external_name***:** *return_code-reason_code***, WHILE PROCESSING DATA SET** *dsname*

Explanation: In processing the specified data set, the named external routine was called, and it returned an unexpected return (*return_code*) or reason code (*reason_code*). The return code and reason code are printed in hexadecimal.

Source: DFSMSdss

System Action: Processing is ended for the specified data set. The return code is 8.

Application Programmer Response: This message is not normally expected and indicates a programming or system problem. Rerun the job with PARM =`'ABEND=440'` on the EXEC statement, and a SYSUDUMP DD statement.

If the failing function is REALLOC, message IEC614I may also be issued for the jobstep. If message IEC614I is issued, refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the failing function's return code, and to the associated diagnostic information under REALLOC. If you cannot correct the error as indicated in the *DFSMS/MVS DFSMSdfp Diagnosis Reference*, contact your programming support personnel.

Operator Response: None.

ADR441W **(***ttt***)-***mmmmm***(***yy***), LOGICAL ERROR IN BUFFER ON TRACK** *cchh*

Explanation: A logical error was discovered in the track data after it had been read into the buffer and before writing it to DASD. The length of the track data does not match the sum of the count, key, and data fields of all records on the track in the buffer. This message is issued instead of ADR433E when CANCELERROR is not specified.

Source: DFSMSdss

System Action: The track is not processed. The return code is 4.

Application Programmer Response: Use DFSMSdss PRINT to examine the track data.

Application Programmer Response: If unable to determine the cause, contact your IBM Support Center.

Operator Response: None.

ADR442I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **PREALLOCATED [, IN CATALOG** *catalog_name***], ON VOLUME(S): {***volume_serial_number* **|** *volume_serial_number_list***}**

Explanation: The data set was selected for replacement as a preallocated target data set. The target catalog name, if known, is printed. The target volume or optional volume list is always printed with this message.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR443W **(***ttt***)-***mmmmm***(***yy***), DUE TO ERRORS, TARGET COMPONENT** *component_name1* **IS NOW NAMED** *component_name2***. CLUSTER** *cluster_name***, CATALOG** *catalog_name*

Explanation: During COPY processing, the target cluster and components can be allocated using generated names. After the COPY, the target cluster name and component names are altered to match the source names. This message indicates that the target cluster name was successfully altered, but the alter for a component failed.

Source: DFSMSdss

System Action: Processing continues with the next data set. Message ADR469W follows this message. The return code is 4. Run access method services LISTCAT against the target catalog to determine the reason for the access method services ALTER failure. You can alter the component name to match the source by using access method services ALTER NEWNAME.

Operator Response: None.

ADR444E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **{ IS EMPTY | HAS AN UNSUPPORTED DSORG}. IT WILL NOT BE COPIED**

Explanation: The data set cannot be copied to an *unlike* device for one of the following reasons:

- It has an unsupported DSORG.
- It has a BLKSIZE of 0.
- It is empty (the pointer in the VTOC entry that points to the end of the data set is 0) but does not have an end-of-file (EOF) as its first record.

The data set cannot be copied to a *like* device if it is both:

- Empty and is being reblocked, and
- Its first record is not an EOF record.

Source: DFSMSdss

System Action: The data set was not copied. Processing continues. The return code is 8.

Application Programmer Response: To have the data set copied, do one of the following:

- For a data set with an unsupported DSORG (an organization other than sequential, partitioned, direct, indexed sequential, or VSAM), ensure that the selected target volume is of a like device type. For a data set with an unsupported DSORG going to an unlike target device, specify the PROCESS keyword with the UNDEFINED subkeyword. The target device specified or chosen must have a track capacity equal to or greater than the source.
- For unsupported data sets, such as sequential or partitioned data sets with BLKSIZE = 0, ensure that the selected target volume is of a like device type.
- For an empty data set without an EOF, use ALLEXCP to force copy of all allocated space in the data set. Ensure that the selected target volume is of a like device type and that the data set is not being reblocked.

Operator Response: None.

ADR445I **(*ttt*)-*mmmmm*(*yy*), SOURCE VSAM DATA SET *dsname* [, IN CATALOG *catalog_name*], IS EMPTY**

Explanation: The source VSAM data set is empty; therefore the target data set is allocated, but no data movement is performed. If the data set is preallocated, the existing data set is deleted then reallocated using the source as the model.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR446E **(*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* [IN CATALOG *catalog_name*] CONTAINS NO DIRECTORY BLOCKS**

Explanation: A partitioned data set with no directory was encountered. This was caused by not specifying at least one directory block at the time the data set was created.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR447I **(*ttt*)-*mmmmm*(*yy*), VSAM DATA SET *dsname* [IN CATALOG *catalog_name*] WAS DELETED FROM VOLUME *volume_serial_number*, *reason_code***

Explanation: The target VSAM data set was deleted. The reason codes, (*reason_code*), are:

1	VSAM I/O must be used to restore the data set, and the target set is not reusable.
2	The data set organization of the target did not match the source.
3	The CI size of the target did not match the source.
4	The IMBED attribute of the target did not match the source.
5	The KEY length of the target did not match the source.
6	The record length of the target did not match the source.
7	The REPLICATE attribute of the target did not match the source.
8	The SPANNED attribute of the target did not match the source.
9	This component of an AIX which was previously cataloged in *catalog_name* was uncataloged during a restore of its base cluster. This base cluster could not be reallocated and, therefore, this AIX could not be reattached. This component is no longer usable and has been deleted from volume *volume_serial_number*.
B	The source data set is empty.

Source: DFSMSdss

System Action: Processing continues. For reason codes 2 and 4 through 8, the source attributes override those of the preallocated target.

Application Programmer Response: None.

Operator Response: None.

ADR448I **(*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* DUMPED USING NON-OPTIMIZE CHANNEL PROGRAMS AFTER TRACK OVERFLOW RECORDS WERE ENCOUNTERED**

Explanation: The source data set contained track overflow records and OPTIMIZE(2), (3), or (4) was specified for the dump.

Source: DFSMSdss

System Action: The source data set tracks were processed by using nonoptimized channel programs. This results in performance degradation if the data set is not flagged as track overflow in the VTOC entry or is not in the TRACKOVERFLOW keyword list.

Application Programmer Response: No direct programmer action is required, because the data set was dumped successfully. Optimized channel programs fail on tracks containing overflow records, thus forcing a channel retry with nonoptimized channel programs in order to read the tracks. Therefore, data sets containing track overflow records that are not flagged as such in the VTOC entry must be prevented from using an optimized channel program. If ALLDATA or ALLEXCP is specified for the data set, and it does not contain any track overflow records, the allocated tracks beyond the end of the used data may have residual track overflow records that cause the message to be issued.

Operator Response: None.

ADR449I **(*ttt*)-*mmmmm*(*yy*), TEMPORARY SPACE USED TO STORE TASK RELATED MESSAGES FOR THIS TASK IS FULL AND CANNOT BE EXTENDED FURTHER. MESSAGES WILL BE SPOOLED TO SYSPRINT. SUBSEQUENT MESSAGES FOR THIS TASK WILL BE STORED AND GROUPED TOGETHER**

Explanation: When DFSMSdss is running in parallel mode, all messages for a task are grouped together in a temporary space. The temporary space for this task is full. When a space becomes full, the messages for a task can be broken into groups with messages from other tasks located in between the groups.

Source: DFSMSdss

System Action: The messages stored thus far for this task are spooled to SYSPRINT. The temporary space is reinitialized, and messages continue to be stored and grouped together until the task ends or the temporary space becomes full again.

Application Programmer Response: None.

Operator Response: None.

ADR450E **(*ttt*)-*mmmmm*(*yy*), THE NUMBER OF INPUT AND OUTPUT TRACK RANGES DOES NOT MATCH**

Explanation: The number of input track ranges does not correspond to the number of output track ranges. Each input track range requires a corresponding output track range. Each output track range requires a corresponding input track range.

Source: DFSMSdss

System Action: The task is ended. The return code is 8.

Application Programmer Response: Specify the same number of input and output track ranges.

Operator Response: None.

ADR451W **(*ttt*)-*mmmmm*(*yy*), CLUSTER *cluster_name* IN CATALOG *catalog_name* IS PROCESSED. (*text_description*)**

Explanation: The VSAM data set is processed, but there were unexpected conditions in the cluster. In the message, *text_description* describes the unexpected conditions. A primary allocation inconsistency was detected. The cluster primary allocation is not an even multiple of the tracks per control area (track/CA) and may contain unused tracks. While processing these tracks, records containing invalid data may have been added to the cluster.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: Ensure that the cluster does not contain more records than expected or correct the primary allocation of the cluster if it is still available.

Operator Response: None.

ADR452E **(*ttt*)-*mmmmm*(*yy*), {IEHMOVE | IEBCOPY | IEBISAM | IDCAMS | ICKDSF} UTILITY FAILED WHILE PROCESSING {DATA SET *dsname* | VOLUME *volume_serial_number*}, {ABEND | RETURN} CODE IS *nnn***

Explanation: During processing of a DFSMSdss function, a system utility was invoked to process the specified data set or volume. The utility encountered errors, and processing failed.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Take one of the following actions:

- For abending utilities, see *OS/390 MVS System Codes* for an explanation of the abend code. If the abend is caused by insufficient storage (DASD or virtual), you must run the utility itself (not through DFSMSdss), as described in *DFSMS/MVS Utilities.* If IEHMOVE abends with code 0C4, it could be because DFSMSdss called it with a task I/O table (TIOT) referring to more DD statements than IEHMOVE can handle. In this case, change the DFSMSdss filtering to select fewer data sets.
- For IEHMOVE, IEBCOPY, or IEBISAM error return codes, run the job with *UTILMSG=ERROR* or *UTILMSG=YES* to propagate the utility's SYSPRINT data set. See the appropriate volume of *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* for an explanation of the utility messages.
- For IDCAMS error return codes, run the job by specifying the DFSMSdss *UTILMSG=YES* parameter. See *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* for an explanation of the messages.
- For ICKDSF error return codes, run the job with *UTILMSG=ERROR* or *UTILMSG=YES* to propagate the utility's SYSPRINT data set. See the *ICKDSF R16 User's Guide* for an explanation of the messages.

Note: When performing in-place operations, the source data sets may have been left unusable by the failure of the job. Check and restore all data sets from backup if necessary.

Operator Response: None.

ADR453E **(*ttt*)-*mmmmm*(*yy*), USER REBLOCK EXIT SPECIFIED AN INVALID BLOCK SIZE FOR DATA SET *dsname*. DATA SET WILL NOT BE PROCESSED**

Explanation: The data set was eligible for reblocking, and the user reblock exit was called. However, the block size returned to DFSMSdss from the exit was invalid for the data set.

Source: DFSMSdss

System Action: The data set is not allocated or copied. The return code is 8.

Application Programmer Response: Correct the block size for the data set in the exit routine.

Operator Response: None.

ADR454I **(*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS WERE SUCCESSFULLY PROCESSED**

Explanation: The list of successfully processed data sets follows this message.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR455W **(*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS WERE NOT SUCCESSFULLY PROCESSED**

Explanation: The list of data sets that were not successfully processed follows this message.

Source: DFSMSdss

System Action: Processing continues. The return code is set to 4.

Application Programmer Response: None.

Operator Response: None.

ADR456I **(*ttt*)-*mmmmm*(*yy*), THE NUMBER OF DATA SETS PROCESSED ON VOLUME *volume_serial_number* IS *nnnn***

Explanation: *nnnn* is the number of data sets successfully processed. For COMPRESS, the data set names follow this message.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR457I **(***ttt***)-***mmmmm***(***yy***), THE NUMBER OF TRACKS MADE AVAILABLE ON VOLUME** *volume_serial_number* **IS** *nnnn*

Explanation: RELEASE processing released *nnnn* tracks.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR458I **(***ttt***)-***mmmmm***(***yy***), {TOTAL | USED} NUMBER OF TRACKS ON VOLUME** *volume_serial_number* **IS** *nnnn*

Explanation: The number, *nnnn*, indicates either the total number of tracks on the volume or the number of used tracks on the volume after RELEASE processing.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR459E **(***ttt***)-***mmmmm***(***yy***), ERROR ENCOUNTERED WHILE FILTERING ON THE CATALOG.**

Explanation: This message is preceded by message ADR497E or ADR724E. When this message is preceded by ADR497E, see message IDC3009I for an explanation and corrective action. When preceded by ADR724E, see message IGW01zzz for an explanation and corrective action.

Source: DFSMSdss

System Action: The current volume is bypassed. Processing continues with the next volume, if any. The return code is 8.

Application Programmer Response: For I/O errors, follow recommendations by your installation for I/O errors, and resubmit the job. For logical errors encountered in the VVDS, run access method services DIAGNOSE against the indicated volume, and take necessary action to correct the problem.

Operator Response: None.

ADR460I **(***ttt***)-***mmmmm***(***yy***), UTILITY GENERATED MESSAGES FOLLOW FOR {DATA SET** *dsname* **| VOLUME** *volume_serial_number***}**

Explanation: During processing of a DFSMSdss function, a system utility was invoked that generated SYSPRINT data. The utility messages are printed following this message when UTILMSG=YES is specified in the PARM information of the DFSMSdss EXEC statement or when UTILMSG=ERROR is specified and the utility function failed.

Source: DFSMSdss

System Action: The function continues processing.

Application Programmer Response: None.

Operator Response: None.

ADR461W **(***ttt***)-***mmmmm***(***yy***), UNMOVABLE DATA SET** *dsname* **WITH FOLLOWING EXTENTS CANNOT BE PROCESSED**

Explanation: The unmovable data set that has the listed extents cannot be processed. Either the system does not support allocation of unmovable data sets or the extents are not free on the target volume.

Source: DFSMSdss

System Action: The data set is not processed. The return code is set to 4.

Application Programmer Response: Either specify FORCE if you want to move the unmovable data set, or free the required extents and rerun the job.

Operator Response: None.

ADR462E **(***ttt***)-***mmmmm***(***yy***), NON-VSAM DATA SET** *dsname* **[IN CATALOG** *catalog_name***] IS NOT PROCESSABLE**

Explanation: The CVOL catalog entry is not processed because the DELETE subparameter was not specified and the RENAMEUNCONDITIONAL subparameter was specified.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: Copy the CVOL catalog, specifying DELETE, and remove the RENAMEUNCONDITIONAL subparamater.

Operator Response: None.

ADR463E **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **WAS NOT {DELETED | DEFINED | ALLOCATED} BECAUSE VOLUME(S) WERE NOT AVAILABLE**

Explanation: The allocation of the volumes failed because the volumes are not available. The cluster was not deleted, defined, or allocated.

Source: DFSMSdss

System Action: The return code is 8.

Application Programmer Response: Ensure that the volumes where the cluster resides are available.

Operator Response: None.

ADR464I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **HAS BEEN UNCATALOGED FROM CATALOG** *catalog_name*

Explanation: The named data set was uncataloged at the user's request.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR465I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **HAS BEEN CATALOGED IN CATALOG** *catalog_name*

Explanation: The named data set was cataloged at the user's request.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR466E (*ttt*)-*mmmmm*(*yy*), ERROR RETURN CODE *return_code* [*diagnostic_information*] FROM PARTREL FOR DATA SET {*dsname* | *cluster_name* COMPONENT *component_name*} [IN CATALOG *catalog_name*] ON VOLUME *volume_serial_number*

Explanation: A PARTREL macro was issued to release all unused DASD space from a sequential, partitioned, or extended format VSAM data set, and an unexpected return code (*return_code*) was received during RELEASE processing. A return code of 8 indicates that a data set was open. Any other return code probably indicates an invalid VTOC or VVDS.

Source: DFSMSdss

System Action: Processing of the command is ended. The return code is 8.

Application Programmer Response: Information about PARTREL return codes is in *DFSMS/MVS DFSMSdfp Advanced Services*. For extended format VSAM only, return codes not documented in *DFSMS/MVS DFSMSdfp Advanced Services* can be found under message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*. Information about PARTREL diagnostic information, which accompanies some but not all return codes, is in *DFSMS/MVS DFSMSdfp Diagnosis Reference*.

Operator Response: None.

ADR467E (*ttt*)-*mmmmm*(*yy*), DURING A TARGET TRACKS COPY, THE OUTPUT TRACKS FALL WITHIN THE INPUT TRACK RANGE; AND THE INPUT AND OUTPUT VOLUMES ARE THE SAME

Explanation: A COPY request was issued with the OUTTRACKS option. The input volume serial number and output volume serial number are the same, and the output tracks overlap the input tracks.

Source: DFSMSdss

System Action: Processing of the command is ended. The return code is 8.

Application Programmer Response: Select nonoverlapping tracks for input and output.

Operator Response: None.

ADR468E (*ttt*)-*mmmmm*(*yy*), VSAM DATA SET *dsname* [IN CATALOG *catalog_name*] IS NOT PROCESSABLE

Explanation: The VSAM entry was not processed because one or more of the following conditions exist:

- The RENAMEUNCONDITIONAL subparameter is specified but the newname is not fully qualified and there is a mismatch in the resulting number of data set name levels.
- If REPLACE was specified, either the data set does not qualify for preallocation or a preallocated target does not exist, and one of the following conditions applies:
  - If DELETE is specified and the entry name is a SYS1., page, or swap data set, the RENAMEUNCONDITIONAL or PROCESS(SYS1) subparameter was not specified.
  - If the entry name is a cluster name and DELETE was not specified: (1) the RENAMEUNCONDITIONAL subparameter was not specified, or (2) the RECAT subparameter was not specified.
  - If the entry name is an alternate index or a user catalog name: (1) the DELETE subparameter was not specified, or (2) the RENAMEUNCONDITIONAL subparameter was specified.
- If REPLACE was not specified, one of the following conditions applies:
  - If DELETE is specified and the entry name is a SYS1., page, or swap data set, the RENAMEUNCONDITIONAL or PROCESS(SYS1) subparameter was not specified.
  - If the entry name is a cluster name and DELETE was not specified: (1) the RENAMEUNCONDITIONAL subparameter was not specified or (2) the RECAT subparameter was not specified.
  - If the entry name is an alternate index or a user catalog name: (1) the DELETE subparameter was not specified or (2) the RENAMEUNCONDITIONAL subparameter was specified.
  - If the entry name is a user catalog name, INDDNAME or INDYNAM was specified.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: Take one of the following actions:

- If the RENAMEUNCONDITIONAL subparameter is specified and the newname is not fully qualified, correct the rename criteria to eliminate the mismatch in the resulting data set name levels, or specify a fully qualified name.
- If REPLACE was specified and:
  - If the data set is eligible for preallocation, ensure that a qualifying target is available on the target volumes.
  - If the data set is not eligible for preallocation or a REPLACE operation is not required, determine further action from the following lists.
- If the entry name is a SYS1., page, or swap data set and DELETE is specified, copy the entry specifying RENAMEUNCONDITIONAL(newname) or PROCESS(SYS1).
- If the entry name is a cluster name: (1) copy the cluster by specifying DELETE, (2) copy the cluster by specifying RENAMEUNCONDITIONAL(newname), or (3) copy the cluster by specifying RECAT(catname).
- If the entry name is an alternate index or a user catalog name, copy the alternate index or user catalog, specifying DELETE, and remove the RENAMEUNCONDITIONAL subparameter.
- If the entry name is a user catalog name, do not specify INDDNAME or INDYNAM.

Operator Response: None.

ADR469W (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS WERE COPIED, BUT ENCOUNTERED POSTPROCESSING ERRORS

Explanation: After a data set was copied, a postprocessing error was encountered. The error occurred during an attempt to catalog, uncatalog, scratch, correct a VSAM cluster component name, or RACF/password-protect the source or target data set.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: See earlier messages for specific errors.

Operator Response: None.

ADR470W (*ttt*)-*mmmmm*(*yy*), NO DATA SETS SELECTED FOR COPY

Explanation: No data sets were selected for processing. The data sets found in the catalog or on the input volumes did not pass INCLUDE, EXCLUDE, or BY filtering or cannot be copied.

Source: DFSMSdss

System Action: Processing continues with the next control statement. The return code is 4.

Application Programmer Response: When input volumes are specified, ensure that all components of a cluster and all pieces of a multivolume data set are contained on the input volumes. Change filtering criteria, add a STEPCAT, or specify different input volumes, then rerun the job.

Operator Response: None.

ADR471E (*ttt*)-*mmmmm*(*yy*), DUE TO ERRORS, SOURCE {CLUSTER | COMPONENT} *name1* IS NOW NAMED *name2*. CLUSTER *cluster_name*, CATALOG *catalog_name*

Explanation: During COPY processing, the source cluster and components can be renamed in order to allow the COPY target cluster to be altered to the source name. If the target-to-source alter fails, the target data set is deleted, and restoring the source cluster to its original state is attempted. This message is issued for each alter rename failure. The cluster name and catalog name indicate the name and location of the failing data set.

Source: DFSMSdss

System Action: Processing continues with the next data set. Message ADR455E follows this message. The return code is 8.

Application Programmer Response: Run access method services DIAGNOSE against the source and target catalogs to determine the reason for the access method services ALTER failures. Restore the original cluster name, using access method services ALTER NEWNAME.

Operator Response: None.

ADR472E (*ttt*)-*mmmmm*(*yy*), UNABLE TO SELECT A TARGET VOLUME FOR DATA SET *dsname* [IN CATALOG *catalog_name*], *reason_code*

Explanation: DFSMSdss was unable to select a target volume from the available target volumes for one of the following reasons, (*reason_code*):

04 No target volume has enough space to accommodate the target data set.

08 At least one duplicate data set was encountered on a target volume, and the REPLACE keyword was not specified. If the duplicate data set is named SYS1.xx, you must also specify PROCESS(SYS1). However, DFSMSdss will not replace a SYS1.xx data set that is a CVOL, integrated catalog facility user catalog, VVDS, or VTOCIX, regardless of the REPLACE and PROCESS(SYS1) keywords.

If the target volume did not contain a duplicate data set, then this reason code means the target volume did not have enough space for the data set. For an indexed sequential data set, the matching space in the target volume was not available.

12 The data set is non-VSAM and is allocated as either unmovable or absolute track. DFSMSdss was able to select only unlike targets for target allocation and the FORCE keyword was not specified.

16 The data set is non-VSAM and either unmovable or absolute track allocated. An absolute allocation failure, or lack of system support for absolute allocation, precludes the use of absolute allocation; however, the FORCE keyword was not specified.

20 A directory read failed for the partitioned data set.

24 An error was encountered while the VVR records for the VSAM data set were being read.

28 Duplicate VTOC entries were encountered on the only or all available target volumes for the VSAM data set.

32 A duplicate entry for the VSAM data set was encountered in the target catalog.

36 An error was encountered during the define of the target VSAM data set.

40 GETMAIN errors were encountered while the internal control blocks for the data set were being built.

44 The data set was a direct data set, and only target devices of smaller track capacity than the source were available. The data set was not specified in the RELBLOCKADDRESS keyword list, or it was specified in RELBLOCKADDRESS, but the data set is not accessed by relative block address (that is, it has a standard user label or its record format is not F or FB).

DFSMSdss does not allocate or attempt to copy the data set.

48 The source data set block size was greater than the track capacity of all volumes DFSMSdss was able to select for allocation. The data set was not indicated as track overflow in the VTOC entry.

52 An indexed VTOC was not available.

56 Not enough space is available in the VTOC on the target volume.

60 The DADSM installation exit (IGGPRE00) rejected the allocation request.

64 No output volume was specified for the COPY function, and the data set is not SMS-managed.

68 Usable space on all the target volumes combined was insufficient to define the target data set.

69 The number of target volumes required for the data set exceeds the number of source volumes.

72 During a non-SMS allocation, no target volumes were available and at least one output volume was not selected because it was SMS-managed.

76 The NOPACKING keyword was specified for the data set, but no space was available or no like devices were specified as targets.

80 No target volume that has device track capacity equal to or greater than the source is available for selection.

84 The data set was a direct data set and the only available target devices were unable to contain the source track's worth of data due to the blocksize of the data set. For example, if the source device is a D/T3380 and the only available devices are D/T3390S, and the data set's blocksize is 190 with a key length of 0, then a track on the target cannot contain as much data as a track on the source.

The data set was not specified in the RELBLOCKADDRESS keyword list, or it was specified in the REBLOCKADDRESS but it was not accessed by a relative block address (that is, it has a standard user label or its record format is not F or FB). DFSMSdss does not allocate or attempt to copy the data set.

88 During a non-SMS allocation, no usable target volumes were available.

92 During DFSMSdss data set COPY, an attempt was made to copy the data set back to its source volume with DELETE specified, but RENAMEUNCONDITIONAL was not specified.

Source: DFSMSdss

System Action: The data set is not copied. The return code is 8.

Application Programmer Response: Depending on the reason code, take the following action and rerun the job:

04 Either increase the value for PERCENTUTILIZED, or specify additional target volumes. For VSAM data sets, contiguous space is needed.

08 Specify additional target volumes, delete the duplicate data set, specify REPLACE, or specify PROCESS(SYS1). For indexed sequential data sets, specify a volume that has free space on the matching tracks.

12 Either specify FORCE if the unlike target volumes are desired, or specify additional target volumes of the same device type that the data set currently resides on.

16 Specify FORCE or specify additional target volumes.

20 Ensure that the partitioned data set is usable.

24 Ensure that the cluster and its components are usable.

28 Specify additional target volumes.

32 If a target catalog was specified by using RECATALOG, either delete the existing data set in that catalog, or specify a different catalog. If a target catalog was not specified, the data set is being defined in a catalog set by the STEPCAT/JOBCAT/MASTERCAT structure. Either determine where the duplicate entry exists and delete it, or modify the catalog structure using a STEPCAT statement in the job JCL.

36 Message ADR497E accompanies this message. Determine the cause of the error and correct it.

40 Increase the region size.

44 Specify target devices of the same or larger track capacity for the direct data set.

48 Specify target devices of the same or larger track capacity for the data set, or use an appropriate system utility to copy the data set.

52 Specify a volume with an indexed VTOC.

56 Enlarge the VTOC on the target volume or specify additional target volumes.

60 Specify additional target volumes.

64 If you expect the target data set to be SMS-managed, ensure the ACS routine assigns a storage class or use the BYPASS ACS and STORCLAS keywords to force the data set to be SMS-managed.

68 Either specify additional target volumes or, if PERCENTUTILIZED was specified, increase the PERCENTUTILIZED value.

69 Specify a list of target volumes with enough space to let DFSMSdss allocate the data set on either an equal or fewer number of volumes than the number of noncandidate source volumes.

72 If you expect the target data set to be SMS-managed, ensure the ACS routine assigns a storage class or use the BYPASS ACS and STORCLAS keywords to force the data set to be SMS-managed.

76 Either rerun the job without specifying NOPACKING for the data set, or rerun the job specifying the same or like devices with enough room to allocate the data set.

80 If the target data set is SMS, make sure that the storage class selected maps to a storage group that has devices with track capacity equal to or greater than the source. If the target data set is non-SMS, specify a target volume that has track capacity equal to or greater than the source.

84 Specify target devices of the same or larger track capacity for the direct data set.

88 If you expect the target data set to be SMS-managed, ensure the ACS routine assigns a storage class or use the BYPASS ACS and STORCLAS keywords to force the data set to be SMS-managed.

92 Choose a target volume different from the data set's source volumes, or use the RENAMEUNCONDITIONAL keyword to rename the data set.

Operator Response: None.

ADR473E (*ttt*)-*mmmmm*(*yy*), FAILURE WHILE ATTACHING UTILITY MODULE, RC=*reason_code*

Explanation: DFSMSdss was unable to attach a utility module. The reason codes (*reason_code*) are documented in the *OS/390 MVS Programming: Assembler Services Guide*.

Source: DFSMSdss

System Action: No data sets are processed. The task ended. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Correct the problem as indicated by *reason_code*, and rerun the job.

Operator Response: None.

ADR474I (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* CONSISTS OF *n* TARGET TRACKS AND *m* SOURCE TRACKS

Explanation: This is an informational message to assist the user during logical data set restore of a non-VSAM data set.

Source: DFSMSdss

System Action: Processing continues. DFSMSdss may scratch and reallocate the data set, extend the existing data set, convert an extended format non-VSAM data set to PS format, or fail the restore with additional error processing.

Application Programmer Response: None.

Operator Response: None.

ADR475I (*ttt*)-*mmmmm*(*yy*), FOLLOWING DATA SETS WERE SELECTED

Explanation: TYPRUN=NORUN was specified in the EXEC statement parameter, and the following list of data set names met the filtering criteria.

Source: DFSMSdss

System Action: The data sets are selected, but not processed.

Application Programmer Response: None.

Operator Response: None.

ADR476E **(*ttt*)-*mmmmm*(*yy*), UTILITY PROCESSOR TERMINATED BECAUSE OF SYSPRINT/SYSIN PROCESSING FAILURES**

Explanation: Errors in utility SYSPRINT or SYSIN data set processing occurred, causing the utility processor task to end.

Source: DFSMSdss

System Action: Utility processing is ended. The return code is 8.

Application Programmer Response: Utility processing occurs during initial job setup. Therefore, this failure may or may not affect processing within the job. If errors are encountered, rerun the job ensuring that adequate DASD temporary space is available.

Operator Response: None.

ADR477E **(*ttt*)-*mmmmm*(*yy*), VVDS/VVR/CELL ERRORS ENCOUNTERED FOR CLUSTER** *cluster_name*

Explanation: Data set COPY or RESTORE encountered errors while reading or updating VVDS/VVR/CELL information. This message may be issued for one of the following reasons:

- An error was encountered processing a VVR. If there was an I/O error, message ADR231E may precede this message.
- An error was encountered on a catalog request. Message ADR497E may precede this message.
- There may be insufficient storage for internal processing. Messages ADR008E, ADR018I, or ADR376E may precede this message.

Source: DFSMSdss

System Action: The data set is not copied or restored. Processing continues. The return code is 8.

Application Programmer Response: Perform the appropriate actions from the following list:

- An error was encountered processing a VVR:

  Run access method services DIAGNOSE against the appropriate VVDS to determine the nature of the error and take the recommended action.
- An error was encountered on a catalog request:

  Using the return and reason codes from message ADR497E, find the corresponding return and reason codes in message IDC3009I and follow the recommended action.
- There may be insufficient storage for internal processing:

  Increase the region size and resubmit the request.

Operator Response: None.

ADR478W **(*ttt*)-*mmmmm*(*yy*), VSAM CLUSTER** *cluster_name* **NOT DUMPED, COMPONENT** *component_name* **SIZE IS GREATER THAN A SINGLE SOURCE VOLUME**

Explanation: The VSAM cluster was not dumped because it had a multivolume component that was larger than an entire source volume. To restore the data set, it would be necessary to allocate the component on multiple volumes, but the system does not support the allocation of VSAM data sets on multiple volumes.

Source: DFSMSdss

System Action: The data set was not dumped. Processing continues. The return code is 4.

Application Programmer Response: Take one of the following actions:

- Use DFSMSdss DUMP, specifying the input volumes that contain the VSAM cluster. DFSMSdss RESTORE can restore the data set from the dump tape in physical dump format.
- Use access method services EXPORT to dump the VSAM cluster. Use access method services IMPORT to restore from the EXPORT-created dump tape.

Operator Response: None.

ADR479E **(*ttt*)-*mmmmm*(*yy*), LOGICAL DATA SET DUMP TAPE DOES NOT CONTAIN {VSAM | NON-VSAM} DATA SETS**

Explanation: The requested type of data set is not on the logically formatted dump tape. Either the BY criterion is incorrect or the wrong tape was specified in the RESTORE command.

Source: DFSMSdss

System Action: No data sets are restored. Processing continues. The return code is 8.

Application Programmer Response: Either change the BY criterion *DSORG* or use a different dump tape, and rerun the job. For an empty VSAM data set, no action is required.

Operator Response: None.

ADR480W **(*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS WERE NOT PROCESSED FROM THE LOGICALLY FORMATTED DUMP TAPE DUE TO ERRORS:**

Explanation: The data sets in the list were not processed. The error is identified by other messages that precede this message.

Source: DFSMSdss

System Action: The return code is 4.

Application Programmer Response: Correct the problem according to preceding messages.

Operator Response: None.

ADR481E **(*ttt*)-*mmmmm*(*yy*), UNABLE TO ALTER VSAM CLUSTER** *cluster_name* **[IN CATALOG** *catalog_name***]**

Explanation: The VSAM ALTER NEWNAME failed while attempting to alter the source cluster name.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR482E **(*ttt*)-*mmmmm*(*yy*), I/O ERROR ON DDNAME** *ddname* **WHILE PROCESSING** *tape_record*

Explanation: I/O errors were encountered while the indicated type of dump tape record was being read during logical data set RESTORE processing.

Source: DFSMSdss

System Action: The data set is bypassed. The return code is 8.

Application Programmer Response: Use an alternate backup copy to restore the data set.

Operator Response: None.

ADR483W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **NOT CATALOGED**

Explanation: The data set was not cataloged. RECATALOG(*) was specified, but the source data set was not cataloged.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR484W **(***ttt***)-***mmmmm***(***yy***), COMMAND IS NOT SUPPORTED FOR DATA SET** *dsname* **DURING LOGICAL DATA SET PROCESSING**

Explanation: Data set RESTORE from a logically formatted dump tape does not support the data set organization of the indicated data set.

Source: DFSMSdss

System Action: Processing continues for other data sets. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR485E **(***ttt***)-***mmmmm***(***yy***), CATALOG** *catalog_name* **IS NOT IN STEPCAT/JOBCAT/MASTERCAT STRUCTURE. DATA SET** *dsname* **WILL NOT BE PROCESSED**

Explanation: The NONSMS cluster named in the message required DFSMSdss to use IDCAMS or VSAM I/O to perform the COPY or RESTORE. This requires that both the source and target cluster (allocated by DFSMSdss) be accessible via the catalog structure.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 8.

Application Programmer Response: Add a STEPCAT or JOBCAT JCL statement specifying the named catalog, or concatenate it to your existing STEPCAT/JOBCAT JCL statement, and rerun the job.

Operator Response: None.

ADR486I **(***ttt***)-***mmmmm***(***yy***), UNMOVABLE DATA SET** *dsname* **RESTORED TO FREE SPACE**

Explanation: The unmovable data set specified in the message cannot be restored to the cylinder/track location from which it was dumped. Because FORCE was specified in the RESTORE command, this data set was restored to free space.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR487W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **NOT ON LOGICALLY FORMATTED DUMP TAPE**

Explanation: During a data set RESTORE from a logically formatted dump tape, the data set was not found on the tape. Possibly the data set name is contained in the data set name list at the beginning of the dump tape, but the data set was not dumped. (This can occur if the data set could not be serialized at dump time.) Either the wrong input file was used, an incorrect data set name was specified, or the data set was rejected because of the DSORG filtering criteria. This message is printed if fully qualified names are specified.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: Correct the error, and rerun the job.

Operator Response: None.

ADR488E **(***ttt***)-***mmmmm***(***yy***), ERROR ENCOUNTERED WHILE ACCESSING {VTOC | VVDS} FOR DATA SET** *dsname* **ON VOLUME** *volume_serial_number* **ON DDNAME** *ddname*

Explanation: An inconsistency on the VTOC or VVDS was encountered during data set RESTORE from a logically formatted dump tape.

Source: DFSMSdss

System Action: Processing continues for other data sets. The return code is 8.

Application Programmer Response: Use an alternate backup copy to restore the data set.

Operator Response: None.

ADR489I **(***ttt***)-***mmmmm***(***yy***), {***dsname* **|** *cluster_name* **|** *component_name***} WAS {SELECTED|RESTORED}**

Explanation: After a data set was successfully restored or after a data set was successfully selected (when TYPRUN=NORUN), the data set name is printed for a non-VSAM data set. Component names are printed for a VSAM data set.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR490W **(***ttt***)-***mmmmm***(***yy***), ERROR {OPENING|READING} UTILITY SYSPRINT MESSAGES. UTILITY MESSAGES WILL BE LOST**

Explanation: An error occurred either in opening or in reading the utility SYSPRINT file.

Source: DFSMSdss

System Action: DFSMSdss continues processing for the task, but utility SYSPRINT messages are lost. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR491E **(***ttt***)-***mmmmm***(***yy***), TASK TERMINATED DUE TO INSUFFICIENT STORAGE FOR UIM I/O BUFFER AND/OR EXIT IDENTIFICATION BLOCK**

Explanation: If the application interface is used, the system requires a buffer to pass I/O records to the user interaction module (UIM). If virtual storage cannot be obtained for the buffer or the UIM exit identification block, the related DFSMSdss function is ended.

Source: DFSMSdss

System Action: None. The return code is 8.

Application Programmer Response: Increase either the SIZE parameter, the region size, or both, and rerun the job.

Operator Response: None.

ADR492E **(***ttt***)-***mmmmm***(***yy***), ERROR OCCURRED DURING COPY OF CATALOG** *catalog_name***, RC-***reason_code***. [EXPORT DATA SET** *dsname* **IS ON VOLUME** *volume_serial_number***]**

Explanation: The catalog was being moved using access method services EXPORT or IMPORT when IDCAMS errors occurred. Corrective action may be required to restore the source catalog to a usable condition. The reason code (*reason_code*) describes the error as follows:

01	An error occurred when the catalog was exported to a temporary sequential data set. The COPY is discontinued, and the source catalog remains in usable condition. For this reason code, the second portion of the message is not printed.
02	A failure occurred when the target catalog was imported. The source catalog was deleted and must be recovered by the user.

Source: DFSMSdss

System Action: Processing continues with the next COPY. The return code is 8.

Application Programmer Response: Ensure that the DFSMSdss parameter option *UTILMSG=YES* is specified when running jobs that perform catalog moves. All reason codes are accompanied by IDCAMS messages that clarify the remedial actions necessary.

Take the following actions, depending on the reason code:

01	Use the IDCAMS messages as a guide in correcting the error. Rerun the job.
02	Restore the source catalog before attempting to rerun the job. If the catalog was backed up before the COPY was attempted, the backup can be used to restore the catalog. Otherwise, the catalog can be restored by importing the catalog from the export data set described in the message. See the *DFSMS/MVS Access Method Services for ICF* for an explanation of the IMPORT command. Delete the export data set described in the message before rerunning the job.

Operator Response: None.

ADR493E **(***ttt***)-***mmmmm***(***yy***), UNCATALOG/DELETE IS NOT ALLOWED FOR DATA SET** *dsname* **[IN CATALOG** *catalog_name***]**

Explanation: Either exclusive control of the data set is not obtained or it is a *SYS1.* system, page, or swap data set that cannot be uncataloged.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: For exclusive control, either remove the SHARE keyword or ensure exclusive control of the data set, unless the data set is a VTOCIX or a VVDS. For *SYS1.* system, page, or swap data sets, specify PROCESS(SYS1) to uncatalog or delete the data set.

Note: PROCESS(SYS1) does not lift processing restrictions for VTOCIXs and VVDSs.

Operator Response: None.

ADR494W **(***ttt***)-***mmmmm***(***yy***), {OPEN | CLOSE | I/O} ERROR ON MESSAGE DATA SET FOR TASK. TASK RELATED MESSAGES MAY BE LOST**

Explanation: An OPEN, CLOSE, or I/O error occurred on a message data set used to store task-related messages.

Source: DFSMSdss

System Action: DFSMSdss continues processing for the task, but messages for the task may be lost. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR495E **(***ttt***)-***mmmmm***(***yy***), ECB UNEXPECTEDLY POSTED IN MODULE** *module_name***, ECB CONTENTS ARE** *xxxxxxxx*

Explanation: An ECB related to an attached task was unexpectedly posted.

Source: DFSMSdss

System Action: Command processing is ended. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR496E **(***ttt***)-***mmmmm***(***yy***), UNEXPECTED RETURN CODE** *return_code* **FROM DETACH ISSUED FROM MODULE** *module_name*

Explanation: An attempt to detach a subtask failed.

Source: DFSMSdss

System Action: The return code is 8.

Application Programmer Response: See *OS/390 MVS Programming: Assembler Services Guide* for an explanation of the DETACH return code (*return_code*).

Operator Response: None.

ADR497E **(***ttt***)-***mmmmm***(***yy***), A CATALOG ERROR OCCURRED WHILE** *action_description***. RETURN CODE IS** *return_code***, REASON CODE IS** *reason_code*

Explanation: Catalog management module IGG0CLnn returned this return code (*return_code*) and reason code (*reason_code*) as the result of a catalog error or an exception condition while DFSMSdss was performing the action described by *action_description*.

The *action_description* can be any one of the following:

- RENAMING CLUSTER *cluster_name1* TO *cluster_name2*
- RENAMING COMPONENT *component_name1* TO *component_name2*
- RENAMING AIX *aix_name1* TO *aix_name2*
- RACF PROTECTING *dsname*
- RACF UNPROTECTING *dsname*

- ALTERING ACCESS TO USER CATALOG *catalog_name*
- RENAMING DATA SET *dsname1* TO *dsname2*
- CONVERTING CLUSTER *cluster_name* TO SMS
- CONVERTING CLUSTER *cluster_name* TO NONSMS
- REMOVING CANDIDATE VOLUMES FROM COMPONENT *component_name*
- DEFINING CLUSTER *cluster_name*
- CATALOGING DATA SET *dsname*
- DEFINING AIX *aix_name*
- DEFINING PAGESPACE *dsname*
- DEFINING USER CATALOG *catalog_name*
- DEFINING PATH *path_name* TO *cluster_name*
- DEFINING ALIAS *alias_name* TO *cluster_name*
- SEARCHING FOR DATA SETS BEGINNING WITH *prefix*
- OBTAINING INFORMATION FOR DATA SET *dsname*
- OBTAINING VOLUME INFORMATION FOR DATA SET *dsname*
- DETERMINING TARGET CATALOG FOR DATA SET *dsname*
- DELETING CLUSTER *cluster_name*
- DELETING DATA SET *dsname*
- DELETING USER CATALOG *catalog_name*
- DELETING AIX *aix_name*
- DELETING PATH *path_name*
- EXPORTING CATALOG *catalog_name*
- IMPORTING CATALOG *catalog_name*
- RECATALOGING CLUSTER *cluster_name*
- RECATALOGING AIX *aix_name*
- RECATALOGING DATA SET *dsname*
- READING CATALOG *catalog_name*
- ALTERING THE VOLUME LIST FOR DATA SET *dsname*
- ALTERING LAST BACKUP DATE FOR DATA SET
- DELETING UNCATALOGED VSAM DATA SET *component_name*
- ALTERING RECALL STATUS FOR CLUSTER *cluster_name*

Source: DFSMSdss

System Action: Command processing is ended. The return code is 8.

Application Programmer Response: See message IDC3009I for specific return code and reason code information. For return code 40 or 44, either change the DFSMSdss filtering to reduce the number of selected CVOL-cataloged data sets to fewer than 1455, or increase the region size if you are selecting fewer than 1455 data sets; then rerun the job.

Operator Response: None.

ADR498E **(*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* CANNOT BE COPIED/RESTORED. PREALLOCATE THE DATA SET WITH *nnnnnn* TRACKS**

Explanation: DFSMSdss cannot determine the amount of space required to contain the data set before performing the COPY/RESTORE to an unlike device.

Source: DFSMSdss

System Action: The data set is not processed. The return code is set to 8.

Application Programmer Response: Preallocate the data set with an allocation of *nnnn* tracks on the volumes listed in message ADR396I or ADR442I, or COPY/RESTORE the data set to a like device.

Operator Response: None.

ADR499I **(*ttt*)-*mmmmm*(*yy*), COMPONENT *component_name* REQUIRES *nnnn1* TRACKS, *nnnn2* {BLOCKS | CYLINDERS | TRACKS} REQUESTED.**

Explanation: DFSMSdss has tried to allocate space of *nnnn2* blocks, cylinders or tracks, in order to allocate the component whose size was *nnnn1* tracks, when dumped. If the data set is known to be restored with VSAM I/O, the allocation *nnnn2* is the size of the primary extent when the data set was dumped. If the data set is a key range data set with secondary extents and is not to be restored with VSAM I/O, the allocation size is the size of the largest key range.

This message accompanies messages ADR472E RC04 and ADR472E RC68 when the probable cause of the failure is insufficient space to allocate the data set.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR501W **INVALID CARD CODE. CORRECT ERROR. DEPRESS INTERRUPT KEY.**

Explanation: An incorrect card code appeared in the last card processed.

Source: DFSMSdss

System Action: The system enters a wait state, awaiting operator response.

Operator Response: Probable user error. Check for and correct keypunch or multipunch errors. Reset the card reader. Press the interrupt key and continue processing.

ADR502A **CONTROL STATEMENT ERROR. JOB TERMINATED.**

Explanation: A control statement contains an incorrect keyword, parameter, or name field.

Source: DFSMSdss

System Action: The job is ended.

Application Programmer Response: Probable user error. Check for keypunch errors. Correct keyword, parameter, or name fields. Resubmit the job.

ADR503A STATEMENT SEQUENCE ERROR. JOB TERMINATED.

Explanation: Either the statements are not in proper sequence or unnecessary statements are present.

Source: DFSMSdss

System Action: The job is ended.

Application Programmer Response: Probable user error. Correct control statement sequence, or remove unnecessary statements. Resubmit the job.

ADR504W SVC INTERRUPT. JOB TERMINATED

Explanation: An unknown SVC interrupt occurred. This program does not issue SVCs.

Source: DFSMSdss

System Action: The job ends.

Operator Response: Rerun the program.

ADR505A DEFINE INPUT DEVICE.

Explanation: The input device must be identified to the system by the operator, as specified under "Operator Response."

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Prepare the input device by placing control statements in it. Load the source tape on the source device and prepare it. Enter the following message from the console:

`INPUT=device_type,device_number`

where *device_type* is the device type, and *device_number* is the device number of the input device.

ADR506A THE VOLID IN CONTROL STATEMENT DOES NOT AGREE WITH ID IN VOL LABEL WHICH FOLLOWS. VOLID= *volume_serial_number*

Explanation: The VOLID parameter in the control statement did not match the volume serial number, *volume_serial_number*, found on the receiving volume.

Source: DFSMSdss

System Action: The job is ended.

Application Programmer Response: Probable user error. Correct the error and resubmit the job.

Operator Response: Mount the correct volume, and rerun the program.

ADR507A ENTER CONTROL CARD STATEMENT

Explanation: The input control statements are being entered from a console; this message is a prompt.

Source: DFSMSdss

System Action: None.

Operator Response: Enter the control statements for JOB, MSG, RESTORE, and, optionally, VDRL, and then END.

ADR510I BAD TRACK *cchh*

Explanation: A defective track was found at the location specified by *cc*, the cylinder number, and *hh*, the head number.

Source: DFSMSdss

System Action: None.

Application Programmer Response: Make sure that message ADR511I was issued for each bad track.

ADR511I ALTERNATE *cchh* **| NONE**

Explanation: An alternate track at the location specified by *cc*, the cylinder number, and *hh*, the head number, is the track that replaces the defective track.

Source: DFSMSdss

System Action: None.

ADR551A DASD CONTROLLER STATE CHANGE, PAUSE THEN DEPRESS INTERRUPT KEY.

Explanation: A 3990 Storage Control state change interrupt occurred. Wait approximately 15 seconds for the condition to complete.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Wait 15 seconds, and then press the interrupt key.

System Programmer Response: See *3990 Storage Control Reference for Model 6* for state change interrupt conditions.

ADR552W PROGRAM INTERRUPT. JOB TERMINATED.

Explanation: A program interrupt occurred.

Source: DFSMSdss

System Action: The job is ended.

ADR553A CONSOLE FAILED TO READ LAST MESSAGE. DEPRESS INTERRUPT KEY.

Explanation: The console failed to read the input message.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Press the interrupt key, and attempt to enter the input message again.

ADR554A READY READER *device_number***. DEPRESS INTERRUPT KEY.**

Explanation: Reader *device_number* has a card or transport jam or is out of cards.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Correct the faulty condition, ready the reader, and press the interrupt key to continue the program. If the card or transport jam occurs again, reproduce the jammed cards and try again.

ADR555A READY PRINTER *device_number*. DEPRESS INTERRUPT KEY.

Explanation: Printer *device_number* is not ready. This can be caused by a forms check, an open interlock, or the STOP key being pressed.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Correct the faulty condition, ready the device, and press the interrupt key.

ADR556A READY TAPE *device_number*. DEPRESS INTERRUPT KEY.

Explanation: Tape drive *device_number* is not ready.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Correct the faulty condition, ready the device, and press the interrupt key.

ADR557A READY DASD *device_number*. DEPRESS INTERRUPT KEY.

Explanation: Direct-access device *device_number* is not ready.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Correct the faulty condition, ready the device, and press the interrupt key.

ADR558A WRONG TAPE ON *device_number*. COND = *condition_code*. MOUNT PROPER TAPE.

Explanation: The tape on drive *device_number* does not pertain to this job. The values of *condition_code* are:

1 This is not a DFSMSdss-created dump tape, or, if it is, the stand-alone program does not support the format on the tape. (The tape may have been created by an incompatible DFSMSdss release.)

2 An incorrect tape was mounted in response to ADR561A.

3 The dump tape is not compatible with the function specified. A full volume RESTORE is being attempted from a tracks or physical data set DUMP tape.

5 A RESTORE is being attempted from a DFSMSdss Version 2 logical data set dump tape.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Probable user error. Mount the correct tape, and press the interrupt key to continue.

ADR559A READER CHECK. CORRECT ERROR. DEPRESS INTERRUPT KEY.

Explanation: A reader check occurred.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Correct the faulty condition, and clear the reader check. Ready the reader and continue the program by pressing the console interrupt key. If reader checks occur frequently, check the input cards with a card guide for off-punched cards. Ensure that the cards are both punched correctly and in good condition.

ADR560A PRINT CHECK. CORRECT ERROR. DEPRESS INTERRUPT KEY.

Explanation: A print check occurred.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Clear the print check by pressing Check Reset on the printer. Press the interrupt key on the console to continue processing.

ADR561A END OF TAPE. MOUNT TAPE ON *device_number*. DEPRESS INTERRUPT KEY.

Explanation: It is the end of the present tape reel on device *device_number*.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Mount the next tape volume on the active tape device, the FROMDEV device. Press the interrupt key on the console to continue the program.

ADR563A END OF JOB.

Explanation: A normal end-of-job condition occurred.

Source: DFSMSdss

System Action: The job is ended.

ADR565A ATTEMPT TO RESTORE TO WRONG DEVICE. JOB TERMINATED.

Explanation: The program attempted to restore data to a device type other than the type from which it was dumped.

Source: DFSMSdss

System Action: The job is ended.

Application Programmer Response: Probable user error. Correct the TODEV operand to reflect the device from which the data was dumped, and rerun the job.

ADR568I TRACK 0 HAS AN ALTERNATE ASSIGNED. THIS VOLUME HAS BECOME NON-IPL-ABLE

Explanation: Track 0 was flagged as a defective track. (This volume is usable as a work volume but may not be usable as a system residence volume.)

Source: DFSMSdss

System Action: The job is ended.

Operator Response: If the volume is to be used as an IPL-able volume, try doing the IPL from that volume. If it fails, mount another volume and rerun the job.

ADR569A PRINTER EQUIPMENT CHECK. CORRECT ERROR. DEPRESS INTERRUPT KEY.

Explanation: A printer equipment check occurred.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: Correct the error at the printer. Press the interrupt key and continue processing.

ADR570A SEQUENCE ERROR ON RESTORE TAPE. JOB TERMINATED.

Explanation: The restore tape has a missing, incorrect, or extra record.

Source: DFSMSdss

System Action: The program is unable to continue with the RESTORE. The job is ended.

Operator Response: Probable error during DUMP.

ADR571I TRACK NOT RESTORED DUE TO I/O ERROR DURING DUMP, TRACK *cchh*

Explanation: An I/O error was encountered in reading the track during DUMP.

Source: DFSMSdss

System Action: The track on the disk is not written on.

Application Programmer Response: Verify that the track is not necessary.

ADR601W COMMAND REJECT. *device*, *opcode*, *status*, *sense*

Explanation: The specified channel rejected an incorrect channel command word (CCW) list.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the program.

ADR602A INTERV. REQUIRED. *device_number*

Explanation: Device *device_number* is not ready.

Source: DFSMSdss

System Action: The system waits for the operator's response.

Operator Response: The specified device requires operator intervention to ready it. If you cannot make the device ready, contact your IBM Support Center.

ADR603W BUS OUT CHECK. *c*

Explanation: A bus out check occurred on channel c. Probable hardware error.

Source: DFSMSdss

System Action: The job is ended.

ADR604W EQUIPMENT CHECK.

Explanation: An equipment failure occurred. Probable hardware error.

Source: DFSMSdss

System Action: The job is ended.

ADR605W DATA CHECK. *device*, *opcode*, *status*, *sense*

Explanation: A solid data check occurred on the specified device. Probable hardware error.

Source: DFSMSdss

System Action: The job is ended.

ADR606W OVERRUN. *device*, *opcode*, *status*, *sense*

Explanation: An overrun check occurred on the specified device.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the program.

ADR608W DATA CONV. CHECK. *device*, *opcode*, *status*, *sense*

Explanation: A data converter check occurred on the specified device.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Move data to another device, and rerun the job.

ADR609W END OF CYLINDER. *device*, *opcode*, *status*, *sense*

Explanation: An unusual end-of-cylinder condition occurred on the specified device.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the job.

ADR610W INVALID ADDRESS. *device*, *opcode*, *status*, *sense*, *cchh*

Explanation: An incorrect address was issued to the specified device.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Determine if the *cchh* address shown in the message is valid for the indicated device.

ADR611W NOT AVAILABLE. *device*, *opcode*, *status*, *sense*

Explanation: The specified device is not attached to the system.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Ensure that the ENABLE/DISABLE switch on the device and/or the tape control is in the ENABLE position.

ADR612W READ DATA CHECK. *device*, *opcode*, *status*, *sense*

Explanation: A permanent read data check was detected on the specified tape unit.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Clean the read/write heads of the tape unit, and rerun the job.

ADR614W TRACK OVERRUN.

Explanation: A track overrun condition occurred.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the program.

ADR616I ASYN UC

Explanation: DFSMSdss received an interrupt containing a unit check to a device for which a Start I/O was initiated but not started.

Source: DFSMSdss

System Action: The task is terminated.

Operator Response: Rerun the job.

ADR617W NO RECORD FOUND

Explanation: Two index markers were detected during a CCW chain, and the record being sought was not found.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Probable hardware error. Execute Device Support Facilities to reinitialize the DASD volume. Rerun the job.

ADR618W INDETERMINATE ERROR.

Explanation: An indeterminate I/O error occurred.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Verify that the control unit and channel are not shared. Rerun the program.

ADR619W UNEXPECTED ERROR. *device*, *opcode*, *status*, *sense*

Explanation: The error return is valid, but it is not associated with the specified device.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the program.

ADR620W CHAN. CTRL ERROR. *cxx*, *opcode*, *status*, *sense*

Explanation: A channel control check occurred on the channel specified by *cxx*.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Probable hardware error. Rerun the job.

ADR621W INTERFACE ERROR. *cxx*, *opcode*, *status*, *sense*

Explanation: An interface control check occurred on the channel specified by *cxx*.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Probable hardware error. Rerun the job.

ADR622W CHAN. DATA CHECK. *cxx*, *opcode*, *status*, *sense*

Explanation: A channel data check occurred on the channel specified by *cxx*.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Probable hardware error. Rerun the job.

ADR624W PROGRAM CHECK.

Explanation: A program check occurred because of an incorrect CCW.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the program.

ADR625W PROTECTION CHECK. (*device*, *device_number***),** *opcode*, *status*, *sense*

Explanation: A protection check occurred on the specified device.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the program.

ADR626W UNIT EXCEPTION. *device_number*, *device*, *opcode*, *status*, *sense*

Explanation: A unit exception occurred on the specified unit.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the program.

ADR627W INCORRECT LENGTH. *device_number*, *opcode*, *status*, *sense*

Explanation: An incorrect length record condition occurred on the specified unit.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the program.

ADR628W CHAINING CHECK. *cxx*, *opcode*, *status*, *sense*

Explanation: A chaining check occurred on the channel specified by *cxx*.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Probable hardware error. Rerun the job.

ADR629W COMMAND SEQ. ERR.

Explanation: An incorrect sequence of CCWs was issued.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Probable hardware error. Rerun the job.

ADR630W SEEK CHECK ERROR.

Explanation: An incorrect SEEK address was issued, or a unit malfunction caused a SEEK check.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Probable hardware error. Rerun the job.

ADR632W TAPE-LOAD POINT. *device_number*, *opcode*, *status*, *sense*

Explanation: A tape at load point condition occurred on the specified tape unit.

Source: DFSMSdss

System Action: The job is ended.

ADR633W NOISE RECORD. *device_number*, *opcode*, *status*, *sense*

Explanation: A noise record was found on the specified tape unit.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Clean the read/write heads of the tape unit, and rerun the job.

ADR634W MISSING ADR-MARK. *device_number*, *opcode*, *status*, *sense*

Explanation: A missing address marker occurred on the specified device.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Rerun the job.

ADR635W RESTORE TERMINATED. OUTPUT DEVICE (*cccc***) TOO SMALL FOR INPUT (***cccc***)**

Explanation: The number of cylinders on the target DASD volume is less than either:

- The number of cylinders dumped from the original input volume
- The highest cylinder number to be restored, as specified on a VDRL statement.

Source: DFSMSdss

System Action: The RESTORE operation is ended.

Application Programmer Response: Supply an appropriate volume that matches the input for a full volume RESTORE, or correct the VDRL statement and rerun the job.

ADR642W INVALID TRK FMT. *device_number*, *opcode*, *status*, *sense*

Explanation: An attempt was made to write data exceeding track capacity on the specified device.

Source: DFSMSdss

System Action: If the input tape contains the incorrect track, the RESTORE continues. Otherwise, the job is ended.

Operator Response: Rerun the program.

ADR643W WRITE INHIBITED.

Explanation: The WRITE INHIBIT switch is probably on in the control unit to inhibit processing of write commands.

Source: DFSMSdss

System Action: The job is ended.

Operator Response: Check the status of the WRITE INHIBIT switch:

- If the WRITE INHIBIT switch is on to inhibit execution of write commands and the disk pack should be written on, set the switch off and rerun the job.
- If the WRITE INHIBIT switch is set on to intentionally inhibit processing of write commands, follow the procedures established by your installation.
- If the WRITE INHIBIT switch is off to allow processing of write commands, rerun the job.

ADR649W I/O ERROR, JOB TERMINATED.

Explanation: This message follows all messages that describe input/output error conditions.

Source: DFSMSdss

System Action: The job is ended.

ADR655I ADDITIONAL SENSE *tttxxxxx* **(***xxxxxxxx* **...)**

Explanation: If the device supplies more than 24 bytes of sense data, the additional bytes, beginning with byte 25, will be printed in groups of six up to the 64th byte.

Source: DFSMSdss

System Action: See previously issued message.

Application Programmer Response: See previously issued message.

ADR656W ERROR COMMUNICATING WITH SERVICE CONSOLE

Explanation: An error occurred while communicating with the service console. This message is only issued if there is a device other than the service console where the message can be issued.

Source: DFSMSdss

System Action: The job is ended.

ADR701E (*ttt***)-***mmmmm***(***yy***), UNEXPECTED RETURN CODE FROM** *external_name***:** *return_code-reason_code***.**

Explanation: The named external routine was called, and it returned an unexpected return code (*return_code*) or reason code (*reason_code*). The return code and reason code are printed in hexadecimal.

Source: DFSMSdss

System Action: Processing continues if possible. The return code is 8.

Application Programmer Response: This message is not normally expected and indicates a programming or system problem. If *external_name* is STORAGE MANAGEMENT SUBSYSTEM, ensure that SMS is active. If SMS is not active, activate SMS and rerun the job. If SMS is already active, rerun the job with PARM=`'ABEND=701'` on the EXEC statement and a SYSUDUMP DD statement, and contact your IBM Support Center.

If *external_name* is ANTRQST, refer to *DFSMS/MVS DFSMSdfp Advanced Services* for an explanation of *return_code* and *reason_code.*

Operator Response: None.

ADR702E (*ttt*)-*mmmmm*(*yy*), JOBCAT/STEPCAT NOT ALLOWED WHEN PROCESSING SMS MANAGED DATA SET *dsname*.

Explanation: A JOBCAT or STEPCAT DD statement was specified, and one of the data sets being processed was SMS-managed.

Source: DFSMSdss

System Action: Task ends with return code 8.

Application Programmer Response: Eliminate JOBCAT/STEPCAT in the JCL and rerun the job.

Operator Response: None.

ADR703E (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* NOT SELECTED DUE TO MISSING NVR

Explanation: The data set, which is non-VSAM and SMS-managed, was not selected because the non-VSAM volume record (NVR) for it cannot be found.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Run access method services DIAGNOSE for the data set, fix the error, and rerun the job.

Operator Response: None.

ADR704E (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* ORGANIZATION IS NOT SUPPORTED

Explanation: The following types of data sets are not supported by DFSMSdss in an SMS environment:

- Data set cataloged in more than one catalog
- CVOLs
- Indexed sequential data sets
- Absolute track allocation
- Unmovable data sets
- VTOCIX/VVDS
- PAGE/SWAP data sets
- the VIO journaling data set
- Direct data sets with OPTCD=A.

Source: DFSMSdss

System Action: The data set is not processed, and the return code is set to 8.

Application Programmer Response: None.

Operator Response: None.

ADR705E (*ttt*)-*mmmmm*(*yy*), INVALID {STORAGE CLASS | MANAGEMENT CLASS} NAME {*storage_class_name* | *management_class_name*} SPECIFIED

Explanation: A nonexistent storage class or management class was specified in the STORCLAS or MGMTCLAS keyword.

Source: DFSMSdss

System Action: Task ends with return code 8.

Application Programmer Response: Specify a valid storage class/management class and rerun the job.

Operator Response: None.

ADR706E (*ttt*)-*mmmmm*(*yy*), DUE TO ERRORS, SOURCE DATA SET *dsname1* IS NOW NAMED *dsname2*

Explanation: During COPY processing, the source data set can be renamed in order to allow allocation of the SMS-managed target data set. If the target allocation fails, an attempt is made to restore the source data set to its original state. If the ALTER of the source data set fails, this message is issued. The data set name indicates the name of the failing data set.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 8.

Application Programmer Response: Run access method services DIAGNOSE against the source catalog to determine the reason for the access method services ALTER failure. Restore the original data set name using access method services ALTER NEWNAME.

Operator Response: None.

ADR707E (*ttt*)-*mmmmm*(*yy*), NOT AUTHORIZED TO USE {ADMINISTRATOR | BYPASSACS | CONCURRENT |CONVERTV | DEFRAG | DELCATE | IMPORT | INCAT | MANAGEMENT CLASS | PROCESS(SYS1) | STORAGE CLASS | TOLERATE(ENQF)} {KEYWORD | *storage_class_name* | *management_class_name*} FOR DATA SET *dsname*

Explanation: Proper RACF authority is required as follows:

- ADMINISTRATOR keyword—RACF FACILITY class authority to perform DFSMSdss functions as a storage administrator.
- BYPASSACS keyword—RACF FACILITY class authority to bypass ACS.
- CONCURRENT keyword—RACF FACILITY class authority to use the concurrent copy feature.
- CONVERTV keyword—RACF FACILITY class authority to convert volumes.
- DEFRAG keyword—RACF FACILITY class authority to defragment volumes.
- DELCATE keyword—RACF FACILITY class authority to delete phantom catalog entries.
- IMPORT keyword—RACF FACILITY class authority to import data sets.
- INCAT keyword—RACF FACILITY class authority for direct catalog call.
- MANAGEMENT CLASS(*management_class_name*)—RACF authority to use management class *management_class_name*. The RESOWNER of the data set must have the authority to use the indicated management class (which may have been chosen for the data set by the ACS routines or by the user if BYPASSACS was specified for the data set).
- PROCESS(SYS1) keyword—RACF FACILITY class authority to remove restrictions on processing of *SYS1* system data sets.
- STORAGE CLASS(*storage_class_name*)—RACF authority to use storage class *storage_class_name*. The RESOWNER of the data set must have the authority to use the indicated storage class (which may have been chosen for the data set by the ACS routines or by the user if BYPASSACS was specified for the data set).
- TOLERATE(ENQF) keyword—RACF FACILITY class authority to process data sets even though shared or exclusive access fails.

Source: DFSMSdss

System Action: Another message will indicate the action taken. The return code is 8.

Application Programmer Response: Acquire the proper RACF authority and rerun the job.

- ADMINISTRATOR— FACILITY class must be active, the applicable profile must be defined, you must be permitted READ access to that profile.
- BYPASSACS— you must be permitted READ access to either the STGADMIN.ADR.COPY.BYPASSACS or the STGADMIN.ADR.RESTORE.BYPASSACS profiles.
- CONCURRENT: you must be permitted READ access to either the STGADMIN.ADR.COPY.CNCURRNT or the STGADMIN.ADR.DUMP.CNCURRNT profiles.
- CONVERTV— you must be permitted READ access to the STGADMIN.ADR.CONVERTV profile.
- DEFRAG— you must be permitted READ access to the STGADMIN.ADR.DEFRAG profile.
- DELCATE— you must be permitted READ access to the STGADMIN.ADR.DELCATE profile.
- IMPORT— you must be permitted READ access to the STGADMIN.ADR.IMPORT profile.
- INCAT— you must be permitted READ access the appropriate one of the following profiles:

  STGADMIN.ADR.COPY.INCAT,
  STGADMIN.ADR.DUMP.INCAT,
  STGADMIN.ADR.RELEASE.INCAT
- MANAGEMENT CLASS— the RESOWNER of the data set must be permitted access to the appropriate management class profile.
- PROCESS(SYS1)— you must be permitted access to the STGADMIN.ADR.COPY.PROCESS.SYS, STGADMIN.ADR.DUMP.PROCESS.SYS, or STGADMIN.ADR.RELEASE.PROCESS.SYS profiles.
- STORAGE CLASS— the RESOWNER of the data set must be permitted access to the appropriate storage class profile.
- TOLERATE(ENQF)— you must be permitted READ access to the STGADMIN.ADR.COPY.TOLERATE.ENQF, STGADMIN.ADR.DUMP.TOLERATE.ENQF, or STGADMIN.ADR.RESTORE.TOLERATE.ENQF profiles.

Operator Response: None.

ADR708E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **WAS NOT PROCESSED BECAUSE IT IS SMS-MANAGED AND JOBCAT/STEPCAT WAS SPECIFIED**

Explanation: DFSMSdss COPY or RESTORE cannot create an SMS-managed data set because JOBCAT or STEPCAT was specified.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Eliminate JOBCAT/STEPCAT in the JCL and rerun the job. For source data sets that are not cataloged in the standard search order, specify INCAT and give one or a list of catalog names.

Operator Response: None.

ADR709E **(***ttt***)-***mmmmm***(***yy***), AN ERROR OCCURRED IN THE STORAGE MANAGEMENT SUBSYSTEM WHILE** *action_description***. SMS MESSAGES FOLLOW**

Explanation: An error occurred in the Storage Management Subsystem while DFSMSdss was performing the action described by *action_description*. Error messages produced by the SMS service in error are printed following this message.

The *action_description* can be any one of the following:

- DETERMINING SMS CONSTRUCTS FOR DATA SET *dsname1* [WITH NEWNAME *dsname2*]
- ALLOCATING DATA SET *dsname1* [WITH NEWNAME *dsname2*]
- RENAMING DATA SET *dsname1* TO *dsname2*
- SCRATCHING DATA SET *dsname*

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Refer to the messages following this message to determine the actual error and to correct the problem.

Operator Response: None.

ADR710E **(***ttt***)-***mmmmm***(***yy***), COPYVOLID REQUIRED TO {RESTORE | COPY} INPUT VOLUME** *volume_serial_number_1* **TO OUTPUT VOLUME** *volume_serial_number_2*

Explanation: The source volume of a FULL volume COPY or RESTORE is SMS managed. In order to perform this operation, the COPYVOLID keyword must be specified.

Source: DFSMSdss

System Action: The function is ended with a return code of 8.

Application Programmer Response: If you want to COPY or RESTORE an SMS-managed volume, specify the COPYVOLID keyword in the control statement, and rerun the job.

Operator Response: None.

ADR711I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname1* **HAS BEEN ALLOCATED [AS A PDS | AS A PDSE] [WITH NEWNAME** *dsname2***] USING STORCLAS** *storage_class_name* **{DATACLAS** *data_class_name***|NO DATACLAS}, AND {MGMTCLAS** *management_class_name***|NO MGMTCLAS}**

Explanation: If the RENAME parameter was specified, the data set has been allocated with the new name in the storage class listed. The data class and management class assigned to the data set are also listed, if they exist. If the target data set of a PDS or a PDSE is allocated with a different type than the source, the new target type is listed as well, and the data set is converted to the new target type.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR712W (*ttt*)-*mmmmm*(*yy*), THE CATALOG *catalog_name* SPECIFIED IN RECATALOG IS NOT AVAILABLE

Explanation: The catalog specified in the RECATALOG parameter does not exist or is not available on the system.

Source: DFSMSdss

System Action: If the target data set is SMS-managed, the RECATALOG parameter is ignored, and the system determines the catalog. If the target data set is not SMS-managed, then message ADR380E is issued, and the task continues with the next data set. The return code is 4.

Application Programmer Response: If the target data set is not SMS-managed, ensure that the catalog name is correct and available, then rerun the job.

Operator Response: None.

ADR713E (*ttt*)-*mmmmm*(*yy*), UNABLE TO ALLOCATE SMS MANAGED DATA SET *dsname* BECAUSE NEITHER DELETE NOR RENAMEU WAS SPECIFIED

Explanation: An attempt to copy a cataloged data set into system-managed storage failed because the source data set was not deleted and the target data set was not renamed.

Source: DFSMSdss

System Action: The data set is not copied. The return code is 8.

Application Programmer Response: Specify either DELETE to delete the source data set or RENAMEUNCONDITIONAL to rename the target data set, then rerun the job. Refer to *DFSMS/MVS DFSMSdss Storage Administration Reference* under the RENAME keyword for the RESTORE command for possible syntax errors.

Operator Response: None.

ADR714E (*ttt*)-*mmmmm*(*yy*), UNABLE TO RESTORE USER CATALOG *catalog_name* BECAUSE THE SYSTEM-SELECTED TARGET VOLUME *target_volume* DOES NOT MATCH THE SOURCE VOLUME *source_volume*

Explanation: A user catalog must be restored to a volume with the same serial number and device type as the volume from which it was dumped. Because the user catalog is SMS-managed, the target volume is determined by the system.

Source: DFSMSdss

System Action: The user catalog is not restored. The return code is 8.

Application Programmer Response: Specify the correct DASD volume in the OUTDD/OUTDY parameter, and ensure that the volume is in a storage class with the guaranteed space attribute.

Operator Response: None.

ADR715W (*ttt*)-*mmmmm*(*yy*), UNABLE TO ALTER STATUS OF SMS MANAGED GENERATION DATA SET *dsname* TO {ACTIVE | ROLLED-OFF}. IT WILL BE LEFT IN DEFERRED STATUS.

Explanation: DFSMSdss was attempting to update the status of an SMS-managed generation data set from *deferred* to either *active* or *rolled-off*, but it was unable to do so because of a VVDS manager error. Message ADR231E describing the VVDS manager error precedes this message.

Source: DFSMSdss

System Action: The data set is left in *deferred* status. The return code is 4.

Application Programmer Response: Take the action recommended by message ADR231E. To change the status to *active*, use the access method services command ALTER ROLLIN.

Operator Response: None.

ADR716W (*ttt*)-*mmmmm*(*yy*), UNABLE TO CONVERT USER CATALOG *catalog_name* {TO | FROM} SMS MANAGEMENT. VOLUME *volume_serial_number* HAS BEEN PLACED IN INITIAL STATUS.

Explanation: DFSMSdss physical data set restore has restored a non-SMS-managed integrated catalog facility user catalog to an SMS-managed volume or an SMS-managed user catalog to a non-SMS-managed volume without performing the appropriate conversion to or from SMS management. To avoid contaminating the volume, it was placed in INITIAL status.

Source: DFSMSdss

System Action: The user catalog is restored, and the output volume is placed in INITIAL status. The return code is 4.

Application Programmer Response:

- Connect the user catalog to the master catalog.
- Use the DFSMSdss CONVERTV command to return the volume to its status before the restore. CONVERTV will also perform the appropriate conversion on the user catalog.

Operator Response: None.

ADR717E (*ttt*)-*mmmmm*(*yy*), SYSTEM SERVICES ERROR OCCURRED WHILE *action_description*. {RETURN INFORMATION IS *version_number- module_name-return_code-reason_code* | ABEND CODE IS *abend_code*} [AND MESSAGES FOLLOW:]

Explanation:

- The system services' version number, module name, return code, and reason code were returned as the result of an error or exception condition while DFSMSdss was performing the action described by *action_description*.
- If the system services abended, see *OS/390 MVS System Codes* for an explanation of *abend_code*. DFSMSdss was performing the action described by *action-description* at the time of the abend.

The *action_description* can be any one of the following:

- RACF PROTECTING *dsname*
- RACF UNPROTECTING *dsname*
- RENAMING DATA SET *dsname1* TO *dsname2*
- OBTAINING INFORMATION FOR DATA SET *dsname*
- OBTAINING VOLUME INFORMATION FOR DATA SET *dsname*
- DETERMINING TARGET CATALOG FOR DATA SET *dsname*
- ALTERING THE CHECKPOINT ATTRIBUTE OF DATA SET *dsname*
- DUMPING DATA SET *dsname*
- COPYING DATA SET *dsname*
- RESTORING DATA SET *dsname*

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Following this message, see message IGW01zzz (where *zzz* is the last three digits of *reason_code*) to determine the actual error and the measures to be taken to correct the problem.

Operator Response: None.

ADR718W **(***ttt***)-***mmmmm***(***yy***), SYSTEM SERVICES ENCOUNTERED A WARNING CONDITION WHILE** *action_description***. RETURN INFORMATION IS** *version_number-module_name -return_code-reason_code* **[AND MESSAGES FOLLOW:]**

Explanation: The system services' version number, module ID, return code, and reason code were returned as the result of a attention condition while DFSMSdss was performing the action described below by *action_description*.

Action-description can be any one of the following:

- COPYING DATA SET *dsname*
- RESTORING DATA SET *dsname*
- DUMPING DATA SET *dsname*

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 4.

If DFSMSdss allocated a target data set, it will be deleted.

Application Programmer Response: See message IGW01zzz to determine the actual error and the measures to be taken to correct the problem.

Operator Response: None.

ADR719E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **CANNOT BE CONVERTED TO { A PDSE | A PDS },** *reason_code***.**

Explanation: The CONVERT keyword with the PDS or PDSE subkeyword was specified in the COPY command for the data set. However, it cannot be converted because of the following reason code (*reason_code*):

01	The target data set is preallocated, and its data set type conflicts with the CONVERT keyword. For example, CONVERT PDSE was specified, but the preallocated target data set was not a PDSE.
02	The target volume for the data set is not SMS-managed.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Correct the problem as indicated by the reason code (*reason_code*) and reprocess the data set:

01	Rename or delete the preallocated data set.
02	Specify an SMS-managed target volume or modify the ACS routine to direct the target allocation to an SMS-managed volume.

Operator Response: None.

ADR720I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **WAS NOT SERIALIZED WHEN IT WAS DUMPED. RECOVERY DATA IS (***yyyyddd hh:mm:ss.t***)**

Explanation: The data set was not serialized when it was dumped because the Backup-While-Open (BWO) status in the VVDS indicated that this data set could be dumped without serialization by DFSMSdss if it was already serialized.

The recovery data information for the data set has the following values:

yyyyddd	The Julian date (year and days).
hh:mm:ss.t	The time-stamp in hours, minutes, seconds and tenths of a second.

Recovery data of (***** **:**:**.*) indicates that DFSMSdss could not obtain the recovery data.

System Action: Processing continues. If this message was unexpected, the Backup-While-Open (BWO) status may have been incorrectly set or left set by an application.

Application Programmer Response: Forward recovery may be required to use this data set.

Operator Response: None.

ADR721I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **IS BEING PROCESSED AS A BACKUP-WHILE-OPEN DATA SET.**

Explanation: The normal serialization was not obtained for the data set, but the Backup-While-Open (BWO) status was either 100 or changed to 100 from 110. As a result, the data set was processed even though it was already opened by another application. See Appendix B, "Data Integrity—Serialization," in *DFSMS/MVS DFSMSdss Storage Administration Reference* for more details about the BWO status indicators.

System Action: Processing continues. If this message was unexpected, the Backup-While-Open (BWO) status may have been incorrectly set or left set by an application.

Application Programmer Response: None.

Operator Response: None.

ADR722E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **IS UNAVAILABLE AND CANNOT BE PROCESSED - BACKUP-WHILE-OPEN STATUS IS** *nnn*

Explanation: The Backup-While-Open status in the VVDS indicated that this data set is in an unavailable state and cannot be dumped or restored. See Appendix B, "Data Integrity—Serialization," in *DFSMS/MVS DFSMSdss Storage Administration Reference* for more details about the BWO status indicators.

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Correct the condition that is causing the data set to be unavailable, or change the BWO status.

Operator Response: Rerun the function when the data set becomes available or the BWO status is changed.

ADR723W **(***ttt***)-***mmmmm***(***yy***), PHYSICAL OPERATION: BACKUP-WHILE-OPEN PROCESSING FOR DATA SET** *dsname* **WAS NOT PERFORMED**

Explanation: Backup-While-Open (BWO) is not supported in physical dump and restore functions.

System Action: The data set is dumped or restored, but the contents of the data set are unpredictable. The return code is 4.

Application Programmer Response: If this is a dump function, re-process the data set with logical data set dump. If this is a restore function, ensure that the restored data set is usable.

Operator Response: None.

ADR724E **(*ttt*)-*mmmmm*(*yy*), ERROR DURING *function* FOR DATA SET *dsname* [IN CATALOG *catalog_name*], *vv-ii-ww-zzz***

Explanation: The version number (*vv*) and module ID (*ii*), and the CMI (catalog management) return code (*ww*) and reason code (*zzz*) were returned by the catalog services as the result of a catalog error or an exception condition.

Source: DFSMSdss

System Action: Command processing is ended. The return code is 8.

Application Programmer Response: See message IGW01zzz for specific return code and reason code definitions. If CMI return information is displayed, see IDC3009I for definitions.

Operator Response: None.

ADR725E **(*ttt*)-*mmmmm*(*yy*), INTERNAL BUFFERING ERROR ENCOUNTERED FOR DATA SET *dsname* [IN CATALOG *catalog_name*] WHILE INTERFACING WITH SYSTEM SERVICES FOR DATA MOVEMENT**

Explanation: An error was detected in the I/O buffer table. This is probably an internal error in DFSMSdss.

Source: DFSMSdss

System Action: Processing ends for the data set. Processing continues with the next data set that is not a PDSE. The return code is 8.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR726W **(*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* WAS A BACKUP-WHILE-OPEN DATA SET BUT WAS RESTORED TO A NON-SMS-MANAGED TARGET.**

RECOVERY DATA IS (*yyyyddd hh:mm:ss.t*)

Explanation: The data set was dumped while it was open and should be restored to an SMS-managed volume.

The recovery data information for the data set has the following values:

yyyyddd	The Julian date (year and days).
hh:mm:ss.t	The time-stamp in hours, minutes, seconds and tenths of a second.

Recovery data of (***** **:**:**.*) indicates that DFSMSdss could not obtain the recovery data.

System Action: The data set is restored. The return code is 4.

Application Programmer Response: For forward recovery, the data set must be restored as an SMS-managed data set. Select an SMS-managed target volume or modify the ACS routine to direct the allocation to an SMS-managed target volume.

Operator Response: None.

ADR727E **(*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* (IN CATALOG *catalog_name*) WAS NOT PROCESSED BECAUSE IT IS SMS-MANAGED BUT IT IS NOT CATALOGED IN THE STANDARD ORDER OF SEARCH**

Explanation: The data set, which is SMS-managed, was not selected because it was found to be cataloged outside the standard order of search.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Recatalog the data set in the standard order of search and rerun the job.

Operator Response: None.

ADR728E **(*ttt*)-*mmmmm*(*yy*), THE DUMPED VERSION OF DATA SET *dsname* IS NOT USEABLE - BACKUP-WHILE-OPEN STATUS IS *nnn***

Explanation: Either the Backup-While-Open (BWO) status or the data set was changed while the data set was being dumped.

For example, a CI or CA split may have occurred, or the data set may have been extended. The version of the data set on the dump data set (tape or DASD) is not usable.

A status of '***' indicates that DFSMSdss could not obtain the BWO status bits at the end of the dump. See Appendix B, “Data Integrity—Serialization,” in *DFSMS/MVS DFSMSdss Storage Administration Reference* for more details about the BWO status indicators.

System Action: The return code is 8. Processing continues with the next data set.

Application Programmer Response: None.

Operator Response: Rerun the dump when the data set becomes available.

ADR729E **(*ttt*)-*mmmmm*(*yy*), UNABLE TO ALLOCATE SUFFICIENT SPACE TO PROCESS DATA SET *dsname*. IT CANNOT BE COPIED/RESTORED**

Explanation: DFSMSdss is unable to allocate sufficient space to contain the data set.

Source: DFSMSdss

System Action: The data set is not copied or restored. The return code is 8.

Application Programmer Response: If possible, preallocate the target data set with the appropriate amount of space. Otherwise, contact your IBM Support Center.

Operator Response: None.

ADR730W **(*ttt*)-*mmmmm*(*yy*), CLUSTER *cluster_name* IS OPEN**

Explanation: The specified VSAM cluster is in open-for-update status. This condition does not prevent the data set from being processed.

If the function this message was issued against was either a data set dump or data set copy, the cluster will be backed up or copied.

Note: The data set may be unusable if the source was in the process of being updated.

If the function this message was issued against was data set restore, the backup copy being restored was open at the time of dump. The restored data set may or may not be usable.

Source: DFSMSdss

System Action: The cluster will be dumped, copied, or restored if it is selected. The return code is 4.

Application Programmer Response: For dump or copy, close the cluster and rerun the job if a complete copy is necessary. For restore, use the Access Method Services VERIFY or EXAMINE commands to ensure that the cluster is usable.

Operator Response: None.

ADR731W **(***ttt***)-***mmmmm***(***yy***), THE SIZE OF THE BLOCK OF DATA ACTUALLY READ,** *nnnn1* **BYTES, IS NOT A MULTIPLE OF LRECL,** *nnnn2***. DATA SET** *dsname* **IS PROCESSED, BUT REBLOCKING IS TERMINATED.**

Explanation: During a DFSMSdss data set COPY or RESTORE with REBLOCK specified, or when reblocking has been automatically invoked because the source and target block sizes differ, an inconsistency was detected between the size of a block of data actually read from the user's data set (*nnnn1*) and the LRECL (*nnnn2*) obtained from the VTOC entry. For a data set with RECFM=FB to be legitimate, all blocks of data in the data set must be an integer multiple of the LRECL. All blocks do not have to be the same length, but they must all be an integer multiple of the LRECL. One or more blocks of data in the data set named in the message does not meet this criteria.

Source: DFSMSdss

System Action: The data set is processed, but reblock processing is terminated starting with the current block. The return code is 4.

Application Programmer Response: Inspect the data set for any LRECL anomalies, and correct any that you find. Retry without specifying REBLOCK, or ensure that the target block size is the same as the source.

Operator Response: None.

ADR732E **(***ttt***)-***mmmmm***(***yy***) DATA SET** *dsname* **ON VOLUME** *volume_serial_number* **WAS NOT SELECTED BECAUSE IT WAS NOT CATALOGED**

Explanation: The VSAM data set specified could not be processed for one or more of the following reasons:

- The data set was not cataloged when the job was run.
- There is no catalog entry for the data set, or one of the components of the data set resides on a volume that is not in the catalog volume list for the component.
- If SELECTMULTI(FIRST) or SELECTMULTI(ANY) was specified, an uncataloged data set was encountered on a volume specified by LOGINDDNAME, LOGINDYNAM, LOGDDNAME, or LOGDYNAM. However, there is a cataloged data set with a duplicate name residing on another volume.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 8.

Application Programmer Response: Inspect the catalog for the entry of the VSAM data set listed in the message. If a volume serial number is listed in the message, verify that the number is also listed in the catalog entry for the data set. Correct the corrupted catalog, and use IDCAMS to recatalog the VSAM data set if no catalog entry is found.

Operator Response: None.

ADR733I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **{DOES NOT HAVE A RECORD FORMAT OF FIXED OR FIXED BLOCK | HAS A STANDARD USER LABEL}. RELATIVE BLOCK ADDRESS PROCESSING WILL NOT BE USED.**

Explanation: The keyword RELBLOCKADDRESS was specified, but the data set did not have a record format of fixed or fixed block, or the data set had a standard user label. The data set cannot be processed using relative block address.

Source: DFSMSdss

System Action: Processing continues without the use of relative block address.

Application Programmer Response: None.

Operator Response: None.

ADR734I **(***ttt***)-***mmmmm***(***yy***),** *date time* **CONCURRENT COPY INITIALIZATION [UN]SUCCESSFUL FOR {VOLUME** *volume_serial_number* **|** *cc_data_sets* **OF** *selected_data_sets* **SELECTED DATA SETS}. [SERIALIZATION FOR THIS DATA IS RELEASED IF DFSMSdss HELD IT.] THE INTERMEDIATE RETURN CODE IS** *return_code***.**

Explanation: The initialization of the concurrent copy session has completed. If the initialization was successful, serialization of the data being dumped or copied with concurrent copy is no longer necessary and it has been released (if DFSMSdss held it). The data is now available for update activity without affecting the dump or copy operation already in progress.

If the concurrent copy initialization was unsuccessful or *cc_data_sets* is less than *selected_data_sets*, this message is preceded by one or more ADR735W or ADR737W messages indicating what data was not successfully initialized into the concurrent copy session and why. If you are doing a logical data set operation, this message is also preceded by message ADR801I indicating the number of data sets that passed filtering and are therefore selected for further processing. The return code for this task (*ttt*) up to this point is *return_code*. If there were any warning or error messages prior to this message, the intermediate return code is 4 or 8, respectively.

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR735W **(***ttt***)-***mmmmm***(***yy***),** *date time* **USE OF CONCURRENT COPY FAILED [FOR [DATA SET** *dsname* **ON] VOLUME** *volume_serial_number***],** *reason_code***. SERIALIZATION WILL BE HELD AND CONCURRENT COPY WILL NOT BE USED. DIAGNOSTIC INFORMATION:** *sdm_rc-sdm_rsn sense_data*

Explanation: The initialization of the concurrent copy function did not complete successfully for the specified data set or volume. Any serialization obtained by DFSMSdss on the data will be held. The initialization failure is describes by reason code, (*reason_code*):

1 Communications between DFSMSdss and the system data mover function could not be established because the real addresses of one or more UCBs were not available. See the previously issued message ADR821W for more information.

2 The data being dumped or copied does not reside on hardware that supports concurrent copy or SnapShot.

4 The control unit limit of concurrent copy sessions has already been reached, or the control unit cannot support this operation.

6 The limit of devices participating in the concurrent copy session that are attached to a given control unit has already been reached.

8 The host limit of concurrent copy sessions has already been reached.

10 The System Data Mover is not available.

12 Concurrent copy or SnapShot initialization for the PDSE or HFS failed. This could have been caused by the data set being extended multiple times during the concurrent copy or SnapShot initialization.

14 Concurrent copy or SnapShot cannot be used due to an error condition. The system data mover return code (*sdm_rc*) and reason code (*sdm_rsn*) are supplied as diagnostic aids. For explanations of the codes, see Table 2 on page ADR-100.

16 SnapShot software support is not available.

The operation will continue as if concurrent copy was not requested for the specified data set or volume. Serialization will be held until the operation is complete.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: If you want the concurrent copy feature to be used, you may correct the problem by doing the following:

1 Resolve the UCB problem and rerun the job.

2 Ensure that all of the data being dumped or copied resides on hardware that supports concurrent copy or SnapShot.

4 If the control unit can support the operation, run the job when the system is less active. Otherwise, ensure that the control unit supports concurrent copy.

6 Reduce the amount of data to be processed in the concurrent copy session, or spread it out across multiple control units.

8 Run the job at a later time when the system is less active.

10 Ensure that the System Data Mover initializes properly when the system is brought up.

12 Rerun the job at a later time. If the job still fails with the same error message, obtain an ABEND user dump on this message and call your IBM Support Center.

14 Notify your system programmer.

16 Install support for SnapShot.

Operator Response: None.

ADR736E **(***ttt***)-***mmmmm***(***yy***), AN ERROR CONDITION WAS DETECTED BY THE SYSTEM DATA MOVER. DIAGNOSTIC INFORMATION:** *return_code-reason_code***.**

Explanation: DFSMSdss cannot complete the requested concurrent copy or SnapShot function due to an error condition detected by the System Data Mover. The System Data Mover return code (*return_code*) and reason code (*reason_code*) are supplied as diagnostic aids.

Source: DFSMSdss

System Action: Concurrent copy or SnapShot is not used to perform the requested function.

Application Programmer Response: None.

Operator Response: None.

System Programmer Response: For explanations of the codes, see Table 2 on page ADR-100.

ADR737W **(***ttt***)-***mmmmm***(***yy***), CONCURRENT COPY IS NOT SUPPORTED FOR DATA SET** *dsname***,** *reason_code***. THE DATA SET WILL NOT BE PROCESSED USING CONCURRENT COPY.**

Explanation: The data set named cannot be supported by the concurrent copy function for the following reason, *reason_code*:

4 The data set must be copied with a utility.

This data set will be processed as if concurrent copy were not requested.

Source: DFSMSdss

System Action: The data set is not processed using concurrent copy. The return code is 4.

Application Programmer Response: You may correct the problem by:

4 Excluding the data set from the concurrent copy operation.

Operator Response: None.

ADR738E **(***ttt***)-***mmmmm***(***yy***),** *date time* **CONCURRENT COPY OPERATION IN PROGRESS FAILED,** *return_code***-***reason_code***,** *sense*

Explanation: The concurrent copy operation in progress has failed. The System Data Mover return code (*return_code*) and reason code (*reason_code*) and the hardware sense data (*sense*) are supplied as diagnostic aids.

Source: DFSMSdss

System Action: All data being dumped or copied with concurrent copy is bypassed. Processing continues for all data being dumped or copied without concurrent copy. The return code is 8.

Application Programmer Response: Take the appropriate action to correct the problem and resubmit the job.

Operator Response: None.

ADR739E **(***ttt***)-***mmmmm***(***yy***), [PREALLOCATED | SOURCE] DATA SET** *cluster_name* **[IN CATALOG** *catalog_name***] WAS NOT [PROCESSED | UNCATALOGED | USABLE] BECAUSE IT WAS NOT COMPLETELY RECALLED**

Explanation: Either the data set was being recalled or a previous recall did not successfully complete. When TYPRUN=NORUN is requested, ADR739E is issued for a DUMP or COPY source data set, but not for a preallocated target of a COPY or RESTORE. An incompletely recalled VSAM data set may only be detected when it is accessed in the standard order of search.

Source: DFSMSdss

System Action: One of the following occurred:

- NOT PROCESSED means the source data set was not copied, dumped, or released.
- NOT USABLE means the preallocated target data set was found to be unusable because it was incompletely recalled. The COPY or RESTORE of the cluster was not done.
- NOT UNCATALOGED means the preallocated target data set could not be uncataloged when the DELETECATALOGENTRY keyword was specified. The RESTORE of the cluster was not

done. Message ADR497E will also be issued and will provide further details.

The return code is 8.

Application Programmer Response: Issue the HRECALL command for the data set and rerun the job when the data set becomes available.

Operator Response: None.

ADR740W (*ttt*)-*mmmmm*(*yy*), DATA SET *dsname* IN CATALOG *catalog_name* HAS BEEN MIGRATED AND IS NO LONGER AVAILABLE FOR SELECTION

Explanation: The data set was migrated after the DFSMSdss step started. The data set was no longer available to be processed. This message will be issued for data sets that would have been excluded with BY filtering, but BY filtering was not performed because DFSMSdss could not locate the VTOC entry for the data set because it was migrated.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 4.

Application Programmer Response: If the data set needs to be processed, recall the data set and rerun the job.

Operator Response: None.

ADR741E (*ttt*)-*mmmmm*(*yy*), AN UNEXPECTED VALUE WAS RETURNED FROM SYSTEM CATALOG SERVICES FOR DATA SET *dsname*

Explanation: During an attempt to obtain data set information, a zero value was returned from the system catalog services for an attribute of the specified data set.

Source: DFSMSdss

System Action: The data set was not processed. Processing continues with the next data set. The return code is 8.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR742E (*ttt*)-*mmmmm*(*yy*), CLUSTER *cluster_name* [IN CATALOG *catalog_name*] WAS NOT PROCESSED BECAUSE IT HAS AN ALLOCATION INCONSISTENCY

Explanation: The VSAM data set was not processed because either its primary or its secondary allocation amount is not an even multiple of its tracks per control area (tracks/CA). The data set may contain unused tracks.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Correct the allocation inconsistency and rerun the job.

Operator Response: None.

ADR743E (*ttt*)-*mmmmm*(*yy*), PROCESSING FOR DATA SET *dsname* IS TERMINATED DUE TO INSUFFICIENT DIRECTORY SPACE

Explanation: DFSMSdss cannot process the data set, *dsname*, because there is no room left in the directory to add member information.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: The data set does not conform to standard conventions for a PDS. If the data set must be moved as is, rerun the job by specifying the data set in the NOPACKING keyword list and providing at least one target volume of a like device as the volume on which the data set resides. Use the DFSMSdss PRINT command to print the data set in order to determine the cause of the failure. Review other informational or attention messages that may precede this message.

Operator Response: None.

ADR744W (*ttt*)-*mmmmm*(*yy*), NO VALID MEMBERS WERE FOUND FOR PDS *dsname*. ONLY THE DIRECTORY WILL BE UPDATED

Explanation: No members were found in the PDS or all members found had invalid starting TTRs. This message is preceded by message ADR745W for each member with an invalid start TTR.

Source: DFSMSdss

System Action: Only the directory of the data set is processed. The return code is 4.

Application Programmer Response: For a data set with no members, no user action is required. For a data set with all invalid member start TTRs, see message ADR745W for direction.

Operator Response: None.

ADR745W (*ttt*)-*mmmmm*(*yy*), STARTING TTR *ttttrr* FOR MEMBER *member_name* IN PDS *dsname* IS INVALID. REASON CODE IS *reason_code*

Explanation: The starting TTR of the named member is invalid for one of the following reasons (*reason_code*):

04	The TTR points to a record before the end of the directory.
08	The TTR points to a record after the end of the data set as determined by the pointer to the last used block in the VTOC entry of the data set.
12	The record portion of the TTR points to a block after the last valid block on the indicated track.

Source: DFSMSdss

System Action: The member data is not processed. The directory entry for the member is transferred unchanged to the target data set. The return code is 4.

Application Programmer Response: The data set does not conform to standard conventions for a PDS. If the data set must be moved as is, rerun the job by specifying the data set in the NOPACKING keyword list and by providing at least one target volume of a like device as the volume on which the data set resides.

Operator Response: None.

ADR746W (*ttt*)-*mmmmm*(*yy*), END OF DIRECTORY RECORD MISSING FOR PDS *dsname*

Explanation: The PDS specified does not have an end-of-file (EOF) record for the directory or the EOF is not in the correct place.

Source: DFSMSdss

System Action: An EOF record is supplied for the directory if the NOPACKING keyword is not specified. Processing continues for this data set. The return code is 4.

Application Programmer Response: The data set does not conform to standard conventions for a PDS. If the data set must be moved as is, rerun the job by specifying the data set in the NOPACKING keyword list and by providing at least one target volume of a like device as the volume on which the data set resides.

Operator Response: None.

ADR747W (*ttt*)-*mmmmm*(*yy*), HIGH MEMBER ENTRY MISSING FOR PDS *dsname*

Explanation: The PDS specified does not have a high member entry (member name = all X'FF's). This entry signifies the position of the last active member in the directory.

Source: DFSMSdss

System Action: The high member entry is supplied for the directory if the NOPACKING keyword is not used. Processing continues for this data set. The return code is 4.

Application Programmer Response: The data set does not conform to standard conventions for a PDS. If the data set must be moved as is, rerun the job by specifying the data set in the NOPACKING keyword list and by providing at least one target volume of a like device as the volume on which the data set resides.

Operator Response: None.

ADR748W (*ttt*)-*mmmmm*(*yy*), TTR *ttttrr* IN MEMBER *member_name* OF PDS *dsname* IS INVALID. BYTE OFFSET IS *nnnn* IN {DIRECTORY ENTRY | CCHHR *cchhrr*}. REASON CODE IS *reason_code*

Explanation: The user or notelist TTR found in the given PDS was invalid and cannot be translated by DFSMSdss track-packing logic. The TTR points to a record outside the bounds of the current member being processed or past the end of valid records on a track within the member. The absolute disk address of the source TTR (if in a notelist) and its offset relative to zero within the record or directory entry are given. The reason code (*reason_code*) describes the specific condition for the invalid TTR as follows:

04	The TTR points to a block before the starting block for the member as indicated in the member directory entry.
08	The TTR points to a block after the ending block for the member.
12	The record portion of the TTR points to a block after the last valid block on the indicated track.
16	The record portion of the TTR is zero. Valid blocks begin at one.

Source: DFSMSdss

System Action: The TTR is copied without change. Processing for this data set continues. The return code is 4.

Application Programmer Response: The data set does not conform to standard conventions for a PDS. If the data set must be moved as is, rerun the job by specifying the data set in the NOPACKING keyword list and by providing at least one target volume of a like device as the volume on which the data set resides.

Operator Response: None.

ADR749W (*ttt*)-*mmmmm*(*yy*), END OF FILE RECORD MISSING FOR MEMBER *member_name* OF PDS *dsname* AT TTR *ttttrr*

Explanation: During the copy or restore of a PDS, an expected end-of-file (EOF) record for the member specified was not found before the starting TTR of the next member. The directory shows the next member should start at the given TTR.

Source: DFSMSdss

System Action: An end-of-file (EOF) record is supplied for the member at the TTR given. Processing continues with the next member in the data set. The return code is 4.

Application Programmer Response: The data set does not conform to standard conventions for a PDS and may contain additional errors that cannot be detected by DFSMSdss. If the data set must be moved as is, rerun the job by specifying the data set in the NOPACKING keyword list and by providing at least one target volume of a like device as the volume on which the data set resides.

Operator Response: None.

ADR750E (*ttt*)-*mmmmm*(*yy*), PROCESSING FOR DATA SET *dsname* IS TERMINATED TO PREVENT DELETION OF THE SOURCE DATA SET

Explanation: An invalid condition or structure was detected in the data set during processing. The DELETE keyword was also specified. In order to preserve the source data set and preclude possible data integrity problems, DFSMSdss ends the processing after data movement and deletes the target data set. The invalid condition might be:

- Invalid TTRs detected in the directory or member entry.
- Missing end-of-file (EOF) record for a member.

Source: DFSMSdss

System Action: The specified data set was not copied, and the return code is set to 8. Processing continues with the next data set.

Application Programmer Response: Correct the invalid conditions to have the PDS copied.

Operator Response: None.

ADR751E (*ttt*)-*mmmmm*(*yy*), {OPEN | WRITE | CLOSE} FAILED WITH RETURN CODE (*return_code*) FOR *data_set* IN AN ATTEMPT TO EXTEND THE DATA SET

Explanation: DFSMSdss cannot extend the data because the OPEN, WRITE, or CLOSE failed for the data set.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: See the *DFSMS/MVS Macro Instructions for Data Sets* manual for an explanation of return codes.

Operator Response: None.

System Programmer Response: See the *DFSMS/MVS Macro Instructions for Data Sets*.

ADR752E **(***ttt***)-***mmmmm***(***yy***), {OPEN | WRITE | CLOSE} ABENDED WITH ABEND CODE (***abend_code***) FOR** *data_set* **IN AN ATTEMPT TO EXTEND THE DATA SET**

Explanation: DFSMSdss cannot extend the data because the OPEN, WRITE, or CLOSE for the data set abnormally ended.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR753E **(***ttt***)-***mmmmm***(***yy***), UNABLE TO ESTABLISH ESTAE EXIT**

Explanation: DFSMSdss cannot register an ESTAE exit to the system and, therefore, cannot process abends.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR754E **(***ttt***)-***mmmmm***-(***yy***), DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **CANNOT BE PROCESSED - UNABLE TO CHANGE BACKUP-WHILE-OPEN STATUS FROM** *nnn1* **TO** *nnn2*

Explanation: An error occurred while changing the Backup-While-Open (BWO) status of the target data set to *nnn2*. See Appendix B, “Data Integrity—Serialization,” in *DFSMS/MVS DFSMSdss Storage Administration Reference* for more details about the Backup-While-Open (BWO) status indicators.

Source: DFSMSdss

System Action: The return code is 8. Processing continues with the next data set.

Application Programmer Response: Correct the condition that is causing the alter Backup-While-Open (BWO) status error.

Operator Response: Rerun the function when the data set becomes available.

ADR755W **(***ttt***)-***mmmmm***(***yy***), SOURCE DATA SET** *source_dsname* **WAS {GENERICALLY PROTECTED | RACF-INDICATED}. THE TARGET DATA SET** *target_dsname* **{IS GENERICALLY PROTECTED | IS NOT PROTECTED BY ANY PROFILE | IS RACF INDICATED AND MAY BE INACCESSIBLE}**

Explanation: For a logical operation, the level of protection for the target data set, (*target_dsname*) compared to the source data set (*source_dsname*), indicates that action on the part of the owner of the data set or a security administrator may be required to ensure that the target data set is properly protected and accessible.

Source: DFSMSdss

System Action: Processing continues for the specified data set. The return code is 4.

Application Programmer Response: Contact your security administrator.

Operator Response: None.

ADR756E **(***ttt***)-***mmmmm***(***yy***), SYS1 DATA SET** *dsname* **NOT COPIED BECAUSE PROCESS(SYS1) NOT SPECIFIED**

Explanation: The SYS1 data set was not copied because PROCESS(SYS1) was not specified and either DELETE or UNCATALOG were specified.

Note: PROCESS(SYS1) does not lift the processing restrictions for VTOCIXs and VVDSs.

Source: DFSMSdss

System Action: Processing continues. The return code is 8.

Application Programmer Response: Specify PROCESS(SYS1) to uncatalog or delete the data set.

Operator Response: None.

ADR757E **(***ttt***)-***mmmmm***(***yy***), DISCRETE PROFILE CREATION FAILED FOR DATA SET** *dsname***, ON VOLUME** *volume_serial_number* **THE DATA SET WAS NOT COPIED,** *return_code1-return_code2,reason_code*

Explanation: RACF is unable to define a discrete profile for the target data set. The target data set is deleted and the source data set is left in its original condition. Error codes *return_code1-return_code2,reason_code* are hexadecimal values which indicate why RACF is unable to complete the define request. *return_code1* is the SAF return code, and *return_code2,reason_code* are the RACF return and reason codes. For descriptions of the error codes, see the return code information under RACROUTE REQUEST=DEFINE in the *OS/390 Security Server External Security Interface (RACROUTE) Macro Reference*.

Source: DFSMSdss

System Action: The target data set is deleted. The return code is 8.

Application Programmer Response: Correct the error indicated by the error codes and rerun the job. This error can occur if the data set is RACF indicated by a discrete profile. Define a discrete profile with the NOSET keyword.

Operator Response: None.

ADR758E **(***ttt***)-***mmmmm***(***yy***), VOLUME CHECKING FAILED FOR DATA SET** *dsname* **{IN CATALOG** *catalog_name***},** *reason_code*

Explanation: The data set was not processed for one of the following reasons (*reason_code*):

1 The data set was extended onto another volume after the DFSMSdss step started. As a result, the volume information obtained by DFSMSdss was no longer accurate.

2 The data set no longer resides on the volume or volumes it resided on when the DFSMSdss step started. As a result, the volume information obtained by DFSMSdss was no longer accurate.

3 The catalog entry for the data set could not be located. The data set may have been uncataloged or moved to a different catalog after the DFSMSdss step started.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Ensure that the data set is not being simultaneously processed by another job, and rerun the job.

Operator Response: None.

ADR759W **(***ttt***)-***mmmmm***(***yy***), DISCRETE PROFILE CREATION FAILED FOR DATA SET** *dsname***, ON VOLUME** *volume_serial_number***. THE DATASET WAS COPIED OR RESTORED AND IT MAY NOT BE ACCESSIBLE,** *return_code1-return_code2,reason_code*

Explanation: RACF is unable to define a discrete profile for the target data set. The data set is copied or restored, but the RACF indicator is set. The data set may not be accessible until a discrete profile has been defined. Error codes *return_code1-return_code2,reason_code* are hexadecimal values that indicate why RACF is unable to complete the define request. *return_code1* is the SAF return code, and *return_code2,reason_code* are the RACF return and reason codes. For descriptions of the error codes, see the return code information under RACROUTE REQUEST=DEFINE in the *OS/390 Security Server External Security Interface (RACROUTE) Macro Reference*.

Source: DFSMSdss

System Action: The target dataset is RACF-indicated, but there is no profile. The return code is 4.

Application Programmer Response: Correct the error indicated in the error codes.

Operator Response: None.

ADR760W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **WAS NOT DUMPED WITH SPHERE KEYWORD SPECIFIED**

Explanation: An attempt to restore a data set at the sphere level that was not dumped at the sphere level failed.

Source: DFSMSdss

System Action: Only the data set will be restored (no other sphere information will be restored). The return code is 4.

Application Programmer Response: Rerun the job without specifying SPHERE.

Operator Response: None.

ADR761W **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **IN CATALOG** *catalog_name* **WAS RESTORED WITHOUT SPHERE INFORMATION**

Explanation: DFSMSdss tried to restore a VSAM cluster that was dumped as part of a VSAM sphere. The cluster will be restored, but no relationship information will be created. If the cluster is a base cluster, then any existing alternate indexes might have to be rebuilt. Likewise, if the cluster is an alternate index, it might not properly reflect the current state of its base cluster.

Source: DFSMSdss

System Action: The data set is restored. The return code is 4.

Application Programmer Response: If the intent was to restore the entire sphere, rerun the job, specifying the SPHERE keyword.

Operator Response: None.

ADR762W **(***ttt***)-***mmmmm***(***yy***), AIX** *aix_name* **OF BASE CLUSTER** *cluster_name1* **ALREADY EXISTS RELATED TO BASE CLUSTER** *cluster_name2* **IN CATALOG** *catalog_name*

Explanation: During DFSMSdss sphere processing in which REPLACE was specified but the preallocated target was not, an alternate index with the same name was found in the target catalog. This alternate index is related to a base cluster that is different from the source base cluster.

Source: DFSMSdss

System Action: The base cluster was successfully processed, but the specified AIX was not processed. Processing continues with the next AIX. The return code is 4.

Application Programmer Response: Use access method services commands to DEFINE the AIX with a different name, DEFINE a path, and build (BLDINDEX) the alternate index.

Operator Response: None.

ADR763E **(***ttt***)-***mmmmm***(***yy***), DATA SETS IN SPHERE OF BASE CLUSTER** *cluster_name1* **[WITH NEWNAME** *cluster_name2***] WERE NOT ALL RENAMED**

Explanation: When copying a sphere without specifying DELETE or RECATALOG, you must rename all parts of the sphere. If the target sphere is to be SMS-managed, the data sets must be renamed even if RECATALOG was specified, because RECATALOG is ignored for SMS-managed data sets.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 8.

Application Programmer Response: Do one of the following, then rerun the job:

- Specify the DELETE or RECATALOG keyword.
- Add or change the RENAMEUNCONDITIONAL keyword specification to rename all data sets in the sphere.

Operator Response: None.

ADR764E **(***ttt***)-***mmmmm***(***yy***), DATA SETS IN SPHERE OF BASE CLUSTER** *cluster_name1* **[WITH NEWNAME** *cluster_name2***] WERE DIRECTED TO MORE THAN ONE CATALOG**

Explanation: The data sets in the sphere were directed by the standard order of search to more than one catalog. The VSAM base cluster, data and index components, AIXs, AIX components, and path names of a sphere must all resolve to the same catalog.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 8.

Application Programmer Response: Ensure that all data sets in the sphere are directed to the same catalog, using one or more of the following techniques:

- Adding or deleting user catalog aliases
- Renaming the data sets with the RENAME or RENAMEUNCONDITIONAL keyword.

Rerun the job.

Operator Response: None.

ADR765W **(***ttt***)-***mmmmm***(***yy***), SPHERE OF BASE CLUSTER** *cluster_name* **IN CATALOG** *catalog_name* **IS NOT COMPLETE ON THE DUMP TAPE**

Explanation: DFSMSdss sphere processing detected that not all of the sphere components are on the dump tape. DFSMSdss is unable to locate all of the alternate indexes related to the named base cluster on the dump tape because of errors encountered when the sphere was dumped. If the sphere was preallocated, the existing alternate indexes that were not on the dump tape will not reflect the current state of the restored base cluster and will need to be rebuilt. The named catalog is the source catalog of the sphere.

Source: DFSMSdss

System Action: This error is not detected until after the base cluster of the sphere is processed. All alternate indexes on the dump tape are restored, and processing continues with the next data set. The return code is 4.

Application Programmer Response: Take the appropriate action:

- For non-preallocated data set RESTORE, check the DFSMSdss messages for the AIXs that were restored, use access method services commands to define the missing AIXs, define paths for them, and build (BLDINDEX) the AIXs.
- For preallocated data set RESTORE, check the DFSMSdss messages for the AIXs that were restored, and use the access method services command BLDINDEX to rebuild the existing alternate indexes that were not restored.

Operator Response: None.

ADR766E (*ttt*)-*mmmmm*(*yy*), CLUSTER *cluster_name1* [WITH NEWNAME *cluster_name2*] CANNOT BE MOVED TO {AN SMS | A NONSMS} TARGET BECAUSE IT IS PART OF {AN SMS | A NONSMS} MANAGED SPHERE [IN A DIFFERENT STORAGE GROUP]

Explanation: When DFSMSdss copies with DELETE between SMS and NONSMS or between different storage groups in SMS, all parts of a VSAM sphere must be included. This message may also be issued if there is an alternate index associated with the base cluster, but there is no path defined for the alternate index.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 8.

Application Programmer Response: Do one or more of the following, then rerun the job:

- Specify RENAMEUNCONDITIONAL or RECATALOG instead of DELETE.
- Specify SPHERE to include all parts of the sphere.
- Specify all parts of the sphere in the data set INCLUDE parameter.

If there is no path defined between the base cluster and the alternate index, use access method services to define a path, and then rerun the job.

Operator Response: None.

ADR767I (*ttt*)-*mmmmm*(*yy*), *date time* CONCURRENT COPY INITIALIZATION SUCCESSFUL FOR DATA SET *dsname* [IN CATALOG *catalog_name*]. [SERIALIZATION IS RELEASED.]

Explanation: The initialization of the concurrent copy session has completed for the indicated data set. Therefore, serialization of the data being dumped or copied with concurrent copy is no longer necessary. The data set is now available for update activity without affecting the dump or copy operation already in progress.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: Activity on the data set may resume.

Operator Response: Activity on the data set may resume.

ADR768W (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING SPHERE(S) COULD NOT BE COMPLETELY PROCESSED DUE TO ERRORS

Explanation: During DFSMSdss sphere processing, one or more components of a sphere could not be successfully processed. The message lists the status of each piece of the sphere.

Source: DFSMSdss

System Action: If possible, processing continues with the next sphere component for COPY and RESTORE, or the next data set for DUMP. If the command was DUMP and DELETE was specified, no parts of the sphere are deleted. If the command was DUMP, processing for each individual sphere halts if an error was detected with an AIX. The return code is 8.

Application Programmer Response: Check other DFSMSdss messages for the components that failed. After correcting the error conditions, run the job again.

Operator Response: None.

ADR769E (*ttt*)-*mmmmm*(*yy*), PROCESSING OF DATA SET *dsname* TERMINATED BY UIM EXIT (*nn*)

Explanation: The indicated User Interaction Module exit *nn* has ended processing for the named data set before normal completion. If the SPHERE keyword is specified and the named data set is a base cluster, processing for all related AIXs is also ended.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR770W (*ttt*)-*mmmmm*(*yy*), AIX *aix_name* RELATED TO BASE CLUSTER *cluster_name* WAS NOT TERMINATED AS REQUESTED BY UIM EXIT (*nn*)

Explanation: The indicated User Interaction Module exit (*nn*) requested that processing for the named alternate index be ended. The request was denied because the SPHERE keyword was specified and the alternate index is related to the named base cluster that was selected for processing.

Source: DFSMSdss

System Action: Processing continues for the named alternate index. The return code is 4.

Application Programmer Response: Take one or more of the following actions:

- Copy only the base cluster by omitting the SPHERE keyword.
- Change the UIM exit so that termination is not attempted for the alternate index.

Operator Response: None.

ADR771W (*ttt*)-*mmmmm*(*yy*), A DISCRETE PROFILE FOR TARGET DATA SET *dsname*, ON VOLUME *volume_serial_number*, (IN CATALOG *catalog_name*,) ALREADY EXISTS

Explanation: RACF is unable to define a discrete profile for the target data set (*dsname*) because one is already defined to RACF. The RACF-indicator has been turned on, so the existing discrete profile now protects the target data set.

Source: DFSMSdss

System Action: The target data set is RACF-indicated and the existing discrete profile now protects the data set. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR772W **(***ttt***)-***mmmmm***(***yy***), UIM EXIT (***nn***) IS NOT AUTHORIZED TO BYPASS SECURITY PROCESSING FOR DATA SET** *dsname*

Explanation: The indicated User Interaction Module exit (*nn*) attempted to bypass RACF and security processing for the named data set. The request was denied because the application program was not authorized to bypass security because PASS was specified in the PPT statement in the SCHEDxx parmlib member.

Source: DFSMSdss

System Action: Processing continues with normal security processing for the data set. The return code is 4.

Application Programmer Response: Alter the application so that it is authorized to bypass security processing by ensuring that NOPASS is specified, or by changing the UIM exit so that it does not attempt to bypass security processing.

Operator Response: None.

ADR773E **(***ttt***)-***mmmmm***(***yy***), PREALLOCATED TARGET DATA SET** *dsname* **[IN CATALOG** *catalog_name***] ON VOLUME** *volume_serial_number* **WAS NOT SCRATCHED AND REALLOCATED BECAUSE DFSMSdss DID NOT SERIALIZE THE DATA SET,** *reason_code*

Explanation: DFSMSdss did not delete and reallocate a preallocated target data set because DFSMSdss did not serialize the target data set. DFSMSdss needed to delete and reallocate the preallocated target because one or more target data set attributes did not match the source. The reason code, (*reason_code*) is as follows:

1	The target KSDS on an unlike device was not reusable.
3	The CI size of the target did not match the source.
4	The IMBED attribute of the target did not match the source.
5	The KEY length of the target did not match the source.
6	The record length of the target did not match the source.
7	The REPLICATE attribute of the target did not match the source.
8	The SPANNED attribute of the target did not match the source.
9	The size of the target data set was smaller than the size of the source data set.
B	The source data set is empty.

DFSMSdss probably bypassed serialization because UIM exit 22 requested that serialization be bypassed for the data set.

Source: DFSMSdss

System Action: The data set is not processed. Processing continues with the next data set. The return code is 8.

Application Programmer Response: Do one of the following, then rerun the job:

- Delete the preallocated target and allocate it with attributes that match the source data set.
- Delete the preallocated target and let DFSMSdss allocate it.
- Change UIM exit 22 so that it does not bypass serialization.

Operator Response: None.

ADR774E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **CANNOT BE PROCESSED BECAUSE CONVERSION TO A {PDS | PDSE } WAS NOT REQUESTED,** *reason_code*

Explanation: The named data set cannot be processed because the CONVERT keyword was not specified. The possible reason codes, (*reason_code*), are:

04	The source data set is a PDSE, but there is a usable preallocated PDS data set on the target volume, and CONVERT with PDS subkeyword was not specified for the data set.
08	The source data set is a PDS, but there is a usable preallocated PDSE data set on the target volume, and CONVERT with PDSE subkeyword was not specified for the data set.
12	The data set being processed is a PDSE, and the target volume for the data set is not SMS-managed. A PDSE must be SMS-managed.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Correct the problem as indicated by the reason code (*reason_code*) and reprocess the data set:

04	If the source PDSE is to be copied to the preallocated target PDS, specify CONVERT with the PDS subkeyword; otherwise, delete or rename the preallocated target PDS.
08	If the source PDS is to be copied to the preallocated target PDSE, specify CONVERT with the PDSE subkeyword; otherwise, delete or rename the preallocated target PDSE.
12	If the PDSE is to be copied to a non-SMS-managed volume, specify CONVERT with the PDS subkeyword; otherwise, specify an SMS-managed target volume, or modify the ACS routine to direct the target allocation to an SMS-managed volume.

Operator Response: None.

ADR778E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **WAS NOT SELECTED BECAUSE THE DATA SET TYPE IS NOT SUPPORTED IN THIS RELEASE,** *reason_code*

Explanation: The data set was not selected for processing because it is a type not supported in this release. The *reason_code* identifies the data set type:

1	Extended sequential
2	Compressible extended sequential
3	HFS file
4	Extended format VSAM
5	Data set with extended attributes
6	Multivolume extended sequential
7	Extended addressable VSAM data set
8	Integrated catalog facility tape volume catalog
9	VSAM data set with RLS information
10	Extended format multi-striped VSAM
11	Extended format non-keyed VSAM
12	Extended addressable non-keyed VSAM
13	Multivolume HFS

Source: DFSMSdss

System Action: Processing of the data set ends. The return code is 8.

Application Programmer Response: Notify the system programmer.

Operator Response: None.

ADR779E **(**_ttt_**)-**_mmmmm_**(**_yy_**), DATA SET** _dsname_ **IS AN LDS WITH DUMMY BLOCKS. IT WILL NOT BE PROCESSED**

Explanation: Dummy blocks were detected during logical COPY, DUMP, or RESTORE processing of a VSAM linear data set (LDS), _dsname_. A dummy block condition exists when there are excess blocks at the end of a control area (CA). DFSMSdss does not support logical processing of VSAM linear data sets with dummy blocks.

Source: DFSMSdss

System Action: Processing continues for other data sets. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR780I **(**_ttt_**)-**_mmmmm_**(**_yy_**), THE INPUT DUMP DATA SET BEING PROCESSED IS IN {FULL VOLUME | TRACKS | TRACKS (CPVOLUME) | PHYSICAL DATA SET | LOGICAL DATA SET} FORMAT AND WAS CREATED BY** _product_name_ **VERSION** _version_number_ **RELEASE** _release_number_ **MODIFICATION LEVEL** _mod_number_

Explanation: The dump data set now being processed was created using the indicated format by the indicated level of the indicated product.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None. For information on logical and physical processing see the _DFSMS/MVS DFSMSdss Storage Administration Guide_.

Operator Response: None.

ADR781I **(**_ttt_**)-**_mmmmm_**(**_yy_**), DATA SET** _dsname_ **[IN CATALOG** _catalog_name_**] HAS AN UNDEFINED DSORG. TRACK LEVEL I/O WILL BE USED TO PROCESS THE DATA SET TO AN UNLIKE DEVICE**

Explanation: The data set has an undefined data set organization and is being moved to an unlike target device. Track image data movement will be used. This results in an exact track-for-track image of the source data set on the target volume.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None

Operator Response: None

ADR782W **(**_ttt_**)-**_mmmmm_**(**_yy_**), DATA SET** _dsname_ **HAS AN INVALID DSORG. VSAM PROCESSING IS BYPASSED**

Explanation: The VVDS data set has an invalid data set organization, and VSAM processing will not be performed.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: Notify Systems Support.

Operator Response: None

ADR783W **(**_ttt_**)-**_mmmmm_**(**_yy_**), NO VVR FOR COMPONENT** _dsname_ **IN VTOC OF VOLUME** _volume_serial_number_

Explanation: A VTOC entry was found to have no matching VVR. Therefore this component is a VSAM orphan.

Source: DFSMSdss

System Action: Processing continues on the next data set. The return code is 4.

Application Programmer Response: Delete the orphan VSAM data sets, or recover them from a previous backup.

Operator Response: None

ADR784E **(**_ttt_**)-**_mmmmm_**(**_yy_**), DATA SET** _dsname_ **(IN CATALOG** _catalog_name_**) CANNOT BE PROCESSED BECAUSE IT WAS SPECIFIED IN BOTH TTRADDRESS AND RELBLOCKADDRESS**

Explanation: The direct data set named in the message is specified in both the TTRADDRESS and the RELBLOCKADDRESS keyword subparameter filtering lists. The processing specified by these keywords conflicts.

Source: DFSMSdss

System Action: The data set is not processed, and processing continues with the next data set. The return code is set to 8.

Application Programmer Response: Change the filtering criteria specified in TTRADDRESS or RELBLOCKADDRESS, or specify only one of the keywords. Rerun the job.

Operator Response: None

ADR785E **(**_ttt_**)-**_mmmmm_**(**_yy_**), AN ENQUEUE LOCKOUT CONDITION WAS DETECTED FOR DATA SET** _dsname_ **{IN CATALOG** _catalog_name_**}.**

Explanation: During a DFSMSdss job, an enqueue lockout condition was detected while processing the named data set. This can occur when DFSMSdss has done a reserve on the VTOC of a volume and then performs a catalog management function. A second job may have exclusive control of the catalog that DFSMSdss needs while DFSMSdss has control of the VTOC that the second job requires. In addition to the above information, if a password request from the system is not responded to within the 90 second timeframe criterion used to detect a lockout condition, the request is cancelled and message ADR785E is issued for the dataset.

Source: DFSMSdss

System Action: The data set is not processed. Processing continues with the next data set. The return code is 8.

Application Programmer Response: Wait for the completing job to finish processing, then resubmit the DFSMSdss job. See the _DFSMS/MVS DFSMSdss Diagnosis Guide_, “Appendix B. DFSMSdss Patch Area” for information about altering the duration of the timeout (`X'0A'`).

Operator Response: None

ADR786W **(***ttt***)-***mmmmm***(***yy***), ERROR DETECTED IN SPANNED RECORD AT RBA** *relative_byte_address* **IN CLUSTER** *cluster_name* **ON VOLUME** *volume_serial_number***, REASON** *reason_code*

Explanation: An error was detected while processing a spanned record. An RBA value of '***' indicates that the RBA is not applicable or that the RBA is not available at the time the error was detected. *Volume_serial_number* is the volume serial number for the source volume. A volume serial number of '******' indicates that the number is unknown. The possible reason codes are:

1 An unspanned record was found when a spanned record segment was expected. This is similar to the error described by EXAMINE message IDC11730I.

2 Spanned record segment sequence error. This is similar to the error described by EXAMINE message IDC11739I. An intermediate or last segment was expected, but the first segment was found.

3 Spanned record segment sequence error. This is similar to the error described by EXAMINE message IDC11739I. The first segment was expected, but the last segment was found.

4 Spanned record segment sequence error. This is similar to the error described by EXAMINE message IDC11739I. The first segment was expected, but an intermediate segment was found.

5 Spanned record update number error. This is similar to the error described by EXAMINE message IDC11731I. The update number for the last segment was not the same as the update number for the segment(s) processed previously.

6 Spanned record update number error. This is similar to the error described by EXAMINE message IDC11731I. The update number for an intermediate segment was not the same as the update number for the segment(s) processed previously.

7 Spanned record segment sequence error. The end of the data CA has been reached but the last segment of a spanned record has not been found.

Source: DFSMSdss

System Action: Processing of this data set continues. The return code is 4.

Application Programmer Response: For logical data set dump, run IDCAMS EXAMINE against the VSAM cluster in question. Take appropriate action to correct the problem and resubmit the job. For logical data set restore, run IDCAMS EXAMINE on the indicated cluster.

Note: The spanned record error condition may have been lost when the record was written to the target cluster and IDCAMS EXAMINE may not reveal any symptoms. Manually check the cluster to determine if data has been lost; if so, you may have to recover the cluster from a previous backup version.

Operator Response: None.

ADR787E **(***ttt***)-***mmmmm***(***yy***), STRUCTURAL ERROR DETECTED AT RBA** *relative_byte_address* **IN CLUSTER** *cluster_name* **ON VOLUME** *volume_serial_number***, REASON** *reason_code*

Explanation: An error was detected during the logical dump processing of a VSAM indexed data set. *Volume_serial_number* is the volume serial number for the source volume. A volume serial number of '******' indicates that the number is unknown. An RBA value of '***' indicates that the RBA is not applicable or that the RBA is not available at the time the error was detected.

The possible reason codes are:

11 A spanned record was found, but VVR indicates that spanned records are not allowed.

12 Index component CI size is invalid. This is similar to the error described by EXAMINE message IDC11760I.

13 The VVR indicates the number of index levels is 0. This is similar to the error described by EXAMINE message IDC11720I.

14 The index component high used relative byte address (RBA) is greater than the high allocated relative byte address (RBA). This is similar to the error described by EXAMINE message IDC11727I.

15 The index component high used relative byte address (RBA) is not a multiple of control interval (CI) size. This is similar to the error described by EXAMINE message IDC11715I.

16 An index control interval (CI) contains a software end-of-file (EOF). This is similar to the error described by EXAMINE message IDC11758I.

17 Index header contains invalid data. This is similar to the error described by EXAMINE message IDC11766I.

18 Index record horizontal pointer points to itself. An index control interval (CI) contains a horizontal pointer specifying the RBA of the control interval itself. This is similar to the error described by EXAMINE message IDC11770I.

19 Invalid length for vertical pointer.

20 Cluster is not eligible to be dumped using the VALIDATE option. The VSAM data set is not indexed.

21 Data component control interval (CI) size is invalid. This is similar to the error described by EXAMINE message IDC11760I.

22 Number of control intervals (CI) per control area (CA) is 0. This is similar to the error described by EXAMINE message IDC11764I.

23 Data component high used relative byte address (RBA) is not equal to the control area (CA) size. For a data set with single level index, the CA size should equal the high used relative byte address (RBA) for the data component. This is similar to the error described by EXAMINE message IDC11718I.

24 Data component high used relative byte address (RBA) is greater than high allocated relative byte address (RBA). This is similar to the error described by EXAMINE message IDC11709I.

25 Data component high used relative byte address (RBA) is not a multiple of the control interval (CI) size. This is similar to the error described by EXAMINE message IDC11710I.

26 Data component high allocated relative byte address (RBA) is not a multiple of the control interval (CI) size. This is similar to the error described by EXAMINE message IDC11712I.

27 Data component high used relative byte address (RBA) is not a multiple of the control area (CA) size. This is similar to the error described by EXAMINE message IDC11765I.

28 Data component high allocated relative byte address (RBA) is not a multiple of the control area (CA) size. This is similar to the error described by EXAMINE message IDC11767I.

29 Data component key length is greater than the maximum record length. Data component key position or length is invalid. This is similar to the error described by EXAMINE message IDC11761I.

30 Empty control interval (CI) encountered while processing spanned record. This is similar to the error described by EXAMINE message IDC11735I.

31 Software end-of-file (EOF) found in data control interval (CI). This is similar to the error described by EXAMINE message IDC11757I.

32 Horizontal pointer chain loop. This is similar to the error described by EXAMINE message IDC11772I.

33 Data component key sequence error. A key sequence error exists in or between control intervals (CI). This is similar to the error described by EXAMINE message IDC11733I.

This reason code may also indicate that the free space displacement field for the CI contains a value which is too big.

34 Data component key sequence error. Duplicate consecutive keys found. This is similar to the error described by EXAMINE message IDC11741I.

35 Sequence set and data control interval (CI) sequence mismatch. This is similar to the error described by EXAMINE message IDC11734I.

36 The index component high allocated relative byte address (RBA) is not a multiple of control interval (CI) size. This is similar to the error described by EXAMINE message IDC11716I.

37 The index record contains an invalid index entry.

38 The data control interval RDF field contains an invalid record length or the record length in RDF field is greater than the maximum record length.

39 The free space displacement field for the CI contains an erroneous value.

40 The free space length field for the CI contains an erroneous value.

41 An empty track is encountered in a data control area (CA) or an index sequence set. See message ADR973E issued prior to this message for the location of the track reported.

42 An invalid CI record number was detected. A CI record may be missing.

Source: DFSMSdss

System Action: Processing of this data set ends. DFSMSdss processing continues. The return code is 8.

Application Programmer Response: Run IDCAMS EXAMINE against the VSAM cluster in question. Take appropriate action to correct the problem and resubmit the job.

Operator Response: None.

ADR788I **(***ttt***)-***mmmmm***(***yy***), PROCESSING COMPLETED FOR CLUSTER** *cluster_name***,** *record_count* **RECORD(S) PROCESSED {, REASON** *reason_code***}**

Explanation: Processing of the VSAM data set has completed. The total number of records processed for this cluster is *record_count*. The reason code is applicable to dump processing. The possible reason codes are:

0 The processing completed successfully.

4 The processing completed. In-progress control interval (CI) splits have been detected and resolved in dump. However, the source data set is not changed.

8 The processing completed. Errors have been detected while processing a spanned record. Message ADR786W accompanies this message.

20 The processing encountered an error such as GETMAIN failure. Check for other error messages issued prior to this message.

24 The processing encountered an I/O error. Check for other error messages issued prior to this message.

Source: DFSMSdss

System Action: DFSMSdss processing continues.

Application Programmer Response: If the record count is different from what is expected, determine whether there is any problem with the input data set. If additional information about the data set is required, run IDCAMS EXAMINE against the VSAM cluster in question. In-progress control interval (CI) split may generate IDCAMS message IDC11768I. If the dump data set is determined to be unusable, take appropriate action to correct the problem and resubmit the job.

0 Verify that the record count provided in the message is the same as expected.

4 Verify that the record count provided in the message is the same as expected.

8 Check any associated messages for spanned record error.

20 Check any associated messages such as ADR736E and ADR432E for the error.

24 Check any associated messages for the I/O error.

Operator Response: None.

ADR789W **(***ttt***)-***mmmmm***(***yy***), RESTORE PROCESSING COMPLETED FOR CLUSTER** *cluster_name***, RECORD COUNT DOES NOT MATCH. INPUT RECORD COUNT IS** *record_count* **OUTPUT RECORD COUNT IS** *record_count*

Explanation: Restore processing of the data set has completed, but the record count from the input data set does not match the record count from the output data set.

Source: DFSMSdss

System Action: DFSMSdss processing continues. The return code is 4.

Application Programmer Response: Save the dump data set from which the data set was restored and contact IBM for programming support.

Operator Response: None.

ADR790W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **ORGANIZATION IS NOT SUPPORTED IN AN SMS ENVIRONMENT**

Explanation: DFSMSdss has detected an invalid SMS data set during a data set COPY or RESTORE operation. DFSMSdss will attempt to allocate the target data set on a non-SMS volume, if one is available, and will continue processing the data set. If a non-SMS volume is not available, DFSMSdss will fail in the allocation. The following types of data sets are not supported by DFSMSdss in an SMS environment:

- Indexed sequential data sets
- Absolute track allocation
- Unmovable data sets
- Direct data sets with OPTCD=A
- Data sets cataloged in more than one catalog
- CVOLs
- VTOCIX/VVDS
- Page/swap data sets
- the VIO journaling data sets

Source: DFSMSdss

System Action: The data set is processed. The return code is 4.

Application Programmer Response: If the data set fails during allocation, retry the COPY or RESTORE and supply a non-SMS target volume with the OUTDD or OUTDYNAM keyword.

Operator Response: None.

ADR791E **(***ttt***)-***mmmmm***(***yy***), PREALLOCATED TARGET DATA SET** *dsname* **IN CATALOG** *catalog_name* **IS INCOMPLETE**

Explanation: The preallocated target data set in the indicated catalog is incomplete. A part or parts of the data set were not found on the volume pointed to by the catalog entry. This message may be issued erroneously for non-SMS, non-VSAM data sets with candidate volumes, and for KRDS data sets when OUTDD or OUTDYNAM is specified.

Source: DFSMSdss

System Action: The data set is not processed. Processing continues with the next data set. The return code is 8.

Application Programmer Response: Inspect the data set in error, correct any problems, and rerun the job. For non-SMS, non-VSAM data sets with candidate volumes, restore the data set by rerunning the job with the REPLACE keyword but without the DELETECATALOGENTRY keyword. For KRDS data sets with the OUTDD or OUTDYNAM keyword specified, rerun the job without using OUTDD or OUTDYNAM.

Operator Response: None.

ADR792E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IS AN INCONSISTENT PDSE AND CANNOT BE RESTORED TO AN UNLIKE DEVICE. IT MUST BE RESTORED TO A** *unit_type*

Explanation: The target volume to which the inconsistent PDSE is restored must be of the same device type as that from which it was dumped (*unit_type*). DFSMSdss cannot restore the data set to a volume of an unlike device type.

Source: DFSMSdss

System Action: The data set is not restored. Processing continues with the next data set.

Application Programmer Response: Ensure that the storage group ACS routine selects a storage group containing values of the indicated device type, and that volumes of that device type are available and are selected by the ACS routine.

Operator Response: None.

ADR793E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **ON VOLUME** *volume_serial_number* **IS AN INCONSISTENT PDSE AND CANNOT BE {COPIED | DUMPED | RESTORED}**

Explanation: The data set's PDSE indicators in the VTOC and VVDS do not match. Therefore, the data set is not processed.

Source: DFSMSdss

System Action: The data set is not copied, dumped, or restored. Processing continues with the next data set.

Application Programmer Response: For a copy or dump, fix the VVDS or VTOC to reflect whether the data set is a PDSE, and rerun the job. For a restore, see *DFSMS/MVS DFSMSdss Diagnosis Guide* under patch area `X'12'`.

Operator Response: None.

ADR794W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IS AN INCONSISTENT PDSE AND WILL BE RESTORED AS A {PDS | PDSE}**

Explanation: The data set being restored is an inconsistent PDSE, and you have indicated to DFSMSdss that the data set is either a PDS or a PDSE. If the data set is a PDSE, you must restore it as a PDSE. If you try to restore it as a PDS, DFSMSdss issues error messages, and the restore fails. If the data set is a PDS, you must restore it as a PDS. If you try to restore it as a PDSE, the restore may complete without errors, but the data set will be unusable.

Source: DFSMSdss

System Action: The data set is restored as either a PDS or a PDSE.

Application Programmer Response: After the restore, verify that the data set is usable.

Operator Response: None.

ADR795E **(***ttt***)-***mmmmm***(***yy***), AN UNEXPECTED RETURN CODE (***return_code***) AND REASON CODE (***reason_code***) HAS BEEN RECEIVED FROM THE IGWNOTIF MACRO WHILE PROCESSING DATA SET** *dsname***.**

Explanation: While processing the given PDSE data set, the IGWNOTIF macro was called to invalidate a storage copy of the data set. The failing return and reason codes from the IGWNOTIF macro are listed in hex.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8. Processing continues with the next data set.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes.

Operator Response: None.

ADR796E **(*ttt*)-*mmmmm*(*yy*), AN UNEXPECTED RETURN CODE (*return_code*) AND REASON CODE (*reason_code*) HAS BEEN RECEIVED FROM THE IGWNOTIF MACRO WHILE PROCESSING VOLUME *volume_serial_number*.**

Explanation: When processing the given volume, the IGWNOTIF macro was called to invalidate a storage copy of all PDSE data sets that reside on the specified volume. The failing return and reason codes from the IGWNOTIF macro are listed in hex.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes.

Operator Response: None.

ADR797E **(*ttt*)-*mmmmm*(*yy*), CANNOT COPY TRACK 0 WHEN OUTTRACKS IS SPECIFIED**

Explanation: Track 0 was selected to be copied during a COPY TRACKS operation, but the OUTTRACKS keyword was also specified.

Source: DFSMSdss

System Action: The job is ended.

Application Programmer Response: Remove the OUTTRACKS keyword, or change the TRACKS specification to exclude track 0.

Operator Response: None.

ADR798E **(*ttt*)-*mmmmm*(*yy*), VVDS EXTENTS DO NOT MATCH VTOC EXTENTS FOR COMPONENT *component_name*, CLUSTER *cluster_name*, ON VOLUME *volume_serial***

Explanation: A mismatch exists between the VTOC and VVDS. Either the number or locations of the extents for this data set as reported in the VVDS do not match the number of locations of extents as reported in the VTOC, or the VVRIRF flag is on.

Source: DFSMSdss

System Action: The data set is not dumped.

Application Programmer Response: Run access method services DIAGNOSE for the affected data set. Correct the problem by using the procedures recommended in *DFSMS/MVS Access Method Services for ICF*.

Operator Response: None.

ADR799E **(*ttt*)-*mmmmm*(*yy*), AN UNEXPECTED ERROR HAS OCCURRED [WHILE PROCESSING {DATA SET *dsname* | VOLUME *volume_serial_number*}]**

Explanation: DFSMSdss detected an unexpected error during processing. It was possibly an internal error.

Source: DFSMSdss

System Action: If possible, DFSMSdss attempts to continue processing; otherwise, the task ends. The return code is 8.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR801I **(*ttt*)-*mmmmm*(*yy*), DATA SET FILTERING IS COMPLETE. *selected_data_sets* OF *total_data_sets* DATA SETS WERE SELECTED; *serialization_fail* FAILED SERIALIZATION AND *other_fail* FAILED FOR OTHER REASONS.**

Explanation: For a logical data set operation, the data set filtering has completed. *selected_data_sets* is the number of data sets that are selected for further processing. No further processing is done on the data sets that are not selected. *total_data_sets* will only reflect data sets that passed all INCLUDE, EXCLUDE, and BY filtering.

serialization_fail is the number of data sets that DFSMSdss could not serialize. An ADR412E message for each of these data sets precedes this message. *other_fail* is the number of data sets that were not selected for other reasons (for example, authorization failure). An appropriate message (for example, ADR402E) for each of these data sets precedes this message.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

System Programmer Response: None.

Operator Response: None.

ADR802W **(*ttt*)-*mmmmm*(*yy*), A CATALOG ERROR OCCURRED WHILE SEARCHING FOR DATA SETS BEGINNING WITH *prefix*. RETURN SETS WHERE CODE IS *return_code*, REASON CODE IS *reason_code***

Explanation: Catalog Management module IGG0CLnn returned *return_code* and *reason_code* as the result of a catalog error or an exception condition. The catalog problem may have occurred as a result of an alias pointing to a catalog that does not exist or is offline. This may cause DFSMSdss not to process all data sets that the user intended.

Source: DFSMSdss

System Action: DFSMSdss tries to process the list of data sets returned by Catalog Management. The return code is 4.

Application Programmer Response: See message IDC3009I for specific return and reason code information. Check the list of data sets processed to see if any desired data sets were not processed as a result of the Catalog Management problem. If necessary, correct the catalog problem and rerun the DFSMSdss job to process all the desired data sets.

System Programmer Response: None.

Operator Response: None.

ADR804W **(*ttt*)-*mmmmm*(*yy*), EOF FOR DATA SET *dsname* [IN CATALOG *catname*] WAS NOT FOUND WHERE EXPECTED. ALL ALLOCATED SPACE WILL BE PROCESSED.**

Explanation: The non-extended format sequential data set did not have an end-of-file record (EOF) where DFSMSdss expected one. Data sets with a track balance equal to a full track must have an EOF as the first record on the track pointed to by the last used block pointer. Data sets with a track balance less than a full track must have an EOF as the first record on the track following the track pointed to by the last used block pointer. This message may be printed for data sets that have been allocated and never opened, as well as for data sets that have been opened, written to, and not properly closed (for example, the application or system terminated abnormally before the data set could be closed). This message may also be printed if an I/O error occurs while trying to find the EOF.

Source: DFSMSdss

System Action: DFSMSdss tries to dump or copy all allocated space for the data set.

Note: In order for all the allocated data to be copied or restored, the target device must be a like device. If the data set is copied or restored to an unlike device, only the data up to the last used block pointer will be processed.

The return code is 4.

Application Programmer Response: Determine the cause of the inconsistency and correct it or consider using the ALLDATA or ALLEXCP keyword.

Operator Response: None.

ADR805E (*ttt***)-***mmmmm***(***yy***), DEVICE TYPE** *device_type* **(***nnn***), FROM WHICH** *dsname* **WAS DUMPED, IS NOT SUPPORTED ON THIS SYSTEM.**

Explanation: The device type *device_type* that the data set resided on at dump time is not supported on the target system. The *nnn* represents the UCB device type in hexadecimal.

Source: DFSMSdss

System Action: The data set is not restored. The return code is 8.

Application Programmer Response: Contact the system programmer to define the device to your I/O configuration. Rerun the restore job.

System Programmer Response: None.

Operator Response: None.

ADR806I (*ttt***)-***mmmmm***(***yy***), [VOLUME | TRACKS | DATA SET** *data_set_name***] COPIED USING SNAPSHOT FUNCTION.**

Explanation: DFSMSdss used the SnapShot function to “instantly” copy the requested volume, tracks, or data set.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: None.

Operator Response: None.

ADR809I (*ttt***)-***mmmmm***(***yy***), ADDITIONAL DIAGNOSTIC DATA FOR PRECEDING MESSAGE:**

Explanation: This message provides additional diagnostic information related to the preceding error condition.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: Be prepared to provide this information to IBM support if needed.

System Programmer Response: Be prepared to provide this information to IBM support if needed.

Operator Response: None.

ADR811E (*ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **IS ALREADY BEING PROCESSED - BACKUP-WHILE-OPEN STATUS IS** *nnn*

Explanation: This data set is already being processed by another program and therefore it be dumped or restored at this time. See Appendix B, “Data Integrity—Serialization,” in *DFSMS/MVS DFSMSdss Storage Administration Reference* for more details about the Backup-While-Open (BWO) status indicators.

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: None.

Operator Response: Rerun the function when the data set becomes available or the Backup-While-Open (BWO) status is changed.

ADR812I (*ttt***)-***mmmmm***(***yy***), THE BACKUP-WHILE-OPEN STATUS FOR DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **IS BEING CHANGED FROM** *nnn1* **TO** *nnn2*

Explanation: The current Backup-While-Open (BWO) status is changed to nnn before the data set is dumped.

See MSGADR720I for an explanation of the BWO status meanings.

System Action: The data set is processed.

Application Programmer Response: None.

Operator Response: None.

ADR813E (*ttt***) -** *mmmmm***(***yy***), UNABLE TO PROCESS DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **FOR BACKUP-WHILE-OPEN. STATUS IS** *nnn*

Explanation: The Backup-While-Open (BWO) status was unexpectedly changed to *nnn* from 100.

A status of “***” indicates that DFSMSdss could not obtain the Backup-While-Open (BWO) status. See Appendix B, “Data Integrity—Serialization,” in *DFSMS/MVS DFSMSdss Storage Administration Reference* for more details about the Backup-While-Open (BWO) status indicators.

System Action: The data set is not processed.

Application Programmer Response: None.

Operator Response: Rerun the function.

ADR820W (*ttt***)-***mmmmm***(***yy***), ATTRIBUTES LOST FOR DATA SET** *dsname*

Explanation: During a data set copy or restore operation, the source data set (*dsname*) has SMS attributes, but the target data set resides on a non-SMS-managed volume.

System Action: The copy or restore is allowed. However, the attributes do not exist for the target data set. The return code is 4.

Application Programmer Response: If the data set is to maintain its attributes, it must reside on SMS-managed volumes. Change the new name for a copy; or rename the data set for a restore; or specify STORCLASS(*storage-class-name*) with BYPASSACS(*dsname*) so that the target data set resides on SMS-managed volumes.

Operator Response: None.

ADR821W **(***ttt***)-***mmmmm***(***yy***), UNEXPECTED RETURN CODE** *return_code* **REASON CODE** *reason_code* **FROM IOSCAPU MACRO FOR VOLUME** *volume_serial_number* **AT DEVICE ADDRESS** *device_addr*

Explanation: DFSMSdss issued the IOSCAPU macro to retrieve the pointer to the UCB whose device address is *device_addr*, and the IOSCAPU macro failed with the listed *return_code* and *reason_code*. This message indicates there is a problem with the support for UCBs above the 16MB line. The UCB whose address is *device_addr* may reside above or below the 16MB line.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR822W **(***ttt***)-***mmmmm***(***yy***), EVENT NOTIFICATION** *event_id* **NOT ISSUED. UNEXPECTED RETURN CODE** *return_code* **REASON CODE** *reason_code* **FROM IOSCAPU MACRO FOR VOLUME AT DEVICE ADDRESS** *device_addr*

Explanation: DFSMSdss issued the IOSCAPU macro to retrieve the pointer to the UCB whose device address is *device_addr*, and the IOSCAPU macro failed with the listed *return_code* and *reason_code*. The indicated Event Notification did not occur.

event_id	**Description**
ENFPC003	Vary offline of the device
ENFPC016	Notification of a change in the SMS configuration

If the *event_id* is ENFPC016, allocation of data sets on the newly restored or copied volume may not be allowed until SMS is informed of the configuration change by a SETSMS command.

Source: DFSMSdss

System Action: Processing continues. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR823W **(***ttt***)-***mmmmm***(***yy***), DDM ATTRIBUTES MISSING FOR DATA SET** *dsname*

Explanation: During a data set dump operation, one or more source data set indicators show that DDM attributes exist for the data set, but the VVR or NVR cell containing the attributes is missing.

Source: DFSMSdss

System Action: The dump operation is allowed. However, the attributes do not exist for the source data set. The return code is 4.

Application Programmer Response: None.

Operator Response: None.

ADR860I **(***ttt***)-***mmmmm***(***yy***), PROCESSING BEGINS ON VOLUME** *volume_serial_number*

Explanation: DFSMSdss began processing the named volume.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR861T **(***ttt***)-***mmmmm***(***yy***), REQUIRED SUBSYSTEM** *subsystem* **IS UNAVAILABLE. TASK IS TERMINATED**

Explanation: The indicated subsystem (*subsystem*) is not installed. It is required to perform the CONVERTV function.

Source: DFSMSdss

System Action: The job is ended. The return code is 12.

Application Programmer Response: Verify that the indicated subsystem is installed, and rerun the job.

Operator Response: None.

ADR862I **(***ttt***)-***mmmmm***(***yy***), THE REDETERMINE KEYWORD WAS SPECIFIED. ALL DATA SETS WILL BE REPROCESSED**

Explanation: The REDETERMINE keyword was specified in the SMS job stream. The SMS constructs for all of the data sets will be reset, including those data sets already SMS-managed.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR863I **(***ttt***)-***mmmmm***(***yy***), THE TEST KEYWORD WAS SPECIFIED. NO DATA SETS OR VOLUMES WILL BE CONVERTED**

Explanation: The TEST keyword was specified in the SMS job stream. Subtasks will run in the NORUN mode.

Source: DFSMSdss

System Action: No volumes or data sets will be converted, but volume and data set eligibility checking will be done. A report will be issued indicating whether SMS processing would be successful.

Application Programmer Response: None.

Operator Response: None.

ADR864E **(***ttt***)-***mmmmm***(***yy***), JOBCAT/STEPCAT IS NOT ALLOWED WHEN CONVERTING VOLUMES TO OR FROM SMS MANAGEMENT. TASK IS TERMINATED**

Explanation: A JOBCAT or STEPCAT DD statement was encountered. These statements are not allowed in the SMS environment.

Source: DFSMSdss

System Action: The task is not performed. Processing continues with the next control statement. The return code is 8.

Application Programmer Response: Remove the JOBCAT or STEPCAT DD statement. Use the INCAT keyword if it is necessary to specify an input catalog. Rerun the job.

Operator Response: None.

ADR868I **(***ttt***)-***mmmmm***(***yy***), THE FOLLOWING DATA SETS ON VOLUME** *volume_serial_number* **HAD {'*'} CANDIDATE VOLUMES WHICH WERE {DELETED | CONVERTED TO '*'}**

Explanation: During conversion to SMS, non-VSAM data sets with candidate volumes have the candidate volumes converted to nonspecific `'*'` volumes. During conversion from SMS, both VSAM and non-VSAM data sets have their nonspecific `'*'` volumes deleted.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR869I **(*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS ON VOLUME** *volume_serial_number* **WERE NOT CATALOGED IN THE STANDARD ORDER OF SEARCH. THEY {WERE | WILL BE} CATALOGED IN THE NAMED CATALOG**

dsname **CATALOG:** *new_catalog_name*
[DELETED FROM: *old_catalog_name***]**

Explanation: Catalog entries were not found for each of the listed data sets in the standard order of search. The listed VSAM data sets were deleted from their original catalog and recataloged in the standard order of search. For non-VSAM data sets, if the INCAT keyword was specified and an entry for the non-VSAM data set was found in one of the catalogs listed with this keyword, then that entry was deleted from this catalog and the data set was recataloged in the standard order of search.

If INCAT was not specified or no entry was found in any of the catalogs listed, then the system assumed that the non-VSAM data set was uncataloged and cataloged it in the named catalog. In this case, the DELETED FROM line will not be issued.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR870I **(*ttt*)-*mmmmm*(*yy*), PREPARE PROCESSING {WILL BE | WAS} SUCCESSFUL. VOLUME** *volume_serial_number* **{WILL NOW BE | IS NOW} IN INITIAL STATUS**

Explanation: PREPARE processing for the named volume completed successfully, and the volume is now in INITIAL status. No data sets can be allocated or deleted on the volume. If TEST was specified in the job stream, this message indicates whether the task will be successful if actually run. The volume status is not changed with TEST.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR871W **(*ttt*)-*mmmmm*(*yy*), VOLUME** *volume_serial_number* **MUST BE ASSIGNED TO A STORAGE GROUP BEFORE SMS CONVERSION CAN PROCEED**

Explanation: This message is issued with a PREPARE task if the named volume is eligible for SMS conversion but is not assigned to an SMS storage group. The volume will be successfully placed in INITIAL status but must be assigned to a storage group before the conversion to SMS management can be completed.

Source: DFSMSdss

System Action: None. The return code is 4.

Application Programmer Response: Change the active control data set so that the volume is defined to a storage group before attempting to convert the volume to SMS management.

Operator Response: None.

ADR872E **(*ttt*)-*mmmmm*(*yy*), VOLUME** *volume_serial_number* **IS ALREADY IN {INITIAL | CONVERTED} STATUS. PREPARE PROCESSING {WILL FAIL | FAILED}**

Explanation: PREPARE processing for the named volume failed because the volume was already in INITIAL status.

Source: DFSMSdss

System Action: Processing of that volume is ended. Processing continues with the next volume in the input volume list. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR873I **(*ttt*)-*mmmmm*(*yy*), VOLUME** *volume_serial_number* **[IN STORAGE GROUP** *storage_group***] IS ELIGIBLE FOR CONVERSION {TO | FROM} SMS MANAGEMENT**

Explanation: DFSMSdss determined that the named volume is eligible for SMS/non-SMS processing. Conversion of the data sets on that volume can now proceed. *storage_group* is the SMS storage group in which the volume is defined. The storage group is listed only when a volume is converted to SMS management.

Source: DFSMSdss

System Action: The system proceeds with converting all of the data sets on the named volume either to or from SMS management.

Application Programmer Response: None.

Operator Response: None.

ADR874E **(*ttt*)-*mmmmm*(*yy*), VOLUME** *volume_serial_number* **IS NOT ELIGIBLE FOR CONVERSION {TO | FROM} SMS MANAGEMENT,** *reason_code*

Explanation: The named volume failed the eligibility requirements for conversion either to or from SMS management. The reason code, (*reason_code*) for the ineligible volume is one of the following:

04	The volume is not a DASD device.
08	The volume has a nonindexed VTOC.
12	The volume is not defined to an SMS storage group.
16	The volume is in unknown status. The SMS-converted flag is on but the SMS-initial flag is off in the VTOC index map.
20	The volume is in unknown status. The SMS-converted flag is on but the SMS-initial flag is off in VTOC entry.
24	SMS indicators for VTOC index map and VTOC entry do not match.

Source: DFSMSdss

System Action: Conversion of the volume failed. Processing continues with the next volume in the input list. The return code is 8.

Application Programmer Response: Take the appropriate action for each reason code:

04	Do not attempt to convert non-DASD volumes to SMS management.
08	Define an index for the VTOC, and rerun the job.
12	Change the ACDS so that the volume is defined to a storage group, and rerun the job.
16	Contact your IBM Support Center.
20	Contact your IBM Support Center.
24	Contact your IBM Support Center.

Operator Response: None.

ADR875E (*ttt*)-*mmmmm*(*yy*), VOLUME *volume_serial_number* IS ALREADY IN CONVERTED STATUS AND REDETERMINE WAS NOT SPECIFIED. SMS PROCESSING {WILL FAIL | FAILED}

Explanation: The named volume was already in SMS status, and the REDETERMINE keyword was not specified in the DFSMSdss job stream. Therefore, SMS processing of that volume is ended.

Source: DFSMSdss

System Action: Processing continues with the next volume in the input volume list. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR876E (*ttt*)-*mmmmm*(*yy*), VOLUME *volume_serial_number* IS NOT IN INITIAL OR CONVERTED STATUS. NONSMS PROCESSING {WILL FAIL | FAILED}

Explanation: Because the named volume was already in non-SMS status, non-SMS processing of the volume is ended.

Source: DFSMSdss

System Action: Processing continues with the next volume in the input volume list. The return code is 8.

Application Programmer Response: None.

Operator Response: None.

ADR877I (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS ON VOLUME *volume_serial_number* {WILL BE | WERE} SUCCESSFULLY PROCESSED

```
dsname                        CATALOG: catname
  [STORCLAS:  scname          MGMTCLAS: mcname]
  [VOLUMES:  vol001 vol002 vol003 . . .]
  [          vol00x vol00y vol00z . . .]
[AIX: aixname]
[PATH: pathname]
```

Explanation: The listed data sets were successfully processed either to or from SMS management.

- At the end of processing they are cataloged in the named catalog.
- If the task was conversion to SMS management, the storage and management classes in which the data set is defined are listed.
- If the data set is multivolume, the volumes on which the data set resides are listed.
- If the data set has any AIXs or PATHs defined for it, these are listed. If any of the AIXs are multivolume, then the volumes on which they reside are listed.

If TEST was specified, the data sets were not actually processed. The message indicates that data sets would be successfully processed if the job was run.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR878E (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS ON VOLUME *volume_serial_number* {WILL NOT BE | WERE NOT} SUCCESSFULLY PROCESSED *dsname* CATALOG: *catalog_name*

Explanation:

```
REASON: rc,mmmmm(yy),[volser],[reason]
          {[,catlg func,catlg rsn code,catlg mod id,
          parmlist rsn code,catlg service id] |
          [,VVR func,VVDS manager rsn code] |
          [,SMPM CFPurge rc, SMPM CFPurge rsn code]}
AIX:  aix name rc,[volser],[reason]
          {[,catlg func,catlg rsn code,catlg mod id,
          parmlist rsn code,catlg service id] |
          [,VVR func,VVDS manager rsn code]}
PATH: path name rc
          [,catlg func,catlg rsncode,catlg mod id,
          parmlist rsncode,catlg service id]
```

The listed data set (or its associated AIX or PATH) failed conversion either to or from SMS management, where *rc* is the reason code for the data set failing. If the data set is multivolume and the error occurred on a volume other than the one being processed by CONVERTV at that time, then the volume serial number of this other volume is printed. If a multivolume data set fails conversion because one of the other volumes that the data set is on is ineligible for SMS processing, then this reason is printed after the volume serial number. If the error occurred in a catalog call, then the catalog function code, catalog reason code, catalog module ID, and parmlist reason code are printed. Refer to IDC3009I for an explanation of the error, where:

IDC3009I return_code = ADR878E catalog_reason_code
IDC3009I reason_code = ADR878E parmlist_reason_code
IDC3009I module_ID = ADR878E catlg module_ID

If the error occurred in a VVR REQUEST function call, then the VVR function code that failed and the VVDS manager reason code are printed. Refer to message IDC3009I under return code 50 for an explanation of the VVDS manager reason code.

If the error occurred in an SMPM CFPurge function invocation, then the SMPM CFPurge return codes and reason codes are printed. See the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for explanations of the return and reason codes.

The reason codes are:

02	The data set is not supported in an SMS environment (indexed sequential, ABSTR, unmovable, model DSCB, CVOL, nonintegrated catalog facility VSAM catalog, or nonintegrated catalog facility VSAM data set).
03	The data set is not supported in a non-SMS environment (PDSE, HFS or extended format data set).
04	The data set is an uncataloged GDS.
05	The data set has extended attributes. Data sets with extended attributes cannot reside on non-SMS volumes.
06	The data set is a cataloged GDS, but it is not cataloged in the standard order of search.
08	The data set is a GDS with nonspecific volumes.
10	The data set is a GDS with candidate volumes.
12	ACS routines did not return SMS constructs for the data set.
14	A null storage class was returned for the data set.
16	The storage class definition cannot be retrieved for the data set.

18	The data set is multivolume, extents for the data set exist on volume *volser*, volume *volser* was not specified in the volume list, and SELECTMULTI(ALL) was specified (or defaulted to).
20	The data set is multivolume, volume *volser* is the first volume of the data set (for VSAM, volume *volser* is the first volume of the data component), volume *volser* was not specified in the volume list, and SELECTMULTI(FIRST) was specified.
22	The data set is multivolume and has extents on volumes *volume_serial_number* that are in different storage groups.
24	The data set has candidate volumes *volume_serial_number* that are in different storage groups.
26	The data set is multivolume and has extents on volumes *volume_serial_number* that are ineligible for conversion for the reasons given. (Refer to message ADR874E for volume reason code.)
28	The data set has candidate volumes *volume_serial_number* that are ineligible for conversion for the reasons given. (Refer to message ADR874E for volume reason code.)
30	The data set is multivolume and is not cataloged.
32	The data set is not cataloged in the standard search order, and the CATALOG keyword was not specified.
34	The data set is not cataloged in the standard search order, and a duplicate entry was found in another catalog.
36	The data set is not cataloged in the standard search order, and a duplicate entry was found in a standard order of search catalog.
38	The VSAM base cluster is in a sphere where all data sets are not convertible to SMS management.
40	The catalog to which the AIX's sphere is directed is different from the catalog to which the AIX's related base cluster is directed. All components must be in the same catalog.
42	The catalog to which the path's sphere is directed is different from the catalog to which the path's related base cluster is directed. All components must be in the same catalog.
44	ALTER failed during an attempt to update the catalog entry for the data set.
46	DELETE NOSCRATCH failed during an attempt to delete the catalog entry for the data set.
48	DEFINE RECATALOG failed during an attempt to recatalog the data set.
49	DEFINE ALIAS failed during an attempt to define the aliases for the data set.
50	DEFINE CATALOG failed during an attempt to catalog the data set.
52	CATALOG NAME LOCATE failed during an attempt to determine where the data set should be cataloged according to standard order of search.
54	DEFINE PATH failed during an attempt to define a path.
56	LOCATE failed.
58	The VSAM base cluster is in a sphere that includes data sets with catalog errors.
60	Read non-VSAM volume record (NVR) failed in the VVDS manager.
62	Get for update of non-VSAM volume record (NVR) failed in the VVDS manager.
64	Put for update of non-VSAM volume record (NVR) failed in the VVDS manager.
66	Delete of non-VSAM volume record (NVR) failed in the VVDS manager.
68	Insert of non-VSAM volume record (NVR) failed in the VVDS manager.
70	Read VSAM volume record (VVR) failed in the VVDS manager.
72	Get for update of VSAM volume record (VVR) failed in the VVDS manager.
74	Put of VSAM volume record (VVR) failed in the VVDS manager.
76	The VSAM base cluster is in a sphere that includes data sets with VVR errors.
78	Read of the VTOC failed during an attempt to update the SMS indicator for the data set.
80	Rewrite of the VTOC failed during an attempt to update the SMS indicator for the data set.
82	The VSAM base cluster is in a sphere that includes data sets with VTOC entry update errors.
84	The VSAM component does not have a corresponding VTOC entry.
86	The non-VSAM data set is SMS-managed, but its NVR cannot be found.
88	Storage class authorization for the data set failed.
90	Management class authorization for the data set failed.
92	Both storage class and management class authorization for the data set failed.
93	DFSMSdss invoked the SMPM CFPurge function to purge the data in the coupling facility caches for the data set. The SMPM CFPurge function returned the listed return and reason codes.
94	Unable to get extent information from the VTOC.
95	Data set is HFS file.
96	The data set failed enqueue.
98	The data set is an extended sequential data set (SAM striped).
99	Extended format VSAM data set.
101	The data set has RLS information associated with it, and therefore is not supported in this release.
102	The data set is marked as checkpointed.

Source: DFSMSdss

System Action: Processing continues with the next data set. The volume will not be successfully converted to or from SMS management. The return code is 8.

Application Programmer Response:

02-10	Move or delete the data set from the volume.
12	Update ACS routines to return SMS constructs for the data set.
14-16	Verify ACS routines to ensure that the data set is defined to a storage class.

18	Take one of the following actions and rerun the job: • Specify SELECTMULTI(FIRST) and include the first volume of the data set in the input volume list. For VSAM data sets, you must include the first volume of the data component in the input volume list. • Specify SELECTMULTI(ALL) (this is the default if you do not specify SELECTMULTI) and include all volumes of the data set in the input volume list. • Specify SELECTMULTI(ANY) and include at least one primary or candidate-with-space volume of the data set in the input volume list. • Move or delete the data set off the volume you are trying to convert.
20	Take one of the following actions and rerun the job: • Specify SELECTMULTI(FIRST) and include the first volume of the data set in the input volume list. For VSAM data sets, you must include the first volume of the data component in the input volume list. • Specify SELECTMULTI(ALL) (this is the default if you do not specify SELECTMULTI) and include all volumes of the data set in the input volume list. • Specify SELECTMULTI(ANY) and include at least one primary or candidate-with-space volume of the data set in the input volume list. • Move or delete the data set off the volume you are trying to convert.
22	Change your active control data set so that all the volumes that the data set resides on are defined to the same storage group.
24	(1) Delete the candidate volumes from the data set's catalog entry, or (2) change your ACDS so that all the candidate volumes are defined to the same storage group as the volumes on which the data set resides.
26-28	Refer to message ADR874E for required action.
30	(1) Catalog the data set, or (2) move or delete the data set from the volumes that you are trying to convert.
32	(1) Specify the CATALOG keyword, or (2) recatalog the data set into the standard order of search.
34	(1) Catalog the data set into the standard order of search, or (2) rename the data set, or (3) move or delete the data set from the volumes that you are trying to convert.
36	(1) Rename the data set, or (2) move or delete the data set from the volumes that you are trying to convert.
38-42	(1) Rename the base cluster, the data or index component, AIX, AIX data or index component, or PATH to be directed to the same catalog as the VSAM base cluster, or (2) delete or add catalog aliases so all parts of the sphere are alias-directed to the same catalog.
44-86	Contact your IBM Support Center.
88-92	(1) Make sure that the RESOWNER of the data set is authorized to use the storage or management class derived for the data set, or (2) update the ACS routines to select a different storage or management class for the data set.
93	See the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes.
94	See previous error message associated with the data set for specific action.
95	Move the data set to another SMS volume.
96	Ensure that no other jobs are accessing data sets on volumes to be converted, and then rerun the CONVERTV job.
98	Move or delete the data set from the volume
99	Move the data set to another SMS volume.
101	Rerun the job on a system running DFSMS/MVS Version 1 Release 3 or higher.
102	Confirm that the checkpointed data set is no longer required for a restart, specify FORCECP with the appropriate *days* parameter and rerun the job.

Operator Response: None.

ADR879I (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS ON VOLUME *volume_serial_number* WERE ALREADY IN {NON-}SMS STATUS

Explanation:

```
dsname                            CATALOG: catname
  [STORCLAS:  scname        MGMTCLAS: mcname]
  [VOLUMES:  vol001 vol002 vol003 . . . ]
  [          vol00x vol00y vol00z . . . ]
[AIX: aixname]
[PATH: pathname]
```

The listed data sets were not processed because they were already in the desired SMS status.

- The data sets are cataloged in the named catalog.
- If the task was conversion to SMS management, the storage and management classes in which the data set is defined are listed.

**********	Asterisks (*) shown in the place of storage and management class names indicate that no primary VVR was found for the cluster.
--------	Dashes (-) shown in the place of storage and management class names indicate incorrectly converted old format VVRs. Refer to message ADR409E.

- If the data set is multivolume, the volumes on which the data set resides are listed.
- If the data set has any AIXs or PATHs defined for it, these are listed. If any of the AIXs are multivolume, then the volumes on which they reside are listed.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR880I (*ttt*)-*mmmmm*(*yy*), VOLUME *volume_serial_number* IS EMPTY. NO DATA SETS WERE CONVERTED.

Explanation: Data set conversion was not required because the named volume did not have any data sets defined on it.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR881I (*ttt*)-*mmmmm*(*yy*), VOLUME *volume_serial_number* CONTAINS THE FOLLOWING TEMPORARY DATA SETS

dsname

Explanation: The named volume contains the temporary data sets listed.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR882W (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING DATA SETS ON VOLUME *volume_serial_number* {WILL NOT BE | WERE NOT} SUCCESSFULLY PROCESSED, BUT WERE ALREADY IN {NON}SMS STATUS

Explanation:

```
dsname                    CATALOG: catalog name
 REASON: rc,mmmmm(yy)[,volser][,reason]
           [,catlg func,catlg rsn code,catlg mod id,
           parmlist rsn code,catlg service id]
           [,VVR func,VVDS manager rc]
 AIX:  aix name rc[,volser][,reason]
           [,catlg func,catlg rsn code,catlg mod id,
           parmlist rsn code,catlg service id]
           [,VVR func,VVDS manager rc]
 PATH: path name rc
           [,catlg func,catlg rsn code,catlg mod id,
           parmlist rsn code,catlg service id]
```

An error was found while the listed data set (or its associated AIX or PATH) was being processed, but the data set was already converted, so this error will not affect the volume being successfully converted. *rc* is the reason code for the data set's failing. Refer to message ADR878E for a full explanation of the data set error information returned and the reason codes.

Source: DFSMSdss

System Action: Processing continues with the next data set. The return code is 4.

Application Programmer Response: Refer to message ADR878E.

Operator Response: None.

ADR885I (*ttt*)-*mmmmm*(*yy*), VOLUME *volume_serial_number* {WILL BE | HAS BEEN} SUCCESSFULLY CONVERTED {TO|FROM} SMS MANAGEMENT

Explanation: All data sets on the named volume were successfully converted to either SMS or non-SMS status. The SMS flags in the VTOC entry and the VTOC index map for the volume were successfully updated to the appropriate status. If TEST was specified, this message indicates that processing would have been successful if the job had actually been run. No changes occur to the volume under TEST.

Source: DFSMSdss

System Action: Processing continues with the next volume in the input volume list.

Application Programmer Response: None.

Operator Response: None.

ADR886E (*ttt*)-*mmmmm*(*yy*), DATA SETS EXIST ON VOLUME *volume_serial_number* WHICH ARE NOT CONVERTIBLE {TO | FROM} SMS MANAGEMENT. THE VOLUME {WILL BE | WAS} {PLACED | LEFT} IN INITIAL STATUS

Explanation: The named volume failed SMS/non-SMS conversion because of data sets that cannot be converted existing on the volume. The volume is left in INITIAL status at the end of processing. If TEST was specified, this message indicates that processing would have failed if the job had actually been run. No changes occur to the volume under TEST.

Source: DFSMSdss

System Action: Processing continues with the next volume in the input volume list. The return code is 8.

Application Programmer Response: Appropriate responses are:

- For SMS processing, the problem can be solved by one of the following:
  - Adding the CATALOG, INCAT, SELECTMULTI(FIRST), or SELECTMULTI(ANY) keywords to the DFSMSdss job stream, and rerunning the SMS job.
  - Running a non-SMS job to place the volume back in non-SMS status, deleting or moving the data sets that caused the processing to fail, and rerunning the SMS job.
- For non-SMS processing, the problem can be solved by one of the following:
  - Adding the SELECTMULTI(FIRST) or SELECTMULTI(ANY) keyword to the DFSMSdss job stream, and rerunning the job.
  - Running an SMS job to place the volume back in SMS status, deleting or moving the data sets that caused the processing to fail, and rerunning the non-SMS job.

Operator Response: None.

ADR891E (*ttt*)-*mmmmm*(*yy*), {CONVERSION | PREPARATION} OF VOLUME *volume_serial_number* FAILED, *reason_code*

Explanation: The SMS/NONSMS/PREPARE job failed on the named volume because of an error in trying to update the VTOC entry or VTOC index map SMS status flags. The reason code, (*reason_code*) for the failure is one of the following:

04	Read of the VTOC entry failed during an attempt to update the SMS indicators to INITIAL.
08	Read of the VTOC entry failed during an attempt to update the SMS indicators after processing data sets.
12	Rewrite of the VTOC entry failed during an attempt to update the SMS indicators to INITIAL.
16	Rewrite of the VTOC entry failed during an attempt to update the SMS indicators to NONSMS.
20	Rewrite of the VTOC entry failed during an attempt to update the SMS indicators to SMS.
24	Read of the VTOC index map failed during an attempt to update the SMS indicators to INITIAL.
28	Read of the VTOC index map failed during an attempt to update the SMS indicators after processing data sets.
32	Rewrite of the VTOC index map failed during an attempt to update the SMS indicators to INITIAL.
36	Rewrite of the VTOC index map failed during an attempt to update the SMS indicators to NONSMS.

40 Rewrite of the VTOC index map failed during an attempt to update the SMS indicators to SMS.

44 An attempt to determine if a VVDS exists on the volume failed.

48 An attempt to add a VVDS to the volume failed.

Source: DFSMSdss

System Action: Processing continues with the next volume in the input volume list. The return code is 8.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR892I (*ttt*)-*mmmmm*(*yy*), THE STATUS OF EACH VOLUME { WILL BE | IS} AS FOLLOWS

Explanation:

```
    VOLUME           FINAL STATUS      REASON FOR FAILURE
    ------           ------------      ------------------
volser - PREPARED         INITIAL
volser - CONVERTED SMS | NONSMS | INITIAL
volser - FAILED    SMS | NONSMS | INITIAL  VOLUME NOT ELIGIBLE
volser - FAILED    SMS | NONSMS | INITIAL  DATA SETS NOT ELIGIBLE
volser - FAILED    SMS | NONSMS | INITIAL  VTOC UPDATE FAILED
volser - FAILED    SMS | NONSMS | INITIAL  VVDS ERROR
```

After all of the volumes in the CONVERTV job are processed and individual volume and data set processing messages are printed, DFSMSdss issues this report summary message, which lists all of the volumes and their final status. If conversion of a volume failed, the reason for failure is also indicated.

Source: DFSMSdss

System Action: None.

Application Programmer Response: If any of the volumes failed processing, refer to that volume's specific processing messages to determine the reason for failure and corrective action for the error.

Operator Response: None.

ADR893I (*ttt*)-*mmmmm*(*yy*), THE FOLLOWING VOLUMES CONTAIN PIECES OF MULTIVOLUME DATA SETS WHICH WERE PROCESSED DURING THE CONVERTV TASK. THE VOLUMES ARE IN THE INDICATED STATUS

Explanation:

```
volser - SMS | INITIAL | NONSMS | UNKNOWN
```

Some data sets processed during the CONVERTV job were multivolume and had extents on volumes not in the input volume list. For SMS processing, the SMS status of these volumes is not altered. For non-SMS processing, the volumes are set to INITIAL if at least one data set with extents on those volumes was successfully processed.

Note: If this message is issued, the user may have pieces of SMS-managed data sets on non-SMS volumes. These volumes must also be converted to SMS management.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR894E (*ttt*)-*mmmmm*(*yy*), ERRORS OCCURRED WHILE TRYING TO PLACE THE FOLLOWING VOLUMES IN INITIAL STATUS

volser **-** *reason_code*

Explanation: Some data sets processed during the NONSMS CONVERTV job were multivolume and had extents on volumes not in the input volume list. An error occurred in trying to set the SMS status of these listed volumes to INITIAL. Refer to message ADR891E for the explanation of the reason code.

Source: DFSMSdss

System Action: None. The return code is 8.

Application Programmer Response: Contact your IBM Support Center.

Operator Response: None.

ADR901E (*ttt*)-*mmmmm*(*yy*), COPY OF EXTENDED SEQUENTIAL DATA SET *dsname* FAILED.

Explanation: The requested function could not be completed. Message ADR910E, which follows, explains the reason for the failure.

Source: DFSMSdss

System Action: The data set is not processed. The return code is set to 8.

Application Programmer Response: See message ADR910E for the reason for the failure.

Operator Response: None.

ADR902I (*ttt*)-*mmmmm*(*yy*), COPY OF EXTENDED SEQUENTIAL DATA SET *dsname* WAS SUCCESSFUL. SIZE OF INPUT DATA SET PROCESSED WAS *nnnn1*. SIZE OF OUTPUT DATA SET PROCESSED WAS *nnnn2*.

Explanation: The specified data set (*dsname*) was copied successfully. The sizes specify the number of user bytes (*nnnn1*) copied from the source and the number of user bytes (*nnnn2*) placed on the target.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR903I (*ttt*)-*mmmmm*(*yy*), DUMP OF EXTENDED SEQUENTIAL DATA SET *dsname* WAS SUCCESSFUL. SIZE OF DATA SET DUMPED WAS *nnnn*.

Explanation: The specified data set *dsname* was dumped successfully. The size *nnnn* specifies the number of user bytes dumped from the source.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR904I **(***ttt***)-***mmmmm***(***yy***), DUMP OF EXTENDED SEQUENTIAL DATA SET** *dsname* **WAS SUCCESSFUL.**

Explanation: The specified data set *dsname* was dumped successfully.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR905E **(***ttt***)-***mmmmm***(***yy***), DUMP OF EXTENDED SEQUENTIAL DATA SET** *dsname* **FAILED.**

Explanation: The requested function could not be completed. ADR910E, which follows, explains the reason for the failure.

Source: DFSMSdss

System Action: The data set is not processed. The return code is set to 8.

Application Programmer Response: See message ADR910E for the reason for the failure.

Operator Response: None.

ADR906I **(***ttt***)-***mmmmm***(***yy***), RESTORE OF EXTENDED SEQUENTIAL DATA SET** *dsname* **WAS SUCCESSFUL. SIZE OF DATA SET RESTORED WAS** *nnnn***.**

Explanation: The specified data set *dsname* was restored successfully. The size *nnnn* specifies the number of user bytes restored.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR907I **(***ttt***)-***mmmmm***(***yy***), RESTORE OF EXTENDED SEQUENTIAL DATA SET** *dsname* **WAS SUCCESSFUL.**

Explanation: The specified data set *dsname* was restored successfully.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR908E **(***ttt***)-***mmmmm***(***yy***), RESTORE OF EXTENDED SEQUENTIAL DATA SET** *dsname* **FAILED.**

Explanation: The requested function could not be completed. Message ADR910E, which follows, explains the reason for the failure.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: See message ADR910E for the reason for the failure.

Operator Response: None.

ADR909W **(***ttt***)-***mmmmm***(***yy***), AN ERROR WAS ENCOUNTERED. RETURN CODE =** *return_code***, REASON CODE =** *reason_code*

Explanation: The requested function for an extended sequential data set was completed. However, an error condition was encountered. The reason and return codes can be found in the table in message ADR910E.

Source: DFSMSdss

System Action: The data set was successfully processed, but a minor error was encountered during the data set processing.

Application Programmer Response: Use the return and reason code table in message ADR910E to identify the error.

Operator Response: None.

ADR910E **(***ttt***)-***mmmmm***(***yy***), AN ERROR WAS ENCOUNTERED DURING {***operation***} PROCESSING. RETURN CODE =** *crrrrrrr***, REASON CODE =** *bbbbbbbb* **{, SENSE DATA =** *ios_status***,** *csw_status***,** *sense_data***}**

Explanation: The requested function for processing an extended sequential data set received an error during processing. The reason for the failure is identified by the return code (*crrrrrrr*) The failure occurred during the operation specified by {*operation*}

The return code format is *crrrrrrr*, where *c* is the component area that reported the failure, and *rrrrrrr* is the return code. In some cases, a reason code will be supplied for additional diagnostic information, when applicable.

If sense data exists for the failure, the ios status, csw status, and sense data will be included to aid in problem determination. If sense data does not exist, this part of the message will not be included.

The operation field contains the operation being processed. The following are valid values for *operation*:

Initialization	An error occurred during the process of obtaining storage, initializing the parameter list, and so forth.
Open Source	An error occurred during the process performed to open the source data set.
Open Target	An error occurred during the process performed to open the target data set.
Data Movement	An error occurred during the data movement process.
Close Source	An error occurred during the process performed to close the source data set.
Close Target	An error occurred during the process performed to close the target data set.
Cleanup	A failure occurred during the process of cleaning up data areas, storage, or related items required to process the request.

Example: The following example message indicates that the data set being processed has failed while reading or writing data for the requested data set. **(001)-PSECM(01), An error was encountered during data movement processing. Return code = 500005E3, Reason code = 00000008**

The failing component area is indicated by the 5 in the leftmost position of the return code. The failure is a return code `X'5E3'` and a reason code of 8.

To determine the cause of the failure, find the value of the component (5, in this example), and then locate the failing return code or the failing reason code, or both, in the following lists:

Return Code	**Explanation**
00*xxxxxxx*	Component Value = 0
Values for *xxxxxxx*	
00 (X'00')	Processing is successful.
08 (X'08')	Reason Code:
	06 (X'06') - A request for storage failed. Check the region size of your failing job. Increase the specified region if possible. Resubmit the failing job. If the failure recurs, contact IBM for support.
	08 (X'08') - Build failure: communications between DFSMSdss and the logical data mover function could not be established because the real addresses of one or more UCBs were not available. See the previously issued message ADR821W for more information.
400–499 (X'190'–X'1F3')	An internal error was detected. Contact IBM for support.
9000 (X'2328')	An unexpected error has been encountered. Contact IBM for support.
2*xxxxxxx*	Component value = 2 An error has been encountered during initialization or termination processing. If the error cause cannot be determined, call IBM for support.
Values for *xxxxxxx*	
100 (X'64')	An error has been encountered during SVM processing while attempting to close a “pipe.”
101 (X'65')	An error has been encountered during SVM processing while attempting to free a buffer.
102 (X'66')	An error was encountered during execution of an MVS LOAD macro for entry SVMXHOTT.
103 (X'67')	An error was encountered during execution of an MVS DELETE macro for entry SVMXHOTT.
200 (X'C8')	An environmental error has been encountered during SVM processing. Contact IBM for support.
201 (X'C9')	An environmental error has been encountered during SVM “asynchronous” processing. Contact IBM for support.
202 (X'CA')	An environmental error has been encountered while trying to read data from an SVM pipe. Contact IBM for support.
203 (X'CB')	An environmental error has been encountered while using the SVM “allocate” service. Contact IBM for support.
204 (X'CC')	An environmental error has been encountered while using the SVM “open pipe” service. Contact IBM for support.
205 (X'CD')	An environmental error has been encountered while using the SVM “write pipe” service. Contact IBM for support.
206 (X'CE')	An error has been encountered during execution of an MVS LOAD macro for entry SVMXHOTL.
207 (X'CF')	An error has been encountered during execution of an MVS DELETE macro for entry SVMXHOTL.
208 (X'D0')	An error has been encountered during execution of an MVS LOAD macro for entry SVMXHOTU.
209 (X'D1')	An error has been encountered during execution of an MVS DELETE macro for entry SVMXHOTU.
210 (X'D2')	An error has been encountered during execution of an SDM Dataspace Create request.
211 (X'D3')	An error has been encountered during execution of an SDM Dataspace request.
3*xxxxxxx*	Component Value = 3 The system data mover (SDM) reported an error. See Table 2 on page ADR-100.
4*xxxxxxx*	Component Value = 4 Extended format I/O routine reported the error. See *DFSMS/MVS DFSMSdfp Diagnosis Reference* for the return and reason codes.
5*xxxxxxx*	Component Value = 5 An internal error has occurred. If the error cannot be determined, contact IBM for support.
Values for *xxxxxxx*	
1500 (X'00005DC')	A buffer sequence error has occurred internally. Contact IBM for support.
1501 (X'00005DD')	An invalid buffer sequence error has been detected. Contact IBM for support.
1502 (X'00005DE')	An internal error has been detected in ANTRPSE. Contact IBM for support.
1503 (X'00005DF')	An external error has been detected in ANTRPSE. Contact IBM for support.
1504 (X'00005E0')	An invalid buffer sequence error has been detected in ANTWPSE. Contact IBM for support.
1505 (X'00005E1')	An external error has been detected in ANTRPSE. Contact IBM for support.
1506 (X'00005E2')	An internal error has been detected by the internal exit. Contact IBM for support.
1507 (X'00005E3')	A failing condition has been detected during I/O processing. Contact IBM for support.
9*xxxxxxx*	Component Value = 9 An ABEND occurred while processing the request. The system ABEND code is contained in *xxxxxxx*. Check the system abend code explanation to determine if the condition can be corrected.

Source: DFSMSdss

System Action: The data set is not processed.

Application Programmer Response: If the cause cannot be corrected, contact your IBM service representative for support.

Operator Response: None.

ADR911W **(***ttt***)-***mmmmm***(***yy***), DATASET** *dsname* **WAS AN EXTENDED SEQUENTIAL DATA SET. IT HAS BEEN RESTORED AS A PHYSICAL SEQUENTIAL DATA SET. RETURN CODE** *(return_code)***.**

Explanation: During an attempted restore of an extended sequential data set, there was a failure. The data set is restored as a physical sequential data set and may not be usable. The return code documents the reason for the failure:

04 The data set was allocated as physical sequential instead of extended sequential data set. This could be due to not having the correct storage class selected.

Source: DFSMSdss

System Action: Processing continues.

Application Programmer Response: Check the return code to determine why the data set was not restored as an extended sequential data set.

Operator Response: None.

ADR912I **(***ttt***)-***mmmmm***(***yy***), COPY OF EXTENDED SEQUENTIAL DATA SET** *dsname* **WAS SUCCESSFUL.**

Explanation: The specified data set *dsname* was copied successfully.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR913W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **ORGANIZATION IS NOT SUPPORTED OUTSIDE AN SMS ENVIRONMENT.**

Explanation: The data set being processed has a data set organization that is only supported by an SMS environment.

Source: DFSMSdss

System Action: Processing continues. This data set is not processed.

Application Programmer Response: None.

Operator Response: None.

ADR914I **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **WAS SCRATCHED BECAUSE IT WAS NOT AN EXTENDED SEQUENTIAL DATA SET.**

Explanation: The source data set was an extended sequential data set. The preallocated target was not an extended sequential data set and has been deleted. The target has been scratched so that an attempt can be made to reallocate it as an extended sequential data set.

Source: DFSMSdss

System Action: Operation continues. If not reallocated as an extended sequential data set, the data set is converted to a physical sequential data set during the restore. If reallocated as an extended sequential data set, it is restored without conversion.

Application Programmer Response: None.

Operator Response: None.

ADR915W **(***ttt***)-***mmmmm***(***yy***), AN ERROR OCCURRED IN SMS WHILE ALLOCATING DATA SET** *dsname1* **[WITH NEW NAME** *dsname2***]. ALLOCATION AS NON-EXTENDED WILL BE ATTEMPTED. SMS MESSAGES FOLLOW.**

Explanation: An error occurred in the Storage Management Subsystem while allocating the extended format data set. SMS messages are printed following this message. DFSMSdss will attempt to allocate the data set as non-extended format.

Source: DFSMSdss

System Action: Processing of the data set continues. The return code is 4.

Application Programmer Response: Refer to the SMS messages following this message to determine the reason for the allocation failure. Correct the problem if the allocation failure is not expected.

Operator Response: None.

ADR922E **(***ttt***)-***mmmmm***(***yy***), AN ERROR CONDITION WAS DETECTED WHILE PROCESSING CLUSTER** *cluster_name* **ON VOLUME** *volume_serial***, RETURN CODE=***sdm_return_code* **REASON CODE=***sdm_reason_code*

Explanation: DFSMSdss cannot complete the operation for the cluster *cluster_name* because an error condition was detected by the System Data Mover during processing of volume *volume_serial*. The System Data Mover return code *(sdm_return_code)* and reason code *(sdm_reason_code)* are supplied as diagnostic information.

Source: DFSMSdss

System Action: The data set is not processed. Processing continues with the next data set. The return code is 8.

Application Programmer Response: Notify the system programmer.

System Programmer Response: For explanations of the return and reason codes, see Table 2 on page ADR-100.

ADR923W **(***ttt***)-***mmmmm***(***yy***), AN ERROR CONDITION WAS DETECTED AFTER PROCESSING CLUSTER** *cluster_name***, REASON CODE=***reason_code*

Explanation: DFSMSdss successfully processed the cluster *cluster_name* but encountered an error during post-processing that might eventually adversely affect the DFSMSdss job or the overall system. The *reason_code* explanation is:

1 An error was encountered freeing storage that was obtained for the processing of this cluster.

2 SDM termination did not complete successfully.

Source: DFSMSdss

System Action: The data set is processed. The return code is 4.

Application Programmer Response: Notify the system programmer.

System Programmer Response: Contact your IBM Support Center.

ADR940I **(***ttt***)-***mmmmm***(***yy***) DATA SET** *dsname* **BEING RESTORED WAS PROCESSED AS AN OPEN DATA SET WHEN IT WAS DUMPED.**

Explanation: The data set was dumped as an open data set at the request of a data base application, such as Information Management System (IMS), through a UIM exit request (EI22BWOE). System-level enqueues for serialization were not obtained by DFSMSdss when the data set was dumped.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR941E (*ttt***)-***mmmmm***(***yy***) DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **CANNOT BE PROCESSED BECAUSE IT IS ALREADY BEING PROCESSED AS AN OPEN DATA SET.**

Explanation: The data set cannot be dumped as an open data set because it is already being processed as an open data set.

Source: DFSMSdss

System Action: The data set is not processed, the return code is 8, and processing continues with the next data set.

Application Programmer Response: None.

The data base application, after waiting for a short period of time, may reinitiate the dump request.

Operator Response: None.

ADR942E (*ttt***)-***mmmmm***(***yy***) DATA SET** *dsname* **CREATED ON** *ddname* **IS NOT USABLE BECAUSE OF UPDATE ACTIVITY WHILE IT WAS BEING PROCESSED AS AN OPEN DATA SET.**

Explanation: The data set was dumped as an open data set at the request of a data base application, such as Information Management System (IMS), through the application programming interface: System-level enqueues for serialization were not obtained by DFSMSdss when the data set was dumped. During the dump process, the data set was altered in a manner that indicates the dumped version of the data set on the dump tape is unusable and must be discarded. *ddname* describes the dump data set on tape or DASD.

Source: DFSMSdss

System Action: The return code is 8. Processing continues with the next data set.

Application Programmer Response: None.

The data base application may reinitiate the dump request.

Operator Response: None.

ADR943E (*ttt***)-***mmmmm***(***yy***) DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **REQUIRES VALIDATE TO BE PROCESSED AS AN OPEN DATA SET.**

Explanation: DFSMSdss was requested to dump the data set as an open data set by a data base application, such as Information Management System (IMS), through the application programming interface. But the data set is an indexed VSAM data set, and VALIDATE is required to dump that type of data set as an open data set.

Source: DFSMSdss

System Action: The data set is not processed, the return code is 8, and processing continues with the next data set.

Application Programmer Response: The data base application must be changed to specify VALIDATE rather than NOVALIDATE.

Operator Response: None.

ADR944E (*ttt***)-***mmmmm***(***yy***) DATA SET** *dsname* **IN CATALOG** *catalog_name* **ON VOLUME** *volume_serial_number* **CANNOT BE DUMPED BECAUSE IT WAS UPDATED DURING CONCURRENT COPY INITIALIZATION.**

Explanation: The data set was updated while it was being prepared for concurrent copy initialization. Because of the update activity, the data set cannot be dumped.

Source: DFSMSdss

System Action: The return code is 8. Processing continues with the next data set.

Application Programmer Response: None.

The data base application may reinitiate the dump request.

Operator Response: None.

ADR950W (*ttt***)-***mmmmm***(***yy***), DURING THE CONVERSION TO NON-SMS, RETAINED LOCKS IN THE COUPLING FACILITY {WERE|WOULD HAVE BEEN} PURGED FOR THE FOLLOWING DATA SETS ON VOLUME** *volume_serial_number*

Explanation: Retained locks in the coupling facility were detected for the listed data sets during conversion from SMS. Retained locks indicate that the cluster is part of a recoverable sphere that was accessed with RLS protocols and that there are pending CICS RLS backouts for the cluster. These locks cannot be preserved during conversion from SMS.

Source: DFSMSdss

System Action: If TYPRUN=NORUN was not specified and TEST was not specified, then the locks were purged as a result of conversion from SMS. If TYPRUN=NORUN or TEST was specified, then the locks were not purged.

Processing for the volume continues. The return code is 4.

Application Programmer Response: If TYPRUN=NORUN or TEST was specified, then run the pending CICS RLS backouts before actually converting the volume from SMS.

If neither TYPRUN=NORUN nor TEST was specified and the conversion was not intended, the cluster must be converted back to SMS for RLS access, including the respecification of the values of the LOG and LOGSTREAMID parameters. Since locks protecting pending CICS backouts were lost during the conversion, special CICS procedures are required to handle the disposition of CICS online backouts. Please refer to the description of the SHCDS FRDELETEUNBOUNDLOCKS command in the *DFSMS/MVS Access Method Services for ICF* manual and the *CICS Recovery and Restart Guide* to correctly dispose of the pending CICS online backouts.

Operator Response: None.

ADR951W (*ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **IS MARKED RECOVERY REQUIRED**

Explanation: The specified VSAM cluster has been marked “recovery required” by the application that owns it, and therefore, may be unusable.

If the message was issued during a data set dump or data set copy operation, then the data set being backed up or copied was marked recovery required. If the message was issued during a data set restore operation, then the back up copy being restored was marked recovery required at the time of the back up.

Source: DFSMSdss

System Action: The data set is processed. The return code is 4.

Application Programmer Response: For data set copy and data set dump, the dump/copy may need to be rerun, following a forward recovery of the data set. For data set restore, the target may need to be forward recovered, or the restore may need to be rerun, using a different back up version.

Operator Response: None.

ADR952E **(***ttt***)-***mmmmm***(***yy***), THE IDAQDMP MACRO FAILED DURING QUIESCE PROCESSING FOR CLUSTER** *cluster_name* **WITH RETURN CODE (***return_code***) AND REASON CODE (***reason_code***)**

Explanation: DFSMSdss issued the IDAQDMP macro to perform quiesce processing for the VSAM data set. The IDAQDMP macro returned the listed failing return and reason codes. If error data was returned by the IDAQDMP macro, message ADR957I follows this message.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes. For some return codes, the problem can be corrected in the job rerun.

Operator Response: None.

ADR953E. **(***ttt***)-***mmmmm***(***yy***), THE IDAQDMP MACRO FAILED DURING RESUME PROCESSING FOR CLUSTER** *cluster_name* **WITH RETURN CODE (***return_code***) AND REASON CODE (***reason_code***)**

Explanation: DFSMSdss issued the IDAQDMP macro to perform resume processing for the VSAM data set. The IDAQDMP macro returned the listed failing return and reason codes. If error data was returned by the IDAQDMP macro, message ADR957I follows this message.

Source: DFSMSdss

System Action: For COPY operations, the data set is not processed.

For DUMP, the failure may not have been detected until *after* the data set was dumped. In this case, the dumped version of the data set is *not* usable. If the error was detected before the data set was dumped, then the data set is not processed.

The return code is 8.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes.

Operator Response: None.

ADR954W **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **IS MARKED RECOVERY REQUIRED, BUT IS BEING CONVERTED TO NON-SMS. RECOVERY REQUIRED STATUS IS LOST**

Explanation: The cluster is being copied or restored to a non-SMS-managed volume. Since the cluster is being converted to non-SMS, the recovery required status of the cluster will be lost as a result of the operation. The recovery required status indicates that the data set may not be usable.

Source: DFSMSdss

System Action: The data set is processed. The return code is 4.

Application Programmer Response: For copy, a back up copy of the data set may need to be restored. For restore, another back up version may need to be used.

Operator Response: None.

ADR955W **(***ttt***)-***mmmmm***(***yy***), AS A RESULT OF CONVERSION TO NON-SMS, THE RECOVERY REQUIRED STATUS {WILL BE | WAS} LOST FOR THE FOLLOWING DATA SETS ON VOLUME** *volume_serial_number*

Explanation: The listed data sets were marked as recovery required. Upon conversion of a data set to non-SMS, the recovery required status of the data set is lost. The recovery required status indicates that the data sets may not be usable.

Source: DFSMSdss

System Action: None. The return code is 4.

Application Programmer Response: If TYPRUN=NORUN and TEST were not specified, a back up copy of the data set may need to be restored. If either TYPRUN=NORUN or TEST was specified, the data set may need to be forward recovered before being converted from SMS management.

Operator Response: None.

ADR956E **(***ttt***)-***mmmmm***(***yy***), CONNECTION TO THE SMSVSAM SERVER WAS LOST WHILE PROCESSING DATA SET** *dsname* **USING RECORD LEVEL SHARING ACCESS**

Explanation: While processing the data set using record level sharing access, the connection to the SMSVSAM server was lost.

Source: DFSMSdss

System Action: For COPY operations, the data set is not processed.

For DUMP, the failure may not have been detected until *after* the data set was dumped. In this case, the dumped version of the data set is *not* usable. If the error was detected before the data set was dumped, then the data set is not processed.

The return code is 8.

Application Programmer Response: None.

Operator Response: Verify that the SMSVSAM server is available and rerun the job.

ADR957I **(***ttt***)-***mmmmm***(***yy***), IDAQDMP ERROR DATA FOR CLUSTER** *cluster_name* **IS** *error_data*

Explanation: Either message ADR952E or ADR953E precedes this message, indicating that the IDAQDMP macro failed. The listed error data was returned by the IDAQDMP macro.

Source: DFSMSdss

System Action: Refer to the system action for the preceding ADR952E or ADR953E message.

Application Programmer Response: Refer to the application programmer response for the preceding ADR952E or ADR953W message.

Operator Response: None.

ADR958E **(***ttt***)-***mmmmm***(***yy***), THE SMPM CFPURGE FUNCTION FAILED FOR CLUSTER** *cluster_name* **WITH RETURN CODE (***return_code***) AND REASON CODE (***reason_code***)**

Explanation: DFSMSdss invoked the SMPM CFPurge function to purge the data in the coupling facility caches for the VSAM data set. The SMPM CFPurge function returned the listed failing return and reason codes.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes.

Operator Response: None.

ADR959E **(***ttt***)-***mmmmm***(***yy***), THE SMPM CFPURGE FUNCTION FAILED FOR VOLUME** *volume_serial_number* **WITH RETURN CODE (***return_code***) AND REASON CODE (***reason_code***)**

Explanation: DFSMSdss invoked the SMPM CFPurge function to purge the data in the coupling facility caches for the volume. The SMPM CFPurge function returned the listed failing return and reason codes.

Source: DFSMSdss

System Action: The volume is not processed. The return code is 8.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes.

Operator Response: None.

ADR960E **(***ttt***)-***mmmmm***m(***yy***), THE BX1UQS MACRO FAILED DURING UNQUIESCE PROCESSING FOR DATA SET** *dsname* **WITH RETURN CODE** *return_code* **AND REASON CODE** *reason_code*

Explanation: Serialization for the data set was lost while the data set was being dumped. DFSMSdss issued the BX1UQS macro to perform unquiesce processing for the HFS data set. The BX1UQS macro returned the listed failing return and reason codes.

Source: DFSMSdss

System Action: The dumped version of the data set is not usable. Processing continues with the next data set. The return code is 8.

Application Programmer Response: Refer to the *OS/390 UNIX System Services Programming: Assembler Callable Services Reference* for an explanation of the listed return and reason codes. Correct the reported problem and rerun the dump job.

ADR961W **(***ttt***)-***mmmmm***m(***yy***), THE HIGH RELATIVE PAGE NUMBER COULD NOT BE DETERMINED FOR DATA SET***dsname*

Explanation: DFSMSdss was unable to read the high relative page number due to I/O errors. Therefore, DFSMSdss was unable to determine how much of the data set was actually used. If this error occurred during a logical DUMP, then all of the allocated space for the data set will be dumped. If this error occurred during RELEASE, then no space was released because the amount of releasable space could not be determined.

Source: DFSMSdss

System Action: The return code is 4.

Application Programmer Response: Determine the cause of the read error and correct it.

ADR962I **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **WAS DUMPED AS A BACKUP-WHILE-OPEN DATA SET USING RECORD LEVEL SHARING ACCESS. LOCAL TIMESTAMP IS:** *yyyyddd hh:mm:ss.t* **GMT TIMESTAMP IS:** *yyyyddd hh:mm:ss.t*

Explanation: DFSMSdss dumped the data set using record level sharing (RLS) access. Updates to the data set were not quiesced while the data set was being dumped. The time of the dump is listed in both local (to the system that performed the dump) and GMT formats.

The timestamps have the following values:

yyyyddd	The Julian date (year and days).
hh:mm:ss.t	The time in hours, minutes, seconds, and tenths of a second.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR963I **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **WAS DUMPED USING RECORD LEVEL SHARING ACCESS. LOCAL TIMESTAMP IS:** *yyyyddd hh:mm:ss.t* **GMT TIMESTAMP IS:** *yyyyddd hh:mm:ss.t*

Explanation: DFSMSdss dumped the data set using record level sharing (RLS) access. Updates to the data set were quiesced while the data set was being dumped. The time of the dump is listed in both local (to the system that performed the dump) and GMT formats.

The timestamps have the following values:

yyyyddd	The Julian date (year and days).
hh:mm:ss.t	The time in hours, minutes, seconds, and tenths of a second.

Source: DFSMSdss

System Action: None.

Application Programmer Response: None.

Operator Response: None.

ADR964E **(***ttt***)-***mmmmm***(***yy***), A TIME OUT OCCURRED DURING QUIESCE PROCESSING FOR CLUSTER** *cluster_name***.**

Explanation: DFSMSdss issued the IDAQDMP macro to perform quiesce processing for the VSAM data set. A time out condition occurred before the IDAQDMP macro returned.

For BWO processing, the timer is set for two minutes. For non-BWO processing, the timer is set for five minutes.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Rerun the job at a later time. If the problem persists, contact your IBM support center.

Operator Response: None.

ADR965E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IN CATALOG** *catname* **CANNOT BE COPIED AND DELETED BECAUSE IT IS OPEN IN RLS MODE**

Explanation: The data set is opened for record level sharing (RLS) access and therefore cannot be copied and deleted.

Source: DFSMSdss

System Action: The data set is not copied or deleted. Processing continues with the next data set, if any. The return code is 8.

Application Programmer Response: Close the data set, making sure there are no lost or retained locks (see the application programmer response for message ADR966E), and rerun the job.

Operator Response: None.

ADR966E **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IN CATALOG** *catname* **CANNOT BE COPIED AND DELETED BECAUSE IT HAS LOCKS ASSOCIATED WITH IT**

Explanation: The data set was previously opened for record level sharing (RLS) access, has lost or retained locks associated with it, and therefore cannot be copied and deleted.

Source: DFSMSdss

System Action: The data set is not copied or deleted. Processing continues with the next data set, if any. The return code is 8.

Application Programmer Response: Run the pending CICS RLS backouts and then rerun the DFSMSdss job.

Operator Response: None.

ADR967W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IN CATALOG** *catname* **WILL BE DUMPED BUT CANNOT BE DELETED BECAUSE IT IS OPEN IN RLS MODE**

Explanation: The data set is opened for record level sharing (RLS) access and therefore cannot be deleted.

Source: DFSMSdss

System Action: The data set is dumped but not deleted. Processing continues with the next data set, if any. The return code is 4.

Application Programmer Response: Close the data set, making sure there are no lost or retained locks (see the application programmer response for message ADR968W), and rerun the job.

Operator Response: None.

ADR968W **(***ttt***)-***mmmmm***(***yy***), DATA SET** *dsname* **IN CATALOG** *catname* **WILL BE DUMPED BUT CANNOT BE DELETED BECAUSE IT HAS LOCKS ASSOCIATED WITH IT**

Explanation: The data set was previously opened for record level sharing (RLS) access, has lost or retained locks associated with it, and therefore cannot be deleted.

Source: DFSMSdss

System Action: The data set is dumped but not deleted. Processing continues with the next data set, if any. The return code is 4.

Application Programmer Response: Run the pending CICS RLS backouts and then rerun the DFSMSdss job.

Operator Response: None.

ADR969E **(***ttt***)-***mmmmm***(***yy***), THE SMPM CFQUERY FUNCTION FAILED FOR CLUSTER** *cluster_name* **WITH RETURN CODE** *return_code* **AND REASON CODE** *reason_code***. THE DATA SET IS NOT PROCESSED.**

Explanation: DFSMSdss invoked the SMPM CFQuery function to determine if there were any locks associated with the data set. The SMPM CFQuery function returned the listed failing return and reason codes.

Source: DFSMSdss

System Action: The data set is not processed. The return code is 8.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes.

Operator Response: None.

ADR970E **(***ttt***)-***mmmmm***(***yy***), MISSING CI(S) WITHIN SEQUENCE SET IN CLUSTER** *cluster_name***,** *number_of_index_records* **CI(S) PROCESSED IN SEQUENCE SET,** *number_of_data_control_areas* **CA(S) FOUND IN DATA COMPONENT.**

Explanation: An error was detected during the logical dump processing of an indexed VSAM data set. All data in the indexed VSAM data set may not have been dumped.

Source: DFSMSdss

System Action: Processing of this data set ends. DFSMSdss processing continues. The return code is 8.

Application Programmer Response: Run IDCAMS EXAMINE against the VSAM cluster in question. Correct the problem and resubmit the job.

Operator Response: None.

ADR971E **(***ttt***)-***mmmmm***(***yy***), LOGICAL {DUMP | RESTORE | COPY} FOR CLUSTER** *cluster_name* **[IN CATALOG** *catalog_name***] FAILED,** *reason_code*

Explanation: The command could not be processed. The reason codes are:

01	A logical DUMP was requested for an extended format VSAM data set, and NOVALIDATE was requested. VALIDATE must be used to dump an extended format VSAM data set.
02	The source data set is an extended format VSAM data set, and the target data set could not be allocated as a extended format VSAM data set. If the source is an extended format VSAM data set, the target must be an extended format VSAM data set. If the source is compressed, the target must also be compressed.
03	The source data set is an extended format VSAM compressed KSDS, and the target data set could not be allocated as a extended format VSAM compressed KSDS. If the source is an extended format compressed VSAM KSDS, the target must be an extended format compressed VSAM KSDS.
04	A logical COPY was requested for an extended format VSAM data set and DFSMSdss could not enqueue on the data set name. A logical COPY cannot be performed on an extended format VSAM data set that is open for update. The TOLERATE keyword is not supported.

05 A logical COPY was requested for an extended format VSAM data set, and the catalog indicates that a VERIFY is required. Run IDCAMS VERIFY.

06 An error occurred while attempting to update the VVR VSAM extended format cell during the target allocation. This problem requires assistance from IBM.

07 The source data set is an extended addressable VSAM KSDS and the target data set could not be allocated as an extended addressable VSAM KSDS data set. If the source is an extended addressable VSAM KSDS data set, then the target must be an extended addressable VSAM KSDS data set.

Source: DFSMSdss

System Action: DFSMSdss ends processing for the current data set. The return code is 8.

Application Programmer Response: Correct the problem described by the reason code and re-submit the DFSMSdss request.

Operator Response: None.

ADR972E **(***ttt***)-***mmmmm***(***yy***), CLUSTER** *cluster_name* **ON VOLUME** *volume_serial_number* **IS NOT SUPPORTED BY** *function*

Explanation: VSAM extended format data sets are not supported by the function specified.

The following is a list of functions which may be used to process extended format VSAM data sets in DFSMSdss 1.2.0 and above releases.

- Physical volume dump and restore
- Physical volume copy
- Stand-alone restore volume
- Defragment
- Print
- Logical dump (VALIDATE)
- Logical restore
- Logical copy
- Convert volume to SMS with REDETERMINE

Source: DFSMSdss

System Action: DFSMSdss ends processing for the current data set. The return code is 8.

Application Programmer Response: Notify the system programmer.

Operator Response: None.

ADR973E **(***ttt***)-***mmmmm***(***yy***), EMPTY TRACK ENCOUNTERED WHILE PROCESSING CLUSTER** *cluster_name* **ON VOLUME** *volser***, TRACK** *cchh*

Explanation: During logical data set dump of the VSAM cluster using VALIDATE, an empty track was encountered in a data CA or an index sequence set where valid data was expected. The track reported was located on volume *volser*, track *cchh*. This message is issued once for each unexpected empty track.

Source: DFSMSdss

System Action: DFSMSdss ends processing for the current data set. The return code is 8.

Application Programmer Response: Check the track reported. Run IDCAMS EXAMINE against the VSAM cluster. Take appropriate action to correct the problem and resubmit the job.

Operator Response: None.

ADR974I **(***ttt***)-***mmmmm***(***yy***), MISSING CI(S) WITHIN SEQUENCE SET IN CLUSTER** *cluster_name***,** *number_of_index_records***. CI(S) PROCESSED IN SEQUENCE SET,** *number_of_data_control_areas* **CA(S) FOUND IN DATA COMPONENT.**

Explanation: All data in the indexed VSAM data set may not have been dumped. When a keyed VSAM data set is logically dumped with DFSMSdss using the VALIDATE option, a check is performed to determine if there are data control areas (CAs) without corresponding index control intervals (CIs). If there are missing index control intervals, ADR974I is issued. Your installation has specified a DFSMSdss patch byte to produce this message instead of ADR970E. You need to verify that all data in this data set was dumped.

Source: DFSMSdss

System Action: Processing of this data set continues. DFSMSdss processing continues. The return code is 0.

Application Programmer Response: Run IDCAMS EXAMINE against the VSAM cluster in question. Determine if the problem was a result of an incomplete control area split. If this is not the case, correct the data set and resubmit the job. See the *DFSMS/MVS DFSMSdss Diagnosis Guide* for information on the DFSMSdss patch area.

Operator Response: None.

ADR990E **(***ttt***)-***mmmmm***(***yy***), INSUFFICIENT ACCESS AUTHORITY TO CREATE COREIMAGE FOR IPLING FROM DASD VOLUME** *volser*

Explanation: To use IPL(DASD) with the BUILDSA command, you must either use the ADMINISTRATOR keyword or you must have DASDVOL access at the UPDATE level to the DASD volume.

Source: DFSMSdss

System Action: BUILDSA processing ends. The return code is 8.

Application Programmer Response: If you are authorized, use the ADMINISTRATOR keyword with the BUILDSA command. Otherwise, see your security administrator or storage administrator to obtain the required access authority to use IPL(DASD).

Operator Response: None

ADR992E **(***ttt***)-***mmmmm***(***yy***), OUTPUT IPL DATA SET NOT PROPERLY DEFINED**

Explanation: The output data set is not properly defined. The data set must be a physical sequential data set with record format and blocksize as indicated in the BUILDSA command description.

Source: DFSMSdss

System Action: BUILDSA processing ends. The return code is 8.

Application Programmer Response: Refer to the BUILDSA command description for the attributes necessary for the data set. Redefine the data set and rerun the job.

Operator Response: None.

ADR993E **(***ttt***)-***mmmmm***(***yy***), ALLOCATION OF SYS1.ADR.SAIPLD.Vvolser FAILED. DADSM RETURN CODE IS** *return_code***. DADSM DIAGNOSTIC INFORMATION IS** *diagnostic_information***.**

Explanation: Allocation of the stand-alone restore core image data set failed. The DADSM return code and diagnostic information is listed.

Source: DFSMSdss

System Action: The BUILDSA task ends. The return code is 8.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the DADSM return code and diagnostic information.

Operator Response: None.

ADR994E **(***ttt***)-***mmmmm***(***yy***), ERROR PROCESSING DATA SET, DDNAME** *nnnnnnnn*

Explanation: An error occurred while processing the data set with the *ddname* indicated.

Source: DFSMSdss

System Action: BUILDSA processing ends. The return code is 8.

Application Programmer Response: Correct the cause of the problem and rerun the job.

Operator Response: None.

ADR995E **(***ttt***)***mmmmm***(***yy***), UNABLE TO OPEN DATA SET, DDNAME** *ddname*

Explanation: The data set could not be opened.

Source: DFSMSdss

System Action: BUILDSA processing ends. The return code is 8.

Application Programmer Response: Correct the cause of the problem and rerun the job.

Operator Response: None.

ADR996E **(***ttt***)***mmmmm***(***yy***), BLDL FAILED, BLDL RTNCODE =** *nnnn***, RSNCODE =** *nnnn***, DDNAME** *nnnnnnnn*

Explanation: BLDL failed during BUILDSA processing. RTNCODE and RSNCODE are the return and reason codes from BLDL.

Source: DFSMSdss

System Action: BUILDSA processing ends. The return code is 8.

Application Programmer Response: Refer to the BLDL macro in *DFSMS/MVS Macro Instructions for Data Sets* for the description of the return and reason codes. If the ddname indicates the input data set and the return code = 0004, with reason code 0000, a possible cause is a module missing from the input data set.

Operator Response: None.

ADR997E **(***ttt***)***mmmmm***(***yy***), IEWL UTILITY FAILED, (RETURN | ABEND) CODE IS** *nnn*

Explanation: During processing of a DFSMSdss function, the IEWL utility encountered errors, and processing failed.

Source: DFSMSdss

System Action: BUILDSA processing ends. The return code is 8.

Application Programmer Response: Take one of the following actions:

- For abends, see *OS/390 MVS System Codes* for an explanation of the abend code.
- For error return codes, run the job and specify the DFSMSdss UTILMSG=YES parameter. See the appropriate volume of *OS/390 JES3 Messages* for an explanation of the utility messages.

Operator Response: None.

ADR998I **(***ttt***)***mmmmm***(***yy***), UTILITY GENERATED MESSAGES FOLLOW**

Explanation: During processing of a DFSMSdss function, a system utility was invoked that generates SYSPRINT data. The utility messages are printed following this message when UTILMSG=YES, or UTILMSG=ERROR is specified in the PARM information of the DFSMSdss EXEC statement.

Source: DFSMSdss

System Action: The function continues processing.

Application Programmer Response: None.

Operator Response: None.

System Data Mover Return and Reason Codes

If the System Data Mover detects an error condition during a DFSMSdss operation, DFSMSdss issues message ADR736E, which includes System Data Mover service return and reason codes that specify the condition that occurred. Return codes indicate the general types of conditions and may be coupled with reason codes that further qualify these conditions. Table 2 describes these codes.

Table 2 (Page 1 of 5). System Data Mover Return and Reason Codes

Return Code	Description	
0 (X'00')	The request to the service completed without error.	
2 (X'02')	The asynchronous request to the service started without error.	
4 (X'04')	The request to the service failed because of an invalid System Data Mover parameter list. Reason codes 1 (X'01') through 32 (X'20') are internal DFSMSdss/DFSMSdfp errors and should be reported to your IBM service center.	
	The requested operation failed. The reason codes specified below explain the error:	
	35 (X'23')	The track data passed to be written did not contain a valid Record Zero Count value.
	36 (X'24')	The track data passed to be written did not contain the required ending X'FFFFFFFFFFFFFFFF' signature that indicates the end of data.

Table 2 (Page 2 of 5). System Data Mover Return and Reason Codes

Return Code	Description	
8 (X'08')	The requested operation failed. The reason codes specified below explain the error:	
	2 (X'02')	A request to establish a dual copy session is rejected because the secondary device has a concurrent copy session active.
	3 (X'03')	A request to establish a concurrent copy session has failed because the device is in track emulation mode.
	4 (X'04')	The requested control unit does not have any concurrent copy sessions available. The number of concurrent copy sessions is model dependent information that can be obtained from the appropriate controller documentation.
	5 (X'05')	This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.
	6 (X'06')	The concurrent copy session is not active on the device. This may be caused by the following: • The session has been terminated. This may be a normal condition if concurrent copy jobs have been cancelled or if storage controller cache thresholds have been exceeded. • The session identifier is invalid. This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.
	7 (X'07')	This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.
	8 (X'08')	The concurrent copy session is not active. This may be because: • A concurrent copy session was never started. • The session may have been terminated. This may be a normal condition if concurrent copy jobs have been cancelled. • The System Data Mover terminated and was restarted. On termination all existing sessions are terminated.
	9 (X'09')	This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.
	10 (X'0A')	The system data mover has been terminated (by a Cancel ANTMAIN) and has restarted. Active sessions at the time of the cancel receive this error.
	11 (X'0B')	The selected device has become unavailable to the system. Check for IOS messages to determine the state of the device.
	12 (X'0C')	This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.
	13 (X'0D')	The device address is not associated with a concurrent copy session. This can occur if the concurrent copy session has been cancelled or the device has been removed from the session.
	14 (X'0E')	The storage controller does not have the concurrent copy feature installed.
	16 (X'10')	The storage controller is not capable of supporting concurrent copy.
	18 (X'12')	This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.
	20 (X'14')	All tracks have not been processed.
	24 (X'18')	SDM retrieved a track from the control unit for a track that had been updated (a data check indication was received). All data up to the point of failure was transferred. The sense data field for the failing track is zeroes.
	26 (X'1A')	SDM retrieved a track from the control unit for a track that had been updated (an invalid track format indication was received). All data up to the point of failure was transferred. The sense data field for the failing track is zeroes.
	30 (X'1E')	The selected device does not support Extended Count Key Data (ECKD) architecture (Define Extent and Locate Record channel program commands). The System Data Mover does not support this device.
12 (X'0C')	An error occurred in a System Data Mover program. The reason codes specified below explain the error:	
	1 (X'01')	This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.
	2 (X'02')	Invalid function requested.
	3 (X'03')	A translation exception occurred building a channel program
	4 (X'04')	Real storage error.
	8 (X'08')	Data space error.
	20 (X'14')	The System Data Mover is not currently available to process requests. Resubmit the failing request.
16 (X'10')	An error was detected by the Asynchronous Operations Manager (AOM). The reason code is in the format, *ccmmrrss*, where:	
	cc	is the op code of the CCW that had the problem.
	mm	is byte 9 of the sense data returned on a command reject (format 0 message F) on the op code "cc" specified.
	rr	is the return code from AOM.
	ss	is the reason code from AOM.
	The CCW op codes and sense data information is documented in the controller reference documentation. The AOM return and reason codes are in the AOM chapter of the *DFSMS/MVS DFSMSdfp Diagnosis Reference*.	
20 (X'14')	This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.	
24 (X'18')	This is an internal DFSMSdss/DFSMSdfp error that should be reported to your IBM service center.	

Table 2 (Page 3 of 5). System Data Mover Return and Reason Codes

Return Code	Description
28 (X'1C')	The MVS Resource Manager returned an error. The reason code is in the format, *ttttrrrr*, where: *tttt* is the request type. *rrrr* is the return code from the Resource Manager.
32 (X'20')	An abend occurred in one of the SDM modules. The reason code contains the abend code.
36 (X'24')	The MVS ALESERV service returned an error. The reason code is in the format, *ttttrrrr*, where: *tttt* is the request type: **AD** ADD **AP** ADDPASN **DE** DELETE **EX** EXTRACT **SE** SEARCH **EH** EXTRACTH *rrrr* is the return code from ALESERV.
64 (X'40')	The requested job failed; a non-recoverable error was received. The reason codes specified below explain the error. **4 (X'04')** A command reject was received from the control unit for the requested operation. The specified concurrent copy session has been terminated due to 128 or more CC track images (updated tracks) remaining in the Control Unit Cache for longer than two (2) minutes without being moved to the host storage. **8 (X'08')** A command reject was received from the control unit for the requested operation. The specified concurrent copy session has been terminated due to the combined CC usage of cache exceeding 60% of the available cache for the control unit. **12 (X'0C')** A command reject was received from the control unit for the requested operation. The concurrent copy session has been terminated due to the control unit cache being reinitialized or terminated.
6000 (X'1770')	Insufficient storage available in ANTMAIN address space.
6001 (X'1771')	Internal SDM error.
6002 (X'1772')	Internal SDM error.
6003 (X'1773')	IXFP is not at the correct level for DFSMSdss/SDM support of SnapShot.
6004 (X'1774')	The device is not an RVA.
6005 (X'1775')	Internal SDM error.
6006 (X'1776')	Internal SDM error.
6007 (X'1777')	Internal SDM error.
6008 (X'1778')	Error communicating with IXFP. This could be an internal SDM error, an internal IXFP error, or a mismatch between the service levels of SDM and IXFP.
6009 (X'1779')	Insufficient storage available in ANTMAIN address space.
6010 (X'177A')	Insufficient storage available in ANTMAIN address space.
6011 (X'177B')	Catalog locate error finding a working-space data set.
6012 (X'177C')	Catalog error locating the working-space data set.
6013-6017 (X'177D'-X'1781')	Internal SDM error.
6018 (X'1782')	Error obtaining format-1 DSCB for a working-space data set.
6019 (X'1783')	Error loading module ANTUGOAD.
6020 (X'1784')	Error loading module ANTUGOFR.
6021 (X'1785')	Error obtaining format-3 DSCB for a working-space data set.
6022 (X'1786')	Error obtaining format-4 DSCB for a working-space data set.
6023-6032 (X'1787'-X'1790')	Internal SDM error.

Table 2 (Page 4 of 5). System Data Mover Return and Reason Codes

Return Code	Description
6033 (X'1791')	A SnapShot operation failed. This can be a DFSMSdss internal error, a SDM internal error, a IXFP internal error, or a configuration error. The following error reason codes are generated by IXFP in response to SDM requests for IXFP services. These reason codes are shown and generally displayed in HEX format. **X'00000001'** Internal SDM error. **X'00000002'** Internal SDM error. **X'00000003'** IXFP Subsystem not found. **X'00000004'** Device is not write enabled. **X'00000005'** Internal SDM error. **X'00000006'** Internal SDM error. **X'00000007'** Internal SDM error. **X'00000008'** Specified device number, volume serial, or UCB address of a device identifies a device that cannot be found. **X'00000009'** Specified device does not reside on a RAMAC Virtual Array. **X'0000000A'** Internal SDM error. **X'0000000B'** Internal SDM error. **X'0000000C'** A mismatch exists between the service levels of IXFP and SDM. **X'0000000D'** Internal SDM error. **X'0000000E'** Internal SDM error. **X'0000000F'** Internal SDM error. **X'00000010'** Internal SDM error. **X'00000011'** Internal SDM error. **X'00000012'** Device mapping service is not available. **X'00000013'** Device mapping service received an unexpected error. **X'00000015'** I/O error received by IXFP subsystem. **X'00000016'** Internal SDM error. **X'00000017'** Internal SDM error. **X'00000018'** Internal SDM error. **X'00000019'** Internal SDM error. **X'0000001A'** Internal SDM error. **X'0000001B'** RVA configuration busy. **X'0000001C'** RVA communication busy. **X'0000001D'** RVA unexpected completion. **X'0000001E'** RVA subsystem does not support read-only communications request. **X'00010001'** Required parameter missing. **X'00010002'** Parameter invalid for request. **X'00010003'** Mutually exclusive parameters specified. **X'00010004'** Output area too small for all information returned. **X'00010005'** Parameter value invalid. **X'00010006'** Parameter not supported in current environment. **X'00010007'** Duplicate parameters specified.

Table 2 (Page 5 of 5). System Data Mover Return and Reason Codes

Return Code	Description
6033 (X'1791') Continued	**X'00020001'** No devices passed selection criteria. **X'00050001'** Internal SDM error. **X'00050002'** Current request exceeds maximum SnapShot requests for an RVA source device. **X'00050003'** Current request exceeds maximum SnapShot requests for an RVA subsystem. **X'00050004'** SnapShot feature not available for source/target subsystem. **X'00050005'** Source device and Target device not on same RVA subsystem. **X'00050006'** Source device and Target device not in same RVA subsystem partition. **X'00050007'** Source and Target device types are incompatible. **X'00050008'** Internal SDM error. **X'00050009'** SnapShot source device is busy. **X'0005000A'** Internal SDM error. **X'0005000B'** Internal SDM error. **X'0005000C'** Internal SDM error. **X'0005000D'** Internal SDM error. **X'0005000E'** Internal SDM error.
6034 (X'1792')	Internal SDM error.
6035 (X'1793')	A Query Device operation failed. The reason code is described in IXFP Reason Codes (IXFP Reason Codes on page ADR-103). This can be a DFSMSdss internal error, a SDM internal error, a IXFP internal error or a configuration error.
6036-6050 (X'1794'-X'17A2')	Internal SDM error.
6051 (X'17A3')	AOM error reading track data from a working-space data set.
6144 (X'1800')	All working-space data set space on the RVA subsystem containing the source data set is currently in use by other SnapShot requests. Allocate one or more additional working-space data sets on the RVA subsystem according to the allocation guidelines for working-space data sets, then resubmit the failing job.
6145 (X'1801')	Insufficient working-space data set was available on the RVA subsystem that contains the source data set to satisfy the SnapShot request. Resubmit the failing job after another DFSMSdss job using concurrent copy (CC) on the source RVA releases the working-space data set space, or increase the working-space data set space and resubmit the failing job.
6146 (X'1802')	All working-space data set space on the RVA subsystem containing the source data set is currently in use either by other SnapShot requests in other MVS systems in the complex, or by a nonSnapShot user in this MVS system. Increase working-space data set space or wait for another DFSMSdss job using CC on the source RVA to complete, then resubmit the failing job.
6147 (X'1803')	There is no working-space data set cataloged in this system. Follow the procedure in *DFSMS/MVS DFSMSdss Storage Administration Guide* to determine what problem or problems exist when accessing the working-space data set. Repair or reallocate the working-space data set and resubmit the job.
6148 (X'1804')	No usable working-space data set was found associated with the system. No working-space data set was found on the RVA subsystem that matches the source data set attributes. The working-space data set must be on the same partition, or be on a device type which is write enabled and snap enabled. Follow the procedure in *DFSMS/MVS DFSMSdss Storage Administration Guide* to properly allocate a working-space data set, then resubmit the failing job.
6149 (X'1805')	The SnapShot request has timed-out attempting to find working-space data set space. Get a dump of the ANTMAIN address space by issuing the console command MODIFY ANTMAIN,DUMPTRC, then call your IBM software support center.

ADRY Messages

This section contains all messages issued for DFSMSdss stand-alone services with an ADRY prefix.

ADRY Messages Received at the Console

ADRY003D *device_number* **REPLY Y TO ALTER VOLUME CONTENTS, ELSE N**

Explanation: Processing of volume *device_number* must be confirmed because DFSMSdss stand-alone does not verify the volser. This will cause loss or modification of data on the volume.

System Action: DFSMSdss stand-alone waits for the operator's response.

Operator Response: Respond Y to proceed with command processing. Respond N to terminate the command.

System Programmer Response: None.

ADRY004D *device_number* **READY DEVICE AND REPLY Y, ELSE N**

Explanation: The device *device_number* is not in the READY state.

System Action: DFSMSdss stand-alone waits for the operator's response.

Operator Response: Ensure that the device is in the READY state. Respond Y to continue processing the command or respond N to end the command.

System Programmer Response: None.

ADRY005E **DEFINE INPUT DEVICE, REPLY '***dddd*,*device_number***' OR 'CONSOLE'**

Explanation: The device type and location of the command input stream must be specified. *dddd* is the device type. *device_number* is the device number. To specify the console, enter a null line.

System Action: DFSMSdss stand-alone waits for the operator's response.

Operator Response: Specify the input device type and its device number. Specify *device_number* as 3 or 4 digits.

System Programmer Response: None.

ADRY006E **DEFINE OUTPUT DEVICE, REPLY '***dddd*,*device_number***' OR 'CONSOLE'**

Explanation: The device type and the location of the printed output must be specified. *dddd* is the device type. *device_number* is the device number. To specify the console, enter a null line.

System Action: DFSMSdss stand-alone waits for the operator's response.

Operator Response: Specify the output device type and its device number. *device_number* can be specified as 3 or 4 digits.

System Programmer Response: None.

ADRY007E **INVALID INPUT DEVICE SPECIFIED**

Explanation: The specified device type is not valid in response to message ADRY005E.

System Action: DFSMSdss stand-alone repeats message ADRY005E.

Operator Response: Specify a correct input device type.

System Programmer Response: None.

ADRY008E **INVALID OUTPUT DEVICE SPECIFIED**

Explanation: The specified device type is not valid in response to message ADRY006E.

System Action: DFSMSdss stand-alone repeats message ADRY006E.

Operator Response: Specify a correct output device type.

System Programmer Response: None.

ADRY009I **SVC INTERRUPT OCCURRED**

Explanation: This indicates a probable program error. The SVC instruction cannot be used in the stand-alone version.

System Action: DFSMSdss stand-alone ends.

Operator Response: Notify the system programmer.

System Programmer Response: Save the job output. Run the AMDSADMP service aid to dump the contents of real storage to tape. Contact your IBM software service representative.

ADRY010I **PROGRAM INTERRUPT OCCURRED**

Explanation: This indicates a probable program error where an instruction processed incorrectly.

System Action: DFSMSdss stand-alone ends.

Operator Response: Notify the system programmer.

System Programmer Response: Save the job output. Run the AMDSADMP service aid to dump the contents of real storage to tape. Contact your IBM software service representative.

ADRY011E **I/O ERROR --** *error-type*, *device_number*, *command*, *csw*, *sense*

Explanation: An I/O error of the *error-type* indicated has occurred on the device at address *device_number*. The message prints the failing *command,* the contents of the channel status word (*csw*), and the results of a *sense* operation against the device.

System Action: DFSMSdss stand-alone ends.

Operator Response: None.

System Programmer Response: Correct the cause of the error, and restart DFSMSdss stand-alone. Save the job output and contact your IBM service representative.

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ADRY012E INTERVENTION REQUIRED, *device_number*

Explanation: The device shown is not in the READY state.

System Action: DFSMSdss stand-alone waits for correction of the problem.

Operator Response: Ensure that the device is in a READY state.

System Programmer Response: None.

ADRY013E CONSOLE READ FAILED, REENTER LAST LINE

Explanation: An I/O error occurred while a line entered at the console was being read.

System Action: DFSMSdss stand-alone waits for the line to be reentered.

Operator Response: Reenter the line.

System Programmer Response: None. Save the job output and contact your IBM service representative.

ADRY015E SUPPLY TODAY'S DATE, REPLY '*mm/dd/yy***'**

Explanation: This message requests that operator either include the date as part of the output title line or omit the date by pressing the Enter key.

To bypass this message, set the CPU time and date before IPLing DFSMSdss stand-alone.

System Action: Either the date appears in the title line of the output listing, or blanks are substituted if a date has not been supplied.

Operator Response: To include the date in the title line of the output listing, respond with the month, day, and year. To omit the date, press the Enter key.

System Programmer Response: None.

ADRY016E SUPPLY TIME OF DAY, REPLY '*hh:mm:ss***'**

Explanation: This message requests that operator either include the time of day as part of the output title line or omit the time by pressing the Enter key.

To bypass this message, set the CPU time and date before IPLing DFSMSdss stand-alone.

System Action: Either the time of day appears in the title line of the output listing, or blanks are substituted if a time of day has not been specified.

Operator Response: To include the time of day in the title line of the output listing, specify the hour, minute, and second. To omit the time of day, press the Enter key.

System Programmer Response: None.

ADRY501I *device_number* **DUMP DATA SET IS NOT A SUPPORTED FORMAT**

Explanation: The dump data set on the device at address *device_number* does not pertain to this job. The DFSMSdss stand-alone program does not support the format of the dump data set. The dump data set was not created by this product, or may have been created by an incompatible release, or the volume mounted on the tape drive may be mounted in the wrong sequence.

System Action: Message ADRY509D is issued to the operator console to allow the operator to continue or terminate.

System Programmer Response: None.

Operator Response: Probable user error. To continue, reply Y to ADRY509D and mount the correct tape. To terminate, reply N to ADRY509D.

ADRY502I *device_number* **WRONG TAPE MOUNTED**

Explanation: The tape on the tape device at address *device_number* does not pertain to this job. An incorrect tape was mounted or the volume may be mounted in the wrong sequence.

System Action: Message ADRY509D is issued to the operator console to allow the operator to continue or terminate.

Operator Response: Probable user error. To continue, reply Y to ADRY509D and mount the correct tape. To terminate, reply N to ADRY509D.

System Programmer Response: None.

ADRY503I *device_number* **DUMP DATA SET IS NOT A FULL VOLUME DUMP**

Explanation: The dump data set on the device at address *device_number* is not compatible with the function specified. A full volume RESTORE is being attempted from a tracks or physical data set DUMP. To perform a full volume RESTORE, the dump data set must be a full volume DUMP.

System Action: Message ADRY509D is issued to the operator console to allow the operator to continue or terminate.

System Programmer Response: None.

Operator Response: Probable user error. To continue, reply Y to ADRY509D and mount the correct tape. To terminate, reply N to ADRY509D.

Note: If a tracks or physical data set DUMP is the correct dump data set, then refer to the STARTTRK and ENDTRK parameters of the RESTORE command for details on how to specify the range to be restored. Then reply N to message ADRY509D to end, and rerun the job with parameters specifying the range of tracks to restore.

ADRY504I *device_number* **LOGICAL DUMP NOT VALID FOR THIS FUNCTION**

Explanation: The dump data set on the device at address *device_number* is not valid for this job. A RESTORE is being attempted from a logical data set DUMP.

System Action: Message ADRY509D is issued to the operator console to allow the operator to continue or terminate.

System Programmer Response: None.

Operator Response: Probable user error. To continue, reply Y to ADRY509D and mount the correct tape. To terminate, reply N to ADRY509D.

ADRY505A *device_number* **WAITING FOR MOUNT OF PROPER TAPE**

Explanation: The system is waiting for a tape to be mounted and the tape device at address *device_number* to be readied. This message is issued after prior messages have indicated that the wrong tape was mounted.

System Action: The system waits for a ready indication from the tape device.

System Programmer Response: None.

Operator Response: If the tape is being automatically mounted (for example, from an automatic cartridge loader), then no action is necessary. If the tape is being manually mounted, then mount the tape and make the tape drive ready.

ADRY506I *device_number* **TAPE READY DETECTED, PROCESS CONTINUING**

Explanation: The system was waiting for the tape device at address *device_number* to be readied, and has now detected that the tape device has become ready.

System Action: Processing continues.

System Programmer Response: None.

Operator Response: None.

ADRY509D **DO YOU WISH TO CONTINUE? REPLY Y OR N**

Explanation: A previous message was issued indicating an error (for example, the wrong tape was mounted). The operator may be able to correct the problem and resume processing (rather than rerunning the job).

System Action: The system waits for the operator response. If the response is Y, subsequent messages may be issued to indicate the operator action required to resume processing. If the response is N, processing ends.

System Programmer Response: None.

Operator Response: Probable user error. To continue, reply Y to ADRY509D, and then take action indicated by subsequent messages. To terminate, reply N to ADRY509D.

ADRY510I *device_number* **END OF TAPE**

Explanation: The end of the tape has been reached. If additional tapes are to be mounted, subsequent messages will indicate any necessary action.

System Action: Processing continues.

System Programmer Response: None.

Operator Response: None.

ADRY511A *device_number* **WAITING FOR MOUNT OF NEXT TAPE**

Explanation: The system is waiting for the next tape in the sequence to be mounted and for the tape device at address *device_number* to be readied.

System Action: The system waits for a ready indication from the tape device.

System Programmer Response: None.

Operator Response: If the next tape is automatically mounted (for example, from an automatic cartridge loader), then no action is necessary. If the next tape is to be manually mounted, then mount the tape and make the tape drive ready.

ADRY512I *device_number* **MOUNTING TAPE VOLSER:** *tttttt*

Explanation: The system is in the process of mounting the tape with volser *tttttt*. This message is issued when the tape volsers are specified and the tape is in a tape library.

System Action: The system mounts the tape.

System Programmer Response: None.

Operator Response: None.

ADRY821A *device_number* **INTERVENTION REQUIRED**

Explanation: Manual intervention is required on the specified device. The device may not be in the READY state.

System Action: DFSMSdss stand-alone waits until the problem is corrected.

Operator Response: Ensure that the device is in a READY state.

System Programmer Response: None.

ADRY822I *device_number* **INTERVENTION CLEARED, PROCESS CONTINUING**

Explanation: The system has detected that the device at address *device_number* is no longer in an intervention required condition.

System Action: Processing continues.

System Programmer Response: None.

Operator Response: None.

ADRY823A *device_number* **LIBRARY INTERVENTION REQUIRED**

Explanation: Intervention is required at the library.

System Action: DFSMSdss stand-alone waits until the problem is corrected.

Operator Response: Take the appropriate action to resolve the problem. Refer to your tape library operator's guide problem determination procedures for information on handling error conditions.

System Programmer Response: None.

ADRY833A *device_number* **INTERVENTION REQUIRED - RELOAD CARTRIDGE**

Explanation: Manual intervention is required on the specified device. The cartridge may not be inserted correctly, or the tape may not be threaded correctly.

System Action: DFSMSdss stand-alone waits until the problem is corrected.

Operator Response: Reload the tape cartridge.

System Programmer Response: None.

ADRY834A *device_number* **INTERVENTION REQUIRED - UNLOAD CARTRIDGE**

Explanation: Manual intervention is required on the specified device. The drive may not be able to unload the cartridge, and the tape may need to be manually unloaded.

System Action: DFSMSdss stand-alone waits until the problem is corrected.

Operator Response: Unload the tape cartridge.

System Programmer Response: None.

Messages Received at the Output Printer

ADRY0001I FUNCTION COMPLETED, HIGHEST CONDITION CODE WAS *nn hh:mm:ss mm/dd/yy*

Explanation: A command has been processed. The value *nn* is the last condition code (LASTCC) generated during processing. *hh:mm:ss* and *mm/dd/yy* are the hours, minutes, seconds and month, day, year respectively of the time and date of the message.

Note: The LASTCC value is the highest condition code found in the messages printed during command processing.

System Action: LASTCC is set to *nn*. MAXCC is set to *nn* if *nn* is greater than the current value of MAXCC.

Operator Response: None.

System Programmer Response: None.

ADRY0002I PROCESSING COMPLETE. MAXIMUM CONDITION CODE WAS *nn*

Explanation: This message is issued upon completion of a DFSMSdss stand-alone job step. The highest condition code (MAXCC) set during the job step is printed (see message ADRY0001I).

System Action: None.

Operator Response: None.

System Programmer Response: None.

ADRY0204I PRECEDING COMMAND BYPASSED DUE TO CONDITION CODES

Explanation: The specified IF-THEN-ELSE command sequence caused the command to be bypassed. When an IF-THEN-ELSE command sequence is specified, either the THEN or the ELSE clause is processed. The clause that is not processed is bypassed.

System Action: The bypassed portion of the command sequence is checked for syntax errors but is not processed. DFSMSdss stand-alone processing continues.

Operator Response: None.

System Programmer Response: None.

ADRY0206I IMPROPERLY PLACED COMMA HAS BEEN FOUND AND IGNORED

Explanation: The command contained a redundant comma, which is ignored.

Note: Positional parameters cannot be omitted by the use of commas. Leading positional parameters cannot be omitted.

System Action: Command processing continues.

Operator Response: None.

System Programmer Response: Correct the syntax error to prevent the message from recurring.

ADRY0222I WARNING: COMMAND-END DELIMITER APPEARS WITHIN APOSTROPHES

Explanation: There is a semicolon (the optional command delimiter) inside a quoted string. A closing single quotation mark may have been omitted.

System Action: The usage is accepted, and the semicolon is treated as a valid character instead of a delimiter.

Operator Response: None.

System Programmer Response: Check the usage of the semicolon, and correct if necessary.

ADRY0233I TOO MANY RIGHT PARENTHESES FOUND. EXCESS IGNORED

Explanation: There are too many closing parentheses at the end of the command or following a first-level parameter.

System Action: The excess is ignored, and command processing continues.

Operator Response: None.

System Programmer Response: Remove the excess parentheses.

ADRY0500I NEXT TRACK TO WRITE: TRACK CCHH = X'cccc hhhh' *hh:mm:ss mm/dd/yy*

Explanation: This message is issued at intervals during a full RESTORE, to give an indication of how far processing has progressed. It is for information only. *hh:mm:ss* and *mm/dd/yy* are the hours, minutes, seconds and month, day, year respectively of the time and date of the message.

System Action: Processing continues.

System Programmer Response: None.

Operator Response: None.

ADRY0501I *device_number* **VOLUME PROCESSING AS MINIDISK**

Explanation: The DASD volume was determined to be a minivolume.

System Action: Processing continues.

System Programmer Response: None.

Operator Response: None.

ADRY0700I *device_number* **TRACK CCHH = X'cccc hhhh'**

Explanation: `X'cccc hhhh'` is the hexadecimal cylinder and head address of the track being processed.

System Action: System action is determined by the previously issued message.

Operator Response: None.

System Programmer Response: Refer to the description of the previous message that was issued to determine the appropriate response.

ADRY0701I *device_number* **TRACK CCHH = NOT AVAILABLE**

Explanation: A previous message indicated that an I/O error occurred. The error may be specific to a single track, but the track could not be determined from the sense bytes.

System Action: System action is determined by the previously issued message.

Operator Response: None.

System Programmer Response: Refer to the description of the previously issued message to determine the appropriate response.

ADRY1110I *device_number* **UNABLE TO CLOSE VOLUME**

Explanation: An error has occurred that prevents the volume from being closed properly. The close does cleanup actions to free the device on completion of processing.

System Action: The command probably did not complete successfully because the volume did not close.

Operator Response: None.

System Programmer Response: Examine the previous messages to determine if any other errors occurred that may have prevented the volume from being closed properly.

ADRY1500W INVALID TRACK FORMAT DETECTED DURING DUMP TRACK CCHH = X'cccc hhhh'

Explanation: An invalid track format condition was detected for the track during DUMP processing. When this track is accessed on the target volume, the invalid track format condition will recur.

System Action: Operation continues and the remaining tracks, if any, are restored.

System Programmer Response: Determine and correct the reason for the invalid track format condition.

Operator Response: None.

ADRY1501W *device_number* **ALTERNATE TRACK INFORMATION IN VTOC MAY BE INVALID**

Explanation: An error occurred while the alternate tracks were being scanned to determine the information for updating the VTOC.

System Action: Restore processing continues, but the alternate track information in the VTOC may not be valid. Error messages (for example, I/O errors or channel errors) will not cause the RESTORE command to terminate if the errors occurred while the alternate tracks were being scanned.

System Programmer Response: Examine previous messages to determine the cause of the error, and take the action indicated by the previous messages.

Operator Response: None.

ADRY1524W ENDING CYLINDER EXCEEDS THE VOLUME LIMITS

Explanation: The specified ending cylinder is higher than the last cylinder on the volume.

System Action: The ending cylinder is set to the last cylinder on the volume and processing continues.

System Programmer Response: Verify that the specification was correct for the volume to be restored.

Operator Response: None.

ADRY1525W ENDING HEAD EXCEEDS THE VOLUME LIMITS

Explanation: The specified ending head is higher than the last head on a cylinder for this volume.

System Action: The ending head is set to the last head on the specified cylinder and processing continues.

System Programmer Response: Verify that the specification was correct for the volume to be restored.

Operator Response: None.

ADRY1640I *device_number* **TAPE DRIVE IS NOT IN A TAPE LIBRARY**

Explanation: The TAPEVOLSER parameter was specified, but the tape drive at the specified device address is not in a tape library.

Note: The TAPEVOLSER parameter is not required, and should not be specified when the tape drive is not in a tape library.

System Action: DFSMSdss stand-alone will attempt to continue. The volsers are ignored. The tape volumes must be mounted by the operator on the specified drive.

System Programmer Response: None.

Operator Response: Mount the tape volumes when required.

ADRY1710I *device_number* **I/O ERROR OCCURRED ON DEVICE**

Explanation: An I/O error occurred at device address *device_number*. Information following the message describes the nature of the I/O error.

System Action: Command processing continues. Command processing may eventually end.

Operator Response: None.

System Programmer Response: Make sure the problem is caused by the device. Correct the device problem, and retry the command.

ADRY1711I SIM INFORMATION: CCUU=*device_number***,**
*errortype***,***severity***,**
MT=*xxxx-xx***,SER=***xxxx-xxxxx***,**
REFCODE=*xxx-xxxx-xxxx***,**
VOLSER=*xxxxxx***,ID=***xx***,**
CCHH=X'cccc hhhh',
BLOCK=*xxx xxxxx***,REPEATED**
SIM=*xxxxxxxxxxxxxxxxxxxxxx*

Explanation: This message contains information from a service information message (SIM). The CCHH or BLOCK fields are printed only when they are applicable to the error type. When other fields are not applicable to the error type, N/A is printed in the variable portion of the message. The DASD model number appears in bits 3–5 of the MT field.

System Action: Command processing continues.

Operator Response: None.

System Programmer Response: See *IBM 9340 Direct Access Storage Subsystems Reference* for further information regarding SIMs.

ADRY2500I TRACK NOT RESTORED DUE TO I/O ERROR DURING DUMP TRACK CCHH = X'cccc hhhh'

Explanation: An I/O error was encountered in reading the track during DUMP processing.

System Action: The track is not written, the operation continues, and the remaining tracks, if any, are restored.

System Programmer Response: Verify that the track is not necessary.

Operator Response: None.

ADRY2765I *device_number* **INVALID TRACK FORMAT**

Explanation: A track format condition that is not valid was detected while attempting to write data on the specified track. This usually indicates that data has been written to the track beyond the track capacity. It is generally a user error. Information following the message pertains to the error.

System Action: DFSMSdss stand-alone continues with the next track.

Operator Response: None.

System Programmer Response: Determine which data set contains the specified track. Determine how, when, and where the data on the specified track was originally written, prior to being dumped, in order to find how the invalid track condition occurred. If ADRY1500I was previously issued, this error was also detected during the dump operation.

Begin recovery of the data on the track using your installation's procedures. Then inspect the failing track by specifying the NOPRESERVE parameter.

ADRY2766I *device_number* **DATA CHECK**

Explanation: A data check occurred on the specified device. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Determine the cause of the data check. Rerun the job after the problem is resolved.

ADRY2950I INVALID FORMAT STRUCTURE

Explanation: An element of one of the static text structures is incorrect. There is probably a program error.

System Action: The request to print a line is ignored. Command processing continues, but no output is printed.

Operator Response: None.

System Programmer Response: Save the job output and contact IBM software support.

ADRY2951I OUTPUT COLUMN SPECIFIED OUT OF RANGE

Explanation: An output column specification is outside the allowed print line width (for example, the specification is beyond column 120). There is probably a program error.

System Action: This field and subsequent fields for the same line are ignored. Command processing continues, but no output is printed.

Operator Response: None.

System Programmer Response: Save the job output and contact IBM software support.

ADRY2952I EXCESSIVE FIELD LENGTH FOR BD OR PU CONV

Explanation: A binary-to-decimal or packed-to-unpacked conversion length was specified greater than 15. There is probably a program error.

System Action: A default value of 15 is used, and command processing continues.

Operator Response: None.

System Programmer Response: Save the job output and contact IBM software support.

ADRY2953I A REDO SUB-STRUCTURE IS NESTED

Explanation: A redo structure cannot be defined within a set of structures to be redone. There is probably a program error.

System Action: The current redo operation ends. All structures are treated only once.

Operator Response: None.

System Programmer Response: Save the job output and contact IBM software support.

ADRY2954I STATIC TEXT ENTRY REQUESTED NOT IN MODULE

Explanation: A request for a specific static text entry in a specified static text module could not be resolved. Either the static text index is incorrect, or the programmer has neglected to enter a message into the static text module. There is probably a program error.

System Action: The request is ignored and command processing continues.

Operator Response: None.

System Programmer Response: Save the job output and contact IBM software support.

ADRY2955I INVALID PACKED DECIMAL FIELD

Explanation: A conversion request for packed-to-unpacked decimal encountered a digit that is not in the range of 0 to 9. There is probably a program error.

System Action: Conversion stops for the current request. Command processing continues without the packed-to-unpacked conversion.

Operator Response: None.

System Programmer Response: Save the job output and contact IBM software support.

ADRY3003I FUNCTION TERMINATED. CONDITION CODE IS *nn hh:mm:ss mm/dd/yy*

Explanation: A command has encountered an abnormal ending error condition during processing. The value *nn* is the last condition code (LASTCC) generated during command processing. Messages printed just prior to this message indicate the nature of the error.

Note that the LASTCC value is the highest condition code found in the messages printed during command processing.

hh:mm:ss and *mm/dd/yy* are the hours, minutes and seconds, and month, day, and year, respectively, of the time and date of the message.

System Action: DFSMSdss stand-alone continues with the next command. LASTCC is set to *nn*; MAXCC is set to *nn* if *nn* is greater than the current value of MAXCC.

Operator Response: None.

System Programmer Response: Correct the cause of the error, and reissue the command.

ADRY3004I FUNCTION TERMINATED. INSUFFICIENT MAIN STORAGE

Explanation: The size of storage is too small.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Increase the storage size and reissue the command.

ADRY3115I UNABLE TO READ DASD VOLUME LABEL

Explanation: An I/O error occurred while stand-alone was attempting to read the DASD volume label to verify the volume serial number.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Either issue the command again specifying the NOVERIFY parameter, or reinitialize the volume. Save the job output and contact your hardware service representative.

ADRY3116I VERIFICATION FAILED: VOLSER SPECIFIED DOES NOT MATCH TARGET. TARGET VOLSER=*vvvvvv*

Explanation: The VERIFY parameter was specified, but the specified volume serial number does not match the volume serial number *vvvvvv* found in the volume label of the target volume.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Ensure that the correct volume is specified. Either correct the volume serial number specified in the command, or specify the NOVERIFY parameter.

ADRY3117I INVALID VOLUME LABEL

Explanation: The DASD volume does not have a valid volume label for use on an MVS system (containing the VOL1 identifier).

System Action: The function ends.

Operator Response: None.

System Programmer Response: Ensure that the correct volume is specified.

ADRY3118I UNABLE TO READ VTOC

Explanation: An error occurred while stand-alone was attempting to read the DASD VTOC.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that a valid VTOC pointer exists in the volume label and that a valid VTOC exists on the volume. Either issue the command again specifying the NOVERIFY parameter, or reinitialize the volume.

ADRY3123I *device_number* INVALID UNIT ADDRESS SPECIFIED

Explanation: The device numbers specified do not exist in the system I/O configuration.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the value substituted for *device_number* and issue the command again.

ADRY3124I *device_number* UNABLE TO OPEN VOLUME

Explanation: The volume that was specified cannot be opened for several possible reasons:

- The device number is not valid.
- There are I/O errors associated with the volume.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Determine the status of the volume by examining previous messages. Save the job output and contact your IBM service representative.

ADRY3145I NO STORAGE AVAILABLE

Explanation: Dynamic acquisition of storage for work areas and control blocks failed.

System Action: Command processing ends.

Operator Response: Increase main storage size.

ADRY3150I INVALID DEVICE TYPE PARAMETER: *xxxx*

Explanation: The specified device type *xxxx* is not a valid parameter.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Examine the command description to determine the valid device types for the specified command. Correct the parameters, and run the job again.

ADRY3154I *device_number* TAPE LIBRARY NOT SUPPORTED IN 370 MODE

Explanation: The specified tape drive exists in a tape library. Tape library functions are not supported in 370 mode.

System Action: The function ends.

Operator Response: Run the job from a drive that is not in a tape library.

System Programmer Response: None.

ADRY3200I TOO MANY POSITIONAL PARAMETERS AFTER *xxxx*

Explanation: A parameter list has too many specified positional parameters following the characters *xxxx*.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Remove the excess parameters and issue the command again.

ADRY3201I CONSTANT *xxxx* EXCEEDS LENGTH LIMIT

Explanation: The constant *xxxx* contains more characters than the maximum permitted by the command syntax.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the constant and issue the command again.

ADRY3202I ABOVE TEXT BYPASSED UNTIL NEXT COMMAND. CONDITION CODE IS 12

Explanation: There is a syntax error in the command. The remainder of the command is ignored.

Messages printed just prior to this message indicate the nature of the error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the syntax error, and issue the command again.

ADRY3203I ITEM *xxxx* DOES NOT ADHERE TO RESTRICTIONS

Explanation: An indicated parameter does not conform to required naming conventions. For example, a parameter may be misspelled.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the parameter error and issue the command again.

ADRY3205I DELIMITER *xxxx* IS NOT PROPERLY PRECEDED BY A CONSTANT OR KEYWORD

Explanation: A delimiter was found where either a subparameter list or data was expected.

The delimiter is improperly used because either parentheses were improperly positioned, or a positional parameter was missing.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the syntax error, and issue the command again.

ADRY3207I REMAINDER OF COMMAND INPUT STREAM IGNORED

Explanation: An error has occurred that prohibits further scanning of the command stream. Messages issued just prior to this message indicate the nature of the error.

Note: Condition code (MAXCC) is always set to 16 when this situation is encountered.

System Action: Command processing ends.

Operator Response: None.

System Programmer Response: Correct the error, and issue the command again.

ADRY3208I LEFT PARENTHESIS MISSING FOLLOWING KEYWORD *xxxx*

Explanation: The keyword *xxxx* is not followed by the opening parenthesis. A left parenthesis must begin the required subparameter list or value associated with the command keyword.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Check the requirements of the keyword, correct the syntax, and issue the command again.

ADRY3209I RIGHT PARENTHESIS MISSING AFTER *xxxx*

Explanation: A closing parenthesis was not found where expected. A subparameter list was possibly not properly delimited.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax and reissue the command.

ADRY3210I INVALID PARENTHESES FOR SPECIFYING REPEATED SUBPARAMETER LIST

Explanation: Parentheses that delimit repeated subparameter lists are either missing or not matched.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax and reissue the command.

ADRY3211I KEYWORD *xxxx* IS IMPROPER

Explanation: The command contains a misspelled, improperly specified, or inapplicable keyword.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax and reissue the command.

ADRY3212I INVALID LEFT PARENTHESIS AFTER *xxxx*

Explanation: There is an opening parenthesis that appears to delimit the positional parameter *xxxx*, but the positional parameter specified is not a constant or a list of constants.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax and reissue the command.

ADRY3213I KEYWORD *xxxx* APPEARS TOO OFTEN

Explanation: The keyword *xxxx* appears too often in the command. A parameter list may be incorrectly specified.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax by removing the keyword, and issue the command again.

ADRY3214I HEX OR BINARY CONSTANT SPECIFIED IMPROPERLY

Explanation: A hexadecimal or binary constant is not specified in the correct format: `X'hh...hh'` or `B'bb...bb'`, respectively.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax and reissue the command.

ADRY3216I ABOVE TEXT BYPASSED UNTIL NEXT COMMAND

Explanation: Syntax checking of this command found an error. Syntax checking ended. Messages issued just prior to this message indicate the nature of the error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax and reissue the command.

ADRY3217I PASSWORD IMPROPER AFTER *xxxx*

Explanation: A password, denoted by a slash (/), was encountered where a password is not allowed.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Remove the password from the parameter and issue the command again.

ADRY3218I TOO MANY REPEATED SUBPARAMETER LISTS APPEAR

Explanation: More repeated subparameter lists are specified than are allowed for this command.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Check the command syntax, correct the error, and issue the command again.

ADRY3219I VERB NAME *xxxx* UNKNOWN

Explanation: The verb *xxxx* is not recognized as a command.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Reissue the command with the correct command name.

ADRY3220I IMPROPER NUMERIC DIGIT FOUND IN *xxxx*

Explanation: The constant *xxxx* contains an invalid character:

- Decimal numbers can only be specified with the symbols 0 through 9
- Hexadecimal numbers can only be specified with the symbols 0 through 9 and A through F
- Binary numbers can only be specified with the symbols 0 and 1

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax error and issue the command again.

ADRY3221I CONSTANT *xxxx* NOT WITHIN VALUE RANGE

Explanation: The value of the constant *xxxx* is outside the range of values allowed for the associated parameter.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Check the command syntax for allowed values, correct the error, and issue the command again.

ADRY3223I TOO MANY CONSTANTS IN LIST BEGINNING AT *xxxx*

Explanation: The command contains too many specified constants beginning at the characters *xxxx.*

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax and reissue the command.

ADRY3225I REQUIRED (SUB)PARAMETER OF *xxxx* IS MISSING

Explanation: A required parameter or subparameter, identified by *xxxx*, is missing.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Add the missing parameter and issue the command again.

ADRY3226I INCONSISTENT PARAMETERS INVOLVING *xxxx*

Explanation: Some commands contain parameters that are defined as mutually exclusive. (If one parameter is specified, the other parameter is not allowed.)

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the command syntax and reissue the command.

ADRY3234I TOO FEW RIGHT PARENTHESES FOUND AT END OF COMMAND

Explanation: The command contains too few specified closing parentheses at the end to properly close the subparameter lists.

System Action: Command processing ends.

Operator Response: None.

System Programmer Response: Correct the command syntax.

ADRY3300I ERROR OPENING *name*

Explanation: An error occurred when attempting to open the SYSIN or SYSPRINT data set. See the associated message for the cause of the error.

System Action: See the associated message.

Operator Response: None.

System Programmer Response: See the associated message.

ADRY3301I ERROR CLOSING *name*

Explanation: An error was encountered while attempting to close the SYSIN or SYSPRINT data set. See the associated message for the cause of the error.

System Action: See the associated message.

Operator Response: None.

System Programmer Response: See the associated message.

ADRY3302I ACTION ERROR ON *name*

Explanation: This informational message identifies what was being processed (SYSIN or SYSPRINT, for example) when the error occurred. See the associated message for an explanation of the error.

System Action: None.

Operator Response: None.

System Programmer Response: None.

ADRY3309I **RECORD *xxxxx* NOT WRITTEN. LENGTH INVALID**

Explanation: The record *xxxxx* was not written for one of the following reasons:

- Record length was greater than LRECL of the output data set.
- Record length was less than the LRECL of the output data set and RECFM was F (fixed).

Note: *xxxxx* is the first five bytes of the record in hexadecimal format.

System Action: DFSMSdss stand-alone continues processing until four such errors occur. After four errors, the command continues to run, but no further records are written to the output data set.

Operator Response: None.

System Programmer Response: Save the job output and contact your software service representative.

ADRY3312I **SYSTEM UNABLE TO OPEN**

Explanation: See the associated messages for the cause of the error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your IBM service representative.

ADRY3315I **RECORD SIZE GREATER THAN 32767 NOT SUPPORTED**

Explanation: The system cannot process a logical record whose size is greater than 32,767 bytes.

System Action: The function ends. DFSMSdss stand-alone continues with the next command.

Operator Response: None.

System Programmer Response: Specify a LRECL length that is less than 32,767 bytes.

ADRY3321I **OPEN/CLOSE ERROR**

Explanation: The OPEN/CLOSE processing detected an error while either opening or closing a SYSIN or SYSPRINT data set.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Correct the error and issue the command again.

ADRY3501I *device_number* **DUMP DATA SET IS NOT A SUPPORTED FORMAT**

Explanation: The dump data set on the device at address *device_number* does not pertain to this job. The DFSMSdss stand-alone program does not support the format of the dump data set. The dump data set was not created by this product, or may have been created by an incompatible release, or the tape volsers may have been specified in the wrong sequence. This message is issued when the nature of the error or the devices being used or both do not lend themselves to resume processing without respecification of parameters and rerunning the job.

System Action: The function ends.

System Programmer Response: None.

Operator Response: Probable user error. Correct the parameters and rerun the job.

ADRY3502I *device_number* **WRONG TAPE**

Explanation: The tape on the tape device at address *device_number* does not pertain to this job. The tape volsers may have been specified in the wrong sequence. This message is issued when the nature of the error or the devices being used or both do not lend themselves to resume processing without respecification of parameters and rerunning the job.

System Action: The function ends.

System Programmer Response: None.

Operator Response: Probable user error. Correct the parameters and rerun the job.

ADRY3503I *device_number* **DUMP DATA SET IS NOT A FULL VOLUME DUMP**

Explanation: The dump data set on the device at address *device_number* is not compatible with the function specified. A full volume RESTORE is being attempted from a tracks or physical data set DUMP. To perform a full volume RESTORE, the dump data set must be a full volume DUMP. This message is issued when the nature of the error or the devices being used or both do not lend themselves to resume processing without respecification of parameters and rerunning the job.

System Action: The function ends.

System Programmer Response: None.

Operator Response: Probable user error. Correct the parameters and rerun the job.

Note: If a tracks or physical data set DUMP is the correct dump data set, then refer to the RESTORE command STARTTRK and ENDTRK parameters for details on how to specify the range to be restored.

ADRY3504I *device_number* **LOGICAL DUMP NOT VALID FOR THIS FUNCTION**

Explanation: The dump data set on the device at address *device_number* is not valid for this job. A RESTORE is being attempted from a logical data set DUMP. This message is issued when the nature of the error or the devices being used or both do not lend themselves to resume processing without respecification of parameters and rerunning the job.

System Action: The function ends.

System Programmer Response: None.

Operator Response: Probable user error. Use a physical dump data set for the RESTORE.

ADRY3520I **ATTEMPT TO RESTORE TO WRONG DEVICE**

Explanation: There was an attempt to restore data to a device type other than the type from which it was dumped.

System Action: The function ends.

System Programmer Response: Probable user error. Correct the parameters to reflect the device from which the data was dumped, and rerun the job.

Operator Response: None.

ADRY3521I OUTPUT DEVICE TOO SMALL FOR INPUT. OUTPUT CYLINDERS = X'cccc' INPUT CYLINDERS = X'cccc'

Explanation: The number of cylinders on the target DASD volume is less than the number of cylinders dumped from the original input volume. The output cylinders is the hexadecimal value for the number of cylinders on the target volume. The input cylinders is the hexadecimal value for the number of cylinders on the volume that was dumped.

System Action: The function ends.

System Programmer Response: Supply an appropriate volume that matches the input for a full volume RESTORE, and rerun the job.

Operator Response: None.

ADRY3522I STARTING TRACK HIGHER THAN ENDING TRACK

Explanation: The specified starting track is higher than the specified ending track for the range to be restored.

System Action: The function ends.

System Programmer Response: Correct the parameters so that the start of the range is prior to the end of the range, and rerun the job.

Operator Response: None.

ADRY3523I STARTING TRACK IS NOT WITHIN THE VOLUME LIMITS

Explanation: The specified starting track is not within the valid limits of the volume. For example, the starting cylinder is higher than the last cylinder on the volume, or the starting head is higher than the last head on a cylinder for this volume.

System Action: The function ends.

System Programmer Response: Correct the parameters so that the range of tracks to be restored is within the limits of the target volume, and rerun the job.

Operator Response: None.

ADRY3530I SEQUENCE ERROR ON RESTORE TAPE

Explanation: The restore tape has a missing, incorrect, or extra record. There was probably an error during DUMP.

System Action: The function is terminated.

System Programmer Response: None.

Operator Response: None

ADRY3531I *device_number* UNEXPECTED UNIT EXCEPTION

Explanation: An unexpected unit exception occurred. A possible problem may exist on the tape, or if the FILE parameter was specified, the file may not exist on the tape.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that the correct tape is mounted, the file specification is correct, and the tape contains valid data.

ADRY3532I *device_number* UNABLE TO LOCATE THE DUMP DATA SET

Explanation: An error occurred while stand-alone was trying to locate the dump data set. This could be due to an I/O error that occurred, or if the FILE parameter was specified, the file may not exist on the tape.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Examine the previous messages to determine the cause of the problem.

ADRY3533I *device_number* UNABLE TO VERIFY THE DUMP DATA SET

Explanation: An error occurred while stand-alone was trying to verify the dump data set. This could be due to an I/O error that occurred, or if the FILE parameter was specified, the file may not exist on the tape.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Examine the previous messages to determine the cause of the problem.

ADRY3550I TERMINATING AT OPERATOR REQUEST

Explanation: The function is terminating because the operator responded to a previous message to end the processing.

System Action: The function ends.

System Programmer Response: None.

Operator Response: None.

ADRY3630I *tttttt* LIBRARY VOLUME IN USE

Explanation: The tape with volser *tttttt* is in use. This message is only issued if the TAPEVOLSER parameter was specified indicating that DFSMSdss stand-alone should mount the tape volume in the tape library.

System Action: The function ends.

System Programmer Response: Verify that the tape volume serial number is specified correctly and rerun the job when the volume is not in use.

Operator Response: None.

ADRY3631I *tttttt* LIBRARY VOLUME RESERVED

Explanation: The tape with volser *tttttt* is reserved.

This message is only issued if the TAPEVOLSER parameter was specified indicating that DFSMSdss stand-alone should mount the tape volume in the tape library.

System Action: The function ends.

System Programmer Response: Verify that the tape volume serial number is specified correctly and is not a reserved volume.

Operator Response: None.

ADRY3632I *tttttt* **VOLUME NOT IN LIBRARY**

Explanation: The tape with volser *tttttt* is not found in the tape library. This message is only issued if the TAPEVOLSER parameter was specified indicating that DFSMSdss stand-alone should mount the tape volume in the tape library.

System Action: The function ends.

System Programmer Response: Verify that the tape volume serial number is specified correctly and rerun the job specifying a tape volume that is in the library.

Operator Response: None.

ADRY3633I *device_number* **TAPE DRIVE CANNOT BE ACCESSED IN LIBRARY**

Explanation: The TAPEVOLSER parameter was specified, but the drive is not online or cannot be accessed in the library.

System Action: The function ends.

System Programmer Response: Verify that the drive is online in the library. Assistance of a hardware service representative may be necessary to resolve the cause of the problem.

Operator Response: None.

ADRY3634I *tttttt* **LIBRARY VOLUME NOT AVAILABLE**

Explanation: The tape with volser *tttttt* is not currently available. There are several possible reasons why the volume is not available:

- The volume is queued for demount or being demounted
- The volume is misplaced, has an unreadable label, was ejected or queued for eject, was previously mounted, or is being mounted or queued for mounting by another job
- The volume was mounted from the library manager console via the Stand-Alone Setup window, and the TAPEVOLSER parameter was specified.

  The TAPEVOLSER parameter should not be specified when the tape is mounted from the library manager console via the Stand-Alone Setup window.

This message is only issued if the TAPEVOLSER parameter was specified indicating that DFSMSdss stand-alone should mount the tape volume in the tape library.

System Action: The function ends.

Operator Response: If the volume was mounted from the library manager console via the Stand-Alone Setup window, then either: rerun the job without specifying the TAPEVOLSER parameter, or demount the volume via the library manager console Stand-Alone Setup window and rerun the job with the TAPEVOLSER parameter to let DFSMSdss stand-alone mount the volume(s).

If the volume was *not* mounted from the library manager console via the Stand-Alone Setup window, then verify that the tape volume serial number is specified correctly and rerun the job when the volume is available.

System Programmer Response: None.

ADRY3650I *device_number* **LIBRARY ATTACHMENT FACILITY EQUIPMENT CHECK**

Explanation: The Library attachment facility failed. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3651I *device_number* **LIBRARY MANAGER OFFLINE**

Explanation: The library manager is not online to the subsystem. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None

System Programmer Response: Refer to your tape library operator's guide problem determination procedures for information on handling error conditions.

ADRY3652I *device_number* **CONTROL UNIT AND LIBRARY MANAGER INCOMPATIBILITY**

Explanation: The microcode levels of the control unit and library manager are not compatible. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3653I *device_number* **LIBRARY VISION SYSTEM NOT-OPERATIONAL**

Explanation: The library vision system has failed. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3654I *device_number* **LIBRARY MANAGER EQUIPMENT CHECK**

Explanation: The library manager is not operational. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Refer to your tape library operator's guide problem determination procedures for information on handling error conditions.

System Programmer Response: None.

ADRY3655I *device_number* **LIBRARY EQUIPMENT CHECK**

Explanation: A hardware failure has occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3656I *device_number* **LIBRARY DEVICE FAILURE**

Explanation: A device in the library has failed. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3657I *device_number* **LIBRARY ENVIRONMENTAL ALERT**

Explanation: An environmental alert condition has been detected by the library. Information following the message pertains to the error.

System Action: The function ends.

System Programmer Response: See operator response.

Operator Response: Refer to your tape library operator's guide problem determination procedures for information on handling environmental alert conditions.

ADRY3658I *tttttt* **LIBRARY VOLUME MANUALLY EJECTED**

Explanation: The tape with volser *tttttt* has been manually ejected.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that the tape volume serial number is specified correctly.

ADRY3659I *device_number* **LIBRARY NOT CAPABLE - MANUAL MODE**

Explanation: A request has been made to a library that is in manual mode, but the request requires that the library be in automated mode. Information following the message describes the nature of the error.

System Action: The function ends.

System Programmer Response: None.

Operator Response: Rerun the job when the library is in automated mode.

ADRY3660I *tttttt* **LIBRARY VOLUME INACCESSIBLE**

Explanation: The tape with volser *tttttt* cannot be accessed by the cartridge accessor. Information following the message pertains to the error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Refer to your tape library operator's guide problem determination procedures for information on handling error conditions.

ADRY3661I *device_number* **LIBRARY DRIVE SETUP IN STAND-ALONE MODE**

Explanation: The TAPEVOLSER parameter was specified for a drive that has been setup in stand-alone mode from the library manager console via the Stand-Alone Setup window.

This message is only issued if the TAPEVOLSER parameter was specified indicating that DFSMSdss stand-alone should mount the tape volume in the tape library.

System Action: The function ends.

System Programmer Response: None

Operator Response: Verify that the correct tape drive address is specified.

If an incorrect tape drive address was specified, then correct the parameters and rerun the job.

If the correct tape drive address was specified, then do one of the following:

- Rerun the job without specifying the TAPEVOLSER parameter, and mount the volumes from the library manager console Stand-Alone Setup window.
- Take the drive out of stand-alone mode from the library manager console Stand-Alone Setup window and rerun the job with the TAPEVOLSER parameter to let DFSMSdss stand-alone mount the volume(s). For this option, the tape volumes must reside in the tape library.

ADRY3702I OPERATOR DID NOT READY DEVICE

Explanation: When prompted by message ADRY004D to make a device ready, the operator requested that command processing end.

System Action: The function ends.

Operator Response: None.

System Programmer Response: None.

ADRY3711I *device_number* **CHANNEL CONTROL CHECK**

Explanation: An unrecoverable channel error occurred. Information following the message pertains to the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3717I *device_number* **UNRECOGNIZED I/O ERROR TYPE**

Explanation: An I/O error has occurred. However, the error cannot be recognized for the specified device type. Information following the message describes the nature of the I/O error.

System Action: DFSMSdss stand-alone has performed a retry, but the error still persists. A hardware error is suspected.

System Programmer Response: Examine the error information. Assistance of a hardware service representative may be required to interpret the error information and to aid in correcting the cause of the error.

ADRY3730I *device_number* **UNSUPPORTED DEVICE TYPE**
SENSEID =
+ 00 *xxxxxxxx xxxxxxxx xxxxxxxx*

Explanation: Either the device type at the specified address could not be determined, or the device type is not supported. The sense ID information from sense ID CCW `X'E4'` is printed starting at offset +00. If the sense ID CCW is not supported by the device, this information may contain zeros. See the appropriate device manual for the format of the sense ID information.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that the device is a supported device. Then verify that the device address and type (when required) are specified correctly.

ADRY3762I *device_number* **NO RECORD FOUND**

Explanation: A ‘no record found’ condition occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: If the VERIFY parameter was specified, and other messages indicate that the error occurred while reading the volume label or VTOC, then verify that a valid volume label and VTOC exist on the volume. If not, then rerun the job specifying the NOVERIFY parameter. Otherwise, save the job output and contact your service representative.

ADRY3763I *device_number* **END OF CYLINDER**

Explanation: An end-of-cylinder condition occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your service representative.

ADRY3764I *device_number* **FILE PROTECTED**

Explanation: A file protect condition occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your service representative.

ADRY3770I *device_number* **UNABLE TO RESERVE DEVICE**

Explanation: The device could not be reserved by DFSMSdss stand-alone because of an I/O error or because the device may be reserved on another path or by another system.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Examine the previous messages to determine if an I/O error occurred.

If the device is reserved on another path or by another system, rerun the job when the device is available.

If previous messages indicate an I/O error occurred, examine the error information to determine the cause of the error. Assistance of a hardware service representative may be necessary to resolve the cause of the problem.

ADRY3771I *device_number* **UNABLE TO RELEASE DEVICE**

Explanation: DFSMSdss stand-alone issued a device reserve to this device at the start of processing and is not able to do a device release.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Examine previous messages to determine if an I/O error occurred and contact your hardware service representative.

ADRY3772I *device_number* **UNABLE TO ASSIGN TAPE DRIVE**

Explanation: The tape drive could not be assigned by DFSMSdss stand-alone because of an I/O error or because the drive is assigned elsewhere.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Examine the previous messages to determine the reason the drive could not be assigned.

If message ADRY3830I was issued, the drive may be in use on another system. Use another tape drive or rerun the job when the drive is available.

If previous messages indicate an I/O error occurred, examine the error information to determine the cause of the error. Assistance of a hardware service representative may be necessary to resolve the cause of the problem.

ADRY3773I *device_number* **UNABLE TO UNASSIGN TAPE DRIVE**

Explanation: The tape drive was not able to be unassigned.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Examine previous messages to determine if an I/O error occurred and contact your hardware service representative.

ADRY3815I *device_number* **I/O ERROR RECOVERY UNSUCCESSFUL**

Explanation: DFSMSdss stand-alone was unable to recover from an I/O error. The prior message will contain information pertaining to the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3816I *device_number* **RETRY LIMIT EXCEEDED**

Explanation: DFSMSdss stand-alone has exhausted all of its retries for an I/O error condition.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Examine the error information to determine the cause of the error. Save the job output and contact your hardware service representative.

ADRY3818I *device_number* **INCORRECT LENGTH**

Explanation: An incorrect length record condition occurred on the specified device. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your service representative.

ADRY3819I *device_number* **PROGRAM CHECK**

Explanation: This indicates a probable program error because of an incorrect CCW.

System Action: DFSMSdss stand-alone ends.

Operator Response: Notify the system programmer.

System Programmer Response: Save the job output. Run the AMDSADMP service aid to dump the contents of real storage to tape. Contact IBM software support.

ADRY3820I *device_number* **PROTECTION CHECK**

Explanation: A protection check occurred.

System Action: The function ends.

Operator Response: Rerun the job.

System Programmer Response: None.

ADRY3822I *device_number* **EQUIPMENT CHECK**

Explanation: An equipment check I/O error occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3823I *device_number* **DATA CHECK**

Explanation: A data check occurred on the specified device. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Determine the cause of the data check. Rerun the job after the problem is resolved.

ADRY3824I *device_number* **COMMAND REJECT**

Explanation: The specified device rejected the CCW. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your service representative.

ADRY3825I *device_number* **FUNCTION INCOMPATIBLE**

Explanation: A requested function cannot be performed due to the state of the subsystem. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your service representative.

ADRY3826I *device_number* **FORMAT INCOMPATIBLE**

Explanation: The device is not compatible with the format of the tape.

System Action: The function ends.

Operator Response: Load the tape in a drive that is compatible with the tape format.

System Programmer Response: None.

ADRY3827I *device_number* **TENSION LOSS**

Explanation: An error occurred that caused the drive to lose tape tension. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3828I *device_number* **UNLOAD ERROR**

Explanation: The tape drive was unable to unload a cartridge. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3829I *device_number* **OVERRUN**

Explanation: An overrun occurred on the specified device. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3830I *device_number* **DRIVE ASSIGNED ELSEWHERE**

Explanation: The tape drive is assigned on another channel path. It may be in use on another system. Information following the message pertains to the error.

System Action: The function ends.

Operator Response: Rerun the job with a different tape drive or when the tape drive is not assigned elsewhere.

System Programmer Response: None.

ADRY3831I *device_number* **DRIVE OFFLINE**

Explanation: The drive is not online in the subsystem. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Ensure the drive is online in the subsystem and rerun the job.

System Programmer Response: None.

ADRY3832I *device_number* **BUS OUT CHECK**

Explanation: A bus out check occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3833I *device_number* **CONTROL UNIT ERP FAILED**

Explanation: The control unit was unsuccessful in recovering a failure. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3834I *device_number* **INTERFACE CONTROL CHECK**

Explanation: An interface control check occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3835I *device_number* **CHANNEL PROTOCOL ERROR**

Explanation: A channel protocol error occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Rerun the job. if the problem persists, save the job output and contact your hardware service representative.

System Programmer Response: See operator response.

ADRY3836I *device_number* **DATA CONVERTER CHECK**

Explanation: A data converter check occurred on the specified device. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3837I *device_number* **TAPE LENGTH INCOMPATIBLE**

Explanation: The tape is too long for the drive being used. Probable user error.

System Action: The function ends.

Operator Response: Verify that the correct tape is being used, and mount the tape on the proper device.

System Programmer Response: None.

ADRY3838I *device_number* **UNEXPECTED LOAD POINT**

Explanation: An unexpected tape at load point condition occurred on the specified tape unit. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3839I *device_number* **CHANNEL DATA CHECK**

Explanation: A channel data check occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3840I *device_number* **CHAINING CHECK**

Explanation: A chaining check occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3841I *device_number* **CHANNEL INTERFACE ERROR**

Explanation: A channel interface error occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3842I *device_number* **PHYSICAL END OF TAPE**

Explanation: The physical end of the tape was reached. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that the correct tape is being used, and that the parameters were specified correctly. If the FILE parameter was specified, verify that the specified file exists on the tape.

ADRY3843I *device_number* **TAPE LENGTH CHECK**

Explanation: The tape length in the cartridge is too short. The error occurs when the leader block is replaced. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: None.

ADRY3844I *device_number* **TAPE VOID**

Explanation: No data is found on the tape. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Verify that the proper tape is mounted, and that the tape contains data. If the FILE parameter was specified, verify that the file specified exists on the tape and contains data.

ADRY3845I *device_number* **FILE PROTECTED**

Explanation: A write operation was attempted on a tape that is write-protected. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Verify that the proper tape is mounted, and make it non-write-protected to write on it.

ADRY3846I *device_number* **TAPE LENGTH VIOLATION**

Explanation: A tape was mounted that exceeds the length of an IBM Enhanced Capacity Cartridge System tape. Probable user error. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Verify that the correct tape is being used.

System Programmer Response: None.

ADRY3847I *device_number* **END OF DATA**

Explanation: An end-of-data condition occurred. Information following the message describes the nature of the I/O error. There are several possible reasons for this error:

- The volume may not have been closed properly when it was written
- If the FILE parameter was specified, the file may not exist on the tape or may contain invalid data.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that the correct tape is being used and contains valid data. If the FILE parameter was specified, verify that the file exists on the tape and contains valid data.

ADRY3848I *device_number* **RECORD SEQUENCE ERROR**

Explanation: A record sequence error occurred on the tape. Information following the message describes the nature of the I/O error. This message could indicate a possible media problem. Or if the FILE parameter was specified, the file may not exist on the tape or may contain invalid data.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Determine if a media problem exists. If the FILE parameter was specified, verify that the file exists on the tape and contains valid data.

ADRY3849I *device_number* **CONTROL UNIT AND DRIVE INCOMPATIBLE**

Explanation: An incompatibility exists between the control unit and the drive. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3850I *device_number* **CONFIGURATION ERROR**

Explanation: A command attempted to use a facility that is not installed in the I/O subsystem. For example: the device may not be installed, the device may not be compatible with the I/O subsystem, or the library and I/O subsystem may not be compatible. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that the proper device is being used and that the features exist in the subsystem for the function being performed. Assistance of a hardware service representative may be necessary to resolve the problem.

ADRY3851I *device_number* **PROTECTION EXCEPTION**

Explanation: An error occurred while stand-alone was trying to execute a command. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your service representative.

ADRY3852I *device_number* **END OF VOLUME**

Explanation: An end of volume condition occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that the correct tape is being used and contains valid data. If the FILE parameter was specified, verify that the file exists on the tape and contains valid data.

ADRY3853I *device_number* **BLOCK NOT FOUND**

Explanation: The device was unable to find a specified block. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Verify that the correct tape is being used and contains valid data. If the FILE parameter was specified, verify that the file exists on the tape and contains valid data.

ADRY3854I *device_number* **READ ERROR**

Explanation: An unrecoverable error occurred while stand-alone was attempting to read a data block or tape mark. Information following the message describes the nature of the I/O error. This message could indicate a possible media problem. Or if the FILE parameter was specified, the file may not exist on the tape or may contain invalid data.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Determine if a media problem exists. If the FILE parameter was specified, verify that the file exists on the tape and contains valid data.

ADRY3855I *device_number* **VOLUME IS NOT FORMATTED**

Explanation: A read command was issued to a volume that has not been formatted for read-type operations. The tape may be blank or may be written in a format that the device does not support or does not recognize. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Verify that the correct tape is mounted and is mounted on a drive that supports the tape.

System Programmer Response: None.

ADRY3856I *device_number* **POSITIONING LOST**

Explanation: An error occurred that caused the tape positioning to be lost. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Save the job output and contact your hardware service representative.

ADRY3857I *device_number* **READ LENGTH ERROR**

Explanation: A read was issued for a length not supported by the device. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Verify that the correct tape is mounted and is mounted on a drive that supports the tape.

System Programmer Response: None.

ADRY3858I *device_number* **UNSUPPORTED MEDIUM**

Explanation: The device does not support the tape that is mounted. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Verify that the correct tape is mounted and is mounted on a drive that supports the tape.

System Programmer Response: None.

ADRY3859I *device_number* **MEDIUM LENGTH ERROR**

Explanation: A length error occurred. Information following the message describes the nature of the I/O error.

System Action: The function ends.

Operator Response: Verify that the tape is mounted in a compatible drive.

System Programmer Response: None.

ADRY3995I INTERNAL ERROR, DIAGNOSTIC INFORMATION FOLLOWS:

Explanation: An internal error was detected.

System Action: Processing ends.

Operator Response: None.

System Programmer Response: Probable program error. Run the AMDSADMP service aid to dump the contents of real storage to tape. Save the output and contact IBM software support.

ADRY4227I AN “ELSE” COMMAND APPEARS IMPROPERLY

Explanation: The command contains an ELSE clause without a corresponding IF statement.

System Action: The remainder of the command is ignored. DFSMSdss stand-alone continues with the next command.

Operator Response: None.

System Programmer Response: Correct the command syntax, and issue the command again.

ADRY4228I AN “END” COMMAND IS INVALID

Explanation: An END statement does not have a matching DO statement.

System Action: The remainder of the command is ignored. DFSMSdss stand-alone continues with the next command.

Operator Response: None.

System Programmer Response: Correct the DO-END sequence and issue the command again.

ADRY4229I 'IF' COMMAND HAS INVALID RELATIONAL EXPRESSION

Explanation: The IF-THEN-ELSE statement sequence is incorrect.

Only the system variables LASTCC and MAXCC can be specified. All values must be decimal numbers from 0 through 99999.

System Action: The remainder of the command stream is ignored. DFSMSdss stand-alone continues with the next command.

Operator Response: None.

System Programmer Response: Check the requirements of the IF-THEN-ELSE statement sequence and correct the error. Issue the command again.

ADRY4230I “SET” COMMAND HAS INVALID ASSIGNMENT EXPRESSION

Explanation: The syntax of a SET statement is not valid. Only the system variables LASTCC and MAXCC can be assigned values. All values must be decimal numbers from 0 through 99999.

System Action: The remainder of the command stream is ignored. DFSMSdss stand-alone continues with the next command.

Operator Response: None.

System Programmer Response: Check the syntax requirements of the SET statement and correct the error. Issue the command again.

ADRY4232I IMPROPER OR MISSING "THEN" KEYWORD

Explanation: The THEN clause of the IF-THEN-ELSE command sequence is either missing or is misspelled.

System Action: The remainder of the command stream is ignored. DFSMSdss stand-alone continues with the next command.

Operator Response: None.

System Programmer Response: Correct the error and issue the command again.

ADRY4236I INPUT STREAM END-OF-FILE FOUND BEFORE END OF COMMAND

Explanation: An end-of-file condition was encountered while scanning the command. This could be caused by either incorrect command-continuation syntax or missing records in the input stream.

System Action: The function ends.

Operator Response: None.

System Programmer Response: Either correct the command syntax, or add the missing records. Issue the command again.

ADRY4237I TOO MANY LEVELS OF "IF" COMMAND NESTING

Explanation: More than ten IF statements have been nested.

System Action: The remainder of the command stream is ignored. DFSMSdss stand-alone continues with the next command.

Operator Response: None.

System Programmer Response: Restructure the command stream to avoid the excessive nesting and issue the command again.

ADRY4990I MODULE NOT FOUND: *xxxxxxxx*

Explanation: The indicated module could not be located. This could be due to an error when DFSMSdss stand-alone was created or due to a program error.

System Action: Processing ends.

Operator Response: Notify the system programmer.

System Programmer Response: Examine the data set that was used as input to the BUILDSA command when the DFSMSdss stand-alone was created. Ensure that the specified module is included and that it is not corrupted. Rerun the BUILDSA command to create a new stand-alone program and then rerun the stand-alone. If the module exists and is not corrupted, then run the AMDSADMP service aid to dump the contents of real storage to tape. Save the output and contact IBM software support.

ADRY4999I UABORT CODE *nn*

Explanation: An abnormal end error caused the DFSMSdss stand-alone processor to abort. This situation is usually caused by hardware, program, or system errors. The message appears in the output listing.

Code *nn* indicates the nature of the error.

Code	Meaning
24	Text processor's print control table is not addressed by the global data table.
28	No virtual storage is available for: • Page header line • Argument lists • Main title line • Footing lines • Print control table • Initialization of message areas • Automatic (dynamic) storage for a module • A GETMAIN request • Open control-block allocation • Device information table **Note:** The system could not issue the message that sufficient storage was not available because the SYSPRINT data set was not open.
32	Request made to process unopened data set.
36	Unable to open the output listing device.
40	A U-macro argument is not valid.

System Action: DFSMSdss stand-alone ends.

Operator Response: Notify the system programmer.

System Programmer Response: Save the job output. Run the AMDSADMP service aid to dump the contents of real storage to tape. Contact your IBM service representative.

ADY Messages

ADY001I THE DAE PARAMETER RECORD IN MEMBER *mem* HAS A SYNTAX ERROR ERROR = *prm*: *text*

Explanation: While processing a SET DAE operator command, dump analysis and elimination (DAE) encountered an error in a parameter in the ADYSETxx parmlib member.

In the message text:

mem	The parmlib member name.
prm	The parameter in error.
text	One of the following:

A COMMA IS MISSING An expected comma was not found.

A LEFT PARENTHESIS IS EXPECTED The value following the keyword was not preceded by a left parentheses, as required.

A RIGHT PARENTHESIS IS EXPECTED The value following the keyword was not followed by a right parentheses, as required.

DAE= MUST BE THE FIRST KEYWORD The first text that is not a comment was not DAE=, as required.

NOTIFY COUNT IS NOT VALID (MUST BE 1-9999) The NOTIFY parameter does not have a value of 1 through 9999 for the number of dumps.

NOTIFY INTERVAL IS NOT VALID (MUST BE 1-9999) The NOTIFY parameter does not specify a time interval of 1 through 9999 minutes.

THIS DATA SET NAME IS NOT VALID The data set name value provided for the DSN keyword was longer than 20 characters.

THIS IS NOT A VALID KEYWORD The keyword is not one of the keyword parameters defined for DAE.

THIS KEYWORD VALUE WAS SPECIFIED MORE THAN ONCE One of the following has occurred:

The SYSMDUMP or SVCDUMP keyword specified one of the following values more than once:

- MATCH
- SUPPRESS
- SUPPRESSALL
- UPDATE
- NOTIFY (for the SVCDUMP keyword)

The GLOBAL or SHARE keyword specified one of the following values more than once:

- DSN
- OPTIONS

THIS IS NOT A VALID KEYWORD VALUE One of the following has occurred:

The SYSMDUMP or SVCDUMP keyword contained a value other than the following:

- MATCH
- SUPPRESS
- SUPPRESSALL
- UPDATE

The GLOBAL or SHARE keyword contained a value other than the following:

- DSN
- OPTIONS

THE SUPPRESS AND SUPPRESSALL KEYWORD VALUES ARE MUTUALLY EXCLUSIVE Both SUPPRESS and SUPPRESSALL keyword values were specified with either the SVCDUMP or SYSMDUMP keyword. Only one may be specified.

THIS RECORD NUMBER IS NOT VALID The value was not a decimal number of 1 to 4 digits.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYSETP

System Action: The system does not process the SET DAE command.

Operator Response: Select a different ADYSETxx parmlib member and enter the SET DAE command.

System Programmer Response: Correct the error in the ADYSETxx parmlib member. Ask the operator to enter the SET DAE command again.

ADY002I THE DAE PARAMETER RECORD IN MEMBER *mem* HAS A SYNTAX ERROR *text*

Explanation: While processing a SET DAE operator command, dump analysis and elimination (DAE) encountered an error in a parameter in the ADYSETxx parmlib member.

In the message text:

mem	The parmlib member name.
text	One of the following:

AN SVCDUMP OR SYSMDUMP KEYWORD MUST BE USED WITH THE GLOBAL(OPTIONS) KEYWORD GLOBAL(OPTIONS) was used without specifying an SVCDUMP and/or SYSMDUMP keyword(s) with value(s) to share with other DAE instances.

GLOBALSTOP INVALID BECAUSE SHARE(DSN) WAS NOT SPECIFIED WHEN DAE WAS STARTED DAE=STOP,GLOBALSTOP was issued on a system that is not able to share the DAE data set. This environment makes the parameter incorrect. One of the following conditions is causing the problem:

1. DAE is active, but the previous ADYSETyy member did not specify the SHARE(DSN) parameter.
2. DAE is not active. DAE is either stopped, or it was never started.

AN SVCDUMP OR SYSMDUMP KEYWORD SPECIFICATION WAS INCOMPLETE An SVCDUMP or SYSMDUMP keyword specification does not have at least one value, or a right parenthesis did not follow the value(s) specified.

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EITHER THE START OR STOP KEYWORD MUST BE SPECIFIED The ADYSETxx member did not specify either START or STOP. One of these keywords is required.

GLOBAL(OPTIONS) CANNOT BE SPECIFIED WITHOUT SHARE(OPTIONS) SHARE(OPTIONS) is required when GLOBAL(OPTIONS) is specified.

SHARE(OPTIONS) CANNOT BE SPECIFIED WITHOUT SHARE(DSN) SHARE(DSN) is required when SHARE(OPTIONS) is specified.

THE DSN KEYWORD MUST BE USED WITH THE GLOBAL(DSN) KEYWORD When GLOBAL(DSN) is used, the DSN keyword is required to specify the data set name.

THE GLOBAL KEYWORD CANNOT BE SPECIFIED WITHOUT SHARE(DSN) SHARE(DSN) is required to use the GLOBAL keyword.

THE NOTIFY KEYWORD IS ONLY VALID FOR SVCDUMP The ADYSETxx parmlib member contains a NOTIFY keyword on other than the SVCDUMP statement.

THE NOTIFY KEYWORD MUST BE USED WITH THE UPDATE KEYWORD The ADYSETxx parmlib member does not contain an UPDATE keyword, which is a corequisite.

THE NOTIFY KEYWORD WAS SPECIFIED MORE THAN ONCE The ADYSETxx parmlib member contains more than one NOTIFY keyword.

THE RECORD COULD NOT BE PARSED An unexpected error occurred while DAE was parsing the ADYSETxx member.

THE RECORD HAS AN INCORRECT USE OF COMMENT DELIMITERS DAE allows two types of comment delimiters. An "*" in column 1 of a record indicates that the entire record is a comment. All characters, including other delimiters, are ignored. The second type of comment delimiter allows the combination of "/*" and "*/" to denote the start and end of comment text. A likely cause of this error is that an ending comment delimiter "*/" was not found.

THE {RECORDS|SHARE|GLOBAL|DSN} KEYWORD SPECIFICATION WAS INCOMPLETE The indicated keyword parameter was specified without a required option enclosed in parentheses.

THE {RECORDS|SVCDUMP|SYSMDUMP|STOP |SHARE|GLOBAL|DSN|GLOBALSTOP} KEYWORD WAS SPECIFIED MORE THAN ONCE The specified keyword appeared more than once.

THE START AND STOP KEYWORDS MAY NOT BE SPECIFIED IN THE SAME RECORD The ADYSETxx member specified both START and STOP. Only one can be specified.

THE START KEYWORD SPECIFICATION IS INCOMPLETE START was specified without a following keyword.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYSETP

System Action: The system does not process the SET DAE command.

Operator Response: Select a different ADYSETxx parmlib member and enter the SET DAE command.

System Programmer Response: Correct the error in the ADYSETxx parmlib member. Request the operator to enter the SET DAE command again.

ADY003I SET DAE PROCESSING FAILED *text*

Explanation: While processing a SET DAE operator command, dump analysis and elimination (DAE) detected an error.

In the message text:

text One of the following:

MODULE IEEMB878 COULD NOT BE LOADED The system could not load a required DAE service.

THERE WAS AN UNEXPECTED ERROR. THE ABEND CODE IS *cde* The system abnormally ends DAE processing.

In the message text:

cde The abend code.

THE DAE TRANSACTION PROCESSOR IS NOT ACTIVE DAE is not available to modify the DAE parameters.

THE GETMAIN FOR THE TRANSACTION FAILED Storage from the common service area (CSA) needed to process the SET DAE command was not available.

THE POST OF THE DAE TRANSACTION PROCESSOR FAILED The cross-memory post (XMPOST) to DAE in the DUMPSRV address space failed.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYSETP

System Action: DAE does not process the SET DAE command. DAE cannot be started or stopped.

Operator Response: If requested by the system programmer, enter the SET DAE command.

System Programmer Response: Where the environment makes the parameter incorrect, either provide an ADYSETxx member that specifies the SHARE(DSN) parameter, and start DAE; or find a system where DAE was started with an ADYSETxx member having SHARE(DSN) specified. Then issue the GLOBALSTOP.

For other situations, correct the error in the ADYSETxx parmlib member. Request the operator to issue the correct SET DAE command on the appropriate system.

ADY005E SET DAE PROCESSING FAILED *text*

Explanation: *text* is one of the following:

MODULE ADYMSG COULD NOT BE LOADED
THE ESTAE COULD NOT BE ESTABLISHED

Dump analysis and elimination (DAE) failed to initialize processing for a SET DAE command.

In the message text:

MODULE ADYMSG COULD NOT BE LOADED The system could not load a required module.

THE ESTAE COULD NOT BE ESTABLISHED Recovery initialization failed.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYSETP

System Action: DAE does not process the SET DAE command.

Operator Response: If requested by the system programmer, enter the SET DAE command.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

ADY006E SET DAE PROCESSING FAILED THE MESSAGE SERVICE IS UNAVAILABLE

Explanation: While processing a SET DAE operator command, dump analysis and elimination (DAE) detected an error. DAE could not issue message ADY003I because the DAE message service had not been loaded or had the error.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYSETP

System Action: DAE does not process the SET DAE command.

Operator Response: If requested by the system programmer, enter the SET DAE command.

System Programmer Response: If the error recurs and the program is not in error, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

ADY010E THE DAE START TRANSACTION FAILED *text*

Explanation: The ADYSETxx parmlib member specified in a SET DAE operator command requested that dump analysis and elimination (DAE) stop itself, then start with changed parameters. The start failed.

In the message, *text* is one of the following:

STORAGE WAS NOT FREED FROM PREVIOUS SYMPTOM QUEUES. A NEW QUEUE CANNOT BE BUILT The cell pools that were obtained for a previous start could not be deleted. If the number of cell pools that are not freed reaches a threshold, DAE cannot be started until the system is initialized again.

MODULE ADYDFLT COULD NOT BE LOADED The system could not load a required DAE module.

THE OPEN FOR *dsname* **FAILED** The DAE data set could not be opened.

In the message text:

dsname	The data set name.

ALLOCATION FOR *dsname* **FAILED RETURN CODE =** *return-code* **ERROR CODE =** *error-code* **REASON CODE =** *reason-code* The DAE data set could not be allocated. The return, error, and reason codes describe the dynamic allocation error; see the return and reason codes for SVC 99 for an explanation of these codes. These codes are missing if the allocation ended abnormally.

In the message text:

dsname	The data set name.
return-code	The return code.
errc	The error code.
reason-code	The reason code.

I/O ERROR OCCURRED WHILE READING *dsname* **SYNAD DATA =** *yyy* An I/O error occurred while reading the DAE data set.

In the message text:

dsname	The data set name.
yyy	The SYNAD data returned from the error. SYNAD is a subparameter of the AMP parameter on the DD statement used to define a data set. See the SYNADAF macro of the Data Facility Product (DFP) for information about the SYNAD data.

ALLOCATION FOR *dsname* **FAILED. THE DATA SET COULD NOT BE FOUND.** The DAE data set could not be dynamically allocated. A catalog entry could not be found for the data set.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYTRNS

System Action: The system ignores the START transaction. For an abend, the system writes a dump.

Operator Response: If requested by the system programmer, enter the SET DAE command. If the message reads **I/O ERROR OCCURRED WHILE READING** *dsname* **SYNAD DATA =** *yyy*, contact Hardware Support.

System Programmer Response: Depending on the message text, do the following:

STORAGE WAS NOT FREED FROM PREVIOUS SYMPTOM QUEUES. A NEW QUEUE CANNOT BE BUILT

MODULE ADYDFLT COULD NOT BE LOADED
Ensure that system initialization occurred correctly. Check all system libraries for an error.

THE OPEN FOR *dsname* **FAILED**
ALLOCATION FOR *dsname* **FAILED RETURN CODE =** *return-code* **ERROR CODE =** *error-code* **REASON CODE =** *reason-code*

ALLOCATION FOR *dsname* **FAILED. THE DATA SET COULD NOT BE FOUND.**
Ensure that the data set was available at system initialization.

Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

ADY011E UPDATING *dsname* **HAS TERMINATED [***text***]**

Explanation: In the message text:

dsname	The data set name.

text is one of the following:

THE OPEN FAILED The DAE data set could not be opened.

I/O ERROR OCCURRED WHILE READING THE DATA SET An I/O error occurred while reading the DAE data set.

I/O ERROR OCCURRED WHILE WRITING TO THE DATA SET SYNAD DATA = *yyy* An I/O error occurred while writing to the DAE data set.

yyy	The SYNAD data returned from the error. SYNAD is a subparameter of the AMP parameter on the DD statement used to define a data set. See the SYNADAF macro of the Data Facility Product (DFP) for information about the SYNAD data.

Dump analysis and elimination (DAE) could not update the DAE data set.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYTRNS

System Action: DAE does not update the DAE data set. Because temporary records are kept in virtual storage, DAE continues processing. Without UPDATE, DAE writes no permanent records.

When DAE is stopped or started, DAE regresses to its record of dumps from the data set as previously updated.

Operator Response: Notify the system programmer.

System Programmer Response: Correct the error. Restart DAE so that the DAE data set can be updated.

ADY012I THE FOLLOWING DAE OPTIONS ARE IN EFFECT: *text*

Explanation: *text* is one of the following:

DSN = *dsname*
GLOBAL = *share-parameters*
NOTIFY = *options*
RECORDS = *nnn*
SHARE = *share-parameters*
START
SVCDUMP = *options*
SYSMDUMP = *options*

The system started dump analysis and elimination (DAE) with the listed options. See *OS/390 MVS Initialization and Tuning Reference* for a description of the ADYSETxx parmlib member options.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYTRNS

System Action: DAE analyzes the specified dumps according to the indicated options.

Operator Response: Verify that the options listed are the options desired. To change options, start DAE with a parmlib member that contains the correct options.

ADY013I DAE COULD NOT FREE *nnn* **BYTES OF** *text* **COMMON STORAGE**

Explanation: *text* is one of the following:

FIXED
PAGEABLE

Processing for a DAE STOP command could not free cell pool storage occupied by the symptom queue.

In the message text:

nnn	The number of bytes of storage.
FIXED	The cell pool storage was from fixed common storage.
PAGEABLE	The cell pool storage was from pageable common storage.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYTRNS

System Action: DAE abandons the cell pool storage from either the fixed system queue area (SQA) or from the pageable common service area (CSA). When the number of cell pools that are not freed reaches a threshold, DAE cannot be started again.

System Programmer Response: None.

ADY014E DAE INITIALIZATION FAILED. *text*

Explanation: *text* is one of the following:

THE ESTAE COULD NOT BE ESTABLISHED
MODULE ADYMSG COULD NOT BE LOADED
MODULE ADYIO COULD NOT BE LOADED

Dump analysis and elimination (DAE) could not be initialized because of an unrecoverable problem.

In the message text:

THE ESTAE COULD NOT BE ESTABLISHED DAE could not establish a recovery environment.

MODULE ADYMSG COULD NOT BE LOADED The system could not load a required DAE module.

MODULE ADYIO COULD NOT BE LOADED The system could not load a required DAE module.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYTRNS

System Action: DAE will not be available in the system until the system is initialized again.

Operator Response: Notify the system programmer.

System Programmer Response: Correct the problem. To reestablish DAE processing, ask the operator to IPL the system. If DAE is not automatically started during system initialization, the operator should enter a SET DAE command.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

ADY015I DAE STOP PROCESSING IS COMPLETE

Explanation: The system stopped dump analysis and elimination (DAE), as requested.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYTRNS

System Action: DAE is now inactive.

ADY016E DATA SET *ndsn,* **DOES NOT MATCH THE CURRENT SHARED DAE DATA SET:** *odsn*

Explanation: While processing a SET DAE operator command or while starting the system, dump analysis and elimination (DAE) detected that the data set name specified in the parmlib member did not match the name of the data set currently shared in the sysplex.

In the message text:

ndsn	The new data set name specified with the DSN keyword.
odsn	The data set currently being shared in the sysplex.

Source: Dump analysis and elimination (DAE)

Detecting Module: ADYTRNS

System Action: The system does not start DAE.

Operator Response: Notify the system programmer.

System Programmer Response: Do one of the following to correct the parmlib member used to start DAE:

- To share data set *ndsn*, specify the correct data set name on the DSN parameter.
- To share data set *odsn*, remove the DSN parameter.
- To change the data set currently being shared in the sysplex, add the GLOBAL(DSN) parameter.

See *OS/390 MVS Initialization and Tuning Reference* for more information about the ADYSETxx parmlib member parameters.

AHL Messages

AHL001A INVALID KEYWORD. RESPECIFY PARAMETERS OR REPLY U

Explanation: A keyword specified on the START command for the generalized trace facility (GTF) is not correct.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to these messages.

Operator Response: Respecify all parameters, or reply **U** to request default values.

AHL002A INVALID DELIMITER. RESPECIFY PARAMETERS OR REPLY U

Explanation: The START command parameters for the generalized trace facility (GTF) have been punctuated incorrectly.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: Respecify all parameters, or reply **U** to request default values.

AHL003A INVALID OPERAND. RESPECIFY PARAMETERS OR REPLY U

Explanation: An operand in the START command for the generalized trace facility (GTF) was specified incorrectly.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: Respecify all parameters, or reply **U** to request default values.

AHL004A KEYWORD(S) REPEATED. RESPECIFY PARAMETERS OR REPLY U

Explanation: In the START command for the generalized trace facility (GTF), a keyword is repeated.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: Respecify all parameters, or reply **U** to request default values.

AHL005I GTF TERMINATING. MUST RUN AS SYS TASK FROM CONSOLE

Explanation: The generalized trace facility (GTF) must run as a system task. The program properties table (PPT) indicated that GTF was started as a problem program. This situation was probably caused by starting GTF from the card reader.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

System Action: The system abnormally ends GTF.

Operator Response: After the system programmer has fixed the PPT, restart GTF from the system console as described in *OS/390 MVS Diagnosis: Tools and Service Aids*.

System Programmer Response: Use the SCHEDxx parmlib member to change attributes in the PPT. See *OS/390 MVS Initialization and Tuning Reference* for a description of the PPT bits.

AHL006I GTF ACKNOWLEDGES STOP COMMAND

Explanation: The operator entered the STOP command for the generalized trace facility (GTF).

Source: Generalized trace facility (GTF)

Detecting Module: AHLTMON, AHLGTFI

System Action: The system ends GTF.

AHL007I GTF TERMINATING ON ERROR CONDITION

Explanation: The generalized trace facility (GTF) is ending because it has detected an error condition. If message AHL031I has not been issued, then the ending condition is usually a programming logic error and the system may write an SVC dump. If message AHL031I has been issued, then either a message with additional information about the error precedes AHL007I or a dump is written.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTMON

System Action: The system abnormally ends GTF, issues other messages, and may request an SVC dump.

Operator Response: If message AHL031I has been issued, restart GTF.

System Programmer Response: If message AHL031I has not been issued, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the SVC dump, if available.

AHL008A INCORRECT BUF VALUE. RESPECIFY PARAMETERS OR REPLY U

Explanation: The value specified for the BUF keyword on the START GTF command is not correct.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to the message.

Operator Response: Respecify all parameters, or reply **U** to request default values. The allowable value range for the BUF keyword is 10 to 225 (decimal).

AHL009A INCORRECT BLOK VALUE. RESPECIFY PARAMETERS OR REPLY U

Explanation: On the START GTF command, an incorrect value was specified for the BLOK keyword. The value was outside the allowable range of 1 to 99999 (decimal).

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to this message.

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Operator Response: Respond in one of the following ways:

- Respecify all parameters, making sure that the value for BLOK is in the range from 1 to 99999 (decimal).
- Reply **U** to request default values.

AHL013I GTF ACTIVE FROM A PREVIOUS START COMMAND

Explanation: The operator entered a START command for the generalized trace facility (GTF), but GTF is already active.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

System Action: The system ignores the second request to start GTF. The GTF that was previously started remains active.

AHL015I {STAE|ESTAE} REQUEST UNSUCCESSFUL

Explanation: The recovery environment requested by the generalized trace facility (GTF) was not established.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

System Action: The system abnormally ends GTF.

System Programmer Response: Ensure that the region size is adequate for GTF.

AHL016I GTF INITIALIZATION UNSUCCESSFUL

Explanation: Initialization of the generalized trace facility (GTF) failed. A previous message indicates the exact cause of the problem.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

AHLTMON

System Action: The system abnormally ends GTF.

Operator Response: See the previous message.

AHL018A GTF UNABLE TO INITIALIZE ON ALL CPUS, REPLY U OR END

Explanation: Initialization of the generalized trace facility (GTF) has failed. GTF could not initialize the control register, register 8, of one or more active processors. Continued tracing may result in incomplete trace information being collected.

Possibly GTF could not initialize register 8 because the processor was stopped. Refer to message AHL133I for processors that were not initialized.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTMON

System Action: GTF initialization or completion does not continue until the operator responds to this message.

Operator Response: Reply **U** to continue GTF initialization or **END** to begin GTF completion.

System Programmer Response: If all processors are running, collect all printed output and output data sets related to the problem. Report the problem to the IBM Support Center.

AHL019I SETEVENT SERVICE FAILED, RETURN CODE =*return-code*

Explanation: Initialization of the generalized trace facility (GTF) failed. The return code in the message text gives the reason:

18X	The GTF routine that monitors events to be traced is ending.
20X	A GTF routine was not in the link pack area (LPA). GTF issues message IEA950I to identify the missing module.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTFI.

System Action: The system abnormally ends GTF.

Operator Response: If the return code is 18X and GTF is active and does not end, stop GTF.

System Programmer Response: Collect all printed output and output data sets related to the problem. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL020I RSMGR SERVICE FAILED. RETURN CODE =*return-code*

Explanation: The generalized trace facility (GTF) attempted to establish a resource manager to monitor the GTF address space, but failed.

In the message text:

return-code	The return code from the resource manager service.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: The system abnormally ends GTF.

Operator Response: Record this message and notify the system programmer.

System Programmer Response: Collect all printed output and output data sets related to the problem. Report the problem to the IBM Support Center.

AHL024I UNALLOWABLE BUF VALUE. MINIMAL DEFAULT 10 IS ASSIGNED

Explanation: The BUF parameter on the START command for the generalized trace facility (GTF) is incorrect. The BUF parameter specified a buffer value less than the minimum allowed.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization continues with a default value of 10 buffers.

AHL025I UNALLOWABLE BUF VALUE. MAXIMUM DEFAULT 255 IS ASSIGNED

Explanation: The BUF parameter on the START command for the generalized trace facility (GTF) specified a value greater than 255.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization continues with a default value of 255 buffers.

AHL026I ESTAE REQUEST FOR AHLWTASK UNSUCCESSFUL

Explanation: The recovery environment requested by the generalized trace facility (GTF) was not established.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWTASK

System Action: The system abnormally ends GTF and issues other messages.

System Programmer Response: Look at the messages in the job log. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL027I INSUFFICIENT STORAGE FOR AHLWTASK INITIALIZATION

Explanation: Initialization of the generalized trace facility (GTF) failed. The system queue area (SQA) is not large enough.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWTASK

System Action: The system abnormally ends GTF.

System Programmer Response: Ensure that there is sufficient SQA storage for GTF. Restart GTF.

AHL030I INSUFFICIENT CSA FOR GTF

Explanation: An attempt by the generalized trace facility (GTF) to obtain common storage area (CSA) storage has failed.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: The system abnormally ends GTF.

Operator Response: Record this message and contact the system programmer.

System Programmer Response: Modify the GTF BLOK keyword in the JCL to limit the amount of common storage area (CSA) storage that GTF will use for the collection of trace entries.

AHL031I GTF INITIALIZATION COMPLETE

Explanation: Initialization of the generalized trace facility (GTF) completed successfully.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTMON

System Action: GTF continues processing.

AHL032I INSUFFICIENT ADDRESS SPACE FOR GTF

Explanation: During initialization of the generalized trace facility (GTF), a GETMAIN instruction for subpool 0-127 failed.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: The system abnormally ends GTF.

System Programmer Response: Make the necessary space available to GTF and restart.

AHL033I INSUFFICIENT SQA FOR GTF

Explanation: During initialization of the generalized trace facility (GTF), a GETMAIN for buffers in the system queue area (SQA) failed.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: The system abnormally ends GTF.

System Programmer Response: Make the necessary space available to GTF and restart.

AHL034I GTF BUFFER MANAGER TERMINATING ON ERROR CONDITION

Explanation: During generalized trace facility (GTF) initialization, a GTF recovery routine was invoked for reasons other than alternate CPU recovery (ACR).

Source: Generalized trace facility (GTF)

Detecting Module: AHLBFMGR

System Action: The system abnormally ends GTF.

System Programmer Response: Examine SVC dumps provided by GTF and other problem determination information to determine the reason why the recovery routine was entered.

AHL035I GTF TRACE [WRITER] UNABLE TO LOAD *nnnnnnnn*

Explanation: A LOAD instruction issued during generalized trace facility (GTF) processing failed.

In the message text:

nnnnnnnn Name of module that could not be loaded.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: The system abnormally ends GTF.

System Programmer Response: Determine why the module named in the message text (*nnnnnnnn*) could not be loaded and correct the condition.

AHL036I GTF DATA FLOW BLOCKED. FIX {FAILED|ATTEMPTED}

Explanation: The generalized trace facility (GTF) has detected an error in a common storage area (CSA) that GTF uses to copy trace data and is attempting to correct it.

Note: GTF completion may be indefinitely delayed. If this happens, there will be no impact to the system outside GTF.

Source: Generalized trace facility (GTF)

Detecting Module: AHLBFMGR

System Action: The system abnormally ends GTF.

System Programmer Response: A single occurrence of this message needs no action; however, repeated occurrences indicates a problem. Examine the SVC dump provided and determine why the use count of the GTFBLOKs is not going to zero.

AHL037I GTF BUFFER MANAGER UNABLE TO ESTABLISH ESTAE

Explanation: The recovery environment requested by the generalized trace facility (GTF) was not established.

Source: Generalized trace facility (GTF)

Detecting Module: AHLBFMGR

System Action: The system abnormally ends GTF.

System Programmer Response: Restart GTF and if the problem recurs, examine the SVC dump and determine why the ESTAE request failed.

AHL038I GTF WRITER UNABLE TO OPEN IEFRDER

Explanation: During generalized trace facility (GTF) processing, the system attempted to open a data set, but failed.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWWRIT

System Action: The system abnormally ends GTF.

System Programmer Response: Verify that a valid trace data set was specified and restart GTF. If the problem recurs, determine why the data set cannot be opened or try another trace data set.

AHL039I IEFRDER DD STATEMENT MISSING

Explanation: The IEFRDER DD statement did not correctly specify a device for the generalized trace facility (GTF) trace data set.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWWRIT

AHLCWRIT

AHLGTFI

System Action: The system abnormally ends GTF.

System Programmer Response: Ensure that a valid IEFRDER DD statement was specified in the GTF procedure when starting GTF.

AHL040 NOT A LEGAL FORM OF THE MACRO. CHECK THE MF =

Explanation: During generalized trace facility (GTF) processing, an incorrect parameter was specified on the MF keyword of the GTRACE macro. L (for the list form) and E (for the execute form) are the only correct parameters.

Source: Generalized trace facility (GTF)

Detecting Module: GTRACE

System Action: The system does not expand the macro.

Application Programmer Response: Correct the MF keyword, specifying a valid parameter (L or E). Rerun the job.

AHL041 LNG = KEYWORD MISSING

Explanation: The GTRACE macro could not be fully expanded because the LNG keyword is not specified. If the standard form of the GTRACE macro is being used, the LNG keyword must be specified with a valid parameter.

Source: Generalized trace facility (GTF)

Detecting Module: GTRACE

System Action: The system partially expands the macro; expansion stops following detection of the omission.

Application Programmer Response: Correct the GTRACE macro, specifying the LNG keyword with a valid parameter. A valid parameter is any decimal integer in the range 1 to 256. Rerun the job.

AHL042 PAGEIN= KEYWORD MISSPECIFIED

Explanation: In the GTRACE macro, the PAGEIN keyword was specified incorrectly. Valid values are YES and NO.

Source: Generalized trace facility (GTF)

Detecting Module: GTRACE

Application Programmer Response: Change the PAGEIN parameter on the GTRACE macro to a valid value.

AHL044 DATA= KEYWORD MISSING

Explanation: In the GTRACE macro, the DATA keyword is not specified. If the standard form of the GTRACE macro is being used, the DATA keyword must be specified with a valid parameter.

Source: Generalized trace facility (GTF)

Detecting Module: GTRACE

System Action: The system partially expands the macro; expansion stops following detection of the error.

Application Programmer Response: Correct the GTRACE macro, specifying the DATA keyword with a valid parameter. Valid parameters are a register number in parentheses or an A-type address constant. Rerun the job.

AHL045 MF= E, PARAMETER SPECIFICATION MISSING

Explanation: In the GTRACE macro, the parameter specification for the MF keyword is incomplete. If the execute form of the GTRACE macro is being used, the address of the parameter list must be included as part of the MF operand.

Source: Generalized trace facility (GTF)

Detecting Module: GTRACE

System Action: The system does not expand the macro.

System Programmer Response: Correct the GTRACE macro, specifying the address of the parameter list as part of the MF operand. Specify the address observing the syntax rules governing address specification for an RX-type instruction, or one of the general registers 1-12, previously loaded with the address. For example, if the address of the parameter list is in register 1, MF=(E,(1)) should be specified. Rerun the job.

AHL048 ID= KEYWORD MISSING

Explanation: In the GTRACE macro, the ID keyword is not specified. The ID keyword must be specified for either form (standard or execute) of the GTRACE macro.

Source: Generalized trace facility (GTF)

Detecting Module: GTRACE

System Action: The system partially expands the macro; expansion stops following detection of the error.

System Programmer Response: Correct the GTRACE macro, specifying the ID keyword with the appropriate value. Rerun the job.

AHL052 INSUFFICIENT KEYWORD PARAMETERS

Explanation: In the HOOK macro, the EID keyword is not specified. This keyword must be included.

Source: Generalized trace facility (GTF)

Detecting Module: HOOK

System Action: The system does not expand the macro.

System Programmer Response: Correct the HOOK macro, specifying the EID keyword with a valid symbolic value. Rerun the job.

AHL053 INVALID TYPE= KEYWORD

Explanation: In the HOOK macro, a parameter other than P, BP, BPN, T, or BT is specified for the TYPE keyword.

Source: Generalized trace facility (GTF)

Detecting Module: HOOK

System Action: The system does not expand the macro.

System Programmer Response: Correct the TYPE keyword, specifying a valid value. Rerun the job.

AHL055 INVALID EID= KEYWORD

Explanation: In the HOOK macro, an incorrect value is specified for the EID keyword.

Source: Generalized trace facility (GTF)

Detecting Module: HOOK

System Action: The system does not expand the macro.

System Programmer Response: Correct the EID keyword, specifying a valid symbolic value. Rerun the job.

AHL057 ECB KEYWORD MISSING

Explanation: In the AHLREAD macro, the ECB keyword is missing.

Source: Generalized trace facility (GTF)

Detecting Module: AHLREAD

System Programmer Response: Code the missing keyword on the macro and recompile.

AHL058 DATA AREA KEYWORD MISSING

Explanation: In the AHLREAD macro, the DATA AREA keyword is missing.

Source: Generalized trace facility (GTF)

Detecting Module: AHLREAD

System Programmer Response: Code the missing DATA AREA keyword on the macro and recompile.

AHL060 NO NAME OPTION SPECIFIED ON STANDARD FORM

Explanation: On the SETEVENT macro, a full set of options must be specified on standard form of the macro. The name field is missing on this invocation.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Programmer Response: Correct the macro and recompile. The macro generates no code.

AHL061 NO MCQE ADDRESS SPECIFIED

Explanation: The MCQE address returned by SETEVENT service on the first invocation of the SETEVENT macro must be specified on all later invocations of this macro. If this is the first invocation, this address must be zero.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Programmer Response: Correct the macro and recompile. The macro generates no code.

AHL062 SOME EID TYPE SPECIFIED WITH FREE OR ACTIVAT

Explanation: On the SETEVENT macro, FREE and ACTIVAT are related on the entire MCQE chain. Therefore, single EIDs or classes of EIDs may be specified with these two actions.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Programmer Response: Correct the macro and recompile. The macro generates no code.

AHL063 NO ACTION SPECIFIED ON STANDARD FORM

Explanation: On the SETEVENT macro, a full set of options must be specified on the STANDARD form. The ACTION option is missing.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Programmer Response: Correct the macro and recompile. The macro generates no code.

AHL064 NO EIDAD OR CLASSAD SPECIFIED ON STANDARD FORM

Explanation: On the SETEVENT macro, a full set of options must be specified on the STANDARD form. Both EIDAD and CLASSAD are missing. At least one of these must be specified.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Programmer Response: Correct the macro and recompile. The macro generates no code.

AHL065 ACTION OPTION INVALID

Explanation: On the SETEVENT macro, the contents of the ACTION field is not one of the valid options.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Programmer Response: Correct the macro and recompile. The macro generates no code.

AHL066 NO ADDRESS SPECIFIED WITH MF (E) OR MF (M)

Explanation: When the execute form of the SETEVENT macro is used, the address of the parameter list to be filled in must be provided. This is missing on this invocation.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Programmer Response: Correct the macro and recompile. The macro generates no code.

AHL067 NO PARAMETER LIST NAME SPECIFIED

Explanation: When the list form of the SETEVENT macro is used, a name must be included, which the macro uses to name the parameter list. This name was not specified in this case.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Programmer Response: Correct this condition and recompile. This macro generates no code.

AHL068 INVALID MACRO FORM SPECIFIED WITH MF KEYWORD

Explanation: The invocation of the SETEVENT macro specified a character other than E (for execute), L (for list), or M (for modify) on the MF keyword.

Source: Generalized trace facility (GTF)

Detecting Module: SETEVENT

System Action: The system does not expand the macro and the compilation fails.

System Programmer Response: Recode the macro with the proper form on the MF keyword and recompile.

AHL069I SYS1.PARMLIB SHOULD BE USED IN SYSLIB DD. INPUT IGNORED.

Explanation: The user has not specified SYS1.PARMLIB as input for the SYSLIB DD statement. Input is ignored.

Source: Generalized trace facility (GTF)

System Action: The SYS1.PARMLIB data set will not be used to supply the trace options to the GTF.

Operator Response: Trace options can be entered at the console.

System Programmer Response: Specify SYS1.PARMLIB as input for the SYSLIB DD statement.

AHL070I INVALID DEVICE TYPE FOR TRACE DATA SET

Explanation: The trace data set defined by the IEFRDER DD statement in the generalized trace facility (GTF) procedure is allocated with an incorrect device type. It must be allocated to a tape or direct access storage device (DASD).

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

System Action: The system abnormally ends GTF.

System Programmer Response: Ensure that the trace data set, as defined by the IEFRDER DD statement in the GTF procedure, is allocated to a tape or DASD.

AHL071I LOAD FAILED FOR MODULE *mod*, *yyy return-code*

Explanation: During generalized trace facility (GTF) initialization, a LOAD macro issued for the specified module failed.

In the message text:

mod	Name of module that could not be loaded.
yyy	Abend code associated with this message.
return-code	Reason code issued with the abend.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

System Action: The system abnormally ends GTF.

Operator Response: Restart GTF.

System Programmer Response: Refer to *OS/390 MVS System Codes* for an explanation of the abend code and the reason code.

AHL074A INCORRECT SADMP VALUE. REENTER ALL PARAMETERS OR REPLY U

Explanation: The value specified for the SADMP keyword on the START GTF command is not correct.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: The correct range for the stand-alone dump keyword is zero to 2048M-400K. Reenter all parameters, or reply **U** to request all default values.

AHL075A INCORRECT SDUMP VALUE. REENTER ALL PARAMETERS OR REPLY U

Explanation: The value specified for the SVC dump keyword on the START GTF command is not correct.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: The correct range for the SVC dump keyword is zero to the maximum amount specified by the stand-alone dump keyword. Reenter all parameters, or reply **U** to request all default values.

AHL076A INCORRECT ABDUMP VALUE. REENTER ALL PARAMETERS OR REPLY U

Explanation: The value specified for the abend dump keyword on the START GTF command is not correct.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: The correct range for the SVC dump keyword is zero to the maximum amount specified by the stand-alone dump keyword. Reenter all parameters, or reply **U** to request all default values.

AHL077A THE BUF KEYWORD IS NO LONGER VALID, IT WILL BE IGNORED

Explanation: The BUF keyword is no longer an accepted keyword for the START GTF command.

Source: Generalized trace facility (GTF)

System Action: GTF initialization continues with default values.

Operator Response: Use the stand-alone dump, SVC dump, or abend dump keyword instead of BUF. Tell your system programmer that BUF is no longer acceptable, and to replace any BUF keywords for START GTF.

AHL079I GTF NO LONGER ACCEPTS ‘TIME=NO’. GTF WILL CONTINUE WITH TIME STAMPS IN ALL OUTPUT RECORDS.

Explanation: In the EXEC statement of the cataloged procedure for the generalized trace facility (GTF), or in the START command for GTF, TIME=NO was specified in the GTF parameters.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF initialization continues. GTF disregards TIME=NO and puts time stamps in all output records.

Operator Response: When starting GTF, do not specify TIME=NO.

System Programmer Response: Remove any TIME=NO specifications from the JCL statements in the cataloged procedures for GTF.

AHL080I GTF STORAGE USED FOR GTF DATA:

GTFBLOCK STORAGE *cccc***K BYTES**
GTFBLOCK STORAGE *cccc***K BYTES (BLOK=***xxxx***)**
PRIVATE STORAGE *pppp***K BYTES**
SADMP HISTORY *ssss***K BYTES (SADMP=***xxxx***)**
SDUMP HISTORY *vvvv***K BYTES (SDUMP=***xxxx***)**
ABEND DUMP DATA *aaaa***K BYTES (ABDUMP=***xxxx***)**

Explanation: For holding generalized trace facility (GTF) data, GTF has obtained common storage and storage associated with the GTF address space. GTF will ensure that the specified amount of most recent data appears in a stand-alone dump, an SVC dump, or an ABEND or SNAP dump. These amounts may have been specified by the BLOK, SADMP, SDUMP, or ABDUMP GTF parameters; or GTF may have used defaults.

In the message text:

*cccc***K**	The number of bytes GTF has obtained from common storage.
*pppp***K**	The number of bytes GTF has obtained from the GTF address space.
*ssss***K**	The number of most recent bytes that will appear in a stand-alone dump.
*vvvv***K**	The number of most recent bytes that will appear in an SVC dump.
*aaaa***K**	The number of most recent bytes that will appear in an ABEND or SNAP dump.
xxxx	The specified or default values.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: GTF processing continues.

AHL082I GTF INTERFACE ERROR WITH TRACE WRITER, RETURN CODE=*return-code*

Explanation: An error occurred while the generalized trace facility (GTF) was writing trace data to an external data set.

In the message text:

return-code	The return code from the trace writer.

Source: Generalized trace facility (GTF)

Detecting Module: AHLBFMGR

System Action: The system issues message AHL007I and ends GTF execution.

Operator Response: Record this message and notify the system programmer.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL084I NO DD STATEMENT WAS FOUND FOR A GTF OUTPUT DATA SET.

Explanation: The JCL for the generalized trace facility (GTF) does not contain a DD statement for an output GTF data set. The ddname for an output GTF data set must either be IEFRDER or begin with the prefix GTFOUT. The ddname is incorrect or the specified data set is not acceptable to BSAM or the data set is one of the following: DUMMY data set, terminal allocation, SYSIN or SYSOUT data set.

The data set organization specified on the DD DCB parameters must be acceptable to BSAM; either PS (physical sequential) or PSU (physical sequential that contains location-dependent information).

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: The system issues message AHL016I and ends GTF processing.

System Programmer Response: Ensure that the JCL for GTF contains at least one DD statement for a GTF data set. Restart GTF.

AHL085I DYNALLOC INFORMATION RETRIEVAL FOR GTF OUTPUT DATA SETS FAILED - RETURN CODE=*return-code*, REASON CODE=*reason-code*.

Explanation: The generalized trace facility (GTF) has attempted to locate its output data sets by using the information retrieval service of dynamic allocation (SVC 99), but the DYNALLOC macro has failed.

return-code	Return code from the DYNALLOC macro in general register 15.
reason-code	Reason code from the DYNALLOC macro.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: The system issues message AHL016I and ends GTF execution.

Operator Response: Record this message and notify the system programmer.

System Programmer Response: Examine the return and reason codes specified in the message and see *OS/390 MVS Programming: Assembler Services Guide* for the DYNALLOC macro return and reason codes.

AHL088I GTF INITIALIZATION OF TRACE WRITER FAILED, RETURN CODE = *return-code*.

Explanation: The attempt by generalized trace facility (GTF) to initialize the trace writer has failed.

In the message text:

return-code	The return code from the trace writer service (in hexadecimal) as follows:

0	Initialization was successful.
8	There were no open data sets.
C	The GETMAIN operation failed.
14	The trace writer service abended.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: GTF will end after it issues message AHL016I.

System Programmer Response: Search problem reporting data bases for a fix for the problem or look in logrec for any associated abends. If no fix exists, contact the IBM Support Center and report the return code from the trace writer service.

AHL089I TOO MANY GTF OUTPUT DATA SETS - DDNAME *ddname* WILL NOT BE USED.

Explanation: The JCL for the generalized trace facility (GTF) contains DD statements for more than 16 output data sets, but GTF can use only 16.

In the message text:

ddname The ddname.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI2

System Action: GTF continues, but it will not use the data set with the ddname.

Operator Response: Record this message and notify the system programmer.

System Programmer Response: Remove the excess data sets from the JCL for GTF.

AHL091I THE SPECIFIED BLOK VALUE OF *value* IS TOO SMALL. GTF WILL USE THE MINIMUM VALUE OF 40K.

Explanation: The specified BLOK value is insufficient for the generalized trace facility (GTF) processing to work.

In the message text:

value The BLOK value.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSCAN

System Action: GTF continues, but it will use a minimum default value of 40 kilobytes for its BLOK storage.

AHL100A SPECIFY TRACE OPTIONS

Explanation: The generalized trace facility (GTF) issues this message to request that you enter trace options.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTSCN

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: Enter REPLY id,‘TRACE=option, option,...,option’ to enter the trace options your installation needs.

AHL101A SPECIFY TRACE EVENT KEYWORDS-

keywd=,...,*keywd*=

Explanation: The generalized trace facility (GTF) issues this message to request that you enter the trace event keywords that correspond to the trace options specified in response to message AHL100A. Enter only the trace event keywords that appear in the message text. The keywords and their corresponding trace options are:

IO=	IOP, SYSP
SSCH=	SSCHP, SIOP, SYSP
SIO=	SIOP, SSCHP, SYSP
SVC=	SVCP, SYSP
PI=	PIP, SYSP
CCW=	CCWP
ASID=	ASIDP
JOBNAME=	JOBNAMEP
USR=	USRP

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: To complete each keyword in the message text, enter:

R id,‘keyword=(value,...,value), ..., keyword=(value,...,value)’

AHL102A CONTINUE TRACE DEFINITION OR REPLY END

Explanation: The generalized trace facility (GTF) issues this message to allow the operator to continue or end the trace definition.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF initialization does not continue until the operator responds to this message.

Operator Response: Continue or end the trace definition. To continue the trace definition, enter:

R id,‘keyword=(value,...,value), ..., keyword=(value,...,value)’

To end the trace definition, enter:

R id,‘END’

AHL103I TRACE OPTIONS SELECTED -

keywd=(*value*),...,*keywd*=(*value*)

keywd,keywd,...,keywd

Explanation: The generalized trace facility (GTF) issues this message to describe the selected trace options, shown as *keywd,keywd,...,keywd*. The keyword(s) correspond to the trace options specified in the response to message AHL100A or in the GTF parmlib member. If prompting is in effect, the keywords also indicate values provided in the parmlib member or in response to messages AHL101A and AHL102A.

In the message text:

keywd The keyword.

value The value specified for the keyword.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLT103

System Action: GTF issues message AHL125A to allow you to accept or respecify the trace options.

Operator Response: If the values do not indicate the trace options your installation needs, you can specify the correct options in response to message AHL125A.

AHL104A TRACE= KEYWORD NOT SPECIFIED

Explanation: For the generalized trace facility (GTF), the response to message AHL100A or the control statements in the GTF parmlib member did not specify the TRACE keyword. TRACE is a required keyword.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTSCN

System Action: GTF does not accept the response or control statement. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source. If NOPROMPT is in effect, GTF terminates.

Operator Response: If GTF has not terminated, enter REPLY id,'TRACE=option,option,...,option' to enter the TRACE keyword. If GTF has terminated, restart GTF and supply the TRACE keyword. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, specify the TRACE keyword on a control statement in the GTF parmlib member and restart GTF.

AHL105A SYNTAX ERROR. IMPROPER DELIMITER

Explanation: For the generalized trace facility (GTF), a response to message AHL100A, AHL101A, or AHL102A, or a control statement in the GTF parmlib member, contains incorrect punctuation.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTSCN

System Action: GTF does not accept the response or control statement. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source. If NOPROMPT is in effect, GTF terminates.

Operator Response: If GTF has not terminated, reply to this message to correct the punctuation error. If GTF has terminated, restart GTF and supply correct information. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the punctuation error in the GTF parmlib member and restart GTF.

AHL106A NO OPTIONS SPECIFIED

Explanation: The generalized trace facility (GTF) did not detect any TRACE options in the response to message AHL100A or in any control statement provided in the GTF parmlib member. Either a blank separates the TRACE keyword from its options, or no options follow the TRACE keyword.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTSCNL

System Action: GTF does not accept the response or control statement. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source. If NOPROMPT is in effect, GTF terminates.

Operator Response: If GTF has not terminated, enter REPLY id,'TRACE=option,option,...,option' to enter the TRACE options. If GTF has terminated, restart GTF and supply the TRACE options. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, specify the TRACE options on a control statement in the GTF parmlib member and restart GTF.

AHL107A SYNTAX ERROR. MISSING COMMA

Explanation: For the generalized trace facility (GTF), a response to message AHL100A, AHL101A, or AHL102A, or a control statement in the GTF parmlib member, is missing a required comma.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF does not accept the response or control statement. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, supply the missing comma. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, supply the missing comma in the GTF parmlib member and restart GTF.

AHL108A INVALID OPTION SPECIFIED -- *opt*

Explanation: For the generalized trace facility (GTF), the response to message AHL100A or the control statements in the GTF parmlib member contained an incorrect option.

In the message text:

opt	The incorrect option.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTSCN

System Action: GTF does not accept the response or control statement. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source. If NOPROMPT is in effect, GTF terminates.

Operator Response: If GTF has not terminated, enter REPLY id,'TRACE=option,option,...,option' to correct the option. If GTF has terminated, restart GTF and supply the correct options. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, specify the correct option on a control statement in the GTF parmlib member and restart GTF.

AHL109A INVALID DEVICE SPECIFIED -- *dev*

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, specified an incorrect device number in one of the following parameters:

IO=
SSCH=
SIO=
IO=SSCH=
IO=SIO=

In the message text:

dev
The device number.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, correct the device number and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the device number in the GTF parmlib member and restart GTF.

AHL110A INVALID EVENT KEYWORD SPECIFIED

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, specified an incorrect event keyword.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, correct the event keyword and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, supply the correct keyword in the GTF parmlib member and restart GTF.

AHL111A UNBALANCED PARENTHESIS IN KEYWORD *keywd*

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, contained an unbalanced parenthesis for keyword *keywd*.

In the message text:

keywd	Keyword containing an unbalanced parenthesis.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, supply the missing parenthesis and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, supply the missing parenthesis in the GTF parmlib member and restart GTF.

AHL112A UNALLOWABLE KEYWORD FOR THE PROMPTING SEQUENCE -- *keywd*

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, contained a keyword (*keywd*) that was not specified in the TRACE options used to start the generalized trace facility (GTF).

In the message text:

keywd	Keyword is not allowed for the prompting sequence.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, specify only options noted in message AHL101A and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the error in the GTF parmlib member and restart GTF.

AHL113A LMT ERROR. EXCEEDED 256 DEVICES FOR IO=

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, specified more than 256 device numbers for the IO keyword.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, correct the IO keyword and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the IO keyword in the GTF parmlib member and restart GTF.

AHL114A LMT ERROR. EXCEEDED 256 DEVICES FOR SSCH=

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, specified more than 256 device numbers for the SSCH or SIO keyword.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, correct the SSCH or SIO keyword and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the SSCH or SIO keyword in the GTF parmlib member and restart GTF.

AHL115A INVALID INTERRUPT CODE SPECIFIED

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, specified an incorrect interruption code for the PI keyword.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, correct the interruption code in the PI keyword and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the interruption code in the PI keyword in the GTF parmlib member and restart GTF.

AHL116A INVALID {SVC|USR} NUMBER SPECIFIED

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, specified an incorrect value for the SVC or USR keyword. If SVC appears in the message text, an SVC number specified in the SVC keyword is greater than 255. If USR (user) appears in the message text, a user event number specified in the USR keyword is less than X‘000’ or greater than X‘FFF’.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, correct the SVC or USR keyword and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the SVC or USR keyword in the GTF parmlib member and restart GTF.

AHL117A LMT ERROR. EXCEEDED 50 {SVC|USR|PI} NUMBERS

Explanation: For the generalized trace facility (GTF), a response to message AHL101A or AHL102A, or a control statement in the GTF parmlib member, specified too many prompting values. Depending on the message text, one of the following is true:

SVC	The number of SVCs specified is greater than 50.
USR	The number of USRs specified is greater than 50.
PI	The number of PIs specified is greater than 50.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, correct the number of prompting values and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the number of prompting values in the GTF parmlib member and restart GTF.

AHL118I ERROR IN AHLT*xxxx yyy* [*zzzzzz*ING] DISABLED. TIME=*hh.mm.ss* [DUMP ATTEMPT {SUCCESSFUL|UNSUCCESSFUL}]

Explanation: An error has occurred in the generalized trace facility (GTF) module AHLT*xxxx* while attempting to gather data for event *yyy*.

In the message text:

AHLT*xxxx*	Module in which error occurred.
yyy	Event for which GTF was gathering data when error occurred.
*zzzzzz***ING**	Specifies whether it is the tracing or the filtering which has been disabled. If filtering has been disabled, all events of type *yyy* will be traced.

For module AHLTDIR, the error occurred while attempting to save trace data for ABDUMP/SNAP or SVCDUMP.

In the message text:

*zzzzzz***ING**	Indicates ABDUMPing for ABDUMP/SNAP or SDUMPing for SVCDUMP.
yyy	Indicates TRT.

This message also indicates whether or not GTF's attempt to take an SVC dump to record the error was successful.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTDIR

System Programmer Response: Stop GTF. Specify EXT mode, DEBUG=YES, and the same trace options specified for GTF. Enter the IPCS GTFTRACE subcommand. The input for GTFTRACE is the trace data set.

AHL119I ERROR IN GTF MODULE AHLWTASK

Explanation: During initialization of the generalized trace facility (GTF), the write to operator (WTO) function encountered an unrecoverable error.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWTASK

System Action: The system abnormally ends GTF and issues other messages.

System Programmer Response: Look at the messages in the job log. Collect all printed output and output data sets related to the problem. Obtain the logrec data set error records. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL120A INCORRECT *keyword* RANGE STARTING at *dddd*, RESPECIFY AS *xxxx-yyyy*

Explanation: For the generalized trace facility (GTF), a response to message AHL100A, AHL101A, or AHL102A, or a control statement in the GTF parmlib member, specified an incorrect range. The range specified for the IO, SSCH, or IO=SSCH keyword must be in the form *xxxx-yyyy* or *xxxx:yyyy*, and *xxxx* must be less than or equal to *yyyy*.

In the message text:

keyword
The GTF keyword IO, SSCH, or IO=SSCH.

dddd
The first four characters of the incorrect range parameter.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, correct range values and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the range values in the GTF parmlib member and restart GTF.

AHL121I TRACE OPTION INPUT INDICATED FROM MEMBER *memname* of PDS *dsname*

Explanation: The user has indicated that the trace options for the generalized trace facility (GTF) are to be provided by a member of the specified data set.

In the message text:

memname	The name of the member.
dsname	The name of the data set.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCTL1

System Action: GTF will receive trace options from the trace option data set specified and not from the system console.

AHL122I MEMBER NOT SPECIFIED. TRACE OPTION DATASET IGNORED.

Explanation: During initialization of the generalized trace facility (GTF), a member name was not found on the DD statement for the trace option data set.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCTL1

System Action: The trace option data set is not used to supply trace options to GTF.

Operator Response: Trace options must be entered by way of the master console.

System Programmer Response: Include a valid member name in the trace option data set DD statement.

AHL123I MEMBER *memname* NOT FOUND. TRACE OPTION DATASET IGNORED.

Explanation: During initialization of the generalized trace facility (GTF), the member indicated on the DD statement for the trace option data set was not found in that data set.

In the message text:

memname	The name of the member.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCTL1

System Action: The trace option data set will not be used to supply trace options to GTF.

Operator Response: Trace options must be entered by way of the master console.

System Programmer Response: Include a valid member name in the trace option data set DD statement.

AHL124I GTF TRACE OPTION DATASET INPUT ERROR

Explanation: During initialization, the generalized trace facility (GTF) found an error in the trace options specified in the trace option data set, the GTF parmlib member.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTSCN

AHLTPMT

System Action: GTF ignores the trace options specified in the GTF parmlib data set and issues an operator message to describe the error.

Operator Response: To correct the error, respond to the message that describes the error and enter trace options through the master console. Notify the system programmer.

System Programmer Response: Use the message in the job stream list to identify the error. Correct the error in the GTF parmlib member and restart GTF.

AHL125A RESPECIFY TRACE OPTIONS OR REPLY U

Explanation: During initialization, the generalized trace facility (GTF) issues this message to allow you to accept or reject the trace options GTF will use. Message AHL103I lists the trace options GTF will use.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTCTL1

System Action: The system continues processing, but GTF initialization does not continue until you respond to this message.

Operator Response: If the trace options listed in message AHL103I are not correct for your installation, specify the trace options again, beginning with TRACE. If the trace options are correct, reply **U** to continue initialization.

AHL126A ILLEGAL SPECIFICATION OF TRACE OPTIONS

Explanation: During initialization, the generalized trace facility (GTF) detected that at least one qualifier trace option was specified without the option it qualifies. The qualifier options are ASIDP, CCW, CCWP, JOBNAMEP, PCI, and TRC. These options cannot stand alone; they can only qualify other trace options.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTSCN

System Action: GTF ignores all options on the line in the response or control statement that contains the error. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In your reply to this message, enter the trace options again, correcting the problem with the qualifier options. If you are unable to resolve the error, or if the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If you can resolve the error, correct the operator response or GTF control statement that caused the error, then restart GTF. If these actions do not solve the problem, obtain the SYSOUT output for the job. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL127I GTF TRACE OPTION DATASET I/O ERROR -- *text*

Explanation: The generalized trace facility (GTF) detected an I/O error while reading the trace option data set.

In the message text:

text	Describes the error: device number, I/O operation, error condition, and access method used.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCTL1

System Action: The trace options specified on the trace option data set are disregarded.

Operator Response: Enter the trace options from the master console.

AHL128I GTF ENTRY POINT *mod* **NOT FOUND**

Explanation: A generalized trace facility (GTF) module was not found.

In the message text:

mod	The module that could not be loaded.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

System Action: The system abnormally ends GTF.

System Programmer Response: Use the linkage editor to put the missing GTF module *mod* into the system. Restart GTF.

AHL129I BLDL I/O ERROR LOADING GTF ENTRY POINT *mod*

Explanation: The generalized trace facility (GTF) could not continue initialization because of an input/output error encountered during the loading of a module.

In the message text:

mod	The module that could not be loaded.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

System Action: GTF abnormally ends.

Operator Response: Correct the input/output error. Restart GTF.

AHL130I INSUFFICIENT STORAGE FOR TRACE INITIALIZATION

Explanation: During initialization of the generalized trace facility (GTF), a shortage of virtual storage caused initialization to abnormally end.

Source: Generalized trace facility (GTF)

Detecting Module: AHLGTFI

System Action: The system abnormally ends GTF.

Operator Response: Increase the region size and restart GTF.

Note: Make sure that the buffer space is not too large.

AHL131I GTF TRACE OPTION DATASET ERROR DURING OPEN -- *nnn*

Explanation: During initialization of the generalized trace facility (GTF), an error occurred while the trace option data set was being opened.

In the message text:

nnn	The system completion code.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCTL1

System Action: Trace options will not be supplied to the GTF by the trace option data set.

Operator Response: All options must be specified from the master console.

System Programmer Response: See the system programmer response for completion code *nnn*.

AHL132I MC ROUTING FACILITY TERMINATING ON ERROR CONDITION

Explanation: The system encountered an unrecoverable error while attempting to handle monitor call processing.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSETEV

System Action: The system attempts to end GTF. The system issues other messages which indicate the exact problem.

Operator Response: If GTF is active, and does not end, the operator should stop it.

System Programmer Response: Look at the messages in the job log. Collect all printed output and output data sets related to the problem. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL133I SETEVENT UNABLE TO INITIALIZE CPU *xxx* **FOR** *yyyyyyyy*

Explanation: Initialization of a processor failed.

In the message text:

xxx	The processor that could not be initialized.
yyyyyyyy	Component attempting to initialize the processor.

Source: Generalized trace facility (GTF)

Detecting Module: AHLSETEV

System Action: All other active processors are initialized.

System Programmer Response: Collect all printed output and output data sets related to the problem. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL135A INVALID EVENT SPECIFIED FOR KEYWORD *keywd*

Explanation: For the generalized trace facility (GTF), the response to message AHL101A or AHL102A, or the control statements in the GTF parmlib member, specified an event that is not valid for the keyword shown in the message.

In the message text:

keywd	The keyword.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF does not accept the response or control statement. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In reply to this message, correct the event for the keyword and enter all options on the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the control statement in the GTF parmlib member to specify the correct keyword event, then restart GTF.

AHL136I INVALID RESPONSE TO MSG AHL125A

Explanation: During GTF initialization, the operator did not reply **TRACE=option,option,...** or **U** in response to message AHL125A.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCTL1

System Action: The system reissues message AHL125A.

Operator Response: Enter correct reply to message AHL125A.

AHL138I SIO TRACE OPTION REPLACED BY SSCH TRACE OPTION

Explanation: During generalized trace facility (GTF) initialization, GTF received a request to trace start input/output (SIO) events. In MVS/XA, the start subchannel (SSCH) event replaced the SIO event. To maintain compatibility with MVS/370 procedures, GTF accepts the SIO request and treats it as a SSCH trace option request.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTSCN

System Action: GTF initialization continues.

AHL140D RESPECIFY VALUE FOR INVALID PARAMETER *parm*

Explanation: For the generalized trace facility (GTF), a response to message AHL100A, AHL101A, or AHL102A, or a control statement in the GTF parmlib member, contains a parameter has an incorrect value.

In the message text:

parm One of the following:

CCWN	The value of CCWN (the number of CCWs traced) is greater than 512.
DATA	The value of DATA (the number of data bytes traced) is greater than 32767.
PCITAB	The value of PCITAB (the size of program controlled interrupt table) is 0 or greater than 9.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF does not accept the response or control statement. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: Reply to this message to correct the parameter value. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the parameter value in the GTF parmlib member and restart GTF.

AHL141D INVALID VALUE SPECIFIED FOR CCW KEYWORD, RESPECIFY PARAMETERS

Explanation: For the generalized trace facility (GTF), a response to message AHL100A, AHL101A, or AHL102A, or a control statement in the GTF parmlib member, contains an incorrect value. GTF issues this message for misspellings, missing commas, duplicate entries, incorrect parameter values, and the like.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all keywords and values on the response or control statement. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: In reply to this message, correct the error and enter the line again. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the control statement in the GTF parmlib member and restart GTF.

AHL142D A SPECIFIED JOBNAME IS INVALID, RESPECIFY PARAMETERS

Explanation: For the generalized trace facility (GTF), the response to message AHL101A or AHL102A, or the control statements in the GTF parmlib member, specified an incorrect job name for the JOBNAME parameter. The job name is incorrect because it contains an unacceptable character or too many characters. A valid job name is 1 to 8 characters. The characters must be alphabetic (A to Z), numeric (1 to 9 and 0), or national (#, @, and $). The first character of the job name must be alphabetic or national.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all the job names that the operator specified in response to message AHL101A or AHL102A. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: If you are entering the control statements through the system console, correct the job name error and respecify the jobnames. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the control statement in the GTF parmlib member and restart GTF.

AHL143D MORE THAN FIVE {ASIDS|JOBNAMES} SPECIFIED, RESPECIFY PARAMETERS

Explanation: For the generalized trace facility (GTF), the response to message AHL101A or AHL102A, or the control statements in the GTF parmlib member, specified more than 5 job names for the JOBNAME parameter or more than 5 address space identifiers for the ASID parameter.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all job names or address space identifiers (ASIDs) specified in response to AHL101A or AHL102A. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: If you are entering the control statements through the system console, enter the response again, specifying the correct number of job names or address space identifiers. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the control statement in the GTF parmlib member and restart GTF.

AHL144D A SPECIFIED ASID IS INVALID, RESPECIFY PARAMETERS

Explanation: For the generalized trace facility (GTF), the response to message AHL101A or AHL102A, or the control statements in the GTF parmlib member, specified an incorrect address space identifier for the ASID parameter. The ASID is not valid because of one of the following conditions:

- The ASID value contains a character that is not a valid hexadecimal character.
- The value of the ASID is greater than the largest valid ASID value. The system initialization parameter, MAXUSER, defines the largest valid ASID value.
- The ASID is 0.

Detecting Module: Generalized trace facility (GTF)

Detecting Module: AHLTPMT

System Action: GTF ignores all the address space identifiers that the operator specified in response to message AHL101A or AHL102A. The system continues processing, but GTF initialization does not continue until the error is corrected. If the error occurred in the GTF parmlib member, the system issues message AHL124I to identify the error source.

Operator Response: If you are entering the control statements through the system console, correct the ASID error and respecify the address space identifiers. If the error is in the GTF parmlib member, notify the system programmer.

System Programmer Response: If a GTF control statement caused the error, correct the control statement in the GTF parmlib member and restart GTF.

AHL145I ERROR IN JOBNAME OR ASID FILTERING, GTF TERMINATED

Explanation: An unrecoverable error occurred during initialization of the generalized trace facility (GTF).

Source: Generalized trace facility (GTF)

Detecting Module: AHLTSELF

System Action: The system abnormally ends GTF and attempts to take an SVC dump.

Operator Response: If you wish, start GTF again without JOBNAME filtering or ASID filtering.

System Programmer Response: Obtain the SYSOUT output for the job. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL146I THE EXPECTED CCW AT SCSW-8 WAS NOT FOUND DURING THE CCW SCAN, TRACING WAS FORCED

Explanation: During tracing of an input/output (I/O) interrupt by the generalized trace facility (GTF), GTF traced from the beginning of the channel program to find the channel command word (CCW) pointed to by SCSW-8 (channel status word). GTF could not find the CCW. This may happen if:

- A program controlled interrupt (PCI) disabled interrupt exit (DIE) modified the channel program.
- GTF traced the number of CCWs that the number of CCWs traced (CCWN) specified before finding SCSW-8.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCCWG

System Action: GTF traces the CCW pointed to by SCSW-8. GTF also traces the data that certain fields of the CCW pointed to by SCSW-8 reference. These fields are the data address and count fields. For further information on these fields and the data they reference, see the CCW section in *Principles of Operation*

Usually, when GTF issues this message, GTF cannot trace the entire channel program. GTF cannot tell if the traced CCW (the one pointed to by SCSW-8), is using the command code of a previous CCW. In other words, GTF cannot tell if the CCW is part of a data chain. Thus, the CCW command code may be incorrect. Because GTF cannot check the CCW command code, the I/O operation may not transfer data.

System Programmer Response: Obtain the SYSOUT output for the job. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL147I ERROR IN RECORD COUNT, THERE MAY BE LOST EVENTS

Explanation: During initialization of the generalized trace facility (GTF), a record was detected out of sequence during record formatting. The system places all channel command word (CCW) trace records into sequence. The user should scan the GTF output for a GTF lost event record.

Source: Generalized trace facility (GTF)

Detecting Module: AMDSYS07

System Action: GTF continues processing.

AHL148I THE ADDRESS OF THE CHANNEL PROGRAM IS NOT VALID. THE CHANNEL PROGRAM CANNOT BE TRACED.

Explanation: During tracing of a channel program, GTF encountered one of the following problems with the real address of the beginning of the channel program:

- The generalized trace facility (GTF) could not translate the real address into a valid virtual address.
- GTF translated the real address into a virtual address but could not translate the virtual address back to the same real address.
- The real address is not the address of a double word boundary.
- On an end-of-sense-information interrupt, the channel command word (CCW) address (the real address) in the channel status word (CSW) is zero.

You can find the real address of the beginning of the channel program in either the channel address word (CAW), the program controlled interrupt (PCI) table, the CSW, or the I/O supervisor block (IOSB).

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCCWG

System Action: GTF issues this message to the GTF trace data set as a GTF trace record. GTF writes the contents of the IOSB to the GTF trace data set. If an error recovery program (ERP) work area is present, the system writes the ERP work area to the GTF trace data set. GTF continues processing.

System Programmer Response: If the condition persists:

- Examine the start input/output (SIO) record associated with the missing CCW chain for an incorrect CCW.
- Examine the IOSB that GTF wrote to the GTF trace data set.
- Examine the logrec data set for errors in GTF modules.

AHL149I CHANNEL PROGRAM NOT COMPLETED WITHIN SPECIFIED *nnnnn* CCWS

Explanation: During initialization of the generalized trace facility (GTF), GTF could not trace the entire channel program.

In the message text:

nnnnn	The value of the number of CCWs traced (CCWN) keyword specified at GTF initialization time. If CCWN is not specified at GTF initialization time, *nnnnn* is 50, the default value.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCCWG

System Action: GTF issues this message to the trace data set as a trace record. GTF continues processing. GTF has traced *nnnnn* CCWs, which it writes to the GTF output data set. GTF also writes the input/output supervisor block (IOSB) to the GTF output data set. If an error recovery program (ERP) work area is present, GTF writes the ERP work area to the GTF output data set.

System Programmer Response: Increase the value of the CCWN keyword if you want to see more of the channel program.

AHL150I THE PCI TABLE IS FULL. TRACE USES THE ADDRESS IN IOSB AS THE CHANNEL PROGRAM START.

Explanation: A program controlled interrupt (PCI) occurred. There is no entry in the PCI table for this interrupt and there is no empty slot to make an entry for this interrupt.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCCWG

System Action: GTF issues this message to the GTF output data set as a trace record.

System Programmer Response: Increase the size of the PCI table by increasing the value of PCITAB, a CCW keyword.

AHL151I THE ADDRESS OF THE CCW IS NOT VALID. THERE IS A BREAK IN THE CCW CHAIN.

Explanation: The generalized trace facility (GTF) attempted to trace a channel command word (CCW). One of the following is true about the real address of the CCW:

- GTF could not translate the real address into a valid virtual address.
- GTF translated the real address into a virtual address but then could not translate the virtual address back to the same real address.
- The boundary of the storage location containing the real address is not a double word boundary.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCCWG

System Action: GTF issues this message to the GTF output data set as a trace record.

GTF places 8 bytes (a double word) of zeroes in the slot reserved for the CCW. GTF places the incorrect real address in the field that normally contains the CCW address. GTF writes the I/O supervisor block (IOSB) to the GTF output data set. If an error recovery program (ERP) is present, GTF writes the ERP to the GTF output data set. GTF continues processing.

System Programmer Response: Obtain the SYSOUT output for the job. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL152I DATA COULD NOT BE TRACED

Explanation: The generalized trace facility (GTF) could not trace the data associated with the current channel command word (CCW). This is because GTF could not translate the real address of the data to a virtual address or translate the virtual address back to a real address.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCCWG

System Action: GTF issues this message to the GTF output data set as a trace record.

GTF writes the input/output supervisor block (IOSB) to the GTF output data set. If an error recovery program (ERP) workarea is present, GTF writes the ERP work area to the GTF output data set. GTF continues processing.

System Programmer Response: This message may occur frequently while GTF traces the I/O activity of a paging data set. If this message occurs frequently for I/O that is not paging I/O, check logrec data set for GTF errors.

AHL153I UNABLE TO OBTAIN SENSE INFORMATION ON AN END-OF-SENSE I/O INTERRUPT

Explanation: The generalized trace facility (GTF) cannot trace the sense information because of one of the following:

- The address of the sense bytes is zero.
- CSW-8 (channel status word) does not point to a sense channel command word (CCW).

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCCWG

System Action: GTF issues this message to the GTF output data set as a trace record.

GTF traces the CCW and writes the input/output supervisor block (IOSB) to the GTF output data set. If an error recovery program (ERP) is present, GTF writes it to the GTF output data set. GTF continues processing, but ends this channel program trace.

System Programmer Response: Obtain the SYSOUT output for the job. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL154I ON AN I/O INTERRUPT, THE SCSW CONTAINS AN INVALID ADDRESS. TRACING CONTINUES AS FAR AS POSSIBLE.

Explanation: The channel command word (CCW) address in the subchannel status word (SCSW) is not valid because of one of the following:

- The generalized trace facility (GTF) could not translate the real address of the last CCW into a valid virtual address.
- GTF translated the real address of the last CCW into a virtual address but could not translate the virtual address back to the same real address.
- The CCW address is not the address of a double word.
- The CCW address is zero. This occurs when there is a simulated interrupt after a missing interrupt is detected.

Source: Generalized trace facility (GTF)

Detecting Module: AHLTCCWG

System Action: GTF issues this message to the GTF output data set as a trace record. GTF traces the channel program, as long as it finds valid CCWs or until it traces the maximum number of CCWs as specified by the CCWN parameter. GTF writes the IOSB to the GTF output data set. If an error recovery program (ERP) work area is present, GTF writes it to the GTF output data set.

System Programmer Response: Obtain the SYSOUT output for the job. Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AHL901I BLOCK SIZE *blocksize* IS TOO SMALL. TRACE WRITER WILL NOT USE DATA SET: *dsname*

Explanation: The specified block size for a generalized trace facility (GTF) data set is less than the minimum block size of 4096 bytes.

In the message text:

blocksize	The block size.
dsname	The name of the data set.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: Trace writer initialization will continue if there are other data sets to use; if there are none, the trace writer initialization ends.

System Programmer Response: Make sure that the data sets you specify for GTF output have a blocksize of at least 4096.

AHL902I INSUFFICIENT ADDRESS SPACE FOR TRACE WRITER.

Explanation: During trace writer initialization, a GETMAIN for subpool 0-127 failed.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: Trace writer initialization will be ended.

Operator Response: Record the message and notify the system programmer.

System Programmer Response: Make the necessary address space available and restart.

AHL903I TRKCALC UNSUCCESSFUL, *ddname* DD STATEMENT INVALID

Explanation: During trace writer initialization, an incorrect DD statement caused initialization to fail.

In the message text:

ddname	The incorrect ddname.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: Trace writer initialization ends.

Operator Response: Record the message and notify the system programmer.

System Programmer Response: Ensure that the DD statement for the specified *ddname* is valid.

AHL904I THE FOLLOWING TRACE DATASETS CONTAIN TRACE DATA:

Explanation: The trace data sets containing valid trace data are indicated by the data set names listed in the message. The data set names correspond to those data sets that contain trace data and have not incurred an I/O error during this trace writer invocation.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWRITE

System Action: The trace writer will end.

System Programmer Response: Note valid trace data set names for later post-processing.

AHL905I *ddname* DD STATEMENT HAS INVALID DEVICE TYPE

Explanation: During trace writer initialization, the trace data set defined by a DD statement in the generalized trace facility (GTF) procedure is allocated with an incorrect device type. It must be allocated to a tape or direct access storage device (DASD).

In the message text:

ddname	The incorrect ddname.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: Trace writer initialization will continue processing the remaining trace data sets. If none of the trace data sets are valid the trace writer will end; otherwise, the trace writer will continue processing using the valid trace data sets to contain the trace data.

Operator Response: Record message and notify system programmer.

System Programmer Response: Ensure that the trace data set, as defined by the *ddname* DD statement in the GTF procedure, is allocated to a tape or direct access storage device (DASD).

AHL906I THE OUTPUT BLOCK SIZE OF *blksize* WILL BE USED FOR OUTPUT DATA SETS: *dsname1*...*dsname16*

Explanation: This lists the output data sets that will be used by the trace writer and the single block size that will be used for each one.

In the message text:

*blksize***K**	The output block size.
*dsname1***...***dsname16*	The name(s) of the data set(s).

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: Trace writer initialization continues.

AHL907I OPEN RETURN CODE=*return-code*. TRACE WRITER CANNOT OPEN OUTPUT DATASET *dsname*

Explanation: During trace writer initialization, the trace writer tried to open the DCB for the output data set, but the OPEN was not successful.

In the message text:

return-code	The OPEN macro return code.
dsname	The data set name.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: The trace writer will not use the output data set. If the trace writer can open at least one output data set, it will continue. If the trace writer cannot open any output data set, initialization will end.

Operator Response: Record this message and notify the system programmer.

System Programmer Response: Verify that a valid output trace data set is specified in the JCL for GTF, and restart GTF. If this reoccurs, determine why the data set cannot be opened, or try another data set.

AHL908I OUTPUT DATA SETS SPECIFIED ON BOTH DASD AND TAPE. TRACE WRITER WILL USE ONLY DASD.

Explanation: The JCL for the generalized trace facility (GTF) contains DD statements for multiple output data sets, but some data sets are on direct access devices (DASD) and some are on magnetic tape. This is not supported by the trace writer.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: The trace writer will continue and use only the data sets on DASD, ignoring the tape data sets.

System Programmer Response: Remove either the DASD or the tape allocations from the JCL.

AHL909I DEVTYPE UNSUCCESSFUL, *ddname* DD STATEMENT INVALID

Explanation: During trace writer initialization, an incorrect DD statement caused processing of a trace data set to fail.

In the message text:

ddname	The ddname.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: Trace writer initialization will continue processing the remaining trace data sets. If none of the trace data sets are valid the trace writer will end; otherwise, the trace writer will continue processing using the valid trace data sets to contain the trace data.

Operator Response: Record the message and notify the system programmer.

System Programmer Response: Ensure that the DD statement for the specified DDNAME is valid.

AHL910I I/O ERROR PROCESSING DATA SET *dsname*

Explanation: The trace writer has detected an input/output error while writing to a data set.

In the message text:

dsname	The name of the data set.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWRITE

System Action: Refer to possible preceding system messages describing the problem.

Trace writer processing will continue as long as there are additional trace data sets still available. If all trace data sets are exhausted, then trace writer processing will end.

Operator Response: Record the message and notify the system programmer.

System Programmer Response: Verify that a valid trace data set has been specified for use and restart GTF. If the problem recurs, examine data set in error, or use alternative data set. The data set in error may contain valid trace data; however, the results of post processing this trace data are unpredictable.

AHL911I I/O ERROR - ABEND CODE *abc*, RETURN CODE *return-code*, DATA SET *dsname*

Explanation: The trace writer has detected an input/output error during OPEN/CLOSE/EOV processing for a data set.

In the message text:

abc	The abend code.
return-code	The return code.
dsname	The name of the data set.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWINIT

System Action: Trace writer processing will continue as long as there are additional trace data sets still available. If all trace data sets are exhausted, then trace writer processing will end.

Operator Response: Record the message and notify the system programmer.

System Programmer Response: Verify that a valid trace data set has been specified for use and restart GTF. If the problem recurs, examine data set in error, or use alternative data set. The data set in error may contain valid trace data; however, the results of post processing this trace data are unpredictable.

AHL920I **TRACE WRITER TERMINATING ON ERROR CONDITION**

Explanation: The trace writer has detected an unrecoverable error during processing and therefore must end.

Source: Generalized trace facility (GTF)

Detecting Module: AHLWRITE

System Action: The trace writer will quiesce all outstanding processing and close all data sets prior to ending.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMA Messages

AMA100I AMASPZAP PROCESSING COMPLETED

Explanation: This message occurs when SPZAP processing ends normally. It should be noted, however, that normal ending can occur despite prior failure in the processing of control statements.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The job step ends.

System Programmer Response: Check the SYSPRINT output to ensure that all control statement operations completed successfully.

AMA101I SYSLIB I/O ERROR *ddd*, *opr*, *err*, *access-method*

Explanation: An I/O error occurred when the data set defined in the SYSLIB DD statement was being accessed.

In the message text:

ddd	The device address.
opr	The operation in process.
err	The error type.
access-method	The access method in use.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The job step ends.

System Programmer Response: If VERIFY and REP control statements were part of the input stream for SPZAP, bypass either the record or control section being inspected and/or modified, and carefully check the printed output to ensure that any modifications were performed correctly. If all the modifications requested have not been performed, rerun the SPZAP program to make the necessary modifications.

AMA102I SYSLIB DD SPECIFICATION ERROR

Explanation: The data set defined in the SYSLIB DD statement does not contain the member name or physical record defined in a control statement, or the NAME statement identifies a member of a partitioned data set (PDS) that is not a load module created by the linkage editor.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: Subsequent VERIFY, REP, and SETSSI statements are ignored until a successful NAME or CCHHR operation is performed.

System Programmer Response: Correct the member name or address in the control statement or correct the DSNAME in the SYSLIB DD statement, and rerun the job. If the CONSOLE option is being utilized, the job need not be rerun; the corrected statement can be reentered in response to message AMA116A. If the volume table of contents (VTOC) is being opened for update, make sure that SPZAP resides in SYS.LINKLIB or SYS1.LPALIB with an access code of 1.

AMA103I CSECT ABSENT - ALL CSECTS FOLLOW

Explanation: A control section name defined in a control statement cannot be found in the specified member.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: All control sections of the load module are dumped. Subsequent VERIFY or REP statements are ignored until a NAME or CCHHR statement is read.

System Programmer Response: Correct the control section parameter in the control statement, and rerun the job. If the CONSOLE option is being utilized, the job need not be rerun; the corrected statement can be reentered in response to message AMA116A.

AMA104I VERIFY REJECT - SET NO GO SWITCH

Explanation: The data contained in the VERIFY statement did not agree with the data at the specified location.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: A dump of the text portion of the control section or the entire data record is printed in SYSPRINT listing. Processing continues, but all REP and SETSSI statements that follow the rejected VERIFY statement are ignored until another NAME or CCHHR statement is encountered. However, any VERIFY statements that are detected will be processed.

System Programmer Response: Check the dump output and correct either the data or offset parameter (whichever was in error in the VERIFY statement), and rerun the job.

AMA105I INVALID CARD OR NO GO SWITCH SET

Explanation: This message indicates that the requested operation cannot be performed. Either:

- The operation name or one (or more) of the parameters is not valid. For example, a parameter value might contain characters other than valid hexadecimal characters.
- An error occurred on a previous operation preventing the current operation.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: If an error occurred processing a NAME or CCHHR statement in an earlier operation, no VERIFY or REP operations will be performed until a NAME, CCHHR, DUMP, DUMPT, ABSDUMP, or ABSDUMPT statement is processed successfully. If the error occurred in a previous VERIFY or REP statement, only REP statements will be bypassed until a NAME or CCHHR statement is performed successfully.

System Programmer Response: Correct the control statement in error, then rerun the job.

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AMA106I [PATCH OVERLAPS - CHECK DUMP | ATTEMPTING TO VER/REP OUTSIDE LIMITS OF SECTION]

Explanation: One of the following conditions occurred while a VERIFY or REP operation was being performed:

For a data record, the offset specified in the control statement is beyond the end of the record containing the data to be inspected or modified. For example, OFFSET is greater than (KEYLEN + record length).

For a control section, the offset value plus the number of bytes of data specified in the control statement denotes a location that is beyond the limits of the control section. For example: (offset value + number of bytes of data) is greater than the displacement of the last byte of control section.

If the offset specified was defined in the CSECT by a DS (Define Storage) operation in the assembler, this message may be issued.

Source: SPZAP. If DFSMS/MVS 1.1 or higher is installed, IGWSPZAP.

Detecting Module: AMASPZAP

IGWSPZAP

System Action: The SPZAP program dumps the data in the control section or data record being modified or inspected, and continues processing subsequent control statements. However, any REP statements pertaining to the same NAME or CCHHR statement will be ignored.

System Programmer Response: If a REP operation was being performed on a control section when the error occurred, check the offset and data parameters.

If the offset is within the limits of the control section, but the number of bytes specified exceeds the end of the control section, the portion of data that fell within the control section will have been modified before the error was detected. Restore the data to its original form, correct the number of bytes specified in the REP statement, and perform the REP operation again.

If the offset in the REP statement exceeded the limits of the control section, then no data will have been modified. In this case, correct the offset specified in the REP statement and perform the REP operation again.

If a VERIFY operation was being performed on a control section or data record, or if a REP operation was being performed on a data record at the time the error was detected, no data will have been modified. Correct the offset or number of bytes specified in the control statement (whichever was in error), and perform the operation again.

AMA107I DS AREA NOT INCLUDED IN TEXT

Explanation: A VERIFY or REP operation was attempted, and the base value specified in a BASE statement was greater than the offset value specified in a corresponding VERIFY or REP statement.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program dumps the data in the control section being modified or inspected and continues processing. Any subsequent REP statements pertaining to the same NAME statement will be ignored.

System Programmer Response: Correct either the value in the BASE statement or the offset value given in the VERIFY or REP statement, then rerun the job.

AMA108I SYSIN SPECIFICATION ERROR

Explanation: The SYSIN DD statement is not included in the JCL.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The job step ends.

System Programmer Response: Include a SYSIN DD statement in the JCL, then rerun the job.

AMA109I ERROR - ODD NUMBER DIGITS - IGNORED

Explanation: This message occurs if the patch data, verify data or data offset specified in a VERIFY or REP control statement is not represented as an even number of hexadecimal digits.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: If the error results from an incorrect VERIFY statement, any REP statements that follow are ignored until a subsequent NAME, CCHHR, DUMP, DUMPT, ABSDUMP, or ABSDUMPT command is entered. If the error is detected in a REP statement, only that particular statement is ignored.

System Programmer Response: Make sure that an even number of hexadecimal digits is specified in the offset and data parameters in the VERIFY or REP statement, and rerun the job.

AMA110I NO DIRECTORY SSI - SETSSI IGNORED

Explanation: A SETSSI statement has been entered for a member which does not contain SSI information in its directory entry.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: No SSI information is stored; processing continues with the next control statement.

System Programmer Response: To create the SSI in the directory entry for the member:

- If a member of a load module library, re-link-edit the load module, including a SETSSI control statement.
- If a member of a macro or symbolic library, use the IEBUPDTE utility program, specifying SSI information in the ADD, REPL, CHANGE or REPRO control statement.

AMA111I PREVIOUS ERROR - SETSSI IGNORED

Explanation: Due to an error detected in a previous operation, the SETSSI operation cannot be performed.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SETSSI operation is not performed, and SPZAP continues processing subsequent control statements.

System Programmer Response: Correct the previously detected error, and rerun the job.

AMA112I MEMBER NOT FOUND - SETSSI IGNORED

Explanation: The member to which the SETSSI operation was directed could not be found in the directory of the data set specified by the SYSLIB DD statement.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program continues processing subsequent control statements.

System Programmer Response: Correct the member name in the NAME statement associated with the SETSSI command, or correct the data set name defined in the SYSLIB DD statement, and rerun the job.

AMA113I COMPLETED DUMP REQUIREMENTS

Explanation: This message is written to the SYSPRINT device following the successful completion of a DUMP, DUMPT, ABSDUMP or ABSDUMPT operation.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program continues processing remaining sequential control statements.

AMA114I PERMISSION TO UPDATE VTOC DENIED

Explanation: When SPZAP requested permission to update the volume table of contents (VTOC), the operator replied ‘N’.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: No modification to the VTOC will be performed. Processing continues with the next control statement, but any subsequent VERIFY or REP operations will be ignored.

System Programmer Response: If you intend to modify the VTOC, instruct the operator to reply ‘Y’ when SPZAP requests permission to do so. (See message AMA117D.)

AMA115I SYSIN I/O ERROR *ddd*,*opr*,*err*, *access-method*

Explanation: An I/O error that could not be corrected occurred when SPZAP attempted to read a control statement from the SYSIN data set.

In the message text:

ddd	The device address.
opr	The operation in process.
err	The error type.
access-method	The access method in use.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: Processing ends immediately. Control statements read from the SYSIN data set before the error was encountered will have been processed.

System Programmer Response: If the error condition is a wrong length record, check the blocksize specified for the SYSIN data set to be sure that it is equal to the actual size of the records in the SYSIN data set. For other error conditions, check the SYSIN DD statement for correct specifications.

AMA116A ENTER AMASPZAP CONTROL STATEMENT OR END

Explanation: When the console option is being used, this message is issued to the console each time input is required. If any errors occur in the control statements entered, the error message is printed on both SYSPRINT and the console. However, information messages and dumps are printed only on SYSPRINT.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: Processing continues.

Operator Response: If the programmer wishes to continue processing, enter a valid control statement; if the programmer wishes to end the job, enter REPLY id,‘END’.

AMA117D REPLY Y OR N TO UPDATE VTOC *volser ddd xxxxxxxx*

Explanation: SPZAP is being run by *xxxxxxxx* for the purpose of modifying or inspecting the volume table of contents (VTOC) on volume *volser*, device *ddd*. As a precautionary measure, the program requests permission for this operation.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The program stops processing until the operator enters a response.

Operator Response: If the programmer submitting this job is not authorized to perform such an operation, enter REPLY id‘N’. As a result of this negative response, SPZAP will issue message AMA114I and ignore all subsequent VERIFY and REP statements. The response REPLY id, ‘Y’ will, however, allow SPZAP to inspect and modify the VTOC.

AMA118I SYSPRINT DD NOT IN INPUT

Explanation: A SYSPRINT DD statement was not included in the SPZAP program JCL statements.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The SPZAP program ends immediately.

System Programmer Response: Include a SYSPRINT DD statement in the SPZAP program JCL, then rerun the job.

AMA119I NO IDR FOR MODULE *mod*

Explanation: SPZAP found that a load module does not include CSECT identification records (IDRs); it has not been processed by a linkage editor containing IDR support.

In the message text:

mod	The name of the load module.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program continues with normal processing.

System Programmer Response: If IDR maintenance data in the load module is desired, reprocess the module with the linkage editor that has IDR support, then rerun the SPZAP job.

AMA120I *mod* **NO IDR SPACE -- RE-LINK**

Explanation: A REP operation was to be performed on a module, but SPZAP found that no space is available in the IDR for maintenance information.

In the message text:

mod	The name of the module.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: Message will be followed by either AMA127I or AMA128I.

System Programmer Response: The indicated module must be reprocessed by the linkage editor so that the module will contain an additional IDR; then rerun the SPZAP job.

AMA121I **CCHHR UPDATE BY** *jobname* **ON** *volser***,***cchhr***,***dsname*

Explanation: SPZAP has modified a data set on a direct access device (DASD) by use of the CCHHR and REP statements. This message is automatically given as security audit information.

In the message text:

jobname	The name of the job which performed the CCHHR update.
volser	The volume serial number of the direct access device containing the modified data set.
cchhr	The device record address of the record that was modified.
dsname	The name of the modified data set.

If SPZAP input is from the system console and both CCHHR and REP statements have been processed, then this message will appear immediately after the next CCHHR, NAME, DUMP, AESDUMP, END, or incorrect statement entered.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: Normal processing continues.

Operator Response: Save the information as recommended by your installation.

AMA122I **OLD DATA WAS [***hhh***|NOT AVAILABLE]**

Explanation: A REP or SETSSI operation was performed. In the message text, *hhh* represents the data or system status index (SSI), in hex, prior to the operation.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program will process the next control statement.

System Programmer Response: If a VERIFY control statement was not used prior to the REP operation, ensure that this is the data to be replaced. Should it become necessary to restore the data or SSI to its former value, this message indicates that value.

AMA123I **SYSPRINT I/O ERROR** *ddd***,***opr***,***err***,** *access-method*

Explanation: An I/O error occurred while SPZAP was writing in the data set defined by the SYSPRINT DD statement.

In the message text:

ddd	The device address.
opr	The operation in process.
err	The error type.
access-method	The access method in use.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The job step ends.

System Programmer Response: If the REP operation was successful, rerun the job step after making sure that the associated REP and VERIFY control statements have been removed.

AMA124I **INVALID SYSLIB DCB BLOCKSIZE**

Explanation: After an OPEN, the SYSLIB DCB contained zero or a value less then the size of the block just read, in the DCBBLKSZ field.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The SPZAP program ends.

System Programmer Response: Ensure that the SYSLIB DSCB contains the correct blocksize, or specify the blocksize in the DCB parameter of the SYSLIB DD statement.

AMA125I *mod* **IDR COUNT=***nnnn* **(MAX=***mmmm***)**

Explanation: The IDR record(s) for module (*mod*), which was just updated, contains *nnnn* valid entries and *mmmm-nnnn* empty entries.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: None.

System Programmer Response: If *nnnn=mmmm*, module (*mod*) must be reprocessed by the linkage editor before any further updates. For example, if *mmmm*=19 and *nnnn* =19, additional IDR space (19 entries) can be created by re-link editing the load module (using INCLUDE).

AMA126I *mod* **(IDRs) FILLED -- RE-LINK**

Explanation: This message is issued after message AMA125I when the IDR count equals the maximum number of entries.

In the message text:

mod	The name of the module.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The system sets a return code.

System Programmer Response: The module must be reprocessed by the linkage editor before any further updates with IDR maintenance. Additional IDR space can be created by re-link editing the load module (using INCLUDE).

AMA127I **UPDATES INHIBITED (NO OVERRIDE)**

Explanation: This message is issued after message AMA120I to indicate inhibition of updates to the module because all IDR entries for that module have been filled.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: Processing continues except for rejection of REP and IDR statements for this module.

System Programmer Response: Re-link edit the module to create a new IDR, or rerun the job with IGNIDRFULL option specified.

AMA128I UPDATES ENABLED BY OVERRIDE PARM

Explanation: Follows AMA120I to indicate that the normal inhibition on CSECT updates when all IDR entries are filled has been overridden by specification of the IGNIDRFULL parameter.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: Normal processing continues, except for omission of IDR maintenance.

System Programmer Response: Re-link edit the module to create an empty IDR for resumption of IDR maintenance.

AMA129I INVALID PARAMETER SPECIFICATION

Explanation: The SPZAP program was invoked with an incorrect PARM/PARAM specification. At present, the only valid parameter string is IGNIDRFULL.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program ends.

System Programmer Response: Collect or delete the parameter specification and rerun the job.

AMA130I SYSLIB DATA SET NOT OPENED

Explanation: SPZAP was unable to open the SYSLIB data set.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program ends.

System Programmer Response: Check for absence of SYSLIB DD statement, or other cause of failure to open SYSLIB.

AMA131I *xxxxxxxx* INVALID RECORD TYPE ID

Explanation: While searching for a control record, SPZAP has encountered a record whose ID byte consists of two hexadecimal digits which are both zero or both nonzero.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The erroneous record is dumped and SPZAP ends.

System Programmer Response: Correct or regenerate the bad records.

AMA132I CHECKSUM WAS {*hhhhhhhh*|CORRECT}, IS NOW 0

Explanation: A CHECKSUM statement has been processed. The appearance of CORRECT in the text indicates that the checksum was found to be equal to the value specified in the CHECKSUM statement. The message with *hhhhhhhh* appears after a CHECKSUM statement with a blank operand field or after message AMA133I or AMA134I.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The CHECKSUM accumulator is set zero and the next control statement is read.

System Programmer Response: None for the correct case. For the no-operand case, the printed value can be inserted into the CHECKSUM statement for future runs of the same input sequence.

AMA133I CHECKSUM ERROR. NO-GO SWITCH SET

Explanation: The operand of a CHECKSUM statement was valid but was not equal to the checksum.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: The system issues message AMA132I, and reads the next control statement. The system ignores all subsequent REP and SETSSI statements until it encounters the next NAME or CCHHR statement. The results of previously processed statements are unaffected by these system actions.

System Programmer Response: Locate and correct the errors in the preceding control statements or in the computation of the value specified on the CHECKSUM statement. Note that checksumming excludes incorrect hexadecimal data and control statements.

AMA134I OPERAND ERROR. NO-GO SWITCH SET

Explanation: The operand of a CHECKSUM statement had more than or less than the required eight characters, or contained non-hexadecimal characters.

Source: SPZAP

Detecting Module: AMASZIOR

System Action: Message AMA132I is issued and the next control statement is read. REPs and SETSSIs are inhibited until the next NAME or CCHHR statement.

System Programmer Response: Correct the operand in the CHECKSUM statement.

AMA135I NO CORE TO DUMP ALL OF *member*

Explanation: SPZAP processing tried to dump all of the load modules identified in the message text, but there was not enough storage available to build an internal CSECT table. SPZAP tries to dump an entire load module in response to one of the following:

- A DUMP control statement that specifies ALL for the CSECT parameter.
- A DUMP control statement that specifies an incorrect CSECT name.
- A NAME control statement that specifies an incorrect CSECT name.

In the message text:

member	The name of the load module.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program ignores the control statement that caused the dump request. If the control statement was a NAME statement, SPZAP ignores any associated VER or REP statements. SPZAP continues processing any subsequent control statements.

System Programmer Response: Correct any incorrect CSECT names on the control statements and rerun the job, specifying a larger region size.

AMA136I FIRST 32K BYTES OF RECORD DUMPED

Explanation: During ABSDUMP processing, SPZAP encountered a record that is at least 32,767 bytes long. SPZAP cannot determine whether the record is exactly 32,767 bytes long or if the record exceeds that length. The dump displays the first 32,767 bytes of the record.

Source: SPZAP

Detecting Module: AMASZDMP

System Action: ABSDUMP processing continues.

System Programmer Response: If you want a dump of the entire record, enter a CCHHR statement for the address of the record and then intentionally fail a VERIFY request on some data in the first 32 kilobytes of the record. The system will issue message AMA104I and dump the entire record.

AMA137I LOAD FAILED FOR BLSROPTR (OP-CODE TRANSLATOR) ABEND CODE = *abend_code* **REASON CODE =** *reason_code*

Explanation: Because of a DUMPT statement, SPZAP attempted to load a module to perform op-code translation.

In the message text:

abend_code	The LOAD macro abend code.
reason_code	The reason code.

Source: SPZAP

Detecting Module: AMASPZAP

System Action: The SPZAP program processing ends.

Operator Response: Tell the system programmer about this error, and the LOAD macro codes.

System Programmer Response: Use the LOAD macro abend and reason codes to determine the error. Correct the error, and resubmit the SPZAP request.

AMA140T UNABLE TO COMPLETE OPERATION DUE TO BINDER ERROR, FUNCTION = *function_name* **, RC=** *return_code*, **RSN=** *reason_code*

Explanation: The binder function indicated in the message failed. The return code and reason code of failed function are displayed.

The severity is 16.

Source: IGWSPZAP

System Action: Subsequent VERIFY, REP, SETSSI statements are ignored until a successful NAME or CCHHR operation is encountered.

User Response: Report any non-user errors.

System Programmer Response: Check for the binder-related problem.

AMA142I A SECTION NAME MUST BE SUPPLIED FOR A PROGRAM OBJECT

Explanation: A control section name is not supplied in a control statement to perform REP on a program object.

The severity is 08.

Source: IGWSPZAP

System Action: Subsequent VERIFY, REP, SETSSI statements are ignored until a NAME or CCHHR statement is encountered.

User Response: Provide correct control section name in the control statement.

System Programmer Response: Execute AMBLIST Service Aids or other program to determine control section names in a program object.

AMA143I IDRDATA IGNORED

Explanation: This message indicates that the user specified IDRDATA is ignored because the REP operation was not successfully performed.

The severity is 00.

Source: IGWSPZAP

System Action: The IDRDATA statement is ignored. The system continues processing.

User Response: Correct the REP statement.

System Programmer Response: Check for presence and successful completion of REP statement preceding IDRDATA statement.

AMA144I COMMAND OUT OF PROPER SEQUENCE

Explanation: This message indicates that the requested operation cannot be performed due to absence of a required operation prior to this operation.

It may be received when BASE statement is not immediately preceded by a NAME statement or when BASE statement is invalid for the kind of data set being processed.

The severity is 08.

Source: IGWSPZAP

System Action: The statement is ignored.

User Response: Correct the prior failing statement.

System Programmer Response: Check for presence of a required VERIFY, REP, NAME, CCHHR or other statement prior to this statement.

AMA145I SETSSI ERROR. NO-GO SWITCH SET

Explanation: The SSI information in SETSSI statement had more or less than the required eight hex digits.

The severity is 08.

Source: IGWSPZAP

System Action: Message AMA125I is issued for the previous successful REP statement. REP, SETSSI, IDRDATA which follow are inhibited until the next NAME or CCHHR statement.

User Response: Correct the SSI information in the SETSSI statement.

System Programmer Response: Check the length and the content of SSI information in the SETSSI statement.

AMA148I MEMBER DOES NOT CONTAIN REQUESTED SECTION

Explanation: The CSECT name specified on the previous NAME statement was not found in the requested member.

The severity is 8.

Source: IGWSPZAP

System Action: A dump of the entire member is printed. Subsequent VERIFY, REP, and SETSSI statements are ignored until a NAME or CCHHR control statement is encountered.

User Response: Check the dump output and change the CSECT name or member name, whichever is appropriate, in the failing control statement.

AMA149I OFFSET TO SECTION IS GREATER THAN SIZE OF BLOCK READ INTO BUFFER

Explanation: The offset of the csect being dump is beyond the record length of the data set.

The severity is 08.

Source: IGWSPZAP

System Action: The program continues processing subsequent control statements.

User Response: Correct the control section of the load module.

System Programmer Response: Dump the specific control section or the entire load module using DUMP(T) statement to verify the load module. Run AMBLIST Service aid or other utility program to validate the load module.

AMA150I SYSLIB CONTAINS NO MEMBERS.

Explanation: The data set defined in the SYSLIB DD statement is empty.

The severity is 04.

Source: IGWSPZAP

System Action: Subsequent statements are ignored until a CCHHR statement is encountered.

User Response: Correct SYSLIB DD statement and resubmit the job.

System Programmer Response: Verify that the data set contain members by running IEHLIST program with LISTPDS control statement or other utility programs.

AMA151I MEMBER NOT FOUND IN SYSLIB.

Explanation: The data set defined in the SYSLIB DD statement does not contain the member name defined in a control statement.

The severity is 04.

Source: IGWSPZAP

System Action: Subsequent VERIFY, REP, and SETSSI statements are ignored until a NAME or CCHHR statement is encountered.

User Response: Correct the member name in the control statement or correct the DSNAME in the SYSLIB DD statement, and rerun the job.

System Programmer Response: Verify that the member does exist in the specified library.

AMA152I NO TEXT DATA FOR REQUESTED CLASS FOR THIS SECTION.

Explanation: The program management binder class-name associated with this DUMP or DUMPT request contained no data. The severity is 8.

Source: IGWSPZAP

System Action: Processing continues with the next CSECT, if any.

User Response: This is a normal condition if the dump request specified a class-name that is valid but happens to contain no data in the CSECT indicated. It is also possible that the class-name requested did not exist in the member or CSECT indicated.

AMA153I WARNING! MULTI-VOLUME DATASET FOR SYSLIB IS NOT SUPPORTED

Explanation: Only the data from the first volume of the multi-volume non-pdse load module for SYSLIB will be displayed using DUMP(T) or ABSDUMP(T) command.

The severity is 08.

Source: IGWSPZAP

System Action: The program continues with normal processing.

User Response: None

System Programmer Response: Check for number of volumes allocated for the SYSLIB data set.

AMA154T BUFFER SPACE NOT AVAILABLE - INCREASE REGION SIZE

Explanation: The IGWSPZAP or binder was unable to obtain necessary GETMAIN storage.

The severity is 16.

Source: IGWSPZAP

System Action: The job or the step specifying the region size is terminated.

User Response: Increase the region size and resubmit the job.

System Programmer Response: Verify that the specified IGWSPZAP REGION value is at least set to the value recommended in *OS/390 MVS Diagnosis: Tools and Service Aids*.

AMA155I IGWSPZAP DOES NOT SUPPORT EXTENDED SEQUENTIAL DATASETS.

Explanation: The SYSLIB data set cannot be an Extended Sequential data set.

The severity is 12.

Source: IGWSPZAP

System Action: The program terminates immediately.

User Response: None

System Programmer Response: Check SYSLIB data set.

AMA158I INVALID CONTINUATION TO A COMMENT

Explanation: A control statement contained a non-blank value in column 72, but the next record in the SYSIN data set started with the character "*".

The severity is 4.

Source: IGWSPZAP

System Action: Processing of this control statement will be terminated and the next control statement will be read.

User Response: Change the control statement so that it continues to a valid continuation statement that will complete the parameter that was being continued.

AMA159I ABSDUMP/ABSDUMPT NOT SUPPORTED FOR PROGRAM OBJECTS

Explanation: ABSDUMP and ABSDUMPT functions are not supported for Binder program objects.

The severity is 8.

Source: IGWSPZAP

System Action: Processing of this control statement will be terminated.

User Response: Change the control statement to use either DUMP or DUMPT as appropriate.

AMA160I PREVIOUS LINE CONTINUED, BUT END-OF-FILE ENCOUNTERED

Explanation: A control statement contained an non-blank character in column 72, but there were no more records in the SYSIN data set.

The severity is 4.

Source: IGWSPZAP

Detecting Module: IGWZAP01

System Action: Processing of this control statement will be terminated and IGWSPZAP will terminate normally.

User Response: Change the last statement to remove the non-blank value in column 72. If the statement was to be continued, supply the continued statement and resubmit the job.

AMA161I INVALID HEX DATA, NO GO SWITCH SET

Explanation: A field containing hexadecimal data on the card either:

1. Started or ended with a comma (",")
2. Contained two successive commas (",,")
3. Contained a character other than 0 through 9 and A through F

The severity is 8.

Source: IGWSPZAP

System Action: Processing of this control statement will be terminated.

User Response: Change the control statement to supply a valid hexadecimal string.

AMA162I HEX DATA IS LONGER THAN MAXIMUM, NO GO SWITCH SET

Explanation: A field containing hexadecimal data on the control statement exceeded 71 characters, including any embedded commas.

The severity is 8.

Source: IGWSPZAP

System Action: Processing of this control statement will be terminated.

User Response: Change the control statement to supply a valid hexadecimal string less than 72 characters in length.

AMA163I PREVIOUS GROUP ENDED, ASSOCIATED MESSAGES FOLLOW:

Explanation: A control statement that begins a new group has been encountered (NAME, DUMP, DUMPT, CCHHR, end-of-file, or an invalid statement) and the previous control statement group needs to complete processing. Any mes- sages associated with this processing will be listed fol- lowing this message. The most common message is AMA125I.

Source: IGWSPZAP

System Action: Processing continues normally.

User Response: None - this message is simply to indicate that any messages that follow should be associated with the control statement group just ended, not for the control statement this message immediately follows. Message AMA164I will be displayed after the last message for the previous group.

AMA164I END OF MESSAGES FOR PREVIOUS GROUP

Explanation: After the last message is written for the completion of processing of a previous group, this message is displayed. It indicates any messages from this point on refer to the processing of the group whose control statement precedes message AMA163I.

Source: IGWSPZAP

System Action: Processing continues normally.

User Response: None - this message indicates that any messages that follow are associated with the processing of the control statement group that starts with the statement before message AMA163I.

AMB Messages

AMB101I ESD CONTAINS INVALID DATA

Explanation: A list service aid encountered either an incorrect ESD type or an incorrect ESDID.

Source: List service aids

Detecting Module: HMBLKXRF

System Action: If the LISTOBJ function of AMBLIST is being used, the incorrect control statement is printed and processing continues. Otherwise, processing ends for this operation.

System Programmer Response: Recompile the modules, and rerun the job. If the problem occurred during processing of LISTOBJ, run the LISTIDR function of AMBLIST to determine which compiler processed the module. If the problem occurred during processing of LISTLOAD, run the LISTIDR function of AMBLIST to determine which linkage editor produced the load module.

AMB102I INVALID [LOAD/OBJECT] RECORD

Explanation: A list service aid detected an undefined record type in the load/object records. For object records, byte positions do not contain any of the following types: ESD, SYM, TXT, RLD, or END. For load module records, the hexadecimal code in the first byte of the record is incorrect or undefined.

Source: List service aids

Detecting Module: HMBLKOBJ

System Action: If the record in question is from an object module, it will be printed. Processing will continue. If the record in question is from a load module, processing will end for the current control statement and resume with the next.

System Programmer Response: List the load module using the IEBPTPCH data utility specifying PRINT TOTCONV=XE to determine the nature of the faulty record. If it has been incorrectly modified, restore it to its correct format.

Run the list service aid program to obtain IDR listings for the module and for all programs which may have modified it.

AMB103I RLD POINTER INVALID

Explanation: A list service aid encountered an incorrect R or P pointer in the relocation dictionary (RLD).

Source: List service aids

Detecting Module: HMBLKXRF

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Re-link edit the program and rerun the job.

Run the LISTOBJ function to determine which linkage editor or language translator produced the bad R or P pointer. Run LISTIDR for IDR data, showing if SPZAP has been run for the module, when and what translators were used, and other user supplied data.

AMB104I TABLE OVERFLOW, ENLARGE REGION SIZE AND RERUN

Explanation: The list service aids table capacities were exceeded because the partition size was insufficient.

Source: List service aids

Detecting Module: HMBLKXRF

System Action: The operation ends; processing continues with the next control statement.

System Programmer Response: Enlarge the partition size, and rerun the job.

Run the IEBPTPCH utility program specifying PRINT TOTCONV=XE to list the module being processed by the list service aid.

AMB105I *ddname* DOES NOT DEFINE LOAD MODULE LIBRARY

Explanation: The name specified by the DDN parameter on a list service aid control statement or by the default DDNAME on the SYSLIB DD statement is not the name of a load module library.

In the message text:

ddname The name in error.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Make sure that the library referenced by the list service aid control statement or by the SYSLIB DD statement contains load modules, or change the control statements indicating the proper library type. Rerun the job.

AMB106I MODULE IS NOT EDITABLE, NO XREF PROVIDED

Explanation: When the associated module was link edited, the not editable attribute of the linkage editor was specified. The module, therefore, does not contain the CESD, and no XREF can be provided.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Recreate the load module from its associated object module. Do not specify the not editable attribute. Rerun the job.

AMB107I I/O ERROR ON READ

Explanation: An I/O error that could not be corrected was encountered while a list service aid was reading input.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Be sure the data set is defined correctly in the control statement.

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AMB108I MEMBER NOT FOUND

Explanation: The member name or alias name specified by the MEMBER parameter on a list service aid control statement was not found in the indicated library.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: List the directory of the referenced library using the LISTPDS function of the IEHLIST utility. Rerun the job.

AMB109I I/O ERROR READING PDS DIRECTORY

Explanation: An I/O error that could not be corrected occurred while list service aids was reading the directory of a partitioned data set (PDS).

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with the next control statement.

AMB110I DDNAME DOES NOT DEFINE OBJECT MODULE DATA SET

Explanation: A list service aid attempted to process as an object module, a data set or member defined by the DDN parameter or by the operands on the LISTOBJ control statement. However, the data set or member is not an object module.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: The operation ends; processing continues with the next operation.

System Programmer Response: Make sure that the module to be processed is an object module. Rerun the job.

AMB111I *dsname* CANNOT BE OPENED

Explanation: The specified data set cannot be opened. The DD statement defining that data set may be missing.

In the message text:

dsname The name of the data set.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends if *ddname* is SYSIN or SYSOUT; otherwise, processing continues with the next control statement.

System Programmer Response: Make sure that the JCL for the step includes a DD statement that properly defines the data set. Run the LISTVTOC function of the IEHLIST utility to obtain a list of the volume table of contents of the volume containing the data set.

AMB112I LOAD MODULE DOES NOT CONTAIN CSECT IDENTIFICATION

Explanation: The load module specified on the LISTIDR control section does not contain any CSECT identification records.

Source: List service aids

Detecting Module: HMBLKIDR

System Action: No IDR listings are produced. Processing continues with the next operation.

System Programmer Response: Re-link edit the load module using a linkage editor which contains IDR support, and rerun the job.

AMB113I IDR INFORMATION IS INCOMPLETE

Explanation: The last CSECT identification record found in this load module is not marked with an “end of IDR data” flag.

Source: List service aids

Detecting Module: HMBLKIDR

System Action: Processing continues.

System Programmer Response: Make sure that no IDR data has been lost. Re-link edit the module using a linkage editor which contains IDR support, and rerun the job.

AMB114I THE CSECT NAME ASSOCIATED WITH AN IDR ENTRY CANNOT BE FOUND

Explanation: The ESD ID on an IDR data entry did not match any ID in the CESD of the load module being processed.

Source: List service aids

Detecting Module: HMBLKIDR

System Action: Processing of this operation ends. Processing continues with the next operation.

System Programmer Response: Make sure that the IDR data for this load module has not been altered. If it has been altered, correct it and rerun the job.

AMB115I BUFFER SPACE NOT AVAILABLE - INCREASE REGION SIZE

Explanation: A list service aid buffer space was exceeded because the region size was insufficient.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Enlarge the partition size and rerun the job.

AMB117I INVALID DIRECTORY BLOCK

Explanation: A list service aid encountered a directory block that was not 256 bytes long.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: The operation ends; processing continues with the next control statement.

System Programmer Response: Examine the DD statement for the data set currently being processed and make certain that a member name was not specified in the DD statement. If one was, correct the DD statement and resubmit the job.

AMB119I INVALID LOAD MODULE: NO CESD RECORDS FOUND, LOAD MODULE MARKED EDITABLE

Explanation: The load module specified on the LISTDIR control statement does not contain any CESD records, but was marked editable.

Source: List service aids

Detecting Module: HMBLKIDR

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Recreate the load module from its associated object module. Rerun the LISTDIR.

AMB120I EXPECTED CONTINUATION CARD NOT FOUND

Explanation: A list service aid control statement indicated continuation (a comma was found after the last operand); however, it is not followed with proper continuation.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation.

System Programmer Response: Check all list service aid control statements for valid continuation statements. Rerun the job.

AMB121I INVALID CONTROL STATEMENT

Explanation: A list service aid control statement is incorrect because it contains an incorrect operation, an embedded blank, or it begins in column 1.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Make sure the list service aid control statements are specified correctly. Then rerun the job.

AMB122I INVALID OPERAND NEAR CARD COLUMN INDICATED BY $

Explanation: An error has occurred in a list service aid control statement near the statement column location indicated by the $.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Make sure the list service aid control statements are specified correctly. Then rerun the job.

AMB123I CLOSE QUOTE OR PAREN NOT FOUND, OR KEYWORD VALUE EXCEEDS COL 71

Explanation: Quotation mark or closing parenthesis is missing on a list service aid control statement, or the value for a keyword runs past column 71.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: Processing ends for this operation and continues with next control statement.

System Programmer Response: Check the list service aid control statements for unbalanced quotation marks and parentheses or for operands that run past column 71. Resubmit the job.

AMB124I NUMBER OF MEMBER NAMES EXCEEDS 32 NEAR COLUMN INDICATED BY $

Explanation: The number of member names specified on a list service aid control statement exceeds the limit, 32. The column where this error was detected is flagged by a $.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: The extra member names are ignored, and processing continues.

System Programmer Response: Use two or more list service aid control statements to list the member names.

AMB125I IMPROPER OPERAND NEAR COLUMN INDICATED BY $

Explanation: An incorrect operand has been detected in the list service aid control statement. Its location is indicated by $.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: The operand is ignored. Processing continues.

System Programmer Response: Make sure the list service aid control statements are specified correctly; then rerun the job.

AMB126I IMPROPER OPTION NEAR COLUMN INDICATED BY $ LOCATION

Explanation: An option specified in the list service aid control statement is not valid; its location is indicated by $.

Source: List service aids

Detecting Module: HMBLKCTL

System Action: The default value was assumed; processing continues.

System Programmer Response: Check the validity of the options specified on the list service aid control statement. Correct the errors and rerun the job.

AMB127I RELOC OPERAND INVALID WHEN MAPPING NUCLEUS - OPERAND IGNORED

Explanation: The RELOC operand is not compatible with mapping of a nucleus.

Source: List service aids

Detecting Module: HMBLKXRF

System Action: Processing continues without relocation.

AMB128I NUCLEUS NOT MARKED SCTR - STANDARD XREF PROVIDED

Explanation: The nucleus is not marked SCTR.

Source: List service aids

Detecting Module: HMBLKXRF

System Action: Processing continues as if the nucleus was not intended for use as a nucleus.

System Programmer Response: If the program being mapped is not intended for use as a nucleus, no programmer response is necessary. If the program is intended for use as a nucleus, the program must be reprocessed by the linkage editor using the SCTR option. Then rerun the list service aid program to obtain the correct nucleus map.

AMB129I IMPROPER CESD SEQUENCE IN NUCLEUS - STANDARD XREF PROVIDED

Explanation: IEAANIPO and IEAQFX00 are not the first two CSECTs in the composite external symbol dictionary (CESD). This is a normal message for MVS/XA Version 2 and higher systems.

Source: List service aids

Detecting Module: HMBLKXRF

System Action: The DAT-on nucleus is processed as if it were a standard load module. The DAT-off part of the nucleus is not mapped.

System Programmer Response: This is a normal message for MVS/XA Version 2 and higher systems. The NUCMAP verb in IPCS will map the entire nucleus. AMBLIST no longer supports mapping of IPL IEANUC01. This message is expected.

AMB130I NUCLEUS REQUESTED FOR OUTPUT=XREF IS NOT THE NUCLEUS THAT WAS IPL

Explanation: The nucleus is not the nucleus that was loaded.

Source: List service aids

Detecting Module: HMBLKXRF

System Action: Processing continues.

AMB131I Load module does not contain any CESD records

Explanation: The load module specified on the LISTIDR control statement does not contain any CESD records. Possibly, the not editable attribute of the linkage editor was specified, the module, therefore does not contain IDR records.

Source: List service aids

Detecting Module: HMBLKIDR

System Action: Processing ends for this operation and continues with the next control statement.

System Programmer Response: Recreate the load module from its associated object modules without the not editable attribute. Return the LISTDIR.

AMB132I BINDER START DIALOG ERROR. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder START DIALOG function.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes.

System Programmer Response: If the problem recurs, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB133I INTERNAL LOGIC ERROR. LISTIDR REQUEST CANNOT BE PROCESSED.

Explanation: AMBLIST has detected an internal logic error.

Source: AMBLIST

Detecting Module: HMBLBIDR

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: Report this problem to your system programmer.

System Programmer Response: Search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMB134I DIRECTORY SERVICES ERROR. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: An error was encountered while attempting to obtain directory entries for a program object.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated DIRECTORY SERVICES return code.)

User Response: Report this problem to your system programmer.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB135I INVALID HMBIPARM VERSION NUMBER

Explanation: An incorrect version of the AMBLIST input parameter list is detected.

Source: AMBLIST

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 12.)

User Response: Report this problem to your system programmer.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMB136I INVALID PDSE PROGRAM LIBRARY: *library_name*

Explanation: An unexpected internal error occurred while attempting to obtain directory entries. The indicated library is expected to be a program object.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: Report this problem to your system programmer.

System Programmer Response: Search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMB137I **BINDER CREATE FAILED. RETURN CODE =** *return_code***, REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder CREATE WORKMOD function, with the indicated program management return and reason codes.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB138I **ISITMGD MACRO ERROR. RETURN CODE =** *return_code***, REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the macro ISITMGD - IS IT Managed, with the indicated ISITMGD return and reason codes.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: See *DFSMS/MVS Macro Instructions for Data Sets* regarding module IGWCIMGD for meaning of return and reason codes.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB139I **BINDER INCLUDE FAILED. RETURN CODE =** *return_code***, REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder INCLUDE function with the indicated program management return and reason codes.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB140I **PDSE MEMBER NAME LONGER THAN 64 CHARACTERS:** *member_name*

Explanation: Member name or alias name exceeds the 64 bytes limitation for a program object. Up to 64 characters member name or alias name was printed.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: If the member name is too long, shorten the name specified and rerun the job.

AMB141I **BINDER GETE FAILED. RETURN CODE =** *return_code***, REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder GETESD function with the indicated program management return and reason codes.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

AMB142I **USER DATA ENCOUNTERED IN PDSE MEMBER:** *member_name*

Explanation: While processing a program object, AMBLIST encountered user data in the indicated PDSE member name.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: The member is not processed. (The AMBLIST return code is 8.)

User Response: Make sure member name is a program object. Rerun the job.

AMB143I **BINDER GETN FAILED. RETURN CODE =** *return_code***, REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder GETNAMES function with the indicated program management return and reason codes.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB144I PDSE MEMBER NOT FOUND: *member_name*

Explanation: The PDSE member name or PDSE alias name specified by the member parameter on the AMBLIST control statement was not found in the indicated library.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: To verify the member name, list the directory of the referenced library using the LISTPDS function of IEHLIST utility.

AMB145I NO CSECT NAMES FOR THIS PROGRAM OBJECT: *program_object_name***. RETURN CODE =** *return_code***, REASON CODE =** *reason_code*

Explanation: While processing the zap data for this LISTIDR control statement, no CSECT names were found for the indicated module.

Source: AMBLIST

Detecting Module: HMBLBIDR

HMBLBXRF

System Action: Processing of the current operation terminates. Processing continues with the next operation. (The AMBLIST return code is 8.)

User Response: Make sure that the indicated program object contains some ESDs. Rerun the job after appropriate correction.

AMB146I NO MEMBERS IN THE DIRECTORY POINTED BY *library_name*

Explanation: AMBLIST has detected a failure in DIRECTORY SERVICES, specifically, there are no members in the directory. No program objects were found in the name specified by the DDN parameter on the AMBLIST control statement or by the default ddname on the SYSLIB DD statement.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is DESERV return code.)

User Response: Make sure that the PDSE library referenced by AMBLIST control statement or by the SYSLIB DD statement contains program objects, or change the control statement indicating the proper library type. Rerun the job.

AMB148I MODLIB IS INCOMPATIBLE WITH MEMBER OR OUTPUT OPTION

Explanation: The AMBLIST OUTPUT= or MEMBER= parameters cannot be specified with the MODLIB parameter on the LISTIDR control statement.

Source: AMBLIST

Detecting Module: HMBLBPAR

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: If MODLIB is intended, remove the OUTPUT= or MEMBER= parameters. Rerun the job.

AMB149I BINDER GETD FAILED FOR ZAP DATA. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: While processing the Zap data, AMBLIST has detected a failure from the binder GETDATA function with the indicated return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBLDM, HMBLBIDR

System Action: Processing terminates for this operation and continues with next operation. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes.

Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB150I BINDER GETD FAILED FOR SYMBOL DATA. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: While processing the symbol data, AMBLIST has detected a failure from the binder GETDATA function with the indicated binder return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

AMB151I BINDER GETD FAILED FOR BINDER DATA. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder GETDATA function while reading the binder data, which contains the binder ID, Version/Modification level, Date, Time bound...

Source: AMBLIST

Detecting Module: HMBLBLDM, HMBLBIDR, HMBLBXRF

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB152I **BINDER GETD FAILED FOR ESD DATA. RETURN CODE =** *return_code*, **REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder GETDATA function while reading the ESD data.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB153I **BINDER GETD FAILED FOR TRANSLATION DATA. RETURN CODE =** *return_code*, **REASON CODE =** *reason_code*

Explanation: While processing the Translation data, AMBLIST has detected a failure from the binder GETDATA function with the indicated return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBLDM, HMBLBIDR

System Action: Processing terminates for this operation and continues with next operation. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB154I **BINDER GETD FAILED FOR RLD DATA. RETURN CODE =** *return_code*, **REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder GETDATA function while reading the RLD data.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB155I **BINDER GETD FAILED FOR IDENTITY DATA. RETURN CODE =** *return_code*, **REASON CODE =** *reason_code*

Explanation: While processing the Identity/User data, AMBLIST has detected a failure from the binder GETDATA function with the indicated return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBLDM, HMBLBIDR

System Action: Processing terminates for this operation and continues with next operation. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB156I **BINDER GETD FAILED FOR TEXT DATA. RETURN CODE =** *return_code*, **REASON CODE =** *reason_code*

Explanation: While processing the Text, AMBLIST has detected a failure from the binder GETDATA function with the indicated return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing terminates for this operation and continues with next operation. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB157I **BINDER DELTEW FAILED. RETURN CODE =** *return_code*, **REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder DELETE WORKMOD function, with the indicated program management return and reason codes.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB158I BUFFER IN ERROR EXCEEDS 16K BYTES LIMIT.

Explanation: While processing the return ESD or RLD buffer from the binder GETESD or GETDATA function call, an incorrect value is encountered. In an attempt to dump the buffer in error, the requested buffer size exceeds the 16K bytes limitation.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB159I BINDER GETE FAILED FOR PSEUDO REGISTER DATA. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: While processing the Pseudo Register data, either numerical or alphabetical cross-reference, AMBLIST has detected a failure from the binder GETESD function with the indicated return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBLDM, HMBLBXRF

System Action: Processing terminates for this operation and continues with next operation. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB160I INTERNAL LOGIC ERROR. INVALID AMBLIST INPUT PARAMETER LIST FOR *module_id*

Explanation: An unexpected internal error occurred. An incorrect parameter list has been passed to the indicated module. This member will not be processed.

Source: AMBLIST

System Action: Processing terminates for this operation and continues with the next operation. (The AMBLIST return code is 12.)

User Response: Report this message to your system programmer.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the module name and the output from the failing job.

AMB161I BINDER GETE FAILED FOR CONTROL SECTION OR LABEL DEFINITION DATA. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: While processing the ESD numerical cross-reference data, and in reading the control section or label definition associated with this ESD, AMBLIST has detected a failure from the binder GETESD function, with the indicated return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBXRF, HMBLGETR

System Action: Processing terminates for this operation and continues with next operation. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB162I BINDER GETE FAILED, SYMBOL NOT FOUND. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: While processing the ESD/RLD Numerical/Alphabetical Xref, AMBLIST has detected a failure from the binder GETESD function with the indicated return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBXRF, HMBLGETR

System Action: Processing terminates for this operation and continues with next operation. (The AMBLIST return code is the indicated binder return code.)

Possibly in retrieving all ESD/RLDs associated with the binder input, SYMBOL, was not found.

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the module name.

AMB163I BINDER FAILED WHILE PROCESSING RLDS. RETURN CODE = *return_code***, REASON CODE =** *reason_code*

Explanation: While processing the RLD numerical/alphabetical cross-reference data, AMBLIST has detected a failure in either the binder GETESD or GETDATA function, with the indicated return and reason codes.

Source: AMBLIST

Detecting Module: HMBLBXRF

System Action: Processing terminates for this operation and continues with next operation. (The AMBLIST return code is the indicated binder return code.)

User Response: Use the IGWSPZAP program to zap the module_id to find out which binder GET function reported the error. See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB164I **BINDER RESETW FAILED. RETURN CODE =** *return_code***, REASON CODE =** *reason_code*

Explanation: AMBLIST has detected a failure from the binder RESET WORKMOD function, with the indicated program management return and reason codes.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB165I **LONG NAME FOUND AND IGNORED NAME:** *member_name*

Explanation: Either a primary or alias name longer that is supported on this level of DFSMS system has been encountered and ignored by DIRECTORY SERVICES. This is most likely an PDSE program object library where some were created on a DFSMS 1.3 or later system that contains long primary or alias name.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing continues.

User Response: Make sure the length of the listed member name (primary or alias) is within limit on this level of DFSMS system, and this is a version one program object.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMB166I **PDS MEMBER NAME LONGER THAN 8 CHARACTERS:** *load_module_name*

Explanation: Member name or alias name exceeds the 8 bytes limitation for a PDS load module. Up to 8 characters member name or alias name is printed.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: If the member name is too long, shorten the name specified and rerun the job.

AMB167I **INSUFFICIENT STORAGE TO PROCESS THIS PSDE PROGRAM LIBRARY - INCREASE REGION SIZE FOR** *module_id*

Explanation: The AMBLIST PDSE buffer space was exceeded because the region size was insufficient.

Source: AMBLIST

Detecting Module: HMBLKCTL, HMBLBLDM, HMBLBIDR, HMBLBXRF

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: Verify that the specified AMBLIST REGION value is at least set to the value recommended in *OS/390 MVS Diagnosis: Tools and Service Aids*. Increase the region size and rerun the job.

AMB168I **AMBLIST LOGIC ERROR**

Explanation: While processing the Text data, a possible logic error is encountered, either in the BINDER GETD function call or AMBLIST. Since one of the two components has encountered more text data than the actual section length.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: Contact your system programmer.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the module name and the output from the failing job.

AMB169I **INVALID ESD TYPE. DUMP OF ESD ENTRY FOLLOWS.**

Explanation: An ESD record was found that did not contain a valid ESD type. A dump of the ESD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the ESD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 8.)

User Response: Examine the output dump of the ESD entry in error, and verify the ESD type. Rerun the job after appropriate correction.

AMB170I **INVALID ESD STATUS. DUMP OF ESD ENTRY FOLLOWS.**

Explanation: An ESD record was found that did not contain a valid ESD status. A dump of the ESD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the ESD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the ESD entry in error, and verify the ESD status. Rerun the job after appropriate correction.

AMB171I **INVALID ESD AUTOCALL. DUMP OF ESD ENTRY FOLLOWS.**

Explanation: An ESD record was found that did not contain a valid ESD autocall. A dump of the ESD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the ESD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the ESD entry in error, and verify the ESD autocall. Rerun the job after appropriate correction.

AMB172I INVALID ESD AMODE. DUMP OF ESD ENTRY FOLLOWS.

Explanation: An ESD record was found that did not contain a valid ESD amode. A dump of the ESD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the ESD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the ESD entry in error, and verify the ESD amode. Rerun the job after appropriate correction.

AMB173I INVALID ESD ALIGNMENT. DUMP OF ESD ENTRY FOLLOWS.

Explanation: An ESD record was found that did not contain a valid ESD alignment. A dump of the ESD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the ESD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the ESD entry in error, and verify the ESD alignment. Rerun the job after appropriate correction.

AMB174I INVALID RLD ADCON DIRECTION. DUMP OF ESD ENTRY FOLLOWS.

Explanation: An RLD record was found that did not contain a valid RLD adcon direction. A dump of the RLD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the RLD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the RLD entry in error, and verify the RLD adcon direction. Rerun the job after appropriate correction.

AMB175I INVALID RLD TYPE. DUMP OF RLD ENTRY FOLLOWS.

Explanation: An RLD record was found that did not contain a valid RLD type. A dump of the RLD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the RLD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the RLD entry in error, and verify the RLD type. Rerun the job after appropriate correction.

AMB176I INVALID RLD ADCON LENGTH. DUMP OF ESD ENTRY FOLLOWS.

Explanation: An RLD record was found that did not contain a valid RLD adcon length. A dump of the RLD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the RLD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the RLD entry in error, and verify the RLD adcon length. Rerun the job after appropriate correction.

AMB177I INVALID RLD ADCON BOUNDARY. DUMP OF ESD ENTRY FOLLOWS.

Explanation: An RLD record was found that did not contain a valid RLD adcon boundary. A dump of the RLD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the RLD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the RLD entry in error, and verify the RLD adcon boundary. Rerun the job after appropriate correction.

AMB178I INVALID RLD ADCON STATUS. DUMP OF ESD ENTRY FOLLOWS.

Explanation: An RLD record was found that did not contain a valid RLD adcon status. A dump of the RLD entry in error follows the message.

Source: AMBLIST

Detecting Module: HMBLBLDM

System Action: Processing of the RLD operation terminates. Processing continues with the next operation. (The AMBLIST return code is 4.)

User Response: Examine the output dump of the RLD entry in error, and verify the RLD adcon status. Rerun the job after appropriate correction.

AMB179I BINDER ENDD ERROR. RETURN CODE = *return_code*, REASON CODE = *reason_code*

Explanation: AMBLIST has detected a failure from the binder END DIALOG function, with the indicated program management return and reason codes.

Source: AMBLIST

Detecting Module: HMBLKCTL

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is the indicated binder return code.)

User Response: See *DFSMS/MVS Program Management* for the meaning of return and reason codes. Take appropriate action as indicated in the above reference.

System Programmer Response: If the problem recurs and the program is not in error, search problem data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the return and reason code.

AMB188I INSUFFICIENT STORAGE BELOW 16 MEG LINE TO PROCESS THIS PROGRAM OBJECT.

Explanation: The storage space available to AMBLIST has been exceeded. This is an AMBLIST temporary restriction.

Source: AMBLIST

Detecting Module: HMBLGETR

System Action: Processing terminates for this operation and continues with the next control statement. (The AMBLIST return code is 8.)

User Response: None.

AMD Messages

Note: Other SADMP Messages

Stand-alone dump also issues messages in the output listing of the assembly of the AMDSADMP macro and on the 3480 or 3490 magnetic tape display. See *OS/390 MVS Diagnosis: Tools and Service Aids* for more information.

AMD001A SPECIFY OUTPUT DEVICE ADDRESS (*nnn*)

Explanation: The stand-alone dump program requires the device number of the dump output device.

In the message text:

nnn	A sequence number, which starts at 1 and is incremented each time a DASD dump data set becomes full.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAODP

System Action: The stand-alone program waits for a response. When the system issues AMD001A for the first time, the sequence number displayed in the message is 1. If the DASD dump data set becomes full, the system reissues AMD001A and increments the sequence number by 1.

Operator Response: Do one of the following:

- Specify the device address of a tape volume.

  Prepare and ready the tape volume to be used. Insert a file protect ring or disable the file protection so that the dump can be written successfully.

- Specify the device number of a DASD.

  Note: When specifying a DASD device, if DDSPROMPT=YES was specified on the AMDSADMP macro, then SADMP additionally prompts you for a dump data set to use. If DDSPROMPT=NO was specified, then SADMP does not prompt for a dump data set and assumes that the data set SYS1.SADMP is to be used for the dump.

  The dump data set to be used during the dump must be initialized with the AMDSADDD REXX utility.

- Use the default device number and/or data set by giving a null reply.

  If the default device is a DASD and you also specified a dump data set name on the OUTPUT= keyword of the AMDSADMP macro, then the SADMP program will attempt to use the specified dump data set on the specified device. If a default dump data set name was not provided on the OUTPUT= keyword and DDSPROMPT=YES was specified, the SADMP program additionally prompts the operator for a dump data set to use. If DSSPROMPT=NO was specified, the SADMP program will continue by assuming the dump data set name on the default device is SYS1.SADMP.

When specifying the device, you can optionally precede the device number with a slash(/).

AMD002A DUMP DATA SET=

Explanation: For a DASD output device, the stand-alone dump program prompts for a DASD dump data set. This message is only issued if DDSPROMPT=YES was specified on the AMDSADMP macro. However, regardless of the DDSPROMPT= value, if the operator indicates to use the default device and dump data set name (by providing a null response to message AMD001A) this message will not be issued as the SADMP program will attempt to use the default data set on the default device.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAODP

System Action: The stand-alone dump program waits for a response.

Operator Response: Specify the data set name that is to be used to contain the dump data. The dump data set name must:

- reside on the DASD output device indicated in response to message AMD001A.
- contain the text ‘SADMP’ as part of, or as an entire data set qualifier.
- be allocated and initialized with the AMDSADDD REXX utility.

Note: Do not specify quotes around the dump data set name as SADMP assumes the dump data set is fully qualified.

AMD004A END OF REEL. MOUNT AN ADDITIONAL OUTPUT TAPE.

Explanation: While writing to tape, the stand-alone dump program detected an end-of-volume condition.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABRA, AMDSATER, AMDSAT80

System Action: The stand-alone dump program marks and unloads the tape volume. The dump program stops processing until the operator mounts a tape volume.

Operator Response: Mount another tape volume.

AMD005I

DUMPING OF REAL STORAGE
{NOW IN PROGRESS.}
{COMPLETED[(MINIMAL)]}
{[(SUMMARY)]}
{[(IN-USE)]}

Explanation: In the message text:

IN PROGRESS The stand-alone dump (SADMP) program has started the dumping of central storage.

COMPLETED(MINIMAL) Indicates that ASIDs 1 through 4 and common storage have been dumped.

COMPLETED(SUMMARY) Indicates that a set of selected system address spaces (like consoles and catalog) and the current primary, secondary, and home spaces of the actively executing work on all of the processors have been dumped.

COMPLETED(IN-USE) Indicates that all other allocated storage in the system has been dumped.

COMPLETED The SADMP program has successfully dumped central storage. This is the final message issued during the real storage dump phase.

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Source: Stand-alone dump (SADMP)

Detecting Module: AMDSARDM

System Action: The SADMP program continues.

AMD010I PROCESSING ASID=*asid* **ASCB=***address* **JOBNAME=***jobname*

Explanation: The stand-alone dump program will attempt to dump selected paged out data. The system issues this message for each address space that is dumped.

In the message text:

asid	The address space.
jobname	The name of the job. If both ASCB fields (ASCBJBNI and ASCBJBNS) are zero or the first character of the job name is not A through Z, [, $, #, or *, the system contains a job name of *UNKNOWN.
address	The address of the address space control block (ASCB).

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAMDM

System Action: The stand-alone dump program continues to dump the address space.

This message appears in the message log, but does not appear on the operator console.

AMD011A TITLE=

Explanation: The message requests a dump title.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSATTL

System Action: The stand-alone dump program waits for the operator to enter a dump title.

Operator Response: Enter a dump title of up to 100 characters, or press the ENTER key (EOB) on the system console to indicate no dump title.

AMD012D REPLY I (IGNORE), or READY *dev* **AND REPLY G (GO); REPLY=**

Explanation: The stand-alone dump program attempted to obtain paged out data from a device, but found the device in a not ready state.

In the message text:

dev	The device number of the device that needs to be readied.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSADER

System Action: The stand-alone dump program waits for the operator to enter a reply.

Operator Response: If the specified device does not exist or is not attached to the system, reply I. Processing will ignore data indicated to exist on that device.

If the specified device is attached to the system, verify that the volume mounted is the same volume mounted when the system failed. Then ready the device and reply G. Processing will use selected data from the device.

AMD014A INTERVENTION REQUIRED ON DEVICE *dev*

Explanation: A device is not ready.

In the message text:

dev	The device number.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSADER, AMDSABRA, AMDSATER, AMDSAT80

System Action: The stand-alone dump program waits for the device to become ready.

Operator Response: Ready the device. If the device cannot be readied, perform a system restart of stand-alone dump and, if possible, specify another output device by its device number.

If the device is a 2305 Model 2 direct access device (supported pre-MVS/ESA SP 5.2), make sure that the intervention required condition has been satisfied by doing the following:

1. Readying the device
2. Activating the STOP function on the device
3. Activating the START function

If stand-alone dump cannot be restarted, reIPL stand-alone dump. To restart or the reIPL stand-alone dump, see *OS/390 MVS Diagnosis: Tools and Service Aids.*

AMD015I DEVICE *dev* **NOT OPERATIONAL**

Explanation: The stand-alone dump program attempted an I/O operation. The device is not operational.

In the message text:

dev	The device number.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSADER, AMDSASIO

System Action: The stand-alone dump program does not use the device for I/O.

AMD018I CONTROL BLOCK ERROR--*text yyy*, **ASID=***asid*, **ADDR=***address*

Explanation: *text* is one of the following:

INVALID
LOOP IN

The stand-alone dump program found a control block in the specified address space in error or unavailable.

In the message text:

yyy	The control block.
asid	The address space identifier.
address	The address of the control block.

INVALID
One of the following exists:

- The control block did not pass the validity check.
- The pointer to the control block was zero.
- The control block could not be obtained from the stand-alone dump work file or the system paging devices because:
  - An I/O error occurred on the device; in this case, message AMD033I also appears.
  - I/O failed to initiate.

  - The operator replied I to message AMDO12D for a device on which intervention was required.
  - The virtual address is not defined on external storage.
  - An incorrect or unavailable control block was required to page in the control block; in this case, message AMD018I precedes this message.

LOOP IN
The control block is on a chain that is too long.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAGTF, AMDSAVCK

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log. Use the diagnostic information in this message to help determine the cause of the operating system failure.

AMD019A OUTPUT TAPE FILE PROTECTED. {INSERT RING|DISABLE FILE PROTECT}

Explanation: The mounted tape is file protected, and cannot be used.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSATER, AMDSAT80

System Action: The stand-alone dump program either:

- Unloads the tape and prompts for a new one.
- Waits for the operator to disable the file protect for the mounted tape.

Operator Response: Either mount a tape that has a file protect ring, or disable the file protect on the mounted tape.

AMD022I ERROR DUMPING {PAGE, ASID=*asid*, ADDR=*address*| DURING SWAP-IN, ASID=*asid*}

Explanation: An error occurred when the stand-alone dump program tried to write a dump record to the output device or tried to initialize an address space.

- If PAGE appears in the message text, either the page could not be written to the output device, a SADMP program error occurred, or the page could not be brought in from a system paging device.
- If DURING SWAP-IN appears in the message text, the address space with the specified address space identifier (ASID) cannot be initialized, because of one of the following:
  - The address space was not fully initialized by the operating system
  - The address space was being swapped in by the operating system. During the swap-in of an address space, there is a period of time in which stand-alone dump cannot access the address space.

In the message text:

asid	The ASID of the address space being initialized.
address	The address of the ASID.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSASIN

System Action: The system continues processing.

System Programmer Response: None.

AMD025I GTF DUMP BYPASSED

Explanation: The stand-alone dump program could not dump the generalized trace facility (GTF) trace because of control block errors.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAGTF

System Action: The stand-alone dump program continues processing with the next address space. No GTF trace is dumped.

System Programmer Response: See message AMD018I.

AMD029D REPLY W TO WAIT AFTER NEXT FULL SCREEN, ELSE REPLY N; REPLY=

Explanation: The stand-alone dump program issues this message when the operator console screen fills with messages.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSACON

System Action: The stand-alone dump program stops running to give the operator time to read and record any necessary messages. Processing does not continue until the operator replies to the message.

Operator Response: Notify the system programmer if error messages appear. Then reply to this message:

REPLY=W or press the ENTER key
Reply W or press the ENTER key to indicate end of block. This tells the stand-alone dump program to clear the screen and continue processing. When the screen is filled again, the dump program reissues message AMD029D.

Use this reply to provide the time needed to copy the stand-alone dump messages.

REPLY=N
Reply N to tell the stand-alone dump program to clear the screen and continue processing. Processing continues uninterrupted from that point, no matter how many times the screen fills. Once N is entered, SADMP does not issue AMD029D again unless the number of output devices used in the stand-alone dump exceeds the number of lines on the console. If this occurs, AMD104I causes AMD029D to be reissued, allowing the operator to record all the SADMP volumes used during the stand-alone dump.

System Programmer Response: If you want the stand-alone dump messages before you format the dump, ask the operator to reply W and copy all error messages.

AMD031I TERMINAL ERROR ON OUTPUT DEVICE

Explanation: The error described by message AMD033I ends processing by the stand-alone dump program.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABRA, AMDSADER, AMDSATER, AMDSAT80

System Action: Stand-alone dump issues message AMD098A, which prompts the operator to perform an restart of the SADMP program.

Operator Response: See message AMD098A for the operator response.

AMD032I **UNCORRECTABLE ERROR ON OUTPUT VOLUME--TAPE MARK NOT WRITTEN**

Explanation: The stand-alone dump program could not write a tape mark on the dump output tape volume because of an I/O error.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSATER, AMDSAIOI, AMDSASIO

System Action: If an end-of-reel condition caused the I/O error, the stand-alone dump program issues message AMD004A. If an end-of-reel condition did not cause the I/O error, the stand-alone dump program either issues message AMD056I and ends processing or issues message AMD098A to prompt the operator to perform a restart of the SADMP program.

Operator Response: If message AMD098A was issued, see the operator response for message AMD098A.

AMD033I **I/O ERROR ON** *dev* **CMD =** *cmd* **STATUS =** *stat* **COND =** *err*

Explanation: During processing of a stand-alone dump, a permanent I/O error occurred.

In the message text:

dev	The device number of the device on which the error occurred.
CMD=*cmd*	The channel command that was being run.
STATUS=*stat*	The status bits, if applicable, or NONE, if not applicable.
COND=*err*	The type of error for which the stand-alone dump program was attempting recovery; it is one of the following:

- For channel path errors:

  CHAINING CHECK
  CHANNEL CONTROL CHECK
  CHANNEL DATA CHECK
  INCORRECT LENGTH
  INTERFACE CONTROL CHECK
  PCI
  CHANNEL PROGRAM CHECK
  CHANNEL PROTECTION CHECK

- For device or control unit errors:

  ATTENTION
  BUSY
  CONTROL UNIT END
  STATUS MODIFIER
  UNIT EXCEPTION

- For direct access device errors:

  BUFFERED LOG FULL
  BUS OUT PARITY
  COMMAND REJECT
  DATA CHECK
  END OF CYLINDER
  ENVIRONMENTAL DATA PRESENT
  EQU CK
  FILE PROTECTED
  INTERVENTION REQUIRED
  INVALID TRACK FORMAT
  MISSING ADDR MARKER
  NO RECORD FOUND
  OPERATION INCOMPLETE
  DEFERRED ACCESS
  PERM ERROR
  SEEK CK
  TRACK COND CK

- For 3990 Storage Control errors:

  OPERATION TERMINATED
  SUBSYSTEM PROCESSING ERROR
  CACHING TERMINATED
  NON-RETENTIVE ACCESS NOT AUTHORIZED
  TRACK FORMAT INCORRECT
  CACHING REINITIATED
  NON-VOLATILE STORAGE TERMINATED
  VOLUME IS FAILED DUPLEX
  VOLUME STATUS INDEFINITE

- For type device errors:

  BUS OUT PARITY
  COMMAND REJECT
  DATA CHECK
  DATA CONVERTER CK
  EQU CK
  FILE PROTECTED
  INTERVENTION REQUIRED
  LOAD POINT
  NOT CAPABLE
  DEFERRED ACCESS
  PE ID BURST CK

- For paging storage device errors:

  BASE DEVICE UNAVAILABLE
  DISABLED INTERFACE
  MICROCODE LOGIC ERROR
  STORAGE DIRECTOR COMMUNICATION FAILED
  SUBSYSTEM STORAGE AVAILABILITY THRESHOLD CROSSED
  SUBSYSTEM STORAGE EQUIPMENT CHECK
  SUBSYSTEM STORAGE MUST BE INITIALIZED
  SUBSYSTEM STORAGE IS UNUSABLE
  TRACK FORMAT NOT SUPPORTED FOR PAGING
  WRITE INHIBITED

- For 3480 Magnetic Tape Subsystem errors:

  BACKWARD AT BEGINNING OF TAPE
  BLOCK ID SEQUENCING
  CONTROL UNIT ERROR
  CONTROL UNIT ERP FAILED
  DATA CHECK READ
  DATA CHECK (READ OPPOSITE)
  DATA SECURITY ERASE FAILURE
  DEFERRED CONDITION CODE 3 - DEVICE IS NOT OPERATIONAL
  DEGRADED MODE ERRORS
  DEMARK DATA BUFFER
  DRIVE ASSIGNED ELSEWHERE
  DRIVE EQUIPMENT CHECK
  DRIVE NOT ONLINE
  DRIVE PATCH LOAD FAILURE
  DRIVE RESET BY OPERATOR
  FORMAT INCOMPATIBLE — 3480-2 XF FORMAT
  FUNCTION INCOMPATIBLE
  LOCATE BLOCK UNSUCCESSFUL
  LOAD ASSISTANCE
  LOAD DISPLAY TIMEOUT
  LOAD FAILURE
  LOG AND RETRY
  MANUAL UNLOAD
  NOT READY
  PATH EQUIPMENT CHECK
  PERMANENT EQUIPMENT CHECK

PHYSICAL END OF TAPE
READ BUFFERED LOG (EOV)
READ BUFFERED LOG (OVERFLOW)
TAPE DRIVE/CONTROL UNIT INCOMPATIBLE
TAPE LENGTH INCOMPATIBLE
TAPE LENGTH VIOLATION
TAPE LENGTH ERROR
TAPE VOID
VOLUME REMOVED BY OPERATOR
WRITE DATA CHECK
WRITE ID MARK CHECK

- For 3490 magnetic tape subsystem errors:

DATA STREAMING ERROR
CHECK ONE ERROR
RESETTING EVENT
GLOBAL COMMAND INTERCEPT
CHANNEL INTERFACE RECOVERY (TEMPORARY) ERROR
CHANNEL INTERFACE RECOVERY (PERMANENT) ERROR
CHANNEL PROTOCOL ERROR
ATTENTION INTERCEPT ERROR
FUNCTION INCOMPATIBLE

- For magnetic tape devices:

LOST SENSE DATA
DRIVE ASSIGNED ELSEWHERE
ALLEGIANCE RESET
COMMAND REJECT
CONFIGURATION ERROR
PROTECTION EXCEPTION
WRITE PROTECTED
WRITE LENGTH ERROR
READ-ONLY FORMAT
BEGINNING OF PARTITION
END OF PARTITION
END OF DATA ENCOUNTERED
BLOCK NOT FOUND
READY THE DEVICE
READY THE LOADER
WRITE ERROR DETECTED
ERASE ERROR DETECTED
FORMATTING ERROR DETECTED
READ ERROR DETECTED
UNSUPPORTED FORMAT
VOLUME IS NOT FORMATTED
POSITIONING LOST
READ LENGTH ERROR
UNSUPPORTED MEDIUM
MEDIUM LENGTH ERROR
MEDIUM MANUALLY UNLOADED
RELOAD THE TAPE
UNLOAD THE TAPE
EQUIPMENT CHECK
BUS OUT CHECK
CHANNEL PROTOCOL ERROR
INTERFACE ERROR
OVERRUN
HALT SIGNAL
DEVICE FENCED
DEVICE-PATH FENCED
MEDIA INFORMATION MESSAGE
I/O SUBSYSTEM SIM
DEVICE SIM

Note: If an error occurs such that message AMD033I is required and the 3590 message code in sense byte 6 does not apply to any of the above conditions, then message AMD033I is issued with COND=DEVICE MESSAGE CODE IS IN SENSE BYTE 6.

- For special errors:

ERROR IN ERROR RECOVERY - While attempting to recover from the error indicated by the status and sense bytes, a second error occurred from which recovery was impossible.
ERROR ON SENSE COMMAND - An error occurred while the system was reading the sense bytes.
UNKNOWN - The error indicated by the status and sense bytes is unexpected. No recovery exists.
UNUSED - The stand-alone dump program generated an incorrect message.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSADER, AMDSATER, AMDSAT80, AMDSAIOI, AMDSABRA

System Action: The stand-alone dump program does not complete the I/O operation successfully. The dump program may also issue message AMD034I. If the I/O error is a permanent error on the output device, stand-alone dump issues message AMD098A.

Operator Response: If the error is WRITE INHIBITED and message AMD014A follows, turn the write inhibit switch of the device to the write position. If message AMD098A is issued, see the operator response for AMD098A.

For all other errors, fix the problem, if possible.

AMD034I SENSE = *sens*

Explanation: This message shows up to 32 sense bytes for the error described in message AMD033I. If the device in error has less sense information, the extra bytes are not displayed.

In the message text:

sens	The sense information.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABRA, AMDSADER, AMDSATER, AMDSAT80, AMDSAIOI

System Action: The stand-alone dump program does not complete the I/O operation successfully. If the I/O error is a permanent error on the output device, stand-alone dump issues message AMD098A.

Operator Response: If the error is WRITE INHIBITED and message AMD014A follows, turn the write inhibit switch of the device to the write position. If message AMD098A is issued, see the operator response for AMD098A.

For all other errors, fix the problem, if possible.

AMD035I *ddname* **FILE CANNOT BE OPENED**

Explanation: The stand-alone dump program could not open the data set specified on a DD statement for the following reasons:

- The system has probably improperly allocated the data set.
- The data set is in error.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABLD, AMDSAOSG

System Action: The stand-alone dump program stops initializing the volume.

System Programmer Response: Check the availability of the data set that the DD statement requires.

AMD042I GETMAIN FAILED - INSUFFICIENT STORAGE

Explanation: The stand-alone dump component cannot obtain enough virtual storage to generate a stand-alone dump program.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABLD

System Action: The stand-alone dump component does not initialize a residence volume.

System Programmer Response: Rerun the stand-alone dump initialization job with an increased region size.

AMD043I AMDSABLD PROCESSING SUCCESSFULLY COMPLETED

Explanation: The stand-alone dump component successfully generated a stand-alone dump program.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABLD

AMD045A TAPE LABEL=*volser* REPLY 'USE' or 'UNLOAD'.

Explanation: The output tape, mounted in response to a request by the stand-alone dump component, has a label. Stand-alone dump is requesting the disposition of the tape.

In the message text:

volser	The volume serial number.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSATER

System Action: The stand-alone dump component waits for the reply.

Operator Response: Do one of the following:

- Reply USE to write over the label.
- Reply UNLOAD to dismount the tape without writing on it. The system will prompt for another tape.

AMD046I A SEGMENT OF AMDSAPGE WHICH MAY NOT CROSS A PAGE BOUNDARY EXCEEDS 4K IN LENGTH.

Explanation: The stand-alone dump component found an internal error.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABLD

System Action: The stand-alone dump component returns a condition code of 4. The stand-alone dump component did not initialize a residence volume.

System Programmer Response: Attempt to generate a stand-alone dump program again. If all parameters are correct, but the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMD047A TAPE DATASET IS PASSWORD PROTECTED. MOUNT ANOTHER TAPE.

Explanation: The stand-alone dump component read the tape label. The data set security character indicates that security procedures unavailable to stand-alone dump must be invoked.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSATER

System Action: Because stand-alone dump does not have the ability to verify the password, it unloads the tape and prompts for another.

Operator Response: Mount another tape.

AMD048I INVALID DEVICE NUMBER *devn* REASON CODE=*return-code*

Explanation: The device number of the dump output device specified by the caller is in error. The device number has one of the following errors:

- It contains incorrect characters
- It is the console
- It is the IPL device
- Its device cannot be reached by stand-alone dump (SADMP)

In the message text:

devn	The device number specified on the AMDSADMP OUTPUT keyword or specified by the operator.
return-code	The associated reason code

The associated reason codes are:

Reason Code (hex)	Explanation
10	The device number specified is syntactically incorrect.
20	The device number specified is the SADMP IPL or console device, or the device number specified is not connected to the system.
30	The device number specified is an unsupported output device type.
40	The output DASD device number specified has a corrupted volume label.
50	The output DASD device number specified failed on the first attempt to perform a write I/O operation.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD, AMDSAODP

System Action: The SADMP program continues by issuing AMD001A to reprompt the operator to specify a new device number.

Operator Response: Specify a valid device number in response to system message AMD001A. Typical actions for the specific reason code in AMD048I are given as follows:

Reason Code (hex)	Response
10	Correct the specification of the device number. Reply to AMD001A with a valid device number.
20	Verify that the device is not the SADMP IPL or console device. Verify that the device is connected to the system that SADMP is running on. Reply to AMD001A with a different SADMP supported tape or DASD device.
30	Verify that the device number is a supported tape or DASD device. Reply to AMD001A with a different SADMP supported tape or DASD device.
40	Reply to AMD001A with a different SADMP supported tape or DASD device.

50 Verify that the output DASD device is not write protected. If it is, disable the write protection and reply to message AMD001A with the same device number. Otherwise, reply to message AMD001A with a different SADMP supported tape or DASD device.

AMD049I SYNTAX ERROR IN REPLY TO AMDSADMP MESSAGE

Explanation: The system cannot process the reply to the stand-alone dump message. The syntax of the reply contains errors.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD, AMDSATER, AMDSARDM

System Action: The system issues another message to prompt for another reply.

Operator Response: See the prompting message.

AMD050A ERROR READING LABEL. MOUNT ANOTHER TAPE.

Explanation: The stand-alone dump component cannot read the tape label. Therefore, it cannot determine the content of the tape.

In the message text:

dev	The device address.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSATER

System Action: To avoid destroying possibly valuable data, the system rejects the tape.

Operator Response: Try another tape or tape drive.

AMD051A MOUNT ANOTHER TAPE.

Explanation: The stand-alone dump component has unloaded the previous output tape and is waiting for another.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABRA, AMDSATER, AMDSAT80

System Action: The system waits for another tape.

Operator Response: Mount another tape on the device.

AMD052I *csect* CSECT NOT FOUND

Explanation: While generating a stand-alone dump program, the input does not contain a control section.

In the message text:

csect	The control section.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABLD

System Action: The system returns a condition code of 4. The stand-alone dump component does not initialize a residence volume.

Operator Response: Notify the system programmer.

System Programmer Response: Attempt to generate a stand-alone dump program again. If all parameters are correct, but the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMD053I *ddname* AT UNEXPECTED END OF FILE.

Explanation: While generating a stand-alone dump program, the input data set reached end-of-file before the system read an end record.

In the message text:

ddname	The ddname of the input data set.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABLD

System Action: The system returns a condition code of 4. The stand-alone dump component does not initialize a residence volume.

Operator Response: Notify the system programmer.

System Programmer Response: Check the content of the data set. It should contain complete object or load module text. If not, correct the problem.

AMD054I RELOCATION TABLE TOO LONG

Explanation: While generating a stand-alone dump program, an internal error occurred.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABLD

System Action: The system returns a condition code of 4. The stand-alone dump component does not initialize a residence volume.

Operator Response: Notify the system programmer.

System Programmer Response: Attempt to generate a stand-alone dump program again. If all parameters are correct, but the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMD055I AMDSADMP TERMINATED BY OPERATOR REQUEST

Explanation: The stand-alone dump program stopped short of a complete dump because the operator caused an external interrupt.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE

Operator Response: None. The output tape or dump data set may contain valuable information, however, the dump will be incomplete.

AMD056I DUMPING OF VIRTUAL STORAGE COMPLETED.

Explanation: The stand-alone dump program finished the dump.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE

System Action: The system issues AMD104I listing each volume used in the stand-alone dump.

Operator Response: None.

AMD057I COMPLETED SPECIFIC DUMPING FOR *xxx*.

Explanation: The stand-alone dump program contains logic to locate and dump specific storage for certain components.

In the message text:

xxx	The component that is dumped.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAGTF, AMDSAMDM

System Action: This message appears in the message log, but does not appear on the operator console.

AMD058I PAGING DEVICE *dev* UCB INVALID. REASON CODE=rc.

Explanation: While attempting to access virtual storage currently paged out, the stand-alone dump program obtained a unit control block (UCB) address that could not be resolved into a working device.

In the message text:

dev	The device number. The number may be meaningless if the UCB failed validity checking.
return-code	The return code, as follows:

4	Failed acronym validity test
8	Subchannel ID format incorrect
12	Subchannel not operational
16	Subchannel valid flag in SCHIB not on

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAUCB

System Action: The stand-alone dump program continues dumping accessible virtual storage. No data is dumped from the paging device represented by the incorrect UCB.

AMD059D ENTER ‘DUMP’ OR ‘SET’ WITH OPTIONS, ‘LIST’ OR ‘END’.

Explanation: The stand-alone dump program is prompting the operator.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPMT

System Action: The stand-alone dump program waits for a response.

Operator Response: The operator should respond with one of the following:

1. DUMP dto

   Where dump tailoring options, dto, specify storage to be dumped. The response must be contained on a single line. After it is entered, the operator is prompted again and may enter another line.

2. SET MINASID(minimum)

   Where minimum is either all address spaces, ALL, or physically swapped-in address spaces, PHYSIN.

   - Specify ALL to diagnose hangs, enabled waits, and performance problems. If ALL is specified, the minimum dump includes certain system-related storage ranges in all address spaces. This dump provides enough first-failure data to debug most system problems. Because of the large amount of data dumped, the time for the dump may be excessive.
   - Specify PHYSIN to diagnose coded waits, loops, and spin loops. If PHYSIN is specified, the minimum dump includes storage in address spaces that are physically swapped-in. This dump takes less time. Because of the storage not in the dump, the dump may not contain enough first-failure data to diagnose the system problem. If this is the case, recreate the system problem, and request MINASID with ALL.

   When in doubt, ALL is the better choice.

3. LIST

   The stand-alone dump program writes on the console all the dump options accumulated up to now (message AMD067I). Prompting continues.

4. END

   The stand-alone dump program stops prompting the operator and begins dump processing. The operator can no longer respond with dump options.

AMD060I ERROR IN INPUT TEXT INDICATED BY '*': *text*

Explanation: The stand-alone dump program considers the text above the asterisk (*) to be in error.

In the message text:

text	The incorrect text.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPMT, AMDSABLD

System Action: The stand-alone dump program ignores the text above the asterisk.

Operator Response: Message AMD065A allows you to correct the error.

AMD062I AMDSADMP RESIDENCE VOLUME INITIALIZATION COMPLETED.

Explanation: The stand-alone dump program has been generated and placed onto the residence volume. It is ready to be IPLed.

Note: This message is only issued during a one-step generation of stand-alone dump.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAOSG

AMD063I DYNAMIC ALLOCATION FAILURE ON FILE *ffffffff* - RETURN CODE *xxxx*

Explanation: The stand-alone dump component failed to initialize a residence volume. The system could not allocate a necessary data set.

In the message text:

ffffffff	The ddname of the data set.
xxxx	The dynamic allocation reason code.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAOSG

System Action: The stand-alone dump component failed to generate a stand-alone dump program.

Operator Response: Notify the system programmer.

System Programmer Response: Attempt to generate a stand-alone dump program again. If all parameters are correct, but the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMD064I ERROR RETURN CODE *return-code* FROM *module-name*.

Explanation: The stand-alone dump component failed to initialize a residence volume. A load module issued a return code indicating an error.

In the message text:

return-code	The return code issued by the load module.
module-name	The load module.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAOSG

System Action: The stand-alone dump component failed to generate a stand-alone dump program.

System Programmer Response: Attempt to generate a stand-alone dump program again. If all parameters are correct, but the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMD065A ENTER TEXT TO BE SUBSTITUTED FOR THE TEXT IN ERROR.

Explanation: The stand-alone dump program considers the text above the asterisk (*) to be in error.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPMT

System Action: The stand-alone dump program ignores the text above the asterisk.

Operator Response: Enter the text that you want to substitute for the text in error. The substitution text may be any length up to a full line, or null.

The text entered replaces only the text above the asterisk. This means that the stand-alone dump program retains the text without an asterisk beneath it. The response is inserted in place of the text with an asterisk beneath it.

For example, if the following appears in the message text:

```
...IN ASODL(...
      *****
```

Enter the substitution text,

```
ASID
```

The result is as follows:

```
...IN ASID(...
```

For a null response, the dump program inserts no text. The text without an asterisk beneath it becomes joined together.

AMD066I AMDSADMP ERROR, CODE=*ssee*, PSW=*psw* COMPDATA(AMDSA00*n*)

Explanation: One of the following occurred:

- The stand-alone dump program (SADMP) detected an error.
- System restart - *ss* is `X'1C'` and *ee* `X'13'`. If system restart was performed after the original SADMP completed, then AMDSA000 is displayed in the message text.

In the message text:

ss	The stand-alone dump SVC number of the CSECT in error.
ee	The reason code associated with the error.
psw	The program status word (PSW) at the time of error.
AMDSA000	The stand-alone dump program was not able to take a dump for this error because the output device is unusable or has not yet been initialized.
AMDSA001 - AMDSA005	The stand-alone dump program dumped all the storage that it used to the output device.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAAUD

System Action: Depending on the cause of this message, one of the following occurs:

- If SADMP detected an error and if the message text contains:
  - AMDSA000, then the system could not take a dump because the device was bad. They system enters stand-alone wait state `X'4Fssee'`.
  - AMDSA001 - AMDSA005, then SADMP takes as many as five self-dumps to the output device and attempts to continue. If the error persists, the system enters stand-alone dump wait state `X'4F0D02'`, which means that SADMP requested more than five self-dumps.
- If a system restart occurred, SADMP attempts to take a self-dump, and the system reloads an enabled wait PSW with reason code `X'3E0000'`, indicating that SADMP is waiting for an external or console I/O interrupt.

Operator Response: Depending on the cause of this message, do the following:

- If SADMP detected an error and if:
  - AMDSA000 is issued in the message text, record the PSW of the target CPU on which SADMP was executing. Also, record all messages that are still available at the console.
  - Wait state `X'4F0D02'` is loaded (meaning that SADMP requested more than five self dumps), attempt a system restart using a different output device.
- If a system restart occurred, select a console to use for the restarted SADMP.

In all instances where the system enters a wait state, attempt a system restart, specifying a different output device.

System Programmer Response: Contact the IBM Support Center for an explanation of the *ss* and *ee* variables in the message text.

AMD067I CURRENT DUMP OPTIONS: *list*

Explanation: After the operator replied LIST to message AMD059D, the stand-alone dump program writes, on the console, a list of all the dump options used.

In the message text:

list	The list of dump options.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPMT

System Action: The stand-alone dump program reissues message AMD059D.

AMD068I MVS VIRTUAL STORAGE CANNOT BE DUMPED. {INVALID *cb*|NO STORAGE FOR SGT}

Explanation: The stand-alone dump (SADMP) program determined that virtual storage could not be dumped because a control block was incorrect or because contiguous storage for a segment table could not be found.

In the message text:

INVALID *cb*	Indicates which control block is incorrect.
NO STORAGE FOR SGT	The system could not find storage for the segment table.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE

System Action: The SADMP program ends.

Operator Response: Ensure that a STORE STATUS function is performed before or as part of the IPL of the SADMP program. Also ensure that the operating system is fully initialized. Both of these are necessary to dump virtual storage.

Try to reIPL the SADMP program, if possible. See *OS/390 MVS Diagnosis: Tools and Service Aids* for information on running the SADMP. If the problem persists, notify the system programmer.

System Programmer Response: If the problem persists, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

AMD069I TAPE *dev* CANNOT BE ASSIGNED TO STAND-ALONE DUMP

Explanation: The stand-alone dump program cannot use the assigned tape device for the dump output volume. The device is currently assigned to another system.

In the message text:

dev The device number.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

System Action: If the stand-alone dump program is initializing the output volume, it will request another tape device by reissuing message AMD001A.

Operator Response: Reply to message AMD001A with the device number of a tape device that is not already assigned to another system.

AMD070I WARNING - ASID *asid* WAS BEING SWAPPED IN BY MVS

Explanation: When a stand-alone dump was requested, the address space identified in the message was being swapped in by the operating system. The swap in had not been completed. Stand-alone dump may be unable to dump some or all of this address space.

In the message text:

asid The address space identifier.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSASIN

System Action: The stand-alone dump continues dumping.

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log. Although an incomplete swap in can occur normally, it can also indicate an operating system error.

AMD071I ERROR IN EXTENDED STORAGE *text*

Explanation: The stand-alone dump program could not read a page from expanded (extended) storage, even though system control blocks show that the page was on expanded storage.

In the message text:

E-FRAME=*ffffffff ffffffff* is the address of the expanded storage frame that could not be read.

DATA ERROR The page-in operation returned a condition code of 1.

BLOCK NOT AVAILABLE The page-in operation returned a condition code of 3.

ESTE=*eeeeeeee***, UNEXPECTED ERROR** An error occurred in a system control block or in stand-alone dump processing. *eeeeeeee* is the address of the extended storage table entry (ESTE) that stand-alone dump was using when the error occurred.

See message AMD075I for a summary of expanded storage errors by address space and by system.

Note: This message appears only in the stand-alone dump message log written for the VERBEXIT SADMPMSG subcommand. It does not appear on a console while stand-alone dump runs.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAXSM

AMD072I EXTENDED STORAGE UNUSABLE - INVALID EST

Explanation: The stand-alone dump program cannot dump any pages from expanded (extended) storage. The pointer to the expanded storage table (EST) is nonzero, but it does not point to a valid EST.

The error is probably in a system control block.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE

System Action: The stand-alone dump program does not dump from expanded storage.

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log.

AMD073I MVS AUXILIARY STORAGE UNUSABLE - INVALID ASMVT

Explanation: The stand-alone dump program cannot dump pages from auxiliary storage, because the auxiliary storage management vector table (ASMVT) is incorrect.

The error is probably in a system control block.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE

System Action: The stand-alone dump program does not dump pages from auxiliary storage.

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log.

AMD074I MVS {PAGE|SWAP} DATASETS UNUSABLE - INVALID {PART|SART}

Explanation: The stand-alone dump program cannot dump pages from page or swap data sets, because the auxiliary storage management (ASM) paging activity reference table (PART) or swap activity reference table (SART) is not valid.

The error is probably in a system control block.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE

System Action: The stand-alone dump program does not dump from the page or swap data sets.

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log.

AMD075I EXTENDED STORAGE ERROR SUMMARY,

{ASID=*asid*|ALL ADDRESS SPACES}
ssssssss **SUCCESSFUL PAGE-IN OPERATIONS**
dddddddd **DATA ERRORS**
bbbbbbbb **BLOCKS NOT AVAILABLE**
uuuuuuuu **UNEXPECTED ERRORS**

Explanation: While using expanded (extended) storage, the stand-alone dump program detected at least one error.

In the message text:

ssssssss	The number of page-in operations that set condition code 0.
dddddddd	The number of page-in operations that set condition code 1.
bbbbbbbb	The number of page-in operations that set condition code 3.
uuuuuuuu	The number of times the page-in operation did not run because of a system control block error or an internal error in the stand-alone dump program.

ASID=*asid*
The error occurred while stand-alone dump was trying to read a page of data for an address space. The statistics in the message are totals for that address space.

ALL ADDRESS SPACES
An error occurred for at least one address space. The statistics are totals for all address spaces.

The error is probably in an MVS control block.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAAID

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log.

AMD076I PROCESSING DATA SPACE *dddddddd*, OWNED BY ASID *asid*.

Explanation: The stand-alone dump program is attempting to dump paged-out data for a data space.

In the message text:

dddddddd	The data space.
asid	The address space identifier (ASID) for the address space that owns the data space.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAUDS

System Action: The stand-alone dump program issues this message for each data space to be dumped. The dump program continues to dump the specified data space.

This message appears in the message log, but does not appear on the operator console.

AMD078I ERROR LOCATING *datatype* RC = *return-code*, REASON = *reason-code*.

Explanation: The stand-alone dump program received an unexpected return code.

In the message text:

datatype	The type of data to be extracted.
return-code	The return code.
reason-code	The associated reason code.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE, AMDSARDS, AMDSAUDS

System Action: Stand-alone dump processing continues, but one of the following can occur:

- The stand-alone dump program does not attempt to dump any data spaces.
- The stand-alone dump program does not attempt to dump any more data spaces for the address space currently being processed.

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log.

AMD079I ERROR DUMPING DATA SPACE PAGE *address*, RC = *return-code*, REASON = *reason-code*

Explanation: The stand-alone dump program received an unexpected return code. The previous AMD076I message identifies the data space being processed.

In the message text:

address	The virtual storage address of the data space page.
datatype	The type of data to be extracted.
return-code	The return code.
reason-code	The associated reason code.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSADSD

System Action: The stand-alone dump program continues processing storage in the data space, starting with the next referenced page.

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log.

AMD080I A TOTAL OF *number* AMD079I MESSAGES HAVE BEEN SUPPRESSED

Explanation: The stand-alone dump program received one or more unexpected return codes. For each unexpected code, the dump program issued an AMD079I message to indicate the error and the code, and an accompanying AMD076I message indicated the data space being processed. One or more of the AMD079I messages were suppressed to decrease the number of messages displayed.

AMD080I may appear many times during the processing of one data space; the last AMD080I message issued represents the total number of AMD079I messages that were suppressed during the processing for that data space.

In the message text:

number	The number of messages suppressed.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSADSD

System Action: The stand-alone dump program continues processing until all of the pages in the requested data space have been processed. As more messages are suppressed, message AMD080I appears less frequently.

Operator Response: Notify the system programmer.

System Programmer Response: When using IPCS to format the dump, specify the VERBEXIT SADMPMSG subcommand to see the stand-alone dump message log.

AMD081I **ASID *asid* NOT DUMPED, PHYSICALLY SWAPPED-OUT (JOBNAME=*jobname*).**

Explanation: The stand-alone dump program detected that an address space was physically swapped-out at the time of the dump. This address space was not requested by either the dump specifications used to generate the stand-alone dump program, or the dump options specified for the stand-alone dump.

In the message text:

asid	The address space identifier.
jobname	The job associated with the address space.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAMDM

System Action: The stand-alone dump program stops processing the current address space, and begins processing the next address space.

This message appears in the message log, but does not appear on the operator console.

AMD082I **WARNING: THE MINASID SPECIFICATION HAS BEEN SET TO ‘PHYSIN’.**

Explanation: MINASID=PHYSIN was specified either:

- At dump program generation time, on the stand-alone dump macro.
- In response to the prompt following message AMD059D, by SET.

This specification causes certain system-related storage ranges to be dumped only for address spaces that are physically swapped-in at the time of the dump. The system-related storage in the physically swapped-out address spaces may be needed to diagnose the system problem that resulted in taking the stand-alone dump.

By choosing the PHYSIN option, first-failure data capture might be sacrificed for improved system availability. If there is not enough data in the dump to diagnose the system problem, recreate the problem and dump with a MINASID specification of ALL.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPMT

System Action: The stand-alone dump program continues.

Operator Response: If you do not want a MINASID specification of PHYSIN, enter SET MINASID(ALL) at the prompt that follows message AMD059D. Remember that a specification of ALL is probably necessary to diagnose hangs, enabled waits, and performance problems; PHYSIN should suffice for coded waits, loops, and spin loops.

AMD083I **AMDSADMP: STAND-ALONE DUMP {INITIALIZED|RESTARTED}**

Explanation: This message indicates the current status of the stand-alone dump (SADMP) program.

In the message text:

INITIALIZED	The SADMP program has been IPLed.
RESTARTED	The SADMP program has been restarted.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAICN

System Action: The SADMP program continues.

Operator Response: None.

AMD085I **STORE STATUS DATA IS MISSING OR INVALID FOR PROCESSOR *cpuid***

Explanation: The system wrote a dump, but the STORE STATUS for a central processor is missing or incorrect. The dump written by the system may not have the correct central processor status needed to diagnose the problem.

In the message text:

cpuid	The identifier of the central processor that has just been IPLed.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSACPU

System Action: The SADMP program dumps the central processor status record for processor *cpuid* using the data that was found in the area reserved for the STORE STATUS function. The SADMP program continues to dump central storage but may not be able to dump any virtual storage. IPCS may not be able to display virtual storage.

Operator Response: Determine if the STORE STATUS function was performed for the processor on which the SADMP program was IPLed. Ensure that the STORE STATUS function is performed only once after MVS has been stopped, and only for the processor that will be IPLed using SADMP. See *OS/390 MVS Diagnosis: Tools and Service Aids* and *OS/390 MVS Diagnosis: Procedures* for information on running the SADMP program and the STORE STATUS function.

AMD086I **ALL OF STORAGE CONTAINED BINARY ZEROES. THERE IS NO DATA TO DUMP.**

Explanation: The stand-alone dump (SADMP) program checked for nonzero storage to dump and found that all of central storage was cleared to binary zeroes prior to the loading of the SADMP program.

Note: The following areas in storage are overlaid as part of the IPL for the SADMP program:

- The IPL bootstrap channel command words (CCW)
- The IPL subchannel identifier (ID)
- The processor store status area

The SADMP program does not consider these areas when determining if there is any nonzero data to be dumped.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAICN

System Action: The SADMP program ends by loading wait state code `X'3E'`, reason code `X'0100'`.

Operator Response: Determine if the LOAD option was requested without the CLEAR option on the STORE STATUS function. The SADMP program should be IPLed by using a LOAD option that does not clear storage if a dump of storage is desired. If the SADMP program has been IPLed to verify that storage was intentionally cleared to zeroes, this message indicates that the storage has been successfully cleared. See *OS/390 MVS Diagnosis: Tools and Service Aids* and *OS/390 MVS Diagnosis: Procedures* for information on running the SADMP program and the STORE STATUS function.

AMD087I DUMP OF A PREVIOUS STAND-ALONE DUMP PROGRAM NOW {IN PROGRESS|COMPLETE}

Explanation: The stand-alone dump (SADMP) program checked for the existence of a previous initial program load (IPL) of the SADMP program and has detected data that was used by the previous dump.

In the message text:

IN PROGRESS The SADMP program has started dumping the storage that was being used by the previous IPL of the SADMP program.

COMPLETE The SADMP has finished dumping the storage that was being used by the previous IPL of the SADMP program.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSARDM

System Action: If *status* is **IN PROGRESS**, the SADMP program dumps the storage that was in-use by the previous dump.

If *status* is **COMPLETE** the SADMP program issues message AMD088D to give the operator the choice of ending the dump or attempting to continue dumping.

Operator Response: Determine if the LOAD option was requested on the STORE STATUS function more than once for the SADMP program. If the SADMP program is IPLed into a system where it has been running, only the storage being used by the previous SADMP program will be dumped. See *OS/390 MVS Diagnosis: Tools and Service Aids* and *OS/390 MVS Diagnosis: Procedures* for information on running the SADMP program and the STORE STATUS function.

If additional storage is needed to diagnose a problem with the system being dumped, reply **U** to message AMD088D to dump central storage.

AMD088D REPLY 'T' TO TERMINATE, OR 'U' TO CONTINUE DUMPING REPLY=

Explanation: The stand-alone dump (SADMP) program has dumped storage that was being used by a previous IPL of the SADMP program. The operator can either end the dump now or dump the remainder of central storage.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSARDM

System Action: The SADMP program prompts the operator for a reply. If the operator replies **T**, the SADMP program ends by issuing message AMD104I and loading wait state code `X'4F'`, reason code `X'1E20'`. If the operator replies **U**, the SADMP program attempts to continue dumping.

Operator Response: Reply **T** if you want to stop the dump. Reply **U** if additional data may be needed in order to diagnose a problem with MVS or with the SADMP program.

AMD089I DUMP TERMINATED DUE TO *reason*

Explanation: *reason* is one of the following:

OPERATOR REQUEST
EXTERNAL KEY

The stand-alone dump (SADMP) program has loaded a wait state code due to *reason*, which is one of the following:

OPERATOR REQUEST The operator replied **T** to message AMD088D. The system loads the normal completion wait state code, `X'410000'`.

EXTERNAL KEY The operator pressed the external interruption key on the system console during the dump. The system loads wait state code `X'4F1E12'`.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE

System Action: The SADMP program loads wait state code.

AMD090I UNABLE TO CONTINUE USING THE SYSTEM CONSOLE

Explanation: The stand-alone dump (SADMP) program used the system console to communicate with the operator, but the SADMP program is unable to continue to use the system console in that way.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAICN

System Action: The SADMP program continues but communicates with the operator through SADMP wait state codes rather than through the console.

AMD091I *dev volser dsname* **IS NOT USABLE; DATA SET IS NOT FOUND.**

Explanation: A direct access storage device (DASD) was specified, but a search of the volume table of contents (VTOC) did not locate the predefined dump data set.

In the message text:

dev	The output device number.
volser	The output device volume serial number.
dsname	The output data set name.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

System Action: The dump program issues message AMD001A to prompt the operator for an output device.

Operator Response: Notify the system programmer. When the output data set is properly allocated, specify one of the following in response to message AMD001A:

- The device number of a DASD that contains an allocated dump data set
- The device number of a tape device

System Programmer Response: Verify the definition of the output dump data set. AMDSADDD is the utility that defines the dump output data set.

See *OS/390 MVS Diagnosis: Tools and Service Aids* for more information about the AMDSADDD utility.

This message may be issued as a result of the dump data set being migrated or moved to a different volume. The necessary steps should be taken to insure that the SADMP dump data sets are not placed into a migrated state or moved to a different volume. Furthermore, the dump data sets must also be exempt from any space management processing that will release unused space.

AMD092I *dev volser dsname* **IS NOT USABLE; DATA SET IS NOT VALID.**

Explanation: The predefined dump data set on the specified device failed validity checking. The dump data set must be a single extent data set, allocated in cylinders, with LRECL=4160 and one of the following:

- A BLKSIZE of 20800 for a 3380 or 9345 DASD
- A BLKSIZE of 24960 for a 3390 DASD

In the message text:

dev	The output device number.

volser	The output device volume serial number.
dsname	The output data set name.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

System Action: The dump program issues message AMD001A to prompt the operator for an output device.

Operator Response: Specify one of the following in response to message AMD001A:

- The device number of a DASD that contains a predefined and initialized output dump data set
- The device number of a tape device

System Programmer Response: Verify the definition of the output dump data set. AMDSADDD is the utility that defines the output dump data set.

See *OS/390 MVS Diagnosis: Tools and Service Aids* for more information about the AMDSADDD utility.

AMD093I *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP. THE INSTALLATION CHOSE TO NEVER REUSE THE DUMP DATA SET.**

Explanation: The predefined output dump data set on the specified device passed validity checks, however, the first record in the data set does not match the record written by the stand-alone dump utility, AMDSADDD. Since REUSEDS=NEVER was specified on the AMDSADMP macro, stand-alone dump rejects the use of the dump data set.

In the message text:

dev	The output device number.
volser	The output device volume serial number.
dsname	The output data set name.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

System Action: The dump program issues message AMD001A to prompt the operator for an output device.

Operator Response: Specify one of the following in response to message AMD001A:

- The device number of a DASD that contains a predefined and initialized output dump data set
- The device number of a tape device

System Programmer Response: After you view or copy the dump, clear the output data set each time a dump is written to DASD. Use the AMDSADDD utility to clear the dump output data set. See *OS/390 MVS Diagnosis: Tools and Service Aids* for information about the AMDSADDD utility.

AMD094I *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP. THE INSTALLATION CHOSE TO ALWAYS REUSE THE DUMP DATA SET.**

Explanation: The predefined output dump data set passed validity checks, however, the first record in the data set does not match the record written by the stand-alone dump REXX utility, AMDSADDD. Since REUSEDS=ALWAYS was specified on the AMDSADMP macro, stand-alone dump reuses the output dump data set.

In the message text:

dev	The output device number.
volser	The output device volume serial number.
dsname	The output data set name.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

System Action: The dump program reuses the data set and continues dumping.

System Programmer Response: Note that the output data set was reused. The existing data in the dump data set has been lost.

AMD095I **{REAL|VIRTUAL} DUMP** *xx***% COMPLETED. TOTAL MEGABYTES DUMPED:** *yy*

Explanation: The stand-alone dump (SADMP) program is in progress. The system issues this message when any of the following occur:

- 30 seconds have elapsed since the previous message was issued
- The SADMP program has dumped 30 megabytes since the previous message was issued SADMP only uses the 30 megabyte limit when the TOD clock on the processor is not operational.
- The SADMP program has written 70 buffers to the output device since the previous message was issued

In the message text:

xx	For the virtual dump phase, the percentage of address space processed versus the total number of address spaces in the system being dumped. For the real dump phase, the percentage of installed real storage in the system being dumped.
yy	The total number of megabytes dumped.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSASIO

System Action: The SADMP program continues.

Operator Response: None.

AMD096A *dev volser dsname* **IS VALID, HOWEVER, IT MAY ALREADY CONTAIN DATA FROM A PREVIOUS DUMP.** *mm/dd/yyyy hh:mm:ss* **TITLE:***title of the previous dump* **REPLY 'R' TO REUSE OR 'U' TO USE ANOTHER DATA SET.**

Explanation: The predefined output dump data set passed validity checks, however, the first record in the data set does not match the record written by the stand-alone dump utility, AMDSADDD.

In the message text:

dev	The output device number.
volser	The output device volume serial number.
dsname	The output data set name.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

System Action: If the operator replies 'R', SADMP reuses the output dump data set and continues dumping. If the operator replies 'U', SADMP issues message AMD001A to prompt for an output device.

Operator Response: Reply 'R' if the output dump data set should be reused. Note that the existing data in the dump data set will be lost.

Reply 'U' if the output dump data set on the specified output device should not be reused.

AMD098A REPLY 'R' TO RESTART THE DUMP OR 'T' TO TERMINATE

Explanation: A permanent error has occurred on the output device. The operator is prompted to either restart the dump from the beginning with no loss of data, or to end the dump.

Note: Because this message is issued as a result of a permanent I/O error on the output device, take a restarted dump on a different output device.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSABRA, AMDSADER, AMDSAIOI, AMDSASIO, AMDSATER, AMDSAT80

System Action: If the operator replies 'R', the SADMP program restarts. Message AMD083I will be issued, followed by message AMD001A.

If the operator replies 'T', the SADMP program ends and loads wait state code `X'4F'`, with reason code `X'ss01'` or `X'ssF1'`.

Operator Response: Reply 'R' to restart the SADMP program with no loss of data. Reply 'T' to end the dump. If 'T' is specified, the operator can still perform a manual restart of the SADMP program. See *OS/390 MVS Diagnosis: Tools and Service Aids* for more information about restarting the SADMP program.

AMD099I *dev volser dsname* IS FULL. TO CONTINUE DUMPING, SPECIFY ANOTHER OUTPUT DEVICE.

Explanation: The dumping program has filled the output DASD dump data set.

In the message text:

dev	The output device number.
volser	The output device volume serial number.
dsname	The output data set name.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAEDR

System Action: The system issues AMD001A to request an output device to continue the dump.

Operator Response: Reply to AMD001A with an output device to continue the dump. The additional output device can be any SADMP supported DASD or tape device. If continuing to a DASD device, you cannot use a dump data set that had been previously used during the taking of this dump.

System Programmer Response: To avoid this message, use a larger number of cylinders when predefining or reallocating the output dump data set using the AMDSADDD REXX utility.

AMD100I PAGING DEVICE *dev volser* CANNOT BE USED. IT IS AN OUTPUT DEVICE.

Explanation: While attempting to access virtual storage currently paged out, the SADMP program found that a paging device is the current output device.

In the message text:

dev	The paging device number.
volser	The paging device volume serial number.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAUCB

System Action: Because stand-alone dump cannot operate if the output dump data set resides on the paging device, the SADMP program continues dumping accessible virtual storage. No further data is dumped from this paging device.

Operator Response: To get a complete dump, you can restart the SADMP program with the output directed to a device that is not a paging device.

System Programmer Response: Ensure that the stand-alone dump DASD output data sets used for dumping are not on any devices which contain paging or swapping data sets used by the system.

AMD101I OUTPUT DEVICE *dev volser dsname* SENSE ID DATA: *b0 cutype cumodel devtype devmodel* BLOCKSIZE: *blocksiz*

Explanation: This message displays information about the output device.

In the message text:

dev	The device number of the output data set.
volser	If the output device is a DASD, the volume serial number of the output device. If the output device is a tape, then blanks.
dsname	If the output device is DASD, the output dump data set name. If the output device is tape, this field is blank.
blocksiz	The block size of the output data set.
b0	Sense id byte 0.
cutype	The control unit type (sense id bytes 1 and 2).
cumodel	The control unit model (sense id byte 3).
devtype	The device type (sense id bytes 4 and 5).
devmodel	The device model (sense id byte 6).

Note: For output devices that do not support the sense id command, stand-alone dump will display '3803' for the *cutype* and '3420' for the *devtype*. All other sense id data fields are zero.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

System Action: The SADMP program continues.

Operator Response: None.

AMD102I FINAL DUMP OPTIONS: *list*

Explanation: This message provides a list of the dump options being used.

In the message text:

list	The list of dump options.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPMT

System Action: The SADMP program continues. This message appears in the message log, but does not appear on the operator console.

Operator Response: None.

AMD103I *dev volser dsname* WAS ALREADY USED FOR THIS DUMP AS DATA SET (*nnn*).

Explanation: The operator has attempted to use a dump data set that was already used during the process of taking this dump

In the message text:

dev	The output device number.

volser	The DASD volume serial number.
dsname	The output dump data set name.
nnn	The sequence number of the data set.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

System Action: The system reissues AMD001A to request an output device to continue the dump.

Operator Response: Reply to AMD001A with an output device to continue the dump.

AMD104I

```
           DEVICE  VOLUME USED   DATA SET NAME
       nnn     dev     volser amt    dsname
```

Explanation: One line of data is displayed for each output device and/or dump data set used during this dump.

In the message text:

nnn	The sequence number of the data set.
dev	The output device number.
volser	If the output device is a DASD, the volume serial number. If the output device is a tape, *TAPE* appears.
amt	If the output device is a DASD, the percentage of space in the data set which was used for this dump. If the output device is a tape, the number of tape volumes used.
dsname	If the output device is a DASD, the output dump data set name. If the output device is a tape, N/A appears.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAPGE

Operator Response: If the output device is a tape, save the tape. If the output device is a DASD, notify the system programmer. Record this information for use by the system programmer.

System Programmer Response: If the dump is contained on one device and/or dump data set, copy the dump to another data set. If the output device is a DASD, use the REXX utility AMDSADDD to clear the output dump data set.

If the dump is contained on more than one device and/or dump data set, use this information to assist in copying multiple dump data sets into one dump data set for IPCS viewing. See *OS/390 MVS Diagnosis: Tools and Service Aids* for more information about copying multiple output data sets.

AMD105I DEVICE *dev*: WAITING FOR CONTROL UNIT TO RECOVER

Explanation: Stand-alone dump attempted input/output to a DASD whose control unit is in an extended busy condition. This busy condition might last for several minutes.

In the message text:

dev	The output device number.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSADER

System Action: The system will queue and periodically retry the I/O to device *dev* until the control unit accepts the request. The system issues AMD105I periodically while the busy condition persists.

Operator Response: None.

AMD106I MODESET FAILURE. [*message_text*]

Explanation: Stand-alone dump (SADMP) detected an error while trying to issue the MODESET command to a 3590 tape drive.

In the message text:

message_text
Additional message text defined as follows:

DEVICE FEATURES COULD NOT BE DETERMINED
SADMP attempts to reset all of the tape drive's control pages to their default values in order to insure that a previous user has not left the drive in an incompatible state for SADMP. This message text is used to indicate that the I/O to reset the device's control pages to their default values has failed.

DATA COMPACTION MAY NOT BE SET ON
The user has requested that data compaction be used during SADMP processing (via the COMPACT= option of the AMDSADMP macro). This message text indicates that the I/O done to explicitly set the data compaction feature on has failed. Depending on the tape drive's default setting for data compaction, SADMP may not use data compaction during the dumping process.

DATA COMPACTION MAY NOT BE SET OFF
The user has requested that data compaction not be used during SADMP processing (via the COMPACT= option of the AMDSADMP macro). This message text indicates that the I/O done to explicitly set the data compaction feature off has failed. Depending on the tape drive's default setting for data compaction, SADMP may use data compaction during the dumping process.

System Action: The system action depends on the message text:

DEVICE FEATURES COULD NOT BE DETERMINED
SADMP issues message AMD001A to prompt the operator for a new output device. This action is taken because the device features might be in a state that would cause unpredictable results during SADMP processing.

DATA COMPACTION MAY NOT BE SET ON
SADMP continues processing using the specified tape device.

DATA COMPACTION MAY NOT BE SET OFF
SADMP continues processing using the specified tape device.

Operator Response: The operator response depends on the message text:

DEVICE FEATURES COULD NOT BE DETERMINED
Reply to message AMD001A with another valid tape or DASD device.

DATA COMPACTION MAY NOT BE SET ON
To insure data compaction is used, perform a system restart of the SADMP program and select another valid tape device.

DATA COMPACTION MAY NOT BE SET OFF
To insure data compaction is not used, perform a system restart of the SADMP program and select another valid tape device.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAIDD

AMD107I *dev volser dsname* **INCORRECT DUMP DATA SET NAME.** *reason*

Explanation: The DASD dump data set name, specified in response to message AMD002A or specified on the OUTPUT= keyword on the AMDSADMP macro, is incorrect. reason further explains the condition.

In the message text:

dev	The output device number.
volser	The output device volume serial number.
dsname	The output data set name.
reason	Additional message text that explains the condition. reason is one of the following:

TEXT 'SADMP' WAS NOT FOUND The text 'SADMP' must appear as part of, or as an entire data set qualifier.

NAME WAS NOT SPECIFIED. The operator did not specify a dump data set name in response to message AMD002A.

Note: If this reason is indicated, *dsname* in message AMD107I is blank.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAODP

System Action: The system reissues AMD001A to request an output device.

Operator Response: Reply to AMD001A with an output device.

AMD108I **DUMPING OF {SUMMARY|SWAPPED IN} ADDRESS SPACES COMPLETED.**

Explanation: When SUMMARY appears in the message text, it indicates that the first pass through the MVS address space vector table is complete, and address spaces designated as summary address spaces have been successfully dumped.

When SWAPPED IN appears in the message text, it indicates that the second pass through the MVS address space vector table is complete, and swapped in address spaces have been successfully dumped.

Source: Stand-alone dump (SADMP)

Detecting Module: AMDSAAID

System Action: The SADMP program continues.

Operator Response: None.

System Programmer Response: None.

AMS Messages

AMS001D REPLY “S” FOR A SCHEDULED IPL OR “U” FOR AN UNSCHEDULED IPL.

Explanation: This message is displayed when a system IPL is performed.

Source: System Availability Management (SAM)

System Action: The system waits a maximum of one hour for an operator response, and then continues processing.

Operator Response: Reply **S** if the outage was scheduled or **U** if it was unscheduled. If you reply **U**, the system displays message AMS002D.

AMS002D ENTER THE REASON FOR THE SYSTEM OUTAGE.

Explanation: The system displays this message after the operator replied **U** in response to message AMS001D.

Source: System Availability Management (SAM)

System Action: The system waits for a maximum of one hour for an operator response, and then continues processing.

Operator Response: Enter a brief description of 45 characters or less describing the cause of the system outage. The response will be recorded in the Info/Management data base.

AMS003D ENTER REASON FOR CANCELLING JOB *jjj*.

Explanation: The operator cancelled job *jjj*; the availability of this application is being tracked.

Source: System Availability Management (SAM)

System Action: The system waits a maximum of one hour for an operator response, and then continues processing.

Operator Response: Enter a description of the reason why the operator cancelled the application. The description can not exceed 45 characters; it will be recorded in the Info/Management data base.

System Programmer Response: None.

AMS004D INVALID RESPONSE - REPLY “S” OR “U”.

Explanation: The reply to message AMS001D is not correct.

Source: System Availability Management (SAM)

System Action: The system reissues message AMS001D.

Operator Response: You can only enter **S** for a scheduled outage or **U** for an unscheduled outage.

AMS009E WORK DATA SET IS FULL.

Explanation: AMSCOL issues this message when a record cannot be written because there is no space available. The system suspends the recording of abnormal endings until the situation is cleared.

Source: System Availability Management (SAM)

System Action: The system abnormally ends the collector; the collector will not be automatically restarted.

Operator Response: Run either AMSSIN or AMSDIN to obtain the records in the data set and free the space occupied by them.

AMS010I ALERT CREATED FOR *xxxxxxxx.*

Explanation: This is the first line of a multiline write-to-operator (WTO) message. A record was written into Info/Management for *xxxxxxxx*, where *xxxxxxxx* is one of the following:

- STALL for a system stall condition.
- IPL for a system IPL.
- The name of an application that is being tracked.

Source: System Availability Management (SAM)

System Action: The system continues processing.

System Programmer Response: None.

AMS010I ON *mm/dd/yy* AT *hh:mm* ON SYSTEM *sysid*.

Explanation: This is the second line of the multiline write-to-operator (WTO) message that shows the following information for the event that just occurred:

- the date *mm/dd/yy*
- the time *hh:mm*
- the System Management Facilities (SMF) system ID *sysid*

Source: System Availability Management (SAM)

System Action: The system continues processing.

System Programmer Response: None.

AMS018I *procname* IS ALREADY ACTIVE - START REJECTED

Explanation: A start command was issued for the collector when the collector was already active on the system. If the currently active collector completed initialization, *procname* will contain the name of the procedure that started it.

Source: System Availability Management (SAM)

System Action: The system ends the started task.

Operator Response: None.

System Programmer Response: None.

AMS019I WORK DATA SET IS OVER 80 PERCENT FULL

Explanation: This message is issued from AMSCOL when it has detected that less than 20 percent free space is left in the work data set

Source: System Availability Management (SAM)

System Action: Processing continues

Operator Response: Run either AMSSIN or AMSDIN to obtain the records on the data set and to free the space occupied by them.

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ANT Messages

This section contains DFSMS system data mover (SDM) messages (all begin with ANT) and error return codes, and includes extended remote copy (XRC), peer-to-peer remote copy (PPRC), concurrent copy, and snapshot functions. SDM messages that begin with **ANTP** are PPRC messages, and are listed in “PPRC ANT Messages” on page ANT-34.

The SDM messages in this section are organized according to the *numerical portion* of the message.

ANTB0001E XRC ADDRESS SPACE COULD NOT BE CREATED

Explanation: In response to an XSTART command or automatic XRC restart operation, the creation of a new XRC address space has failed.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Determine the number of active address spaces. If the address space limit for the installation has been reached, you must increase the limit to support XRC. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and generate an SVC dump of the ANTAS000 address space.

ANTT0009I USER *userid* IS NOT AUTHORIZED TO ISSUE THE XRC *cmdname* COMMAND

Explanation: The *cmdname* command was issued by user *userid*, and RACF (or the product providing resource control) has determined that this user is not authorized to use this command. If *userid* is “UNKNOWN,” a batch job was used to invoke the *cmdname* command, and the JOB card did not specify a user ID.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Contact your system administrator if authorization is required. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for command authorization details. If *userid* is “UNKNOWN,” specify an authorized user ID on the JOB card and resubmit the batch job.

ANTT0010I *cmdname* COMMAND PARSE ERROR. REQUIRED SESSIONTYPE KEYWORD IS NOT SPECIFIED

Explanation: The SESSIONTYPE keyword is not specified on the *cmdname* command. This is a required keyword that must be specified as SESSIONTYPE(XRC) or SESSIONTYPE(MIGRATE).

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, specifying SESSIONTYPE(XRC) or SESSIONTYPE(MIGRATE). If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0011I *cmdname* COMMAND PARSE ERROR. REQUIRED VOLUME KEYWORD IS NOT SPECIFIED

Explanation: The VOLUME keyword is not specified on the *cmdname* command. The VOLUME keyword is a required parameter.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, specifying the VOLUME keyword. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0012I *cmdname* COMMAND PARSE ERROR. INVALID OR NO PRIMARY VOLUME SPECIFIED

Explanation: One of the following has occurred for the *cmdname* command:

- No primary volume is specified
- The volume specified is invalid

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, specifying the proper primary volume with the VOLUME keyword. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0013I *cmdname* COMMAND PARSE ERROR. INVALID OR NO SECONDARY VOLUME SPECIFIED

Explanation: One of the following has occurred for the *cmdname* command:

- No secondary volume is specified
- The volume specified is invalid

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, specifying the proper secondary volume with the VOLUME keyword. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0014I *cmdname* COMMAND PARSE ERROR. ERRORLEVEL KEYWORD INVALID VALUE

Explanation: The optional ERRORLEVEL keyword is specified with an invalid value on the *cmdname* command.

Detecting Module: Extended remote copy (XRC).

System Action: Command is rejected.

System Programmer Response: Reenter the command either without the ERRORLEVEL keyword or with a valid ERRORLEVEL value. If the command was issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

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ANTT0015I *cmdname* **COMMAND PARSE ERROR. REQUIRED ERRORLEVEL KEYWORD VALUE INVALID**

Explanation: The ERRORLEVEL keyword is specified with an invalid value.

Detecting Module: Extended remote copy (XRC)

System Action: Command is rejected.

System Programmer Response: Reenter the command specifying a valid value for the ERRORLEVEL keyword. If the command was issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0016I *cmdname* **COMMAND PARSE ERROR. RESERVED SESSION_ID**

Explanation: The *cmdname* command is specified with the reserved session identifier of *ALL*.

Detecting Module: Extended remote copy (XRC).

System Action: Command is rejected.

System Programmer Response: Reenter the command, specifying a session identifier other than *ALL*. If the command was issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0017I *cmdname* **COMMAND PARSE ERROR. REQUIRED SESSION_ID KEYWORD VALUE IS MISSING OR INCORRECT**

Explanation: The *cmdname* command is specified with a missing or invalid session. The SESSION_ID keyword is required for the command.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, specifying the SESSION_ID keyword with a valid value. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0018I *cmdname* **COMMAND PARSE ERROR. REQUIRED ERRORLEVEL KEYWORD IS NOT SPECIFIED**

Explanation: The ERRORLEVEL keyword is not specified on the *cmdname* command. The ERRORLEVEL keyword is a required parameter.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, specifying the ERRORLEVEL keyword. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0019I *cmdname* **COMMAND PARSE ERROR. REQUIRED SESSIONTYPE KEYWORD VALUE IS MISSING OR INCORRECT**

Explanation: A missing or incorrect value for the SESSIONTYPE keyword is specified on the *cmdname* command. Only the values “XRC” or “MIGRATE” are acceptable.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, specifying the SESSIONTYPE parameter as SESSIONTYPE(XRC) or SESSIONTYPE(MIGRATE). If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0020I *cmdname* **COMMAND PARSE ERROR. VOLUME KEYWORD HAS EXCEEDED THE MAXIMUM VALUE OF 50 PAIRS**

Explanation: The *cmdname* command is entered with the VOLUME keyword containing more parameters than the command supports. Only 50 volume pairs (100 volumes) per command are supported.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Enter multiple *cmdname* commands to enable XRC to process more than 50 volume pairs. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0021I *cmdname* **COMMAND PARSE ERROR. VOLUME KEYWORD HAS EXCEEDED THE MAXIMUM VALUE OF 100 VOLUMES**

Explanation: The *cmdname* command is entered with the VOLUME keyword containing more parameters than the command supports. Only 100 volumes per command are supported.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Enter multiple *cmdname* commands to enable XRC to process more than 100 volumes. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0022A XEND REQUEST ISSUED. CONTINUE REQUEST? (YES/NO)

Explanation: This is a prompt for confirmation that you want the XEND command to continue. The XEND command ends an XRC session. The command requires a confirmation because ending a session ends all XRC processing.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled unless YES is specified.

System Programmer Response: Confirm the command with a YES response. Any other response cancels the command. Abbreviations of YES are not acceptable. If you are issuing the XEND command from a CLIST or REXX EXEC, place the confirmation on the stack prior to running the EXEC. You can also reissue the command with the NOVERIFY keyword to bypass this confirmation.

ANTT0023I YES TO CONTINUE REQUEST, OTHERWISE REQUEST IS CANCELED

Explanation: This message provides additional detail for messages ANTT0022A, ANTT0025A, and ANTT0028A.

Detecting Module: Extended remote copy (XRC).

System Action: None.

System Programmer Response: Respond to the accompanying ANTT0022A, ANTT0025A, or ANTT0028A message.

ANTT0024I XEND REQUEST CANCELED

Explanation: The XEND command is canceled due to a non-YES response to the ANTT0022A prompt message.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled.

System Programmer Response: To end the session, reenter the XEND command and respond YES to the ANTT0022A prompt message. Abbreviations of YES are not acceptable. If you are issuing the XEND command from a CLIST or REXX EXEC, place the response on the stack prior to running the EXEC.

ANTT0025A XDELPAIR REQUEST ISSUED. CONTINUE REQUEST? (YES/NO)

Explanation: This is a prompt for confirmation that you want the XDELPAIR command to continue. The XDELPAIR command deletes the volume pair or pairs associated with the specified primary volume or volumes from an XRC session.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled unless YES is specified.

System Programmer Response: Confirm the command with a YES response. Any other response cancels the command. Abbreviations of YES are not acceptable. If you are issuing the XDELPAIR command from a CLIST or REXX EXEC, place the confirmation on the stack prior to running the EXEC. You can also reissue the command with the NOVERIFY keyword to bypass this confirmation.

ANTT0026I XDELPAIR REQUEST CANCELED

Explanation: The XDELPAIR command is canceled due to a non-YES response to the ANTT0025A prompt message.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled.

System Programmer Response: To delete the volume or volumes, reenter the XDELPAIR command and respond YES to the ANTT0025A prompt message. Abbreviations of YES are not acceptable. If you are issuing the XDELPAIR command from a CLIST or REXX EXEC, place the response on the stack prior to running the EXEC.

ANTT0027I XRC *cmdname* COMMAND HAS NOT BEEN DEFINED AS A TSO AUTHORIZED COMMAND

Explanation: The *cmdname* command is not an authorized TSO command. The command name must be added to the appropriate IKJTSOxx parmlib member under the AUTHCMD NAMES parameter.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Contact your system administrator if authorization is required. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for command authorization details.

The system administrator must:

1. Update the IKJTSOxx member of SYS1.PARMLIB, specifying the *cmdname* command with the AUTHCMD NAMES parameter.
2. Issue the TSO command PARMLIB UPDATE(xx) to activate the new IKJTSOxx member.

ANTT0028A XSUSPEND REQUEST ISSUED. CONTINUE REQUEST? (YES/NO)

Explanation: This is a prompt for confirmation that you want the XSUSPEND command to continue. The XSUSPEND command suspends the specified volume or volumes, or the XRC session. The command requires a confirmation to place either the specified volumes or XRC session in a suspended state.

Detecting Module: Extended remote copy (XRC).

System Action:

The command is canceled unless YES is specified.

System Programmer Response: Confirm the command with a YES response. Any other response cancels the command. Abbreviations of YES are not acceptable. If you are issuing the XSUSPEND command from a CLIST or REXX EXEC, place the confirmation on the stack prior to running the EXEC. You can also reissue the command with the NOVERIFY keyword to bypass this confirmation.

ANTT0029I XSUSPEND REQUEST CANCELED

Explanation: The XSUSPEND command is canceled due to a non-YES response to the ANTT0028A prompt message.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled.

System Programmer Response: To suspend volumes or the XRC session, reenter the XSUSPEND command and respond YES to the ANTT0028A prompt message. Abbreviations of YES are not acceptable. If you are issuing the XSUSPEND command from a CLIST or REXX EXEC, place the response on the stack prior to running the EXEC.

ANTT0030I *cmdname* COMMAND PARSE ERROR. MEMBER NAME IS NOT ALLOWED

Explanation: The *cmdname* command failed due to a command parse error. The function does not support a member name being specified.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled.

System Programmer Response: Correct the error and reenter the command. If you are issuing the command from a CLIST or REXX EXEC, correct the error and rerun the EXEC.

ANTT0031I *cmdname* COMMAND PARSE ERROR. *keyword1* KEYWORD REQUIRES *keyword2* KEYWORD

Explanation: The *cmdname* command failed due to a command parse error. The *keyword1* keyword must be specified with the *keyword2* keyword.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled.

System Programmer Response: Correct the error and reenter the command. If you are issuing the command from a CLIST or REXX EXEC, correct the error and rerun the EXEC.

ANTT0032I *cmdname* **COMMAND PARSE ERROR. KEYWORD** *keyword1* **MUTUALLY EXCLUSIVE WITH KEYWORD** *keyword2*

Explanation: The *cmdname* command is specified with keywords *keyword1* and *keyword2*, which are mutually exclusive. Select only one of the keywords.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, selecting the desired keyword option. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0033I *cmdname* **COMMAND PARSE ERROR. THE VALUE FOR KEYWORD** *keyword* **HAS AN INVALID FORMAT**

Explanation: The *cmdname* command failed due to a command parse error. The format specified for the keyword *keyword* is invalid.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled.

System Programmer Response: Correct the error and reenter the command. If you are issuing the command from a CLIST or REXX EXEC, correct the error and rerun the EXEC.

ANTT0034I *cmdname* **COMMAND PARSE ERROR. THE VALUE FOR KEYWORD** *keyword* **HAS AN INVALID NUMERICAL VALUE**

Explanation: The *cmdname* command failed due to a command parse error. The value specified for keyword *keyword* is specified with an invalid value. For example, this error is issued if an invalid ATTIME value is specified on the XDELPAIR, XEND, or XSUSPEND command. The ATTIME parameters must fall into the following ranges:

- Year — Between the current year and 2041
- Day — Between 1 and 365 (366 if the year is a valid leap year)
- Hours — Between 0 and 23
- Minutes — Between 0 and 59
- Seconds — Between 0 and 59
- Other values — Must be valid decimal digits (0—9)

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled.

System Programmer Response: Correct the error and reenter the command. If you are issuing the command from a CLIST or REXX EXEC, correct the error and rerun the EXEC.

ANTT0035I *cmdname* **COMMAND PARSE ERROR. THE VALUE FOR KEYWORD** *keyword* **IS INVALID**

Explanation: The *cmdname* command failed due to a command parse error. A required value for keyword *keyword* is either not specified or was specified with an incorrect value.

Detecting Module: Extended remote copy (XRC).

System Action: The command is canceled.

System Programmer Response: Correct the error and reenter the command. If you are issuing the command from a CLIST or REXX EXEC, correct the error and rerun the EXEC.

ANTT0036I *cmdname* **COMMAND PARSE ERROR. THE VALUE FOR KEYWORD** *keyword* **IS NOT BETWEEN** *value1* **AND** *value2*

Explanation: The value specified for the *keyword* keyword for the *cmdname* command is out of range. Valid values must be between *value1* and *value2*.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command, selecting a proper value within the specified range. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0037I *cmdname* **COMMAND PARSE ERROR. AT LEAST ONE KEYWORD MUST BE ENTERED**

Explanation: The *cmdname* command failed because at least one keyword must be specified with the command.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command with the desired keyword. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0038I **XSUSPEND COMMAND PARSE ERROR. KEYWORD TIMEOUT OR KEYWORD CANCEL MUST BE ENTERED**

Explanation: The XSUSPEND command failed due to a command parse error. You must specify either the TIMEOUT or the CANCEL keyword.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command with the desired keyword. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0039I *cmdname* **COMMAND PARSE ERROR. THE VALUE FOR KEYWORD** *keyword* **IS AN INVALID HEXADECIMAL NUMBER**

Explanation: The *cmdname* command failed due to a parsing error. The value specified for the keyword given by *keyword* is not a valid hexadecimal number.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command specifying a proper hexadecimal value. If the command has been issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0040I *cmdname* **COMMAND PARSE ERROR.** *keyword1* **KEYWORD REQUIRES** *keyword2* **KEYWORD OR** *keyword3* **KEYWORD**

Explanation: The *cmdname* command failed due to a parsing error. When *keyword1* is specified, *keyword2* or *keyword3* must also be specified.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command specifying a proper hexadecimal value. If the command has been issued from a

CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTT0090E XRC IS NOT OPERATIONAL. PLEASE RETRY THE *cmdname* COMMAND LATER

Explanation: The *cmdname* command has not been accepted because XRC is not operational when the command is entered.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: Reenter the command after XRC is operational. To determine if XRC is operational, review the system log for message ANTB8001I. If this error continues after you receive message ANTB8001I or if message ANTB8001I is not received, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, you must also provide pertinent SYS1.LOGREC information.

ANTT0091E *cmdname* ENCOUNTERED AN ERROR ATTEMPTING TO SEND REQUEST TO XRC, RC = *return_code*, REAS = *reason_code*

Explanation: The *cmdname* command is not accepted. The return code given by *return_code* and the reason code given by *reason_code* provide explanations for the error.

The following are the return codes and associated reason codes issued with this message:

Return Code	Explanation		
8	Request failed to be processed.		
		Reason Code	**Explanation**
		4	Parameter list cannot be built.
		99	A major error occurs while attempting to process the request.

Detecting Module: Extended remote copy (XRC).

System Action: The command is rejected.

System Programmer Response: This is an internal error. Search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide any system log and SYS1.LOGREC information that is available.

ANTT0099I *cmdname* COMMAND ACCEPTED

Explanation: The *cmdname* command is accepted.

Detecting Module: Extended remote copy (XRC).

System Action: The command is accepted.

System Programmer Response: Additional XRC messages normally follow this message. If no additional XRC messages are received at the system console log or the user ID specified with the MSGROUTEID parameter on the command, the command may still be queued in the XRC control function awaiting processing.

If ANTAS000 or ANTAS001 is in the process of ending or reinitializing, it is possible that no other messages are issued. For ANTAS000, the command is accepted, but never passed to the primary address space. For ANTAS001, the command is accepted, but never processed by the data mover function.

To determine if XRC is operational, issue a DISPLAY A,ANTAS001 command and verify that the system processor time is incrementing for the address space. If the processor time is not incrementing or if additional processing for the command is not indicated, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2000E UNABLE TO CREATE *address_space_name* ADDRESS SPACE. ASCRE RC=*return_code* REAS=*reason_code*

Explanation: The MVS address space create service (ASCRE) has failed to create the *address_space_name* address space for XRC. ASCRE fails with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the return and reason codes. If necessary, increase the installation limit on the number of address spaces allowed in the system. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2001E UNABLE TO ADD RESOURCE MANAGER. RESMGR RC=*return_code*

Explanation: The MVS resource manager service (RESMGR) has failed to create a resource manager for XRC. RESMGR fails with return code *return_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the return code. If necessary, increase the system limit on resource managers. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2002E UNABLE TO RESERVE LINKAGE INDEX. LXRES ABEND=*abend_code*

Explanation: XRC has called the MVS linkage index service (LXRES) which abends with code *abend_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the abend code. You may need to increase the number of slots in the system function table reserved for linkage indexes. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, pertinent abend information, and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2003E UNABLE TO CREATE ENTRY TABLE. ETCRE ABEND=*abend_code*

Explanation: XRC has called the MVS entry table create service (ETCRE) which abends with code *abend_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the abend code. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, pertinent abend information, and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2004E UNABLE TO CONNECT ENTRY TABLE. ETCON ABEND=*abend_code*

Explanation: XRC has called the MVS entry table connect service (ETCON) but abends with code *abend_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the abend code. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, pertinent abend information, and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2005E UNABLE TO SET AUTHORIZATION. AXRES ABEND=*abend_code*

Explanation: XRC has called the MVS reserve authorization service (AXRES) which abends with code *abend_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the abend code. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, pertinent abend information, and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2006E UNABLE TO GET SMS STATUS. SSREQ ABEND=*abend_code*

Explanation: XRC has called the SMS status service (SSREQ) which abends with code *abend_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response:

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the abend code. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, pertinent abend information, and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2007E UNABLE TO ADD RESOURCE MANAGER. RESMGR ABEND=*abend_code*

Explanation: XRC has called the MVS add resource manager service (RESMGR) which abends with code *abend_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the abend code. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, pertinent abend information, and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTU2500E ABEND OCCURRED IN MODULE *mod_name* **AT OFFSET** *offset***, ABEND CODE =** *abend_code*

Explanation: XRC detected an abend with abend code *abend_code* at offset *offset* in module *mod_name*.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: Refer to the appropriate MVS system codes manual for an explanation of the abend code. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, the XRC dump generated when the abend occurs, and pertinent abend information from SYS1.LOGREC. The system log includes messages ANTU2500E through ANTU2512E issued when the abend occurred. Ensure that XRC ends by cancelling the ANTAS000 and ANTAS001 address spaces. After you have canceled these address spaces, ANTAS000 automatically restarts. When message ANTB8001I is received, restart XRC operations by entering an XSTART command.

ANTU2501E PSW AT TIME OF ABEND = *psw*

Explanation: XRC detected the abend at PSW *psw*. This message is preceded by message ANTU2500E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See ANTU2500E.

ANTU2502E GENERAL PURPOSE REGISTERS AT TIME OF ABEND ARE AS FOLLOWS:

Explanation: XRC detected an abend. The contents of the general purpose registers at the time of the abend are specified immediately following this message in messages ANTU2503E through ANTU2506E. This message is preceded by messages ANTU2500E and ANTU2501E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2503E GPR0–3 *gpr0 gpr1 gpr2 gpr3*

Explanation: XRC detected an abend. The contents of general purpose registers 0 through 3 at the time of the abend are specified in this message. This message is preceded by messages ANTU2500E through ANTU2502E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2504E GPR4–7 *gpr4 gpr5 gpr6 gpr7*

Explanation: XRC detected an abend. The contents of general purpose registers 4 through 7 at the time of the abend are specified in this message. This message is preceded by messages ANTU2500E through ANTU2503E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2505E GPR8–11 *gpr8 gpr9 gpr10 gpr11*

Explanation: XRC detected an abend. The contents of general purpose registers 8 through 11 at the time of the abend are specified in this message. This message is preceded by messages ANTU2500E through ANTU2504E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2506E GPR12–15 *gpr12 gpr13 gpr14 gpr15*

Explanation: XRC detected an abend. The contents of general purpose registers 12 through 15 at the time of the abend are specified in this message. This message is preceded by messages ANTU2500E through ANTU2505E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2507E ACCESS REGISTERS AT TIME OF ABEND ARE AS FOLLOWS:

Explanation: XRC detected an abend. The contents of the access registers at the time of the abend are specified in messages ANTU2508E through ANTU2511E immediately following this message. This message is preceded by messages ANTU2500E through ANTU2506E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2508E AR0–3 *ar0 ar1 ar2 ar3*

Explanation: XRC detected an abend. The contents of access registers 0 through 3 at the time of the abend are specified in this message. This message is preceded by messages ANTU2500E through ANTU2507E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2509E AR4–7 *ar4 ar5 ar6 ar7*

Explanation: XRC detected an abend. The contents of access registers 4 through 7 at the time of the abend are specified in this message. This message is preceded by messages ANTU2500E through ANTU2508E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2510E AR8–11 *ar8 ar9 ar10 ar11*

Explanation: XRC detected an abend. The contents of access registers 8 through 11 at the time of the abend are specified in this message. This message is preceded by messages ANTU2500E through ANTU2509E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2511E AR12–15 *ar12 ar13 ar14 ar15*

Explanation: XRC detected an abend. The contents of access registers 12 through 15 at the time of the abend are specified in this message. This message is preceded by messages ANTU2500E through ANTU2510E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2512E *abending module identifier*

Explanation: XRC detected an abend in the module identifier *abending module identifier*. This message is preceded by message ANTU2500E.

Detecting Module: Extended remote copy (XRC), concurrent copy, or a striping function.

System Action: XRC functions are inactive.

System Programmer Response: See message ANTU2500E.

ANTU2513I *information* **HAS BEEN COPIED TO DATA SET** *dataset_name*

Explanation: The command information specified by *information* has been successfully written to the data set specified by *dataset_name*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been issued at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTU2514W UNABLE TO COPY *information* **TO DATA SET** *dataset_name* **RC=***return_code* **REAS=***reason_code*

Explanation: The request, indicated by *information*, for output to data set *dataset_name* has failed. The return code given by *return_code* and reason code given by *reason_code* indicate the reason for the failure.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error and reenter the command.

ANTX5000E *device_number*, *serial_number*, *failing_CCW_command_code*, *failing_CCW_position*, *CCW_data_area*, *full_error_description*

Explanation: The XRC function encountered an I/O error. The message text provides the following information:

- *device_number* — The device number to which the I/O is directed. If the device is associated with a primary XRC volume, the error may be a storage control error.
- *serial_number* — The volume serial number, if available, of the device that encountered the I/O error.
- *failing_CCW_command_code* — The CCW command code that encounters the I/O error.
- *failing_CCW_position* — The position in the channel program chain on which the error occurs. If the error occurs at the first CCW in the chain (a Define Extent), the path to the storage control or device may have been dropped. This can indicate an operations error due to the storage path being removed.
- *CCW data_area* — The parameter list data area of the failing CCW.
- *full_error_description* — A brief description of the cause of the I/O error based on the sense data. The descriptions are as follows:
  - STORAGE_CONTROL_SESSION_NUMBER_ NOT_ACTIVE —This indicates a dropped XRC session resulting from an error that ended the storage control session. The error can occur when the update-handling capability of XRC is exceeded by the update rate to the storage control. In this case, examine the number and configuration of volumes managed by XRC to determine the cause of the high update rate to the storage control. If this error persists, the XRC environment may require reconfiguration. This error can also occur if the timeout interval has expired.
  - NONVOLATILE_STORAGE_NOT_AVAILABLE —This indicates that nonvolatile storage has been altered. Issue the DEVSERV MVS operator command to determine the status of nonvolatile storage. Do not disable nonvolatile storage for storage controls that have an active XRC session. Correct the problem by reenabling nonvolatile storage and issuing the XADDPAIR command to add the volume or volumes behind the affected storage control to the XRC session.
  - CACHE_NOT_AVAILABLE — This indicates that cache has been disabled. Issue the DEVSERV MVS operator command to determine the status of cache storage. Cache storage should not be disabled for storage controls that have an active XRC session. Correct the problem by reenabling cache for the storage control and issuing the XADDPAIR command to add the volume or volumes behind the affected storage control to the XRC session.
  - TOO_MANY_STORAGE_CONTROL_SESSION_ NUMBERS —This indicates that either the maximum number of XRC sessions on the storage control (from multiple MVS hosts) has been exceeded or that the maximum number of concurrent copy and remote copy sessions on the storage control has been exceeded. The LISTSESS diagnostic command can be used to determine which sessions are active on a storage control. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for a description of the LISTSESS command. Reduce the number of active sessions on the affected storage control and issue the XADDPAIR command to add the volume or volumes behind the affected storage control to the XRC session.
  - DEVICE_NOT_PART_OF_ANY_XRC_SESSION – This indicates a dropped XRC session resulting from an operations error that produced a reset notification. This error can also indicate that an error has occurred in the storage control cache or that the cache is disabled, causing any knowledge of this device as part of an XRC session to be lost. Issue the DEVSERV MVS operator command to determine the status of cache storage. Correct the problem by reenabling cache for the storage control and issuing the XADDPAIR command to add the volume or volumes behind the affected storage control to the XRC session.
  - PATH_GROUP_NOT_ESTABLISHED — This indicates a dropped XRC session resulting from an operations error that produced a reset notification. This error can also indicate that an error has occurred in the storage control cache or that the cache is disabled, causing any knowledge of this

device as part of an XRC session to be lost. Issue the DEVSERV MVS operator command to determine the status of cache storage. Correct the problem by reenabling cache for the storage control and issuing the XADDPAIR command to add the volume or volumes behind the affected storage control to the XRC session.

- XRC_SESSION_ALREADY_ACTIVE_FOR_DEVICE — This indicates that another MVS system already has an active XRC session on the specified device, or that the device is active in a session that has been suspended. Only one XRC session may be active per device.
- INVALID_COMMAND — This is due to issuing an XRC command to a storage control that does not have XRC capability.
- INVALID_COMMAND_SEQUENCE — This is either due to an internal error or because an XRC command has been issued to a storage control that does not have XRC capability.
- CCW_COUNT_LESS_THAN_REQUIRED — This is due to an internal error.
- INVALID_PARAMETER — This is either due to an internal error or because an XRC command has been issued to a storage control that does not have XRC capability.
- STORAGE_CONTROL_SESSION_NUMBER_ ZERO_OR_ALREADY_USED — This is due to an internal error.
- STORAGE_CONTROL_CACHE_ALREADY_ BEING_READ — This is due to an internal error.

Detecting Module: Extended remote copy (XRC).

System Action: The XRC action taken is based upon the ERRORLEVEL specified on the XSTART command, as follows:

- If ERRORLEVEL(SESSION) is specified, XRC suspends the entire session on any I/O error. Correct the error and restart the XRC session. The session is suspended only if the volume is in a duplex state at the time of the error. Errors prior to a volume reaching duplex state do not affect the session.
- If ERRORLEVEL(VOLUME) is specified, the scope of the error determines the action taken. If the error occurs for a single primary or secondary volume, only the affected volume pair are removed from the session. If the error impacts a storage control, all volume pairs using that storage control are removed from the session. Certain errors have the potential to end the XRC session.
- If ERRORLEVEL(*group_name*) is specified, XRC suspends all volumes that belong to the specified group. Correct the error and add the volume pairs back into the session.

System Programmer Response: If the problem is an environmental or hardware error, then correct the error and restart the session or volumes. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, a dump of the ANTAS001 address space, and SYS1.LOGREC information indicating the I/O error encountered. For some errors, a GTF trace may be required to determine the cause of the problem.

ANTX5001E *device_number*, *abbreviated_error_ description*, *failing_CCW_command_code*, *failing_CCW_position*, *IOS_completion_code*, *subchannel_status*, *sense_data*, *serial_number*, *full_error_description*

Explanation: When the XRC function encounters an I/O error, the message text provides the following information:

- *device_number* — The device to which the I/O is directed. If the device is associated with a primary XRC volume, then the error may be a storage control error.
- *abbreviated_error_description* — A short error code describing the type of error based on the sense information. The valid codes are:

Code	**Description**
BOC	Bus out parity check
CMD	Command reject
COR	Correctable data check
DCK	Data check
ENV	Environmental data present
EOC	End of cylinder
EQC	Equipment check
FPR	File protect
IMP	Imprecise ending
ITF	Invalid track format
LOG	First error log
M23	MR23 record
MTO	Message to operator
NRF	No record found
OVR	Overrun
PRM	Permanent error
RIW	Request inhibit write
VIO	Intent violation
WRI	Write inhibited
WRO	Write operation
*******	Unknown

- *failing_CCW_command_code* — The CCW command code that encounters the I/O error. If the error has occurred at the first CCW in the chain (a Define Extent), the path to the storage control or device may be dropped. This potential operations error is due to the removal of the storage path.
- *failing_CCW_position* — The position in the channel program chain on which the error occurs. If the error occurs at the first CCW in the chain (a Define Extent), the path to the storage control or device may have been dropped. This can indicate an operations error due to the storage path being removed.
- *IOS_completion_code* — The return code from IOS.
- *subchannel_status* — The channel status word status field received from the subchannel.
- *sense_data* — The sense information returned from the operation. Refer to the storage control reference documentation for interpretation of the sense data.
- *serial_number* — The volume serial number of the device on which the I/O operation fails.
- *full_error_description* — A brief description of the cause of the I/O error based on the sense data. Refer to the ANTX5000E message for an explanation of these descriptions.

Detecting Module: Extended remote copy (XRC).

System Action: The XRC action taken is based upon the type of error.

System Programmer Response: If the problem is an environmental or hardware error, correct the error and restart the failing XRC function. If the problem persists, search problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, an SVC dump of the ANTAS001 address space, and SYS1.LOGREC information indicating the I/O error. The XRC action taken is based on the type of error encountered and the ERRORLEVEL specified on the XSTART command.

- If ERRORLEVEL(SESSION) is selected, XRC suspends the entire session on any I/O error. Correct the error and restart the XRC session. The session is suspended only if the volume is in a duplex state at the time of the error. Errors prior to a volume reaching duplex state do not affect the session.
- If ERRORLEVEL(VOLUME) is selected, the scope of the error determines the action taken. If the error occurs for a single primary or secondary volume, only the affected volume pair will be removed from the session. If the error impacts a storage control, all volume pairs using that storage control will be removed from the session. Certain errors have the potential to end the XRC session.
- If ERRORLEVEL(*group_name*) is specified, XRC suspends all volumes that belong to the specified group. Correct the error and add the volume pairs back into the session.

In any case, XRC processing for the impacted volume or volumes has ended. Correct the error and restart the session or volumes.

ANTX5002E *device_number*, *serial_number*, *SERVRETC_from_AOM*, *SERVREAS_from_AOM*, *SERVFRC_from_AOM*, *SERVABCO_from_AOM*

Explanation: XRC has detected an error when requesting a service from the Asynchronous Operations Manager (AOM) function. The message provides the device number to which the I/O is directed (if the device is associated with a primary XRC volume, the error may be a storage control error), the volume serial number of the device that encounters the I/O error, the return code *SERVRETC_from_AOM*, the reason code *SERVREAS_from_AOM*, the functional code *SERVFRC_from_AOM*, and the abend code *SERVABCO_from_AOM* received from AOM. If the device is offline or unavailable, the volume serial number is reported as “******.”

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Refer to *DFSMS/MVS DFSMSdfp Diagnosis Reference* in the AOM Service Return and Reason Codes section for an explanation of the codes returned by AOM. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, pertinent abend information, and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTQ5006E XQUERY FAILED FOR SESSION(*session_id*), RC = *return_code* REAS = *reason_code*

Explanation: The XQUERY command for session *session_id* has failed with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return codes. Correct the error and reenter the command. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information. Based on the return and reason codes, XRC may not be processing normally. In this case, end and restart the XRC session. If the session fails to end properly, cancel the ANTAS000 and ANTAS001 address spaces. After you cancel these address spaces, ANTAS000 automatically restarts. When message ANTB8001I is received, restart XRC operations by entering an XSTART command.

ANTX5009W UNABLE TO RECOVER A SUSPENDED STORAGE CONTROL SESSION NUMBER

Explanation: XRC detects a suspended storage control session that cannot be recovered. XRC continues normal operations.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: A storage control session is suspended whenever a system reset is issued to the storage control with an active session. This message is a warning that a suspended session exists that cannot be properly recovered. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for procedures to determine which sessions are currently suspended and how to recover those sessions. Failure of those actions to correct the problem indicates that the storage control session is permanently suspended until the storage control is re-IMLed.

This is probably a hardware error. Prior to reporting the problem, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and associated SYS1.LOGREC information.

ANTB5010E XRC CONTROL INITIALIZATION FAILURE. RC = *return_code* REAS = *reason_code*

Explanation: The XRC control address space initialization has failed with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return codes. Based on the error, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTX5011E XRC SESSION(*session_id*) ENCOUNTERED AN ERROR WHILE PROCESSING *voltype* VOLUME(*volser*), RC = *return_code* REAS = *reason_code*

Explanation: XRC has encountered an error while processing volume *volser* for the volume type specified with *voltype*, in session *session_id*. *voltype* can be PRIMARY, SECONDARY, or RECOVERY. The processing ends with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive if ERRORLEVEL(SESSION) is specified on the XSTART command, and active if ERRORLEVEL(VOLUME) is specified.

System Programmer Response: XRC can issue this message during a session restart if the volume is offline, or during recovery processing. See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return codes. Based on the error, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTI5013E XRC SESSION(*session_id*) ENCOUNTERED VOLUME INITIALIZATION ERROR FOR VOLUME(*volser*), RC = *return_code* REAS = *reason_code*

Explanation: XRC has encountered an error during volume synchronization or resynchronization. The error was encountered for volume *volser* in session *session_id*. The volume synchronization or resynchronization function ends with return code *return_code* and reason code *reason_code*. The pair associated with volume *volser* is suspended from session *session_id*.

Detecting Module: Extended remote copy (XRC).

System Action: The volume pair is suspended due to the error. Activity continues on other volume pairs.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error, and add the volume pair again to continue synchronization or resynchronization. Provide the system log and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active, to the IBM Support Center. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information to the IBM Support Center.

ANTX5014E *SYNADAF message*

Explanation: XRC has encountered an I/O error. The output from the SYNADAF macro is provided with this message.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Macro Instructions for Data Sets* for a description of the SYNADAF macro and its associated output. Correct the error. If the error persists, search problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, an SVC dump of the ANTAS001 address space, and any associated information from the SYS1.LOGREC data set.

ANTX5020E ERROR DETECTED FOR DEVICE *device_number* UNDER CONTROLLER SESSION *session_number* FOR XRC SESSION(*session_id*), REAS = *reason_code*

Explanation: An error is detected for device *device_number* running under XRC session *session_id*. The XRC session has been active under storage control session *session_number*. The reason code for the error is given by *reason_code* as follows:

Reason	Description
3	The number of entries in the cache has exceeded the supported limit. The current limit is 16K entries.
4	The subsystem storage cache is overcommitted. The XRC session is canceled.
5	The storage control has encountered an internal error. The XRC session is canceled.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions for volumes under this storage control are ended.

System Programmer Response: This error can occur as a result of several configuration problems, as follows:

- Verify that the journal and control data sets are set up correctly. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for additional details.
- Verify that secondary volume I/O activity can be supported by the configuration. Verify that the secondary volumes are attached to storage controls with sufficient NVS, and that DASD fast write is active.
- Verify that the storage control cache size is adequate to support the primary volume update rate.
- Verify that the host configuration can support the XRC activity. You may need to allocate more expanded storage to support the XRC work load.

If all configuration conditions appear to be correct, search problem reporting data bases for a solution for the problem. If no solution exists, contact the IBM Support Center. Provide the console log and a dump of the ANTAS001 address space for the time when the error occurs.

ANTS5100E XRC ENCOUNTERED AN ERROR PROCESSING XSTART COMMAND FOR SESSION(*session_id*), WITH HLQ (*hlq*), RC = *return_code* REAS = *reason_code*

Explanation: The XSTART command for session *session_id* using the high-level-qualifier of *hlq* has failed with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: The XSTART command has encountered an error condition during processing. See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error, and reenter the command if necessary. Sometimes the command continues to process when the error condition is corrected. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information to the IBM Support Center. After collecting this information, it may be possible to restart XRC by canceling the ANTAS000 and ANTAS001 address spaces. After you cancel these address spaces, ANTAS000 automatically restarts. When message ANTB8001I is received, start XRC operations by entering an XSTART command.

ANTX5101E XRC SESSION(*session_id*) ENCOUNTERED AN ERROR PROCESSING *cmdname* (*option*) FOR VOLUME PAIR(*primary_volser,secondary_volser*), RC=*return_code* REAS=*reason_code*

Explanation: XRC has encountered an error while attempting to process the command specified by *cmdname* using option *option* for volume pair *primary_volser* and *secondary_volser* in session *session_id*. The command processing ended with return code *return_code* and reason code *reason_code*. The status of the volume pair is unknown.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error and reenter the command. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information to the IBM Support Center. Based on the return and reason codes, the processing of this volume may have not completed normally. Though the volume is no longer being copied, it may not be possible to add this volume to the XRC session in the future without first suspending the active session and restarting the session.

ANTR5102E XRECOVER FAILED FOR SESSION(*session_id*) WITH HLQ (*hlq*), RC = *return_code* REAS = *reason_code*

Explanation: The XRECOVER command for session *session_id* using the high-level-qualifier of *hlq* has failed with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. The likely cause of this error is either that an invalid high-level-qualifier has been specified or that an invalid session identifier has been specified. Correct the error and reissue the command. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information to the IBM Support Center.

ANTX5103E XRC ENCOUNTERED AN ERROR PROCESSING *cmdname* (*option*) FOR SESSION(*session_id*), RC=*return_code* REAS=*reason_code*

Explanation: XRC has encountered an error while attempting to process the command *cmdname* with option *option* for session *session_id*. This message does not necessarily mean that the function has failed to complete. The return code given by *return_code* and the reason code given by *reason_code* indicate the nature of the error.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions may be active or inactive based on the command.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error and reenter the command. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information to the IBM Support Center. Based on the return and reason codes, the cleanup of this session may have not completed normally. After collecting any diagnostic information, cancel the ANTAS001 address space before starting a new XRC session.

ANTX5104E XRC SESSION(*session_id*) ENCOUNTERED AN ERROR PROCESSING VOLUME(*error_volser*) IN VOLUME PAIR (*primary_volser,secondary_volser*), RC=*return_code* REAS=*reason_code*

Explanation: XRC has encountered an error for volume *error_volser* while processing the volume pair *primary_volser* and *secondary_volser* in session *session_id*. The processing for the volume pair ended with return code *return_code* and reason code *reason_code*. The volume pair is suspended from the session.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information to the IBM Support Center.

Based on the return and reason codes, the processing of this volume pair may have not completed normally. The suspended volume pair can be added back into the XRC session after the error has been corrected. If this is not possible, you may be forced to suspend the active session or cancel the ANTAS001 address space and restart the session before adding the volume. Based on the error, the volume pair may require a full synchronization.

ANTX5105E XRC SESSION(*session_id*) ENCOUNTERED AN ERROR, RC=*return_code* REAS=*reason_code*

Explanation: XRC has encountered an error in session *session_id*. The processing ended with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC session is suspended.

System Programmer Response: Follow the specific actions recommended by the return and reason codes. Usually, you can correct the error and restart the session. If this message is accompanied by ANTS5100E, refer to the error codes within the ANTS5100E message instead of the error codes issued by this message. See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information to the IBM Support Center. Based on the return and reason codes, any of the following may be true:

- The session may have been suspended
- The session may have been restarted by command
- Some volume pairs may require a complete synchronization
- XRC may not be processing normally

If this is not a restart, gather diagnostic information and then cancel ANTAS001 if you wish to restart the XRC session.

ANTX5106E XRC SESSION(*session_id*) DETECTED A *error_type* ERROR, REAS=*reason_code*

Explanation: The XRC software for session *session_id* has detected an environmental error. The *error_type* field specifies the likely cause. The *error_type* may be SOFTWARE, LIC, HARDWARE, or STATE_DATASET. The reason indicated by *reason_code* provides the reason for the error.

Diagnostic information for the error is placed in SYS1.LOGREC. The reason code *reason_code* is the same as reported in Register 15 for a `X'9C4'` abend code.

error_type can be one of the following:

SOFTWARE — If the XRCTRAP function is set to ON, XRC generates a dump to the SYS1.DUMP data set to capture relevant debugging information. For these errors the system log contains relevant diagnostics.

LIC — The storage control may have generated a diagnostic state save. If a state save was not generated, you should ensure that the SCTRAP function is active. This is done by issuing the system console command
MODIFY ANTAS000,SCTRAP ON. For these errors the system log contains relevant diagnostics.

HARDWARE — Relevant diagnostics are provided in the system log and in SYS1.LOGREC.

STATE_DATASET — An error has occurred when writing to the state data set. Relevant diagnostics, with associated IEC or IOS error messages, are provided in SYS1.LOGREC and in the system log.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the reason codes. Correct the error. Provide all information generated for the particular error type, the system log, and SVC dump of the ANTAS001 address space. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information to the IBM Support Center.

| Based on the return and reason codes, the XRC session or a set of volumes behind one or more storage controls may have been suspended. Correct the problem which caused the failure. You can add the volumes back into the session. If this fails, you may need to suspend the XRC session, restart the session, and after a successful restart add the volumes back into the session.

ANTA5107E XADDPAIR FAILED FOR VOLUME PAIR(*primary_volser,secondary_volser***) FOR SESSION(***session_id***), RC=***return_code* **REAS=***reason_code*

Explanation: The XADDPAIR command for the volume pair indicated by *primary_volser* and *secondary_volser* in session *session_id* failed with return code *return_code* and reason code *reason_code*. The specified volume pair is not added to the session.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: XRC activity is suspended on the specified volume pair, but continues on other volume pairs in the session. See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error. Provide pertinent SYS1.LOGREC information to the IBM Support Center if an XRC error is indicated in the system log.

ANTX5108E XRC SESSION(*session_id***) ENCOUNTERED AN ERROR PROCESSING** *cmdname***(***option***) FOR VOLUME LIST (***first_volume_in_list***,...,***last_volume_in_list***), RC =** *return_code* **REAS =** *reason_code*

Explanation: The XRC session *session_id* has encountered an error while attempting to process the command specified by *cmdname* using option *option* for a list of volumes. The failing volume list is identified by *first_volume_in_list* and *last_volume_in_list*. The return code is given by *return_code* and the reason code by *reason_code*. This message may be preceded by ANTX5101E messages that identify the reason the error has occurred for one of the volumes in the list. The volume list is not processed.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: This error occurs when an XDELPAIR or XSUSPEND command is issued and one of the volumes in the list fails to process. Refer to previous ANTX5101E messages for the reason the failure occurred. See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes.

Correct the error and reenter the command. If the problem persists, search the problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and SVC dump of the ANTAS001 address space. You can obtain the dump by issuing MODIFY ANTAS001,DUMP. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information.

ANTV5109E XRC ENCOUNTERED AN ERROR PROCESSING XSUSPEND FOR SESSION(*session_id***), RC=***return_code* **REAS=***reason_code*

Explanation: XRC has encountered an error while attempting to process an XSUSPEND command for the session *session_id*. This message does not necessarily mean that the function has failed to complete. The return code given by *return_code* and the reason code given by *reason_code* indicate the nature of the error.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error and reenter the command. After this error, issue CANCEL ANTAS001 and issue the XSTART command to restart the session. If an XRC error is indicated in the system log, provide pertinent SYS1.LOGREC information to the IBM Support Center.

Based on the return and reason codes, the cleanup of this session may have not completed normally. After collecting any diagnostic information, cancel the ANTAS001 address space before starting a new XRC session.

ANTS5110E XRC RESTART FOR SESSION(*session_id***) FAILED FOR STORAGE CONTROL** *ssid***, REAS=***reason_code*

Explanation: The XSTART command for session *session_id* attempted restart processing of record updates for the storage control specified by *ssid*, and the restart operation has failed for the reason indicated by *reason_code*. If multiple SCSESSIONs exist for the storage control, this message may be issued for each session, based on the scope of the error.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error and reenter the command. System processing continues for other storage controls. The volumes associated with the failing storage control require a full-volume synchronization when the volumes are added to the XRC session by an XADDPAIR command. This message is issued if the storage control timeout was reached before the session was restarted.

ANTV5111E XRC ERROR SUSPENDING VOLUME PAIR(*primary_volser,secondary_volser***) FOR SESSION(***session_id***), RC=***return_code* **REAS=***reason_code*

Explanation: The suspension of the volume pair *primary_volser* and *secondary_volser* in session *session_id* failed with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error. Provide pertinent SYS1.LOGREC information to the IBM Support Center if an XRC error is indicated in the system log.

Based on the return and reason codes, the suspension of this volume pair may not have completed normally. Though the volume pair is no longer being copied, it may not be possible to add this volume pair to the XRC session in the future without first suspending the ANTAS001 address space and restarting the session.

ANTX5112E XRC SESSION(*session_id*) ENCOUNTERED AN ERROR PROCESSING STORAGE CONTROL *ssid*, RC=*return_code* REAS=*reason_code*

Explanation: XRC has encountered an error while processing the storage control identified by *ssid*, in session *session_id*. The processing ended with return code *return_code* and reason code *reason_code*. If multiple SCSESSIONs exist for the storage control, this message may be issued for each session, based on the scope of the error.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return and reason codes. Correct the error. Provide pertinent SYS1.LOGREC information to the IBM Support Center if an XRC error is indicated in the system log.

Based on the return and reason codes, the processing of volumes behind the specified storage control may not be processing normally. After gathering diagnostic information, suspend and restart the XRC session. If the session fails to suspend properly, cancel the ANTAS001 address space. When message ANTB8001I is received, restart XRC operations by entering an XSTART command.

ANTX5113W PENDING ACTION FOR *cmdname*(*option*) CANCELED FOR VOLUME PAIR(*primary_volser,secondary_volser*) FOR SESSION(*session_id*)

Explanation: The pending action for *cmdname* option *option* has been canceled for the volume pair indicated by *primary_volser* and *secondary_volser* in session *session_id*. This error can result from the CANCEL option being issued on the command.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See the previous XRC message to determine the reason the pending action has been canceled. To reenable XRC functions for the volume pair, correct the error and issue an XADDPAIR command to resynchronize the volume pair in the session.

ANTX5114W PENDING ACTION FOR *cmdname*(*option*) CANCELED FOR SESSION(*session_id*)

Explanation: The pending action for *cmdname* option *option* has been canceled for the session *session_id*. This error can result from the CANCEL option being issued on the command, or if the last volume pair in the session has been deleted by an XDELPAIR command.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See the previous XRC message to determine the reason the pending action has been canceled. If you want to issue the XEND or XSUSPEND command, reissue the command with the IMMEDIATE option.

ANTX5115E XSET (*option(value)*) FAILED FOR SESSION(*session_id*) RC = *return_code* REAS = *reason_code*

Explanation: The XSET keyword *option* with value *value* has been specified for session *session_id*. The value specified is invalid. The reason for the error is identified by the specified return code and reason code.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: As a result of the error, the function requested by the XSET command is not performed. The most likely cause is that an invalid value has been specified for the option. Correct the error and reissue the command. If you issued the command and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTX5116E XSET FAILED FOR SESSION(*session_id*), RC = *return_code* REAS = *reason_code*

Explanation: The XSET command has failed for session *session_id* with return code *return_code* and reason code *reason_code*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See “System Data Mover Return Codes” on page ANT-41 for an explanation of the return code. Correct the error and reenter the command.

ANTX5117E XRC VOLUME INITIALIZATION ENCOUNTERED A PHYSICAL VOLUME ERROR ON VOLUME(*volser*) at CCHH OF *cchh*

Explanation: The XRC volume synchronization or resynchronization function has encountered a physical I/O error while initializing volume *volser* at the CCHH specified by *cchh*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Run the ICKDSF utility program to analyze the error at the specified CCHH on the volume experiencing the error. You may need to issue an XDELPAIR command to remove the volume from the session before running ICKDSF. Correct the error and issue the XADDPAIR command to add the volume pair to the session.

ANTX5118E ERROR DETECTED FOR DEVICE *device_number* UNDER STORAGE CONTROL SESSION *session_number* FOR XRC SESSION(*session_id*), REAS = *reason_code*

Explanation: An error is detected for device *device_number* running under XRC session *session_id*. The XRC session has been active under storage control session *session_number*. The reason code for the error is given by *reason_code* as follows:

Reason	**Description**
3	The number of entries in the cache has exceeded the supported limit, which is 16K entries. The data mover has not read from the storage control for at least the timeout interval specified. The storage control session has been canceled; all XRC volume pairs associated with this storage control must be reinitialized.

4	The subsystem storage cache is overcommitted. The data mover has not read from the storage control for at least the timeout interval specified. The storage control session has been canceled; all XRC volume pairs associated with this storage control must be reinitialized.
5	The storage control has encountered an internal error. The XRC session is canceled.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions for volumes under this storage control are ended.

System Programmer Response: This error can occur as a result of several configuration problems, as follows:

- Verify that the journal and control data sets are set up correctly. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for additional details.
- Verify that secondary volume I/O activity can be supported by the configuration. Verify that the secondary volumes are attached to storage controls with sufficient NVS, and that DASD fast write is active.
- Verify that the storage control cache size is adequate to support the primary volume update rate.
- Verify that the host configuration can support the XRC activity. You may need to allocate more expanded storage to support the XRC work load.

If all configuration conditions appear to be correct, search problem reporting data bases for a solution for the problem. If no solution exists, contact the IBM Support Center. Provide the console log and a dump of the ANTAS001 address space for the time when the error occurs.

ANTX5119E XRC SESSION(*session_id*) ENCOUNTERED AN ERROR PROCESSING STORAGE CONTROL *ssid* SESSION *session_number*, RC=*return_code*, REAS=*reason_code*

Explanation: The XRC session identified by *session_id* has encountered an error while processing the storage control session specified by *ssid* in session *session_number*. The processing ended with the specified return code and reason code. If multiple storage control sessions exist for the storage control you might receive a message for each session based on the scope of the error.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for an explanation of the return and reason codes. Correct the error. Provide pertinent SYS1.LOGREC information to the IBM support center if an XRC error is indicated in the system log.

Based on the return and reason codes, volumes attached to the specified storage control may not be processing normally. After gathering diagnostic information, reissue the XADDPAIR command for all volumes associated with the reported session. This will require a full-volume synchronization of these volumes.

ANTX5120W XRC SESSION(*session_id*) STATUS FOR STORAGE CONTROL *ssid*, SESSION *session_number* CANNOT BE DETERMINED

Explanation: XRC has not been able to reestablish the session specified by *session_number* on storage control *ssid* and in XRC session *session_id*. If multiple storage control sessions exist for the storage control, you may receive a message for each session based on the state of the storage control.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: This condition may or may not be a problem. The data mover is currently unable to communicate with the storage control and cannot determine if the specified session is active or not. This condition can be due to a loss of a path from the data mover system to the specified storage control. If this is the case, restore the path to resolve the situation and allow data mover activity on the storage control to continue normally. If paths are active and this message has been received, a GTF trace of data mover I/O to the storage control may be required to diagnose the problem. Provide the GTF trace, SYSLOG, and any associated LOGREC information to IBM for problem diagnosis.

ANTX5121E XSET TIMEOUT(*value*) SSID(*ssid*) SCSESSION(*session*) FAILED FOR SESSION(*session_id*), RC=*return_code*, REAS=*reason_code*

Explanation: An XSET command with the specified **TIMEOUT**, **SSID**, and **SCSESSION** values has failed for session *session_id*. Refer to the specified return code and reason code for additional information.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: As a result of the error, the function requested by the XSET command is not performed. The most likely cause is that an invalid value has been specified for the option. Correct the error and reissue the command.

| **ANTA5122E XADDPAIR SUSPENDED FAILED FOR SESSION(*session_id*), RC=*return_code* REAS=*reason_code***

Explanation: The XADDPAIR SUSPENDED command was received for XRC session *session_id*. The reason that the command failed is indicated by the return code and reason code.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: The function has requested that all suspended volumes be added back to the session. Correct the error and reissue the command. If the problem persists, issue a MODIFY command to dump the ANTAS001 address space and provide pertinent system log information to the IBM Support Center.

ANTM6000I SNAPSHOT WORKING SPACE DATA SETS BEING REFRESHED

Explanation: SDM is creating the list of cataloged working space data sets that DFSMSdss will use for snapshot operations. The names of these data sets must meet the naming convention specified in *DFSMS/MVS DFSMSdss Storage Administration Guide*.

Detecting Module: System data mover (SDM).

System Action: Snapshot operations that require use of working space data sets are delayed until message ANTM6001I is issued.

System Programmer Response: If any DFSMSdss jobs have received message ADR736E with return code 1805, resubmit the job after message ANTM6001I is issued.

ANTM6001I *wscnt* **SNAPSHOT WORKING SPACE DATA SETS REFRESHED**

Explanation: SDM has finished creating the list of working space data sets to be used for snapshot requests. *wscnt* represents the number of working space data sets that SDM was able to find in the catalog.

Detecting Module: System data mover (SDM).

System Action: Operations continue for snapshot operations requiring working space data sets.

System Programmer Response: If any DFSMSdss jobs have received message ADR736E with return code 1805, resubmit the job after message ANTM6001I is issued.

ANTM6002W ERROR REFRESHING SNAPSHOT WORKING SPACE DATA SETS - RC=*rc* **REAS=***reas*

Explanation: SDM has encountered an error while creating the list of working space data sets that will be used for snapshot requests.

Detecting Module: System data mover (SDM).

System Action: DFSMSdss jobs that use snapshot may receive message ADR736E until this error is corrected. Refer to the associated return and reason code reported with ADR736E to determine if this is the cause of the error.

System Programmer Response: Refer to the action in the indicated return and reason codes.

ANTM6003E SNAPSHOT READ ERROR ON DEVICE=*device* **VOLSER=***volser* **RC=** *retcode* **REAS=***reascode* **CSW=***cswdata* **SENSE=***sense*

Explanation: SDM has encountered an error when reading from a snapshot working-space data set located on device *device* with serial number *volser*. If the *cswdata* and the *sense* fields contain asterisks, the problem is an internal data mover error. The return and reason code indicate the specific error and the action to be taken.

Detecting Module: System data mover (SDM).

System Action: The snapshot request has failed. An SDM error record has been written to SYS1.LOGREC.

System Programmer Response: Take action based on the return code, reason code, and sense information.

ANTB8000I XRC INITIALIZATION STARTED

Explanation: Initialization of the XRC control function has started. XRC functions are inactive until XRC initialization is completed. Message ANTB8001I will be issued when XRC initialization is complete.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: If XRC initialization starts but never completes, an initialization error has occurred. Search problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log, pertinent abend information from SYS1.LOGREC, and SVC dumps of the ANTAS000 and ANTAS001 address spaces, if they are active. To determine which address spaces are active, enter the console commands DISPLAY A,ANTAS000 and DISPLAY A,ANTAS001. If an XRC error is indicated in the system log, also provide pertinent SYS1.LOGREC information.

ANTB8001I XRC INITIALIZATION COMPLETED

Explanation: The XRC control function has completed its initialization and is ready to accept commands. This message is preceded by message ANTB8000I. This message is issued when XRC completes its initialization after a system IPL or after the ANTAS000 address space is ended and restarted.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: None.

ANTA8004I XADDPAIR COMPLETE, VOLUME PAIR (*primary_volser***,** *secondary_volser***) ADDED TO SESSION(***session_id***), SCSESSION(***storage_control_session***)**

Explanation: The XADDPAIR command has completed successfully. The volume pair *primary_volser* and *secondary_volser* is added to session *session_id* with the primary storage control session of *storage_control_session*. If an SCSESSION value was not specified, the default *storage_control_session* value of "--" is assigned. Use the XQUERY command to determine the status of the volume pair.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted, and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTE8008I XRC SESSION(*session_id***) INACTIVE DUE TO ERROR. CONSISTENCY_GROUP TIME(***timestamp***)**

Explanation: An error occurred which caused the XRC session *session_id* to end. All volumes except suspended volumes in the session are consistent up to the reported time of *timestamp*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: See previous XRC messages to determine the cause of the error. The previous messages also contain the consistency time for suspended volumes.

ANTI8023I VOLUME INITIALIZATION STARTED FOR XRC VOLUME PAIR(*primary_volser,secondary_volser***)**

Explanation: Volume synchronization or resynchronization of volume pair *primary_volser* and *secondary_volser* has started. XRC attempts to vary the secondary volume serial number given by *secondary_volser* offline from the system that the XRC data mover is running on. Do not access the secondary volume during the copy process.

The secondary volume is varied online after volume synchronization or resynchronization has completed or ended.

Note: The XRC initialization function can end abnormally as a result of the secondary volume not being online. In this case, the secondary volume needs to be varied online prior to issuing the XADDPAIR command specifying the secondary volume serial number.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: XRC controls the rate at which the volume initialization progresses, based on application activity. Some volume initializations take longer than others.

ANTI8024I XRC VOLUME PAIR (*primary_volser,secondary_volser*) IN DUPLEX STATUS AT TIME OF *data_mover_host_time*

Explanation: The XRC volume synchronization or resynchronization function has completed for the specified *primary_volser,secondary_volser* at the data mover host system time of *data_mover_host_time*. The volume status has changed from copy pending state to duplex state.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: None.

ANTD8025I XDELPAIR COMPLETE FOR VOLUME PAIR (*primary_volser*,*secondary_volser*) FOR SESSION(*session_id*), WITH CONSISTENCY_GROUP TIME(*timestamp*) AND STATUS OF *status*

Explanation: The volume pair *primary_volser* and *secondary_volser* is successfully removed from session *session_id*. The volume is consistent up to the reported time *timestamp*. The current XRC volume pair status is indicated by *status*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the XDELPAIR has not been explicitly entered by a user, this message may result from an error reported by a previous message. View the system log for message ANTX0511E to determine why the volume pair has been deleted, correct the error, and enter an XADDPAIR for the deleted volume pair to place the volume back into the XRC session. If the command is accepted and this message has not been issued at the system console log or at the user ID at the MSGROUTEID parameter, see message ANTT0099I.

ANTX8030W XRC ENCOUNTERED USER DATA WITH NO TIMESTAMP ON VOLUME(*volser*) AT CCHH OF *cchh*. THE NUMBER OF TRACKS WITH NO TIMESTAMP = *tracks*

Explanation: User data updates without timestamps have been made to the primary XRC volume *volser*. The CCHH being updated is *cchh*. The number of tracks updated is *tracks*. XRC places the non-timestamped updates on the secondary volume. Be aware that, without a timestamp on the record, applications that do dependent record updates on multiple volumes attached to different storage controls may experience temporary data out-of-synchronization situations.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: This message is issued periodically if a significant number of nontimestamped updates are made. The message may be issued if:

- Application systems making updates to XRC-managed volumes do not provide timestamp support. Timestamp support can be missing from non-MVS systems.
- Application programs making updates to XRC-managed volumes bypass the standard MVS IOS interfaces to perform their I/O operation. In this case, change the application programs to provide timestamp support.
- A system paging volume is being managed by the XRC data mover. The paging subsystem uses certain functions that bypass normal I/O timestamping, which then causes the ANTX8030W message to be issued for volumes containing system paging data sets. All data has been properly applied to the secondary volumes, and this message can be ignored.

If all data updates are correctly timestamped and the problem persists, search problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and a GTF trace of related system and XRC activity to the volume or volumes that encounter the error.

ANTX8032W ALL XRC JOURNALS FULL, WAITING FOR SECONDARY UPDATES TO FREE JOURNAL SPACE

Explanation: The XRC journal data sets are full. Processing of additional primary updates cannot occur until journal space is released. This condition can occur as a result of peak load processing.

Detecting Module: Extended remote copy (XRC).

System Action: Primary updates are not journaled until the full journal condition is relieved and message ANTX8033I is received.

System Programmer Response: This message means that updates to secondary volumes have fallen behind updates to primary volumes. If ERRORLEVEL(SESSION) is specified, all XRC volume pairs may have become suspended from the session. If ERRORLEVEL(VOLUME) or ERRORLEVEL(*group_name*) is specified, one or more sets of volumes may have become suspended.

This error may be due to a configuration problem where secondary processing cannot keep up with primary processing. In this case, verify that the journal data sets are large enough. If necessary, increase the size of the existing journal data sets, make them striped, or allocate more journal data sets. Ensure that secondary volumes are properly configured to minimize channel path and device contention, and are attached to storage controls with fast write active.

Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for additional details. If all configuration conditions appear to be correct, search problem reporting data bases for a solution for the problem. If no solution exists, contact the IBM Support Center. Provide the console log and a dump of the ANTAS001 address space for the time when the error occurs.

ANTX8033I XRC JOURNAL FULL CONDITION RELIEVED

Explanation: The condition detected by ANTX8032I has been alleviated. Normal XRC copy operations continue.

Detecting Module: Extended remote copy (XRC).

System Action: XRC copy operations continue.

System Programmer Response: None.

ANTX8050I XRC SESSION(*session_id*) NOT ACTIVE. ISSUE XSTART COMMAND

Explanation: An extended remote copy (XRC) command has been issued for session *session_id*, but the session is not active.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Enter an XSTART command to start an XRC session and reenter this command. If an XRC session is currently ending, wait for the session to end and then issue the XSTART command. If the session fails to end in a reasonable amount of time, issue MODIFY ANTAS001,DUMP and then cancel the ANTAS001 address space. If the problem persists, search problem reporting databases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and an SVC dump of the ANTAS000 and ANTAS001 address spaces.

ANTX8051I NO ACTIVE XRC SESSIONS. ISSUE XSTART COMMAND

Explanation: The XQUERY or XEND command has been entered with the reserved session name *ALL*. There are no active XRC sessions.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: Enter the XSTART command to start an XRC session.

ANTX8052I UCB PINNED BY ANT COMPONENT DF117

Explanation: The device defined by the UCB is currently in use by the system data mover function.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: XRC or concurrent copy function is active.

System Programmer Response: The device is active as a primary volume or a secondary volume in an XRC session. To reconfigure the volume for an XRC session:

- Issue an XDELPAIR command for the volume (or for the corresponding primary volume if this is a secondary volume) to remove the device from the session.
- Complete the reconfiguration.
- Issue the XADDPAIR command, with the default copy option, to return the volume pair to XRC control.

ANTS8100I XSTART COMPLETE FOR XRC SESSION(*session_id*) WITH SESSIONTYPE (*session_type*), ERRORLEVEL (*error_level*), HLQ (*hlq*). SESSION NOW *state*

Explanation: The XSTART command for the XRC session *session_id* has completed successfully. Either a new session has been started or a previously suspended session is now restarted. The SESSIONTYPE indicated by *session_type*, ERRORLEVEL indicated by *error_level*, and the high-level-qualifier indicated by *hlq* are those specified or defaulted from the XSTART command. The session status is active. The *state* variable indicates ACTIVE for a new session or RESTARTED for a restart of a suspended session.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: You can issue XADDPAIR commands to resynchronize or add volumes to the session. If the command has been accepted, and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTA8101I XADDPAIR COMPLETE FOR VOLUME PAIR(*primary_volser*,*secondary_volser*) FOR SESSION(*session_id*) WITH ERRORLEVEL(*error_level*), SCSESSION(*storage_control_session*)

Explanation: The XADDPAIR command has completed successfully. The volume pair *primary_volser* and *secondary_volser* is added to session *session_id* with the ERRORLEVEL indicated by *error_level* and primary storage control session of *storage_control_session*. If an SCSESSION value was not specified, the default *storage_control_session* value of "--" is assigned. Use the XQUERY command to determine the status of the volume pair.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTR8102I XRECOVER COMPLETE FOR SESSION(*session_id*) AT RECOVERED CONSISTENCY_GROUP TIME(*timestamp*)

Explanation: The XRECOVER command has completed successfully for session *session_id*. The recovered consistency time reported is the time *timestamp*. All volumes in duplex status are consistent up to the specified timestamp. Each remaining volume is consistent up to the consistency time reported by previous messages.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: When this message has been received, installation procedures to complete recovery may begin. If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTD8103I XDELPAIR(*option*) COMPLETE FOR VOLUME PAIR(*primary_volser*,*secondary_volser*) FOR SESSION(*session_id*) AT CONSISTENCY_GROUP TIME(*timestamp*) AND STATUS *status*

Explanation: An XDELPAIR command was issued with the option *option*. The volume pair *primary_volser* and *secondary_volser* is successfully removed from session *session_id*. The volume is consistent up to the reported time *timestamp*. The status of the volume pair is given by *status* at the time the pair was removed from the session. If the volume pair never reached duplex state or the primary volume is a utility volume, the consistency time is reported as "NO_TIME_AVAILABLE." The status is the same as reported by an XQUERY report.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: This message reports the completion of the XDELPAIR requested by the user. Any error that occurred while deleting the volume pair was reported by a previous error message. After a volume pair has been deleted it can be placed back into the XRC session by a subsequent XADDPAIR command. If the command is accepted and this message has not been issued at the system console log or at the user ID at the MSGROUTEID parameter, see message ANTT0099I.

ANTX8104I *cmdname*(*option*) ACCEPTED FOR VOLUME PAIR (*primary_volser*,*secondary_volser*) FOR SESSION(*session_id*) AT TARGET CONSISTENCY_GROUP TIME(*timestamp*)

Explanation: The command *cmdname* with option *option* has been accepted for the volume pair *primary_volser* and *secondary_volser* in session *session_id*. The command completes the processing of updates to the XRC secondary volumes through the target consistency time of *timestamp*. Successful completion of the command is reported by either message ANTD8103I or ANTV8109I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted, and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTE8105I XEND(*option*) ACCEPTED FOR SESSION(*session_id*) AT TARGET CONSISTENCY_GROUP TIME(*timestamp*)

Explanation: The XEND command with option *option* has been accepted for the session *session_id*. The command completes the processing of updates to the XRC secondary volumes through the target consistency time of *timestamp*. Successful completion of the command is reported by message ANTE8106I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted, and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTE8106I XEND(*option*) COMPLETE FOR SESSION(*session_id*) AT CONSISTENCY_GROUP TIME(*timestamp*). SESSION NOW INACTIVE

Explanation: The session *session_id* was successfully ended by the option requested by *option*. All secondary volumes are consistent up to the reported time *timestamp*. The session is inactive and no longer maintaining a record of storage control updates.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are inactive.

System Programmer Response: This message reports the completion of the XEND function requested by the user. If an error occurs while processing the XEND request, it was reported by a previous error message. If an XEND function should have occurred and has not, search the problem reporting databases for a solution. If no solution exists, contact the IBM support center. Provide the system log and SVC dump of the ANTAS001 address space. You can obtain the dump by issuing MODIFY ANTAS001,DUMP. You can force a session to end by canceling the ANTAS001 address space and deleting the state data set associated with the session.

ANTV8107I SUSPEND COMPLETE FOR VOLUME PAIR(*primary_volser,secondary_volser*) FOR SESSION(*session_id*) AT CONSISTENCY_GROUP TIME(*timestamp*)

Explanation: The XRC volume pair indicated by *primary_volser* and *secondary_volser* has been suspended from the XRC session indicated by *session_id*. The secondary volume is consistent up to the time indicated by *timestamp*. Data is no longer being copied for this pair.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: See the previous XRC message to determine why the volume pair was suspended. To reenable XRC functions for the volume pair, correct the error and issue an XADDPAIR command to resynchronize the volume pair in the session.

ANTR8108I XRECOVER STARTED FOR SESSION(*session_id*) AT STARTING CONSISTENCY_GROUP TIME(*timestamp*), HLQ (*hlq*)

Explanation: The XRECOVER command has started for session *session_id* using the high-level-qualifier of *hlq*. For a session that is suspended or ended by command, the starting consistency time reported is the consistency time indicated on the ANTE8106I or ANTV8110I message. All volumes in duplex status are consistent up to the indicated time given by *timestamp*. If possible, the XRECOVER function attempts to recover data from the journal data sets to bring volumes to a later consistency time.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: When this message is received, XRC has begun to apply updates from the journal data sets to the secondary volumes. The secondary volumes are clipped as part of the recovery process. If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTV8109I XSUSPEND(*option*) COMPLETE FOR VOLUME PAIR(*primary_volser*,*secondary_volser*) FOR SESSION(*session_id*) AT CONSISTENCY_GROUP TIME(*timestamp*) AND STATUS *status*

Explanation: The volume pair indicated by *primary_volser* and *secondary_volser* is suspended for session *session_id* with option *option*. All data on the secondary volume is consistent up to the consistency time *timestamp* reported. The status of the volume pair is given by *status* at the time the pair was suspended.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the XSUSPEND command has not been explicitly entered by a user, this message may result from an error reported by a previous message. View the system log for previous error messages to determine why the volume pair has been suspended, correct the error, and enter the XADDPAIR command for the suspended volume pair to place the volume pair back into the XRC session. If the command is accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTV8110I XSUSPEND(*option*) COMPLETE FOR SESSION(*session_id*) AT CONSISTENCY_GROUP TIME(*timestamp*), TIMEOUT(*timeout*). SESSION NOW SUSPENDED

Explanation: The XRC session *session_id* has been suspended by option *option*. The session is suspended. All secondary volumes are consistent up to the reported consistency time of *timestamp*. The timeout interval for the storage controls is *timeout*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are suspended.

System Programmer Response: The session can be suspended by an explicit XSUSPEND command or by an error detected by the data mover. The session can be restarted by an XSTART command followed by XADDPAIR commands for the suspended volume pairs.

ANTX8111I PENDING *cmdname*(*option*) CANCELED FOR VOLUME PAIR(*primary_volser*,*secondary_volser*) FOR SESSION(*session_id*)

Explanation: A CANCEL request was specified for the pending command *cmdname* and option *option*. The pending command for volume pair *primary_volser* and *secondary_volser* in session *session_id* has been canceled.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted, and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTX8112I PENDING *cmdname*(*option*) CANCELED FOR SESSION(*session_id*)

Explanation: A cancel was specified for the pending command *cmdname* and option *option*. The pending command for session *session_id* has been canceled.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted, and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTX8113I XSET (*option(value)*) ACCEPTED FOR SESSION(*session_id*)

Explanation: The XSET option *option* with value *value* has been accepted for the session. The value specified takes effect with the start of the next function using this setting.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted, and this message has not been displayed either at the system console log or at the user ID specified with the MSGROUTEID parameter, see message ANTT0099I.

ANTV8114I XSUSPEND COMPLETE FOR SESSION(*session_id*) AT CONSISTENCY_GROUP TIME(*timestamp*), TIMEOUT(*timeout*). SESSION NOW SUSPENDED

Explanation: The XRC session *session_id* has been suspended. All secondary volumes are consistent up to the reported consistency time of *timestamp*. The timeout interval for the storage controls is *timeout*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are suspended.

System Programmer Response: The session was suspended by an internal error detected by the data mover. Refer to other messages for the cause of the error. Correct the error and restart the session by issuing an XSTART command followed by XADDPAIR commands for the suspended volume pairs. If an XSUSPEND function should have occurred but has not, search the problem reporting databases for a solution. If no solution exists, contact the IBM support center. Provide the system log and SVC dump of the ANTAS001 address space. You can obtain the dump by issuing MODIFY ANTAS001,DUMP.

ANTV8115I XSUSPEND(*option*) ACCEPTED FOR SESSION(*session_id*) AT TARGET CONSISTENCY_GROUP TIME(*timestamp*), TIMEOUT(*timeout*)

Explanation: The XSUSPEND command with option *option* has been accepted for the session *session_id*. The command completes the processing of updates to the XRC secondary volumes through the target consistency time of *timestamp* and a storage control timeout interval of *timeout*. Successful completion of the command is reported by message ANTV8109I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted, and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I. If an XSUSPEND function should have occurred but has not, search the problem reporting databases for a solution. If no solution exists, contact the IBM support center. Provide the system log and SVC dump of the ANTAS001 address space. You can obtain the dump by issuing MODIFY ANTAS001,DUMP.

ANTD8116I XDELPAIR(*option*) COMPLETE FOR UTILITY VOLUME(*primary_volser*) FOR SESSION(*session_id*)

Explanation: An XDELPAIR command was issued with the option *option*. The utility volume *primary_volser* is successfully removed from session *session_id*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: This message reports the completion of the XDELPAIR command requested by the user. Any errors that occurred while deleting the volume were reported by a previous error message. You can place a deleted volume back into the XRC session with a subsequent XADDPAIR command. If the command is accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTX8117I XRC SESSION(*session_id*) DELAY DETECTED AT (*function*); SESSION CONSISTENCY DELAY(*delay_time*)

Explanation: The data mover for session *session_id* has detected a delay in mainline data mover processing. The source of the delay is indicated by the specified *function*. The function can be PRIMARY, JOURNAL, or SECONDARY. The impact of the delay is shown by the session consistency delay time *delay_time*, given in hours, minutes, seconds, and tenths of seconds (hh:mm:ss.t).

This message can indicate a temporary peak in application activity on the primary storage control, possibly as a result of volume synchronization or resynchronization activity on that storage control. This message can be repeated periodically until the condition is relieved, as indicated by the ANTX8118I message.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: This message reports a condition, and does not indicate an error. If the delay condition continues for a long period of time, the application can be impacted if primary storage control cache capability is exceeded. When this message states that the primary rate exceeds the specified function, ensure that DASD fast write is on for the volumes associated with the function. If volume synchronization or resynchronization activity is present on any primary storage control, you may want to issue an XSUSPEND command to suspend the volume pairs being added until the application update rate on the primary storage controls has returned to normal.

ANTX8118I XRC SESSION(*session_id*) DELAY RELIEVED AT *function*; SESSION CONSISTENCY DELAY(*delay_time*)

Explanation: The data mover for XRC session *session_id* has determined that the processing delay indicated by a previous ANTX8117I message has been relieved. The relieved function is indicated by *function*, and can be PRIMARY, JOURNAL, or SECONDARY. The consistency delay is shown by *delay_time*.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: None.

ANTX8119W XRC UNABLE TO TERMINATE STORAGE CONTROL SESSION *session_number* USING DEVICE *dddd* ON STORAGE CONTROL *cccc*

Explanation: An XSTART command has been issued to restart an XRC session. During command processing, the data mover has issued I/O to storage control *cccc* from device *dddd* in order to clean up a previously-ended storage control session *session_number*. The data mover was unable to cleanup the storage control session.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: This is a warning condition indicating that this session has not been properly cleaned up, and may become a stalled session. If a subsequent XADDPAIR command fails as a result of this condition, take immediate action to cleanup the stalled session. If the XSTART and XADDPAIR commands are able to proceed using another storage control session, there is no immediate problem to be addressed. In either case, the procedure to cleanup a stalled storage control session is as follows:

1. Issue a MODIFY ANTAS000,LISTSESS *dddd* command to determine the status of storage control sessions associated with the specified device.
2. Issue a MODIFY ANTAS000,LISTDVCS *dddd ss* command to determine which devices belong to the storage control session.
3. Issue a MODIFY ANTAS000,TERMSESS *dddd ss* command to end the session.

Notes:

1. The device used to end the stalled session must be owned by the stalled storage control session, or the TERMSESS operation fails. (The LISTDVCS report shows which devices are owned by the storage control.)
2. The device used to end the session is different than the device reported by this ANTX8119W message.

ANTX8120I ALL VOLUMES IN SESSION(*session_id*) ARE NOW *status*

Explanation: All the volumes in session *session_id* are in the state indicated by *status*. The *status* field can be one of the following:

DUPLEX	All volumes have reached duplex state. There are no volumes that are in pending or copy state.
SUSPENDED	All duplex volumes have been suspended. This status is issued as a result of XRC internally suspending all volumes.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: The message indicates the state of all volumes in the session, except for utility volumes. This message can be used by automation functions.

ANTI8121I VOLUME INITIALIZATION RESTARTED FOR XRC VOLUME PAIR (*primary_volser,secondary_volser*)

Explanation: Volume synchronization or resynchronization of volume pair *primary_volser* and *secondary_volser* has been automatically restarted. This message follows a suspension of the volume pair due to a recoverable error.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: None.

ANTA8122W VOLUME PAIR(*primary_volser,secondary_volser*) WILL NOT BE ASSOCIATED WITH SCSESSION(*storage_control_session*)

Explanation: The XADDPAIR command specified an SCSESSION value that is not the one currently assigned to the volume pair specified by *primary_volser* and *secondary_volser*. The data mover will perform the resynchronization of the volume pair using the assigned SCSESSION value. Refer to the ANTA8101I or ANTA8004I message for this volume pair for the currently assigned SCSESSION value.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: None required. If you want to change the SCSESSION value currently assigned to the volume pair, you must issue an XDELPAIR command to remove the volume pair from its current SCSESSION, then issue an XADDPAIR command to assign it the desired SCSESSION value.

ANTX8123I XSET TIMEOUT(*value*) SSID(*ssid*) SCSESSION(*session*) ACCEPTED FOR SESSION(*session_id*)

Explanation: The XSET command has been accepted for session *session_id*. The command was specified with the associated **TIMEOUT**, **SSID**, and **SCSESSION** values.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: The function requested by the XSET command has been accepted by the system. If you issued the command and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTA8124I XADDPAIR SUSPENDED COMPLETED FOR SESSION(*session_id*)

Explanation: In XRC session *session_id*, an XADDPAIR SUSPENDED command was issued. The command has completed its processing.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: The XADDPAIR SUSPENDED command has added all volumes back to the session, and scheduled the volumes for volume initialization.

ANTA8126I XADDPAIR SUSPENDED COMPLETED - NO SUSPENDED VOLUMES IN SESSION(*session_id*)

Explanation: The XADDPAIR SUSPENDED command was received for XRC session *session_id*. There are no suspended volumes in the session.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: The function has requested that all suspended volumes be added back to the session. The session has no suspended volumes. Issue the XQUERY command to determine the status of all volumes in the XRC session. The suspended volume count should be zero. If it is not zero, then issue a MODIFY command to dump the ANTAS001 address space and provide pertinent system log information to the IBM Support Center.

ANTQ8200I XQUERY STARTED FOR SESSION(*session_id*)

Explanation: An XQUERY command has been issued by either a TSO user or the system data mover for session *session_id*. The report follows this message.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8201I XQUERY *report_type* REPORT COMPLETE FOR SESSION(*session_id*)

Explanation: This message is issued upon completion of all XQUERY reports. The message concludes the XQUERY report for the session *session_id*. The *report_type* identifies the type of report given.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8202I XQUERY *report_type* REPORT - *level_number*

Explanation: An XQUERY command has been issued by either a TSO user or the system data mover for a *report_type* report. The *level_number* specifies the support level of the report. The report follows this message.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8203I *header_line*

Explanation: The *header_line* is a standard header line for various reports. It provides separation between the header and detail information.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8204I NO VOLUMES MEET REQUESTED SPECIFICATION

Explanation: A qualification was requested for a volume list report. There are no volumes which meet the requested qualifications.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: An XQUERY command was issued with specified options and no volumes in the session met the criteria. Issue an XQUERY VOLUME(ALL) command to obtain complete volume status.

ANTQ8205I *number_volumes* OF *total_volumes* VOLUMES MEET REQUESTED SPECIFICATION

Explanation: A qualification request was made for a volume list report. *number_volumes* is the number of volumes that met the qualifications. *total_volumes* reports the total number of valid volumes in the list that the user requested to be considered.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: None.

ANTQ8206I *number_volumes* VOLUME(S) MEET REQUESTED SPECIFICATION

Explanation: This message specifies the number of volumes that meet the selection criteria specified on the XQUERY command. Volumes which are not part of an XRC session are not included in the reported volume count.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted with a specified criteria and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8211I PRIM SEC ERROR SYNCH

Explanation: This message provides the XQUERY command volume report header information. It is associated with messages ANTQ8212I and ANTQ8213I. The details of the fields are provided in message ANTQ213I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8212I VOL VOL LEVEL % STA CMD OP ------TIMESTAMP------

Explanation: This message provides the XQUERY command volume report header information. This header message is associated with ANTQ8211I and ANTQ8213I. The details of the fields are provided by ANTQ8213I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8213I *prim_vol sec_vol errorlevel synch_% sta cmd op timestamp*

Explanation: This message provides the output associated with the header lines produced by messages ANTQ8211 and ANTQ8212 for the XQUERY command requesting a volume report.

prim_vol **—** The primary volume serial being reported.

sec_vol **—** The secondary volume serial being reported.

errorlevel **—** The error level for the primary and secondary volume pair. For each volume pair reported, the error level is either explicitly specified on a previous XADDPAIR command or defaulted from the XSTART command for the session. The valid values in this field are:

VOLUME — Volume-level recovery
SESSION — Session-level recovery
(*group_name*) — Group-level recovery
(blank) — No error level for the volume (such as a utility volume)

synch_% **—** Provides the approximate percentage of the volume pair that has completed synchronization or resynchronization. For example, a volume pair that is reported with *synch_%* of 80 percent means that 80 percent of the data on the secondary volume is synchronized with the primary volume at the reported session consistency time. Thus, 20 percent of the data must be copied in order to place the volume pair in a fully synchronized state.

This field may contain any of the following:

nn — Where nn ranges from 00 to 99. This is the approximate percentage of the volume pair that is synchronized. If nn is 00, the volume synchronization process may not yet have started. If the percentage does not change as expected on subsequent XQUERY commands, it may be because the storage control has exceeded its internal threshold value and has temporarily stopped the copy activity. When the activity level again falls below the threshold value (default of `X'500'`), the storage control resumes processing the volume copy.
“??” — The synchronization percentage cannot be determined.
(blank) — The volume pair is in duplex or seqcheck state. The volume pair is completely synchronized and consistent as of the reported session consistency time.
“--” — The field is not applicable to this volume pair.

sta **—** The current status information associated with the volume pair. The valid status states are:

CPY — Copy. Volume pair being synchronized or resynchronized.
DUP — Duplex. Volume pair in duplex state at time of report.
NIS — Not in session. Volume pair is not part of the session.
PND — Pending. Volume pair waiting to be synchronized or resynchronized.
RCV — Recovered. Volume pair has been successfully recovered.
RST — Restarted. Volume pair is scheduled for resynchronization due to a recoverable error.
SUS — Suspended. Volume pair is suspended.
SEQ — Seqcheck. Volume pair may be inconsistent relative to other volume pairs on different storage controls.
UTL — Utility volume. Volume is used as a path to the storage control.
* — Blocked. An asterisk appended to the value in the *sta* field indicates that the specified primary volume is currently being blocked. Request a detail volume report for additional information on the blocking status.

cmd **—** The latest pending command issued for the volume pair. The pending command is not executed until the time specified in the *timestamp* field is reached. This field may contain any of the following:

(blank) — No pending command for the volume pair.
DEL — Pending XDELPAIR command for the volume pair.
SUS — Pending XSUSPEND command for the volume pair.

op **—** The keyword option selected when the *cmd* was issued for this volume pair. This field may contain any of the following:

(blank) — No pending time for the volume pair.
AT — Pending ATTIME time for the volume pair.
DR — Pending DRAIN time for the volume pair.
IM — Pending IMMEDIATE time for the volume pair.

timestamp **—** The time associated with the volume pair. The interpretation of the timestamp field is based upon a combination of the status and command fields described below. The timestamp is always a universal time, coordinated (UTC) format associated with the application systems connected to the primary storage controls. The field is not a data mover system timestamp. The timestamp field may be any of the following:

(blank) — There are no outstanding commands pending for the volume pair. If the volume pair is in DUP state, the volume pair is consistent up to the session-specified timestamp reported in message ANTQ8231I.
(timestamp) — The timestamp reported is given in universal time, coordinated (UTC) format. If the volume pair has a status of SUS, the data on the suspended volume pair is consistent up to the time reported. If the volume pair has a pending command (indicated by a command in the *cmd* field), the timestamp reported is the target time for the pending command.
NO_TIME_AVAILABLE — A consistency time for this suspended volume pair cannot be determined. This may be due to either a prior suspension before the volume pair had reached duplex, or because none of the volume pairs in this session has been updated since the pair reached duplex.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: The information reported by the XQUERY command is provided for the volumes requested by the command. It is point-in-time information based on the volume status at the time the command processes the volume. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8214I NO ACTIVE VOLUMES

Explanation: There are no active volumes in the session. The presence of this message indicates that there is no ANTQ8235I message issued for the XQUERY report.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: The information reported by the XQUERY command is provided for the volumes requested by the command. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8216I PRIM SEC ERROR SYNCH RES THD SC

Explanation: This message provides the header information for an XQUERY command volume detail report. It is associated with messages ANTQ8217I and ANTQ8218I. The details of the message are provided in message ANTQ8218I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8217I VOL VOL LEVEL % STA CMD OP CNT CNT SSID SN

Explanation: This message provides the header information for an XQUERY command volume detail report. It is associated with messages ANTQ8216I and ANTQ8218I. The details of the message are provided in message ANTQ8218I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8218I *prim_vol sec_vol errorlevel synch_% sta cmd op residual_cnt threshold_cnt pssid pscsn*

Explanation: This message provides the output associated with the header lines produced by messages ANTQ8216I and ANTQ8217I for the XQUERY command requesting a volume detail report.

Refer to message ANTQ8213I for an explanation of the *prim_vol*, *sec_vol*, *errorlevel*, *synch_%*, *sta*, *cmd*, and *op* fields.

residual_cnt **—** The number of updated records for this device that the data mover has yet to read from the primary storage control for this XRC session.

threshold_cnt **—** The current blocking threshold count for the primary volume. If this field is blank, the device blocking LIC is not installed on the primary storage control. If this field is zero, the volume was added to the session with the DONOTBLOCK keyword specified.

pssid **—** The storage subsystem identifier for the primary volume.

pscsn **—** The logical session name of the primary storage control session.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: None.

ANTQ8231I DATA CONSISTENT(*timestamp*) *system_status*

Explanation: This message provides the summary information for the XQUERY command for the summary and volume reports.

The "DATA CONSISTENT" field reports the consistency time for volumes in the XRC session at the time the report is given. The *timestamp* variable specifies the UTC time from the application system. XRC generates this time from the updates received from the application system. Data on the secondary volumes was last consistent up to this timestamp. This timestamp is not changed if the application system is not performing updates to any primary volumes managed by XRC.

The timestamp reported does not apply to volumes in either pending or suspended state. Volumes in a pending state are currently processing a synchronization function and do not become consistent until the copy operation has completed. Volumes that are in a suspended state have their consistency time reported in a separate message.

The *system_status* field is reported as follows:

- DELAY(*hh:mm:ss.t*) — This is the current delay between the last application I/O to a primary storage control and the update made by the data mover to the journal data set. This field provides an approximation of the time delay (potentially nonrecoverable data) between the primary and secondary volumes, and is reported in hours, minutes, seconds, and tenths of a second.
- IDLE(*hh:mm:ss.t*) — This status is reported when all updates have been applied to the secondary volumes and all primary storage controls have no pending updates. This field is reported in hours, minutes, seconds, and tenths of a second and wraps to zero after 18 hours, 59 minutes, and 59 seconds. Updates to unsuspended volumes reset the idle indication. An XDELPAIR or XSUSPEND command with an ATTIME or DRAIN option specified also resets the idle time.
- ????? — This status is reported when the XQUERY function is unable to determine the status of the primary storage controls. This can occur if the primary storage controls are inaccessible.
- (blank) — This field is not applicable for an XRECOVER report and is reported as blanks when issued during an XRECOVER.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8232I SESSIONTYPE(*session_type*) ERRORLEVEL(*error_level*) HLQ(*hlq*)

Explanation: This message provides additional summary information for the XQUERY command for the summary and volume reports. The SESSIONTYPE field reports the *session_type* specified on the last XSTART command for this session.

The ERRORLEVEL field reports the error level currently in effect for the session. All volumes in the session that were not assigned an error level with the XADDPAIR command receive this error level assignment. The HLQ field reports the high-level-qualifier *hlq* in effect for the session, as was specified on the XSTART command.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8233I DEFAULT TIMEOUT(*timeout*)

Explanation: This message provides the summary information for the XQUERY command. It is issued for the summary and volume reports. The default timeout *timeout* field specifies the session timeout interval. This value is assigned to storage controls when their session is initialized. The time value is given in hours, minutes, and seconds. If the default timeout is used for each storage control, this field is reported as STORAGE_CONTROL_DEFAULT.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed either at the system console log or at the user ID at the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8234I PND SESSION CMD = *command keyword(timestamp)*

Explanation: This message provides the summary information for the XQUERY command. It is issued for the summary and volume reports. It reports a pending session-level command. The *command* field may be either XSUSPEND or XEND. The *keyword* field specifies the option associated with the session-level command. It may be either ATTIME or DRAIN. The *timestamp* field is the universal time, coordinated (UTC) that the command is executed.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed either at the system console log or at the user ID displayed by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8235I TOTAL=*tttt* DUP=*dddd* UTL=*uuuu* SUS=*ssss* PND=*pppp* SEQ=*cccc*

Explanation: This message provides a status summary as part of the XQUERY summary, volume, storage control, and configuration reports. The reported fields are as follows:

- *tttt* — The total number of volumes reported
- *dddd* — The number of volumes in duplex state
- *uuuu* — The number of utility volumes that are not in any other state
- *ssss* — The number of volumes in suspended state
- *pppp* — The number of volumes in pending state
- *cccc* — The number of volumes in seqchk state

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8236I PND XSUSPEND TIMEOUT(*timeout*)

Explanation: This message summarizes the timeout interval for the pending XSUSPEND command. It is only issued for a pending XSUSPEND(session) command. The *timeout* interval is used for all storage controls when the XRC session is suspended. It is given in hours, minutes, and seconds. If the default timeout is used for each storage control, this field is reported as STORAGE_CONTROL_DEFAULT.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8237I TOTAL=*tttt* DUP=*dddd* PND=*pppp* SUS=*ssss*

Explanation: This message is provided as part of the XQUERY volume report that is issued by the XRECOVER command. It provides a status summary of all the volumes in the XRC session. The reported fields are:

tttt — The total number of volumes reported
dddd — The number of recovered duplex volumes
pppp — The number of volumes in pending state
ssss — The number of volumes in suspended state

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8238I TOTAL=*tttt* DUP=*dddd* CPY=*iiii* PND=*pppp* SUS=*ssss* SEQ=*cccc* UTL=*uuuu*

Explanation: This message, part of an XQUERY report, provides a status summary of all volumes in the XRC session. The report fields are as follows:

tttt — The total number of volumes reported
dddd — The number of volumes in duplex state
iiii — The number of volumes in initial copy or resynchronization state
pppp — The number of volumes in pending state
ssss — The number of volumes in suspended state, which include the volumes in RST state
cccc — The number of volumes in seqchk state
uuuu — The number of volumes added with the secondary volume that are specified as XRCUTL

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: There are conditions when volumes are being added, deleted, or suspended when the numbers reported by this message may not agree with the number of volumes reported by the accompanying volume or configuration report. In this case, reissue the command after the transitory change has occurred to verify that the total number is consistent. If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8239I TOTAL=*tttt* DUP=*dddd* CPY=*iiii* PND=*pppp* SUS=*ssss*

Explanation: This message is provided as part of the XQUERY report that is issued by the XRECOVER command. It provides a status summary of all the volumes in the XRC session. The report fields are as follows:

tttt — The total number of volumes reported
dddd — The number of volumes in duplex state
iiii — The number of volumes in initial copy or resynchronization state
pppp — The number of volumes in pending state
ssss — The number of volumes in suspended state

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8241I SC SC S RES UTIL CURRENT

Explanation: This message provides the header information for the output of the XQUERY command for a storage control report. It is associated with header message ANTQ8242I and detail message ANTQ8243I. The explanation is provided with the ANTQ8243I detail message.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8242I SSID SN ID T CNT VOL TIMEOUT -STORAGE CONTROL TIME---

Explanation: This message provides the header information for the output of the XQUERY command for a storage control report. It is associated with header message ANTQ8241I and detail message ANTQ8243I. The explanation is provided with the ANTQ8243I detail message.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8243I *ssid sssn scid status residual_count utility_volume timeout storage_control_time*

Explanation: This message provides the report details for the output of the XQUERY command for a storage control report. It is associated with header messages ANTQ8241I and ANTQ8242I. The report shows the status of the storage control sessions within an XRC session.

ssid **—** Identifies the storage subsystem ID associated with the specified storage control session.

sssn **—** Identifies the storage control session name assigned by the user.

scid **—** Identifies the session ID assigned by the storage control to the storage control session. If it cannot be determined it is reported as “**.”

status **—** Provides the status of the storage control session when the command was issued. Optimal performance is indicated when the field is blank (session is active). The status may be one of the following:

- (blank) — Active
- **D** — One or more devices on this primary storage control is being blocked.
- **E** — I/O error obtaining status from the storage control
- **L** — Long busy condition
- **N** — Storage control session is not found
- **Q** — Quiesced
- **R** — Utility device is reserved by this system
- **S** — Suspended session
- **T** — Storage control session has timed out
- **U** — Unable to determine utility volume for the storage control
- **&** — Utility device is reserved by another system
- **1** — Record update I/O has 1 storage control path blocked
- **2** — Record update I/O has 2 storage control paths blocked
- **3** — Record update I/O has 3 storage control paths blocked
- **4** — Record update I/O has 4 storage control paths blocked

residual_count **—** Specifies the number of pending record updates in the storage control at the time the command was issued. It indicates how many records exist in the storage control buffers for the XRC session.

utility_volume **—** Identifies the volume serial number of the volume being used by the data mover as a utility device path for the storage control identified by the storage subsystem ID. This field can be “******” if the utility volume is either offline or cannot be determined. If this is a temporary condition (caused by a concurrent XDELPAIR or XSUSPEND command), reissue the command to report a new utility volume, if one exists.

timeout **—** Specifies the current timeout interval for the storage control. For a quiesced storage control, it is the time remaining before the storage control ends the active session.

storage_control_time **—** Specifies the timestamp of the current record being processed by the storage control.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8261I HLQ(*hlq*) SCTRAP(*sctrap*) TIMEOUT(*timeout_value*)

Explanation: This message provides information for the output of the XQUERY command for a “set” report. This message reports the following values:

hlq **—** Reports either the high-level-qualifier(*hlq*) that was issued on the XSTART command or the default HLQ if none was specified. The HLQ is used by the data mover to allocate the journal, state, and control data sets.

sctrap **—** Specifies whether or not a storage control LIC dump should be forced by the software if an LIC-related error occurs. YES generates an LIC dump (if required) on error. NO does not generate an LIC dump on error. This function is only valid for storage controls that support the option to dump the LIC.

timeout_value **—** Reports the timeout interval presently being used for storage controls. The value is assigned to storage controls as they are added to the XRC session. It is specified in hours, minutes, and seconds. It may be reported as STORAGE_CONTROL_DEFAULT if this is the assigned default.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8262I SYNCH(*synch*) SCSYNCH(*prim_sc_synch,sec_sc_synch*) PRIORITY(*priority*) XRCTRAP(*xrctrap*)

Explanation: This message provides information for the output of the XQUERY command for a “set” report. This message reports the following values:

synch **—** Specifies the maximum number of concurrent synchronization or resynchronization tasks that can execute per XRC session. This allows the XADDPAIR function to be paced to minimize the processor resources used by the function.

prim_sc_synch **—** Specifies the maximum number of concurrent synchronization or resynchronization tasks that can execute per XRC session against a primary storage control. This allows the XADDPAIR function to be paced to minimize the processor and path resources used by the function.

sec_sc_synch **—** Specifies the maximum number of concurrent synchronization or resynchronization tasks that can execute per XRC session against a secondary storage control. This allows the XADDPAIR function to be paced to minimize the processor and path resources used by the function.

priority **—** Specifies the type of priority to be used by the XADDPAIR function. The options are:

FIFO — Add volumes in order received on command.
LOAD — Defer adding volume if primary storage control load is too heavy. If the residual count for a primary storage control indicates the storage control is overloaded with activity, no additional work is started on the storage control. When the activity level has dropped to a lower level, the work is started.

xrctrap **—** Specifies whether or not a software dump is forced if a software-related error occurs. YES generates a software dump (if required) on error. NO does not generate a software dump on error.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8263I SCBUFFERS(*sc_buffers*) PAGEFIX(*page_fix*) PACE(*pace*)

Explanation: This message provides information for the output of the XQUERY command for a “set” report. This message reports the following values:

sc_buffers **—** Specifies the maximum number of virtual buffers that the data mover may allocate per primary storage control in the session. Based on system activity, the data mover may use fewer buffers. Each virtual buffer requires 60K of virtual storage.

page_fix **—** Specifies the number of megabytes of permanently page-fixed storage that can be used by the data mover. The more storage that is page-fixed, the less processor cycles are used by the data mover. Any storage used above this limit is page-fixed and page-freed as required.

pace **—** Specifies the number of tracks read or written as part of synchronization or resynchronization. It is used to pace the data mover impact on the storage control and primary volume resources.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed at either the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8264I RFREQUENCY(*reset_frequency*) RTRACKS(*reset_tracks*)

Explanation: This message provides information for the output of the XQUERY command for a SET report. This message reports the following values:

reset_frequency **—** Specifies the maximum time allowed before the recovery bitmap information is reset.

reset_tracks **—** Specifies the number of tracks on a volume which must change before the recovery bitmap information is reset.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8271I -------ORIGINAL-------

Explanation: This message provides the XQUERY command volume report header information. This header message is associated with ANTQ8272I and ANTQ8273I. The details of the fields are provided by ANTQ8273I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been issued at the system console log or the user ID at the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8272I PRIMARY SECONDARY STA RCV --------TIMESTAMP--------

Explanation: This message provides the XQUERY command volume report header information. This header message is associated with ANTQ8271I and ANTQ8273I. The details of the fields are provided by ANTQ8273I.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been issued at the system console log or the user ID at the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8273I *primary_vol secondary_vol sta rcv timestamp*

Explanation: This message provides the output associated with the header lines produced by messages ANTQ8271I and ANTQ8272I for the XQUERY command requesting a recovery volume report.

- *primary_vol* — the original volser of the primary source volume.
- *secondary_vol* — the original volser of the secondary target volume.
- *sta* — the current status information associated with the volume pair. The valid status states are:

  DUP — the volume pair is in duplex state, successfully recovered
  PND — the pending volume pair is being synchronized or resynchronized
  SUS — the volume pair is suspended
- *rcv* — gives the status of the secondary volume after the recovery operation. *YES* means all journal data has successfully been applied (if necessary) to the secondary volume and the secondary volume serial number has been changed to be the same as the primary volume serial number.
- *timestamp* — the time associated with the volume pair. The interpretation of the timestamp field is based upon a combination of fields described below. The timestamp is always in universal time, coordinated (UTC) format associated with the application systems connected to the primary storage controls. The field is not a data mover system timestamp. The timestamp field may be any of the following:
  - (blank) — the volume pair has been recovered to the session timestamp reported by ANTQ8231I.
  - (timestamp) — the timestamp reported is given in universal time, coordinated (UTC) format. If the volume pair has a status of “SUS,” the data on the suspended volume pair is consistent up to the time reported.

Detecting Module: Extended remote copy (XRC).

System Action: XRC functions are active.

System Programmer Response: The information reported by the XQUERY command is provided for the volumes requested by the command. It is point-in-time information based on the volume status at the time the command processes the volume. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for examples of XQUERY command output. If the command has been accepted and this message has not been issued at the system console log or the user ID at the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8281I --------PRIMARY-------- ---SECONDARY----

Explanation: This message provides the header information for an XQUERY configuration report. This header message is associated with ANTQ8282I, ANTQ8283I, and ANTQ8284I. The details of the fields are provided by ANTQ8283I.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8282I SSID SN ID DVCN VOLSER SSID DVCN VOLSER

Explanation: This message provides the header information for an XQUERY configuration report. This header message is associated with ANTQ8281I, ANTQ8283I, and ANTQ8284I. The details of the fields are provided by ANTQ8283I.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8283I *pssid pscsn pscid pdvcn pvolser sssid sdvcn svolser*

Explanation: This message provides the output associated with the XQUERY configuration report header information. This report is associated with ANTQ8281I, ANTQ8282I, and ANTQ8284I. The reported fields are:

- *pssid* — Identifies the storage subsystem ID associated with the specified device on the primary control.
- *pscsn* — Identifies the primary storage control session name. If the name was omitted it is reported as “--.”
- *pscid* — Identifies the primary storage control session identifier. If it cannot be determined it is reported as “**.”
- *pdvcn* — Identifies the primary device number.
- *pvolser* — Identifies the primary volume serial number for the specified device.

- *sssid* — Identifies the storage subsystem ID associated with the specified device on the secondary storage control.
- *sdvcn* — Identifies the secondary device number.
- *svolser* — Identifies the secondary volume serial number.

If a requested volume is not in the session, all fields except *svolser* are blank.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8284I SC SC

Explanation: This message provides the header information for an XQUERY configuration report. This header message is associated with ANTQ8281I, ANTQ8282I, and ANTQ8283I. The details of the fields are provided by ANTQ8283I.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: If the command has been accepted and this message has not been displayed either at the system console log or at the user ID specified by the MSGROUTEID parameter, see message ANTT0099I.

ANTQ8285I NO STORAGE CONTROLS MEET REQUESTED SPECIFICATION

Explanation: There are no storage controls that meet the specifications requested by the XQUERY report.

Detecting Module: Extended Remote Copy (XRC).

System Action: XRC functions are active.

System Programmer Response: None.

ANTX8900I MODIFY OPERATION MISSING

Explanation: The MODIFY ANTxxxxx command has been specified without an operation following the ending comma.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command is rejected.

System Programmer Response: Specify an operation with the MODIFY command.

ANTX8901I MODIFY OPERATION *operation* **INVALID**

Explanation: The *operation* specified with the MODIFY command is invalid.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command is rejected.

System Programmer Response: Supply a valid MODIFY command operation.

ANTX8902I *operand* **OPERAND IS MISSING**

Explanation: The operation specified with the MODIFY command requires at least one operand. The *operand* operand is missing.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command is rejected.

System Programmer Response: Supply a valid operand to the command.

ANTX8904I ADDRESS OF *name* **CANNOT BE DETERMINED**

Explanation: *name* is not one of the predefined names, and is not an entry point in the address space's main load module.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command could not provide the address of the requested name.

System Programmer Response: Verify that *name* is spelled correctly.

ANTX8905I *operand* **IS TOO LONG**

Explanation: The maximum size allowed for operand *operand* has been exceeded.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command is rejected.

System Programmer Response: Correct the spelling of the operand.

ANTX8907I *operand value* **IS NOT A VALID HEXADECIMAL NUMBER**

Explanation: The *value* specified for operand *operand* is not a valid hexadecimal number.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command is rejected.

System Programmer Response: Supply a valid hexadecimal number.

ANTX8913I *session_report*

Explanation: This message is the result of a MODIFY LISTSESS command. Between one and nine storage control session reports can be displayed on a single line. An individual session report is provided with the format of *tsnnh*, where the following apply:

t	Session type, which can be: C = concurrent copy session X = XRC session
s	Session status, which can be: A = active session Q = quiesced session S = suspended session T = timed-out session A session can become suspended as a result of a system reset generated, for example, by a system IPL.
nn	Storage control session identifier. This is a hexadecimal number ranging from 01 to FF.

h Host connection field, which can be:

- (blank) = owned by this processor which has access to the storage control session.
- * = owned by another processor.
- ? = owned by this processor which may or may not have access to the storage control session. A question mark may mean that the device is offline.

The following actions can be taken based on the status of the storage control session:

- Active session — The session is currently active and can be ended only from a device that is in the session.
- Quiesced session — The session has been quiesced either by an XSUSPEND command, a cache failure, or by a system reset (caused by the IPL of the owning processor). The session can be resumed or ended from any processor.
- Suspended session — The session has been suspended either by an XSUSPEND command, a cache failure, or by a system reset (caused by the IPL of the owning processor). The session can be resumed or ended from any processor.
- Timed-out session — The session has been ended by the storage control. The timeout interval for the session has expired. The session may not be resumed and is available to be reused.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The command returns the status of all storage control sessions that are on the storage control .

System Programmer Response: None.

ANTX8914I *device_number* **NO SYSTEM DATA MOVER STORAGE CONTROL SESSIONS**

Explanation: A MODIFY LISTSESS command has been issued, and the storage control associated with the device given by *device_number* has no XRC sessions.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The command returns the condition that there are no active XRC sessions at the time the command was issued.

System Programmer Response: None.

ANTX8915I *device_number* **STORAGE CONTROL SESSION** *session_number* **TERMINATED**

Explanation: A MODIFY TERMSESS command has completed successfully. The storage control session indicated by *session_number* has ended for the storage control associated with device *device_number.*

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command has successfully ended the storage control session.

System Programmer Response: The specified session is now available.

ANTX8916I *device_number* **STORAGE CONTROL SESSION** *session_number* **RECOVERED**

Explanation: A MODIFY RCVRSESS command has completed successfully. The storage control session indicated by *session_number* is recovered for the storage control associated with device *device_number*. The storage control session is now available for use.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The specified session is recovered.

System Programmer Response: None.

ANTX8917I *device_number* **REQUEST NOT SUPPORTED BY STORAGE CONTROL**

Explanation: A MODIFY command to the storage control associated with the device given by *device_number* has been issued, but the storage control does not recognize the request.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The requested function could not be performed.

System Programmer Response: Reissue the command to a storage control that supports XRC or concurrent copy.

ANTX8918I *device_number* **STORAGE CONTROL SESSION** *session_number* **NOT FOUND**

Explanation: A MODIFY TERMSESS or RCVRSESS command has been issued, but the device specified by *device_number* for storage control session *session_number* is not recognized by the storage control. The session is either not active or the command was issued to a system other than the system that initiated the storage control session.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The requested function cannot be performed.

System Programmer Response: Supply a valid session ID.

ANTX8922I *device_number* **STORAGE CONTROL SESSION(***session_number***)** *state* **QUIESCED**

Explanation: A MODIFY TERMSESS or RCVRSESS command has been issued, but the storage control associated with device *device_number* is in the state given by *state* for storage control session *session_number.* This may be due to issuing the MODIFY command on a system that did not initiate the session.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The requested function cannot be performed by this command.

System Programmer Response: Supply a valid session ID and device number, and issue the command on the same system that initiated the storage control session.

ANTX8923I *function* STATUS IS *state*

Explanation: A MODIFY command has been issued for the function *function*. This message provides the current status of the specified function. The *state* variable provides the status, which is either ON or OFF.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The function status is displayed.

System Programmer Response: None.

ANTX8924I *operand value* IS INVALID

Explanation: A MODIFY *operand* command has been issued incorrectly. *operand* specifies the command. *value* gives the value associated with the request and must be ON or OFF.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command is rejected.

System Programmer Response: Reenter a correct command.

ANTX8925A *device_number* TERMINATE STORAGE CONTROL SESSION *session_number*? REPLY 'Y' OR 'N'

Explanation: This is a prompt for confirmation that the session indicated by *session_number* associated with the device *device_number* should be ended with the TERMSESS command.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The command is canceled unless “Y” is specified.

System Programmer Response: Confirm the command with a “Y” response. Any other response cancels the command. If you are issuing the TERMSESS command from a CLIST or REXX EXEC, place the confirmation on the stack prior to issuing the command.

ANTX8926A *device_number* RECOVER STORAGE CONTROL SESSION *session_number*? REPLY 'Y' OR 'N'

Explanation: This is a prompt for confirmation that the RCVRSESS command should continue. The RCVRSESS command is attempting to recover the session indicated by *session_number* associated with the device indicated by *device_number*.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The command is canceled unless “Y” is specified.

System Programmer Response: Confirm the command with a “Y” response. Any other response cancels the command. If you are issuing the RCVRSESS command from a CLIST or REXX EXEC, place the confirmation on the stack prior to issuing the command.

ANTX8927I *requested_device* – SESSION=*tass* – *device_number*

Explanation: This message is the result of a MODIFY LISTDVCS operation. The device specified in the LISTDVCS command is reported as the *requested_device*. The session specified on the command is given by *tass*, where the following apply:

t Session type, which can be:

C = concurrent copy session
X = XRC session

a Session status, which can be:

A = active session
Q = quiesced session
S = suspended session
T = timed-out session

A session can become suspended as a result of a system reset generated, for example, by a system IPL.

ss Storage control session identifier. This is a hexadecimal number ranging from 01 to FF.

Between one and six device numbers can be displayed on one line. Other devices associated with this session *tass* are reported as the *device_number*. The device numbers are given in the form *cc(dddd)*, where the following apply:

cc Specifies the channel connection address for the device

dddd Specifies the device number associated with the channel connection address. “....” indicates that the command is unable to determine the device number.

Detecting Module: Extended remote copy (XRC).

System Action: The channel connection address and device numbers associated with a session are returned by the command.

System Programmer Response: None.

ANTX8928I *device_number* NO DEVICES FOR STORAGE CONTROL SESSION *session_number*

Explanation: A MODIFY LISTDVCS command has been issued to the storage control associated with the device given by *device_number* for session *session_number*. This session was shown as active by the MODIFY LISTSESS command. The session was initiated by a system other than the system that issued the LISTDVCS command. The system that started the session is the only one that can associate the devices with the session number.

Detecting Module: Extended remote copy (XRC).

System Action: The command returns the condition that there are no active devices at the time the command was issued.

System Programmer Response: Issue the command from the system that initiated the session.

ANTX8929I *device_number* NO PATHS AVAILABLE

Explanation: A MODIFY LISTSESS, TERMSESS, RCVRSESS, or LISTDVCS command has been issued, but there are no I/O paths available to *device_number*.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The requested function cannot be performed.

System Programmer Response: Enable at least one I/O path.

ANTX8932I *device_number* IS NOT ASSOCIATED WITH STORAGE CONTROL SESSION *session_number*

Explanation: A TERMSESS request was issued to end the session *session_number* associated with device *device_number*. This device is not owned by the storage control session.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: None.

System Programmer Response: Issue the command from a system that owns the storage control session.

ANTX8933I *device_number* **- W A R N I N G - STORAGE CONTROL SESSION** *session_number status* **BELONG TO THIS SYSTEM**

Explanation: A TERMSESS request was issued to end the session specified by *session_number* associated with the device specified by *device_number*. *status* indicates if the session is owned by this processor or by another. Be aware of the session status before responding to message ANTX8925A.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: None.

System Programmer Response: None.

ANTX8936I *device_number* **- SESSION=***tass* **RESIDUAL=***rrrr* **NEXTDEV=***nnnn* **MAXSIZE=***mmmm* **TIME(***timestamp***) TIMEOUT(***timeout***)**

Explanation: A MODIFY SCDATA command has completed successfully. The device specified on the command is given by *device_number*. The session specified on the command is given by *tass*, where the following apply:

t Session type, which can be:

C = concurrent copy session
X = XRC session

a Session status, which can be:

A = active session
Q = quiesced session
S = suspended session
T = timed-out session

A session can become suspended as a result of a system reset generated, for example, by a system IPL.

ss Storage control session identifier. This is a hexadecimal number ranging from 01 to FF.

The following values are displayed for active, quiesced, and suspended sessions:

rrrr The current count of record updates pending in the storage control (hexadecimal).

nnnn The device to be used for the next data mover I/O. When an SCDATA command is issued and the device number is not available, the 2-byte channel connection address is reported in this field.

mmmm The maximum size record in the storage control (hexadecimal). If there are no updates pending in the storage control, the maximum data track size is reported.

timestamp The current storage control time value. If no information is available or the session has never been initialized, the field is reported as asterisks. Information is not available for a device that is not part of the session.

timeout The current storage control timeout interval. If no information is available or the session has never been initialized, the field is reported as asterisks. Information is not available for a device that is not part of the session.

Detecting Module: Extended remote copy (XRC).

System Action: The primary storage control status is displayed.

System Programmer Response: None.

ANTX8937I *command* **OPERATION MUST BE EXECUTED FROM** *address_space_name*

Explanation: The command requested by *command* can only be executed from the address space name given by *address_space_name*. The command is rejected with this message if it is issued from any other address space.

Detecting Module: Extended remote copy (XRC).

System Action: Command is not performed by the system.

System Programmer Response: Reissue the command from the proper address space.

ANTX8938I *device_number* **- UNABLE TO LIST DEVICES FOR SESSION NUMBER** *session_number*

Explanation: A MODIFY LISTDVCS command has been issued to the storage control associated with the device given by *device_number* for session *session_number*. The information returned from the MODIFY LISTSESS command is interpreted as follows:

- Quiesced session — The data mover is unable to determine which devices are associated with the session.
- Timed-out session — The devices associated with the session can only be reported if the *device_number* was originally a device in the session.

Detecting Module: Extended remote copy (XRC).

System Action: The command returns the condition that the devices are not available to be listed.

System Programmer Response: None.

ANTX8939I **DUMP OF ADDRESS SPACE SUPPRESSED BY XRCTRAP**

Explanation: An error has been encountered by the data mover software, and diagnostic information is provided in SYSLOG. However, a software dump is not taken since XRCTRAP is OFF.

Detecting Module: Extended remote copy (XRC)

System Action: Data mover operations continue.

System Programmer Response: The MODIFY ANTAS000,XRCTRAP command is used to control whether or not a software dump is to be taken on an error. In general, it should be set to ON. However, if numerous occurrences of the same problem are causing excessive dumps, you may want to set XRCTRAP to OFF until the problem is resolved.

ANTX8950I **DUMP OF TRACE DATA SPACE REQUESTED**

Explanation: A request to dump an XRC trace data space is sent to MVS.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY DUMP command requesting a dump is processed. MVS system messages indicate when the dump has completed.

System Programmer Response: None.

ANTX8951I PARTIAL DUMP TAKEN

Explanation: A dump has been generated, but is incomplete. This is usually caused by the SYS1.DUMPxx data set not being large enough.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The MODIFY command runs with a partial dump completed.

System Programmer Response: Allocate a larger SYS1.DUMPxx data set, and then reissue the command to obtain a complete dump.

ANTX8952I DUMP SUPPRESSED *reason*

Explanation: *reason* indicates why a dump is not generated. This is usually caused by another dump being active.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The requested function is ended.

System Programmer Response: Wait until the current dump is complete and then try again.

ANTX8953I FULL DUMP TAKEN

Explanation: The dump is completed successfully.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: The requested function is complete.

System Programmer Response: None.

ANTX8955I ACTIVE TRACE BUFFER BEING WRITTEN OUT

Explanation: A request to write out the XRC trace data space is sent to MVS.

Detecting Module: Extended remote copy (XRC).

System Action: The MODIFY TRACE command requesting that MVS write out the trace data buffer is processed. MVS system messages will indicate when this operation has completed.

System Programmer Response: None.

ANTX8956I DUMP OF ADDRESS SPACE REQUESTED

Explanation: XRC has sent a request to the operating system to generate a dump of the SDM address space.

Detecting Module: Extended remote copy (XRC) or concurrent copy (CC).

System Action: The MVS MODIFY command requesting a dump is complete. MVS system messages indicate when the dump has completed.

System Programmer Response: None.

ANTX8957I DUMP OF ADDRESS SPACE AND TRACE DATA SPACE REQUESTED

Explanation: XRC has sent a request to the operating system to generate a dump of the SDM address space and the associated trace data space.

Detecting Module: Extended remote copy (XRC) or concurrent copy (CC).

System Action: The MVS MODIFY command requesting a dump is complete. MVS system messages indicate when the dump has completed.

System Programmer Response: None.

ANTX8958I STORAGE CONTROL STATE SAVE REQUESTED

Explanation: A storage control state save has been requested and is available for diagnostics. SCTRAP is set to ON, and has requested a state save as a result of an LIC error. The state save requires that the storage control supports this function.

Detecting Module: Extended remote copy (XRC) or concurrent copy.

System Action: None.

System Programmer Response: If you wish to suppress state saves, issue MODIFY ANTAS001 SCTRAP OFF.

ANTX8959I STORAGE CONTROL STATE SAVE NOT AVAILABLE

Explanation: An error has occurred for which a storage control state save was attempted. The data mover, however, is unable to force the state save.

Detecting Module: Extended remote copy (XRC).

System Action: None.

System Programmer Response: You may force the state save at the storage control to capture the condition, if you wish.

ANTX8960I FLASHCOPY PERCENTAGE COMPLETE FOR DEVICE *device_number* **=** *percentage*

Explanation: This message reports the FlashCopy status for the device given by *device_number*. The FlashCopy completion status is given by *percentage*.

Detecting Module: Copy services.

System Action: Copy service functions are active.

System Programmer Response: None.

ANTX8961I DEVICE *device_number* **NOT IN A FLASHCOPY RELATIONSHIP**

Explanation: The device specified by *device_number* is not part of a FlashCopy relationship.

Detecting Module: Copy services.

System Action: Copy service functions are active.

System Programmer Response: None.

ANTX8962I ALL FLASHCOPY RELATIONSHIPS WITHDRAWN FOR DEVICE *device_number*

Explanation: Existing FlashCopy relationships have been ended for the device specified by *device_number*

Detecting Module: Copy services.

System Action: Copy service functions are active.

System Programmer Response: None.

ANTX8963I FLASHCOPY *state* **FAILED FOR DEVICE** *device_number sense*

Explanation: The specified FlashCopy state failed for the device *device_number*. The reason for the failure is reported by the sense information.

Detecting Module: Copy services.

System Action: Copy service functions are active.

System Programmer Response: Review the sense information and determine the cause of the failure. Correct the failure and rerun the function.

PPRC ANT Messages

ANTP0001I *command_name* **COMMAND** *ending_status* **FOR DEVICE** *device_number***. COMPLETION CODE:** *hh*

Explanation: The ending status of the PPRC command is presented. The status is determined by conditions encountered during execution.

command_name
The name of the PPRC command.

ending_status

- COMPLETED — The command is successfully completed.
- UNSUCCESSFUL — An error is encountered. Other messages may contain specific error information. A likely cause of this error is that the command was issued either to the wrong path, or to a device that is not valid. Correct the error and reissue the command.

device_number
The device number of the volume specified in the PPRC command. “N/A” is displayed for the device number if the device number is missing or is incorrectly specified in the command.

hh The highest completion code found during execution.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Check the console messages for a previous ANTPnnnnI message that explains the failure, and take action based on this previous message.

ANTP0003I MISSING OR INVALID OPERAND. TYPE = *type*

Explanation: The parsing routine has found an operand in error. The operand is identified in the *type* field.

type
The specific operand type in error:

- DEVN — the device number
- PLSS — the primary logical storage subsystem (LSS) number
- PSSID — the primary SSID
- PSERIAL — the primary serial number
- PCCA — the primary CCA
- SLSS — the secondary LSS number
- SSSID — the secondary SSID
- SSERIAL — the secondary serial number
- SCCA — the secondary CCA
- SAID — a LINK address
- OLDVOL — the old volume label
- NEWVOL — the new volume label
- MODE — the MODE option
- PACE — the PACE value

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for the command syntax rules. Ensure that the missing or incorrect operands are properly entered, the required number of characters are given, and that hex values are in the correct format.

Note: The parsing routines only validate the operands syntactically. The storage control may reject syntactically correct operands if the operands cannot be resolved for the function requested. This condition is covered by the ANTP0200I message.

ANTP0007I CSUSPEND OPERATION REJECTED- QUIESCE OPTION HAS BEEN DISABLED

Explanation: The QUIESCE option of the CSUSPEND command has been disabled by APAR OW15247 or APAR OW15248. The suspend function was not performed and the PPRC pair specified in the CSUSPEND command remains in the duplex state.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to APAR OW15247 or APAR OW15248 for instructions about enabling the QUIESCE option of the CSUSPEND command. *If the QUIESCE option is enabled, do not issue a CSUSPEND command with the QUIESCE option to a volume with active SPOOL, PAGE, or CATALOG data sets, or to an active SYSRES volume. Doing so can cause any attached system to enter a deadlock condition, and may require a storage control IML to correct the condition.*

ANTP0008I *command_name* **COMMAND FAILED IN TSO COMMAND PROCESSING**

Explanation: A missing or incorrect value was specified with the *command_name* command, or there were other TSO command processing errors.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The command is rejected.

System Programmer Response: Refer to *OS/390 TSO/E Messages* for an explanation of the related IKJxxxxx messages. Correct the error and reenter the command. If the command was issued from a CLIST or REXX EXEC, correct the error and rerun the CLIST or REXX EXEC.

ANTP0009I USER *userid* **IS NOT AUTHORIZED TO ISSUE THE PPRC** *command_name* **COMMAND**

Explanation: The *command_name* command was issued by user *userid*, and RACF (or the product providing resource control) has determined that this user is not authorized to use this command. If *userid* is “UNKNOWN,” a batch job was used to invoke the *cmdname* command, and the JOB card did not specify a user ID.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The command is rejected.

System Programmer Response: Contact your system administrator if authorization is required. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for command authorization details. If *userid* is “UNKNOWN,” specify an authorized user ID on the JOB card and resubmit the batch job.

ANTP0010I *command_name* **COMMAND FOR DEVICE** *device_number* **FAILED WHILE PROCESSING STORAGE CONTROL DATA**

Explanation: The PPRC command given by *command_name* for the device given by *device_number* failed while attempting to obtain data from the storage control.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The command has failed.

System Programmer Response: This command may have failed because it was issued to the wrong device or to the wrong storage control. Verify that the device is a PPRC volume and reissue the command.

ANTP0011I PPRC *command_name* COMMAND HAS NOT BEEN DEFINED AS A TSO AUTHORIZED COMMAND

Explanation: The *command_name* command is not an authorized TSO command. The command name must be added to the appropriate IKJTSOxx parmlib member under the AUTHCMD NAMES parameter.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The command is rejected.

System Programmer Response: Contact your system administrator if authorization is required. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for command authorization details.

The system administrator must:

1. Update the IKJTSOxx member of SYS1.PARMLIB, specifying the *command_name* command with the AUTHCMD NAMES parameter.
2. Issue the TSO command PARMLIB UPDATE(xx) to activate the new IKJTSOxx member.

ANTP0012I *command_name* COMMAND *ending_status* FOR DEVICE *device_number* PRIMARY SSID *primary_ssid* SECONDARY SSID *secondary_ssid*. COMPLETION CODE: *hh*

Explanation: The ending status of the CGROUP command is presented. The status is determined by conditions encountered during execution. The various fields reported are as follows:

command_name
CGROUP FREEZE or CGROUP RUN

ending_status

- COMPLETED — The command is successfully completed.
- UNSUCCESSFUL — An error is encountered. Other messages contain the specific error information.

device_number
The device number of the volume specified in the PPRC command. “N/A” is displayed for the device number if the device number is either missing or is incorrectly specified in the command.

primary_ssid
The source site storage subsystem identifier.

secondary_ssid
The recovery site storage subsystem identifier.

hh The highest completion code encountered during execution of the function.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: If the command failed, check the console messages for a previous ANTP*nnnn*I message that explains the failure and take action based on this previous message.

ANTP0090I *cquery_format_volume_message*

Explanation: A CQUERY FORMAT VOLUME request has been made. This is a block message defined by the *cquery_format_volume_message*.

The first line of this report is a control line that consists of the following:

```
timestamp job_number  ANTP0090I CQUERY
FORMATTED LVL 2 connect_message_number  C
```

Note: The *connect_message_number* is written to SYSLOG only. The *C* is written to the console only.

The second line of this report is a text line that consists of the following:

```
VOLUME REPORT
```

The rest of the report is described in *DFSMS/MVS Remote Copy Administrator's Guide and Reference*.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: If you are unable to understand the status returned from a CQUERY command to a primary volume, examine the LOGREC at the secondary subsystem to help diagnose the cause of the condition. When contacting IBM for assistance, provide any associated SYS1.LOGREC information.

ANTP0091I *cquery_unformat_volume_message*

Explanation: A CQUERY UNFORMAT VOLUME request has been made. This is a block message defined by the *cquery_unformat_volume_message* and consists of the following lines:

- Line 1

  ```
  timestamp job_number  ANTP0091I CQUERY
  UNFORMATTED LVL 2 connect_message_number  C
  ```

  Note: The *connect_message_number* is written to SYSLOG only. The *C* is written to the console only.

- Line 2

  ```
   VOLUME REPORT
  ```

- Line 3

  ```
  device_number,level,device_state,path_status
  ```

- Line 4

  ```
  primary_control_unit_subsystem_identifier(SSID),
  primary_device_channel_connection_address(CCA),
  primary_control_unit_serial_number,
  secondary_control_unit_subsystem_identifier(SSID),
  secondary_device_channel_connection_address(CCA),
  secondary_control_unit_serial_number,
  critical_state_status,
  cgroup_longbusy_installed
  ```

- Line 5

  ```
  number_of_paths_established,
  path_#1_said/dest,
  path_#1_status_code,
  path_#2_said/dest,
  path_#2_status_code,
  path_#3_said/dest,
  path_#3_status_code,
  path_#4_said/dest,
  path_#4_status_code
  ```

- Line 6 (if *number_of_paths_established* in line 5 is greater than 4)

```
path_#5_said/dest,
path_#5_status_code,
path_#6_said/dest,
path_#6_status_code,
path_#7_said/dest,
path_#7_status_code,
path_#8_said/dest,
path_#8_status_code
```

- Line 7 (or line 6 if *number_of_paths_established* in line 5 is less than 5)

```
first_cylinder_out_of_synch,
last_cylinder_out_of_synch,
percent_of_copy_completed,
secondary_suspended_timestamp
```

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: If you are unable to understand the status returned from a CQUERY command to a primary volume, examine the LOGREC at the secondary subsystem to help diagnose the cause of the condition. When contacting IBM for assistance, provide any associated SYS1.LOGREC information.

ANTP0095I *cquery_format_paths_message*

Explanation: A CQUERY FORMAT PATHS request has been made. This is a block message defined by the *cquery_format_paths_message*.

The first line of this report is a control line that consists of the following:

```
timestamp job_number  ANTP0095I CQUERY FORMATTED
 LVL 2 connect_message_number  C
```

Note: The *connect_message_number* is written to SYSLOG only. The *C* is written to the console only.

The second line of this report is a text line that consists of the following:

```
PATHS REPORT
```

The rest of the report is described in *DFSMS/MVS Remote Copy Administrator's Guide and Reference*.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: None.

ANTP0096I *cquery_unformat_paths_message*

Explanation: A CQUERY UNFORMAT PATHS request has been made. This is a block message defined by the *cquery_unformat_paths_message* field, and consists of the following lines:

- Line 1

```
timestamp job_number  ANTP0096I CQUERY UNFORMATTED
LVL 2 connect_message_number  C
```

Note: The *connect_message_number* is written to SYSLOG only. The *C* is written to the console only.

- Line 2

```
 PATHS REPORT
```

- Line 3

```
prim_ctl_unit_ser_num,
prim_ctl_unit_subsys_ident(SSID)
prim_ctl_unit_type
```

- Line 4

```
first_secondary_ctl_unit_ser_num,
first_sec'y_ctl_unit_subsys_ident(SSID),
first_sec'y_ctl_unit_num_paths_established,
first_sec'y_ctl_unit_path_#1_said/dest,
first_sec'y_ctl_unit_path_#1_status_code,
first_sec'y_ctl_unit_path_#2_said/dest,
first_sec'y_ctl_unit_path_#2_status_code,
first_sec'y_ctl_unit_path_#3_said/dest,
first_sec'y_ctl_unit_path_#3_status_code,
first_sec'y_ctl_unit_path_#4_said/dest,
first_sec'y_ctl_unit_path_#4_status_code
```

- Line 4a (optional line displayed only if the value of *first_sec'y_ctl_unit_num_paths_established* in line 4 is greater than 4)

```
first_sec'y_ctl_unit_path_#5_said/dest,
first_sec'y_ctl_unit_path_#5_status_code,
first_sec'y_ctl_unit_path_#6_said/dest,
first_sec'y_ctl_unit_path_#6_status_code,
first_sec'y_ctl_unit_path_#7_said/dest,
first_sec'y_ctl_unit_path_#7_status_code,
first_sec'y_ctl_unit_path_#8_said/dest,
first_sec'y_ctl_unit_path_#8_status_code
```

- Line 5

```
second_secondary_ctl_unit_ser_num,
second_sec'y_ctl_unit_subsys_ident(SSID),
second_sec'y_ctl_unit_num_paths_established,
second_sec'y_ctl_unit_path_#1_said/dest,
second_sec'y_ctl_unit_path_#1_status_code,
second_sec'y_ctl_unit_path_#2_said/dest,
second_sec'y_ctl_unit_path_#2_status_code,
second_sec'y_ctl_unit_path_#3_said/dest,
second_sec'y_ctl_unit_path_#3_status_code,
second_sec'y_ctl_unit_path_#4_said/dest,
second_sec'y_ctl_unit_path_#4_status_code
```

- Line 5a (optional line displayed only if the value of *second_sec'y_ctl_unit_num_paths_established* in line 5 is greater than 4)

```
second_sec'y_ctl_unit_path_#5_said/dest,
second_sec'y_ctl_unit_path_#5_status_code,
second_sec'y_ctl_unit_path_#6_said/dest,
second_sec'y_ctl_unit_path_#6_status_code,
second_sec'y_ctl_unit_path_#7_said/dest,
second_sec'y_ctl_unit_path_#7_status_code,
second_sec'y_ctl_unit_path_#8_said/dest,
second_sec'y_ctl_unit_path_#8_status_code
```

- Line 6

```
third_secondary_ctl_unit_ser_num,
third_sec'y_ctl_unit_subsys_ident(SSID),
third_sec'y_ctl_unit_num_paths_established,
third_sec'y_ctl_unit_path_#1_said/dest,
third_sec'y_ctl_unit_path_#1_status_code,
third_sec'y_ctl_unit_path_#2_said/dest,
third_sec'y_ctl_unit_path_#2_status_code,
third_sec'y_ctl_unit_path_#3_said/dest,
third_sec'y_ctl_unit_path_#3_status_code,,
third_sec'y_ctl_unit_path_#4_said/dest,
third_sec'y_ctl_unit_path_#4_status_code
```

- Line 6a (optional line displayed only if the value of *third_sec'y_ctl_unit_num_paths_established* in line 5 is greater than 4)

third_sec'y_ctl_unit_path_#5_said/dest,
third_sec'y_ctl_unit_path_#5_status_code,
third_sec'y_ctl_unit_path_#6_said/dest,
third_sec'y_ctl_unit_path_#6_status_code,
third_sec'y_ctl_unit_path_#7_said/dest,
third_sec'y_ctl_unit_path_#7_status_code,,
third_sec'y_ctl_unit_path_#8_said/dest,
third_sec'y_ctl_unit_path_#8_status_code

- Line 7

  fourth_secondary_ctl_unit_ser_num,
  fourth_sec'y_ctl_unit_subsys_ident(SSID),
  fourth_sec'y_ctl_unit_num_paths_established,
  fourth_sec'y_ctl_unit_path_#1_said/dest,
  fourth_sec'y_ctl_unit_path_#1_status_code,
  fourth_sec'y_ctl_unit_path_#2_said/dest,
  fourth_sec'y_ctl_unit_path_#2_status_code,
  fourth_sec'y_ctl_unit_path_#3_said/dest,
  fourth_sec'y_ctl_unit_path_#3_status_code,
  fourth_sec'y_ctl_unit_path_#4_said/dest,
  fourth_sec'y_ctl_unit_path_#4_status_code

- Line 7a (optional line displayed only if the value of *fourth_sec'y_ctl_unit_num_paths_established* in line 5 is greater than 4)

  fourth_sec'y_ctl_unit_path_#5_said/dest,
  fourth_sec'y_ctl_unit_path_#5_status_code,
  fourth_sec'y_ctl_unit_path_#6_said/dest,
  fourth_sec'y_ctl_unit_path_#6_status_code,
  fourth_sec'y_ctl_unit_path_#7_said/dest,
  fourth_sec'y_ctl_unit_path_#7_status_code,
  fourth_sec'y_ctl_unit_path_#8_said/dest,
  fourth_sec'y_ctl_unit_path_#8_status_code

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: None.

ANTP0100I DUPLEX OPERATION ERROR. MSG FRMT = 0, MSG NMBR = F, REAS: *hh*

Explanation: The storage control has detected an error in the subsystem involving a duplex volume operation. The message format and number from the sense information appear.

hh The reason code from byte 8 of the sense information.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to the appropriate storage hardware reference documentation for sense Format 0 Message F, reason code *hh*. Correct the error and retry the command.

ANTP0101I ESTAB. PAIR FAILED- NVS SPACE NOT AVAIL. FOR BITMAP

Explanation: Insufficient nonvolatile storage space is available for the application site storage control to create the changed track bitmap for the volume pair.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to the appropriate storage hardware operations documentation for pinned data procedures. Correct the condition and retry the command.

ANTP0102I ESTAB. PAIR FAILED- DEVICES NOT IN SUSPEND MODE

Explanation: As expected by the command, the devices are not in the suspend mode. The CESTPAIR RESYNC option is only valid if devices are in SUSPEND mode.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Use the CQUERY command to verify the status of the pair, and then issue the CESTPAIR command with the COPY or NOCOPY option.

ANTP0103I ESTAB. PAIR FAILED- DEVICES NOT IN SIMPLEX MODE

Explanation: As expected by the command, the devices are not in simplex mode.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Issue the CQUERY command to verify the status of the devices (pending, duplex, or suspended). If status is suspended, issue the CESTPAIR command with the RESYNC option.

ANTP0104I ESTAB. PAIR FAILED- SECONDARY NOT IN CORRECT STATE

Explanation: The secondary volume is actively being used by this or another attached host.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Quiesce activity on the target secondary device (vary it offline to all attached hosts). The target secondary device may not be actively used or be a member of a duplex pair.

ANTP0105I ESTAB. PAIR FAILED- PINNED DATA ON SUSPENDED VOLUME

Explanation: The storage control detects pinned data for a volume and halts the command. A CESTPAIR command was issued to a suspended volume that contains pinned data.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to the appropriate storage hardware operations documentation for pinned data procedures. Correct the condition and retry the command.

ANTP0106I ESTAB. PAIR FAILED- SECONDARY ADDRESS INCORRECT

Explanation: The storage control cannot resolve the secondary (target) volume's channel connection address (CCA) from the operand given in the command. The CCA secondary address provided on the command is not a valid CCA address for this PPRC pair.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Issue the DEVSERV command to obtain the target CCA address for the secondary of this PPRC pair, and reissue the command.

ANTP0107I SUSPEND OPERATION REJECTED- SUSPEND STATE EXISTED

Explanation: An attempt to suspend a PPRC copy has been made to a pair that is already suspended.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Issue the CQUERY command to verify the PPRC volume or path status.

ANTP0108I ATTEMPTED A DUPLEX OPERATION ON A SIMPLEX VOLUME

Explanation: A PPRC operation (CDELPAIR, CSUSPEND, or CRECOVER) has been directed to a volume that is not a member of a PPRC pair.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Issue the DEVSERV command to determine the volume status.

ANTP0109I SUSPEND PRIMARY FAILED- DUPLEX OR PPRC PENDING

Explanation: A suspend operation is attempted to a volume that has a pending duplex or PPRC operation.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Issue the CQUERY command to verify that the volume is in pending status. Reissue the command when the device is no longer in pending status.

ANTP0110I ESTAB. DUPLEX PAIR FAILED- CE MODE OR UNDETERMINED

Explanation: While attempting to establish a PPRC pair, the storage control is in CE mode or the “FC” state (Sense Format F, Message C).

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Take the storage control out of CE mode or correct the FC condition, and then reissue the command.

ANTP0111I TERMINATE PAIR FAILED- DASD FAST WRITE PENDING

Explanation: The storage control is unable to end a pair while DASD fast write (DFW) is pending.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Issue the DEVSERV command to determine the DASD fast write condition. Reissue the command when the DFW pending condition clears.

ANTP0112I ESTAB. PAIR FAILED- SUBSYSTEM INSTALLING MICROCODE

Explanation: Because a microcode install operation is in progress, the storage control is unable to initiate the operation.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Permit the microcode install operation to complete, and then reissue the command.

ANTP0113I ESTAB. PATHS FAILED- WOULD EXCEED UNITS/PATHS LIMITS

Explanation: The command has failed because the maximum number of storage control connections or the number of paths to a specific storage control has been reached.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: To determine the established storage controls and paths for the secondary volume, issue the CQUERY command with the PATHS option.

You can also collect path information with ICKDSF (release 16 or above) with the ANALYZE command, specifying the NOSCAN and NODRIVE keywords.

ANTP0114I COPY OPERATION UNABLE TO COMPLETE- ABNORMAL CONDITION

Explanation: An abnormal condition in either storage subsystem prohibits the completion of the CESTPAIR or CESTPATH copy operation.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Verify the path status by issuing the CQUERY command with the PATHS option. Also look for any SIM messages that indicate a problem with the storage control or device. Correct the problem and retry the copy operation.

ANTP0115I NO MATCH IN CU FOR SSID OR SERIAL# OF PRIM. OR SCNDRY

Explanation: The storage control cannot resolve the operands in the command input to match a subsystem ID or serial number.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Verify that the command input correctly identifies the information for the primary volume and the storage control for the secondary volume. This message can occur if a CESTPAIR command is issued before a path has been established from the specified primary storage control to the specified secondary storage control. Check the configuration charts, system log, and SYS1.LOGREC. The DEVSERV and CQUERY commands may also assist in this verification.

ANTP0116I CONDITIONS AT SECONDARY CU PROHIBIT PROPER OPERATION

Explanation: A condition that prohibits initiation of the operation at the secondary volume's storage control has been detected. One of the following conditions exists on the storage control:

- DASD fast write is not active for the device
- Cache is not available for the subsystem
- Cache is not active for the device
- Nonvolatile storage space not available for the subsystem
- Primary and secondary device geometry are incompatible

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Issue the DEVSERV command to determine the status of the above conditions and correct those conditions. After conditions have been corrected, reissue the command.

ANTP0117I FAILED TO ESTAB. ONE OR MORE PATHS TO SECONDARY

Explanation: The storage control cannot establish all the paths specified in the CESTPATH command. However, one or more paths have been established.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The command is partially successful.

System Programmer Response: To determine the pathing status, issue a CQUERY command, with the PATHS option, to the primary device. Refer to the data returned with the CQUERY command to determine the action required for status other than "established."

You can also collect path information with ICKDSF (release 16 or above) with the ANALYZE command, specifying the NOSCAN and NODRIVE keywords.

ANTP0118I ESTABLISH PAIR FAILED- A VOLUME HAS PINNED DATA

Explanation: Either the primary or secondary volume has pinned data, preventing establishment of the pair.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to the appropriate storage hardware operations documentation for pinned data recovery procedures. Correct the condition and retry the command.

ANTP0119I WRITE REJECTED- VOLUME IS IN SUSPENDED STATE

Explanation: The PPRC pair has been suspended. Since the volume is established with the CRIT(YES) option, no writes are permitted to the suspended volume.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Determine the reason why the volume is suspended. Look for an IEA49xx message on the system console, containing the reason code. Correct the condition and reestablish or delete the PPRC pair by issuing the CESTPAIR or CDELPAIR command.

ANTP0120I COMMAND CONFLICTS WITH ESTABLISHED PPRC DEVICE STATE

Explanation: The state (simplex, duplex, pending, or suspend) of the pair is in conflict with the attempted PPRC command.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: To determine the specific PPRC state, issue the CQUERY command to the primary or secondary device.

ANTP0121I DELETE PATHS FAILED- PPRC VOLUMES ARE STILL ACTIVE

Explanation: The CDELPATH command has been issued while the PPRC volumes are still active.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Verify status (with the CQUERY command), and ensure that you are specifying the correct PPRC device. Then issue the CDELPAIR command to end the PPRC pair, and retry the command.

ANTP0122I PRIMARY CU TIMED OUT ATTEMPTING TO COMMUNICATE WITH SECONDARY

Explanation: The primary storage control (CU) timed out while attempting to communicate with the secondary storage control.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Correct the communication problem between the primary storage control and secondary storage control, and then retry the PPRC command.

ANTP0200I AOM DETECTED I/O ERROR. MSG FRMT = *a*, MSG NMBR = *b*, REAS: *hh*

Explanation: While executing a channel program, the asynchronous operations manager (AOM) has detected an I/O error. The AOM internal return code is 8 and the internal reason code is 4 (I/O error). The message format and number from the storage control's sense byte 7 appear.

a	The first digit (Format) of sense byte 7.
b	The second digit (Message) of sense byte 7.
hh	The reason code from byte 8 of the sense information.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to the appropriate storage hardware reference documentation for information related to sense bytes 7 and 8. A likely cause of this error is that the command was issued either to the wrong path, or to a device that is not valid. Correct the error and reissue the command.

ANTP0201I NO UCB FOUND FOR DEVICE NUMBER SPECIFIED IN INPUT

Explanation: A search of the unit control blocks cannot locate the device number (DEVN) given in the command input.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Ensure that the DEVN operand specifies a valid, hexadecimal, 4-digit unit address for a device on the application subsystem.

ANTP0202I CHANNEL PROGRAM: READ DEVICE CHARACTERISTICS FAILED

Explanation: While the program attempts to run a channel program that reads device characteristics, an error has occurred.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to the IOS/DASD ERP messages issued to the system console. Take the appropriate action and retry the PPRC command.

ANTP0203I UNIT DOES NOT SUPPORT PPRC OPERATIONS

Explanation: A PPRC command has been issued to a storage control that does not support the PPRC feature.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Issue the command to a storage control with the PPRC Licensed Internal Code installed.

ANTP0204I VOLUME LABEL IN INPUT DOES NOT MATCH THAT ON VOLUME

Explanation: A CRECOVER command has found a mismatch between the label appearing in the command input and the label on the volume.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The CRECOVER operation completes, and a return code of 4 is posted.

System Programmer Response: Verify the volume label using ICKDSF or other utility programs.

ANTP0205I CHANNEL PROGRAM: READ VOLUME LABEL FAILED

Explanation: A CRECOVER operation has failed to read a volume label.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The CRECOVER operation completes, and a return code of 4 is posted.

System Programmer Response: Refer to the IOS/DASD ERP messages issued to the system console. Take the appropriate action and verify the volume label using ICKDSF or similar program.

ANTP0206I CHANNEL PROGRAM: WRITE VOLUME LABEL FAILED

Explanation: A CRECOVER operation has failed to write a volume label.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The CRECOVER operation on the volume completes; however, the volume label is not written. A return code of 4 is posted.

System Programmer Response: Refer to the IOS/DASD ERP messages issued to the system console. Take the appropriate action and relabel the volume using ICKDSF or similar program.

ANTP0207I ASYNCHRONOUS OPERATION MGR. REQUEST FAILED RTN: 04 REAS: ***hh***

Explanation: While processing a request, the asynchronous operations manager (AOM) has detected an error. The AOM internal return code is 4, and the internal reason code appears.

hh The reason code from AOM

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to *DFSMS/MVS DFSMSdfp Diagnosis Reference* for a full explanation of AOM return and reason codes and the actions to take.

ANTP0208I ASYNCHRONOUS OPERATION MGR. OPERATION FAILED RTN: 08 REAS: ***hh***

Explanation: While processing a request, the asynchronous operations manager (AOM) has detected an error. The AOM internal return code is 8, and the internal reason code appears.

hh The reason code from AOM

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to *DFSMS/MVS DFSMSdfp Diagnosis Reference* for a full explanation of AOM return and reason codes and the actions to take.

ANTP0209I ASYNCHRONOUS OPERATION MGR. OPERATION FAILED RTN: 12 REAS: ***hh***

Explanation: While processing a request, the asynchronous operations manager (AOM) has detected an error. The AOM internal return code is 12, and the internal reason code appears.

hh The reason code from AOM

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to *DFSMS/MVS DFSMSdfp Diagnosis Reference* for a full explanation of AOM return and reason codes and the actions to take.

ANTP0210I CHANNEL PROGRAM: READ CYLINDER BITMAP FAILED

Explanation: A channel program failed while attempting to read an out-of-sync cylinder bitmap during a CQUERY operation.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: The program displays all CQUERY information accumulated before the error, and sets a return code of 4 for the whole CQUERY operation.

System Programmer Response: Refer to the IOS/DASD ERP messages issued to the system console. Take the appropriate action and retry the command.

ANTP0211I CHANNEL PROGRAM: READ CONFIGURATION DATA FAILED

Explanation: The application attempting to run a channel program has encountered an error while reading the configuration data.

Detecting Module: Peer-to-peer remote copy (PPRC).

System Action: None.

System Programmer Response: Refer to the IOS/DASD ERP messages issued to the system console. Take the appropriate action and retry the PPRC command.

System Data Mover Return Codes

This section defines the return codes issued by the DFSMS system data mover (SDM), and includes extended remote copy (XRC), concurrent copy, and snapshot functions. Some of the return codes in this section may appear as reason codes within related messages. If a return code is displayed as an eight-digit number, then it is a hexadecimal number.

General Recovery Actions

For all return codes, if the problem persists after you have taken the actions indicated in the related message and the actions described in Table 3, then:

1. Search the problem reporting databases for a solution to the problem.
2. Contact the IBM Support Center if you are unable to find a documented solution.
3. Provide the system log and a supervisor call (SVC) dump of both the ANTAS000 and ANTAS001 address spaces, if possible.

Some return code descriptions include a request that you dump additional address spaces, provide a GTF trace, or provide other information to assist the support personnel.

On internal errors, the SDM records critical information regarding the error in SYS1.LOGREC. If XRCTRAP is set to ON, the SDM also dumps the failing address space to the SYS1.DUMP data set. The dump, LOGREC, SYSLOG, and any other requested information listed in the description of the return code is sufficient to document a failure that results from an internal error. For codes indicating an internal error, contact IBM for assistance.

This section does not document the reason codes for internal error return codes. In most cases the reason code is returned to the SDM by another system component, and has meaning only in the context of how the data mover uses that component.

Some return codes may be due to processing errors in the data mover internals. For many of these errors, one or more volume pairs may have been suspended by the data mover. If XRC pairs are suspended, for example, you may be able to capture the diagnostic result, and then issue an XADDPAIR command to return the affected volume pairs to the XRC session with minimal system impact. If the volume pairs are not suspended, issue an XSUSPEND command for the affected pairs followed by an XADDPAIR command to resynchronize the pair and bypass the error condition. In some cases you may need to issue a MODIFY ANT0001,RESTART command to force the data mover to save the software bitmaps and restart the session.

If any XRC volume pairs continue to cause a problem, you can issue an XDELPAIR command for those pairs, followed by an XADDPAIR command to reinitialize them into the session. If these actions fail to bypass the error, it may be necessary to shut down the session with an XEND command or CANCEL ANTAS001 command, and then reinitialize the session with an XSTART command. All volume pairs would then require a full resynchronization copy with the restart.

Table 3 (Page 1 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
100, 101	These are internal errors.
102	This can be an installation error where SVM has not been properly installed on the system. Verify the SVM installation. If it has been properly installed, then this is an internal error.
103	This is an internal error.
104	The limit on the number of data spaces that can be created has been reached. You may need to increase this limit. If increasing the limit has no effect, then this is an internal error.
105 to 202	These are internal errors.

Table 3 (Page 2 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
203	This error can result from one of the following conditions: • You are attempting to start or restart an XRC session or add an additional storage control to the XRC session and the virtual storage available to XRC is insufficient to support this request. • An installation-exit function is limiting the storage below the minimum required for the XRC configuration. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for the requirements for the configuration you are running. If this error is associated with multiple volumes, issue an XSUSPEND TIMEOUT command to increase the space available to ANTAS001, restart the session, and then add back (resynchronize) all volume pairs.
204, 205	These are internal errors.
206	This can be an installation error where SVM has not been properly installed on the system. Verify the SVM installation. If it has been properly installed, then this is an internal error.
207	This is an internal error.
208	This can be an installation error where SVM has not been properly installed on the system. Verify the SVM installation. If it has been properly installed, then this is an internal error.
209 to 401	These are internal errors.
402	This error can result if you issue an XADDPAIR command for a volume pair for which the channel connection address has been changed while the volume was still in an active XRC session. If so, follow the procedure described in *DFSMS/MVS Remote Copy Administrator's Guide and Reference*. All volumes that have had their addresses changed must be removed from the session by an XDELPAIR command, and then added back with an XADDPAIR command. If this error is received and you have not issued an XADDPAIR command, then it is an internal error.
403 to 413	These are internal errors.
414	This error means that you are attempting to start a second XRC session when there is already one active, or are attempting to access an invalid session name. Only one XRC session can be active on an MVS image. Issue an XQUERY command with *session_id* ALL to determine which session (if any) is currently active. You can either suspend or end the active session before starting a new one. If the XQUERY report shows that there are no active sessions and this problem persists, it is an internal error. Cancel the ANTAS001 address space to clear the error condition.
415	The session name specified is not an active XRC session. Issue an XQUERY command with *session_id* ALL to determine which session (if any) is currently active. This return code may result when the XQUERY command is issued with *session_id* ALL if an active session is in the process of suspension or ending. Wait until the session has completed suspension processing or has ended before reentering the XQUERY command. If the session does not end, you may need to issue a CANCEL ANTAS001 command to force the address space to end.
416	The specified session ID is currently active in an XRC session. If this return code appears with message ANTS5100E, the session ID specified in the XSTART command is already active. If the return code appears with message ANTR5102E, an XEND or XSUSPEND command must be issued before the XRECOVER command can be processed.
417	This is an internal error.

Table 3 (Page 3 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
418	The volume specified in an XADDPAIR command, an XDELPAIR command, in conjunction with an XRECOVER command, or for a session restarted with an XSTART command is not found. For an XADDPAIR or XDELPAIR command, ensure that the volume has been specified properly and that the volume is online to the data mover system. After correcting the problem, reissue the XADDPAIR or XDELPAIR command. For an XRECOVER command, ensure that the volume is online to the data mover system. After correcting the problem, reissue the command. For an XSTART command, ensure that the volume is online to the data mover system. The storage control report associated with the restarted XRC session indicates that the storage control session is in a quiesced or suspended state. Ensure that all volumes for the storage control are placed online, then issue an XADDPAIR command to add this volume and other volumes in the quiesced or suspended storage control into the XRC session. If you want the session to be restored but do not want to resynchronize the volumes at this time, you can issue an XSUSPEND command to suspend the session followed by an XSTART command to restart the session. The session will then monitor record updates. If you are unable to place the volume online to the data mover system, you must issue a MODIFY ANTAS000,TERMSESS command for the storage control session to free up resources associated with this volume and other volumes on the storage control. All volumes on the storage control will then require a full initialization. If you want to restore the session but do not want to resynchronize the volume pairs at this time, you can vary the volumes online, and then issue an XSUSPEND command to suspend the session followed by an XSTART command the restart the session. If the return code appears with message ANTR5102E, verify that the volume to be recovered is online to the recovery system before issuing the XRECOVER command.
419	The secondary volume of an XRC pair is currently in use. XRC requires exclusive use of the secondary volume. If the volume is allocated to another function, then XRC will not use the volume. Ensure that the secondary volume is available for XRC use (the volume is not allocated), and then reissue the XRC command.
420	The volume or volumes specified in the XADDPAIR command are not attached to storage controls with the proper level of the XRC Licensed Internal Code (LIC) installed. XRC primary volumes must be attached to storage controls that are XRC-capable and have the LIC installed to support XSUSPEND functions.
421	Primary and secondary volumes must have the same device type. This error is due to one of the following conditions: • XADDPAIR command — The primary volume type does not match the secondary volume type. The secondary volume must have the same number of tracks per cylinder and bytes per track as the primary volume. The secondary volume must have a capacity greater than or equal to that of the primary. • XRECOVER command — The information in the XRC state data set does not match the device characteristics of the secondary volume serial number being recovered. It may mean that a volume on the recovery system has the same volume serial number as that on the data mover system, but is a different volume. This is likely a configuration problem. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for allowable device configurations. If this return code appears with message ANTA5107E, reissue the XADDPAIR command using volumes with the same device type characteristics. Ensure that the number of cylinders on the secondary volume is equal to or greater than the number of cylinders of the primary device. If this return code appears with message ANTR5102E, ensure that the secondary volume being recovered is the same volume which was originally part of the XRC session. When contacting IBM for assistance, provide a GTF trace of the commands issued to the XRC volumes, in addition to the data requested in the beginning of this section. Issue the DEVSERV QDASD command with the UCB option to obtain the device characteristics of the failing primary and secondary volume pair.

Table 3 (Page 4 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
422	The volume specified in an XADDPAIR command, an XDELPAIR command, in conjunction with an XRECOVER command, or for a session restarted with an XSTART command is not found. For an XADDPAIR or XDELPAIR command, ensure that the volume has been specified properly and that the volume is online to the data mover system. After correcting the problem, reissue the XADDPAIR or XDELPAIR command. For an XRECOVER command, ensure that the volume is online to the data mover system. After correcting the problem, reissue the command. For an XSTART command, ensure that the volume is online to the data mover system. The storage control report associated with the restarted session indicates that the storage control session is in a quiesced state. Ensure that all volumes for the storage control are placed online, then issue an XADDPAIR command to add this volume and other volumes in the quiesced storage control into the session. If you want the session to be restored but do not want to resynchronize the volumes at this time, you can issue an XSUSPEND command to suspend the session followed by an XSTART command to restart the session. The session will then monitor record updates. If you are unable to place the volume online to the data mover system, you must issue an MODIFY ANTAS000,TERMSESS command for the storage control session to free up resources associated with this volume and other volumes on the storage control. All volumes on the storage control will then require a full initialization. If the return code appears with message ANTR5102E, verify that the volume to be recovered is online to the recovery system before issuing the XRECOVER command
423	This is an internal error.
424	XRC is unable to allocate one of the preallocated XRC state, control, or journal data sets. This is probably an installation problem. There are three likely causes: • The session ID specified is invalid. In this case, reissue the command with the correct session name. • A high-level-qualifier specified on the XSTART or XRECOVER command is invalid. In this case, reissue the command with the correct high level qualifier name. • One or more of the data sets are not allocated or are not cataloged on the data mover or recovery system. In this case, ensure that all of these data sets are allocated and cataloged to both the data mover and recovery system. Reissue the failing command. When contacting IBM for assistance, provide a list of the XRC state, control, and journal data set names that are cataloged on both the data mover and recovery systems, in addition to the data requested in the beginning of this section.
425	XRC is unable to deallocate a data set, and the deallocation fails. When contacting IBM for assistance, provide a list of the SYS1.XCOPY or *hlq*.XCOPY data sets that are cataloged on both the data mover and recovery systems, in addition to the data requested in the beginning of this section.
426 to 428	These are internal errors.
429	The XSTART or XRECOVER function is unable to allocate the preallocated *hlq*.XCOPY.*session_id*.CONTROL data set. The default for *hlq* is SYS1. Ensure that the *hlq*.XCOPY.*session_id*.CONTROL data set is properly allocated and cataloged on the data mover and recovery systems. The reason code associated with this return code is generated by the DYNALLOC facility. Refer to the reason codes from the DYNALLOC section of *OS/390 MVS Programming: Authorized Assembler Services Reference ALE-DYN* for reason code information. When contacting IBM for assistance, provide a list and allocation attributes of the *hlq*.XCOPY data sets cataloged on both the data mover and recovery systems, in addition to the data requested in the beginning of this section.
430	The XRC XSTART or XRECOVER function is unable to allocate the preallocated *hlq*.XCOPY.*session_id*.JRNL01 and *hlq*.XCOPY.*session_id*.JRNL02 data sets. The default for *hlq* is SYS1. Ensure that the *hlq*.XCOPY.*session_id*.JRNL01 and *hlq*.XCOPY.*session_id*.JRNL02 data sets are properly allocated and cataloged on the data mover and recovery systems. The reason code associated with this return code is generated by the DYNALLOC facility. Reason codes of one to 16 indicate which journal data set the allocation is failing on. For reason codes outside of this range, refer to the DYNALLOC section of *OS/390 MVS Programming: Authorized Assembler Services Reference ALE-DYN* for reason code information. When contacting IBM for assistance provide a list and allocation attributes of the *hlq*.XCOPY data sets cataloged on both the data mover and recovery systems, in addition to the data requested in the beginning of this section.

Table 3 (Page 5 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
431	The XRC XSTART or XRECOVER function is unable to allocate the preallocated *hlq*.XCOPY.*session_id*.STATE data set. The default for *hlq* is SYS1. Ensure that the *hlq*.XCOPY.*session_id*.STATE data set is properly allocated and cataloged on both the data mover and recovery systems. The reason code associated with this return code is generated by the DYNALLOC facility. Refer to the reason codes from the DYNALLOC section of *OS/390 MVS Programming: Authorized Assembler Services Reference ALE-DYN* for reason code information. When contacting IBM for assistance provide a list and allocation attributes of the *hlq*.XCOPY data sets cataloged on both the data mover and recovery systems, in addition to the data requested in the beginning of this section.
432	The volume is attached to a storage control that is not XRC-capable. Ensure that the primary volume is online, and attached to an XRC-capable storage control. When contacting IBM for assistance, provide a list and allocation attributes of the SYS1.XCOPY data sets cataloged on both the data mover and recovery systems, in addition to the data requested in the beginning of this section. You can issue a DEVSERV QDASD command to dump the UCB and DCE.
433	XRC was unable to open one of the *hlq*.XCOPY state, control, or journal data sets (up to a maximum of 16 journals). Ensure that the data sets have been allocated with the proper attributes. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for the data set attributes. When contacting IBM for assistance, provide a list and allocation attributes of the SYS1.XCOPY data sets cataloged on both the data mover and recovery systems, in addition to the data requested in the beginning of this section.
434	XRC is unable to close one of the *hlq*.XCOPY state, control, or journal data sets (up to a maximum of 16 journals). This should not affect the success of the XEND or XSUSPEND function. You should be able to restart the session again. When contacting IBM for assistance, provide a list and allocation attributes of the SYS1.XCOPY data sets cataloged on both the data mover and recovery systems, in addition to the data requested in the beginning of this section. This problem also requires a GTF trace to determine where the problem occurred during a close.
435	A failure has occurred during XRC processing when one of the functions requested did not complete in a reasonable timeframe. If the processor has been in a stopped state, this may be an expected error. If this error occurs while starting a session or restarting a suspended session, it may be that the state, control, or journal data sets are unavailable to the XSTART command. Possibly another processor has reserved the volumes that these data sets reside on. Correct the condition so that the XSTART function can proceed normally. If the condition can not be immediately corrected, you can issue an XEND command to end the session or an XSUSPEND to return the session to a suspended state. After correcting the condition, you can reissue the XSTART command to start or restart the session. If the problem persists, issue “ANTAS001,DUMP” to collect diagnostic information.
436	A volume specified with an XADDPAIR command has failed XRC validation for one of the following reasons: • A specified secondary volume is already defined in a session as a primary volume. • A specified secondary volume is already defined in a session as another secondary volume. • A specified primary volume is already defined in a session as a secondary volume. Issue an XQUERY command to determine what volumes are currently defined to the session. To change the status of a volume already in the session, issue an XDELPAIR command to remove the volume pair from the session, then reissue the XADDPAIR command to add the correct volumes. If an incorrect volume pair was specified with an XADDPAIR command, correct the error and reissue the command.
437, 438	These are internal errors.
439	During XRC processing all journal data sets have been filled. No additional extent space is available on the journal volumes. XRC suspends the session when this condition occurs. The journal data sets are not large enough to support the volume of XRC data being copied. This error requires the XRC session to be suspended and restarted. The error may be due to an insufficient number of journal data sets being allocated. The minimum is 2 and the maximum is 16. You may wish to allocate more journal data sets, or to make the existing ones striped data sets that span up to 16 volumes. This condition can also occur when updates to the secondary volumes have fallen so far behind the primary system updates that the journals have been filled with unapplied data. In this case, the configuration of the XRC system may be such that the data mover cannot keep up with the primary updates. You may need to reconfigure the system or place fewer volumes under XRC control. You can suspend, reconfigure, and then restart the session. When contacting IBM for assistance, provide a dump of the journal, state, and control data sets, in addition to the data requested in the beginning of this section.

Table 3 (Page 6 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
440	SMS was not active on the data mover system at the time an XSTART or XRECOVER command was issued. This may be due to a window condition when SMS was not active at the time the XRC command was issued. If this return code appears with message ANTS5100E, then ensure that SMS is made active before issuing the XSTART command. If the return code is present with message ANTR5102E, activate SMS before reissuing the XRECOVER command.
441	SMS is not installed on the XRC data mover system. Ensure that SMS is installed on the data mover system where the XRC commands are being issued before reissuing the XSTART or XRECOVER command. The command may have been issued on the wrong system. After verifying that SMS is installed on the proper system, reissue the command.
442	This is an internal error.
443	This error occurs when an XRC function attempts to communicate to the ANTAS000 address space. This may occur if the control address space, ANTAS000, is canceled and is not active at the time of the error. Ensure that the ANTAS000 address space is active, and then reissue the command.
444	This error occurs when an attempt is made to process an XRC request and the XRC session is not currently active or is in the process of ending. If the session does not end, the session cleanup phase may be stalled. In this case, issue MODIFY ANTAS001,RESTART to force a dump and restart the data mover. You can then resynchronize the volumes into the session with XADDPAIR commands.
445	This error occurs when an XRC function attempts to communicate to the ANTAS001 address space. This may occur if the data mover address space (ANTAS001) is canceled and is not active at the time of the error.
446	This is an internal error.
447	An XADDPAIR command was issued which specifies the same volume serial number for both the primary and secondary volumes. You cannot use XRC to copy a volume to itself. Reissue the XADDPAIR command specifying unique volumes for the primary and secondary volumes.
448	This is an internal error.
449	This error occurs when load module ANTSDMLL cannot be loaded. Verify that ANTSDMLL is installed in SYS1.LINKLIB.
450, 451	These are internal errors.
452	During XRECOVER command processing, XRC has determined that one or more of the journal data sets, which were available for the session on the data mover system, are not available on the recovery system. Scan the SYSLOG output and look for message IEF237I and locate the last journal data set allocated to the XRECOVER function (message IGD103I for SMS journal data sets). Verify that the missing data sets are cataloged on the recovery system before reissuing the XRECOVER command. This condition may occur if the recovery system is different from the data mover system, and if the journal data sets that are cataloged on the data mover system are not cataloged on the recovery system. Ensure that all journal data sets are properly cataloged on both systems and that the correct HLQ is specified, and then reissue the XRECOVER command. When contacting IBM for assistance, provide a report on the cataloged data sets on both the data mover system and the recovery system, in addition to the data requested in the beginning of this section.
453	This is an internal error.
454	This error occurs when a command is issued that specifies an inactive XRC session name. If there is an active XRC session, issue the XQUERY ALL command to determine the session name, then reissue the failing command using the active session name.

Table 3 (Page 7 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
455	The XRECOVER command has completed processing for an XRC session that was started with SESSIONTYPE(XRC). All XRECOVER functions are not complete because there were no members found in the XRC control data set. This may be due to one of the following conditions: • No updates were made to any of the primary volumes while the session was active. Data on all secondary volumes is consistent as of the timestamp reported when the session was suspended or ended. There are no updates that need to be applied to the secondary volumes because the control data set was not initialized. You must clip the secondary volumes to match the primary volume serial numbers. • No volumes have ever been added to the session. The XRECOVER has no work to do and the function is complete. • The CONTROL0 or CONTROL1 member cannot be found in the control data set. Possibly the wrong data set is cataloged on the recovery system. Ensure that the correct data set is cataloged, then reissue the XRECOVER command. If the members do not exist and the system log indicates that an XRC session was properly started with active updates on the volumes, then contact IBM for assistance. Provide a report on the cataloged data sets on both the data mover system and the recovery system, in addition to the data requested in the beginning of this section.
456	The XRECOVER command failed because the state data set indicates that there are no active volumes in the session. Ensure that the state data set has SESSION1, STATE000, and STATE001 members. If none exist, this may indicate either that the wrong data set is cataloged on the recovery system, or that an incorrect HLQ is specified. The error can also occur if the XSTART or XADDPAIR commands have never been issued for the session. If the members do not exist and the system log indicates that an XRC session was properly started with active volumes, then contact IBM for assistance. Provide a report on the cataloged data sets on both the data mover system and the recovery system, in addition to the data requested in the beginning of this section.
457	The XRECOVER command failed due to an I/O error attempting to read the XRC control data set. This error occurs due to a hardware error. The hardware error should have had message ANTX5014E associated with it. XRC recovery cannot take place until the hardware error has been resolved. Data on the secondary volumes is accurate to the last reported timestamp. Additional updates may have been applied, but not reported. Data consistency across the secondary volumes cannot be ensured due to the error. Correct the hardware error and reissue the XRECOVER command. If no I/O error is indicated then contact IBM for assistance. Provide a report on the cataloged data sets on both the data mover system and the recovery system and a copy of the control data set, in addition to the data requested in the beginning of this section.
458	The XRECOVER command failed due to an I/O error attempting to read the XRC state data set. This error occurs due to a hardware error. The hardware error should have had message ANTX5014E associated with it. XRC recovery cannot take place until the hardware error has been resolved. Data on the secondary volumes is accurate to the last reported timestamp. Additional updates may have been applied, but not reported. Data consistency across the secondary volumes cannot be ensured due to the error. Correct the hardware error and reissue the XRECOVER command. If no I/O error is indicated then contact IBM for assistance. Provide a report on the cataloged data sets on both the data mover system and the recovery system and a copy of the state data set, in addition to the data requested in the beginning of this section.
459	The XRECOVER command failed due to the control data set being invalid. This error occurs when XRC can read the data set, but the data in the data set is invalid. This condition may occur if you have a control data set which follows the XRC naming conventions and has members, CONTROL0 and CONTROL1, but is not used by XRC. This error can occur if an XRECOVER command is issued for a previous level data mover that was suspended or ended. Ensure that the data mover can recover the environment for which the XRECOVER command was issued. If the data set is properly being used and the XRECOVER command is being properly issued, contact IBM for assistance. Provide a report on the cataloged data sets on both the data mover system and the recovery system and a copy of the control data set, in addition to the data requested in the beginning of this section.
460	The XRECOVER command failed due to the state data set being invalid. This error occurs when XRC can read the data set, but the data in the data set is invalid. This condition may occur if you have a state data set which follows the XRC naming conventions and has members, STATE0 and STATE1, but is not used by XRC. If the data set is properly being used then contact IBM for assistance. Provide a report on the cataloged data sets on both the data mover system and the recovery system and a copy of the state data set, in addition to the data requested in the beginning of this section.

Table 3 (Page 8 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
461	During processing of an XRECOVER command, the recover function has determined that the secondary volume cannot be found. This is probably a configuration error. The secondary volume or volumes must be online to the recovery system prior to the XRECOVER command being issued. Ensure that all volumes to be recovered are online, and then reissue the XRECOVER command. If XRC abnormally ends during an XRECOVER command, some secondary volume serial numbers may have already been updated. In this case, the XRECOVER command cannot be reissued. Relabel the secondary volumes back to their original volume serial numbers before reissuing the XRECOVER command.
462, 463	An XDELPAIR command has been issued to remove one or more volumes from the session, but there are no volumes in the session. Issue the XQUERY command with the VOLUME(ALL) option to determine the status of volumes in the session.
464	The primary volume specified in an XADDPAIR command was determined to be invalid. Ensure that the primary volume is a valid volume that is online to the data mover system, and then reissue the command.
465	The secondary volume specified in an XADDPAIR command was determined to be invalid. Ensure that the secondary volume is a valid volume that is online to the data mover system, and then reissue the command.
466, 467	Either of these indicate a probable I/O error that has occurred when XRC attempted to access the journal, state, or control data sets. Return code 466 indicates a read error, and return code 467 indicates a write error. Other messages may also be present, including an associated ANTX5014E error message providing hardware error diagnostics, and error messages from IOS or data management. Correct the journal error, then suspend the session and restart the data mover. When contacting IBM for assistance, provide a copy of the associated SYS1.LOGREC information and a GTF trace, in addition to the data requested in the beginning of this section.
468, 469, 471	These are internal errors.
470, 472	The session is in a state of being ended or suspended. If the session does not suspend or end, the session cleanup process may be stalled. In this case, issue the MODIFY ANTAS001,DUMP command followed by the CANCEL ANTAS001 command after the dump has completed. It is likely that all volumes in the session will then require a reinitialization.
473 to 479	These are internal errors.
480	The specified volume was not suspended by XRC. Possibly another error associated with a list of volumes being processed has caused this error. To suspend the volume, reissue the XSUSPEND command. If the volume cannot be suspended, delete the volume pair from the session, then add it back into the session. If this error has been received with a valid active session, issue MODIFY ANTAS001,DUMP to obtain a dump of the failing session. A dump is required in addition to the data requested in the beginning of this section.
481, 482	These are internal errors.
483	An attempt has been made to restart a session, but no storage control session exists on the storage control associated with this data mover. The previously existing session has been ended by the storage control. This may be due to an expired timeout interval for the storage control. If you want the volume pair to be part of the XRC session, reissue the XADDPAIR command for the volume pair. A full-volume synchronization is then required for the volume pair. If this error has been received with a valid active storage control session, issue MODIFY ANTAS001,DUMP to obtain a dump of the failing condition. Issue MODIFY ANTAS001,LISTSESS to obtain the storage control information on active sessions and MODIFY ANTAS001,LISTDVCS to obtain the storage control information for active devices. This information is required in addition to the data requested in the beginning of this section.
484, 485	These are internal errors. Issue MODIFY ANTAS001,DUMP to obtain a dump of the error.
486, 487	These return codes may indicate that the requested command function is taking longer than expected. Reissue the command. If this error occurs while starting a session or restarting a suspended session, it may be that the state, control, or journal data sets are unavailable to the XSTART command. Possibly another processor has reserved the volumes that these data sets reside on. Correct the condition so that the XSTART function can proceed normally. If the condition can not be immediately corrected, you can issue an XEND command to end the session or an XSUSPEND to return the session to a suspended state. After correcting the condition, you can reissue the XSTART command to start or restart the session. If the problem persists, issue “ANTAS001,DUMP” to collect diagnostic information.
488	This is an internal error.

Table 3 (Page 9 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
489	The XADDPAIR command function has determined that the primary volume listed in message ANTA5107E is currently in an active XRC session. Use the XQUERY command to determine which volumes are already part of an XRC session, then reissue the XADDPAIR command with the correct primary volume serial number or SCSESSION identifier.
490	The XADDPAIR command function has determined that the secondary volume listed in message ANTA5107E is currently in an active XRC session. Use the XQUERY command to determine which volumes are already part of an XRC session, then reissue the XADDPAIR command with the correct secondary volume serial number or SCSESSION identifier.
491	This is an internal error.
492	This error occurs if XRC is unable to add any more members to either the control or state data set during XSTART or XADDPAIR command processing. If this error is associated with the control data set, it must have directory space and data set space for a CONTROL0 and CONTROL1 member. If this error is associated with the state data set, it must have sufficient space for a STATE0, STATE1, and volume members. The volume members exist for every primary volume in the session. Reallocate the failing data set with more data space to accommodate the required members. If this error occurs, perform the following procedure: 1. Allocate a new control or state data set with more directory entries defined or additional space allocated for the data set. 2. Suspend the session with an XSUSPEND command. 3. Copy the existing control or state data set to the new data set. 4. Delete the existing control or state data set. 5. Rename the new control or state data set to the original control or state data set name. 6. Restart the XRC session by issuing an XSTART command. 7. Resynchronize the suspended volumes by issuing an XADDPAIR command for all of the volumes in the session. 8. Add the volume that encountered this reason code back to the session. When contacting IBM for assistance, provide a copy of the failing data set, in addition to the data requested at the beginning of this section.
493	This may mean that secondary updates are not being performed fast enough to keep pace with primary updates. Verify the configuration to ensure that you have not placed too many secondary volumes behind a single storage control. Verify that DASD fast write is enabled for the secondary volumes.
494 to 497	These are internal errors.
498	The request has failed because the session is currently being ended or suspended. This error can be the result of a previously issued XEND or XSUSPEND command. Refer to previous messages for an explanation of when the previous command was issued. If the active command does not complete in a reasonable timeframe, you can issue MODIFY ANTAS001,DUMP to capture the proper information for problem diagnosis. You may need to issue CANCEL ANTAS001 to force the address space to end.
499	This error occurs if XRC is unable to add any more members to the state data set during XSTART or XADDPAIR command processing. The state data set must have directory space and data set space for a STATE000, STATE001, SESSION01, and space for each primary volume serial number in the XRC session. The primary volume serial number member name is in the form Vxxxxxx where xxxxxx is the volume serial number of a primary volume. If this error occurs, perform the following procedure: 1. Allocate a new state data set with more directory entries defined or additional space allocated for the data set. 2. Suspend the session with an XSUSPEND command. 3. Copy the existing state data set to the new state data set. 4. Delete the existing state data set. 5. Rename the new state data set to the original state data set name. 6. Restart the XRC session by issuing an XSTART command. 7. Resynchronize the suspended volumes by issuing an XADDPAIR command for all of the volumes in the session. 8. Add the volume that encountered this reason code back to the session.
500 to 603	These are internal errors.

Table 3 (Page 10 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
604	This hardware-detected error can occur for one of the following reasons: • The specified volume may already be owned by an active XRC session. • An I/O error has occurred while attempting to add the specified volume to the session. For either of the above reasons, issue MODIFY ANTAS000,LISTSESS to the volume to determine the active storage control sessions. Next, issue MODIFY ANTAS000,LISTDVCS to the volume and session to determine which storage control session number owns the volume to be added. If you do not want the session to be active for the volume, you can force the storage control session to end by issuing MODIFY ANTAS000,TERMSESS to the session to free the volume for use. Be aware, however, that this command also ends all other volume pairs associated with the specified storage control session. • The storage control cache or NVS is unavailable on the primary (source) storage controls. Issue the DEVSERV system command to display the current status of cache and NVS for the subsystem and the primary volume. If the error continues after you have verified that the storage control cache and NVS are available, the storage control may have encountered an uncorrectable error. You may need to re-IML the storage control to correct the problem. When contacting IBM for assistance with a problem, provide any associated SYS1.LOGREC information, in addition to the data requested in the beginning of this section. A GTF trace of the operations leading to the error may also be required.
605	The maximum number of XRC sessions that are supported by a storage control has been reached. If you reissue the XADDPAIR command, this problem may not occur as volumes are deleted from other sessions. This error can occur if you attempt to start too many SCSESSIONS for a single storage control. If this error continues to occur, issue a LISTSESS command to determine which sessions are currently active on the storage control. Issue the TERMSESS command to end sessions that should not be active. If the error persists, refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for information about identifying and restarting suspended sessions. When contacting IBM for assistance, a GTF trace of the operations leading to the error may also be required, in addition to the data requested at the beginning of this section.
606	This is a hardware I/O error from an attempt to read a track from the specified primary volume; it may indicate a cache error. Refer to other messages to determine the scope of the error.
607	This is a hardware I/O error from an attempt to read one or more updates from the primary storage control cache. It may indicate a cache error, a session ending, a storage control session timeout condition, or the loss of the path (or line) from the data mover to the storage control cache. Refer to other messages to determine the scope of the error. If a path to the storage control has been lost, the associated storage control session may need to be ended with the TERMSESS command, as the data mover is unable to cleanup the session. Issue the MODIFY LISTSESS command to determine if the storage control session is still active, then end it if necessary.
608	This is a hardware I/O error from an attempt to add the specified primary volume to the session. The specified volume is owned by another session. Issue MODIFY ANTAS000,LISTSESS to the volume to determine the active storage control sessions on the storage control. Next issue MODIFY ANTAS000,LISTDVCS to the volume and session to determine which storage control session owns the volume. If you do not want the storage control session to be active you can force the session to end by issuing MODIFY ANTAS000,TERMSESS to the session to free the volume. This command also ends all other volumes associated with the specified storage control session.
609	A hardware I/O error has occurred while deleting the primary volume from the session. You can force the volume pair to end by issuing MODIFY ANTAS000,LISTSESS to the volume to determine the active storage control sessions on the storage control. Next, issue MODIFY ANTAS000,LISTDVCS to the volume and session to determine which storage control session owns the volume. If you do not want the storage control session to be active you can force the session to end by issuing “MODIFY ANTAS000,TERMSESS” to the session to free the volume. This command also ends all other volumes associated with the specified storage control session.
610	A hardware I/O error has occurred while ending the XRC session. You can force the storage control session to end by first issuing MODIFY ANTAS000,LISTSESS to a volume in the session to determine the active storage control sessions on the storage control. Next issue MODIFY ANTAS000,TERMSESS to end the storage control session.
611 to 614	A hardware I/O error has occurred while writing data to a secondary volume. The volume pair is suspended. Using the sense information provided, correct the error and issue an XADDPAIR command to resynchronize the volume pair back into the XRC session.
615 to 616	An error has occurred in track synchronization processing. Issue an XDELPAIR command to remove the volume pair from the XRC session. You can issue an XADDPAIR command to add the volume pair back to the session. The volume pair will then require a full initialization.
617 to 619	These are internal errors.

Table 3 (Page 11 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
620	A hardware I/O error has occurred while attempting to determine the device characteristics of the volume. Correct the error and add the volume pair back into the session.
621	An I/O error has occurred during the read track or write track I/O for the specified volume. If the error occurred on the primary volume, it is likely that the storage control session has ended. This may have been due to a cache or NVS error, a timeout expiration, or an operator-initiated TERMSESS command. If the error is on a write operation, the error may be due to a cache or NVS error. Correct the error and add the volume pair back into the session.
622, 623	These are internal errors. When contacting IBM for assistance, also provide a copy of the SYS1.LOGREC data set, in addition to the data requested in the beginning of this section.
624	This is a hardware I/O error. The XRC data mover function encountered an I/O error while attempting to write the volume label on the secondary volume. Use the sense information and SYS1.LOGREC records to determine the cause of the error. Correct the error and restart the function that encountered the error. When contacting IBM for assistance, a GTF trace of the operations leading to the error may also be required in addition to the data requested in the beginning of this section.
625	The maximum number of XRC sessions that are supported by a storage control has been reached. The session limit includes both concurrent copy and XRC sessions. Issue the LISTSESS command to determine the number of active storage control sessions for the storage control. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for information on determining what sessions are active and restarting suspended sessions. When contacting IBM for assistance, a GTF trace of the operations leading to the error may also be required in addition to the data requested in the beginning of this section.
626	The maximum number of XRC sessions for a single volume has been reached. No volume can have more than one active XRC session. This error can be caused when an XADDPAIR command closely follows an XDELPAIR command, but the delete operation is not yet complete. Reissue the XADDPAIR command. If the error persists, issue the LISTSESS command to determine the number of active storage control sessions. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for information on determining what sessions are active and restarting suspended sessions. When contacting IBM for assistance, a GTF trace of the operations leading to the error may also be required in addition to the data requested in the beginning of this section.
627	The maximum number of data mover sessions supported for a single volume has been reached. The session limit includes both concurrent copy (CC) and XRC sessions. 3990 and 9390 Storage Controls allow up to 16 CC sessions, or 15 CC and one XRC session, per volume. 2105 Storage Controls allow up to 64 CC sessions, or 63 CC sessions and one XRC session, per volume. Issue the LISTSESS command to determine the number of active storage control sessions. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for information on determining which sessions are active and how to restart suspended sessions. When contacting IBM for assistance, a GTF trace of the operations leading to the error may also be required in addition to the data requested in the beginning of this section.
628	This is an internal error.
629	This error is due to a nonstandard record zero on the volume. XRC supports only volumes which have a standard record zero. Initialize the volume with standard record zero and add it to the XRC session. If this error occurs and the volume has standard record zero, then contact IBM. Provide a dump of the failing track and records in addition to the data requested in the beginning of this section.
630	An I/O error has occurred while attempting to read a track for a suspended volume during volume resynchronization. An IOS error message should accompany this error. Correct the error and issue an XADDPAIR command to return the volume pair to the session. The affected volumes will require a full-volume synchronization after and XADDPAIR command is issued. Processing continues for the rest of the volumes in the session if ERRORLEVEL(VOLUME) was specified for the volume pair.
631	This means a non-timestamped write was encountered during resynchronization processing. The volume pair is suspended. The condition can be corrected by issuing an XADDPAIR command for the volume pair.
632	This is an internal error. Issue MODIFY ANTAS001,DUMP to obtain a dump of the error.
633	A list of volumes was given on the specified command. The error occurs when the same volume serial number is specified more than once in the list. Correct the error and respecify the command. A volume serial number can only be specified once in the list.

Table 3 (Page 12 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
634	This error is issued when a primary storage control session has been ended. The session may have ended due to any of the following reasons: • A TERMSESS command being issued to the storage control session • The timeout expiring on the storage control session • Cache or NVS being turned off for a storage subsystem • A storage control error • A software error. The error is detected by either XADDPAIR processing or during normal data mover processing. If an SCSESSION exists for the storage control, the scope of the error reported by this message is for a single session. Review other diagnostic messages to determine the cause of the problem. All volumes for the storage control are suspended as a result of this error. Based on the ERRORLEVEL specification, other volumes on other storage controls may also be suspended. After determining the reason for the error and correcting the condition, you can issue an XADDPAIR command to add the suspended volumes back to the session. The suspended volumes will require a full resynchronization.
635	An I/O error has occurred during a LISTSESS command while attempting to read from the storage control associated with the device specified on the command. This can be caused by an LIC error which generates the I/O error. Verify that the LIC level supports remote copy functions. If the error persists, obtain a GTF trace for the specified device.
636	An I/O error has occurred during a LISTDVCS command while attempting to read from the storage control associated with the device specified on the command. This can be caused by an LIC error which generates the I/O error. Verify that the LIC level supports remote copy functions. If the error persists, obtain a GTF trace for the specified device.
637	An I/O error has occurred during an SCDATA command while attempting to read from the storage control associated with the device and session specified in the command. Possibly, an LIC error has generated the I/O error. Verify that the LIC level supports remote copy functions. If the error persists, obtain a GTF trace for the specified device.
638	This is an LIC error. Obtain the state save associated with the error and contact IBM for hardware-related assistance.
639 to 643	These are internal errors.
644	An I/O error has occurred during a read of the hardware bitmap. This may be due to an error in the cache or NVS. Correct the error and return the volume to the session. The volume pair will require a full resynchronization.
645	A device I/O error has occurred while determining device status. Reissue the failing command. If the error persists, obtain a GTF trace prior to consulting IBM for assistance.
646	An I/O error has occurred during a read of the hardware bitmap. The volume pair will require a full resynchronization. If the error persists, obtain a GTF trace prior to consulting IBM for assistance.
647 to 649	These are internal errors.
650	The volume originally being resynchronized is now being synchronized by a full-volume copy. If a full-volume synchronization is not indicated, issue MODIFY ANTAS001,DUMP to obtain a dump of the error.
651	An I/O error occurred while attempting to read status information from the primary storage control. Reference any ANT or IOS error messages associated with the I/O error and correct the problem.
652 to 676	These are internal errors.
677	80% of the application TIMEOUT interval has passed. The data mover will suspend the storage control volumes that are affected, and automatically start bitmapping the changed record updates. Based on the ERRORLEVEL specified, volumes on other storage controls can also be suspended and have bitmapping in effect. This return code typically indicates a bottleneck somewhere in secondary volume processing (updating the journal, control, or one or more secondary volumes). Review RMF reports to determine where the slowdown has occurred. Correct the error and add the suspended volumes back into the XRC session. Because the data mover is software bitmapping the suspended volumes, the volumes do not require a full-volume synchronization.

Table 3 (Page 13 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
678	The application TIMEOUT interval has been reached. The data mover has suspended the affected volumes on the storage control, and the storage control session has ended. Based on the ERRORLEVEL specified, volumes on other storage controls can also be suspended and have bitmapping in effect. This return code typically indicates a bottleneck somewhere in the primary, secondary, or journal processing. Since the 677 return code normally precedes this condition, it is likely that the bottleneck is in the primary subsystem. The system generates a dump for this error. Review RMF reports to determine where the slowdown has occurred. Correct the error and add the suspended volumes back into the session. Because the data mover has ended the storage control session, the volumes do require a full-volume synchronization.
679 to 804	These are internal errors. When contacting IBM for assistance, also provide a copy of the SYS1.LOGREC data set, in addition to the data requested in the beginning of this section.
805, 806	These are internal errors encountered when issuing an MVS attach order. When contacting IBM for assistance, also provide a copy of the ANTMAIN address space, in addition to the data requested in the beginning of this section.
807 to 900	These are internal errors. Cancel ANTAS000 and ANTAS001 and restart the XRC session.
901	This error is issued if the data mover detects either a No Record Found or Invalid Track Format error on a volume. The data mover will automatically reinitialize the track on which the error occurred and, if an automatic re-add function has been requested, the data mover will correct the error. If a subsequent error occurs during resynchronization for the same volume, the volume pair will be suspended.
902 to 1001	These are internal errors. Cancel ANTAS000 and ANTAS001 and restart the XRC session.
1002 to 1008	These are internal errors.
1009	An I/O error has occurred during control functions to a volume. The error may be accompanied by an IOS error message or an ANTX5001E error message that provides sense information associated with the error. If this error has occurred when adding or re-adding a volume to the session, correct the error and issue an XADDPAIR command to return the volume to the session. If the error occurs during an XSUSPEND function, reissue the command. If the error persists, obtain a GTF trace for the failing device. When contacting IBM for assistance, provide the GTF and a copy of the associated SYSLOG and SYS1.LOGREC information.
1010	This is an internal error.
1011	An SSID has been specified that is unknown to XRC. Issue a LISTSESS command for a device on the storage subsystem to determine if there are any active XRC sessions. If not, correct the SSID and reissue the command.
1012	This is an internal error.
1013	The command is not accepted. There are no volumes in the session, so the requested function cannot be performed.
1014	This is an internal error.
1015	An I/O error has occurred while attempting to read from a primary storage control or a journal, control, or state data set. Related IOS messages contain the reason for the I/O error. Fix the error and reissue the command.
1016	This is an internal error.
1017	An XRC volume was not found. If the return code was received as a result of issuing a command, the volume serial number specified for the command may have been specified incorrectly. The volume is not in the XRC session. In this case, reissue the command. This error can occur for a 2105 Storage Control if the volume channel connection address is greater than 255, which is the maximum supported. In this case, ensure that the address is between 0 and 255. For a non–2105 Storage Control the channel connection address cannot be greater than 127. In this case, ensure that the address is between 0 and 127. If the volume serial number was specified correctly, issue a DEVSERV QDASD command for the failing volume and obtain the UCB and DCE information for the volume. Use the MODIFY command to dump the ANTAS001 address space, and contact IBM for assistance. You may need to cancel ANTAS001 and restart the XRC session. The cancel will cleanup the XRC control structures and suspend all volume pairs.

Table 3 (Page 14 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
1018	This error is issued when a primary storage control session has been ended. The session may have ended for any of the following reasons: • A TERMSESS command being issued to the storage control session • The timeout expiration on a non-2105 Storage Control session • A storage control error • An error in cache or NVS • A software error. Review other diagnostic messages to determine the cause of the problem. The data mover suspends all volumes for the storage control as a result of this error. Based on the ERRORLEVEL specification, other volumes on other storage controls may also be suspended. After determining the reason for the error, you can issue an XADDPAIR command to add the suspended volumes back to the session. The suspended volumes will require a full resynchronization.
1019 to 1026	These are internal errors.
1027	XRC supports a maximum of 80 primary storage control sessions. You have attempted to add more than this limit. Reduce the number of SCSESSIONS used for this XRC session. If you require more than 80 primary storage control sessions, contact IBM for assistance. Issue an XDELPAIR command for all volumes behind one or more primary control sessions to reduce the total number of active sessions.
1028 to 1031	These are internal errors.
1032	This is an internal error. Issue MODIFY ANTAS001,DUMP to obtain a dump of the error.
1033	An XDELPAIR, XEND, or XSUSPEND command has been issued with the DRAIN or ATTIME keyword specified. The request is rejected. This error is issued if there are no active volumes in the session or if no updates have been made to any storage control in the session since an XSTART command last started or restarted the session. The data mover has no application system time reference to use to determine when the DRAIN or ATTIME should take effect. Issue an XQUERY command to verify the session status. You may reissue the XDELPAIR, XEND, or XSUSPEND command with the IMMEDIATE option to complete the function.
1034	An XDELPAIR command has been issued for a volume pair with the ATTIME or DRAIN keyword specified. The volume pair is currently suspended. If you wish to delete the volume pair, reissue the XDELPAIR command with the IMMEDIATE keyword.
1035	The maximum number of XRC sessions that are supported by the data mover has been reached. A single XRC session supports a maximum of 80 storage control sessions. Issue the XQUERY STORAGECONTROL command to see the number of active storage control sessions. Either end any unnecessary sessions or start another data mover to run additional XRC sessions.
1039 to 4000	These are internal errors. Cancel ANTAS001 and restart the XRC session.
4001	The data contained in the state data set does not match the session name being recovered. Verify that the state data set is properly named and cataloged on the recovery system for the session that you are recovering. Cancel ANTAS000 and ANTAS001 and reissue the command.
4002	This is an internal error. Cancel ANTAS001 and reissue the command.
4003, 4004	During processing of an XRECOVER command, XRC has determined that the timestamps for all groups are zero. This is a normal processing state. There is no unrecovered data, and all data is in a consistent state. If you believe that there is unrecovered data, provide a copy of the state, control, and journal data sets in addition to the data requested in the beginning of this section when contacting IBM for assistance.
4005	This is an internal error. Cancel ANTAS001 and reissue the command.
4006	This error may be due to an XADDPAIR command being issued to a non-ECKD volume. Determine if this command has been issued to a volume that does not support ECKD commands.
4007, 4008	These are internal errors. Cancel ANTAS001 and reissue the command.

Table 3 (Page 15 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
4009	During XSTART or XRECOVER processing, XRC has determined that the state data set cannot be opened. If this return code appears with message ANTS5100E, verify that the XSTART command specified the proper high-level-qualifier (HLQ) for the state data set. Verify that the HLQ state data set is defined and cataloged on the data mover system. This error can also occur if the ANTAS001 address space does not have the proper access authority to the HLQ state data set name. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for more information about the state data set. If the return code is present with message ANTR5102E, locate the state data set used in conjunction with the session being recovered. The HLQ specified for the XRECOVER command may be incorrect. The reason code provides the specific details about why this data set was not opened. This may be a non-PDSE data set. Correct the error and reissue the failing command specifying the correct HLQ on the command.
4010	During XSTART or XRECOVER processing, XRC has determined that the control data set cannot be opened. If this return code appears with message ANTS5100E, verify that the XSTART command specified the proper high-level-qualifier (HLQ) for the state data set. Verify that the HLQ control data set is defined and cataloged on the data mover system. This error can also occur if the ANTAS001 address space does not have the proper access authority to the HLQ control data set name. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for more information about the control data set. If the return code is present with message ANTR5102E, locate the control data set used in conjunction with the session being recovered. The HLQ specified for the XRECOVER command may be incorrect. The reason code provides the specific details about why this data set was not opened. Correct the error and reissue the failing command, specifying the correct HLQ.
4011	During XSTART or XRECOVER processing, XRC has determined that a journal data set cannot be opened. If this return code appears with message ANTS5100E, verify that the XSTART command specified the proper high-level-qualifier (HLQ) for a journal data set. Verify that a HLQ journal data set is defined and cataloged on the data mover system. This error can also occur if the ANTAS001 address space does not have the proper access authority to a HLQ journal data set name. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for more information about the journal data set. If the return code is present with message ANTR5102E, locate a journal data set used in conjunction with the session being recovered. The HLQ specified for the XRECOVER command may be incorrect. The reason code provides the specific details about why this data set was not opened. Correct the error and reissue the failing command specifying the correct HLQ on the command.
4012	During XSTART or XRECOVER processing, XRC has determined that either the state data set was not defined as a PDSE, or that the control data set was not defined as a PDSE or PS data set. If this return code appears with message ANTS5100E, verify that the control and state data sets have been properly defined as PDSEs. If the return code is present with message ANTR5102E, locate the control or state data sets that were used in conjunction with the session being recovered. Verify that they are valid data sets (PDSE for the state, and PDSE or PS for the control). Correct the error and reissue the failing command.
4013, 4014	These are internal errors. Cancel ANTAS001 and reissue the command.
4015	While processing an XSTART or XRECOVER command, it was determined that the control, state, or journal data sets are not allocated with a DCB RECFM attribute of FB (fixed block). If this return code appears with message ANTS5100E, then verify that the data set in error has been properly allocated with an FB attribute. If the return code is present with message ANTR5102E, locate the control or state data sets that were used in conjunction with the session being recovered. Verify that they have been properly allocated with the FB attribute. Correct the error and reissue the failing command.
4016	While processing an XSTART or XRECOVER command, it was determined that the control, state, or journal data sets are not allocated on direct access volumes. XRC requires these data sets to be on DASD volumes. If this return code appears with message ANTS5100E, then verify that the data set in error has been properly allocated on DASD volumes. If the return code is present with message ANTR5102E, locate the control or state data sets that were used in conjunction with the session being recovered. Verify that they have been properly allocated on DASD volumes. Correct the error and reissue the failing command.
4017	While processing an XADDPAIR command, it was determined that the primary volume is behind a storage control that is not LRE-capable. XRC supports only ECKD-level systems that have the XRC hardware support. The volume cannot be supported by XRC. To process the volume, place it behind an XRC-supported storage control. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for more information.

Table 3 (Page 16 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
4018	The data mover detected a lost record. This is probably a hardware error where a record has been lost. Correct any errors found in SYS1.LOGREC. When contacting IBM for assistance, provide a GTF trace, from both the application system and the data mover system, of I/O to the primary volume with the lost record, in addition to the data requested in the beginning of this section.
4019 to 4022	These are internal errors. Cancel ANTAS001 and reissue the command.
4023	This may be due to the system limit on resource managers being reached. You may wish to increase this limit. Cancel ANTAS001 and reissue the command.
4024	This is an internal error. Cancel ANTAS001 and reissue the command.
4025	An XRC address space cannot be created in response to an XSTART or XRECOVER command. It is possible that the number of address spaces allowed by the system has been exceeded. This error is associated with message ANTU2000E which contains the system return code and reason code for why the address space cannot be created. When contacting IBM for assistance, provide associated SYS1.LOGREC information in addition to the data requested in the beginning of this section.
4026 to 4033	This error is caused by an incomplete shutdown of a previous XRC session, and may be associated with a system abend. If the ANTAS001 address space is active, cancel both it and the ANTAS000 address space. Reissue the XSTART or XRECOVER command. If the problem persists, generate a dump (if possible) of the ANTAS000 and ANTAS001 address spaces.
4034	You have attempted to add a primary volume to the session that already exists within the session as either a primary or secondary volume. Issue an XQUERY VOLUME(ALL) command to determine which volumes are in the session. To change the primary pair, delete the volume pair with an XDELPAIR command, then reissue an XADDPAIR command.
4035	You have attempted to add a secondary volume to the session that already exists within the session as either a primary or secondary volume. Issue an XQUERY VOLUME(ALL) command to determine which volumes are in the session. To change the primary pair, delete the volume pair with an XDELPAIR command, then reissue an XADDPAIR command.
4036 to 4042	This error is caused by an incomplete shutdown of a previous XRC session, and may be associated with a system abend. If the ANTAS001 address space is active, cancel both it and the ANTAS000 address space. Reissue the XSTART command. If the problem persists, generate a dump (if possible) of the ANTAS000 and ANTAS001 address spaces.

4043	This error results when an XSTART or XRECOVER command is issued after an XRC session has logically completed and before the ANTAS001 address space has ended. Wait for the following system console messages to be issued (for the ANTAS001 address space) before issuing an XRC command:
	`IEF196I IEF352I ADDRESS SPACE UNAVAILABLE`
	`IEF352I ADDRESS SPACE UNAVAILABLE`
	If the above messages do not appear within two minutes, determine if the ANTAS001 address space is still active by issuing DISPLAY A,ANTAS001 from the console. If it is still active, issue CANCEL ANTAS001 to end the address space. It may be necessary to also end the ANTAS000 address space to completely end the XRC session.

4044	Volume is a minidisk. XRC has detected that the specified volume is defined as a VM minidisk. XRC does not support VM minidisks. If this error persists, search problem reporting data bases for a solution. If no solution exists, contact the IBM Support Center. Provide the system log and a copy of the ANTAS001 address space.

Table 3 (Page 17 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
4045	An error has been detected while attempting to store a member in the *hlq*.XCOPY.*session_id*.STATE or the *hlq*.XCOPY.*session_id*.CONTROL data set with the STOW function. Determine why the STOW function failed and correct the error. If this error occurs on suspension of a session or volume, restart the session or add the volume back to the session after correcting the error. The volumes encountering this error require complete synchronization. If the cause of the failure is due to insufficient space in the state or control data set, you can reallocate the failing data set with more data space to accommodate the required members. In some cases, this error may be accompanied by an abend which is caused by the STOW error. If this error occurs on an XADDPAIR command, issue an XDELPAIR command to ensure that this volume is not considered part of the XRC session until the state data set has been expanded. If this error occurs, perform the following procedure: 1. Allocate a new control or state data set with more directory entries defined or additional space allocated for the data set. 2. Suspend the session with an XSUSPEND command. 3. Copy the existing control or state data set to the new data set. 4. Delete the existing control or state data set. 5. Rename the new control or state data set to the original control or state data set name. 6. Restart the XRC session by issuing an XSTART command. 7. Resynchronize the suspended volumes by issuing an XADDPAIR command for all of the volumes in the session. 8. Add the volume that encountered this reason code back to the session. When contacting IBM for assistance, provide a copy of the failing control or state data set in addition to the data requested in the beginning of this section.
4046, 4047	These are internal errors. Cancel ANTAS001 and reissue the command.
4048 to 4050	These are internal errors.
4051	A journal data set is improperly defined. The journal data set must be defined as a sequential file (DSORG=PS).
4052	A suspend request has been made for a volume which is already suspended. Reissue the command without specifying this volume.
4053	An XQUERY command requesting output to a data set has failed because dynamic allocation has encountered an error. It is likely that the specified data set name is incorrect. Correct the error and reissue the command. The reason code associated with this return code was generated by the DYNALLOC facility. Refer to the DYNALLOC section of *OS/390 MVS Programming: Assembler Services Guide* to interpret the reason code.
4054	The requested function is not supported by the storage control LIC.
4055	An XQUERY command requesting output to a data set has failed because the data set specified could not be opened. Refer to *OS/390 MVS System Codes* to interpret the abend code reported by this return code.
4056	An XSTART or XADDPAIR command has been issued. XRC has attempted to reinstate the storage control session that previously existed, but the storage control session is already active. This error indicates that the session is currently owned by another session (which can be either XRC or concurrent copy). The XSTART or XADDPAIR function is not able to use this storage control session.
4057	This is an internal error.
4058	A command specified the ATTIME keyword. The target time specified has already passed. Reissue the command specifying a future time.
4059	The CANCEL keyword has been specified for an XSUSPEND command, but there is no pending XSUSPEND command. Verify and reissue the command.
4060	The CANCEL keyword has been specified for an XDELPAIR command, but there is no pending XDELPAIR command. Verify and reissue the command.
4061	The CANCEL keyword has been specified for an XEND command, but there is no pending XEND command. Verify and reissue the command.
4062, 4063	An XQUERY command requesting output to a data set has failed, probably because the data set size is too small or an I/O error was encountered. Refer to *OS/390 MVS System Codes* to interpret the abend code reported by this return code and refer to message ANTX5014E for error details.
4064	An XQUERY command to a data set has failed because the LRECL specified is too small. Reallocate the data set with a larger LRECL and reissue the XQUERY command.
4065, 4066	These are internal errors.

Table 3 (Page 18 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
4067	An XQUERY command has been issued to an invalid data set type. The XQUERY command has failed. Reissue the command to a sequential data set.
4068	The session is being suspended because MODIFY ANTAS001,RESTART was issued from the operator's console. A dump has been generated, the software bitmaps have been saved, and the session will be suspended and automatically restarted. All volumes will remain in a suspended state until an XADDPAIR command is issued.
4069	An XDELPAIR or XSUSPEND command has been issued and one or more volumes specified with the command is in error. Refer to previous messages for the cause of the error. Correct the error and reissue the command.
4070	An XADDPAIR command has been issued for a suspended primary volume. The volume is either on a different channel or has a different device address than existed when the volume was suspended. Issue an XDELPAIR command to remove the volume from the session followed by an XADDPAIR command to add it back.
4071	An XADDPAIR command has been issued for a suspended secondary volume. The volume is either on a different channel or has a different device address than existed when the volume was suspended. Issue an XDELPAIR command to remove the volume from the session followed by an XADDPAIR command to add it back.
4072	An XQUERY command to a data set has failed because dynamic allocation was unable to determine the organization of the data set. Verify that the data set has been created with the proper attributes, and cataloged.
4073	An XQUERY command requesting output to a data set has failed because the data mover does not have the proper RACF authority to access the data set.
4074	An XQUERY command requesting output to a data set has failed because the data set is in use by another user. When the user frees the data set, the XQUERY command can be reissued.
4075	An XQUERY command requesting output to a data set has encountered an I/O error while writing to the data set. Refer to message ANTX5014E for error details.
4076	A Catalog Locate error was detected while attempting to locate the journal control data set. The accompanying reason code indicates the catalog return code.
4077	An I/O error occurred while attempting to read from the control data set. Reference any ANT or IOS error messages associated with the I/O error, correct the error, and reissue the XRECOVER command.
4078	An I/O error occurred while attempting to write to the control data set. Reference any ANT or IOS error messages associated with the I/O error, correct the error, and reissue the XRECOVER command.
4079	The unplanned outage function is not supported by this storage control.
4080 to 4098	These are internal errors.
4099	An XSUSPEND command has been issued for a utility volume. Utility volumes cannot be suspended because they are used only as a path to the storage control. The command request is failed.
4100 to 5999	These are internal errors.
6000	Insufficient storage available in ANTMAIN address space. This is probably because an installation exit function has limited the storage below the minimum required for the ANTMAIN functions. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for the ANTMAIN storage requirements, and ensure that the installation exit allows the required storage to be allocated.
6001, 6002	These are internal SDM errors.
6003	IXFP is not at the correct level for DFSMSdss or SDM support of snapshot. Install the required level of IXFP maintenance. After maintenance is installed, issue CANCEL ANTMAIN when no snapshot or concurrent copy jobs are running.
6004	A snapshot function has been requested for a device that is not an RVA.
6005 to 6007	These are internal SDM errors.
6008	An error has occurred when communicating with IXFP. This could be an internal SDM error, an internal IXFP error, or a mismatch between the service levels of SDM and IXFP. The reason code associated with this error is found in the IXFP reason codes table.
6009, 6010	Insufficient storage available in ANTMAIN address space. This is probably because an installation exit function has limited the storage below the minimum required for the ANTMAIN functions. Refer to *DFSMS/MVS Remote Copy Administrator's Guide and Reference* for the ANTMAIN storage requirements, and ensure that the installation exit allows the required storage to be allocated.
6011 to 6017	These are internal SDM errors.

Table 3 (Page 19 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
6018	For an XRC session, an OPEN error occurred while obtaining the format-1 DSCB for the journal, control, or state data set due to an error reading the VTOC for the volume. The data set may be cataloged but either does not exist on the volume indicated by the catalog, or an I/O error occurred while attempting to read the VTOC. Determine why the error has occurred, correct the error, and reissue the XSTART or XRECOVER command to restart the session. For a snapshot function, an error occurred while obtaining format-1 DSCB for a working-space data set.
6019	An error has occurred while loading module ANTUGOAD. Verify that the module exits in SYS1.LINKLIB and that it is available to the data mover.
6020	An error has occurred while loading module ANTUGOFR. Verify that the module exits in SYS1.LINKLIB and that it is available to the data mover.
6021	For an XRC session, an OPEN error occurred while obtaining the format-3 DSCB for the journal, control, or state data set due to an error reading the VTOC for the volume. The data set may be cataloged but either does not exist on the volume indicated by the catalog, or an I/O error occurred while attempting to read the VTOC. Determine why the error has occurred, correct the error, and reissue the XSTART or XRECOVER command to restart the session. For a snapshot function, an error occurred while obtaining format-3 DSCB for a working-space data set.
6022	An error has occurred while obtaining format-4 DSCB for a working space data set. The reason code is set to the return code from the OBTAIN macro.
6023 to 6032	These are internal SDM errors.
6033	A snapshot operation failed. See the reason codes from IXFP for an explanation of the associated reason code. This can be a DFSMSdss internal error, a SDM internal error, a IXFP internal error, or a configuration error.
6034	This is an internal SDM error.
6035	A QUERY DEVICE operation failed. The reason code is described in the IXFP reason codes. This can be a DFSMSdss internal error, a SDM internal error, a IXFP internal error, or a configuration error.
6036 to 6143	These are internal SDM errors.
6144	All working space data set space on the RVA subsystem containing the source data set is currently in use by other snapshot requests. Allocate one or more additional working space data sets on the RVA subsystem according to the allocation guidelines for working space data sets, then resubmit the failing job.
6145	Insufficient working space data set space was available on the RVA subsystem that contains the source data set to satisfy the snapshot request. Either resubmit the failing job after another DFSMSdss job using concurrent copy on the source RVA releases the working space data set space, or increase the working space data set space, then resubmit the failing job.
6146	The snapshot operation failed because not enough working space was available to the ANTMAIN system data mover address space. The space was not available because of an allocation or ENQUEUE conflict with the working-space data sets (WSDS) within SYS1.ANTMAIN.S*system*.SNAP*nnnn*. This problem can occur when a WSDS is allocated during the time that the DFSMSdss job is attempting to use it. To prevent this condition, preallocate the WSDS or allocate it during a different job.
6147	There is no working space data set cataloged in this system. Follow the procedure in *DFSMS/MVS DFSMSdss Storage Administration Guide* to determine what problem or problems exist when accessing the working space data set. Repair or reallocate the working space data set and resubmit the failing job.
6148	No usable working space data set was found associated with the system. No working space data set was found on the RVA subsystem that matches the source data set attributes. The working space data set must be on the same partition, or be on a device type which is write enabled and able to process snapshot functions. Follow the procedure in *DFSMS/MVS DFSMSdss Storage Administration Guide* to properly allocate a working space data set, then resubmit the failing job.
6149	The snapshot request timer has expired while attempting to find working space data set space. Obtain a dump of the ANTMAIN address space by issuing the console command MODIFY ANTMAIN,DUMPTRC, then call your IBM software support center.
6150 to 6199	These are internal errors.
6200, 6201	An error has occurred while loading FlashCopy support. Verify that the FlashCopy support is installed on the software system. If an I/O error has occurred when loading the function from SYS1.LINKLIB, correct the error before you retry the function.
6202	An error has occurred while verifying the device address. Ensure that the device address is properly specified, and then reissue the function.
6203 to 8999	These are internal errors.

Table 3 (Page 20 of 20). System Data Mover Return Codes. Use the general recovery actions that precede this table in addition to any recovery actions included with individual return codes.

Return Code	Description and Suggested Recovery Action
9000 to 9012	These are internal errors associated with an abend dump generated by the data mover. The error may be the result of an error detected by one of the system functions used by the data mover. In this case, there may be an associated system message describing the reason that the system function detected the error. Correcting the error will resolve this type of problem. If there is no associated system message, the problem may be due to an internal data mover error. For these return codes, cancel ANTAS000 and ANTAS001 and restart the session. When contacting IBM for assistance, provide associated SYS1.LOGREC information in addition to the data requested in the beginning of this section.
9013	If this is issued as a reason code associated with a 4010 return code, the control data set has not been properly defined with the correct record format or DSORG. Correct the error and reissue the XSTART command.
9014	XRC has encountered an error. The reason code for the error is specified in register 15. Many of these errors may indicate an LIC failure. Diagnostic information for this abend is available in SYS1.LOGREC, a dump initiated by the data mover (if useful), and an LIC state save (if SCTRAP is ON and the storage control supports the state save function). When contacting IBM for assistance, provide this information in addition to the data requested at the beginning of this section.
9015 to 9020	These are internal errors associated with an abend dump generated by the data mover. The error may be the result of an error detected by one of the system functions used by the data mover. In this case, there may be an associated system message describing the reason that the system function detected the error. Correcting the error will resolve this type of problem. If there is no associated system message, the problem may be due to an internal data mover error. For these return codes, first issue MODIFY ANTAS001,RESTART. If this fails, cancel ANTAS000 and ANTAS001 and restart the session. When contacting IBM for assistance, provide associated SYS1.LOGREC information in addition to the data requested in the beginning of this section.
9030 to 9399	These are internal errors.
9400	This is an internal error. First issue MODIFY ANTAS001,RESTART. If this fails, cancel ANTAS000 and ANTAS001 and restart the session. When contacting IBM for assistance, provide the SVC dump taken at the time of the abend, and any associated SYS1.LOGREC information in addition to the data requested in the beginning of this section.
9401 to 9899	These are internal errors.
9900	This is an internal error. First issue MODIFY ANTAS001,RESTART. If this fails, cancel ANTAS000 and ANTAS001 and restart the session. When contacting IBM for assistance, provide the SVC dump taken at the time of the abend, and any associated SYS1.LOGREC information in addition to the data requested in the beginning of this section.
9901 to 9999	These are internal errors.

SDM Reason Codes from IXFP Errors

The following error reason codes are generated by IXFP in response to SDM requests for IXFP services. These reason codes are hexadecimal values.

Table 4 (Page 1 of 2). IXFP Reason Codes

Hex Value	Reason Code
00000001, 00000002	Internal SDM error.
00000003	IXFP subsystem not found. Activate the IXFP subsystem and resubmit the failing job.
00000004	Device is not write enabled. Determine if this is the intended volume. If the volume is correct, use IXFP to change the volume status to write enabled and resubmit the failing job.
00000005 to 00000007	Internal SDM error.
00000008	Specified device number, volume serial number, or UCB address of a device identifies a device that cannot be found on an RVA. The device may be offline or there may be an IXFP problem. Determine if the device is correctly configured to IXFP.
00000009	Specified device does not reside on a RAMAC Virtual Array.

Table 4 (Page 2 of 2). IXFP Reason Codes

Hex Value	Reason Code
0000000A, 0000000B	Internal SDM error.
0000000C	A mismatch exists between the service levels of IXFP and SDM. Check the IXFP and SDM service levels and install maintenance as required.
0000000D to 00000011	Internal SDM error.
00000012, 00000013	IXFP subsystem not found. Activate the IXFP subsystem and resubmit the failing job. This is an IXFP-related problem if that subsystem is active.
00000014	Internal SDM error.
00000015	Internal IXFP error.
00000016 to 0000001A	Internal SDM error.
0000001B, 0000001C	RVA configuration busy. Resubmit the failing job when there is less activity to the RVA subsystem.
0000001D	RVA unexpected completion. This can also be caused by a busy condition. Try to resubmit the failing job when there is less activity. Check problem reporting databases for RVA licensed internal code (LIC) and IXFP.
0000001E	Device is not write enabled. Determine if this is the intended volume. If the volume is correct, use IXFP to change the volume status to write enabled and resubmit the failing job.
00010001 to 00010007	These are internal errors.
00020001	No devices passed selection criteria. There is no device matching the source device characteristics required for snapshot.
00050001	Internal SDM error.
00050002	Current request exceeds maximum snapshot requests for an RVA source device. Resubmit the failing job after other jobs that use snapshot have completed.
00050003	Current request exceeds maximum snapshot requests for an RVA subsystem. Resubmit the failing job after other jobs that use snapshot have completed.
00050004	snapshot feature not available for source or target subsystem. Install the snapshot feature on the RVA subsystem.
00050005	Source device and target device are not on the same RVA subsystem, as is required.
00050006	Source device and target device are not in the same RVA subsystem partition, as is required (either TEST or PRODUCTION).
00050007	Source and target device types are incompatible. The source and target of a snapshot function must be on the same device type (3380 or 3390).
00050008	Internal SDM error.
00050009	snapshot source device is busy. Resubmit the failing job when the source device has less activity.
0005000A to 0005000E	Internal SDM error.

AOM Messages

AOM000I **ASYNCHRONOUS I/O OPERATION {COMPLETED IN ERROR | FAILED} SUBSYSTEM** ***ssss*****, DEVICE** ***dddd***

Explanation: A host-initiated asynchronous I/O operation completed in error or failed. The task that issued the request is no longer active.

In the message text:

ssss	Indicates the subsystem on which the operation completed.
dddd	Indicates the address of the device.
COMPLETED IN ERROR	The asynchronous operation completed, but during the operation sense data was offloaded to an attached host with the environmental data present bit set. This sense data indicates the errors that occurred with the asynchronous operation.
FAILED	The asynchronous operation failed. An I/O error message on the console may accompany this error. There may also be environmental sense data present to contribute to an understanding of the error.

Source: DFSMSdfp

System Action: The system continues processing.

Operator Response: Notify the system programmer.

System Programmer Response: Examine a merged LOGREC from all hosts attached to the storage control. For the **COMPLETED IN ERROR** situation, examine the environmental data to determine what the specific error was and if it pertained to an area on the volume within an allocated data set. From this information, determine the severity of the error. Note that there may be a collection of environmental sense data caused by this one asynchronous operation. After completing this examination, take the appropriate actions to correct the specific data set or entire volume error. If all errors were not in allocated space on the volume, the impact of the error may be minimal. After completing these corrections, the volume should be ready for use. Note that the asynchronous operation need not be repeated because it completed. The state of the subsystem or volume should be as desired.

For the **FAILED** situation, examine the sense data associated with the specific error, as well as any I/O messages that may have appeared on the system console. Examine environmental sense data to determine the reason for the asynchronous operations failure. After completing this examination, take the appropriate actions to correct the problem. Attempt to reissue the asynchronous operation using the IDCAMS utility.

AOM001I **DESTAGE FAILED FOR SUBSYSTEM** ***ssss*****, DEVICE** ***dddd***

Explanation: An error occurred when a Halt EOD (SVC 91) requested that all 3990 Model 3 and Model 6 devices in the system be destaged.

In the message text:

ssss	Indicates the identification of the subsystem on which destage was attempted.
dddd	Indicates the number of a device attached to the subsystem.

Source: DFSMSdfp

System Action: The system continues processing.

Operator Response: Notify the system programmer. If the device associated with this message is attached via the IBM 3990 Model 3 Storage Control, see *IBM 3990/9390 Operations and Recovery Guide* for detailed recovery actions.

System Programmer Response: Run an IDCAMS LISTDATA DSTATUS job to find all the devices that have pinned data. One of these devices caused the destage to fail.

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ARC Messages

ARC0001I DFSMShsm ***version*****.*****release*****.*****modification level*** **STARTING**

Explanation: The DFSMShsm product is starting. In the message, *version* refers to the version of DFSMShsm that has been installed, *release* refers to the release level of DFSMShsm that has been installed, and *modification level* refers to the modification level of DFSMShsm that has been installed.

Source: DFSMShsm

System Action: DFSMShsm starting.

Application Programmer Response: None.

ARC0002I DFSMSHSM SHUTDOWN HAS COMPLETED

Explanation: DFSMShsm shutdown processing occurred because a STOP command was issued or DFSMShsm could not recover from an error that occurred.

Source: DFSMShsm

System Action: DFSMShsm ends.

Operator Response: If the shutdown is because of a STOP command, take no action. If the shutdown is because DFSMShsm could not recover from an error, other messages identify the problem. Take the corrective action indicated by those messages.

ARC0003I ***taskname*** **TASK ABENDED, CODE** ***ffsssuuu*** **IN MODULE** ***modname*** **AT OFFSET** ***offset*****, STORAGE LOCATION** ***location***

Explanation: A DFSMShsm task has abnormally ended (abended).

- *taskname* is the name of the failing task.
- *ffsssuuu* is the abend code.
  - *ff* is the indicator flags.
  - *sss* is the system completion code.
  - *uuu* is the user completion code.
- *modname* is the name of the abend module.
- *offset* is the abend module offset.
- *location* is the address where the abend has occurred.

For more information on the abend code, refer to *OS/390 MVS System Codes*

If *modname* is UNKNOWN and the storage location is a valid address, the name of the failing module is determined in the dump. DFSMShsm can intercept abend processing from other components. In that case, *modname* is UNKNOWN since it is not a valid DFSMShsm module. Often, this indicates a problem in the other component. Please have the failing module name available when contacting the IBM Support Center.

Source: DFSMShsm

System Action: For tasks other than ARCCTL, DFSMShsm processing continues. If the task is ARCCTL, DFSMShsm processing ends.

Operator Response: Notify the storage administrator.

Application Programmer Response: The storage administrator should determine the effect of the abend on the data. If ARCCTL is the failing task, restart DFSMShsm. Notify the system programmer of recurrent abends.

ARC0004I INSTALLATION-WIDE EXIT, MODULE ***installation-wide-exit-name*** **ABEND, ABEND CODE=*****code***

Explanation: An abnormal end (abend) occurred during processing in the user written exit *installation-wide-exit-name*. The failure was detected by the ESTAE routine in the module that invoked the installation-wide written exit. The reason for the abend is the value printed in the code field of the message. To determine the action taken after an abend of an installation-wide exit, see the appropriate ARC*nn*54I message following this message.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Correct the problem in the installation-wide exit.

ARC0005I ERROR IN INITIALIZATION COMMANDS - RESTART DFSMSHSM

Explanation: During the startup process of DFSMShsm, either an erroneous member name has been requested in the initialization command, or there is insufficient space to process initialization commands for DFSMShsm. This message is preceded by message ARC0105I, which contains the erroneous member name; or message ARC0107I, which indicates insufficient available storage; or ARC0108I indicating that the initialization command is too long.

Source: DFSMShsm

System Action: DFSMShsm ends.

Operator Response: See “System Messages” manual for the preceding ARC0105I, ARC0107I, or ARC0108I messages. Take corrective actions per the messages. Restart DFSMShsm.

Application Programmer Response: See Operator Response.

ARC0006I DFSMSHSM ALREADY ACTIVE

Explanation: A START HSM command has been issued while DFSMShsm is already active. Because there can be only one DFSMShsm under a single operating system, this request is ignored.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0007I THERE ARE NO VOLUMES IN THE DFSMSHSM GENERAL POOL

Explanation: During DFSMShsm initialization in a JES3 environment, there are no volumes in the DFSMShsm general pool. Any job that requires a volume in this pool will fail. For a volume to be in the DFSMShsm general pool, it must be mounted as a storage or private volume before DFSMShsm initialization. An ADDVOL command for the volume as a primary volume must be issued from the ARCCMD*xx* member of the data set identified by the HSMPARM DD statement of the DFSMShsm startup procedure.

Source: DFSMShsm

System Action: DFSMShsm initialization continues. Any job that requires volume selection by DFSMShsm from its general pool will fail.

Operator Response: Ensure all DFSMShsm primary volumes are mounted with the correct USE attribute. If they are not, but no jobs have been entered, correct the problem and restart DFSMShsm.

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Jobs in the system could fail if they require a volume from the DFSMShsm general pool. If all volumes have been mounted correctly, notify the storage administrator unless you know your installation does not use the DFSMShsm general pool.

Application Programmer Response: If the DFSMShsm general pool is to be used, the volumes in this pool must be mounted as storage or private volumes before DFSMShsm initialization. An ADDVOL command for each volume as a primary volume must be issued from the ARCCMD*xx* member. If you require the DFSMShsm general pool, correct the ADDVOL commands, ensure the volumes are appropriately mounted, and restart DFSMShsm before submitting any jobs that use it.

ARC0008I DFSMSHSM INITIALIZATION SUCCESSFUL

Explanation: DFSMShsm is now ready to receive commands.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0009I DFSMSHSM STARTUP ATTEMPT FAILED, NOT A STARTED TASK

Explanation: An attempt has been made to invoke DFSMShsm as other than a started task. DFSMShsm may only be invoked as a started task.

Source: DFSMShsm

System Action: DFSMShsm ends.

Operator Response: Notify the system programmer that this message has occurred.

Application Programmer Response: If DFSMShsm needs to be started, issue an MVS operator START command from the system console.

ARC0010E INVALID PARAMETER OR ERROR READING STARTUP PARMS - RESTART DFSMSHSM

Explanation: One of the initialization parameters supplied to DFSMShsm is incorrect (see preceding message ARC0106I), or member ARCSTR*xx* containing startup parameters could not be found, opened, and read (see preceding message ARC0043E).

Source: DFSMShsm

System Action: DFSMShsm ends.

Operator Response: Notify the storage administrator.

Application Programmer Response: Correct the parameter or member, and restart DFSMShsm.

ARC0011I TOO MANY VOLUMES OF ONE DEVICE TYPE TO RETURN THE ENTIRE DFSMSHSM GENERAL POOL

Explanation: While processing an LJES3-directed RECALL command, DFSMShsm determined that there was more than 254 volumes in the general volumes pool. JES3 does not support pools with more than 254 volumes of a single device type. The JES3 directed RECALL ended. Subsequent recall processing of the data set during allocation will fail.

Source: DFSMShsm

System Action: The JES3/DFSMShsm setup for directed RECALL ended and allocation of the migrated data set also failed. DFSMShsm processing continues.

Operator Response: Notify the storage administrator.

Application Programmer Response: Ensure that the number of volumes intended for the DFSMShsm general pool does not exceed 254 of any single device type.

ARC0012I {TAPE VOLUME TABLE | DASD L2 AVAILABLE TABLE} COULD NOT BE CREATED - MIGRATION IS HELD

Explanation: During initialization of DFSMShsm, an attempt was made to create either the tape volume table or DASD level 2 available table, but the table could not be created. There will be one or more messages preceding this one describing the failure.

Source: DFSMShsm

System Action: DFSMShsm continues initializing nonmigration functions, with migration held. If the problem is not resolved, but migration is released, DFSMShsm tries again to create the table on each request for migration. The result of each failure is that each migration request (if migrating to tape) is written to a separate scratch tape volume.

Operator Response: Restart DFSMShsm when the problem has been corrected.

Application Programmer Response: From the messages preceding this one, determine the source of the error and correct the error before releasing migration.

ARC0013I SYSTEM TIMER INACTIVE, AUTO SPACE MANAGEMENT INOPERATIVE

Explanation: The DFSMShsm migration task attempted to set a timer but the system timer function was inoperative.

Source: DFSMShsm

System Action: DFSMShsm continues to process command requests, but will not automatically begin space management or periodic space checks with its associated interval migration.

Operator Response: Notify the system programmer that the system timer function is inoperative.

Application Programmer Response: Determine the type of hardware malfunction and take appropriate action to correct the problem.

ARC0014I VTOC/VVDS INTERFACE MODULE IGDCSP00 COULD NOT BE LOADED, ABEND CODE=*xx*. DFSMSHSM CANNOT MIGRATE OR BACK UP SMS MANAGED VOLUMES

Explanation: During initialization, DFSMShsm has attempted to load module IGDCSP00 but the load processing fails. The abnormal end (abend) code from the attempted load is indicated by *xx*.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Volume backup and migration of SMS-managed volumes will not occur.

Application Programmer Response: Determine the reason for the load failure based upon the explanation of the abend code, which is found in *OS/390 MVS System Codes*. Correct the error; then stop DFSMShsm and restart it.

ARC0015I DFSMSDSS COULD NOT BE LOADED, ABEND CODE=*xxx*, REASON CODE=*xxx*. DFSMSDSS CANNOT BE USED AS DFSMSHSM DATA MOVER.

Explanation: During initialization or in response to a SETSYS DATAMOVER command DFSMShsm has attempted to load module ADRDSSU but the load fails. The abnormal end (abend) and reason codes from the attempted load are indicated in the message.

Source: DFSMShsm

System Action: DFSMShsm processing continues with DFSMShsm as the data mover. Subsequent functions that require DFSMSdss as the data mover may fail.

Application Programmer Response: Use the explanations of the abend and reason codes, which are found in *OS/390 MVS System Codes* to determine the reason for the load failure. Correct the error; then issue the SETSYS command with the DATAMOVER parameter along with the appropriate data movement subparameter.

ARC0016I DFSMSHSM SHUTDOWN HAS BEEN REQUESTED

Explanation: The STOP command was issued requesting that DFSMShsm stop processing.

Source: DFSMShsm

System Action: DFSMShsm will continue processing the commands currently running. No new commands will be started, and shutdown will occur upon completion of all currently processing commands.

Application Programmer Response: None.

ARC0017I PSEUDO USER UNIT TABLE NOT CREATED, DEFAULTS WILL BE USED FOR TAPE LIMITING CRITERIA

Explanation: The pseudo user unit table could not be created during DFSMShsm initialization. The DFSMShsm defaults for tape limiting will be used.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the DFSMShsm defaults for tape limiting are acceptable, no action is required. However, if other criteria is desired for tape limiting, determine the cause of the GETMAIN failure and restart DFSMShsm when the problem is resolved.

ARC0018I DFSMSHSM IS NOT LICENSED FOR USE ON THIS SYSTEM

Explanation: DFSMShsm is not licensed for use on this system.

Source: DFSMShsm

System Action: DFSMShsm processing ends.

Application Programmer Response: None.

ARC0019I CELL POOL *entry#* ENCOUNTERED A SHORTAGE OF *number* CELLS. PERFORMANCE IS DEGRADED.

Explanation: The number of cells allocated to the Cell Pool were all used. GETMAINs are issued for the module’s dynamic storage area. The Cell Pool entry number’s (*entry#*) GETMAIN counter is *number*.

Source: DFSMShsm

System Action: DFSMShsm continues; however, DFSMShsm’s performance may be impacted.

Application Programmer Response: Increase the size of the desired CPOOL entry. Refer to *DFSMS/MVS DFSMShsm Implementation and Customization Guide* for the method of adjusting CPOOL Table entry sizes at startup time.

ARC0020I

Explanation: This message is a separator.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0021I DFSMSHSM LOGGING FUNCTION DISABLED

Explanation: During DFSMShsm startup, either one or both of the DFSMShsm log data sets was not specified or was specified as DD DUMMY on the startup procedure through the DD names of ARCLOGX and ARCLOGY. This message also occurs if the log data set's JFCB or data set VTOC entry cannot be read.

Both log data sets must be specified on the startup procedure before the logging function is enabled.

Source: DFSMShsm

System Action: DFSMShsm processing continues. DFSMShsm logging is not performed.

Operator Response: Notify the storage administrator if your installation procedures require that DFSMShsm functions be recorded in DFSMShsm log data sets.

Application Programmer Response: Shut down DFSMShsm. Before restarting DFSMShsm, ensure that two DFSMShsm log data sets are specified on the DFSMShsm startup procedure.

ARC0022I DFSMSHSM LOG RENAME ERROR *type* DATA SET NAME *dsname* TO *type* DATA SET NAME *dsname*. RC=*return-code*, REAS=*reason-code*

Explanation: During a switch of the DFSMShsm log data sets, DFSMShsm attempted to rename the log data sets. The type of log data set is indicated by *type* and the log data set that is being switched is indicated by *dsname*. The return code is indicated by *return-code*. The status code returned from the RENAME macro is shown by *reason-code*. A return code of 8 along with a reason code of 1 has been found when the ARCLOGX and ARCLOGY data sets are not on the same volume. DFSMShsm does not switch the log data sets.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

If the log switch was requested during DFSMShsm initialization through the startup procedure or the DFSMShsm input parameter, logging remains functional using the log data set referred to by the DD statement ARCLOGX.

If the log switch was requested by the SWAPLOG command or internally after an error occurred in processing the log data set, the logging function is inhibited and remains inhibited until the rename problem is resolved and the SWAPLOG command is issued again to attempt switching of the logs.

Operator Response: Notify the storage administrator. If your installation procedures require the DFSMShsm log data, shut down DFSMShsm.

Application Programmer Response: Shut down DFSMShsm. Ensure that two DFSMShsm log data sets are allocated and available. Ensure that the data set named HSMLOG.TEMP has been deleted. Restart DFSMShsm.

ARC0023I UNABLE TO READ JOURNAL CONTROL RECORD

Explanation: DFSMShsm is unable to read the journal control record.

Source: DFSMShsm

System Action: Journaling is inhibited. DFSMShsm processing continues.

Operator Response: Notify the system programmer and the storage administrator. If your installation requires DFSMShsm journaling, stop DFSMShsm activity.

Application Programmer Response: Determine the cause of the failure for the control record. Take appropriate action to correct the problem. Restart DFSMShsm if it has been stopped.

ARC0024I DFSMSHSM LOGGING INHIBITED DUE TO *errortext*

Explanation: While processing the log data set, an error occurred. The DFSMShsm logging function is disabled.

The *errortext* specifies LOG I/O ERROR, EOV ERROR ON LOG, or *nnn* ABEND PROCESSING LOG, where *nnn* shows the system abnormal end (abend) code, or STRIPED LOG DATA SET. If *errortext* is LOG I/O ERROR, the I/O error message generated by the SYNADAF macro precedes this message.

Source: DFSMShsm

System Action: LOG I/O ERROR and ERROR PROCESSING LOGS: DFSMShsm attempts to switch the log data sets. If successful, then logging will continue.

STRIPED LOG DATA SET: Logging is disabled.

EOV ERROR: Logging is disabled because an attempt to switch the log data sets has failed.

Operator Response: Notify the system programmer.

Application Programmer Response: For I/O errors or abends, reallocate the log data set in error. If the data set is striped, reallocate it as a nonstriped data set. For an EOV condition, see the preceding messages to determine why the switch of the log has failed.

ARC0025I DFSMSHSM JOURNAL NOT OPENED

Explanation: The open for the DFSMShsm journal data set failed.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Updates to the DFSMShsm control data sets are not journaled.

Operator Response: Notify the storage administrator. If your installation procedures specify that DFSMShsm journaling is required, shut down DFSMShsm.

Application Programmer Response: Look for errors in the DD statement for the DFSMShsm journal data. Ensure the DFSMShsm journal data set is available the next time DFSMShsm is started.

ARC0026E JOURNALING DISABLED DUE TO ***errortext*****. MIGRATION, BACKUP, DUMP, TAPECOPY, TAPEREPL, RECYCLE, ARECOVER, AUDIT, AND EXPIREBV HELD**

Explanation: An error has occurred while attempting to write data in the DFSMShsm journal data set.

The *errortext* specifies JOURNAL I/O ERROR, EOV ERROR ON JOURNAL, or *nnn* ABEND PROCESSING JOURNAL, where *nnn* shows the system abnormal end (abend) code. If the *errortext* is JOURNAL I/O ERROR, the I/O error generated precedes this message.

Source: DFSMShsm

System Action: The DFSMShsm commands of MIGRATION, BACKUP, DUMP, TAPECOPY, TAPEREPL, RECYCLE, ARECOVER, AUDIT, and EXPIREBV are held.

Operator Response: Notify the system programmer. When the problem is corrected or the message is no longer needed, take the following action to delete the message:

- If the message identifier *id* is not available, issue the DISPLAY R,I command to get the ID.
- To delete the message, issue the following command using the message identifier obtained from the above DISPLAY R,I command:

  CONTROL C,I,*id*

Application Programmer Response: The operator or system programmer should take immediate action to resolve the situation in order to retain the system integrity for those data sets under DFSMShsm control. See *DFSMS/MVS DFSMShsm Storage Administration Guide* to determine the functions to be performed when the journal data set is disabled.

If you want to continue processing with the journal, you must stop DFSMShsm and delete and reallocate the journal in a different place to avoid getting another I/O error while processing the data set. This process is described in *DFSMS/MVS DFSMShsm Storage Administration Guide* in the section “Maintaining Control Data Sets.” A hardware problem could be causing the I/O error on the journal data set. Be sure you do not reallocate the journal data set where it has been allocated before the I/O error occurred.

If an error occurs which specifies EOV ERROR ON JOURNAL, begin CDS backup processing by using the BACKVOL CDS command or the SETSYS command with the AUTOBACKUPSTART parameter. (For information on controlling automatic backup of control data sets, refer to “Maintaining DFSMShsm Control Data Sets” in the *DFSMS/MVS DFSMShsm Storage Administration Guide*.) It is preferable that the backup of the control data sets be initiated on the system that encountered the error. This creates backup copies of the MCDS, BCDS, OCDS and nulls the journal data set so that all the space in it becomes available. If you are in a multihost environment, issue the RELEASE ALL command on each system that received the ARC0026E message after the completion of the backup of the data set.

ARC0027I DFSMSHSM LOG SWITCHED

Explanation: DFSMShsm has successfully switched log data sets and is now using the alternate log data set. This message might be preceded by ARC0024I and followed by ARC0020I.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: Follow your installation’s procedures for processing DFSMShsm log data.

ARC0028I {BACKUP | DUMP | COMMAND | MIGRATION} ACTIVITY LOG {DISABLED | RELEASED} DUE TO { ERROR OPENING LOG | LOG I/O ERROR}. {*explanation*}.

Explanation: DFSMShsm generates this message whenever an error is detected opening an activity log or an I/O error is detected writing a message to the log.

For ERROR OPENING LOG, another message that displays the reason for the error will precede this message. The possible reasons are:

- An error in getting storage

- An allocation error
- An open error

For LOG I/O ERROR, an ARC0645I message indicating why the log is released will precede this message. The *explanation* part of the message will not appear.

The following inserts are possible for the *explanation*:

- COMMAND ACTIVITY LOGGING DISABLED

  Messages that are intended for the command activity log will not be issued.

- BACKUP ACTIVITY LOGGING DISABLED

  Messages that are intended for the backup activity log will not be issued.

- MIGRATION ACTIVITY LOGGING DISABLED

  Messages that are intended for the migration activity log will not be issued.

- DUMP ACTIVITY LOGGING DISABLED

  Messages that are intended for the dump activity log will not be issued.

- BACKUP ACTIVITY LOGGING SWITCHED TO COMMAND LOG

  Messages that are intended for the backup activity log will be rerouted to the command activity log.

- MIGRATION ACTIVITY LOGGING SWITCHED TO COMMAND LOG

  Messages that are intended for the migration activity log will be rerouted to the command activity log.

- DUMP ACTIVITY LOGGING SWITCHED TO COMMAND LOG

  Messages that are intended for the dump activity log will be rerouted to the command activity log.

Source: DFSMShsm

System Action: The following describes the system action on the basis of the error condition and log type:

- OPEN error (an error in getting storage, during allocation, or while opening the log).
  - For the command activity log, command activity messages disabled.
  - For the backup, dump, or migration activity log, if a command activity log exists:
    1. ACTIVITY LOGGING SWITCHED is written to the command activity log.
    2. The messages that normally are written to the affected activity log will be routed to the command activity log.
  - If no command activity log exists:
    1. ACTIVITY LOGGING DISABLED is written to the system operator.
    2. The messages that normally would be written to the affected activity log will be disabled.
- I/O Error - When an I/O error is detected on an activity log, the affected log will be closed and deallocated. A new name will be generated for the log if output is to DASD, and a new log will be allocated and opened. The message that was being written when the I/O error occurred will be written to the new log when it is successfully allocated and opened.

Messages intended for a particular activity log can be rerouted to the command log after an open error occurs if the command activity log is open. Otherwise, the messages will be lost.

Application Programmer Response: Issue RELEASE HARDCOPY to cause existing activity logs to be closed and deallocated, and all logs to be allocated and opened.

ARC0029E A MINIMUM LEVEL OF MVS IS REQUIRED TO PERFORM *function*, FUNCTIONS ARE DISABLED

Explanation: The system was not found to be at the minimum required level of MVS for the requested function during either DFSMShsm initialization or invocation of the function. One of the following functions is disabled:

- Aggregate Backup/Recovery
- CDS Assurance

Source: DFSMShsm

System Action: If the function was aggregate backup or recovery, DFSMShsm aggregate backup and aggregate recovery have been disabled. Subsequent ABACKUP, ARECOVER, and DEFINE ARPOOL commands will fail.

If the function was CDS assurance, the following AUDIT functions have been disabled:

- MEDIACONTROLS, Tape and SDSP
- DIRECTORYCONTROLS
- VOLUMECONTROLS, Backup, Migration, and Recoverable
- DATASETCONTROLS, Backup and Migration

Other DFSMShsm processing continues.

Application Programmer Response: If the function was aggregate backup or recovery, do not issue any aggregate backup or recovery commands until the system is at the proper level.

If the function was CDS Assurance, do not issue any CDS Assurance commands until the system is at the proper level.

Operator Response: Notify the system programmer.

ARC0032I RENAME ERROR SWITCHING DFSMSHSM PROBLEM DETERMINATION OUTPUT DATA SETS, OLD DATA SET NAME = *old-dsname*, NEW DATA SET NAME = *new-dsname*, RC=*return-code*, REAS=*reason-code*

Explanation: During an attempt to switch the ARCPDOX/ARCPDOY output data sets, an error has been encountered in the rename function. In the message, *old-dsname* is the old data set name that the rename macro is changing from, and *new-dsname* is the new data set name that the RENAME macro is renaming to.

In the message, *return-code* is the register 15 return code from the RENAME macro and *reason-code* is the status value from the RENAME CAMLST. A return code of 8 and a reason code of 1 occurs when the PDA data sets are not on the same volume. Refer to *DFSMS/MVS DFSMShsm Implementation and Customization Guide* for instructions on PDA data set allocation.

Source: DFSMShsm

System Action: Internal tracing continues; however, no trace data blocks are written to the output data set. DFSMShsm processing continues.

Application Programmer Response: Refer to *DFSMS/MVS DFSMSdfp Advanced Services* for the meaning of the status value from the RENAME macro to determine the problem. To restart the DFSMShsm problem determination aid, issue the SWAPLOG PDA command.

ARC0033E DFSMSHSM INITIALIZATION FAILED, REASON=*return-code*

Explanation: A unrecoverable error occurred during DFSMShsm initialization. There may be other messages preceding this one describing the failure. The meanings for *return-code* are:

Retcode	Meaning
1	Journal data set is striped.
4	CDS open error.
8	DFSMShsm SVC initialization error.
12	Startup command error.

Source: DFSMShsm

System Action: DFSMShsm shuts down.

Application Programmer Response: Determine the source of the error. Correct the error and restart DFSMShsm.

ARC0034I {I/O ERROR | nnn ABEND} PROCESSING DFSMSHSM PROBLEM DETERMINATION OUTPUT DATA SET

Explanation: While writing to the output data set, DFSMShsm encountered an I/O error or *nnn* ABEND (where *nnn* is the abend code).

Source: DFSMShsm

System Action: On nonconsecutive occurrences, DFSMShsm switches the ARCPDOX/ARCPDOY output data sets and makes one attempt to retry the output operation. For consecutive failures, the output data set is considered no longer usable. Internal tracing continues; however, no trace data blocks are written to the output data set.

Operator Response: If the abend code is *x*37, no action is required. For an I/O error or an abend code other than *x*37, contact your system programmer.

Application Programmer Response: Determine the cause of the I/O error or abend and take appropriate action to correct the problem. If it is necessary to recreate the output data set, stop and restart DFSMShsm.

ARC0036I I/O {INHIBITED | DISABLED} FOR DFSMSHSM PROBLEM DETERMINATION OUTPUT DATA SET, REAS=*reason-code*

Explanation: Due to an error (defined by *reason-code*), DFSMShsm determines that the output data set is unusable.

The values for *reason-code* are:

1	JFCB read error or DD DUMMY specified for the ARCPDOY data set.
2	JFCB read error or DD DUMMY specified for the ARCPDOX data set.
3	A failure occurred while attempting to open the ARCPDOX data set.
4	A failure occurred while attempting to write to the ARCPDOX data set. Message ARC0034I was issued previously.
5	A failure occurred while attempting to switch the ARCPDOX/ARCPDOY data sets. Message ARC0032I was issued previously.
6	There is a deallocation error on the ARCPDOY data set.
7	There is a deallocation error on the ARCPDOX data set.
8	There is an allocation error on the ARCPDOX data set. Refer to message ARC0503I for more information.
9	The ARCPDOX data set is extended format.
10	The ARCPDOY data set is extended format.
11	There is an OBTAIN error for a PDA data set.

Source: DFSMShsm

System Action: Internal tracing continues; however, no trace data blocks are written to the output data set.

Application Programmer Response: For reason codes 1 and 2, make sure a valid DD statement exists in the DFSMShsm startup procedure for ARCPDOX and ARCPDOY. For the other reason codes, refer to the associated messages to determine the cause of the problem. Correct the error; then re-enable PDA tracing by issuing the SWAPLOG PDA command.

ARC0037I DFSMSHSM PROBLEM DETERMINATION OUTPUT DATA SETS SWITCHED

Explanation: DFSMShsm renames the ARCPDOX data set to the ARCPDOY data set name and the ARCPDOY data set to the ARCPDOX data set name.

Source: DFSMShsm

System Action: Processing continues with trace output data being written to the data set currently identified by the ARCPDOX data set name.

Operator Response: The data set named by the ARCPDOY DD statement may be dumped or archived at this time if specified by local procedures.

ARC0038I RESOURCE MANAGER {SUCCESSFULLY | UNSUCCESSFULLY} ADDED, RETCODE = *return-code***, TYPE = {ADDRSPC | TASK}**

Explanation: This message explains the status of adding the DFSMShsm Resource Manager to the system. If *return-code* is not 0 or 10, then the TYPE identifies the type of resource manager that has not been added to the system. If *return-code* is 0 or 10, then TYPE is not displayed. The *return-code* has the following meanings:

Retcode	Meaning
0	The operation has been successful.
2	Not enough storage exists to process the request.
4	The resource manager system lock is not available.
6	DFSMShsm has already been ending when the request is made.
8	An unrecoverable error has occurred while processing the request.
10	A resource manager can only be added to the system in an ESA environment.
12	An invalid request has been made. This represents an internal DFSMShsm programming error.
14	An unknown error has occurred while processing the request.

Source: DFSMShsm

System Action: DFSMShsm processing continues. If the *return-code* is not 0, then the resource manager will not be invoked when DFSMShsm ends.

Application Programmer Response: For *return-code* 0, 2, 4, 6, 8, and 10, this is an informational message only. For *return-code* 12 and 14, contact IBM.

ARC0040I COMMAND SENT TO DFSMSHSM, REQUEST NUMBER=*request-number*

Explanation: DFSMShsm generates this message for each command entered from the operator's console. A request number *request-number* is assigned to each request. This request number can be used to cancel this request with the (H)CANCEL REQUEST command.

Source: DFSMShsm

System Action: USERID is notified of request number assigned and DFSMShsm processing continues.

Application Programmer Response: None.

ARC0041I MEMBER *membername* **USED IN** *parmdsname*

Explanation: The parmlib member *membername* is being used during DFSMShsm startup. It is located in *parmdsname*, which is either the data set on the HSMPARM DD statement or the data set in the concatenated parmlib.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0042I *msgtext*

Explanation: DFSMShsm has invoked the MVS concatenated PARMLIB service to locate the requested ARCSTR*xx* or ARCCMD*xx* member. During the process, MVS concatenated PARMLIB services issued a message and DFSMShsm intercepted the message for retransmission to the DFSMShsm user or to one of the activity logs. *msgtext* is the actual MVS concatenated PARMLIB service message.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Refer to IEF messages for a description for the MVS concatenated PARMLIB service message.

ARC0043E ERROR OPENING OR READING MEMBER ARCSTR*xx*

Explanation: In the DFSMShsm startup procedure, keyword STR=*xx* refers to PARMLIB member ARCSTR*xx*. When DFSMShsm attempted to open and read the member, it encountered an error.

Source: DFSMShsm

System Action: DFSMShsm ends.

Operator Response: Notify the storage administrator.

Application Programmer Response: Ensure that the member ARCSTR*xx* exists in the data set specified in the HSMPARM DD statement (if specified) or in MVS concatenated PARMLIBs. Restart DFSMShsm.

ARC0045I MWE QUEUE DAMAGED, CORRECTIONS COMPLETED, POSSIBILITY OF LOST MWES

Explanation: During DFSMShsm processing, the queue of MWEs (management work elements) located in CSA (common storage area) have been found to be damaged or missing. Corrections have been performed to repair the queue of MWEs. There exists a possibility that one or more MWEs have been lost.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: Contact the system programmer.

ARC0046I DFSMSHSM ADDRESS SPACE HAS ISSUED THE MVS START COMMAND *start-command-text* **TO RESTART DFSMSHSM**

Explanation: The RESTART parameter specified in the DFSMShsm startup procedure has been utilized to restart DFSMShsm due to terminating errors. The command that DFSMShsm issues to restart is specified as *start-command-text*.

Source: DFSMShsm

System Action: DFSMShsm shutdown/restart processing continues.

Application Programmer Response: None.

ARC0047I DFSMSHSM AUTOMATIC RESTART SEQUENCE FAILED

Explanation: During DFSMShsm shutdown processing, automatic restart was requested (as specified by the RESTART parameter in the DFSMShsm startup procedure) and attempted but a failure in this process was detected. DFSMShsm has *not* been automatically restarted.

Source: DFSMShsm

System Action: DFSMShsm shutdown processing continues.

Operator Response: Contact the system programmer.

System Programmer Response: This error will most likely occur if adequate system storage is not available or if the system has exceeded the maximum number of address spaces allowed by DFSMS/MVS.

ARC0048I DFSMSHSM HAS EXCEEDED THE 5 MINUTE RESTART LIMIT, THE RESTART SEQUENCE HAS NOT BEEN INITIATED

Explanation: During DFSMShsm shutdown processing, automatic restart was requested (as specified by the RESTART parameter in the DFSMShsm startup procedure). DFSMShsm has determined that 5 restart attempts have been tried in the prior 5 minute period. The restart sequence has not been initiated.

Source: DFSMShsm

System Action: DFSMShsm shutdown processing continues.

Operator Response: Contact the system programmer.

ARC0050A DFSMSHSM IS NOT ACTIVE - START DFSMSHSM

Explanation: An OS/VS2 MVS system with DFSMShsm received a DFSMShsm request. DFSMShsm is not active. This message can occur if you are using DFSMShsm in a test environment. If the DFSMShsm SETSYS DEBUG command is issued prior to the STOP command, this message will be suppressed after DFSMShsm is no longer active.

Source: DFSMShsm

System Action: OS/VS2 MVS processing continues.

Operator Response: Start DFSMShsm.

ARC0051A JOB *jobname* WAITING FOR DFSMSHSM TO RECALL DSN=*dsname*

Explanation: An OS/VS2 MVS system received a RECALL command. DFSMShsm is not active. The job *jobname* initiated the RECALL of the data set *dsname*. This message is issued only under all of the following conditions:

- A batch job has been run.
- A cataloged data set cannot be located on the volume pointed to by its catalog entry, whether or not it is migrated (which results in an implicit recall with WAIT option).
- DFSMShsm is not active.

Source: DFSMShsm

System Action: OS/VS2 MVS processing continues. The RECALL command is queued for processing after DFSMShsm has been started.

Operator Response: Start DFSMShsm or cancel the job, according to your installation procedures.

ARC0052A JOB *jobname* WAITING ON DFSMSHSM

Explanation: An OS/VS2 MVS system with DFSMShsm received a DFSMShsm request. DFSMShsm is not active. Job *jobname* initiated the request.

Source: DFSMShsm

System Action: OS/VS2 MVS processing continues. The DFSMShsm request is queued for processing after DFSMShsm is started.

Operator Response: Start DFSMShsm or cancel the job, according to your installation procedures.

ARC0055A REPLY 'GO' OR 'CANCEL'

Explanation: A background request is waiting for DFSMShsm to become active. The operator is given the opportunity to cancel the request or to allow the request to be processed after DFSMShsm has become active. This message is preceded by message ARC0051A or ARC0052A, giving the name of the job making the request.

Source: DFSMShsm

System Action: OS/VS2 MVS processing continues.

Operator Response: According to your installation procedures, reply CANCEL to cancel the request, or reply GO after DFSMShsm has become active.

ARC0056A JES3 JOB FAILED - START DFSMSHSM

Explanation: In a JES3 system, a DFSMShsm wait-type request was issued while DFSMShsm was not active. The request was rejected.

Note: If JES3 CI attempted to locate the resource indicated in the job and the locate fails because DFSMShsm is not active, JES3 then reschedules the attempt on a local partition (another processor). If DFSMShsm is functioning on that system, CI will continue successfully and the job will be successful too.

Source: DFSMShsm

System Action: DFSMS/MVS processing continues.

Operator Response: Start DFSMShsm.

Application Programmer Response: Request that DFSMShsm be started. Reissue the job when DFSMShsm is ready.

ARC0057I CSA USAGE BY DFSMSHSM HAS REACHED DFSMSHSM INACTIVE THRESHOLD OF *xxxxxx*K BYTES, REQUEST FAILED

Explanation: The DFSMShsm common service area (CSA) usage maximum limit of *xxxxxx*K-bytes has been reached while DFSMShsm is inactive.

Source: DFSMShsm

System Action: Until DFSMShsm is started, no further requests are added to the CSA queue. All requests fail.

Operator Response: Start DFSMShsm or contact your DFSMShsm storage administrator.

Application Programmer Response: To determine the action needed to alleviate the problem, see *DFSMS/MVS DFSMShsm Implementation and Customization Guide* and the *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0058I CSA USAGE BY DFSMSHSM HAS REACHED THE ACTIVE THRESHOLD OF *xxxxxx*K BYTES, ALL BUT BATCH WAIT REQUESTS FAILED

Explanation: The DFSMShsm limit of *xxxxxx*K-bytes for nonwait action requests has been reached.

Source: DFSMShsm

System Action: Until common service area (CSA) usage drops under this threshold, only BATCH WAIT management work elements (MWEs) are added to the DFSMShsm CSA queue. All other requests will fail.

Operator Response: Start DFSMShsm or contact your DFSMShsm storage administrator.

Application Programmer Response: To determine the action needed to alleviate the problem, see *DFSMS/MVS DFSMShsm Implementation and Customization Guide* .

ARC0059I CSA USAGE BY DFSMSHSM HAS REACHED MAXIMUM LIMIT OF *xxxxxx*K BYTES, JOB=*jobname* FAILED

Explanation: Job *jobname* has failed because the maximum limit of CSA bytes of storage *xxxxxx*K-bytes has been reached.

Source: DFSMShsm

System Action: Until normal DFSMShsm processing frees some CSA storage, no more requests involving MWEs are processed.

Application Programmer Response: To determine the action needed to alleviate the problem, *DFSMS/MVS DFSMShsm Implementation and Customization Guide* and *DFSMS/MVS DFSMShsm Storage Administration Reference.*

ARC0060I WARNING: DFSMSHSM IS NOT ACTIVE

Explanation: The open or end-of-volume routine, or both, could not find the VTOC entry for the data set. DFSMShsm is not active.

Source: DFSMShsm

System Action: Processing continues. If the data set being opened is not on the specified volume (the data set might have been migrated), the open routine ends abnormally.

For DISP=MOD processing of a multivolume request where the last volume specified does not contain the VTOC entry but some previous volume does, either the open or end-of-volume routine, or both, continues to search previous volumes.

For end-of-volume output processing in which the data set is not yet allocated on the new volume, the end-of-volume routine allocates space on the new volume.

Application Programmer Response: If the data set being opened has migrated, have the operator or system programmer start DFSMShsm and then rerun the job.

ARC0061I DFSMSHSM SHUTTING DOWN DUE TO SMSVSAM SERVER ERROR

Explanation: An error with the SMSVSAM server has caused DFSMShsm to lose access to its control data sets. All attempts to read, write, delete or update control data set records will fail. Most functions currently being processed will fail. Only those functions that are allowed to continue while DFSMShsm is in emergency mode will continue to be processed. To regain access to the control data sets, DFSMShsm must shutdown and be restarted.

Source: DFSMShsm

System Action: DFSMShsm is placed into emergency and shutdown modes. An abend is issued.

Application Programmer Response: Restart DFSMShsm after it has shut down and the SMSVSAM server has restarted. Examine all DFSMShsm messages associated with the SMSVSAM server error. Issue any FIXCDS commands that are documented in the messages that were received. Perform audit processing if it appears that the failure may have caused inconsistencies between the control data sets and the data that DFSMShsm is managing. For more information, refer to “DFSMShsm Abnormal End Considerations” in the *DFSMS/MVS DFSMShsm Implementation and Customization Guide*.

ARC0062I DFSMShsm ADDRESS SPACE HAS BEEN SET TO {NON-SWAPPABLE | SWAPPABLE}

Explanation: If NON-SWAPPABLE is displayed, DFSMShsm has made itself non-swappable so that it can support cross-address space communication.

If SWAPPABLE is displayed, DFSMShsm reset to being swappable after unsuccessfully trying to establish cross-address space communication.

Source: DFSMShsm

System Action: DFSMShsm processing continue.

Application Programmer Response: None.

ARC0073I AN ERROR OCCURRED WHILE DFSMSHSM WAS PROCESSING A REQUEST FROM IDCAMS TO UPDATE A DFSMSHSM RECORD FOR A MIGRATED DATA SET.

Explanation: The user submitted an ALTER dsn STORAGECLASS(*storageclassname*) or a MANAGEMENTCLASS(*managementclassname*) command, or both, to IDCAMS for a migrated data set. DFSMShsm failed to update the DFSMShsm record used for SMS space management processing. The reason codes have the following meanings:

4	Data Set in use
5	Parsing error on internal ALTERDS command from Catalog Services.
6	Catalog Services has indicated that the data set being processed is migrated. The DFSMShsm information indicates that the data set is not migrated.
7	The DFSMShsm information indicates that this data set is not SMS managed.
8	Update error for MCD record. DFSMShsm could not update the MCD record.
9	Read error for MCD record. DFSMShsm failed when it tried to read the MCD record.
10	Needed enqueue not obtained.
92	DFSMShsm could not service the update request from Catalog Services because the DFSMShsm task abended, DFSMShsm was shutting down, the DFSMShsm address space was being cancelled, or the DFSMShsm request was cancelled.

System Action: The IDCAMS ALTER command fails.

Application Programmer Response: Perform the action assigned to the reason code you received.

4,8,10,92	Resubmit the IDCAMS command.
5	Interface restricted for use by Catalog. Use this interface only when an ALTER command has been issued through IDCAMS.
6,7	Verify the status of the data set or DFSMShsm record. Correct any discrepancies and reissue the command.
9	Use the FIXCDS command to verify that the MCD record can be found. Correct any problems and resubmit the command.

ARC0075E RECALL OF DATASET *dsname* FAILED, ORIGINAL DEVICE = *unitname*.

Explanation: DFSMShsm was unable to recall a data set (*dsname*), because the DFSMSdss datamover detected, during restore (recall), the data set had internal errors when dumped (migrated). The original device name from which the data set migrated was *unitname*.

System Action: Processing of the data set ends.

Application Programmer Response: The data set may be recalled, using the Storage Administrator command RECALL DFDSSOPTION(RETRY), to a device having the same geometry as the device from which it is migrated. RECALL DFDSSOPTION(RETRY) causes DFSMSdss to restore the data set using the NOPACKING option.

ARC0087I CDS VERSION BACKUP SHOULD BE PERFORMED AT THIS TIME

Explanation: During DFSMShsm startup, it was detected that the number of clusters for the MCDS or BCDS, or both, has changed since the last time DFSMShsm was active. To create a point of recovery for the new CDS structure, perform CDS version backup at this time. This simplifies the CDS recovery process, should it need to be performed.

System Action: DFSMShsm processing continues.

Application Programmer Response: Perform a CDS version backup.

ARC0089I SETSYS TAPEFORMAT(MULTIFILE) IS NOT SUPPORTED FOR TAPE CARTRIDGES. TAPEFORMAT IS NOT CHANGED.

Explanation: A SETSYS command was entered specifying TAPEFORMAT(MULTIFILE). MULTIFILE format is not supported for tape cartridges (3480, 3480X or 3490). This specification is ignored.

Source: DFSMShsm

System Action: The TAPEFORMAT(MULTIFILE) subparameter is ignored. Any remaining parameters on the SETSYS command are processed. DFSMShsm processing continues.

Application Programmer Response: Do not specify SETSYS TAPEFORMAT(MULTIFILE).

ARC0090I FAILURE TRYING TO ATTACH MODULE *name1* **BY** *name2*

Explanation: A DFSMShsm module *name1* has issued an MVS ATTACH macro for module *name2.* The attach attempt is unsuccessful. The return code from MVS is nonzero and is given in the reason code field of the following ARC1001I, ARC0744E, or ARC0839I message. The return codes are explained in the *DFSMS/MVS Macro Instructions for Data Sets* publication. The function is ended.

Source: DFSMShsm

System Action: The module is not attached. DFSMShsm processing continues.

Application Programmer Response: Determine the cause of the error from the return code and take corrective action.

ARC0091I ARCCKEY CALLED WITH INVALID TYPE='*type***'X KEY=***key*

Explanation: The DFSMShsm module ARCCKEY was called with invalid input of *type* and *key.* The 1-byte *type* is printed in hexadecimal and the 44-byte *key* is printed in alphameric characters.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Contact the IBM Support Center.

ARC0092I INVALID SETSYS - TAPEHARDWARECOMPACT SPECIFIED - DATA FACILITY PRODUCT(DFP) NOT INSTALLED OR INSUFFICIENT LEVEL OF DATA FACILITY PRODUCT INSTALLED

Explanation: The required level of DFSMS/MVS is not installed on the system to perform tape hardware compaction.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Hardware compaction will not be used. All other SETSYS parameters are processed.

Application Programmer Response: The required level of DFP for tape hardware compaction is 2.4.0 or greater, except DFP 3.1.1. MVS/SP-JES3

Source: DFSMShsm

ARC0093I INCONSISTENT CDS SERIALIZATION TECHNIQUE

Explanation: The control data set serialization technique of the starting DFSMShsm differs from the serialization technique of another active DFSMShsm. When record level sharing is used or is to be used, all DFSMShsm systems sharing the same control data sets must use record level sharing.

System Action: DFSMShsm startup ends.

Application Programmer Response: For the starting DFSMShsm system, use the same control data set serialization technique that is already being used. Examine the startup procedures for the conflicting DFSMShsm systems to determine which ones are using record level sharing. If the serialization technique needs to be changed, stop all DFSMShsm systems, change the startup procedure, and restart each DFSMShsm system individually. If record level sharing is used, verify that the minimum system level for the starting DFSMShsm is DFSMS/MVS 1.4.0.

ARC0095I CATALOGVOLUME SUBPARAMETER OF SETSYS RECALL NOT SUPPORTED - RECALL TARGET SELECTION OPTION IS UNCHANGED

Explanation: A SETSYS command with the RECALL parameter and CATALOGVOLUME subparameter was specified. This parameter is not supported in the current release of DFSMShsm. No change is made to the current DFSMShsm recall target selection parameters.

Source: DFSMShsm

System Action: If no SETSYS command has been issued with the RECALL parameter, the default is ANYSTORAGEVOLUME(LIKE).

Other parameters on the SETSYS command are processed. DFSMShsm processing continues.

Application Programmer Response: If a function similar to the CATALOGVOLUME subparameter is required, the volume pool function may be used to associate volumes for the recall of non-SMS-managed data sets.

ARC0096I INVALID VALUE SPECIFIED FOR CSALIMITS SUBPARAMETERS (MWE, ACTIVE, INACTIVE, MAXIMUM)

Explanation: An invalid value has been specified for the indicated subparameter of the SETSYS CSALIMITS command.

Source: DFSMShsm

System Action: The CSALIMITS parameter is ignored. Any remaining parameters on the SETSYS command are processed. DFSMShsm processing continues.

Application Programmer Response: For details on specifying the SETSYS CSALIMITS subparameters, see *DFSMS/MVS DFSMShsm Storage Administration Reference Summary* Specify the subparameter values correctly and resubmit the SETSYS command.

ARC0097I INVALID SETSYS {TAPESECURITY | SELECTVOLUME} SUBPARAMETER - {RACF | RACFINCLUDE | SPECIFIC}, DATA FACILITY PRODUCT (DFP) NOT INSTALLED OR INSUFFICIENT LEVEL OF DATA FACILITY PRODUCT INSTALLED

Explanation: One of the following two conditions occurred:

- A SETSYS command was entered with the TAPESECURITY parameter and either RACF or RACFINCLUDE subparameter was specified.

- A SETSYS command was entered with the SELECTVOLUME parameter and SPECIFIC subparameter.

Source: DFSMShsm

System Action: The TAPESECURITY or SELECTVOLUME parameter and any of their subparameters are ignored. Any remaining parameters on the SETSYS command are processed. DFSMShsm processing continues.

Application Programmer Response: The use of the RACF or RACFINCLUDE subparameter with the TAPESECURITY parameter or the SPECIFIC subparameter with the SELECTVOLUME parameter requires that a sufficient level of the Data Facility Product be installed on the system. One of the following licensed programs, or a later release of one, must be installed on the system:

- MVS/370 Data Facility Product (DFP) Release 1.0 (Program Number 5665-295)
- MVS/XA Data Facility Product (DFP) 1.1.2 (Program Number 5665-284) or MVS/XA Data Facility Product (DFP) 2.1.0 (5665-XA2)

ARC0098I INVALID SETSYS TAPESECURITY SUBPARAMETERS, {{PASSWORD | PD} AND EXPIRATIONINCLUDE CANNOT BE SPECIFIED TOGETHER | {PASSWORD | PD} AND RACFINCLUDE CANNOT BE SPECIFIED TOGETHER | {RACF | RACFINCLUDE} SPECIFIED BUT RACF NOT INSTALLED | {RACF | RACFINCLUDE} SPECIFIED BUT RACF TAPEVOL RESOURCE CLASS NOT DEFINED}

Explanation: A SETSYS command has been entered with the TAPESECURITY parameter and an invalid combination of subparameters. One of the following four conditions has occurred. Each condition listed below corresponds to the respective insert in the message text.

- The PASSWORD (or PD) and the EXPIRATIONINCLUDE subparameters are specified with the TAPESECURITY parameter on the SETSYS command.
- The PASSWORD (or PD) and the RACFINCLUDE subparameters are specified with the TAPESECURITY parameter on the SETSYS command.
- The RACF or RACFINCLUDE subparameter is specified with the TAPESECURITY parameter on the SETSYS command but RACF is not installed in the system.
- The RACF or RACFINCLUDE subparameter is specified with the TAPESECURITY parameter on the SETSYS command but the resource class TAPEVOL is not defined in the RACF class descriptor table (CDT).

Source: DFSMShsm

System Action: The TAPESECURITY parameter and its subparameters are ignored. The previous tape security options remain unchanged and in effect. Any remaining parameters on the SETSYS command are processed. DFSMShsm processing continues.

Application Programmer Response: For each of the error conditions listed above, the following programmer response applies:

- It is inconsistent to specify both the PASSWORD (or PD) and EXPIRATIONINCLUDE subparameters with the TAPESECURITY parameter on the SETSYS command. By specifying the PASSWORD (or PD) subparameter, you indicate that DFSMShsm should password protect its tape volumes. The EXPIRATIONINCLUDE subparameter indicates that it is acceptable for DFSMShsm to migrate or back up password-protected data sets to non-password-protected tape volumes. The EXPIRATIONINCLUDE is intended to be used when the PASSWORD tape security option is not being used. If the intent is for DFSMShsm to protect its tape volumes with both password and expiration date protect, both the PASSWORD and EXPIRATION subparameters should be specified with the TAPESECURITY parameter.
- It is inconsistent to specify both the PASSWORD (or PD) and RACFINCLUDE subparameters with the TAPESECURITY parameter on the SETSYS command. By specifying the PASSWORD (or PD) subparameter, you indicate that DFSMShsm should password protect its tape volumes. The RACFINCLUDE subparameter indicates that it is acceptable for DFSMShsm to migrate or backup password-protected data sets to non-password-protected tape volumes. The RACFINCLUDE subparameter is intended to be used when the PASSWORD tape security option is not being used. If the intent is for DFSMShsm to protect its tape volumes with both password and RACF, both the PASSWORD and RACF subparameters are specified with the TAPESECURITY parameter.
- Specifying the RACF or RACFINCLUDE subparameter is not valid when RACF is not installed in the system. If you want DFSMShsm to RACF-protect its tape volumes, RACF must be installed in the system.
- Specifying the RACF or RACFINCLUDE subparameter is not valid if the RACF TAPEVOL resource class is not defined in the RACF class descriptor table (CDT). If you want DFSMShsm to RACF protect its tape volumes, RACF must be installed and the TAPEVOL resource class must be defined in the RACF CDT. For information on the RACF CDT, see *OS/390 Security Server (RACF) Command Language Reference*.

ARC0099E WARNING - {RACF | RACFINCLUDE} SPECIFIED WITH TAPESECURITY PARAMETER BUT {RACF NOT ACTIVE | RACF TAPEVOL RESOURCE CLASS NOT ACTIVE}

Explanation: A SETSYS command has been entered with the TAPESECURITY parameter and the RACF or RACFINCLUDE subparameter, but RACF has not been activated.

Source: DFSMShsm

System Action: The TAPESECURITY parameter and its subparameters are processed. Either the RACF or RACFINCLUDE tape security option is in effect. All other parameters on the SETSYS command are processed. DFSMShsm processing continues.

Operator Response: When the problem is corrected or the message is no longer needed, take the following action to delete the message:

- If the message identifier *id* is not available, issue the DISPLAY R,I command to get the ID.
- To delete the message, issue the following command using the message identifier *id* obtained from the above DISPLAY R,I command:

  CONTROL C,I,*id*

Application Programmer Response: This message is an attention message. The installation has requested DFSMShsm, via the TAPESECURITY parameter on the SETSYS command, to RACF-protect the tape volumes it uses. RACF is installed in the system, but one of the two following conditions exist:

- RACF is not active.
- RACF is active but the system-wide tape protection option of RACF is not active.

If your installation has defined multiple RACF resource names for DFSMShsm tape volume sets since the last initialization of DFSMShsm, you must reinitialize DFSMShsm on each processing unit in which you have defined the resources for them to take effect. For more information, see *DFSMS/MVS DFSMShsm Implementation and Customization Guide*.

A RACF-defined user can reactivate RACF by entering the following RACF command: RVARY ACTIVE

The operator (at the master console or security console) must approve the change of RACF status to active or inactive.

A RACF-defined user with the SPECIAL attribute can start the system-wide tape protection option by entering the following RACF command: SETROPTS CLASSACT(TAPEVOL)

For more information, see *OS/390 Security Server (RACF) Command Language Reference*.

ARC0100I **{RELEASE | HOLD | SETSYS} COMMAND COMPLETED**

Explanation: The DFSMShsm command that appears in the message text has completed processing. However, the function requested might have had errors, as indicated in preceding messages.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0101I **QUERY {ACTIVE | ABARS | ARPOOL | AUTOPROGRESS | BACKUP | CDSVERSIONBACKUP | CONTROLDATASETS | CSALIMITS | DATASETNAME | MIGRATIONLEVEL2 | POOL/VOLUMEPOOL | REQUEST | RETAIN | SETSYS | SPACE | STARTUP | STATISTICS | TRAPS | USER | WAITING} COMMAND {STARTING | COMPLETED}**

Explanation: A QUERY command was issued. STARTING indicates that the response to the command follows this message. COMPLETED indicates that the response to the command precedes this message.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0102I **SETSYS WITH {JES2 | JES3} REJECTED, SUBSYSTEM ALREADY ESTABLISHED**

Explanation: During DFSMShsm initialization, the JES2 or JES3 parameter was specified on a SETSYS command after DFSMShsm had already established the job entry system by default or prior system command.

Source: DFSMShsm

System Action: The JES2 or JES3 parameter on the SETSYS command is rejected. DFSMShsm processing continues.

Operator Response: Notify the storage administrator.

Application Programmer Response: Specify JES2 or JES3 in the SETSYS command before all pool-configuring ADDVOL or DEFINE commands in the ARCCMD*xx* member.

ARC0103I **INVALID SETSYS PARAMETER {AMSTART | ABSTART | ADSTART | ARECOVERPERCENTUTILIZED | TAPEMAXRECALL TASKS | TAPEMAXRECALL TASKS > MAXRECALL TASKS | SMALLDATASETPACKING | MAXBACKUPTASKS | MOUNTWAITTIME | MAXMIGRATIONTASKS | MAXINTERVALTASKS | PRIMARYSPMGMTSTART | SECONDARYSPMGMTSTART | PARTIALTAPE | SELECTVOLUME | TAPEDELETION | OUTPUT UNITNAME=*es2out* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in*, NO ONLINE DEVICES FOR OUTPUT UNIT NAME OR NOT ALL ONLINE DEVICES FOR OUTPUT UNIT NAME HAVE ACLS | OUTPUT UNITNAME=*es2in* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in*, DEVICE TYPE CONFLICT | OUTPUT UNITNAME=*es2out* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in*, INVALID INPUT UNIT NAME | INVALID USER UNIT TABLE ENTRY, UNITNAME=*unitname* UNKNOWN | INVALID USER UNIT TABLE ENTRY, UNITNAME=*unitname* CONTAINS INCOMPATIBLE DEVICES | INVALID USER UNIT TABLE ENTRY, UNITNAME=*unitname* IS A RESERVED SYSTEM NAME | - CONFLICTING TRANSLATIONS FOR USER UNIT TABLE UNITNAME=*unitname* | USER UNIT TABLE CREATE FAILED, THERE ARE NO VALID USER UNIT TABLE ENTRIES | USER UNIT TABLE CREATE FAILED, A MODULE'S ESTAE SETUP FAILED | USER UNIT TABLE CREATE FAILED, A FREEMAIN FAILURE OCCURRED | USER UNIT TABLE CREATE FAILED, A MACRO FAILED WHILE BUILDING THE UCB LIST | USER UNIT TABLE CREATE FAILED, AN ABEND OCCURRED IN A MODULE OR MACRO | USER UNIT TABLE CREATE FAILED, THE CAUSE OF FAILURE IS UNKNOWN | TAPEMIGRATION | DUMPIO | MAXDUMPTASKS | MAXDSRECOVERTASKS | ACTLOGMSGLVL | ACCEPTPSCBUSERID | NOACCEPTPSCBUSERID | DAYS | DENSITY | INCOMPATIBLE DENSITY=*n* | UNITNAME=*unitname* | MIGUNITNAME=*unitname* | EXITS | EXITON | MAXABARSADDRESSSPACE | SWAP | ARECOVERUNITNAME | ABARSUNITNAME | ARECOVERML2UNIT | ABARSBUFFERS | ABARSKIP | ARECOVERREPLACE | NOARECOVERREPLACE | BACKUP | PROCESSING WILL BE DONE WITHOUT USING IDRC FORMAT FOR ESOTERIC = *unitname* | CDSVERSIONBACKUP | NOCDSVERSIONBACKUP | TAPESPANSIZE | TRACE | NOTRACE | MAXRECYCLETASKS, VALUE OUT OF RANGE | ML2RECYCLEPERCENT OUT OF RANGE | RECYCLEPERCENT OUT OF RANGE | RECYCLE INPUT DEALLOC FREQUENCY (BACKUP) OUT OF RANGE | RECYCLE INPUT DEALLOC FREQUENCY (MIGRATION) OUT OF RANGE | NODEFERMOUNT NOT SUPPORTED. DEFERMOUNT WILL BE USED | MAXSINGLEFILEBLOCKS - NO LONGER SUPPORTED USE SETSYS TAPEUTILIZATION | TAPEUTILIZATION UNIT=*unit* | TAPERECALLLIMITS | PLEXNAME | PROMOTE | RECYCLEOUTPUT | SPILL | ML2PARTIALSNOTASSOCIATEDGOAL }**

Explanation: A SETSYS command was issued to establish or change the current setting of a parameter. The parameters indicated in this message are:

- ABARSBUFFERS — This parameter was specified with an invalid number. Valid values are 1–9.
- ABARSKIP — There are four valid subparameters:
  - PPRC
  - XRC
  - NOPPRC
  - NOXRC

  The subparameter specified is incorrect.
- ABARSUNITNAME — This parameter was specified with an invalid device type. This parameter applies only to tape.
- ABSTART — The specified time value is invalid. The automatic backup planned start time, the automatic backup late start time, and the quiesce time are the time values used with ABSTART.
- ACCEPTPSCBUSERID — The ACCEPTPSCBUSERID parameter was issued in an MVS system where RACF is active. This parameter is invalid in an active RACF environment.
- ACTLOGMSGLVL — The ACTLOGMSGLVL parameter has 3 valid subparameters:
  - FULL
  - REDUCED
  - EXCEPTIONONLY

  The subparameter specified on the ACTLOGMSGLVL parameter is incorrect.
- ADSTART — The specified time value is invalid. The automatic dump planned start time, the automatic dump late start time, and the quiesce time are the time values used with ADSTART.
- AMSTART — The specified time value is invalid. The automatic migration planned start time, the automatic migration late start time, and the quiesce time are the time values used with AMSTART.
- ARECOVERML2UNIT — This parameter was specified with an invalid device type. This parameter applies only to tape.
- ARECOVERPERCENTUTILIZED — The ARECOVERPERCENTUTILIZED parameter was specified with a value outside the range 1–100.
- ARECOVERREPLACE — The ARECOVERREPLACE parameter was specified; however, it is no longer supported.
- ARECOVERUNITNAME — This parameter was specified with an invalid device type. This parameter applies only to tape.
- BACKUP — If DFSMShsm was started without the OCDS DD or the BCDS DD statement defined in the startup JCL, this message appears. Also, this message appears if an incorrect unit type was specified for tape.
- CDSVERSIONBACKUP — The CDSVERSIONBACKUP parameter was specified with conflicting parameters:
  - DATAMOVER(DSS) is specified along with BACKUPDEVICECATEGORY(TAPE(NOPARALLEL)).
  - The CDSVERSIONBACKUP parameter has been issued with both the BACKUPDEVICECATEGORY(TAPE) and EXPIRATIONDATE subparameters. However, *date* is not a valid date, is a date in the past, or is in the form *yyddd* when the current date is after 1999.
- CONFLICTING TRANSLATIONS FOR USER UNIT TABLE UNITNAME=*unitname.* A duplicate unit name was specified. The translation specified for one does not match the translation specified for the other. The second occurrence is removed from the table.
- DAYS — The DAYS parameter was specified to establish the minimum age a data set must remain unopened until it is eligible for migration. The age value specified on the DAYS parameter is less than the DFSMShsm data set integrity age. The integrity age for DFSMShsm is 1-day in a single processing unit environment and 2-days in a multiple processing unit environment.
- DENSITY — The DENSITY parameter is in error due to one of the following conditions:
  - The CDSVERSIONBACKUP parameter was specified with BACKUPDEVICECATEGORY and TAPE as the subparameters. Valid values for DENSITY are 2, 3, or 4. The DENSITY subparameter of the TAPE subparameter was specified with an invalid value.
- DUMPIO — The DUMPIO parameter was specified to control DFSMSdss read characteristics during dump processing. One or both of the DUMIO subparameters are specified with a value outside the range of 1–4.
- EXITON — The EXITON (*exitname*) parameter was specified to enable the exit (*exitname*), but the exit was not loaded and its address is not available.
- EXITS — The EXITS(*abcdefghi*) parameter of the SETSYS command was specified for identifying those user-written exits to be enabled or disabled. There must be a string of 9 *Y*s or *N*s, or a combination of both, representing those exits. Either there are not exactly 9 *Y*s or *N*s, or a combination of both, or there are characters in the string other than *Y* or *N*.
- INCOMPATIBLE DENSITY = *n* — The *n* indicates the density value specified on the command. This message will be issued for the following condition:
  - The CDSVERSIONBACKUP parameter was specified with BACKUPDEVICECATEGORY and TAPE as the subparameters. The DENSITY parameter of the TAPE subparameter was specified with a density value (2, 3, or 4) that does not match the density capability of the device specified in the UNITNAME subparameter of the TAPE parameter.
- INVALID USER UNIT TABLE ENTRY, UNITNAME=*unitname* CONTAINS INCOMPATIBLE DEVICES. The USERUNITTABLE parameter was specified on a SETSYS command. The esoteric name *unitname* contains incompatible device types. For example, DFSMShsm does not allow a 3480X unit and a 3490 unit to be in the same esoteric.

  DFSMShsm only considers an esoteric for cartridge type devices, (3480, 3480X, 3490, or 3590-1), valid if any method of writing on any tape unit belonging to an esoteric group can be read on any tape unit belonging to the same esoteric group.
- INVALID USER UNIT TABLE ENTRY, UNITNAME=*unitname* IS A RESERVED SYSTEM NAME. The USERUNITTABLE parameter was specified on a SETSYS command. The esoteric name *unitname* is reserved by the system. The possible values for *unitname* are:
  - SYS3480R — Special esoteric name provided by the system that is associated with all 3480, 3480X, and 3490 devices. Any device in this esoteric is capable of reading a cartridge written by a 3480 device.
  - SYS348XR — Special esoteric name provided by the system that is associated with all 3480X and 3490 devices. Any device in this esoteric is capable of reading a cartridge written by a 3480X device.
- INVALID USER UNIT TABLE ENTRY, UNITNAME=*unitname* UNKNOWN. The USERUNITTABLE parameter was specified on a SETSYS command. The *unitname* is unknown to the operating

system and so cannot be included in DFSMShsm's user unit table.

- MAXABARSADDRESSSPACE — The MAXABARSADDRESSSPACE parameter is invalid. It is specified with a value outside the range of 1–15.
- MAXBACKUPTASKS — The MAXBACKUPTASKS parameter was specified with a value outside the range of 1–15.
- MAXDSRECOVERTASKS — The MAXDSRECOVERTASKS parameter is specified with a value outside the range of 1–64.
- MAXDUMPTASKS — The MAXDUMPTASKS parameter is specified with a value outside the range of 1–32.
- MAXINTERVALTASKS — This parameter is outside the range 1–15.
- MAXMIGRATIONTASKS — This parameter is outside the range 1–15.
- MAXRECYCLETASKS, VALUE OUT OF RANGE — The MAXRECYCLETASKS parameter is specified with a value outside of the range of 1–15.
- MAXSINGLEFILEBLOCKS - NO LONGER SUPPORTED USE SETSYS TAPEUTILIZATION — The MAXSINGLEFILEBLOCKS parameter is specified; however, it is no longer supported. Use the SETSYS TAPEUTILIZATION command.
- MIGUNITNAME = *unitname* — The value specified for UNITNAME is not a tape device unit name. The valid values for MIGUNITNAME are 3480, 3480X, 3490, 3590-1, or an esoteric name that you previously specified with the USERUNITTABLE parameter of the SETSYS command.
- ML2PARTIALSNOTASSOCIATEDGOAL — The specified value is not NOLIMIT and is outside the range of 0–999.
- ML2RECYCLEPERCENT OUT OF RANGE — The ML2RECYCLEPERCENT parameter is specified with a value outside the range of 0–100.
- MOUNTWAITTIME — The MOUNTWAITTIME parameter was specified to establish how much time can go by while waiting for a tape to be mounted for a DFSMShsm operation. The value is outside the range of 1–120 minutes.
- NOACCEPTPSCBUSERID — The NOACCEPTPSCBUSERID parameter was issued in an MVS system where RACF is active. This parameter is invalid in an active RACF environment.
- NOARECOVERREPLACE — The NOARECOVERREPLACE parameter was specified; however, it is no longer supported.
- NOCDSVERSIONBACKUP — The NOCDSVERSIONBACKUP parameter was specified; however, it is no longer supported.
- NODEFERMOUNT NOT SUPPORTED. DEFERMOUNT WILL BE USED — The NODEFERMOUNT parameter is specified; however, it is no longer supported. The DEFERMOUNT parameter is used.
- NOTRACE — The NOTRACE parameter was specified; however, it is no longer supported.
- OUTPUT UNITNAME=*es2out* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in*, DEVICE TYPE CONFLICT. The USERUNITTABLE parameter was specified on a SETSYS command with *es2out:es2in*. The devices associated with the two unit names write data in incompatible formats. For example:
  - The output unit name cannot be associated with 3490 devices when the input unit name is associated with 3480 or 3480X devices.
  - The output unit name cannot be associated with 3480 or 3480X devices when the input unit name is associated with 3490 devices.
- OUTPUT UNITNAME=*es2out* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in*, INVALID INPUT UNIT NAME. The USERUNITTABLE parameter was specified on a SETSYS command with *es2out:es2in*. The input unit name is unknown to the operating system, so the translation is ignored. The output unit name is still defined in DFSMShsm's user unit table, but without the intended translation.
- OUTPUT UNITNAME=*es2out* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in*, NO ONLINE DEVICES FOR OUTPUT UNIT NAME OR NOT ALL ONLINE DEVICES FOR OUTPUT UNIT NAME HAVE ACLS. The USERUNITTABLE parameter was specified on a SETSYS command with *es2out:es2in*.
  - The output unit name must have at least one of its associated devices online in order for the translation to be processed successfully.
  - All of the devices currently online for the output unit name must have ACLs.
- PARTIALTAPE — The PARTIALTAPE parameter was specified on a SETSYS command with conflicting subparameters. MARKFULL or REUSE was specified along with MIGRATION or BACKUP. Specifying a global value and a specific function on a single command is not allowed.
- PLEXNAME — The name of the HSMplex can only be specified in the parmlib. An attempt was made to name the sysplex after start-up.
- PRIMARYSPMGMTSTART — The hours digits are outside the range 00–24 or the minutes are outside the range 00–59 or the time is greater than 2400.
- PROCESSING WILL BE DONE WITHOUT USING IDRC FORMAT FOR ESOTERIC = *unitname* — DFSMShsm detected a mixture of 3480 and 3480X devices defined in the same esoteric. Processing continues, but DFSMShsm does not use the IDRC format when processing with this esoteric.
- PROMOTE — The PROMOTE keyword was specified without any other parameter specified.
- RECYCLE INPUT DEALLOC FREQUENCY (BACKUP) OUT OF RANGE — The BACKUP subparameter of RECYCLEINPUTDEALLOCFREQUENCY is specified with a value greater than 255.
- RECYCLE INPUT DEALLOC FREQUENCY (MIGRATION) OUT OF RANGE — The MIGRATION subparameter of RECYCLEINPUTDEALLOCFREQUENCY is specified with a value greater than 255.
- RECYCLEOUTPUT — The value specified for RECYCLEOUTPUT(*unittype)* is not a valid tape device unit name.

  The RECYCLEOUT parameter of the SETSYS command was issued to limit the selection and allocation of an output volume during recycle processing. *unittype* for either BACKUP or MIGRATION subparameters indicates a generic or esoteric unit name for a tape output device during recycle processing. Valid values for *unittype* are 3480, 3480X, 3490, and 3590-1. If you specify an esoteric unit name, it must already have been defined to DFSMShsm using the USERUNITTABLE parameter of the SETSYS command.

- RECYCLEPERCENT OUT OF RANGE — The RECYCLEPERCENT parameter is specified with a value outside the range of 0–100
- SECONDARYSPMGMTSTART — The hours digits are outside the range 00–24 or the minutes are outside the range 00–59 or the time is greater than 2400.
- SELECTVOLUME — The SELECTVOLUME parameter was specified on a SETSYS command with conflicting subparameters. SCRATCH or SPECIFIC was specified along with MIGRATION, BACKUP or DUMP. Specifying a global value and a specific function on a single command is not allowed.
- SMALLDATASETPACKING — The SMALLDATASETPACKING parameter was specified with a value for deciding the eligibility of a data set for migration to a small data set packing data set. If the value specified is in tracks, only values from 1–18 are valid. If the value specified is in kilobytes, only values from 1–800 are valid.
- SPILL — The value specified for SPILL TAPE*unittype* is not a valid tape device unit name.

  The SPILL parameter of the SETSYS command specifies that DFSMShsm spills full DASD daily backup volumes when a DASD daily backup volume is needed and none is available. The TAPE*unittype* subparameter specifies that only tape spill backup volumes can be mounted and written on a specified *unittype* during spill processing. Valid values for *unittype* are 3480, 3480X, 3490, and 3590-1. If you specify an esoteric unit name, it must already have been defined to DFSMShsm using the USERUNITTABLE parameter of the SETSYS command.
- SWAP — An attempt was made to make DFSMShsm swappable. DFSMShsm must be nonswappable to support inter-address and cross-address space communication.
- TAPEDELETION — The TAPEDELETION parameter was specified on a SETSYS command with conflicting subparameters. SCRATCHTAPE or HSMTAPE was specified along with MIGRATION, BACKUP or DUMP. Specifying a global value and a specific function on a single command is not allowed.
- TAPEMAXRECALLTASKS — A SETSYS command with the TAPEMAXRECALLTASKS parameter was specified with a value of zero.
- TAPEMAXRECALLTASKS > MAXRECALLTASKS — A SETSYS command with the TAPEMAXRECALLTASKS parameter was specified with a value greater than the value currently indicated for the MAXRECALLTASKS.
- TAPEMIGRATION — The TAPEMIGRATION parameter was specified with either the DIRECT(ANY | unit), ML2TAPE(ANY | unit), or NONE(ROUTETOTAPE(ANY | unit)) subparameters. This indicates the type of tape unit to be used in several DFSMShsm tape destination environments. Migration to tape volumes requires the offline control data set (OCDS). This message appears if DFSMShsm is started without the OCDS DD statement in the DFSMShsm startup JCL or the OCDS is not defined. This message also appears if the unit name specified with the DIRECT, ML2TAPE, or NONE(ROUTETOTAPE) subparameters is incorrect.
- TAPERECALLLIMITS — The required parameter is not specified.
- TAPESPANSIZE — The TAPESPANSIZE parameter was specified with a value outside the range 0–1000.
- TAPEUTILIZATION UNIT — *unit* has not been defined to the DFSMShsm user unit table or the unit is invalid.
- TRACE — The TRACE parameter was specified; however, it is no longer supported.
- UNITNAME=*unitname* — Specify a tape unit name that you want DFSMShsm to use.
  - The UNITNAME parameter of the SETSYS command was issued to establish the type of tape device selected the first time DFSMShsm selects a scratch tape for backup. Valid values for UNITNAME are 3480, 3480X, 3490, 3590-1, or an esoteric name that you previously specified with the USERUNITTABLE parameter of the SETSYS command.
  - The CDSVERSIONBACKUP parameter was issued with the BACKUPDEVICECATEGORY and TAPE subparameters. The UNITNAME subparameter establishes the type of tape device selected for control data set version backup (CDSVERSIONBACKUP). Valid values for UNITNAME are 3400-3, 3400-4, 3400-5, 3400-6. 3400-9, 3480, 3480X, 3490, 3590-1, or an esoteric name that you previously specified with the USERUNITTABLE parameter of the SETSYS command.
- USER UNIT TABLE CREATE FAILED, A FREEMAIN FAILURE OCCURRED. Memory needed to build the user unit table could not be freed, so no new table is built.
- USER UNIT TABLE CREATE FAILED, A MACRO FAILED WHILE BUILDING THE UCB LIST. One of the system service macros required for building the table fails, so no new table is built.
- USER UNIT TABLE CREATE FAILED, A MODULE'S ESTAE SETUP FAILED. Critical error recovery paths could not be established for the table build process, so no new table is built.
- USER UNIT TABLE CREATE FAILED, AN ABEND OCCURRED IN A MODULE OR MACRO. An abnormal end (abend) occurred while building the table, so no new table is built.
- USER UNIT TABLE CREATE FAILED, THE CAUSE OF FAILURE IS UNKNOWN. An unanticipated return code was received from a service module during table build, so no new table is built.
- USER UNIT TABLE CREATE FAILED, THERE ARE NO VALID USER UNIT TABLE ENTRIES. None of the specified unit names are valid and the new user unit table contains no information. If a previous user unit table existed, it was kept.

Source: DFSMShsm

System Action: Processing of other SETSYS command parameters continues. DFSMShsm processing continues.

Application Programmer Response: The correction necessary for the parameter indicated is specified below:

- ABARSBUFFERS — Reenter the command with a valid number between 1–9.
- ABARSKIP — Correct the subparameter to a valid value, and reissue the SETSYS command.
- ABARSUNITNAME — Reenter the command with a valid tape unit type.
- ABSTART — Set the quiesce time to a value outside the time frame defined by the planned start time and the late start time.
- ACCEPTPSCBUSERID — RACF is active in the system from which this message was issued. If this command is in your startup procedure, remove it.
- ACTLOGMSGLVL — Correct the subparameter for the ACTLOGMSGLVL parameter and reissue the command.
- ADSTART — Set the quiesce time to a value outside the time frame defined by the planned start time and the late start time.

- AMSTART — Set the quiesce time to a value outside the time frame defined by the planned start time and the late start time.
- ARECOVERML2UNIT — Reenter the command with a valid tape unit type.
- ARECOVERPERCENTUTILIZED — Reissue the SETSYS command specifying the ARECOVERPERCENTUTILIZED parameter with an associated value of 1–100 enclosed in parentheses.
- ARECOVERREPLACE — This parameter is no longer supported.
- ARECOVERUNITNAME — Reenter the command with a valid tape unit type.
- BACKUP — If you intend to use BACKUP, ensure that DDs for the BCDS and OCDS are defined in the startup JCL. Also ensure that the unit type defined for BACKUP(TAPE is correct.
- CDSVERSIONBACKUP — The CDSVERSIONBACKUP parameter was specified with conflicting parameters:
  - DATAMOVER(DSS) is specified along with BACKUPDEVICECATEGORY(TAPE(NOPARALLEL)).
  - The specified dates conflict. If *date* is invalid or in the past, correct the value and reissue the command. If the current date is before 2000 and the desired expiration date is after 1999, ensure that *date* is specified in the format yyyyddd.
- CONFLICTING TRANSLATION FOR USER UNIT TABLE UNITNAME=*unitname*. Do not ask for two different translations for the same output unit name.
- DAYS — Specify a minimum age greater than the DFSMShsm data set integrity age and reissue the command.
- DENSITY — Specify a density value of 2, 3, or 4 for DFSMShsm to use when it selects a scratch tape for backup.
- DUMPIO — The values supplied with this parameter must be from 1–4. Correct the values and reissue the command.
- EXITON — Link edit the exit into SYS1.LINKLIB so it can be loaded by DFSMShsm. Reissue the SETSYS command to enable the exit.
- EXITS — Exactly 9 *Y*s or *N*s, or a combination of both, must follow the EXITS parameter and only *Y*s and *N*s follow the parameter.
- INCOMPATIBLE DENSITY=*n* — Specify a density value that coincides with the density capability of the device type specified in the UNITNAME parameter with the SETSYS CDSVERSIONBACKUP command.
- INVALID USER UNIT TABLE ENTRY, UNITNAME=*unitname* CONTAINS INCOMPATIBLE DEVICES. Only specify an esoteric name that contains all compatible devices. DFSMShsm only considers an esoteric for cartridge type devices (3480, 3480X, 3490, or 3590-1) valid if any method of writing on any tape unit belonging to an esoteric group can be read on any tape unit belonging to the same esoteric group.
- INVALID USER UNIT TABLE ENTRY, UNITNAME=*unitname* IS A RESERVED SYSTEM NAME — Issue the SETSYS command without specifying any of the following reserved system names:
  - SYS3480R
  - SYS348XR
- INVALID USER UNIT TABLE ENTRY, UNITNAME *unitname*= UNKNOWN — Define the unit name to the operating system so it can be included in DFSMShsm’s user unit table.
- MAXABARSADDRESSSPACE — Reenter with a value from 1–15.
- MAXBACKUPTASKS — The value supplied with the parameter must be from 1–15. Correct the value and reissue the command.
- MAXDSRECOVERTASKS — The value supplied with the parameter must be from 1–64. Correct the value and reissue the command.
- MAXDUMPTASKS — The value supplied with this parameter must be from 1–32. Correct the value and reissue the command.
- MAXINTERVALTASKS — Specify value in the range of 1–15.
- MAXMIGRATIONTASKS — Specify value in the range of 1–15.
- MAXRECYCLETASKS, VALUE OUT OF RANGE — Specify a value in the range of 1–15.
- MIGUNITNAME = *unitname* — Specify a tape unit name you want DFSMShsm to use. The valid units are 3400-3, 3400-4, 3400-5, 3400-6, 3400-9, 3480, 3480X, 3490, 3590-1, or an esoteric name that you previously specified with the USERUNITTABLE parameter in the SETSYS command.
- ML2PARTIALSNOTASSOCIATEDGOAL — Reissue the command with a value either of NOLIMIT or from 0–999.
- ML2RECYCLEPERCENT OUT OF RANGE — Specify a value in the range of 0–100.
- MOUNTWAITTIME — Specify a value from 1–120 and reissue the command.
- NOACCEPTPSCBUSERID — RACF is active in the system from which this message was issued. If this command is in your startup procedure, remove it.
- NOARECOVERREPLACE — This parameter is no longer supported.
- NOCDSVERSIONBACKUP — This parameter is no longer supported.
- NOTRACE — This parameter is no longer supported.
- OUTPUT UNITNAME=*es2out* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in*, DEVICE TYPE CONFLICT. Specify two unit names that contain compatible devices.
- OUTPUT UNITNAME=*es2out* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in*, INVALID INPUT UNIT NAME. The USERUNITTABLE PARAMETER was specified on a SETSYS command with *es2out:es2in*. Define the input unit name to the operating system so it can be included in DFSMShsm’s user unit table.
- OUTPUT UNITNAME=*es2out* CAN NOT BE TRANSLATED TO INPUT UNITNAME=*es2in* — NO ONLINE DEVICES FOR OUTPUT UNIT NAME OR NOT ALL ONLINE DEVICES FOR OUTPUT UNIT NAME HAVE ACLS. Make sure at least one device for the output unit name is online. Make sure all online devices for the output unit name have ACLs.
- PARTIALTAPE — Do not specify MARKFULL or REUSE along with MIGRATION or BACKUP on the same SETSYS command.
- PLEXNAME — Specify the name of the HSMplex only in the parmlib.
- PRIMARYSPMGMTSTART — The times must be in the range 0000–2400. The second time is optional and is set to 2400 if defaulted. A defaulted second time implies a late start time of 2400, which causes automatic primary space management to run until it is finished.
- PROCESSING WILL BE DONE WITHOUT USING IDRC FORMAT FOR ESOTERIC = *unitname* — If IDRC format is required, define the named esoteric without 3480 devices. If IDRC format is not required, no further action needs to be taken.

- PROMOTE — Specify PROMOTE with the appropriate parameters.
- RECYCLE INPUT DEALLOC FREQUENCY (BACKUP) OUT OF RANGE — Specify a value for BACKUP in the range of 0–255.
- RECYCLE INPUT DEALLOC FREQUENCY (MIGRATION) OUT OF RANGE — Specify a value for MIGRATION in the range of 0–255.
- RECYCLEOUTPUT — Specify a tape unit name that you want DFSMShsm to use. Valid units are 3480, 3480X, 3490, 3590-1, or an esoteric name that you previously specified with the USERUNITTABLE parameter with the SETSYS command.
- RECYCLEPERCENT OUT OF RANGE — Specify a value in the range of 0–100.
- SECONDARYSPMGMTSTART — The times must be in the range 0000–2400. The second time is optional and is set to 2400 if defaulted. A defaulted second time implies a late start time of 2400, which causes automatic secondary space management to run until it is finished.
- SELECTVOLUME — Do not specify SCRATCH or SPECIFIC along with MIGRATION, BACKUP or DUMP on the same SETSYS command.
- SMALLDATASETPACKING — If the data set size value is to be in tracks, the value must be from 1–18. If the data set size value is to be in kilobytes, you must specify KB and use a value from 1–800. For example, SETSYS SMALLDATASETPACKING(KB(200)).
- SPILL — Specify a tape unit name that you want DFSMShsm to use. Valid units are 3480, 3480X, 3490, 3590-1, or an esoteric name that you previously specified with the USERUNITTABLE parameter with the SETSYS command.
- SWAP — If you are in a sysplex environment, do not attempt to make DFSMShsm swappable. Otherwise, wait for all secondary address spaces to shut down, and then enter the SETSYS SWAP command.
- TAPEDELETION — Do not specify SCRATCHTAPE or HSMTAPE along with MIGRATION, BACKUP or DUMP on the same SETSYS command.
- TAPEMAXRECALLTASKS — The value supplied with the parameter must be from 1–15 and must be equal to or less than the value specified for MAXRECALLTASKS.
- TAPEMAXRECALLTASKS > MAXRECALLTASKS — If the parameter for TAPEMAXRECALLTASKS is less than the value for the MAXRECALLTASKS parameter, the MAXRECALLTASKS parameter must appear before the TAPEMAXRECALLTASKS parameter in your command. The value supplied for the TAPEMAXRECALLTASKS parameter cannot be greater than the value for MAXRECALLTASKS.
- TAPEMIGRATION — If the OCDS DD statement is missing in the DFSMShsm startup procedure, add it to the startup JCL. If the OCDS is not defined, define it and add a JCL DD statement to your DFSMShsm startup procedure. An example of the define procedure and the JCL DD statement is in *DFSMS/MVS DFSMShsm Implementation and Customization Guide* . To activate the tape migration function after you have received this message, stop DFSMShsm and restart it with your new startup procedure containing the DD statement for the OCDS.

  If there is an invalid subparameter of the TAPEMIGRATION parameter, correct the subparameter and reissue the command.
- TAPERECALLLIMITS — Set the TASK or the TAPE time, or both.
- TAPESPANSIZE — Reissue the command specifying a value from 0–1000.
- TAPEUNTILIZATION UNIT — If either the device or the esoteric is valid, then issue the SETSYS USERUNITTABLE(unit) command. For complete details, see SETSYS USERUNITTABLE in the in the *DFSMS/MVS DFSMShsm Storage Administration Guide*.
- TRACE — This parameter is no longer supported.
- UNITNAME = *unitname* — Specify a tape unit name you want DFSMShsm to use.

  If you specify the UNITNAME parameter, valid units are 34080, 3480X, 3490, 3590-1, or an esoteric name that you previously specified with the USERUNITTABLE parameter in the SETSYS command.

  If you specify the CDSVERSIONBACKUP parameter with BACKUPDEVICE CATEGORY and TAPE subparameters, valid values for UNITNAME are 3400-3, 3400-4, 3400-5, 3400-6. 3400-9, 3480, 3480X, 3490, 3590-1, or an esoteric name that you previously specified with the USERUNITTABLE parameter of the SETSYS command
- USER UNIT TABLE CREATE FAILED, A FREEMAIN FAILURE OCCURRED. See associated message ARC0307I.
- USER UNIT TABLE CREATE FAILED, A MACRO FAILED WHILE BUILDING THE UCB LIST. See associated message ARC0334I.
- USER UNIT TABLE CREATE FAILED, A MODULE'S ESTAE SETUP FAILED. See associated message ARC0304I.
- USER UNIT TABLE CREATE FAILED, AN ABEND OCCURRED IN A MODULE OR MACRO. See associated system ABEND messages.
- USER UNIT TABLE CREATE FAILED, THE CAUSE OF FAILURE IS UNKNOWN. Contact the IBM Support Center.
- USER UNIT TABLE CREATE FAILED, THERE ARE NO VALID USER UNIT TABLE ENTRIES. See associated messages saying why entries are invalid.

ARC0104I INVALID INITIALIZATION COMMAND

Explanation: An initialization command was received, but is not valid during DFSMShsm initialization.

Source: DFSMShsm

System Action: The command is rejected. DFSMShsm initialization command processing continues.

Operator Response: Because the command is part of the startup procedure, inform the system programmer of the invalid command.

Application Programmer Response: Remove this command from the startup procedure or correct the command name. The DFSMShsm initialization commands are explained in the *DFSMS/MVS DFSMShsm Implementation and Customization Guide* under the topic, “Specifying Commands that Define Your DFSMShsm Environment.”

ARC0105I INITIALIZATION COMMAND MEMBER *membername* NOT FOUND - RESTART DFSMSHSM

Explanation: During DFSMShsm initialization, an attempt was made to read DFSMShsm initialization commands from the specified member *membername*, which was not found.

Source: DFSMShsm

System Action: DFSMShsm processing ends.

Operator Response: Restart DFSMShsm with the correct member name.

Application Programmer Response: Make sure the data set and member with DFSMShsm commands are available.

ARC0106I INVALID DFSMSHSM PARAMETER LIST *parameter* — RESTART DFSMSHSM

Explanation: The DFSMShsm invocation parameter list contains an invalid parameter value *parameter*. The parameters and their possible values are explained in *DFSMS/MVS DFSMShsm Implementation and Customization Guide* under the topic, “DFSMShsm Libraries and Procedures.”

| The error may be in the PARM=parameters on the EXEC statement or in a record in PARMLIB member ARCSTR*xx*.

Source: DFSMShsm

System Action: DFSMShsm ends.

Operator Response: Notify the storage administrator or system programmer.

Application Programmer Response: Correct the invalid parameter and restart DFSMShsm.

ARC0107I INSUFFICIENT MAIN STORAGE TO PROCESS INITIALIZATION COMMANDS

Explanation: The DFSMShsm region size is insufficient for processing the specified initialization commands. A GETBUF request from DFSMShsm for storage used for I/O processing failed to obtain the required storage.

Source: DFSMShsm

System Action: MVS processing continues without DFSMShsm.

Operator Response: Notify the storage administrator or system programmer. Restart DFSMShsm when the problem has been corrected.

Application Programmer Response: Examine the initialization commands for any DFSMShsm commands that might cause unusual requirements for I/O buffers. Change the commands if necessary. An increase in the region size of DFSMShsm might be necessary if the commands cannot be changed to correct the problem. Change the size specified in the cataloged procedure for DFSMShsm and have the operator restart DFSMShsm.

ARC0108I INITIALIZATION COMMAND REJECTED - COMMAND TOO LONG

Explanation: A command issued to DFSMShsm during initialization had a length greater than 1024 characters. The maximum length of a DFSMShsm initialization command is 1024 characters.

Source: DFSMShsm

System Action: All further DFSMShsm command processing ends.

Application Programmer Response: Correct and reissue the commands. If the failing command contains a minus sign (-) for a continuation character, this does not allow for suppression of leading blanks in the subsequent record. Using a plus sign (+) suppresses the leading blanks in subsequent records and may reduce the number of characters for the command.

ARC0109I ACTIVITY LOGGING COULD NOT BE SWITCHED FROM {SYSOUT TO DASD | DASD TO SYSOUT | SYSOUT TO SYSOUT} DUE TO A GETMAIN ERROR

Explanation: The activity log could not be switched from SYSOUT to DASD, DASD to SYSOUT, or SYSOUT to SYSOUT because a GETMAIN error occurred that prevented the switch logic from completing the processing. Message ARC0307I will precede this message indicating the reason the GETMAIN failed.

Source: DFSMShsm

System Action: The activity log does not switch. DFSMShsm will continue processing the logs with the current allocations.

Application Programmer Response: Reduce the number of active DFSMShsm tasks. It may be necessary to stop and restart DFSMShsm if storage is fragmented. Use the return code in message ARC0307I to determine the cause of the GETMAIN error.

ARC0110I {COMMAND | MIGRATION | BACKUP | DUMP} ACTIVITY LOG COULD NOT BE CLOSED/REOPENED DUE TO A GETMAIN ERROR

Explanation: The activity log could not be closed and reopened after the completion of a DFSMShsm function that normally causes the activity log to be spooled for output. Message ARC0307I precedes this message indicating the reason the GETMAIN failed.

Source: DFSMShsm

System Action: The spooling of the activity log to output will not be done now. Messages will continue to be written to the current activity log. DFSMShsm processing continues.

Application Programmer Response: Determine the cause of the problem and issue the RELEASE HARDCOPY command to cause the logs to be closed and reopened. Reduce the number of active DFSMShsm tasks. It may be necessary to stop and restart DFSMShsm if storage is fragmented. Use the return code in message ARC0307I to determine the cause of the GETMAIN error.

ARC0111I SUBFUNCTION {RECALL(TAPE) | RECALL(TAPE(TSO)) | BACKUP(AUTO) | DUMP(AUTO) | RECOVER(TAPEDATASET) | MIGRATION(AUTO) | ABACKUP(*agname*) | ARECOVER(*agname* | *controlefiledsname*)} CANNOT BE RELEASED WHILE MAIN FUNCTION {RECALL | RECALL(TAPE) | BACKUP | DUMP | RECOVER | MIGRATION | ABACKUP | ARECOVER} IS HELD

Explanation: A RELEASE command was issued, but the request cannot be honored because it asks for release of a subfunction while the main function is still held.

- *agname* is the aggregate group that was specified in the RELEASE ABACKUP or RELEASE ARECOVER command.
- *controlfiledsname* is the name of the data set specified for the control file in the RELEASE ARECOVER command.

Source: DFSMShsm

System Action: The subfunction is still held and other DFSMShsm processing continues.

Application Programmer Response: The main function must be released to release the subfunction. For example, releasing RECALL will also release RECALL(TAPE).

ARC0112I AUTOMIGRATION NOT RELEASED - PREVIOUS HOLD COMMAND STILL IN PROGRESS

Explanation: A DFSMShsm RELEASE command affecting automatic migration was issued while a previous HOLD command was still processing for that function.

Source: DFSMShsm

System Action: The AUTOMIGRATION subfunction of the RELEASE command is not processed. Other functions are released as requested.

Application Programmer Response: Reissue the RELEASE command after all AUTOMIGRATION tasks have ended.

ARC0113I INVALID BACKUP CYCLE DAY GIVEN FOR ADDVOL

Explanation: The cycle day specified for a backup volume was greater than the defined backup cycle length or the cycle day specified was 0. The volume will be added as an unassigned daily backup volume if it does not already exist elsewhere.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the volume is to be assigned to a given day, reissue the ADDVOL command with the backup cycle length increased or the cycle day specified within the backup cycle length.

ARC0114I INVALID BACKUP DEVICE CATEGORY

Explanation: An invalid backup device category was specified on an ADDVOL command for a primary volume. The command will be processed, but no backup device category will be assigned to the volume. If the volume had been previously assigned with a valid backup device category specified, the volume will be backed up to the type of device specified in the previous ADDVOL command. Otherwise, the volume will be backed up to any available volume, regardless of type.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the volume is to be assigned to a device category, reissue the ADDVOL command with the proper device category specified. The valid types of backup device categories are DASD, tape, and none.

ARC0115I CAUTION - VOLUME *volser* IS CHANGING TO A {DELETE BY AGE | DELETE IF BACKED UP} VOLUME WITH DELETION AGE OF *days* DAY(S)

Explanation: A volume *volser* already added to DFSMShsm with the space management attribute of migration is being added again. However, the volume is being added again with the space management attribute of delete-by-age *days* or delete-if-backed-up. DFSMShsm will no longer select this volume to receive data sets during undirected recalls.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the volume is not meant to be a delete-by-age volume, reissue an ADDVOL command for the volume specifying the migration space management attribute.

ARC0116I PRIMARY VOLUME *volser* ACKNOWLEDGED

Explanation: DFSMShsm received an ADDVOL command for a primary volume *volser* that is not online to the processor receiving the command. DFSMShsm on the receiving processor supporting JES3 has accepted the volume as managed by DFSMShsm and will work with JES3 to cause data set reservation on this volume as a DFSMShsm volume. However, DFSMShsm on the receiving processor does not completely add this volume to DFSMShsm control or select the volume for data set recall. The volume must be online to at least one processor that has an active DFSMShsm and an ADDVOL command must be issued to that processor to complete the addition.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: If you want the volume to be online to the processor that acknowledged the volume, specify the volume online to that processor and restart DFSMShsm.

ARC0117I ADDVOL *volser* REJECTED, PRIMARY VOLUME CANNOT BE DEMOUNTABLE WITH JES3

Explanation: An ADDVOL *volser* command has been issued to add a primary volume to a JES3 system. The volume is online, but not permanently resident or reserved and cannot be accepted when DFSMShsm and a JES3 system are being used together.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator.

Application Programmer Response: To use this volume as a primary volume in a JES3 system, be sure it is mounted either permanently resident or reserved, before DFSMShsm initialization. At initialization, the volume can be added to DFSMShsm control.

ARC0118I ADDVOL REJECTED. VOLUME *volser* HAS CHANGED STATUS

Explanation: An ADDVOL command has been issued for a primary volume *volser* for which the AUTORECALL | NOAUTORECALL specification, the unit control block (UCB) storage status, or the unit type has been changed since the volume has previously been added. A combined JES3 and DFSMShsm system might not function properly with such a change.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator.

Application Programmer Response: Correct the recall specification or the unit type to agree with the value in effect when DFSMShsm has been initialized and reissue the request. To change the recall specification or the unit type for a primary volume in a JES3 environment, insert an ADDVOL command containing the desired changes in the ARCCMD*xx* member of the data set identified by the HSMPARM DD statement of the DFSMShsm startup procedure.

ARC0119I ADDVOL REJECTED. VOLUME *volser* HAS BEEN DELETED

Explanation: An ADDVOL command has been issued to add a primary volume *volser* that has been deleted by a DELVOL command since DFSMShsm last started. DFSMShsm in a JES3 environment cannot accept the command.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator.

Application Programmer Response: Ensure that the ADDVOL command is in the ARCCMD*xx* member of the data set identified by the HSMPARM DD statement of the DFSMShsm startup procedure and the ADDVOL command is not preceded by a DELVOL command for the same volume. Restart DFSMShsm if necessary.

ARC0120I {BACKUP | MIGRATION | PRIMARY | DUMP} VOLUME *volser* {ADDED | NOT ADDED}, RC= *return-code*, REAS= *reason-code*

Explanation: An ADDVOL command has been processed for the type of volume *volser* specified in the message. If the volume record is successfully created or updated, the return code will be zero.

The values for *return-code* are:

Retcode	Meaning
0	Volume added or updated successfully.
2	Tape migration level 2 volume already exists with valid data on it.
4	Volume entry not found for the backup cycle volume record (BVR) update.
8	Error in reading the BVR record.
11	Error in writing the BVR record during internal ADDVOL command processing of a tape volume during recycle.
12	Error in writing the BVR record.
16	BVR record in use by another processor.
20	Invalid days have been specified for data set deletion. The day must be between 0 and 999 inclusive.
22	Invalid days have been specified on the MIGRATE subparameter. The only valid values are 0-999.
25	A read or write error has occurred for the BVR or backup control data set backup volume record (MCT) during internal processing of an ADDVOL command and type change of a tape volume (for example, unassigned to SPILL). The error and record type are defined in a preceding ARC0184I message.
28	There has been a read or write error on a migration control data set volume record (MCV) or MCT record. See message ARC0184I for details.
30	The specified density is not supported by the specified unit name.
32	Invalid density specified. Valid for dump volumes only, density must be 2, 3, or 4. **Note:** The DENSITY parameter is no longer supported for tape backup or ML2 volumes. However, the DENSITY parameter is still supported for dump volumes and for existing volumes already defined to DFSMShsm.
36	The MCV, MCT or dump volume record (DVL) is not found when read. Whichever record is being searched for, the other types are read to make sure the volume has not already been defined as another type of record than specified on the ADDVOL command. When reading another type of record, an error occurs in the read.
37	There has been an error writing a new DVL record or reading or updating an existing DVL record. See message ARC0184I for details on the particular record that has caused the error.
38	An attempt has been made to add a primary volume by using the ADDVOL command. The addition is not made because the ADDVOL command has specified more than 5 dump classes or 1 dump class has been specified more than once. Five dump classes are the maximum that can be specified in the ADDVOL of a primary volume and a given class can be specified only once.
39	There has been an error reading an existing DCL record. While adding a primary or dump volume with the ADDVOL command, the dump class records associated with the volume are read to confirm that the classes exist and are not disabled. See message ARC0184I for details on the particular record that caused the error.
40	For a primary volume, the high threshold has been given, but no low threshold has been specified. Specify either the high threshold and low threshold or neither.
44	The creation of the tape table of contents record (TTOC) has failed.
46	An internal ADDVOL command for a tape backup volume has failed because the volume already contains valid DFSMShsm data.
48	The deletion of the TTOC record has failed.
52	The read for update of the MCT record has failed.
56	Internal error in module ARCCPADV.
58	DRAIN and NODRAIN parameters are valid only for DASD migration volumes.
61	An internal ADDVOL command has failed. See *reason-code* for additional information.
70	The dump volume has not been added because it is currently in use.
72	A specified dump class has been disabled as the result of a DEFINE DUMPCLASS DISABLE command. No further dumps are processed to this class and no dump volumes can be added to this class with the ADDVOL command. During the process of adding a primary volume with the ADDVOL command, if the AUTODUMP(*class*,...) parameter has not been specified, the MCV record is checked for dump classes specified on a previous ADDVOL command. If DUMPCLASS(*class*) has not been specified

	while adding a dump volume with the ADDVOL command, then the DVL record is checked for the dump class specified on a previous volume added with the ADDVOL command. If a dump class specified while adding a previous volume with the ADDVOL command is now disabled, this return code is issued and the ADDVOL command fails.
80	The volume is SMS managed or is in SMS-managed initial status. SMS-managed volumes cannot be explicitly added to DFSMShsm, but are only added internally by DFSMShsm when needed.
82	An error has occurred on OBTAIN while determining if the volume is SMS managed.
98	Internal ADDVOL command has failed. The number of tape volumes allocated under the current allocation exceeds the limit of 254 volumes.

The following reason codes *reason-code* apply only to return codes 44, 48, and 52:

4	The deletion of the BVR record has also failed. An error in reading the BVR record has caused the failure of the BVR record deletion.
8	The deletion of the BVR record has also failed. An error in writing the BVR record has caused the failure of the BVR record deletion.
12	The deletion of the BVR record has also failed. The BVR record has been in use by another processor causing the failure of the BVR record deletion.

The following reason codes apply only to return code 61:

4	Error in creating the MCV record.
8	Error in deleting the MCV record.
12	Error in reading the MCV record.
16	Error in writing the MCV record.
20	Error in creating the MCT record.
22	Error in creating the DVL record.
24	Error in deleting the MCT record.
26	Error in deleting the DVL record.
28	Error in reading the MCT record.
30	Error in reading the DVL record.
32	Error in writing the MCT record.
34	Error in updating the DVL record.
36	Error in creating the TTOC record.
38	Error in reading a dump class record (DCL).
40	Error in reading the TTOC record.
44	Error in writing the TTOC record.
48	Error in changing the key of a TTOC record.
52	Error in deleting a BVR volume entry.
56	Error in creating a BVR volume entry.
60	Error in updating a BVR volume entry.
64	Tape volume contains valid DFSMShsm data. The file sequence number in the MCV or MCT record is nonzero.
68	The tape volume is RACF-protected, but does not appear in DFSMShsm's RACF tape volume set. Also, the tape volume is not in DFSMShsm's inventory of backup or migration volumes.
72	The tape volume is RACF-protected, but does not appear in DFSMShsm's RACF tape volume set. Also, the tape volume has been in DFSMShsm's inventory of backup or migration volumes. The DFSMShsm control data set record (MCV or MCT) indicates the tape volume is empty (the file sequence number is zero). The tape volume is being removed from DFSMShsm's inventory of backup or migration volumes. For additional information, refer to the explanation of message ARC0357I.
76	The tape volume is RACF-protected, but does not appear in DFSMShsm's RACF tape volume set. Also, the tape volume is in DFSMShsm's inventory of backup or migration volumes. The DFSMShsm control data set record (MCV or MCT) indicates the tape volume is not empty (the file sequence number is nonzero). The tape volume is being marked full in the necessary control data set records to prevent its further use by DFSMShsm. For additional information, refer to the explanation of message ARC0360I.
80	An error has occurred when DFSMShsm attempted to add the tape volume to its RACF tape volume set named either HSMHSM or DFHSMx.
84	An error has occurred when DFSMShsm attempted to delete the tape volume from its RACF tape volume set named either HSMHSM or DFHSMx.
97	Internal error in module ARCTEOV.
108	Error in reading the previous volume's MCV record.

The following reason codes apply only to return code 82 and are the return codes from the OBTAIN:

4	Volume is not mounted.
12	An I/O error or invalid volume VTOC entry.
16	Invalid work area pointer.

Source: DFSMShsm

System Action: ADDVOL processing ends if the return code is not 0. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or system programmer for return codes 4, 8, 11, 12, 16, 25, 28, 36, 37, 39, 44, 48, 52, or 61.

- For return code 20, reissue the ADDVOL command with a DELETEBYAGE(*days*) parameter between 0 and 999 inclusive.
- For return code 22, reissue the ADDVOL command with the MIGRATE(*days*) subparameter, with a day value between 0 and 999 inclusive.
- For return codes 30 and 32, reissue the ADDVOL command, specifying the correct tape density. Specify a tape density of 2, 3, or 4 only for valid dump volumes.
- For return code 38, reissue the ADDVOL command with no more than 5 dump classes specified.
- For return code 40, reissue the ADDVOL command specifying both high thresholds and low thresholds or neither.

- For return code 56, contact the IBM Support Center.
- For return code 72, reissue the ADDVOL command with a dump class that has not been disabled. If the dump class is needed again, use the DEFINE command to redefine it. After the dump class is redefined, reissue the ADDVOL command.
- For return code 80, remove the ADDVOL command from the startup member if the command is being issued during startup.
- For return code 82, determine the cause of the error from the reason code, correct the problem, and reenter the ADDVOL command.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0121I ADDVOL OR DELVOL *volser* **REJECTED - VOLUME TYPE NOT SPECIFIED**

Explanation: Using the ADDVOL command, you attempted to add a volume to the set of volumes managed by DFSMShsm or using the DELVOL command, you attempted to delete a volume from that set. You must specify the type of use intended for the volume; it was not specified with this command. The volume serial number in the command is *volser*.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with a volume type of PRIMARY, MIGRATION, BACKUP or DUMP.

ARC0122I ADDVOL *volser* **REJECTED - UNIT NOT SPECIFIED**

Explanation: Using the ADDVOL command, you attempted to add a volume to DFSMShsm control. The command failed because you did not specify the unit type. The volume serial number of the volume in the command is *volser*.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with the desired unit type specified.

ARC0123I INVALID VOLUME SERIAL NUMBER *volser*

Explanation: An ADDVOL, DELVOL, ARECOVER, AUDIT, BACKDS, BACKVOL, FREEVOL, BDELETE, DEFINE, HBDELETE, MIGRATE, RECALL, RECOVER, RECYCLE, LIST, or HLIST command was issued. The specified volume serial number *volser* is more than 6 characters long or contains invalid characters.

Source: DFSMShsm

System Action: For BACKVOL, processing continues with the next volume serial number specified. For other commands, the command ends and DFSMShsm processing continues.

Application Programmer Response: Determine the correct volume serial number and reissue the command.

ARC0124I CAUTION - VSAM SMALL-DATA-SET-PACKING DATA SET WAS NOT FOUND ON VOLUME *volser***, THE VOLUME WILL BE ADDED TO DFSMSHSM WITH THE NOSDSP ATTRIBUTE, RC =** *return-code* **REAS =** *reason-code*

Explanation: An ADDVOL command adding a ML1 volume with an SDSP attribute is being processed. However, the SDSP data set does not exist on the volume. DFSMShsm will attempt to continue processing ADDVOL of this volume with NOSDSP attribute. Look for message ARC0120I to confirm that the ADDVOL is successful.

The values for *return-code* are:

Retcode	Meaning
4	An SDSP data set for the volume was cataloged, but the SDSP data set does not exist on the ML1 volume being ADDVOLed.
8	SDSP data set not found.

The *reason-code* is the return code from VSAM LOCATE.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Change the SDSP keyword to NOSDSP on the ADDVOL command if the ML1 volume (*volser*) is to be added without an SDSP data set on it. If the ML1 volume (*volser*) is to be added with an SDSP attribute, then verify that the volume associated SDSP data set is allocated on the volume and reissue the ADDVOL command.

ARC0125I ADDVOL *volser* **REJECTED - INVALID UNIT TYPE** *unittype*

Explanation: An ADDVOL command was issued to add a volume to DFSMShsm control. The command failed because the unit type specified in the command was invalid or a tape volume was specified as a primary or migration level 1 volume. Tape volumes are only supported as backup, dump, or migration level 2 volumes. Dump volumes cannot be DASD volumes. The volume serial number is *volser* and the invalid unit type is *unittype*.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with the desired unit type correctly specified. Be sure this unit type is supported by DFSMShsm.

Note: Reel-type tapes associated with devices prior to 3480 are no longer supported by DFSMShsm for backup and migration functions. However, dump volumes can still use reel-type tapes.

ARC0126I ADDVOL *volser* **REJECTED - TYPE INCONSISTENT WITH DFSMSHSM CDS, RC =** *return-code*

Explanation: The ADDVOL command was issued to add a volume with volume serial number *volser* to DFSMShsm control. This command failed because the unit type or volume type (primary, migration level 1, migration level 2, daily backup, dump, or spill backup) was inconsistent with a previous control data set entry for the same volume.

Associated with each return code *return-code* is an example of why the message was issued:

Retcode	Meaning
2	The volume was previously added as a primary volume, but is now being added as a different kind of volume.
4	The volume was previously added as a migration level 1 volume, but is now being added as a different kind of volume.
6	The volume was previously added as a migration level 2 volume, but is now being added as a different kind of volume.
8	The volume was previously added as a daily backup volume, but is now being added as a different kind of volume.
10	The volume was previously added as a spill backup volume, but is now being added as a different kind of volume.
12	The volume was previously added as an unassigned backup volume, but is now being added as a different kind of volume.
14	The volume was previously added as a dump volume, but is now being added as a different kind of volume.
20	The volume was previously added with a different unit type.
22	The daily backup volume was previously added for a different day in the backup cycle.
24	The dump volume is already assigned to a dump class and contains part of a valid dump copy.
27	An attempt was made to ADDVOL a volume. This attempt has created an incompatibility in the IDRC status of the volume.
28	The unit name specified on the ADDVOL command is incompatible with the unit name that was already defined for the volume *volser*. One of the following incompatible conditions was detected by DFSMShsm: • The device type of the unit name used to create the tape was 3490, which is incompatible with the device type of the new unit name, which is 3590. This inconsistency may have resulted from an attempt to convert from 3591 (emulated 3490s) to 3590-1. • The unit name specified on the ADDVOL command was 3490 and the volume *volser* already contained valid data that was written by a 3480 or 3480X tape device. • The unit name specified on the ADDVOL command was 3480 or 3480X and the volume *volser* was previously defined as a 3490. • The unit name specified on the ADDVOL command was 3480, 3480X, or 3490 and the volume volser was previously defined as 3590-1. • The unit name specified on the ADDVOL command was 3590-1 and the volume volser was previously defined as 3480, 3480X, or 3490.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Determine the cause of the inconsistencies with a LIST or HLIST command and correct them by changing the ADDVOL command or by issuing a DELVOL command to remove the conflicting control data set information. For *reason-code* 28, perform one of the following:

- If you are converting a 3591 to a 3590-1 device, first use the FIXCDS command to change the device type from 3490 to 3590 in the migration, backup, or dump volume record. Then reissue the ADDVOL command to change the unit name.

  FIXCDS commands for volumes being converted are as follows:

  ```
  for ML2       FIXCDS V volser PATCH(X'1C' X'78048083')
  for BACKUP    FIXCDS X volser PATCH(X'48' X'78048083')
  for DUMP      FIXCDS Y volser PATCH(X'0C' X'78048083')
  ```

- Issue the ADDVOL command with a unit name that is compatible with how the tape volume has already been defined.
- Remove the volume from DFSMShsm’s control by issuing the DELVOL command with the PURGE parameter. Then reissue the ADDVOL command and specify the desired unit name.

  Note: Issue the DEVOL PURGE command only if the tape is empty or if you no longer need the contents of the tape. If you issue the DELVOL PURGE command on an ML2 tape that contains valid data, the command will fail. If you issue the DELVOL PURGE command for a backup tape containing valid data, you will lose the data.

ARC0127I INVALID {SETSYS | ADDVOL | DEFINE} REQUEST AFTER DFSMSHSM INITIALIZATION

Explanation: You issued a DFSMShsm command that contains parameters or exposes conditions that prohibit its processing other than from the ARCCMD*xx* member of the data set identified by the HSMPARM DD statement of the DFSMShsm startup procedure in a JES3 environment. The command was received from a different source. The specified command is not accepted at times other than initialization.

Source: DFSMShsm

System Action: The prohibited parameters on a SETSYS command are ignored. An ADDVOL or DEFINE command ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator.

Application Programmer Response: To process this command, place it in the ARCCMD*xx* member and restart DFSMShsm.

ARC0128I CYCLE LENGTH TOO LONG OR CYCLE DEFINITION HAS OTHER THAN Y OR N

Explanation: A DEFINE command was issued to define a backup cycle, dump cycle, migration cleanup cycle, primary space management cycle, or secondary space management cycle. The command failed because the cycle length exceeded 31 days or characters other than Y and N were used to define the cycle. A Y means automatic backup, automatic dump, automatic migration cleanup, automatic primary space management, or automatic secondary space management will be done that day. An N means no automatic backup, no automatic dump, no automatic migration cleanup, no automatic primary space management, or no automatic secondary space management will be done that day.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Examine the BACKUP, DUMP, MIGRATIONCLEANUPCYCLE, PRIMARYSPMGMTCYCLE, or SECONDARYSPMGMTCYCLE parameter of the DEFINE command for accuracy and reissue the command. Be sure the cycle length does not exceed 31 days and a Y or N was used to define the cycle.

ARC0129I DEFINE REJECTED. NO PRIOR ADDVOL FOR VOLUME *volser*

Explanation: A DEFINE command with the POOL parameter has been issued that contains the volume *volser*. Either the volume has not been specified in a previous ADDVOL command or has not been specified as a primary volume in a previous ADDVOL command. In a JES3 environment, DFSMShsm does not accept a DEFINE command for a volume that has not been added previously.

Source: DFSMShsm

System Action: The command ends without defining any volumes in the pool. DFSMShsm processing continues.

Operator Response: Notify the storage administrator.

Application Programmer Response: Ensure that a previous ADDVOL command has been issued for the volume, the volume has been added as a primary volume, and the volume serial number has been spelled correctly in the DEFINE command with the POOL parameter. Correct the problem and restart DFSMShsm if necessary.

ARC0130I CONTROL DATA SET DEFINITION RULES FOR THE {MCDS | BCDS | OCDS} WERE NOT FOLLOWED, RC=*return-code*

Explanation: The migration control data set (MCDS), backup control data set (BCDS), or offline control data set (OCDS) does not agree with the DFSMShsm recommended definition. The rules for defining this data set were not followed. The *return-code* describes the problem found with the definition.

The values for *return-code* are:

Retcode	Meaning
1	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. The key ranges are not contiguous. The low key range of the first cluster must be `X'00'` and the high key range of the last cluster must be `X'FF'`. For all other ranges, there must be no gap or overlap between the high key range of one cluster and the low key range of the subsequent cluster.
2	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. The maximum record size defined for all clusters must be the same.
3	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. The record key must start at relative position 0 and be 44 characters long for all clusters.
4	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. The control interval (CI) size defined for all clusters must be the same.
5	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. The number of CIs per control area (CA) must be the same for all clusters.
6	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. The volume device type must be the same for all clusters.
7	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. The device share option for all devices that contain the cluster must be the same.
8	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. The high key range for each cluster must contain `X'FF'`. `X'FF'` is the fill character for this key range when it is less than 44 characters.
9	The MCDS or the BCDS was defined as a multicluster data set that allows separate clusters to exist for the data set key ranges. However, the rules for defining these clusters were not followed. Only primary space on one volume may be specified when the data set is not accessed in RLS mode.
10	The MCDS, BCDS, or OCDS may not be defined as an extended format VSAM KSDS unless it is accessed in RLS mode..
11	The MCDS, BCDS, or OCDS was defined as a single volume data set that allows secondary allocation. Only primary allocation should be specified. Specifying secondary allocation can result in performance and deadlock problems when it is not accessed in RLS mode. In all cases, DFSMShsm continues processing.
13	The MCDS or BCDS was defined as a multicluster data set without key ranges. During DFSMShsm processing to calculate the dynamic key boundaries, an inconsistency was found in the DFSMShsm control records.
14	The MCDS was defined as a multicluster data set without key ranges. During processing to calculate the dynamic key boundaries, DFSMShsm determined that the high key of the first cluster was set at less than the acceptable value (`X'10'`||`C'MHCR'`).
15	An MCDS, BCDS, or OCDS cluster was defined as multivolume, but it is not being accessed in RLS mode. This can cause problems such as inaccurate CDS space calculations.

Source: DFSMShsm

System Action: If RC=13 or 14, or if the error occurs with the MCDS, the startup of DFSMShsm is incomplete. If the error occurs with the BCDS or OCDS, the startup continues, but all related functions are disabled. For RC=15, DFSMShsm initialization continues.

System Programmer Response: Correct the reported error and restart DFSMShsm.

For RC=13, this situation occurs if the CDS clusters' key boundaries have been restructured. To correct the situation, return the CDS clusters' key boundaries to their previous state and restart DFSMShsm. Refer to the *DFSMS/MVS DFSMShsm Storage Administration Guide* for details on the correct method to restructure the CDS clusters' key boundaries.

For RC=14, restructure the CDS clusters so that the high key of the first cluster is greater than or equal to `X'10'||C'MHCR'`. Refer to the *DFSMS/MVS DFSMShsm Storage Administration Guide* for details on the correct method to restructure the CDS clusters' key boundaries.

ARC0131I MIGRATE REJECTED - VOLUME OR DSNAME REQUIRED

Explanation: The MIGRATE command was issued to cause space management. The required volume serial number or data set name was not supplied.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Supply the identification of the volume or data set to be migrated. Reissue the command.

ARC0132I {MIGRATE | BACKVOL | ABACKUP | ARECOVER} REJECTED - INVALID UNIT TYPE ***unittype*** **FOR** ***volser***

Explanation: A MIGRATE, BACKVOL, ABACKUP, or ARECOVER command was issued. The UNIT or CONVERT parameter was specified with an invalid *unittype*. For BACKVOL, *volser* indicates a volume for which the unit type *unittype* would have been used, if valid.

Source: DFSMShsm

System Action: The MIGRATE, ABACKUP, or ARECOVER command ends and DFSMShsm processing continues. The BACKVOL command continues with any other volumes specified.

Application Programmer Response: Verify the *unittype* specified on the UNIT parameter of the MIGRATE, BACKVOL, ABACKUP, or ARECOVER command or the CONVERT parameter of the MIGRATE command. Reissue the MIGRATE, ABACKUP, or ARECOVER command. For BACKVOL, reissue the command with the list of volume serial numbers appearing in message ARC0132I.

ARC0133I OFFLINE CONTROL DATA SET NOT OPENED, TAPE SUPPORT WILL NOT BE ACTIVE

Explanation: During initialization and startup processing of DFSMShsm, an attempt was made to open the offline control data set, but no DD statement was provided.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If tape support for migration or backup is desired, stop DFSMShsm, and restart it with the proper DD statement inserted in the JCL for the offline control data set (OCDS).

If tape support for migration or backup is not to be used or if tape support is only required for the volume dump function, ignore the message. The OCDS is not required when tape support is not used in migration or backup and is not required by the volume dump function.

ARC0134I BACKUP CONTROL DATA SET NOT OPENED, BACKUP WILL NOT BE ENABLED

Explanation: One of the following conditions occurred:

- An attempt to open the BCDS during DFSMShsm initialization failed. Either no DD statement was provided or opening the BCDS failed for some other reason.
- During processing of the DEFINE command with the BACKUP parameter, it was determined that the BCDS was not open.

Source: DFSMShsm

System Action: Backup is disabled. DFSMShsm processing continues.

Application Programmer Response: If either backup or dump is desired, this message represents an error and DFSMShsm should be stopped and restarted with the proper DD statement inserted in the JCL for the BCDS. If neither backup nor dump is desired, ignore the message and do not issue the DEFINE command with the BACKUP parameter. If the DD statement appears to be correct, consider running EXAMINE or VERIFY against the BCDS to look for errors in the data set.

ARC0135I INVALID UNIT TYPE ***unittype***

Explanation: The *unittype* specified with the UNIT parameter of a command requesting a recall, recovery, or backup operation is not supported by DFSMShsm.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Correct the *unittype*, and reissue the command.

ARC0136I UNIT AND VOLUME NOT SPECIFIED, BOTH REQUIRED

Explanation: In a request to DFSMShsm for a recall, recovery, or backup operation, either the VOLUME or UNIT parameter was specified, but not both. If either parameter is specified, both parameters must be specified.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with all the required information.

ARC0137I MIGRATE REJECTED - INVALID OR NO DELETE DAYS SPECIFIED

Explanation: The delete-by-age or delete-if-backed-up space management attribute was specified on the MIGRATE command. Either the days subparameter specified was greater than 999 or less than 0 or the required value for the DELETEBYAGE or DELETEIFBACKEDUP parameter was not specified at all.

Source: DFSMShsm

System Action: The MIGRATE command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the MIGRATE command with the correct *days* specified in the command.

ARC0138I **NO {MCDS | BCDS} INFORMATION FOUND FOR {VOLUME | DATASET | DUMPVOLUME | DUMPCLASS | LEVEL}** *key* **| AGGREGATE GROUP}** *key* **{VERSION(***vvvv***) | DATE(***yyyy/mm/dd***)}**

Explanation: A LIST or HLIST command was issued to list:

- BCDS information about a data set, volume *key*, dump class, or aggregate group *key*.
- MCDS information about a data set or volume *key*.
- Information from both MCDS and BCDS about a data set or volume *key*.
- AGGREGATE GROUP *key* — The ABR record information was requested by the LIST command. *key* was the aggregate group name specified. * indicates that ABR record information was requested for all aggregate groups.
- VERSION(*vvvv*) — VERSION was specified on the LIST AGGREGATE command. ABR records for VERSION(*vvvv*) for the specified aggregate groups were to be listed.
- DATE(*yyyy/mm/dd*) — DATE was specified on the LIST AGGREGATE command. ABR records dated *yyyy/mm/dd* for the specified aggregate groups were to be listed.

No information was found for the data set, volume, level, dump class or aggregate group with the serial number or name of *key*.

Source: DFSMShsm

System Action: LIST or HLIST processing ends. DFSMShsm processing continues.

Application Programmer Response: The command might have been issued with the wrong control data set specified or implied. Reissue the LIST or HLIST command with the correct parameters.

ARC0139I **MAXINTERVALTASKS =** *nn,*

Explanation: A QUERY command was issued with the SETSYS parameter. This message is issued by DFSMShsm to describe its current operating environment.

MAXINTERVALTASKS is the maximum number of interval migration tasks that can run concurrently. If this parameter is not specified, then the MAXMIGRATIONTASKS value is used.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0140I **LIST COMPLETED,** *linecount* **LINE(S) OF DATA OUTPUT**

Explanation: A LIST or HLIST command was issued. LIST functional processing has completed and *linecount* lines of data were either written to an output data set or written to the terminal of the person who issued the command. Header lines, trailer lines, and any error messages are not counted.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the message indicates that there were zero lines of data, see any accompanying error messages and check to see that you issued the command correctly.

If there are no accompanying error messages, then none of the selected information was found for the volume.

ARC0141I **ERROR ALLOCATING OUTPUT DATA SET**

Explanation: You issued the DFSMShsm LIST, HLIST, AUDIT, REPORT, RECYCLE, or EXPIREBV command. The output of the command was to be written to an output data set or a spool data set. However, the data set could not be created.

Source: DFSMShsm

System Action: Except in the following case, the command ends, and DFSMShsm processing continues.

Exception case: You specified the RECYCLE ALL command with a prefix or a full data set name for the TAPELIST data sets, and the failure occurred when DFSMShsm tried to open the data set for level 2 volumes. RECYCLE processing continues to attempt to process backup volumes.

Application Programmer Response: Check for the following conditions:

- Check to see if the OUTDATASET parameter was specified. If so, verify whether the data set exists or not.
- Check to see if there is an associated system I/O error message.
- Check to see if there is enough space available to create the data set.
- Check to see if the data set was preallocated. If so, its characteristics may be incompatible with those required for the output data set.

ARC0142I **{BACKUP OF MCDS | BACKUP OF BCDS | BACKUP OF OCDS | BACKUP OF JRNL | MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS | MIGRATION CLEANUP | LEVEL 1 TO LEVEL 2 MIGRATION | CDS BACKUP}, CURRENTLY IN PROCESS**

Explanation: A QUERY command was issued with the ACTIVE parameter. When DFSMShsm receives the QUERY command, it issues this message for each of the following active functions:

- Backup of the MCDS
- Backup of the BCDS
- Backup of the OCDS
- Backup of the journal
- Movement of backup versions
- Backup of migrated data sets
- Migration cleanup
- Level 1 to level 2 migration
- The CDS backup process is pending due to a WAIT for the enqueue on ARCGPA ARCCAT.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The insert of CDS BACKUP occurs when some function other than CDS backup is held because a reply from the operator is outstanding or a tape mount was issued but has not yet completed.

Application Programmer Response: None.

Operator Response: If the insert of CDS BACKUP is displayed, check for outstanding mounts and replies.

ARC0143I PARMLIB MEMBER=ARCCMD*xx*, DFSMSHSM AUTHORIZED USERID=*uid*, HOSTID=*procid*, PRIMARY HOST={YES | NO}, LOGSW={YES | NO}, STARTUP={YES | NO}, EMERGENCY={YES | NO}, CDSQ={YES | NO}, CDSR={YES | NO}, PDA={YES | NO}, RESTART={IS SPECIFIED | NOT SPECIFIED}, CDSSHR={YES | NO | RLS}, RNAMEDSN={YES | NO}, STARTUP PARMLIB MEMBER={ARCSTR*yy* | NONE}

Explanation: A QUERY command has been issued with the STARTUP parameter. This message gives those parameters specified on the operator-issued START HSM command or those values specified on the HSM PROC statement in the DFSMShsm startup procedure in SYS1.PROCLIB. If no values are specified, it displays the system default values.

- ARCCMD*xx* indicates the SYS1.PARMLIB or system concatenated parmlib member containing the DFSMShsm commands that have been processed during startup.
- *uid*. is the authorized user identifier for DFSMShsm that has been specified at startup time.
- *procid*. is the processing unit identifier that has been specified at startup time for this processing unit.
- PRIMARY HOST indicates whether this processing unit is to perform level 1 functions.
- LOGSW indicates whether the DFSMShsm log has been swapped at startup time.

The following values for STARTUP and EMERGENCY are the values specified when DFSMShsm has been started, but they do not necessarily reflect the current values with which DFSMShsm is operating.

- STARTUP indicates whether DFSMShsm sends startup messages to the operator console at startup time.
- EMERGENCY indicates whether DFSMShsm has been in emergency mode at startup time.
- CDSQ indicates whether CDS serialization is done globally.
- CDSR indicates whether CDS uses hardware reserves.
- PDA indicates if PDA TRACE has been specified at startup.
- RESTART indicates that DFSMShsm automatically restarts itself after abnormally ending. If RESTART=IS SPECIFIED, message ARC0248I follows with the restart parameters.
- CDSSHR indicates if DFSMShsm will run in a multiple processor environment. It also indicates if RLS access is being used.
- RNAMEDSN indicates whether minor resource names are translated for down level releases . If RNAMEDSN=Y is displayed, DFSMShsm translates the resource names. If RNAMEDSN=N is displayed, the resource names are compatible with down-level releases.
- STARTUP PARMLIB MEMBER indicates that if keyword STR=*yy* is specified, ARCSTR*yy* is the name of the PARMLIB member DFSMShsm scans for startup parameters.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0144I AUDIT={HELD | NOT HELD} AND {ACTIVE | INACTIVE}, LIST={HELD | NOT HELD} AND {ACTIVE | INACTIVE}, RECYCLE={HELD | NOT HELD} AND {ACTIVE | INACTIVE}, REPORT={HELD | NOT HELD} AND {ACTIVE | INACTIVE}

Explanation: A QUERY command was issued with the ACTIVE parameter. This message gives the status of the potentially long running commands (AUDIT, LIST, RECYCLE and REPORT). HELD and NOT HELD indicate whether the operator issued a HOLD command to hold the function. ACTIVE and INACTIVE indicate whether a command is currently in progress.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0145I DS DELETED=*datasets*, DS DELETE FAILED=*fails*

Explanation: A QUERY command was issued with the STATISTICS parameter. This message contains data set deletion statistics for the current day. The number of data sets deleted is *datasets*. The number of data set deletions that failed is *fails*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0146I RECYCLED {BACKUP | MIGRATION} VOLUMES=*volumes*, DS=*datasets*, BLOCKS=*blocks*

Explanation: A QUERY command was issued with the STATISTICS parameter. This message contains recycle statistics for the number of volumes *volumes* recycled, the number of data sets *datasets* moved and the number of 16K blocks *blocks* processed during recycle for the current day.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0147I BUDENSITY=*density*, BUUNIT=*unit*, BU RECYCLE PERCENTAGE=*percent*%, MOUNT WAIT TIME=*min* MINUTE(S), TAPESPANSIZE(*mbytes*)

Explanation: A QUERY command was issued with the SETSYS parameter. DFSMShsm issues this message to describe its current environment.

The current tape density for either backup scratch tapes or recycle scratch tapes, or both, is *density*.

For 3420 tape drives, the default density can be 2, 3, or 4.

For 3480 tape drives that simulate 3420 tape drives, the default density is 4.

For 3480 tape drives that use all the functions of the 3480 Magnetic Tape Subsystem, the default is an *. The default tape unit for scratch tapes is *unit*. The default recycle percentage is *percent*. When the percent of valid data remaining on a tape backup volume is less than or equal to the specified percentage, message ARC0365I is issued stating that the tape volume is eligible for recycle. The elapsed time during which DFSMShsm will wait for the correct tape to be mounted before issuing message ARC0310A is *min* minutes.

mbytes is the maximum number of megabytes of tape that DFSMShsm may leave unused while it is trying to eliminate spanning data sets.

Note: ARC0310A is a message to the operator inquiring about the requested tape.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0148I {MCDS | BCDS | OCDS | JOURNAL} TOTAL SPACE=*kbytes* K-BYTES CURRENTLY ABOUT *percent*% FULL, WARNING THRESHOLD=*thresh*%, TOTAL FREESPACE=*percent*%

Explanation: A QUERY command was issued with the CONTROLDATASETS parameter. This message contains information about the migration control data set (MCDS), backup control data set (BCDS), offline control data set (OCDS), or journal data set. DFSMShsm issues this message once for each control data set and the journal data set.

Note: If a number is concatenated to the control data set name (such as MCDS2), then the message refers to a single volume of a multicluster CDS.

For JOURNAL, the end of the data set figure used in the following calculations is based on the last journal updates on the host that the message was issued on. The actual end of the data set may have been extended by updates made on another host.

TOTAL SPACE=*kbytes* K-BYTES is the total space allocated in kilobytes. This space figure is based on the amount of space between the beginning and end of the data set (high-allocated). If the data set is defined so it can extend, this value increases. This value is used as the denominator in the calculation of the % FULL and % FREESPACE as described below.

CURRENTLY ABOUT *percent%* FULL is the percentage of space used in the data set.

The numerator is the amount of space between the beginning of the data set and the high-used point in the data set. For the CDSs, DFSMShsm does not subtract the free space below the high-used point, since free space below can still exist when VSAM indicates the data set is full. For example, there can be free space in some control intervals (CI) and control areas (CA) below the high-used point in a key-sequenced data set (KSDS); however, an insert of a new logical record may still receive a return code indicating an out-of-space condition if there is no more space available above the high-used point in the KSDS. Space utilization in a VSAM KSDS is dependent on the location of a new record insert. For example, space must be free in the CI, or a CI must be free in the CA where the insert is to be performed. Otherwise, VSAM tries to obtain a new CA after the high-used point to split the current CA.

The denominator is the TOTAL SPACE in the data set as described above.

This value may vary in size if the data set is defined so it can extend, or if records are inserted or deleted.

WARNING THRESHOLD=*thresh%* is the installation-specified threshold percentage of occupancy specified by the SETSYS MONITOR command which, when exceeded, issues a warning message (ARC0909E).

TOTAL FREESPACE=*percent%* is the percentage of free space (not occupied).

For the CDSs, the numerator is the free space in the data set as indicated in a LISTCAT command plus the free space between the high-used and the end of the data set (high-allocated). For the journal, the numerator is the free space between the high-used point and the end of the data set.

The denominator is the TOTAL SPACE as described above.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0149I MONITOR ({STARTUP | NOSTARTUP} {SPACE | NOSPACE}) {VOLUME | NOVOLUME}, MCDS(*thresh*), BCDS (*thresh*), OCDS(*thresh*), JOURNAL(*thresh*)

Explanation: A QUERY command was issued with the SETSYS parameter. DFSMShsm issues this message to describe its current environment.

The subparameters in effect for the MONITOR parameter of the SETSYS command are displayed. The subparameters can be:

- STARTUP or NOSTARTUP
- SPACE or NOSPACE
- VOLUME or NOVOLUME
- MCDS for the migration control data set
- BCDS for the backup control data set
- OCDS for the offline control data set
- JOURNAL for the journal data set

thresh is the threshold percentage of occupancy which issues an attention message when it is exceeded.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0150I JOURNAL={NONE | SPEED | RECOVERY}, LOG={YES | NO | HELD}, TRACE={YES | NO}, SMFID={*smfid* | NONE}, DEBUG={YES | NO}, EMERG={YES | NO}, JES={2 | 3}, SYS1DUMP={YES | NO}, RACFIND={YES | NO}, ERASEONSCRATCH={YES | NO}

Explanation: A QUERY command was issued with the SETSYS parameter. This message describes DFSMShsm's current environment.

Parameter	Meaning
JOURNAL=NONE	DFSMShsm is not adding journal information.
JOURNAL=SPEED	DFSMShsm is adding journal information asynchronously.
JOURNAL=RECOVERY	DFSMShsm is adding journal information synchronously.
LOG=YES	DFSMShsm is logging information.
LOG=NO	DFSMShsm is not logging information because of a log error.
LOG=HELD	An operator issued the HOLD command to hold logging.
TRACE=YES	Changes to the DFSMShsm control data sets are being written to the DFSMShsm log.
TRACE=NO	Changes to the control data sets are not being logged.
SMFID=*smfid*	The identifier for SMF records is written by DFSMShsm.
SMFID=NONE	DFSMShsm is not writing any SMF records.
DEBUG=YES	DFSMShsm is operating in debug mode.

DEBUG=NO	DFSMShsm is not operating in debug mode. In debug mode, DFSMShsm carries out volume functions just as it would normally except that no data is moved, created, or deleted. Debug mode does not apply to data set commands such as BACKDS, RECALL, RECOVER, or MIGRATE DATASETNAME.
EMERG=YES	DFSMShsm is operating in emergency mode and does not perform any data movement.
EMERG=NO	DFSMShsm is not operating in emergency mode.
JES=2	DFSMShsm is initialized for a JES2 system.
JES=3	DFSMShsm is initialized for a JES3 system.
SYS1DUMP=YES	When an abnormal end (abend) occurs within the address space of DFSMShsm, a dump is written to a system dump data set (for example, SYS1.DUMP01).
SYS1DUMP=NO	When an abend occurs within the address space of DFSMShsm, a dump is written to the data set identified by SYSABEND, SYSMDUMP, or SYSUDUMP.
RACFIND=YES	DFSMShsm marks migration copies and backup versions as RACF-indicated.
RACFIND=NO	A RACF always-call environment is in effect. SETSYS RACFIND reestablishes the default value and causes DFSMShsm to place RACF-indication on backup versions and migration copies of RACF-indicated and password-protected data sets.
ERASEONSCRATCH=YES	DFSMShsm asks RACF to determine if the original user data had the ERASE attribute. If it did, a backup version or migration copy is erased when the data set is scratched.
ERASEONSCRATCH=NO	Backup versions or migration copies are not erased when they are scratched.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0151I **DAYS=***days1***, ML1DAYS=***days2***, PRIMARYSPMGMTSTART=({***time1 time2* **\| NONE}), MAXMIGRATIONTASKS=***nn* **INTERVALMIGRATION={YES \| NO}, MIGRATIONCLEANUPDAYS=(***days3 days4***), SDSP={***number* **KB \| NONE}, MIGRATION PREFIX=***mprefix***, SCRATCH EXPIRED DATA SETS={YES \| NO}, SECONDARYSPMGMTSTART=({***time1 time2***} \| NONE),**

Explanation: A QUERY command was issued with the SETSYS parameter. This message is issued by DFSMShsm to describe its current operating environment. System defaults include:

- *days1* indicates the number of days a data set is not used before it is eligible for automatic primary space management.
- *days2* indicates the number of days a data set is not used before it is eligible for level 1 to level 2 migration.

Times set for automatic primary space management:

- *time1* (*hhmm* - hours, minutes) - The earliest start time automatic primary space management can start.
- *time2* (*hhmm* - hours, minutes) - The latest time automatic primary space management can start and the time automatic primary space management will not start processing any additional volumes. If SETSYS PRIMARYSPMGMTSTART was issued to set up the automatic primary space management times and NONE appears in this field, then the ending time was either not specified or was specified as 0. If SETSYS AMSTART was issued, time2 represents the ending time (time3) and NONE appears if it was either 0 or not specified.

MAXMIGRATIONTASKS is the maximum number of automatic migration (Automatic Primary Space Management and Interval Migration) tasks that can run concurrently.

If INTERVALMIGRATION=YES, DFSMShsm is permitted to perform interval migration.

If INTERVALMIGRATION=NO, DFSMShsm will not perform interval migration.

The variables for MIGRATIONCLEANUPDAYS are:

- *days3* indicates the number of days that must elapse before the migration control data set (MCDS) data set record for a recalled data set is deleted.
- *days4* indicates the number of days that must elapse before the migration control data set statistics records (VSR and DSR) are deleted.

If small data set packing is being performed, the number of kilobytes is always shown even when the data set size eligibility limit was originally specified in tracks. Any data set whose size is equal to or less than the value specified with the SMALLDATASETPACKING parameter of the SETSYS command is a candidate for packing into a small data set packing data set when it migrates.

If no small data set packing is being performed, SDSP=NONE is indicated.

If SCRATCH EXPIRED DATA SETS=YES, DFSMShsm scratches expired data sets during space management processing.

If SCRATCH EXPIRED DATA SETS=NO, DFSMShsm processes the data sets during space management as if the expiration date had not been reached.

Time set for automatic secondary space management:

- *time1* (*hhmm* — hours, minutes) indicates the earliest time automatic secondary space management can start.
- *time2* (*hhmm* — hours, minutes) indicates the latest time automatic secondary space management can start and the time automatic secondary space management will not start processing any additional data sets. If NONE appears in this field, then the ending time was either not specified or it was specified as 0.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0152I MAXRECALLTASKS=*tasks*, RECALL={ANYSTORAGEVOLUME(LIKE | UNLIKE) | PRIVATEVOLUME(LIKE | UNLIKE)}, MAXEXTENTS=*extents*, CONVERSION={NO | REBLOCKBASE | REBLOCKTOANY | REBLOCKTOUNLIKE}, VOLCOUNT=(*NONE* | ANY) TAPERECALLLIMITS (TASK=*time1*, TAPE=*time2*)

Explanation: A QUERY command was issued with the SETSYS parameter. This message is issued by DFSMShsm to describe its current environment.

The maximum number of recall tasks allowed to process concurrently is *tasks*.

If RECALL=ANYSTORAGEVOLUME(LIKE), DFSMShsm recalls a data set to any primary storage volume whose volume attributes match those of the primary volume from which the data set migrated, but not to any primary storage volume mounted private. If RECALL=ANYSTORAGEVOLUME(UNLIKE), DFSMShsm recalls a data set to any primary storage volume except a volume mounted private.

If RECALL=PRIVATEVOLUME(LIKE), DFSMShsm recalls a data set to any primary storage volume whose volume attributes match those of the primary volume from which the data set migrated, including volumes mounted private. If RECALL=PRIVATEVOLUME(UNLIKE), DFSMShsm recalls a data set to any primary storage volume, including volumes mounted private.

The maximum number of extents a data set can occupy is *extents*. A data set that exceeds this number of extents is eligible for reduction. Reblocking is performed to permit better use of space.

If CONVERSION=NO, DFSMShsm will not reblock any data set during recall or recovery.

If CONVERSION=REBLOCKBASE, DFSMShsm is permitted to reblock a data set during recall or recovery if the target volume of the recall or recovery is a 3375 or 3380 DASD and the volume the data set migrated from or was backed up from is not a 3375 or 3380 DASD.

If CONVERSION=REBLOCKTOANY, DFSMShsm is permitted to reblock a data set during recall or recovery regardless of the target device type and regardless of the type of device the data set migrated from or was backed up from.

If CONVERSION=REBLOCKTOUNLIKE, DFSMShsm is permitted to reblock a data set during recall or recovery only if the target volume resides on a type of device different from the type of device the data set migrated from or was backed up from.

If VOLCOUNT=*NONE*, the VOLCOUNT keyword is not passed to DFSMSdss.

If VOLCOUNT=ANY, the VOLCOUNT(ANY) keyword is passed to DFSMSdss.

time1 of the TASK parameter is the number of minutes that is allowed for a recall task to process tape recall requests from a single tape mount before DFSMShsm checks to see if the task is needed to perform a higher priority tape recall request on this host.

time2 of the TAPE parameter is the number of minutes that is allowed for a recall task to process tape recall requests from a single tape mount before the tape becomes eligible for other DFSMShsm host recall tasks to take the tape away from the current host.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

ARC0153I SCRATCHFREQ=*days*, SYSOUT(CLASS=*class*, COPIES=*number*, SPECIAL FORMS={*form* | NONE}), SWAP={YES | NO}, PERMISSION={YES | NO}, EXITS={NONE | *exits*}, UNLOAD={YES | NO}, DATASETSERIALIZATION= {USER | DFHSM}

Explanation: A QUERY command was issued with the SETSYS parameter. DFSMShsm issues this message to describe the current environment.

- *days* is the number of days DFSMShsm keeps list data sets before scratching them.
- *class* is the system default for the hard copy SYSOUT class.
- *number* is the number of SYSOUT copies.
- *form* is the SYSOUT hard copy special form.

If SWAP=YES, the DFSMShsm address space can be swapped by the MVS system resource manager. If SWAP=NO, the DFSMShsm address space cannot be swapped by the MVS system resource manager.

If PERMISSION=YES, the operator’s permission is required to start:

- Automatic backup
- Automatic dump
- Primary space management
- Secondary space management

If PERMISSION=NO, the operator’s permission is not required to start

- Automatic backup
- Automatic dump
- Primary space management
- Secondary space management

If EXITS=NONE, no installation-wide exits are active. In the EXITS=*exits*, 2 character abbreviations appear specifying the active written installation-wide exits. For example, if the second level migrate data set exit (ARCMMEXT) and the space management volume exit (ARCMVEXT) are active, the following message appears:

EXITS=MM,MV.

The exits are:

AD — Data set deletion exit (ARCADEXT)
BD — Data set backup exit (ARCBDEXT)
BE — ABARS backup error exit (ARCBEEXT)
CB — Control data set backup exit (ARCCBEXT)
CR — ABARS conflict resolution exit (ARCCREXT)
CV — Data set reblock exit (ARCCVEXT)
ED — ABACKUP output file tape expiration date exit (ARCEDEXT)
IN — Initialization exit (ARCINEXT)
MD — Data set migration exit (ARCMDEXT)
MM — Second level migrate data set exit (ARCMMEXT)
MV — Space management volume exit (ARCMVEXT)
M2 — ABARS ML2 data set exit (ARCM2EXT)

RD — Recall exit (ARCRDEXT)
RP — Return - priority exit (ARCRPEXT)
SA — Space management and backup data set exit (ARCSAEXT)
SD — Shutdown exit (ARCSDEXT)
SK — ABARS data set skip exit (ARCSKEXT)
TD — Tape data set exit (ARCTDEXT)
TV — Tape volume exit (ARCTVEXT)

If UNLOAD=YES, virtual backup and migration level 2 volumes are unloaded after DFSMShsm finishes using them. If UNLOAD=NO, virtual backup and migration level 2 volumes are not unloaded.

DATASETSERIALIZATION=USER indicates that system data set serialization is active, such as global resource serialization or JES3 data set serialization, and DFSMShsm should not serialize resources.

DATASETSERIALIZATION=DFHSM indicates that system data set serialization is not active and DFSMShsm should serialize resources.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0154I MAXBACKUPTASKS=*tasks***, ABSTART=(***time1 time2 time3***), VERSIONS=***versions***, FREQUENCY=***days***, SKIPABPRIMARY= {YES | NO}, BACKUP PREFIX=***bprefix***, INCREMENTALBACKUP={CHANGEDONLY | ORIGINAL}, PROFILEBACKUP={YES | NO} INUSE=(RETRY={NO | YES}, DELAY=***min***, SERIALIZATION={PREFERRED | REQUIRED})**

Explanation: A QUERY command was issued with the SETSYS or BACKUP parameter. DFSMShsm issues this message to describe the current parameter settings for backup.

The maximum number of volume backup tasks allowed concurrently to process is *tasks*.

Times set for automatic backup:

- *time1* (*hhmm* — hours, minutes) indicates the earliest time automatic backup can start.
- *time2* (*hhmm* — hours, minutes) indicates the latest time automatic backup can start.
- *time3* (*hhmm* — hours, minutes) indicates the time for automatic backup to stop processing any additional volumes.

System defaults for automatic backup:

- *versions* — indicates the maximum number of backup versions for a data set.
- *days* indicates the minimum number of days between backup versions of a data set.

If SKIPABPRIMARY=YES, the primary volumes with the automatic backup attribute are not backed up during automatic backup.

If SKIPABPRIMARY=NO, the primary volumes with the automatic backup attribute are backed up during automatic backup.

If INCREMENTALBACKUP=CHANGEDONLY, DFSMShsm only backs up non-VSAM and ICF VSAM data sets when the change flag is on in the data set VTOC entry of the volume table of contents (VTOC).

If INCREMENTALBACKUP=ORIGINAL, DFSMShsm creates an initial backup version for each non-VSAM and ICF VSAM data set regardless of the setting of the change flag. Incremental backup of old VSAM data sets are affected if they changed since they were last backed up.

If PROFILEBACKUP=YES, DFSMShsm creates a new RACF profile based on the original data set, but with the backup version name and volume serial number of MIGRAT. The profile is available during recovery so discrete profiles deleted between the time of backup and time of recovery can be re-created.

If PROFILEBACKUP=NO, DFSMShsm does not create a new RACF profile. If the data set is later recovered, any backup profiles created during earlier backups may still be used during recovery.

If RETRY=NO, DFSMShsm does not retry a backup attempt which failed because the data set was in use.

If RETRY=YES:

- DFSMShsm attempts only one retry of a backup attempt which fails because:
  - the data set is currently in use, or
  - a BWO candidate suffers a CI split and the backup is discarded.
- If DELAY=*min*, DFSMShsm delays for *min* minutes before retrying a backup which failed because the data set was in use. For a BWO candidate failing backup due to a CI split, no delay occurs before the retry.
- If SERIALIZATION=PREFERRED, DFSMShsm retries backing up a data set that was in use and finds it still (or again) in use, and it backs up the data set anyway.
- If SERIALIZATION=REQUIRED, DFSMShsm retries backing up a data set that was in use and finds it still (or again) in use, and it fails the backup.

Note: The data set backup exit ARCBDEXT can override the RETRY and SERIALIZATION parameters for a given data set. Note that serialization must be attempted for a BWO candidate and these data sets are not retried if SERIALIZATION(PREFERRED) is specified.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0155I DFSMSHSM STATISTICS FOR *date*

Explanation: A QUERY command was issued with the STATISTICS parameter. This message is a header line and the first of the statistical data messages. The current date *date* is expressed as *yy*/*mm*/*dd* (year, month, day).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0156I STARTUPS=*starts***, SHUTDOWNS=***stops***, ABENDS=***abends***, MWES=***requests***, CPU TIME=***time* **SECONDS**

Explanation: A QUERY command has been issued with the STATISTICS parameter.

- *starts* indicates the number of DFSMShsm startups for the current day.
- *stops* indicates the number of DFSMShsm shutdowns.
- *abends* indicates the number of DFSMShsm abnormal ends.
- *requests* indicates the number of DFSMShsm requests or work elements.
- *time* (*sssss.hh* — seconds, hundredths of seconds) indicates the elapsed DFSMShsm CPU time used for the day.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0157I DS MIGRATE L1=_nlevel1_**, DS MIGRATE L2=**_nlevel2_**, DS EXTENT REDUCTIONS=**_exts_**, DS MIGRATE FAIL=**_fails_**, TRKS MIGRATE=**_tracks_**, {KBYTES | MBYTES | GBYTES | TBYTES} MIGRATE=**_nbytes_

Explanation: A QUERY command was issued with the STATISTICS parameter. Migration statistics for the current day are:

- _nlevel1_ indicates the number of data sets that have migrated to level 1.
- _nlevel2_ indicates the number of data sets that have migrated to level 2.
- _exts_ indicates the number of data sets that have been migrated then recalled for extent reduction.
- _fails_ indicates the number of data set migrations that failed.
- _tracks_ indicates the number of tracks of data sets that migrated.
- _nbytes_ indicates the number of bytes of data sets that migrated, in the following units:

Unit	Meaning	Bytes Per Unit
KBYTES	kilobytes	1 024
MBYTES	megabytes	1 048 576
GBYTES	gigabytes	1 073 741 824
TBYTES	terabytes	1 099 511 627 776

To convert to bytes, use the following formula:

nbytes x bytes per unit (unit) = total bytes

Example: If nbytes = 2 and unit = KBYTES, then 2 x 1024 = 2048 bytes

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0158I DS RECALL L1=_ndatasets1_**, DS RECALL L2=**_ndatasets2_**, DS RECALL FAIL=**_fails_**, {KBYTES | MBYTES | GBYTES | TBYTES} RECALL=**_nbytes_**, RECALL MOUNTS AVOIDED=**_avoided_**, EXTRA ABACKUP MOUNTS=**_extras_

Explanation: A QUERY command was issued with the STATISTICS parameter. Recall statistics for the current day are:

- _ndatasets1_ indicates the number of data sets recalled from level 1.
- _ndatasets2_ indicates the number of data sets recalled from level 2.
- _fails_ indicates the number of recalls that failed.
- _nbytes_ indicates the number of bytes of data sets recalled, in the following units:

Unit	Meaning	Bytes Per Unit
KBYTES	kilobytes	1 024
MBYTES	megabytes	1 048 576
GBYTES	gigabytes	1 073 741 824
TBYTES	terabytes	1 099 511 627 776

To convert to bytes, use the following formula:

nbytes x bytes per unit (unit) = total bytes

Example: If nbytes = 2 and unit = KBYTES, then 2 x 1024 = 2048 bytes

- _avoided_ indicates the number of times a recall request was satisfied by a tape already mounted, thus saving a mount each time.
- _extras_ indicates the number of times an ABACKUP command had to remount an ML2 tape taken away by a recall request

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0159I DS BACKUP=_ndatasets1_**, DS BACKUP FAIL=**_fails1_**, DS RECOVER=**_ndatasets2_**, DS RECOVER FAIL=**_fails2_**, RECOVER MOUNTS AVOIDED=**_avoided_

Explanation: A QUERY command was issued with the STATISTICS parameter. Backup and recovery statistics for the current day are:

- _ndatasets1_ indicates the number of data sets backed up.
- _fails1_ indicates the number of data sets whose backups failed.
- _ndatasets2_ indicates the number of data sets recovered.
- _fails2_ indicates the number of data sets where the recovery failed.
- _avoided_ indicates the number of times a recover request was satisfied by a tape already mounted, thus saving a mount each time.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0160I MIGRATION={NOT HELD | HELD AT END OF VOLUME | HELD | LIMITED}, AUTOMIGRATION={NOT HELD | HELD AT END OF VOLUME | HELD | LIMITED}, RECALL={TOTALLY HELD | PARTIALLY HELD | NOT HELD}, TAPERECALL={TOTALLY HELD | TSO HELD | NOT HELD}, DATA SET MIGRATION={ACTIVE | INACTIVE}, VOLUME MIGRATION={ACTIVE | INACTIVE}, DATA SET RECALL={ACTIVE | INACTIVE}

Explanation: A QUERY command was issued with the ACTIVE parameter. This message gives the status of the space management functions (MIGRATION, AUTOMIGRATION, and RECALL) that can be held by the operator HOLD command and the space management operations (DATA SET MIGRATION, VOLUME MIGRATION, and DATA SET RECALL) that are currently in progress.

- HELD and NOT HELD indicate if the function is being held by a HOLD command issued by the operator.
- HELD AT END OF VOLUME indicates that volume processing is stopped after processing of the current volume.
- LIMITED indicates that when DFSMShsm finds that the migration target device is not available, data set migration is limited to those data sets assigned to the available target devices. Data sets targeted to the unavailable device type will not be migrated.
- RECALL=TOTALLY HELD indicates an operator HOLD command was entered for the recall function.
- RECALL=PARTIALLY HELD indicates an abnormal end occurred in the data set recall exit. All undirected recalls that cause the exit to be invoked have failed. When the target volume is specified, the recall will be processed.

- TAPERECALL= TOTALLY HELD indicates an operator HOLD RECALL(TAPE) command was entered for the recall function.
- TAPERECALL= TSO HELD indicates an operator HOLD RECALL(TAPE(TSO)) command was entered for the recall function. For a wait-type recall request, message ARC0389E is issued indicating that the request will be processed as a NOWAIT request when the function is released.
- ACTIVE and INACTIVE indicate if the operation is currently in progress.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0161I **{MIGRATING | BACKING UP | RECOVERING | RECYCLING | AUDITING | DUMPING | RESTORING | VOLUME }***volser* **|** *volser*, **SGROUP=***sg* **FOR USER {***userid* **| **AUTO**} REQUEST {***request-number* **| NONE}**

Explanation: A QUERY command has been issued with the ACTIVE, USER, or REQUEST parameter.

DFSMShsm space management backup, recovery, recycle, full volume dump, volume restore, or audit is processing the volume with the volume serial number *volser*. If SGROUP follows *volser*, the request was for a BACKVOL specifying storage group *sg*.

userid is the user identification of the initiator. *request* is the DFSMShsm request number, except for automatic primary space management, automatic backup, automatic dump or internal copy when NONE is indicated. The request number is nonzero only for requests received by DFSMShsm through the DFSMShsm SVC console. *request-number* is the number of the request.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0162I **{MIGRATING | BACKING UP | RECALLING | RECOVERING | DELETING | RESTORING} DATA SET** *dsname* **FOR USER** *userid*, **REQUEST** *request*

Explanation: A QUERY command was issued with the ACTIVE, USER, REQUEST, or DATASETNAME parameter. DFSMShsm space management backup, recall, recovery, delete, or data set restore is processing the data set with *dsname.* The user identification of the initiator is *userid*. The request number *request* is nonzero only for requests received by the DFSMShsm through the DFSMShsm SVC.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0163I **BACKUP={NOT HELD | HELD AT END OF VOLUME | HELD}, AUTOBACKUP={NOT HELD | HELD AT END OF VOLUME | HELD}, RECOVERY={NOT HELD | HELD AT END OF VOLUME | HELD}, TAPEDATASETRECOVERY= {HELD | NOT HELD}, DATA SET BACKUP= {ACTIVE | INACTIVE}, VOLUME BACKUP={ACTIVE | INACTIVE}, DATA SET RECOVERY={ACTIVE | INACTIVE}, VOLUME RECOVERY={ACTIVE | INACTIVE}**

Explanation: A QUERY command was issued with the ACTIVE parameter. This message gives the status of the BACKUP, AUTOBACKUP, and RECOVERY functions and indicates which backup and recovery operations (DATA SET BACKUP, VOLUME BACKUP, DATA SET RECOVERY, and VOLUME RECOVERY) are currently in progress.

- HELD and NOT HELD indicate if the function is being held by a HOLD command issued by the operator.
- HELD AT END OF VOLUME indicates the volume processing is stopped after processing of the current volume.
- ACTIVE and INACTIVE indicate if the operation is currently in progress.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0164I **{DAY=***day* **| SPILL | UNASSIGNED} VOLS = {***volser-flag volser-flag***}**

Explanation: A QUERY command was issued with the BACKUP parameter and one of the following subparameters specified:

- DAILY
- SPILL
- UNASSIGNED
- ALL

This message lists the backup volumes of the type requested. If the message contains the DAY=*day*, the day in the backup cycle is *day* and one or more volume serial numbers (*volser*) are listed for the daily backup volumes assigned to this day in the backup cycle. Each volume serial number is followed by a 1-character indicator (*flag*).

If a U appears as the indicator, the volume is unavailable and is not being used for backup for one of the following reasons:

- DFSMShsm requested that the volume be mounted and it was not.
- A permanent write error occurred while writing to a tape.
- An error occurred while allocating the volume.
- An error occurred while reading the backup control data set backup volume record (MCT) for the volume.

If an I appears as the indicator, the volume is currently being used.

If an F appears as the indicator, the volume is full.

If an A appears as the indicator, the volume is available for use during a backup operation.

If an E appears as the indicator, the volume is empty.

If the message contains SPILL, one or more volume serial numbers (*volser*) are listed for the spill backup volumes defined to DFSMShsm. The 1- character flag has the same meaning for the spill volumes as it does for the daily backup volumes.

If the message contains UNASSIGNED, one or more volume serial numbers are listed describing the unassigned backup volumes available to DFSMShsm. Each volume serial number is followed by a 1-character indicator (*flag*).

D (day) indicates that the volume has been added to DFSMShsm as a daily backup volume but not associated with any day in the backup cycle.

U (unspecified) indicates that the volume has been added to DFSMShsm as a backup volume but not specified as either a daily or spill backup volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0165I USER NOT AUTHORIZED TO QUERY REQUESTS FOR OTHER USERIDS OR REQNUM MISSING

Explanation: An unauthorized user issued a QUERY or HQUERY command specifying the REQUESTS or USER parameter. Unauthorized users are not allowed to request any of the following information:

- A list of the values of parameters specified with the DFSMShsm commands
- A list of DFSMShsm statistics
- The status of pending requests
- Space use information

Unauthorized users can only request information for their own *userid* or by requesting information by specific request number.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Specify a request number on the HQUERY command with the REQUEST parameter. Correct the *userid* specified with the HQUERY command and reissue the command or follow the installation procedures to obtain additional authorization if required.

ARC0166I NO DFSMSHSM REQUEST FOUND FOR QUERY

Explanation: A QUERY or HQUERY command was issued with the REQUESTS, USER, or DSNAME parameter. DFSMShsm searched all queues and the active DFSMShsm work elements, but no such request could be found. The queried request or requests have completed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the request is not yet completed, verify that the request was correctly specified and reissue the command.

ARC0167I *type* **MWE FOR VOLUME** *name* **|** *name***, SGROUP=***sg* **FOR USER** *userid***, REQUEST** *request-number***, WAITING TO BE PROCESSED,** *nmwe* **MWES AHEAD OF THIS ONE**

Explanation: A QUERY command has been issued with the USER, REQUEST, or DATASETNAME parameter. This message is issued for each management work element (MWE) not selected for processing and matches the information on the QUERY command.

Possible values for *type* are MIGRATE, BACKUP, DUMP, RECOVER, RECALL, DELETE, COMMAND, ABACKUP, or ARECOVER.

name is the

- volume serial number, if VOLUME appears. If SGROUP follows *name*, the request was for the BACKVOL command specifying storage group *sg*.
- data set name, if DATA SET appears.
- command, if COMMAND appears.
- aggregate group name, if AGGREGATE GROUP appears.
- name of the control file data set used in the ARECOVER command, if CONTROL FILE DATA SET appears.

userid is the user identification of the initiator of this MWE. *request-number* is the request number which is nonzero only for requests received by DFSMShsm through the DFSMShsm supervisor call (SVC). *nmwe* is the number of MWEs ahead of this MWE on the same DFSMShsm functional queue.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0168I WAITING MWES: MIGRATE=*nmigrate***, RECALL=***nrecall***, DELETE=***ndelete***, BACKUP=***nbackup***, RECOVER=***nrecover***, COMMAND=***ncommand***, ABACKUP=***nabackup***, ARECOVER=***narecover***, TOTAL=***ntotal*

Explanation: A QUERY command was issued with the WAITING parameter. This message contains the number and type of MWEs waiting for processing on the various DFSMShsm queues.

- *nmigrate* indicates the number of migration MWEs.
- *nrecall* indicates the number of recall MWEs.
- *ndelete* indicates the number of delete MWEs.
- *nbackup* indicates the number of backup MWEs.
- *nrecover* indicates the number of recovery MWEs.
- *nabackup* indicates the number of aggregate backup MWEs.
- *narecover* indicates the number of aggregate recovery MWEs.
- *ncommand* indicates the number of command MWEs.
- *ntotal* indicates the total number of MWEs waiting for processing on all DFSMShsm queues.

For command MWEs, the MWE is not removed from the queue until the command processing is completed. One of the MWEs on the command queue will be the MWE for the QUERY command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0169I USER UNIT NAMES=*unitnames*

Explanation: The QUERY command was issued with the SETSYS parameter. This message lists the user unit names *unitnames* as specified with the USERUNITTABLE parameter of the SETSYS command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0170I SETMIG DSN *dsname* **PROCESSED**

Explanation: The space management status of the data set *dsname* was successfully changed according to the SETMIG command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0171I SETMIG LEVEL *qualifier* PROCESSED

Explanation: All data sets controlled by DFSMShsm beginning with the initial characters of the data set name, *qualifier*, had their space management status changed by the SETMIG command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0172I SETMIG VOLUME *volser* PROCESSED

Explanation: The space management status of data sets on the volume with the volume serial number *volser* was successfully changed as specified in a SETMIG command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0173I ALTERDS *dsname* {SUCCESSFULLY | UNSUCCESSFULLY} PROCESSED

Explanation: The ALTERDS or HALTERDS command was issued to alter backup parameters for the data set *dsname*. DFSMShsm processed the command. If processing of the ALTERDS or HALTERDS command was unsuccessful, one or more messages has preceded this one.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0174I NO RETAIN LEVEL ENTRIES

Explanation: A QUERY command was issued with the RETAIN parameter to list by the initial characters of the data set name, those data sets that have a space management restriction. No such level entries were defined to DFSMShsm with the SETMIG command or defaulted to by DFSMShsm at startup.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0175I LEVEL QUALIFIER AND MIGRATION RESTRICTION TYPE

Explanation: A QUERY command was issued with the RETAIN parameter to list by the initial characters of the data set name, those data sets that have a space management restriction. This message is the header line for the report and is followed by one or more ARC0176I messages.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0176I QUALIFIER=*qualifier* RESTRICTION TYPE=*type*

Explanation: A QUERY command was issued with the RETAIN parameter to list by qualifier, those data sets that have a space management restriction. This is the report-line message that follows message ARC0175I. It is repeated to provide a list of all qualifiers in the names of data sets where there is some type of restriction on space management. *qualifier* is the initial characters of the data set name. The restriction is that no space management is allowed (NOMIGRATION) or space management by command only is allowed (COMMANDONLY) as indicated in the message.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0177I VOLUME *volser* NOT FOUND

Explanation: A SETMIG command was issued to change the space management status for a volume. The volume serial number *volser* specified was not found in the DFSMShsm mounted volume table or it is an SMS-managed volume.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: If the specified volume is SMS-managed and you want to change its space management status, you must use ISMF panels to indicate any changes. DFSMShsm uses SMS storage group attributes to manage SMS volumes within a storage group. If the specified volume is not SMS-managed, check the volume serial specified in the VOLUME parameter and make sure the volume is available to DFSMShsm. Reissue the command.

ARC0178I VOLUME *volser* NOT IN DFSMSHSM MIGRATION CONTROL DATA SET

Explanation: An attempt was made to read the migration control data set entry for a volume *volser* during the processing of the SETMIG command to change the space management status of the volume. No entry was found. This message can be preceded by an associated message from device allocation.

Source: DFSMShsm

System Action: The SETMIG command ends. DFSMShsm processing continues.

Application Programmer Response: Examine the VOLUME parameter of the SETMIG command and determine if the volume is specified correctly and is available to DFSMShsm. If there was an earlier message, make the necessary corrections and reissue the command.

ARC0179I DATA SET NAME IS MISSING

Explanation: DFSMShsm received a request that must identify one or more data sets. No data set name was specified in the request.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Be sure to specify a data set name on the command.

ARC0180I USER *userid* AUTHORIZATION {IS | IS NOT} CHANGED {, RC=*n*}

Explanation: An AUTH command was issued for user *userid*, giving or revoking DFSMShsm authorization.

IS indicates that the authorization is changed as requested.

IS NOT indicates that the authorization change did not occur as requested and RC=*n* indicates the error condition. *n* = 1 Error reading MCDS MCU record. *n* = 2 Error writing MCDS MCU record. *n* = 3 Error updating MCDS MCU record.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Only if IS NOT is specified.

ARC0181I NO BACKUP VERSIONS FOUND FOR {CATALOGED | UNCATALOGED} DATA SET *dsname*

Explanation: A BDELETE storage administrator command or HBDELETE user command was issued to delete a backup version of data set *dsname*. If the message specifies CATALOGED, no backup versions were found for cataloged data set *dsname*. Backup versions may exist for *dsname* as an uncataloged data set.

If the message specifies UNCATALOGED, no backup versions were found for uncataloged data set *dsname*. Backup versions may exist for *dsname* as a cataloged data set.

Source: DFSMShsm

System Action: Command processing ends. DFSMShsm processing continues.

Application Programmer Response: The command was probably issued with improper use of the FROMVOLUME parameter. The FROMVOLUME parameter should be specified if the backup versions of the uncataloged data set are to be deleted. Reissue the command with the correct parameters.

Issue a LIST or HLIST command specifying the data set name and the BACKUPCONTROLDATASET parameter for information on the backup versions of the data set.

ARC0182I {NO | *nbv*} BACKUP VERSION(S) DELETED FOR *dsname*

Explanation: A BDELETE or HBDELETE command was issued to delete backup versions of the data set identified by *dsname*. If NO is specified, the specified backup versions were not found for *dsname*; otherwise the number of backup versions deleted is *nbv*.

Source: DFSMShsm

System Action: The BDELETE or HBDELETE command processing continues with any remaining data set names specified.

Operator Response: If the message specifies *nbv*, there is no response.

If the message specifies NO, ensure that the *dsname*, *volser* (if an uncataloged data set) and version numbers (if specified) are correctly specified. If not, make corrections and reissue the command. If the data set and backup versions were correctly specified and should exist, notify the system programmer or storage administrator.

ARC0183I BACKUP VERSION NUMBER *nbv* OF DATA SET *dsname* {DELETED | NOT DELETED}

Explanation: A BDELETE or HBDELETE command was issued with the VERSIONS parameter to delete backup version *nbv* of data set *dsname*. If the message specifies DELETED, the specified backup version was deleted.

If the message specifies NOT DELETED, the backup version does not exist or a nonzero return code was generated in an attempt to read the BCDS record for the backup version. If the latter prevents deletion of the data set, message ARC0184I precedes this message and gives the backup version name and the return code.

Source: DFSMShsm

System Action: The BDELETE or HBDELETE command continues processing. DFSMShsm processing continues.

Application Programmer Response: If the message specifies NOT DELETED, check LIST or HLIST output for *dsname* to verify the correct version number was specified. If the output reveals no errors, notify the system programmer or storage administrator. If the problem was caused by a nonzero return code, see the operator response for message ARC0184I.

ARC0184I ERROR WHEN {READING | WRITING} THE DFSMSHSM CONTROL DATA SET *type* RECORD FOR *key*, RC=*return-code*

Explanation: An attempt to read or write the DFSMShsm control data set record for *key* has resulted in a nonzero return code *return-code*. Return code 4 has the following meaning:

RC=4 — For disaster alternate volumes, this return code is not an indication of an error condition. DFSMShsm allocates the disaster alternate volumes and the recovery process continues. If a data set being recovered spans to more than one volume and resides on disaster alternate volumes in a tape library, DFSMShsm verifies and corrects only the tape library volume record for the first volume and the original volumes in the volume list.

The following example shows a volume list for a data set spanning four volumes.

```
TAPEA - DISASTER ALTERNATE VOLUME -
TAPE LIBRARY RECORD VERIFIED
TAPEB - DISASTER ALTERNATE VOLUME -
MESSAGE ARC0184I RC=4
TAPEC - ORIGINAL TAPE VOLUME -
TAPE LIBRARY RECORD VERIFIED
TAPED - DISASTER ALTERNATE VOLUME -
MESSAGE ARC184I RC=4
```

DFSMShsm issues *return-code* 4 for all other disaster alternate volumes because they do not have the backup volume record (MCT). The MCT is issued only for the original volume.

If *type* is 0, the first character of the external key is not printed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or system programmer.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0185I **{HBDELETE | BDELETE} COMMAND FAILED, DSN=***dsname***, BDSN=***backupdsname***, FROM VOL=***original-volser***, BACKUP DATE=***date-version-was-made***, CAT={YES | NO}, VER=***version-number***, RC=***return-code***, REASON=***reason-code*

Explanation: An HBDELETE or BDELETE command was issued to delete one or more backup versions of data set *dsname*. When the failure is due to a security check and either more than one version exists for a cataloged data set, or there are multiple versions for an uncataloged data set from the same volume, the message is issued once. The values for *return-code* are:

Retcode	Meaning
2	The migration control data set data set record (MCD) for the data set is found in the migration control data set (MCDS), but the MCD record does not indicate the data set is migrated.
3	MIGRAT is returned as the volume serial of the volume where the data set resides, but no MCD record is found in the MCDS.
14	An error is detected while obtaining VSAM data set information.

The meanings for *reason-code* are:

Code	Meaning
5	An attempt was made to backup a GDG base entry. The data set is only an entry in the catalog and not a cataloged data set.
6	There is an error in a catalog entry for a non-VSAM data set.
9	Unsupported data set for BACKUP. The catalog entry shows the VSAM data set is a non-SMS-managed data set defined with key ranges.
10	The catalog entry indicates that the data set is a multivolume data set. If the data set is VSAM, it is not an SMS-managed data set, and one component is multivolume.
11	Unsupported data set for backup. The catalog entry shows at least one AIX defined with key ranges and the base cluster is *not* defined with key ranges.
12	The components of the non-SMS-managed VSAM cluster are on different volumes.
14	The catalog entry is not a VSAM base cluster or a non-VSAM data set; the catalog entry is a VSAM page space, or a LOCATE error occurred for the data set name.
15	A component of the VSAM data set has a logical record length that is too large for DFSMShsm. The maximum allowable logical record length is 32,752 bytes for a relative record data set and 32,756 bytes for an entry-sequenced or key-sequenced data set.
16	A component of the VSAM data set is open for output.
18	A LOCATE error occurred for the data or index component of the VSAM base cluster.
19	A LOCATE error occurred for the path component of the VSAM base cluster.
20	The data set name is a VSAM component name instead of a cluster name.
24	The catalog entry indicates that the data set is a non-VSAM multivolume data set. The data set's *volser* list also indicates multiple volumes.
28	A LOCATE error occurred for a VSAM AIX* (alternate index) cluster.
38	A LOCATE error occurred for the data or index component of the VSAM AIX cluster.
39	A LOCATE error occurred for the path component of the VSAM AIX cluster.
40	At least one component of the VSAM data set is empty.
52	a GETMAIN error occurred during the process of getting the catalog information about a VSAM data set.

22	Password check fails. The *reason-code* 8 indicates the password is not specified or the password is incorrectly specified.
30	Check fails on allocation authority. The user does not have allocation authority, because a RACF generic profile exists for the data set and it denies access to the user.
32	The backup version for deletion is the most recent backup version of a retired data set. The backup version is not deleted unless the VERSION parameter and the version number of the retired version is specified.
39	RACF check fails. The *reason-code* is the return code from ARCRACF. For the meanings of *reason-code*, see Table 21 on page ARC-292.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If it is necessary to delete backup versions of data sets for which you do not have the required level of access, notify the storage administrator or system programmer for assistance.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0186I {HALTERDS | ALTERDS} COMMAND FAILED FOR DATA SET *dsname*, RETURN CODE=*return-code*, REASON CODE=*reason-code*

Explanation: An HALTERDS command has been issued to alter backup parameters for the data set *dsname*.

If *return-code* is 39, return code *reason-code* has been received from the authorization checking program installed on the system. When RACF is installed, the level of authorization required to issue the HALTERDS command to the original data set is ALTER. If *reason-code* is 0, then there is a LOCATE error on an AIX (alternate index) component.

Additional values for *return-code* are defined for the ARC0186I message to handle errors reading from or writing to the backup control data set (BCDS) as follows:

Retcode	Meaning
1	An error has occurred reading the BCDS B record for the data set. *reason-code* is the return code from ARCZREAD.
2	An error has occurred updating the BCDS B record for the data set. The *reason-code* is the return code from ARCZUPDT.
3	An error has occurred writing a record for the data set. The *reason-code* is the return code from ARCZWRIT.
5	There is a parse error (invalid syntax) in the command.
6	There is error in a catalog entry for a non-VSAM data set.
9	Unsupported data set. The catalog entry shows that the VSAM data set is a non-SMS-managed data set defined with key ranges.
10	The catalog entry indicates that the data set is a multivolume data set. If the data set is VSAM, it is not an SMS-managed data set, and one component is multivolume.
12	The components of a non-SMS VSAM cluster are on different volumes.
14	A LOCATE failure has occurred. The *reason-code* is the VSAM catalog return code. A *reason-code* of zero is received if the data set is a nonintegrated catalog facility (ICF) catalog or a VSAM page or swap data set. For detailed information on the *reason-code*, see *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, message IDC3009I.
18	A LOCATE error has occurred for the data or index component of the VSAM base cluster.
20	The data set is a data or index component. Only cluster names are allowed.
22	Password check has failed. *reason-code* 8 indicates the password is not specified or the password is incorrectly specified.
24	The data set is a non-VSAM multivolume data set which is not allowed.
25	Inconsistency reading the migration control data set (MCDS) D record. The dataset is cataloged as MIGRAT, indicating the data set is migrated. However, an error has occurred reading the D record or the D record indicates that no migration copy exists (reason-code = 0). For other reason codes see ARC1325I.
28	A LOCATE error has occurred for a VSAM AIX cluster.
30	The check on allocation authority has failed. The user does not have allocation authority because a RACF generic profile exists for the data set and it denies access to the user.
38	A LOCATE error has occurred for the data or index component of the VSAM AIX cluster.
39	For *reason-code*=0, LOCATE error has occurred on an AIX path component. For any other *reason-code*, RACF authorization check fails. See message ARC1139I for *reason-code* explanation.
70	The ALTERDS or HALTERDS command is not allowed for SMS-managed data sets.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If it is necessary to alter backup parameters for data sets to which you do not have the required level of access, notify the storage administrator or system programmer for assistance.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0187I I/O ERROR {POSITIONING TO | READING NEXT} DFSMSHSM CONTROL DATA SET *type* RECORD, KEY=*key*, RC=*return-code*

Explanation: There has been a failure in positioning or sequentially reading the next control data set *type* record with *key*. For *return-code* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: Scanning of control data set records ends for the function being processed. DFSMShsm processing continues.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0188I ERROR DELETING DFSMSHSM CONTROL DATA SET *type* RECORD, KEY=*key*, RC=*return-code*

Explanation: There has been a failure to delete the control data set *type* record with *key*. For *return-code* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or system programmer.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0189I NO DFSMShsm CONTROL DATA SET C RECORD FOUND FOR BACKUP VERSION *backupdsname* OF {CATALOGED | UNCATALOGED} DATA SET *dsname*, BACKUP VERSION ENTRY DELETED FROM DFSMSHSM BACKUP CONTROL DATA SET B RECORD

Explanation: An HBDELETE user command or a BDELETE storage administrator command was issued to delete backup version(s) of data set *dsname*. A backup version entry in the BCDS data set record for *dsname* indicated the existence of backup version *backupdsname* but there was no BCDS backup version record found for that backup version. The backup version entry was deleted from the BCDS data set record.

Source: DFSMShsm

System Action: DFSMShsm processing continues. BDELETE or HBDELETE command processing continues.

Application Programmer Response: None.

ARC0190I DISPLAY COMPLETE

Explanation: The DISPLAY command completed processing.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0191I INVALID ADDRESS

Explanation: The DISPLAY or PATCH command was issued to display or patch data at a DFSMShsm storage location. The command failed because an invalid address was specified. Addressing using registers, expressions, variable names, and indirect addressing is not allowed.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Correct the address parameter and reissue the command.

ARC0192I MODULE *modname* NOT FOUND

Explanation: DFSMShsm received a DISPLAY or PATCH command with a module name specified as part of the address. The entry point for the requested module is not known to DFSMShsm. It could not be found in the DFSMShsm external symbol directory table. The name of the requested module is *modname*.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Verify the module name and reissue the command.

ARC0193I DISPLAY FAILED - PROTECTION/ADDRESSING INTERRUPT OCCURRED

Explanation: During an attempt to display the data at a DFSMShsm storage address during DISPLAY or PATCH command processing, a protection or addressing interruption occurred.

Source: DFSMShsm

System Action: The DISPLAY or PATCH command ends. The previous DFSMShsm environment is restored. DFSMShsm processing continues.

Application Programmer Response: Verify the address specified in the command. The address must be within the DFSMShsm address space. Notify the system programmer if the problem occurs again.

ARC0194I {DISPLAY | PATCH} PROCESSING FOR EXIT *exitname* FAILED. EXIT DOES NOT EXIST IN SYSTEM

Explanation: A DISPLAY or PATCH command was issued for a installation-wide exit *exitname* that was not loaded into the DFSMShsm system at startup time. The command fails.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the exit should be in the system, see the storage administrator to determine why the exit is not in the system. If the exit name was incorrect, reissue the command with the proper exit name.

ARC0195I TYPE *type*, KEY *key*, FIXCDS *option*, ERROR=*error*

Explanation: A FIXCDS command failed. The control data set record type is *type*. The control data set record key is *key*. The name of the *option* specified on the FIXCDS command is DISPLAY, PATCH, ADD MDS, DELETE, ASSIGNED, EXPAND, NEWKEY, CREATE, VERIFY, PATCH ENTRY, DELETE ENTRY, VERIFY ENTRY, PATCH GENERATION or DISPLAY GENERATION. Type *error* has several inserts indicating a specific error condition.

- CDS ACCESS ERROR — There was an error in reading, writing, or deleting a control data set record.
- {CREATE | DELETE | NEWKEY} MCU RECORD — The FIXCDS command cannot be used to create, delete or change a new key of the MCDS user record.
- INVALID KEY LENGTH
  - Either no key was entered on the command or a key with more than the allowable characters was entered on the command.
  - The DFSMShsm internal key for the record does not match the external key of the record after the external key was converted.
- INVALID OFFSET OR LENGTH
  - The offset or length value entered on the FIXCDS DISPLAY command addresses an area beyond the end of the record specified in the command.
  - The length value entered on the FIXCDS CREATE or FIXCDS ADDMIGRATEDDATASET command is incorrect. Either a value was entered less than the size of the record specified in the command, or the value was greater than the maximum size for the data portion of any DFSMShsm record (1976 bytes).
  - The length of the data patched into the record specified in the FIXCDS PATCH or FIXCDS CREATE command is 0, or the data extends beyond the end of the record when patched into the record starting at the indicated offset in the command.
  - The length value specified on the FIXCDS EXPAND command causes the record specified in the command to exceed the maximum supported record size of 1976 bytes.
- INVALID RECORD TYPE
  - No record type was entered in the command.

  - The record type entered was not one of the recognized DFSMShsm record types.
  - The option was ADDMIGRATEDDATASET or ASSIGNEDBIT, but the record type entered was not a D (data set).
- NEW KEY EXISTS — The key specified on the FIXCDS NEWKEY command already exists as the key of another record in the control data set.
- PATCH MCU AUTHORIZATION FIELDS — The FIXCDS command cannot be used to patch any authorization control fields in the MCDS user record.
- PATCH VSAM PASSWORD — The offset specified in the FIXCDS PATCH command causes an overlay of the VSAM password storage area in the MCD or MCB record.
- VERIFY FAILED — The data specified in the FIXCDS VERIFY command did not match the data in the control data set record at the specified location.
- ENTRY EXISTS — The key specified on the FIXCDS ENTRY command exists as the entry name of another record entry in the specified control data set record.
- ENTRY NOT FOUND — The key specified on the FIXCDS ENTRY command was not found in the specified control data set record.
- NO SPACE — The control data set record specified on the FIXCDS CREATE ENTRY command does not have enough space remaining to add the requested entry.
- RECORD EXISTS — The control data set record specified already exists.
- PATCH MCL RECORD KEY — The offset specified for either the FIXCDS PATCH or FIXCDS CREATE command specified in the first 2 bytes of the MCL record data area. This area is not changeable.
- MCD RECORD NOT FOUND — The associated MCD record was not found for the data set name specified on the FIXCDS CREATE command. An associated MCD record must already exist for the MCL record creation. FIXCDS PATCH or FIXCDS CREATE command specified in the first 2 bytes of the MCL record data area. This area is not changeable.
- MCD RECORD NOT FOUND — The associated MCD record was not found for the data set name specified on the FIXCDS CREATE command. An associated MCD record must already exist for the MCL record creation.
- INVALID OPERATION
  - The VERIFY parameter is only valid when used alone or with the PATCH, DELETE, or DISPLAY parameters.
  - The ENTRY parameter is valid only when specified with BVR or TTOC records.
  - The GENERATE keyword only is valid when used with the PATCH or DISPLAY parameters and specified with the MCB record.
- RECORD NOT FOUND — The indicated record was not found; it could not be deleted or updated.
- RECORD IN USE — The indicated record was in use; it could not be deleted or updated.
- NEWKEY MCL RECORD — The FIXCDS NEWKEY command may not be used to change the MCL record. If an MCL record is desired for a different data set, use the FIXCDS CREATE command.

Source: DFSMShsm

System Action: The FIXCDS request fails. DFSMShsm processing continues.

Application Programmer Response: Verify the original command, correct the input parameters where necessary, and reissue the command. Should this message recur, notify the system programmer. If *error* is CDS ACCESS ERROR, the error is probably caused by a system problem. If the *error* is one of the following, the error is probably a user error.

INVALID KEY LENGTH
INVALID OFFSET OR LENGTH
PATCH VSAM PASSWORD
INVALID RECORD TYPE

Other values for *error* indicate either a user or a system problem.

- The contents of the authorization control fields in the MCU record can be modified by entering the AUTH command with the DBA (USER) or DBA (CONTROL) parameters.
- The MCU record can be created by entering the AUTH command with the DBA (USER) or DBA (CONTROL) parameters.
- The MCU record can be deleted by entering the AUTH command with the REVOKE parameter.
- The FIXCDS NEWKEY command is not permitted for user (MCU) records. To authorize a person who is not currently authorized for DFSMShsm commands, use the AUTH command to create a new MCU record for the user. If the other user should no longer be authorized, use the AUTH command to revoke his authorization.
- The FIXCDS CREATE or PATCH command may not be used to change the first 2 bytes of the MCL record. If these 2 bytes are changed, the data set name associated with the record is changed. If an MCL record is desired for a different data set, use the FIXCDS CREATE command.

ARC0197I TYPE *type*, KEY *key*, FIXCDS *option* SUCCESSFUL

Explanation: The FIXCDS command processor successfully performed the requested option on the specified control data set record. The type of record processed is *type*, the key of the processed record is *key*, and the operation performed on the record is *option*. The options are DISPLAY, PATCH, DELETE, EXPAND, NEWKEY, ADDMIGRATEDDATASET, ASSIGNEDBIT, DISPLAY ENTRY, CREATE ENTRY, DELETE ENTRY and PATCH ENTRY.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0198I FIXCDS {MCT | TTOC} DELETION FAILED, RC = *return-code*, REASON = *reason-code*

Explanation: A FIXCDS command has been issued to delete a backup control data set backup volume record (MCT) or tape table of contents (TTOC) entry. When an MCT record is deleted, the backup cycle volume record (BVR) entry for the volume is also deleted as well as the TTOC record for the volume, if the volume is a tape volume. The TTOC record is the last of the records that are deleted. If any delete fails, the MCT deletion also fails.

When a deletion of the base TTOC and all of the extension records is requested, the BVR entry and the MCT record for the volume are also deleted. The TTOC record is the last of the records to be deleted. If any delete fails, the TTOC deletion also fails.

The values for *return-code* are:

Retcode	Meaning
4	Read of the MCT fails.
8	Delete of the BVR fails.
10	Delete of the MCT fails.
12	Delete of the TTOC record fails.

If the return code is 4, see Table 11 on page ARC-285 for *reason-code* values.

If the return code is 8, the values for *reason-code* are:

4	The record is not found.
8	A read error has occurred.
12	A write error has occurred.
16	The record is in use by another processing unit.

If the return code is 10, the values for *reason-code* are:

10	A read error has occurred.
16	A physical error has occurred.
20	A logical error has occurred.

If the return code is 12, the values for *reason-code* are:

11	A read error has occurred.
25	A write error has occurred.
45	A delete failure has occurred.
49	A failure to release RACF protection has occurred.

Source: DFSMShsm

System Action: The FIXCDS command ends. DFSMShsm processing continues.

Application Programmer Response: If the command failed because the MCT for the key specified in the command is not found or if the key specified is incorrect, reissue the command. If the key specified is correct, the MCT has been either deleted earlier or a DELVOL command with the PURGE parameter has been processed and the record no longer exists. For all other return codes, notify the storage administrator or system programmer.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0199I {MCT | BVR} RE-CREATION {SUCCESSFUL | FAILED}, RC = *return-code*

Explanation: A FIXCDS command has been issued to delete a backup control data set backup volume record (MCT). During the deletion of the record, an error has occurred. The record specified in the message is deleted when the error occurs. A re-creation of the deleted record has been attempted. The result of the re-creation is given in the message.

For MCT re-creation, see Table 11 on page ARC-285 for return code values.

For backup cycle volume record (BVR) re-creation, the values for *return-code* are:

Retcode	Meaning
4	The record is not found.
8	A read error has occurred.
12	A write error has occurred.
16	The record is in use by another processing unit.

Source: DFSMShsm

System Action: FIXCDS command processing ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or system programmer.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0200I TRAP IN MODULE *modname***, CODE=***errcode***, {LOG ALWAYS ADDED | NODUMP ONCE ADDED | FATAL ONCE ADDED | DEBUG ALWAYS ADDED | SNAP {ALWAYS | ONCE | NEVER} ADDED | ABEND {ALWAYS | ONCE | NEVER} ADDED | REMOVED}**

Explanation: DFSMShsm finished adding or removing a trap for module *modname* when an error *errcode* occurred. The rest of the message indicates what action DFSMShsm takes. This message is in response to a user who entered the TRAP command. In certain cases, this message is also issued the first time an error occurs in DFSMShsm and for which a TRAP command for the specific error condition was not entered.

When the message is issued for the first time the error occurs, an entry is made in the trap table. ARCERP manages the trap table and also contains the action to take. For those entries added to the trap table, *errcode* is the error code sent to ARCERP by the module recognizing the error condition. The TRAP command overrides the error procedures in ARCERP and causes the error processing to take a different action when the error occurs.

If *errcode* is ANY, this message is issued in response to the TRAP command where the ERRCODE parameter of the TRAP command was either entered as 0 or omitted.

If *errcode* is SYSTEM ABEND CODE a system abnormal end (abend) occurred in the module *modname*.

If *errcode* is a number from 400-499, a second message appears with the same error condition, but with a different module name. This error represents an error in a module path. Contact the IBM Support Center.

If the *modname* is ARCZWRIT and the *errcode* is 8, the message indicates a record with a duplicate key already existed when DFSMShsm tried to write the record. This condition is an error.

More information about modules and error codes can be found in *DFSMS/MVS DFSMShsm Diagnosis Guide* under “Diagnosing From Return Codes and Reason Codes” in the table titled “Entries that Pass Error Codes to ARCERP.”

Source: DFSMShsm

System Action: If the message is the result of a TRAP command, no action is taken by the system; however, an entry is placed in the trap table that invokes the requested TRAP command action when the specified error occurs.

If the message is issued as a result of an error, the following actions are taken depending on the action indicated in the message:

- LOG ALWAYS ADDED

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.

- FATAL ONCE ADDED

  The DFSMShsm task that had the error is abended with a dump request.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.

  DFSMShsm is shut down immediately.

- NODUMP ONCE ADDED | ABEND ONCE ADDED

  The DFSMShsm task that had the error is abended.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- SNAP NEVER ADDED | ABEND NEVER ADDED

  No action is taken, but a table entry is created and the number of times this error occurred is set to 1 in the entry.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- SNAP ALWAYS ADDED

  A SNAP dump of the DFSMShsm address space is taken.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- SNAP ONCE ADDED

  The DFSMShsm task that had the error is snapped if this is the first occurrence of the condition. If this is not the first occurrence of the condition, a table entry is created and the number of times this error occurred is set to 1 in the entry.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- ABEND ALWAYS ADDED

  The DFSMShsm task that had the error is abended.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- DEBUG ALWAYS ADDED

  A log entry of the error is written to the DFSMShsm log.

Application Programmer Response: If FATAL ONCE is added, restart DFSMShsm.

If you want DFSMShsm to stop issuing this message, issue the TRAP command with the OFF parameter.

ARC0202W ENTRY POINT *modname* NOT FOUND IN MODULE ENTRY TABLE

Explanation: A TRAP command was issued for a DFSMShsm module or entry point name that it did not find in its module entry table. Since some entry points are not contained in this table, this message serves only as a attention that the TRAP command may have been incorrectly specified.

Source: DFSMShsm

System Action: The TRAP command is accepted as entered. DFSMShsm processing continues.

Application Programmer Response: Verify that the *modname* specified by the TRAP command is correct and reissue the command if it was not correct.

ARC0203I CSALIMITS={NO | YES}, CSA CURRENTLY USED=*nnnnnn* BYTES, MWE=*wwww*, MAXIMUM=*xxxxxx*K BYTES, ACTIVE=*yyy*%, INACTIVE=*zzz*%

Explanation: A QUERY command was issued with the SETSYS or CSALIMITS parameter. This message gives the values for the CSALIMITS parameter specifiable on the SETSYS command.

nnnnnn is the number of common service area (CSA) bytes currently in use by DFSMShsm.

wwww is the number of nonwait-type management work elements (MWEs) per address space to retain in CSA.

xxxxxx is the maximum amount of CSA storage that is allocated to MWEs during DFSMShsm processing in K-bytes.

yyy is the percent of the maximum amount of CSA storage that is allocated to all types of MWEs while DFSMShsm is active.

zzz is the percent of the maximum amount of CSA storage that is allocated to nonwait-type MWEs when DFSMShsm is inactive.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0204I NO ACTIVE TRAP ENTRIES

Explanation: The QUERY command has been issued with the TRAPS parameter. There were no DFSMShsm modules with active traps for error codes.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None

ARC0205I TRAP IN MODULE *modname* FOR CODE *errcode*, TIMES=*errtimes*, TYPE={LOG ALWAYS | BY OCCURRENCE | SNAP {ALWAYS | ONCE | NEVER} | ABEND {ALWAYS | ONCE | NEVER}}

Explanation: The QUERY command was issued with the TRAPS parameter. This message provides data about active trap requests.

- *modname* indicates the trap is specified as a module or entry point name.
- *errcode* indicates the error code being trapped.
- *errtimes* indicates the number of times the error has been trapped.

The type of action taken during processing of the TRAP command is LOG ALWAYS, BY OCCURRENCE, SNAP, or ABEND. If the type of action taken is BY OCCURRENCE, the trap was not set by a user command but by an internal call to the DFSMShsm error handling routine.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0206I *address data*

Explanation: Either a DISPLAY or PATCH command was issued. This message is the data line that starts with the display or patch *address* and continues with the variable *data* that follows that address.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0207I VOLSER NOT SPECIFIED WITH PATCH OF CONTROL BLOCK COMMAND

Explanation: A PATCH command has been issued for a control block and no VOLSER has been specified. A VOLSER is required when a PATCH command is issued for a control block.

Source: DFSMShsm

System Action: The PATCH command processing ends.

Application Programmer Response: Specify the VOLSER of the control block that is to be PATCHed.

ARC0208I TRAP FOR ERROR CODE *errcode*, MODULE *modname*, {NODUMP ONCE | FATAL ONCE | DEBUG ALWAYS | *nnnn* MAXLIMIT | SNAP {ALWAYS | ONCE | NEVER} | ABEND {ALWAYS | ONCE | NEVER}} DONE

Explanation: The error processing routine has been called to perform the action indicated in the message. The module calling the error processing routine is *modname*. If *modname* is UNKNOWN, the module that has issued this error could not be determined accurately. The error code being trapped is *errcode*.

The message is issued when an error occurs that has either occurred before or for which there is an entry in the trap table as a result of a prior TRAP command for that exact condition.

If *errcode* is a number from 400–499, a second message appears with the same error condition but a different module name. This error represents an internal error in a module-to-module path. Contact the IBM Support Center.

If the *modname* is ARCZWRIT and the *errcode* is 8, the message indicates that a record with a duplicate key already existed when DFSMShsm tried to write the record. This condition is an error.

More information about modules and error codes can be found in *DFSMS/MVS DFSMShsm Diagnosis Guide*, in Appendix A, in the section “Diagnosing from Return Codes and Reason Codes,” in Figure 5, “Entries that Pass Error Codes to ARCERP.”

Source: DFSMShsm

System Action: This message is issued as a result of an error occurring in one of the DFSMShsm processes. ARCERP determines what error action is taken in response to that error. The user may wish to change the designed action and may do so by issuing a TRAP command. For information concerning the TRAP command, see *DFSMS/MVS DFSMShsm Diagnosis Guide*.

The action taken as a result of the error appears in the message. Details of the action taken are listed below:

- LOG ALWAYS

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- FATAL ONCE

  The DFSMShsm task that had the error is abnormally ended (abended) with a dump request.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.

  DFSMShsm is shut down immediately.
- *nnn* MAXLIMIT

  The number specified by MAXLIMIT has been exceeded for this day.

  The DFSMShsm task that had the error has been abended with a dump request.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.

  DFSMShsm is shut down immediately.
- NODUMP ONCE | ABEND ONCE

  NODUMP ONCE is an internally set error trap that requires the current task to abend (if this is the first occurrence of the error), but does not process a dump of the abend. ABEND ONCE will process a dump.

  The DFSMShsm task that had the error is abended if this is the first occurrence of the condition. If this is not the first occurrence of the condition, the count of this abend condition is incremented by 1.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- SNAP NEVER | ABEND NEVER

  No action is taken, but the table entry containing the number of times this error has occurred is incremented by 1.

  A log entry of the error is written to the DFSMShsm log.
- SNAP ALWAYS

  A SNAP dump of the DFSMShsm address space is taken and the count of the error condition is incremented by 1.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- SNAP ONCE

  The DFSMShsm task that had the error is snapped if this is the first occurrence of the condition. Otherwise, no system action is taken, but the count of this error condition is incremented by 1.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- ABEND ALWAYS

  The DFSMShsm task that had the error is abended. The count of this error condition is incremented by 1.

  A log entry of the error is written to the DFSMShsm log and message ARC0900I is issued to the operator.
- DEBUG ALWAYS

  A log entry of the error is written to the DFSMShsm log.

Application Programmer Response: If FATAL ONCE or *nnn* MAXLIMIT is the DFSMShsm action, restart DFSMShsm. Otherwise, no action is necessary.

If you want DFSMShsm to stop issuing this message, issue the TRAP command with the OFF parameter.

ARC0210I PATCH PROCESSING COMPLETE

Explanation: The PATCH command was issued. Patch processing has completed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0211I INVALID PATCH DATA

Explanation: The PATCH command processor was given verify data or patch data with length greater than 256 or with length of 0.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Verify the patch data and the length of patch input and reissue the command.

ARC0212I PATCH FAILED - {PROTECTION/ADDRESSING INTERRUPT OCCURRED | VOLUME NOT SPECIFIED}

Explanation: DFSMShsm received a PATCH command. During an attempt to patch a location in the DFSMShsm address space, a protection or addressing interruption occurred. This message is also issued when a PATCH command is issued for a DFSMShsm control block and the volume parameter is not specified.

Source: DFSMShsm

System Action: The command ends. The previous DFSMShsm environment is restored. DFSMShsm processing continues.

Application Programmer Response: Verify the PATCH command and reissue the command. If the error is PROTECTION/ADDRESSING INTERRUPT OCCURRED, the patch address space must be within the DFSMShsm address space. For VOLUME NOT SPECIFIED, a volume must be specified to patch the DFSMShsm control block.

ARC0213I VERIFY SUCCESSFUL

Explanation: DFSMShsm received a PATCH command. The data at the specified address is compared to the verification data supplied. The comparison was correct.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0214I VERIFY FAILED - DATA FOLLOWS

Explanation: DFSMShsm received a PATCH command. The verification data did not match the contents of the specified storage location. The data following the message shows the contents of the location.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Verify that the contents of the location to be patched is the required data. Retry the patch when the correct location is determined or investigate the reason for the unexpected data at the location.

ARC0215I VERIFY FAILED - PROTECTION/ADDRESSING INTERRUPT OCCURRED

Explanation: DFSMShsm has received a PATCH command. During an attempt to verify the data at a DFSMShsm location, a protection or addressing interruption has occurred.

Source: DFSMShsm

System Action: The command ends. The previous operating environment is restored. DFSMShsm processing continues.

Application Programmer Response: Change the verification address to a location within the DFSMShsm address space.

ARC0216I DUMPCLASS DEFINITION {SUCCESSFUL | MODIFIED | DISABLED | UNSUCCESSFUL}, CLASS=*class*, RC=*return-code*

Explanation: A DEFINE command was issued to define a dump *class*. If MODIFIED is indicated, the dump class existed before the DEFINE command was issued and the dump class attributes that were changed were successfully recorded in the DFSMShsm backup control data set (BCDS). If SUCCESSFUL is indicated, a new class was defined without an error or the definition did not change any attributes of an existing class. A value of 0 is returned for *return-code* for SUCCESSFUL and MODIFIED.

If DISABLED is indicated, the dump class existed before the DEFINE command was issued and the DISABLE parameter was specified. The dump class record was marked disabled. No further dumps can be done to this class and no dump volumes can be added to this class.

When DISABLED, the values for *return-code* are:

Retcode	**Meaning**
0	No dump volumes in the dump class contained valid dump copies. Any empty volumes that were assigned to this class are now unassigned.
1	At least one dump volume assigned to the class contained part of a valid dump copy. Any volumes containing valid data in the class remain unchanged. Any volumes that did not contain part of a valid dump copy were unassigned.

If UNSUCCESSFUL is indicated, the dump class definition failed. Possible *return-code* value are:

Retcode	**Meaning**
2	An error reading, writing, or updating the dump class record (DSR) occurred. See an accompanying ARC0184I message for further details.
4	The RETENTIONPERIOD specified was less than 1 or greater than 9999, or it was not NOLIMIT.
6	The FREQUENCY specified was less than 0 or greater than 999.
8	The UNIT specified is invalid. Only the following tape units are valid: 3400-4, 3400-5, 3400-6, 3400-9, 3480, 3480X, 3490, or valid esoteric tape unit names.
10	The DAY specified is invalid. It is either less than 1 or greater than the number of days in the dump cycle, or it is the number of an N day in the cycle.
12	A DEFINE command was issued with the DISABLE parameter for a dump class that does not exist.
14	A DEFINE command was issued with the VTOCCOPIES parameter. The value specified for this parameter was not a numeric value between 0 and 100.
16	A DEFINE command was issued with the TAPEEXPIRATIONDATE parameter. The year value specified for this parameter was not a valid year from the current year (YY) to 99, or from the current year (YYYY) to 2155.
18	A DEFINE command was issued with the TAPEEXPIRATIONDATE parameter. The value specified was not 5 or 7 numeric characters.
20	A DEFINE command was issued with the TAPEEXPIRATIONDATE parameter. The year specified for this parameter was a valid year after 1999; however, the level of MVS or DFP installed does not support expiration dates past 1999. A year between 1900 and 1999 is required.

22	A DEFINE command was issued with the TAPEEXPIRATIONDATE parameter. The days value specified for this parameter was not in the range between 001 to 366.
24	A DEFINE command was issued with the TAPEEXPIRATIONDATE parameter. The date specified was in the past.
26	A DEFINE command was issued with the TAPEEXPIRATIONDATE parameter. The date specified used the form *yyddd*, but the current date is after 1999.

Source: DFSMShsm

System Action: If UNSUCCESSFUL, the DEFINE command fails. DFSMShsm processing continues.

Application Programmer Response: If UNSUCCESSFUL and the return code is not 2, determine the incorrect parameter, correct it, and resubmit the DEFINE command. For return code 2, determine the cause of the control data set access error, correct it, and resubmit the DEFINE command.

ARC0217I DEFINE POOL *char* REJECTED. POOL ALREADY EXISTS

Explanation: DFSMShsm received a DEFINE command to define a pool *char* of the data set name in a JES3 environment. The pool name already exists. Redefinition of the same pool is not acceptable in a JES3 environment.

Source: DFSMShsm

System Action: The command ends. The existing pool definition remains. DFSMShsm processing continues.

Operator Response: Notify the storage administrator.

Application Programmer Response: Before DFSMShsm is initialized, be sure the definition for each pool is a unique definition in the ARCCMD*xx* member of the data set identified by the HSMPARM DD statement of the DFSMShsm startup procedure.

ARC0219I DEFINE MIGRATION LEVEL 2 REJECTED - {TAPE VOLUME CANNOT BE ASSOCIATED WITH KEY RANGE | I/O ERROR | MIGRATION TO LEVEL 2 DASD IN PROCESS | DRAIN ATTRIBUTE | TOO MANY KEYS PREVIOUSLY SPECIFIED FOR VOLUME=*volser*}

Explanation: A DEFINE command was issued to define the structure of migration level 2 storage to DFSMShsm, but one of the following conditions occurred:

1. An attempt was made to associate one or more tape migration level 2 volumes to key ranges, which is not allowed.
2. An I/O error occurred when positioning or reading the migration control record in a multiple processing unit environment. See the preceding message ARC0187I for the I/O error.
3. One of the following types of migration was in process:
   - Migration of a migration level 1 or level 2 volume to level 2 DASD.
   - Migration of all level 1 to level 2 DASD.
4. An ADDVOL command with the DRAIN parameter was previously processed for the volume. The volume is no longer eligible to be a target volume for migration. The volume specified in the message is the first volume with the DRAIN attribute in the list of volumes specified in the DEFINE command. There may be others with the same problem.
5. An attempt was made to define more than 61 key ranges.

Source: DFSMShsm

System Action: The MIGRATIONLEVEL2 parameter is ignored. Processing continues for the POOL, MIGRATIONCLEANUPCYCLE, and BACKUP parameters.

Application Programmer Response:

1. If the error is TAPE VOLUME CANNOT BE ASSOCIATED WITH KEY RANGE, reenter the command specifying only DASD migration level 2 volumes.
2. If the error is I/O ERROR, reenter the DEFINE command with the MIGRATIONLEVEL2 parameter after the I/O error is fixed as described in the preceding message ARC0187I.
3. If the error is MIGRATION TO LEVEL 2 DASD IN PROCESS, wait until the migration is complete and reenter the DEFINE command with the MIGRATIONLEVEL2 parameter. If DFSMShsm is in a multiple processing unit environment and the processing of the migration to level 2 DASD fails before the migration completes, DFSMShsm will not allow a DEFINE command to be issued on any processor until DFSMShsm is started up in the processor that failed. If the processor will be unavailable for an extended time and you want to issue a DEFINE command with the MIGRATIONLEVEL2 parameter, the DFSMShsm migration control data set migration control record (MCR) for the inoperative processor must be modified. Enter a FIXCDS command for the MCR record for the inoperative processor so that DFSMShsm will set off the indicator that migration to level 2 DASD is running. This indicator is MCRFML2. Once the migration to level 2 DASD indicator is set off in the MCR of the inoperative processor, DFSMShsm will allow a DEFINE command with the MIGRATIONLEVEL2 parameter to be processed.
4. If the error is DRAIN ATTRIBUTE, reenter the command specifying only DASD migration level 2 volumes that do not have the DRAIN attribute already turned on. Use the LIST command to find those volumes that do not have the drain attribute turned on.
5. If the error is TOO MANY KEYS PREVIOUSLY SPECIFIED FOR VOLUME = *volser*, 61 or less key ranges must be specified for VOLUME = *volser.*

ARC0220I DEFINE LEVEL 2 VOLUMES SUCCESSFUL

Explanation: DFSMShsm received a DEFINE command with the MIGRATIONLEVEL2 parameter. DFSMShsm has successfully assigned new key ranges to the level 2 migration storage.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0221I DEFINE MIGRATION LEVEL 2 KEYS NOT IN ORDER

Explanation: The key range was not specified in ascending collating sequence, as required, when the DEFINE command was issued to define the structure of migration level 2 storage to DFSMShsm.

Source: DFSMShsm

System Action: The MIGRATIONLEVEL2 parameter is ignored. Processing continues for the POOL and BACKUP parameters if you specified them.

Application Programmer Response: Examine the key ranges specified with the KEYS subparameter. The keys must be in ascending collating sequence. Reissue the command after correcting the KEYS subparameter.

ARC0222I DEFINE MIGRATION LEVEL 2 VOLUME *volser* **COULD NOT BE OBTAINED**

Explanation: A DEFINE command was issued to define a migration level 2 volume with the volume serial number *volser* to a level 2 key range. There is no migration control data set volume record (MCV) for this volume or there was an I/O error reading the record. If the volume has been added to DFSMShsm as a level 2 migration volume, a previous message was issued indicating the type of I/O failure.

Source: DFSMShsm

System Action: The command ends. The volume is not defined to the level 2 key range. DFSMShsm processing continues.

Application Programmer Response: If an I/O failure occurred, follow the directions indicated by the I/O failure message. If the volume was not a part of the owned volumes of DFSMShsm, add the volume to DFSMShsm by using the ADDVOL command. When corrective action has been taken, reissue the DEFINE command.

ARC0223I DEFINE LEVEL 2 - NO MORE FREE VOLUMES {KEYRANGES MAY BE SKIPPED}

Explanation: DFSMShsm attempted to cause migration of a data set to a level 2 DASD volume. There are no more DASD level 2 volumes with space for the data set.

If KEYRANGES MAY BE SKIPPED is stated in the message during level migration to DASD or during migration of a volume to level 2 DASD, then migration failed to associate a level 2 DASD volume to a key range. A level 2 DASD volume could not be associated to a key range for one of the following reasons:

- No level 2 DASD volume was associated to the key range when the level 2 DASD key ranges were defined.
- An attempt was made to cause the migration of a data set to level 2 DASD. There was either not enough space for the data or there was no space left in the VTOC. Message ARC0503I was issued to the command activity log and gives the reason for the allocation error.
- The allocation of the level 2 DASD volume that was associated to the key range failed. Message ARC0500I was issued to the command activity log and gives more information about the allocation error.

Source: DFSMShsm

System Action: The data set being processed does not migrate. DFSMShsm processing continues.

If KEYRANGES MAY BE SKIPPED is stated in the message, level migration to DASD or migration of a volume to level 2 DASD will not cause the migration of any more data sets from the key range that caused ARC0223I to be issued. No data sets will migrate from any subsequent key range that needs to associate a level 2 DASD volume.

Application Programmer Response: Use the ADDVOL command to make additional level 2 DASD volumes available to DFSMShsm. To reuse the current level 2 volumes, issue a DELVOL MIGRATION (UNASSIGN) command for each volume in the key range, followed by a DEFINE command for the specific key range.

If the indexed VTOC is full, redefine the level 2 DASD with a larger indexed VTOC.

If an allocation error occurred, indicated by message ARC0500I or ARC0503I in the command activity log, perform problem determination as indicated by the message.

ARC0224I LOW KEY HIGH KEY VOLSER

Explanation: A DEFINE or QUERY command was issued with the MIGRATIONLEVEL2 parameter. This message is a header line for a report and is immediately followed by message ARC0225I, indicating the level 2 key range structure.

Source: DFSMShsm

System Action: DFSMShsm processing continues with message ARC0225I following this header line.

Application Programmer Response: None.

ARC0225I *lowkey highkey* **{***volser* **| *NONE*}**

Explanation: A DEFINE or QUERY command was issued with the MIGRATIONLEVEL2 parameter. This message is the data line that is immediately preceded by the header line message ARC0224I. The low key value assigned to this level 2 volume is *lowkey*. The high key value assigned to this level 2 volume is *highkey*. A key range includes data sets with names beginning with *lowkey* up to but not including *highkey*. The volume serial number of this level 2 volume is *volser*. *NONE* means that no level 2 volume is assigned to the key range.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0226I MIGRATION LEVEL 2 UNDEFINED

Explanation: A QUERY command was issued with the MIGRATIONLEVEL2 parameter to request the status of the current level 2 structure. There is no level 2 structure defined.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If a migration level 2 structure is required, define it to DFSMShsm and provide volumes for it.

ARC0227I ML2 TAPE TARGET VOLS: DSMIG=*volserA***, VOLMIG=***(T1=volser1,..., T16=volser16)*

Explanation: A QUERY command was issued with the MIGRATIONLEVEL2 parameter.

The currently selected target tape volume for data set migration is *volserA*.

The currently selected target tape volumes for volume space management (initiated by command or automatically) and level 1 to level 2 migration (initiated by command) are (T1=*volser1*,...,T15=*volser15*). T1 is the task identifier for the first migration task and T15 is the task identifier for the fifteenth migration task.

The currently selected target tape volume for level 1 to level 2 migration that is initiated by automatic secondary space management is (T16=*volser16*). T16 is the task identifier for the automatic secondary space management task.

If tape is not used for migration level 2, or if a task is appears in place of a volume serial number.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0228I {DATA SET | VOLUME | AGGREGATE RECOVERY} POOL DELETED FOR {*char* | *poolid*}

Explanation: A DEFINE command was issued with either the POOL, VOLUMEPOOL, or ARPOOL parameters.

If DATA SET POOL, the initial characters, *char*, of the data sets to be recalled were specified, but no volume or list of volumes to be used were specified. If a data set pool existed for the specified character string, it was deleted. If no data set pool existed for the specified character string, no action was taken.

If VOLUME POOL, the volume pool name *poolid* was specified, but no volume or list of volumes to be used were specified for the volume pool. If volume pool *poolid* existed, it was deleted. If no volume pool existed with name *poolid*, no action was taken.

If AGGREGATE RECOVERY POOL, a DEFINE ARPOOL command was issued with neither the MVOLS nor the L0VOLS parameter. If the aggregate recovery pool existed, it was deleted. If the pool did not exist, no action was taken.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0229I {DATA SET | VOLUME} POOL DEFINED FOR {*char* | *poolid*}

Explanation: A DEFINE command was issued with either the POOL or VOLUMEPOOL parameters. If DATA SET POOL, a data set pool has been successfully created to control the recall of data sets *char* to the list of volumes specified.

If VOLUME POOL, the volume pool name *poolid* was specified to successfully create a volume pool. A data set that has migrated from a volume in the volume pool will be recalled to a volume in the volume pool unless the data set belongs to a data set pool or SETSYS RECALL(CATALOGVOLUME) has been specified.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0230I NO {DATA SET | VOLUME | AGGREGATE RECOVERY} POOLS DEFINED

Explanation: A QUERY command was issued with the POOL, VOLUMEPOOL or ARPOOL parameters. If DATA SET POOLS, no data set pools are defined for DFSMShsm. If VOLUME POOLS, no volume pools have been defined for DFSMShsm. If AGGREGATERECOVERY POOLS, no aggregate recovery pools have been defined for DFSMShsm or no aggregate recovery pool has been defined that matches the *agname* specified in the QUERY command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0231I CANNOT OBTAIN SPACE INFORMATION FOR (MCDS | BCDS | OCDS) BECAUSE ACB CONTROL BLOCK IS UNAVAILABLE

Explanation: An ACB pointer was not found when trying to determine space usage of a CDS record. If a CDS is split into more than one data set, this message could be issued one or more times.

Source: DFSMShsm

System Action: The ARC0148 and ARC0948 messages are skipped for this data set.

Application Programmer Response: Check if the CDS record is full. The ACB pointer may not be available after a CDS record is allowed to become full.

ARC0232I {DATA SET | VOLUME} POOLS= {*char* | *poolid*} VOLS=*volser* {*volser* ... *volser*}

Explanation: A QUERY command was issued with either the POOL or VOLUMEPOOL parameters. If the POOL parameter was specified, a list of data set pools is displayed. If the VOLUMEPOOL parameter was specified, a list of volume pools is displayed.

If DATA SET POOL NAME, a data set pool is being displayed. In this case, *char* are the initial characters of the data set names of the data sets recalled to the data set pool. One or more volume serial numbers *volser* are listed for the volumes in the data set pool.

If VOLUME POOL NAME, a volume pool is being displayed. In this case, *poolid* is the name of the volume pool. A data set that has migrated from a volume in the volume pool will be recalled to a volume in the volume pool unless it belongs to a data set pool or SETSYS RECALL(CATALOGVOLUME) is in effect. One or more volume serial numbers *volser* are listed for the volumes in the volume pool.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0233I DUMPCLASS DEFINITION PARAMETER(S) {AUTOREUSE | DATASETRESTORE | AUTOREUSE AND DATASETRESTORE} OVERRIDDEN, RETENTION PERIOD IS ‘NOLIMIT’, CLASS=*class*

Explanation: A DEFINE command was issued to define a dump *class*. The command specified AUTOREUSE, DATASETRESTORE, or both. Also, the RETENTIONPERIOD(NOLIMIT) parameter was specified, either on the same command or on an earlier definition of the dump class.

The AUTOREUSE parameter for dump volumes is not allowed when a retention of NOLIMIT is specified.

The DATASETRESTORE parameter is not allowed for a dump class that has a retention period of NOLIMIT.

To reuse dump volumes with no retention periods, you must delete the dump volume with the DELVOL command and then add a volume with the ADDVOL command. Individual data set restores can be performed from volumes with no retention period only if the RECOVER command is used and explicitly specifies a dump class or dump volume with the FROMDUMP parameter.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If a retention period is now desired, issue a DEFINE command with the RETENTIONPERIOD parameter and a valid number.

ARC0234I VOLUME POOL *poolid* NOT DEFINED. AT LEAST ONE POOL VOLUME MUST BE ADDVOLED

Explanation: A DEFINE command was issued with the VOLUMEPOOL parameter in a JES3 environment. At least one volume in a volume pool must be mounted to the processor receiving the command in a JES3 environment.

Source: DFSMShsm

System Action: The volume pool *poolid* is not defined. DFSMShsm processing continues.

Application Programmer Response: Establish and verify pool volume accessibility before initializing DFSMShsm. Make sure the volume serial numbers in the DEFINE command are correct and at least one volume is added to DFSMShsm by using the ADDVOL command.

ARC0236I DEFINE BACKUP REJECTED, AUTO BACKUP IN PROGRESS

Explanation: A DEFINE command with the BACKUP parameter was issued while automatic backup is in progress. DFSMShsm does not allow any redefinition of automatic backup parameters while automatic backup processing is active.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the DEFINE BACKUP command when automatic backup is not in progress.

ARC0237I VOLUME *volser* NOT ADDED TO DATA SET POOL *qual*.
VOLUME IS SMS-MANAGED.

Explanation: A DEFINE command was issued with the POOL parameter. A volume was specified to be added to the data set pool, identified by *qual*. The specified volume was an SMS-managed volume. SMS-managed volumes may not belong to data set pools.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The specified volume is not added to the data set pool. Other volumes specified on the DEFINE POOL command are evaluated separately for inclusion in the data set pool.

Application Programmer Response: Specify the DEFINE POOL command without this volume.

ARC0238I VOLUME *volser* NOT ADDED TO DATA SET POOL *qual*.
VOLUME IS UNAVAILABLE.

Explanation: A DEFINE command with the POOL parameter was issued in a JES3 system. The volume *volser* could not be added to the data set pool identified by *qual*. DFSMShsm detected that the volume is either not mounted or is mounted but varied offline.

Source: DFSMShsm

System Action: DEFINE command processing continues. DFSMShsm processing continues. The specified volume is not added to the data set pool. Other volumes specified on the DEFINE POOL command are evaluated separately for inclusion in the data set pool.

Operator Response: Complete the following steps:

- Establish and verify pool volume accessibility.
- If the pool volume is not mounted, mount the volume.
- If the pool volume is not online, vary it online.
- Restart DFSMShsm if the specified volume can be mounted and varied online.
- If volume cannot be mounted and varied online, notify the storage administrator.

ARC0239I {MVT | TCIE} CONTROL BLOCK - VOLUME *volser*

Explanation: A DISPLAY command was issued for a DFSMShsm control block. This message is issued at the beginning of each control block to be displayed.

Source: DFSMShsm

System Action: The command continues to completion.

Application Programmer Response: None.

ARC0240I {TCIE | MVT} CONTROL BLOCK {VOLUME *volser*} NOT FOUND

Explanation: A DISPLAY or PATCH command was issued for a DFSMShsm control block. ARC0240I is issued when:

- A DISPLAY command was issued to display all control blocks on the control block queue and there are no control blocks on the control block queue.
- A DISPLAY or PATCH command was issued with the (*volume*) specified and there was no control block with the specified *volser* on the control block queue.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: If a *volser* was specified, verify the *volser* name and reissue the command.

ARC0241I INVALID BACKVOL COMMAND - VOLUME/STORAGE REQUIRED

Explanation: A BACKVOL command was issued, but the required volume identification or storage group was not specified. Either the VOLUMES, PRIMARY, CONTROLDATASETS or STORAGEGROUP parameter must be specified. The VOLUMES or STORAGEGROUP parameter and the volume serial number or the list of storage groups are required when the DUMP parameter is specified.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the BACKVOL command with the desired parameter and its values.

ARC0242I INVALID BACKVOL COMMAND, {BACKUP | DUMP} OF {MIGRATION | BACKUP | DUMP | TAPE | VOLUME *volser*} NOT ALLOWED

Explanation: This message was issued for one of the following reasons:

- The BACKVOL command was issued without the DUMP parameter for a volume defined as a migration, backup, or dump volume.
- The BACKVOL command was issued with the DUMP parameter for a tape volume or a dump volume.

Source: DFSMShsm

System Action: Processing of the BACKVOL command continues for any other volumes specified. DFSMShsm processing continues.

Application Programmer Response: Check the volume serial number of the volume to be backed up or dumped. If the volume is a migration or backup volume and not tape, issue the command with the DUMP parameter. If backup (not dump) is desired, be sure the specified volume is a primary or user (level 0) volume. If corrective action is taken, retry the operation.

ARC0243I INVALID FREEVOL COMMAND - {VOLUME REQUIRED | MIGRATION SOURCE VOLUME IS ML2 AND TARGET VOLUME IS ML1 | INCORRECT TARGET LEVEL FOR SOURCE VOLUME}

Explanation: A FREEVOL command was issued, but the required volume serial number was not supplied or the type of volume was specified with an invalid target level. This can occur when a migration volume is specified with a backup volume, a backup volume is specified with a migration volume, or the FREEVOL was specified from a migration level 2 volume to a migration level 1 volume.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the FREEVOL command with the correct combination of source and target volumes and correct the command syntax.

ARC0245I INVALID BACKVOL COMMAND - RULES FOR DUMPCLASS OR RETENTIONPERIOD OR STACK VIOLATED, RC=*return-code*

Explanation: A BACKVOL command was issued with the DUMP parameter. This command failed because the rules for DUMPCLASS, RETENTIONPERIOD, or STACK were violated.

The values for *return-code* are:

Retcode	**Meaning**
4	DUMPCLASS is specified with more than 5 dump classes.
6	DUMPCLASS is specified with a dump class specified more than once.
8	RETENTIONPERIOD is specified and the number of retention periods exceeds the number of dump classes.
12	Invalid retention periods are specified. The only valid possibilities are the numbers 1 to 9999 inclusive, the word NOLIMIT, or an asterisk as a place holder, as in RETPD(*,*,90).
14	Stack is specified, and the number of stack values exceeds the number of dump classes.
16	Invalid STACK values are specified. The only valid values are the numbers 1 through 99, or an asterisk as a place holder.

Source: DFSMShsm

System Action: The BACKVOL command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with the correct syntax and valid values for the DUMP subparameter indicated in error. IF RETENTIONPERIOD or STACK is specified, ensure that DUMPCLASS is also specified, and that the number of values for STACK or RETENTIONPERIOD are not greater than the number of values for DUMPCLASS.

ARC0246I SMS VOLUMES RESTRICTED TO PROCESSING BY THIS PROCESSING UNIT: NOT PROCESSED =*uu*, TOTAL =*vv*, SMS VOLUMES NOT RESTRICTED TO PROCESSING BY ANY PROCESSING UNIT: NOT PROCESSED =*ww*, TOTAL =*xx* NON-SMS VOLUMES: NOT PROCESSED =*yy*, TOTAL =*zz*

Explanation: A QUERY AUTOPROGRESS command was issued, the following is reported:

- An indication of the number of volumes that have not yet been processed by an active automatic function.
- The total number of volumes that are eligible for processing by an active automatic function.

For each automatic function that is processing DFSMShsm managed volumes in the processing unit were the QUERY AUTOPROGRESS command is issued, the following is reported:

uu	The number of eligible SMS-managed volumes restricted to this processing unit that have not been processed. Restricted to this processing unit means that the storage group with which a volume is associated specifies processing for this function only by the processing unit in which the QUERY AUTOPROGRESS command was issued.
vv	The total number of eligible SMS-managed volumes restricted to this processing unit. Restricted to this processing unit means that the storage group with which a volume is associated specifies processing for this function only by the processing unit in which the QUERY AUTOPROGRESS command was issued.
ww	The number of eligible SMS-managed volumes that are not restricted to processing by any processing unit and have not been processed by this function.
xx	The total number of SMS-managed volumes that are not restricted to processing by any processing unit and are eligible for processing by this function in this processing unit.
yy	The number of eligible non-SMS-managed volumes that have not been processed by this function.
zz	The total number of non-SMS-managed volumes that are eligible for processing by this function in this processing unit.

Notes:

1. The count of volumes that remain to be processed may not reflect another processing unit's activity. A volume that is eligible for processing by multiple processing units, may have been processed in a processing unit other than the one where the QUERY AUTOPROGRESS command was issued. If the processing unit running the QUERY AUTOPROGRESS command has not detected that another processing unit has processed a volume, that volume is included in the count of volumes that have not been processed.
2. A volume is considered eligible if it is defined (via the storage group for SMS-managed volumes or the ADDVOL command for non-SMS-managed volumes) as being eligible to be processed by this processing unit for the active function. For interval migration, eligible volumes are only the ones that are above their associated high threshold.

3. A volume is considered not processed when the following conditions are true:
   - The volume is not currently being processed by the active function.
   - The minimum time has elapsed since the last time the associated automatic function processed the volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0247I {AUTO BACKUP | AUTO DUMP | PRIMARY SPACE MANAGEMENT | INTERVAL MIGRATION | NO AUTOMATIC FUNCTION} IS CURRENTLY PROCESSING DFSMSHSM MANAGED VOLUMES

Explanation: A QUERY AUTOPROGRESS command was issued. This message indicates the automatic function that is currently processing DFSMShsm-managed volumes for the following ARC0246I message. This message is also issued if no automatic function is currently processing DFSMShsm-managed volumes.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0248I RESTART PARAMETERS: *parameters*

Explanation: This message gives the restart parameters. You issued the QUERY STARTUP command and restart is specified in message ARC0143I.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0251I INVALID RECOVER COMMAND - VOLUME OR DSN MISSING

Explanation: A RECOVER command was issued. The required volume serial number or data set name was not supplied. The data set name parameter is always required and the volume serial number is required if the data set name was specified as *.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the RECOVER command specifying the missing volume serial number or the data set name. If the data set name is *, all the data sets on the volume are recovered.

ARC0252I INVALID RECOVER COMMAND - TWO OR MORE OPTIONS ARE INCONSISTENT, RC=*return-code*

Explanation: A RECOVER command was issued. This command failed because 2 or more specified parameters were inconsistent with each other. Associated with each *return-code* are combinations of options that are inconsistent and not allowed.

The values for *return-code* are:

Retcode	Meaning
8	FROMDUMP parameter was specified with either the GENERATION or VERSION parameter.
12	Data set name was specified with the DUMPGENERATION parameter.
16	DUMPVOLUME parameter is specified with the DATE parameter.
20	DUMPGENERATION parameter is specified with a value less than 0 or greater than 99. These are the smallest and the largest dump generation numbers allowed.
24	DUMPGENERATION parameter is specified with the DATE parameter.
28	DAOPTION parameter on a RECOVER VOLUME (*) command was specified. DAOPTION can only be used to recover a data set.
32	TARGETVOLUME parameter is specified with a data set name.
36	TARGETVOLUME parameter is specified with the TOVOLUME parameter, but FROMDUMP is not specified.
40	TARGETVOLUME parameter and TOVOLUME parameter both specify the same volume.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command specifying the desired parameters that are consistent.

ARC0260I {PRIMARY | MIGRATION | BACKUP | DUMP} VOLUME *volser* **ENTRY {DELETED | NOT DEFINED | NOT DELETED - CDS ERROR | NOT DELETED - VALID DATA MAY EXIST ON VOLUME | NOT DELETED - VOLUME INELIGIBLE FOR DELVOL | NOT DELETED - ERROR REMOVING VALID DATA | NOT DELETED - SELECTED BY ANOTHER HOST | DELETED -** *nnnn* **VALID VERSIONS ALSO DELETED | NOT DELETED - CONTAINS ONLY DUMP COPY | UNASSIGNED | MARKED FULL | NOT MARKEDFULL | MARKFULL INVALID | MARKFULL READERROR | NOT DELETED - PURGE NOT SPECIFIED FOR STACKED VOLUME}**

Explanation: While DFSMShsm has been processing a DELVOL command, an attempt has been made to delete the entry for the volume in one of the DFSMShsm control data sets (CDSs). The volume is a primary, migration, backup, or dump volume and has the volume serial number *volser*. This message reports the results of the delete operation. When the ENTRY is DELETED or MARKEDFULL, this means that the command has been successful, whereas NOT MARKEDFULL means it has not been successful.

If a DELVOL UNASSIGN command is issued for a tape migration level 2 volume, DFSMShsm marks the volume as not selected. A selected volume is a partially full volume that still has space after completion of a prior volume or data set migration. If the volume has not been selected, the DELVOL UNASSIGN command for this tape volume has no useful purpose.

If the result is NOT DEFINED, DFSMShsm could not find the specified volume serial number with the specified volume type.

If the result is NOT DELETED — CDS ERROR, an error has occurred while trying to process one of the control data sets.

If the result is NOT DELETED — VALID DATA MAY EXIST ON VOLUME, an attempt has been made to issue a DELVOL command with the PURGE parameter for a tape migration level 2 volume. The offline control data set (OCDS) tape table of contents record (TTOC) indicates that the volume may contain valid migration copies, so the processing ends. If the PURGE parameter has been used because the ML2 tape has been lost or destroyed and fails due to ARC0260I, issue the command MIGRATE VOLUME(*xxxxxx* DBA(0)), where *xxxxxx* is the volume, to remove all record of valid data, then issue the DELVOL PURGE command again. This should only be done when the tape is totally unusable because it removes what may be the only copy of the data. If backup copies are available, recover the data sets that the MIGRATE command deleted.

If the result is NOT DELETED — VOLUME INELIGIBLE FOR DELVOL, an attempt has been made to issue a DELVOL when the ineligible for DELVOL flag is on in the migration control data set volume record (MCV) of the volume. This flag is set on when a VSAM data set migrates to tape and there has been a failure trying to update the TTOC record to reflect this migration (see related messages ARC1285I and ARC0538I). The volume still contains valid migration copies, so DELVOL processing ends.

If the result is NOT DELETED — SELECTED BY ANOTHER HOST, an attempt has been made to issue a DELVOL command and it has been found that the volume is selected by another processing unit.

In a multiple processing unit environment, it is necessary to issue the DELVOL command on each of the processors to which a volume has been added by an ADDVOL command. This message will appear on each system after the first successful DELVOL command, in which case no further action is necessary.

If a DELVOL command with the PURGE parameter is entered for a tape backup volume that contains active and valid backup versions, the control data set records associated with each valid version are updated or deleted so the valid versions are no longer recorded in the control data sets. If all valid versions are successfully processed, the records associated with the volume are deleted or updated and the message indicates the number of valid versions that have been deleted. If DFSMShsm encounters at least one error while deleting records associated with valid versions, the message will indicate NOT DELETED — ERROR REMOVING VALID DATA.

An internal DELVOL causes the message to be issued under the following conditions:

- If the DFSMShsm TAPEDELETION option is HSMTAPE, either the backup control data set backup volume record (MCV) or MCT record, or both, and the TTOC record are kept (the base TTOC and the TTOC extensions are deleted). The base TTOC is then recreated without any data set entries.
- If the DFSMShsm TAPEDELETION option is SCRATCHTAPE, either the MCV or MCT record, or both, and the TTOC record are deleted.
- FREEVOL BACKUPVOLUME (..) option has been used on a daily backup DASD volume assigned to a given day in the backup cycle.

An external DELVOL command with the UNASSIGN parameter will cause the message to be issued. Either the MCV or MCT record, or both, and the TTOC record are kept (the base TTOC and the TTOC extensions are not changed).

If the result is NOT DELETED — CONTAINS ONLY DUMP COPY, the volume contains part of the only valid dump copy for a primary or non-DFSMShsm-managed volume. The LASTCOPY parameter must be specified to delete such a volume.

If the result is MARKFULL INVALID, a DELVOL command with the MARKFULL parameter has been issued for a DASD volume. MARKFULL is only valid for tape. If the result is MARKFULL READERROR, DFSMShsm has been unable to read the volume record. If the result is NOT MARKEDFULL, a DELVOL command with the MARKFULL parameter has failed while attempting to update CDS records.

If the result is NOT DELETED — PURGE NOT SPECIFIED FOR STACKED VOLUME, an attempt has been made to issue a DELVOL command without the PURGE option, for a dump volume with more than one valid dump copy stacked on it.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the entry has not been defined in the control data set, examine the parameters and the volume serial number for errors. If the entry has not been deleted because of a control data set error, see the appropriate table under problem determination.

If the entry has not been deleted because valid data may exist on the volume:

- If an ARC0378I message relating to the same volume has been issued to the migration activity log, see the *DFSMS/MVS DFSMShsm Storage Administration Guide* for information on how to handle inconsistencies between tape media contents and OCDS TTOC records.
- If an ARC0378I message relating to the same volume has not been issued to the migration activity log, issue the LIST TAPETABLEOFCONTENTS(*volser*) command to request a list of the data set information for the tape volume that was requested to be deleted. If the LIST TAPETABLEOFCONTENTS(*volser*) command indicates there are no data sets on the tape volume, see the *DFSMS/MVS DFSMShsm Storage Administration Guide* for information on how to handle inconsistencies between tape media contents and OCDS TTOC records.

If the entry is not deleted because the volume contains the only dump copy, use the DELVOL command with the PURGE parameter to delete the dump volume.

If the DELVOL command failed because the PURGE option was not specified for a stacked dump volume, issue the LIST DUMPVOLUME(volser) command to find which dump copies are on the dump volume. If all copies can be deleted, reissue the DELVOL command with the PURGE option.

ARC0261I TAPE VOLUME *volser* NEEDS TO BE REINITIALIZED

Explanation: A tape volume *volser* was successfully recycled or a DELVOL command with the PURGE parameter was processed. You must relabel the tape before you can use it again.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: Run the IEHINITT utility to relabel the specified tape volume.

ARC0262I DUMP {COPY | GENERATION} INVALIDATED FOR VOLUME *volser*, CREATION DATE= *yy/mm/dd*, {EXPIRATION DATE= {*yy/mm/dd* | NOLIMIT}, DUMP CLASS= *class*}

Explanation: DFSMShsm invalidated a dump copy or a dump generation for the source volume with a volume serial of *volser*. This was done either because:

- The dump copy’s expiration date *yy/mm/dd* was reached.
- The maximum of 100 generations was reached and a new dump of the source volume has been scheduled.
- The DELVOL command was issued for a volume that contained part of a valid dump copy.

The expiration date and dump class portion of the message is included only when issued for a dump copy, not a generation.

Source: DFSMShsm

System Action: DFSMShsm processing continues. DFSMShsm internally deletes the volumes containing the dump copy.

Application Programmer Response: None.

ARC0263I DUMP VOLUME *volser* **{DELETED | NOT DELETED}, VOLUME STATUS= {PURGED | UNASSIGNED | REASSIGNED | UNAVAILABLE | UNCHANGED}{, RETCODE=** *return-code* **}**

Explanation: DFSMShsm attempted to invalidate the contents of the dump volume *volser*. This was done either because:

- The dump copy's expiration date was reached.
- The dump copy was rolled off because the maximum of 100 generations was reached and a new dump of the source volume has been scheduled.
- The DELVOL command was issued for a dump volume.

If DELETED is indicated in the message, all references to the dump copy are removed from the DFSMShsm control data sets. If NOT DELETED is indicated, the status is UNCHANGED.

The *return-code* value indicates the error.

Retcode	Meaning
0	Deleting the volume with the DELVOL command was successful.
2	The DVL record for the volume did not indicate the dump copy was for the same source volume as was expected.
4	An I/O error occurred trying to update or delete the DVL record. Message ARC0184I preceded this message giving the type of error.
6	The DVL record was in use while DFSMShsm was trying to process it.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the volume was not deleted and the *return-code* is 2, a prior error probably occurred while trying to invalidate a dump copy. Use the LIST command to determine the content of the volume and to find out what the valid dump copies are for the source volume.

When a volume is deleted and marked *unavailable* do the following to remove it from DFSMShsm's control.

- To list the tapes marked *unavailable* issue: LIST DUMPVOLUME SELECT(UNAVAILABLE)
- Run the IEHINIT utility to relabel the tape.
- Issue the DELVOL *volser* DUMP(PURGE) command for each volume.

ARC0270I {BACKUP | MIGRATION CLEANUP | DUMP} CYCLE DEFINITION SUCCESSFUL

Explanation: DFSMShsm completed processing a DEFINE command to establish a backup cycle, migration cleanup cycle, or a dump cycle.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0271I BACKUP CYCLE LENGTH=*nday(s)***, TODAY IS DAY=***n* **| ** CYCLE START DATE=***yy/mm/dd***, VOLUME LIMIT/DAY=** *limit***,TOTAL BACKUP VOLUMES=***total*

Explanation: A QUERY command was issued with the BACKUP parameter. The length of the backup cycle in days is *ndays*. The backup cycle is *string*, which is a character string of *Y*s and *N*s. A Y represents a day in the cycle when automatic backup is allowed to take place. An N represents a day in the cycle when automatic backup will not take place. The minimum number of volumes to be used for each day backup is to be done is *limit*. The total number of backup volumes defined to DFSMShsm is *total*.

The backup cycle day is a 24-hour period beginning at the early start time as specified in the SETSYS AUTOBACKUPSTART command, not a 24-hour calendar day beginning at midnight. Today is the *nth* day in the cycle. The first day in the cycle is *yy/mm/dd*. Note that if the QUERY BACKUP command is issued prior to the early start time, the *nth* day represents the 24-hour period that began on the prior calendar day at the early start time. For example, if the early start time is 1900 with a 7-day cycle starting on Sunday, the day in the cycle will be 1 until 1900 on Monday. After 1900, it will be 2 when a QUERY BACKUP command is issued.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0272I PRIMARY SPACE MGMT CYCLE LENGTH=*ndays* **DAY(S), }, TODAY IS DAY=***n***, CYCLE START DATE=***yy/mm/dd***,**

Explanation: SECONDARY SPACE MGMT CYCLE LENGTH=*ndays* DAY(S), }, TODAY IS DAY=*n*, CYCLE START DATE=*yy/mm/dd*,

A QUERY command was issued with the SETSYS parameter. This message describes the automatic primary and automatic secondary space management cycles. The length of the cycle, in days, is *ndays*. The cycle is *string*, which is a character string of *Y*s and *N*s. A Y represents a day in the cycle when management is allowed to take place. An N represents a day in the cycle when management will not take place. *NONE* appears only when neither cycle nor start time were defined for the function.

The migration cycle day is a 24-hour period beginning at the early start time as specified in the SETSYS PRIMARYSPMGMTSTART or SECONDARYSPMGMTSTART command, not a 24-hour calendar day beginning at midnight. Today is the *nth* day in the cycle. The first day in the cycle is *yy/mm/dd*. Note that if the QUERY SETSYS command is issued prior to the early start time, the *nth* day represents the 24-hour period that began on the prior calendar day at the early start time. For example, if the early start time is 1900 with a 7-day cycle starting on Sunday, the day in the cycle will be 1 until 1900 on Monday. After 1900, it will be 2 when a QUERY SETSYS command is issued.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0273I DUMP CYCLE LENGTH=*ndays* DAYS, *string*}, TODAY IS DAY= {*n* | **}, CYCLE START DATE={*yy/mm/dd* | *NONE*} {,{AUTODUMP | LEVEL | AUTODUMP/LEVEL} FUNCTIONS {ELIGIBLE | NOT ELIGIBLE} TO BE {STARTED | RESTARTED}} {,{DUMP CYCLE NOT DEFINED | CYCLE START TIME NOT SPECIFIED | CYCLE START TIME WAS CHANGED | CYCLE START DATE WAS CHANGED | HAVE NOT BEEN RUN FOR THIS DATE | HAVE NOT COMPLETED FOR THIS DATE | THIS IS NOT THE PRIMARY HOST | CURRENT TIME IS NOT WITHIN AUTODUMP START WINDOW | HAVE ALREADY COMPLETED FOR THIS DATE}}

Explanation: A QUERY command was issued with the BACKUP parameter. The number of days in the automatic dump cycle is *ndays*. The dump cycle definition, Y for days on which automatic full volume dump is to run and N for days it is not to run, is given by *string*.

The migration cycle day is a 24-hour period beginning at the early start time as specified in the SETSYS AUTODUMPSTART command, not a 24-hour calendar day beginning at midnight. Today is the *nth* day in the cycle. The first day in the cycle is *yy/mm/dd*. Note that if the QUERY BACKUP command is issued prior to the early start time, the *nth* day represents the 24-hour period that began on the prior calendar day at the early start time. For example, if the early start time is 1900 with a 7-day cycle starting on Sunday, the day in the cycle will be 1 until 1900 on Monday. After 1900, it will be 2 when a QUERY BACKUP command is issued. When the dump cycle has not been defined, *NONE* is the insert for the day.

If today is a Y day in the dump cycle, an explanation is provided for eligibility to start or restart automatic full volume dump. If today is an N day in the dump cycle, an explanation is provided for eligibility to start or restart dump-level functions.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0274I BACKUP={YES({ANY | DASD | TAPE{ (*unit*) }}) | NO}, SPILL={YES({ANY | DASD | TAPE {(*unit*)}}) | NO}, MAXDSRECOVERTASKS=*nn*

Explanation: A QUERY command was issued with the SETSYS or BACKUP parameter. DFSMShsm issues this message to describe its current parameter settings for backup that show whether or not backup is enabled, and what type of units backup is limited to.

If BACKUP=YES, backup processing is currently enabled.

> If BACKUP=YES(ANY), DFSMShsm selects any type of available daily backup volumes during volume backup processing.
> If BACKUP=YES(DASD), DFSMShsm selects only DASD daily backup volumes during volume backup processing.
> If BACKUP=YES(TAPE), DFSMShsm selects only tape daily backup volumes during volume backup processing.
> If BACKUP=YES(TAPE(*unit*)), DFSMShsm selects only tape daily backup volumes. The unit allocated for backup requests directed outside of SMS-managed tape libraries is *unit*.

If BACKUP=NO, backup processing is currently disabled. If backup is disabled, no DFSMShsm backup function can be processed.

If SPILL=YES, DFSMShsm does SPILL processing on full DASD daily backup volumes.

> If SPILL=YES(ANY), DFSMShsm selects any type of available SPILL backup volumes during SPILL processing.
> If SPILL=YES(DASD), DFSMShsm selects only DASD SPILL backup volumes during SPILL processing.
> If SPILL=YES(TAPE), DFSMShsm selects only tape SPILL backup volumes during SPILL processing.
> If SPILL=YES(TAPE(*unit*)), DFSMShsm selects only tape SPILL backup volumes. The unit allocated for SPILL requests directed outside of SMS-managed tape libraries is *unit*.

If SPILL=NO, DFSMShsm does not perform SPILL processing on full DASD daily backup volumes. It does perform cleanup on those volumes.

MAXDSRECOVERTASKS *nn* is the maximum number of recover tasks allowed concurrently to process. The value for *nn* must be between 1–64.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0275I SETMIG LEVEL FAILED, ENTRY *qualifier* NEVER PERMITTED TO BE CHANGED

Explanation: The SETMIG LEVEL *qualifier* command failed. All data sets controlled by DFSMShsm beginning with the initial characters of the data set name, *qualifier*, are not permitted to have their space management status changed.

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0280I REPORT COMPLETED

Explanation: The REPORT command has successfully completed processing.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0281I INVALID DATE SPECIFIED

Explanation: A DEFINE, RECOVER, or REPORT command was issued with an invalid date or invalid date format. The acceptable date format for the DEFINE command is *yy/mm/dd* (year, month, and day). The CYCLESTARTDATE *yy/mm/dd* (year, month, and day) must be today's date or a date in the past. Future dates are not recognized. The acceptable formats for the RECOVER and REPORT commands are *yy/mm/dd*, *mm/dd/yy* or *mm/dd* (where *yy* defaults to the current year), if you issue the command before 1 January 2000; and *yyyy/mm/dd*, if you issue the command after 31 December 1999.

Source: DFSMShsm

System Action: The command ends. The cycle start date remains unchanged. DFSMShsm processing continues.

Application Programmer Response: Correctly specify the date and reissue the command.

ARC0282I INVALID COMBINATION OF FROM DATE AND TO DATE

Explanation: A REPORT command was issued with FROMDATE() and TODATE(). The TO date is earlier than the FROM date, or the FROM date is before 2000 and the TO date is after 1999.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Correct whichever date is incorrect and reissue the command. If the FROM date is prior to 1 January 2000 and the TO date is after 1999, you must issue two

REPORT commands: one for the data prior to 2000 and one for the data after 1999.

ARC0283I MM/DD/YY DATE FORMAT NOT VALID AFTER 1999

Explanation: The RECOVER command with DATE(mm/dd/yy), or the REPORT command with FROMDATE(mm/dd/yy) or TODATE(mm/dd/yy), was issued before 1 January 2000.

Source: DFSMShsm

System Action: DFSMShsm uses the date to determine (for RECOVER) which backup version should be recovered, or (for REPORT) which range of records should be reported.

Application Programmer Response: After 1999, the date must always be specified as yyyy/mm/dd.

ARC0284I YY/MM/DD DATE FORMAT NOT VALID AFTER 1999

Explanation: The DEFINE command with CYCLESTARTDATE(yy/mm/dd) was issued before 1 January 2000.

Source: DFSMShsm

System Action: DFSMShsm uses the date to determine the start of the cycle being defined.

Application Programmer Response: After 1999, the date must be specified as yyyy/mm/dd.

ARC0298I ***WARNING* VOLUME *volser* WILL NOT BE PROCESSED FURTHER DUE TO ABENDS**

Explanation: Command, automatic space management, or backup has been in process on *volser* when an abnormal end (abend) has occurred. Processing of the volume ends. All volume-level functions that would normally include volume *volser* skip this volume.

Source: DFSMShsm

System Action: The requested processing on this volume ends. DFSMShsm processing continues.

Application Programmer Response: Determine if the abend that has occurred is directly related to a problem with the volume. If the abend is not the result of a problem with the volume, do one of the following to make the volume again available to volume-level functions:

- Delete the volume with the DELVOL command, then add the volume with the ADDVOL command. Use the same attributes that the volume had the last time it was ADDVOLed.
- Restart DFSMShsm.

If you determine that the abend is the direct result of a problem with the volume, then correct the problem and perform one of the above two actions.

ARC0299I VOLUME *volser* WILL NOT BE {MIGRATED | BACKED UP} BECAUSE OF PREVIOUS ABENDS

Explanation: DFSMShsm was about to perform the indicated function on volume *volser*, but the volume did not process because of previous abnormal ends (abends) while being processed by DFSMShsm.

Source: DFSMShsm

System Action: The requested processing on the volume is not performed. DFSMShsm processing continues.

Application Programmer Response: The last time a volume-level function was run on this volume, an abend occurred. An ARC0298I message was issued at that time. Determine if the abend that occurred at that time was directly related to a problem with the volume. If the abend was not the result of a problem with the volume, do one of the following to make the volume again available to volume-level functions:

- Delete the volume with the DELVOL command, then add the volume with the ADDVOL command. Use the same attributes that the volume had the last time it was ADDVOLed.
- Restart DFSMShsm.

If you determine that the abend was the direct result of a problem with the volume, then correct the problem and perform one of the above two actions.

ARC0301W VOLUME *volser* TO BE {AUDITED | BACKED UP | MIGRATED | RECOVERED | SPACE MANAGED | COMMAND SPACE MANAGED | DUMPED | RESTORED} ALREADY IN USE BY HOST={*procid* | THIS HOST}

Explanation: DFSMShsm was about to perform the indicated function on the volume with volume serial number *volser*. However, the volume was already being processed. If one character appears for the *procid*, the volume is being processed by another processing unit. If HOST=THIS HOST appears, another function is being performed on the volume within the same processing unit. For automatic processes, this message is issued after all attempts to retry the process on this volume fail.

Source: DFSMShsm

System Action: The requested processing on the volume is not performed. DFSMShsm processing continues. For automatic functions, this volume is not processed for this cycle day.

Application Programmer Response: After the current function being performed on the volume ends, reissue the command that caused processing to be attempted on the volume. If you suspect the record should not be serialized (the information in the processing unit identifier field of the record is no longer valid), you can use the FIXCDS command to reset the processing unit identifier field. This field is not valid if a processing unit fails while the task running under that processing unit serializes the record. The LIST command with the HOST parameter can be used to list the DFSMShsm control data set records serialized by a specified processing unit.

ARC0302I DATA SET *dsname* WILL NOT BE REBLOCKED DURING {RECALL | RECOVERY}. INSTALLATION-WIDE EXIT RETURN CODE= *return-code*

Explanation: The user requested control be given to the installation-wide exit so a new block size for the data set *dsname* could be specified during recall or recovery processing. However, the existing block size is used. If the *return-code* is nonzero, the user requested no reblocking of the data set. If the *return-code* is 0, reblocking does not occur as a result of one of the following conditions:

- The ESTAE macro failed for the installation-wide exit (message ARC0304I is issued).
- The installation-wide exit resulted in an abnormal end (abend) (message ARC0004I is issued).
- The user requested a block size larger than the maximum record size (32760).
- The user requested a block size smaller than the existing record size.
- The block size did not change from the existing block size.

Source: DFSMShsm

System Action: Recall or recovery of the data set continues with the existing block size. DFSMShsm processing continues.

Application Programmer Response: If the reblocking does not occur because of an installation-wide exit abend, the installation-wide exit is disabled until the problem is corrected and the installation-wide exit control is reestablished by issuing a SETSYS command.

ARC0303I DATA SET *dsname* **WILL BE {RECALLED | RECOVERED} USING {DFSMSDSS DETERMINED VALUE |** *blocksize***} FOR THE BLOCKSIZE**

Explanation: Data set conversion to reblock was specified in the SETSYS command, or with DFSMSdss data movement, the data set is system reblockable for recall or recovery of the data set *dsname*. If DFSMSdss data movement was used, it indicates that DFSMSdss determined the block size and that the actual block size value is not given. If DFSMShsm data movement was used, the new *blocksize* for the data set is specified.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0304I SETUP OF ESTAE ENVIRONMENT FOR MODULE *modname* **FAILED, RETURN CODE=***return-code*

Explanation: The DFSMShsm module *modname* attempted to set up an ESTAE environment but the MVS function was unsuccessful. The return code from the MVS ESTAE macro is *return-code*.

Source: DFSMShsm

System Action: Module *modname* ends its processing.

Application Programmer Response: Examine the return codes from the MVS ESTAE macro and take corrective action.

ARC0305I GETMAIN/FREEMAIN FAILURE IN MODULE *modname***, RETURN CODE=***return-code*

Explanation: The DFSMShsm module *modname* attempted to obtain or free storage, but the MVS function was unsuccessful. The return code from the GETMAIN or FREEMAIN macro is *return-code*.

Source: DFSMShsm

System Action: If the error is a GETMAIN error, the module ends processing. If the error is a FREEMAIN error, the module continues processing.

Application Programmer Response: Examine the return code from the MVS GETMAIN or FREEMAIN macro and take corrective action.

ARC0306I DATA SET *dsname* **WILL NOT BE REBLOCKED DURING {RECALL | RECOVERY}**

Explanation: Conversion to reblock the data set *dsname* during recall or recovery processing was specified, but DFSMShsm determined the existing block size was the best default block size for the data set.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0307I ERROR {GET | FREE}MAINING STORAGE FROM SUBPOOL *subpool* **IN MODULE** *modname***, RC=***return-code*

Explanation: The DFSMShsm module *modname* attempted to obtain or free some storage from subpool *subpool*, but the MVS function was unsuccessful. The return code from the GETMAIN or FREEMAIN macro is *return-code*.

Source: DFSMShsm

System Action: If the error is a GETMAIN error, the module ends processing. If the error is a FREEMAIN error, the module continues processing.

Application Programmer Response: Examine the return code from the MVS GETMAIN or FREEMAIN macro and take corrective action.

ARC0308I RETURN CODE *return-code* **RECEIVED FROM INSTALLATION EXIT** *installation exit name***, EXIT MARKED INOPERATIVE**

Explanation: The specified installation-wide exit *installation-wide-exit-name* returned a nonzero return code to DFSMShsm. The return code *return-code* indicates an abnormal condition.

Source: DFSMShsm

System Action: The specified exit is disabled. DFSMShsm processing continues.

Application Programmer Response: Determine the reason for the specified return code from the exit. If you determine that it is an unusual circumstance, reactivate the exit. If the exit has an error, correct it and reactivate it.

ARC0309I TAPE VOLUME *volser* **REJECTED, {VOLUME ALREADY CONTAINS VALID DFSMSHSM DATA | VOLUME RACF-PROTECTED BUT DOES NOT APPEAR IN DFSMSHSM.'S TAPE VOLUME SET | VOLUME IS A BACKUP VOLUME, MIGRATION VOLUME REQUIRED | VOLUME IS A MIGRATION VOLUME, BACKUP VOLUME REQUIRED | VOLUME IS A DUMP VOLUME, MIGRATION VOLUME REQUIRED | VOLUME IS A DUMP VOLUME, BACKUP VOLUME REQUIRED | VOLUME IS A BACKUP VOLUME, DUMP VOLUME REQUIRED | VOLUME IS A MIGRATION VOLUME, DUMP VOLUME REQUIRED | DUMP CLASS CONFLICT | VOLUME HAS ALREADY BEEN USED FOR OUTPUT ON ALLOCATED DEVICE}**

Explanation: The DCB volume verification exit was invoked by OPEN or end-of-volume (EOV) processing for the tape volume whose volume serial number is *volser*. The tape volume is rejected by the DFSMShsm volume verification exit for one of the following reasons:

- The tape volume mounted already contains valid DFSMShsm data.
- The tape volume mounted is RACF-protected, but does not appear in DFSMShsm's RACF tape volume set of HSMHSM or DFHSMx (where *x* is the last nonblank character of the tape volume's *volser*).
- The tape volume mounted is defined to DFSMShsm as a backup volume and a migration volume is required.
- The tape volume mounted is defined to DFSMShsm, as a migration volume and a backup volume is required.

- The tape volume mounted is defined to DFSMShsm as a dump volume, but a migration volume is required.
- The tape volume mounted is defined to DFSMShsm as a dump volume, but a backup volume is required.
- The tape volume mounted is defined to DFSMShsm as a backup volume, but a dump volume is required.
- The tape volume mounted is defined to DFSMShsm as a migration volume, but a dump volume is required.
- The dump class to which the volume is currently assigned does not match the dump class to which it is dumped.
- A volume is mounted for output on an allocated device after a previous mount for output during the processing of the same function.

Source: DFSMShsm

System Action: A keep message is sent for the tape volume. The tape volume is rewound and unloaded by OPEN or EOV processing and a mount message is sent for another tape volume. If the SELECTVOLUME option is SPECIFIC, and it is OPEN processing, DFSMShsm attempts to select another tape volume already defined to DFSMShsm. If there are three consecutive specific volumes mounted and rejected with an ARC0309I message, the operator receives a nonspecific (PRIVAT) mount request. If it is EOV processing, DFSMShsm attempts to select another tape volume already defined to DFSMShsm without regard to the number of rejections occurring with an ARC0309I message for this mount. If DFSMShsm is able to select another tape volume, the operator receives a specific mount request. If DFSMShsm is unable to select another tape volume or the SELECTVOLUME option is SCRATCH, the operator receives a nonspecific (PRIVAT) mount request.

Application Programmer Response: The system programmer determines what valid DFSMShsm data already exists on the tape volume by entering the DFSMShsm space manager LIST command. For level 2 migration tape volumes and backup and SPILL tape volumes, issue the LIST command with the TTOC parameter. For dump volumes, issue the LIST command with the DUMPVOLUMES parameter.

If the message indicates the tape volume does not appear in one of DFSMShsm’s RACF tape volume sets, see *DFSMS/MVS DFSMShsm Implementation and Customization Guide* sections “Authorizing and Protecting DFSMShsm Resources” and “Implementing DFSMShsm Tape Environments” for a description of how to add tape volumes to DFSMShsm’s RACF tape volume sets.

If the message indicates the dump classes are in conflict, use the DELVOL command with the UNASSIGN parameter for the dump volume so the volume can be used in any other dump class for subsequent dumps.

If the message indicates the tape volume is RACF-protected by another user, the system programmer should request the RACF security administrator look into the matter. The RACF security administrator can determine if the tape volume is RACF-protected, and by whom, by entering the following RACF command:

RLIST TAPEVOL *volser* ALL

The sender of the command must have a certain level of access authority to the resource depending on the information requested. For additional information, see *OS/390 Security Server (RACF) Command Language Reference*.

Operator Response: The tape operator should respond to the specific mount request by mounting the requested tape volume on the requested tape drive.

The tape operator can respond to the nonspecific (PRIVAT) mount request by mounting a scratch tape or a tape volume already defined to DFSMShsm on the requested tape drive. If the tape operator mounts a scratch tape, the tape should not be RACF-protected by another user nor used previously for output by the DFSMShsm function issuing the message. If the tape operator mounts a tape volume already defined to DFSMShsm, the tape volume should not contain any valid DFSMShsm data (it should be empty) and should not be RACF-protected by another user. Also, the type of tape volume mounted (backup, migration, or dump) should be the same as the type of tape volume that encountered the EOV condition.

ARC0310A CAN TAPE *volser* BE MOUNTED? REPLY Y OR N

Explanation: The wait time as established by the DFSMShsm SETSYS command for open or end-of-volume (EOV) processing of a tape data set has elapsed and open or EOV processing has not returned control to DFSMShsm. If the tape with volume serial number *volser* is available and can be mounted within the next mount wait time period, reply Y. Otherwise, reply N. If the reply is Y, and the wait time again elapses before open or EOV processing completes, open or EOV fails and the currently running task is detached.

Source: DFSMShsm

System Action: The current DFSMShsm task waits until a reply is received. If the waiting task holds resources critical for DFSMShsm processing, all of DFSMShsm may eventually be waiting for the reply.

If the reply is Y, DFSMShsm resets the time to the user mount wait time and continues to wait for mount completion.

If the reply is N, the mount request ends and the DFSMShsm function (migration, recall, backup, recovery, or recycle) ends if the mount was for an input volume or continues using another volume if the mount was for an output volume. If the reply is N and the DFSMShsm function is volume dump or volume restore using DFSMSdss, the mount request ends and the DFSMShsm function ends.

Operator Response: If the tape with volume serial number *volser* is available and can be mounted within the time allowed, reply Y and mount the specified tape. Otherwise reply N. If the time period is not known, issue the QUERY command with the SETSYS parameter and look at the MOUNT WAIT TIME value displayed in message ARC0147I.

ARC0311A SYSTEM TIMER INOPERABLE - CAN *volser* BE MOUNTED? REPLY Y OR N

Explanation: The wait time used for open or end-of-volume (EOV) processing of a tape data set cannot be measured because of an error in attempting to set the system timer. If the tape with volume serial number *volser* is available and can be mounted, reply Y. Otherwise, reply N. If the reply is N, open or EOV fails and the current DFSMShsm task is detached.

Source: DFSMShsm

System Action: The current DFSMShsm task waits until a reply is received. If the reply is Y, DFSMShsm waits for mount completion. If the reply is N, the mount request ends and the DFSMShsm function (migration, recall, backup, recovery, or recycle) ends if the mount was for an input volume or continues using another volume, if the mount was for an output volume.

Operator Response: If the tape with volume serial number *volser* is available and can be mounted, reply Y and mount the specified tape. If the tape cannot be found, reply N.

ARC0312I RECALLS FROM TAPE *volser* TERMINATED FOR USAGE BY HOST *h*

Explanation: The subject tape has been in continuous use doing recalls, and the time has exceeded a SETSYS TAPERECALLLIMITS specification. If *h* is the ID of a different host than the one having the tape mounted, then a recall request exists on that host that has a higher priority than the recall request that this host was about to start.

If *volser* is the ID of the host issuing the message, then a recall request for a different tape exists on this host. The recall request is a higher priority and is being delayed because DFSMShsm is running at the maximum number of permitted tape recall tasks than the one that this host was about to start.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

ARC0313A TAPE VOLUME *volser* IS NEEDED FOR {RECALL | RECYCLE | RECOVER | RESTORE}

Explanation: A DFSMShsm RECALL, RECYCLE, or RECOVER command was issued and the data to be moved resides on the tape volume *volser*. For RECYCLE, this message is issued only if the SETSYS TAPEINPUTPROMPT allows it, the volume is not in an Automated Tape Library data server (ATLDS), and there is more than one volume needed for the RECYCLE. For RECALL, RECOVER, and RESTORE, this message is issued for each tape needed if the SETSYS TAPEINPUTPROMPT allows it, and the tapes are not in an ATLDS. The message for the last tape is followed by message ARC0314A for either volume recovery or restore, or both, or recycle, or by message ARC0366A for either data set recovery or restore, or both, or recall. These messages are routed to the tape pool.

Source: DFSMShsm

System Action: Recall, recycle, or either recovery or restore processing, or both, continues. DFSMShsm processing continues.

Operator Response: Determine the availability of tape volume. If you do not want these messages issued, the SETSYS TAPEINPUTPROMPT parameter provides a way to prevent them from being issued. Prepare to respond to message ARC0314A or ARC0366A.

ARC0314A CAN THE *nvol* VOLUME(S) ABOVE BE MOUNTED FOR {RECYCLE | RECOVER | RESTORE}? REPLY Y OR N

Explanation: If the number of tape volumes *nvol* specified in the preceding ARC0313A messages is available and can be mounted, reply Y. Otherwise, reply N. If the reply is N, the current volume recycle or the current data set recovery or restore fails. See the explanation for message ARC0313A.

Source: DFSMShsm

System Action: Recycle or recovery or restore processing waits for a valid reply to the message.

Operator Response: Reply Y if all the volumes named in the preceding ARC0313A messages are available for mounting. Otherwise reply N.

ARC0315I OCDS NOT DEFINED

Explanation: An attempt was made to access the offline control data set, but the data set does not exist. This message can be received due to an ARC0910E message for the OCDS.

Source: DFSMShsm

System Action: The command fails. The DFSMShsm task that is attempting to go to tape fails. If the DFSMShsm task is backup, all the backup tasks are held. If the DFSMShsm task is migration, the migration to tape is held. If the DFSMShsm task is recycle, the recycle function is held. Under some conditions, all three functions are held.

Application Programmer Response: Create the offline control data set. Messages ARC0560E and ARC0559I may be received due to the NO OCDS defined condition. These messages may or may not be pertinent to your environment. Ignore these messages until the OCDS is defined.

If your environment usually functions with an OCDS defined, check for the ARC0910E message and follow the recommended actions for this message.

ARC0316I BAD VALUE RETURNED FROM THE RECALL INSTALLATION-WIDE EXIT ROUTINE FOR *dsname*, RC=*return-code*

Explanation: The user-coded exit was taken to select volumes to recall the non-SMS-managed data set *dsname* from a list provided by DFSMShsm. A value returned by the user-coded exit does not coincide with the position of any of the volumes in the list provided by DFSMShsm. If there was at least one good value for DFSMShsm to use, DFSMShsm attempts to recall the data set to the volumes indicated by the good values. For jobs going through JES3 setup, JES3 data set reservation was performed on the volumes for the data set. However, if there were no volumes for DFSMShsm to use (RC=8), JES3 data set reservation fails for the job requiring the given migrated data set. This permits the user to perform a DFSMShsm command recall of the data set to any volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: If you determine that the DFSMShsm recall function can run without the installation-wide exit, turn off the installation-wide exit using a SETSYS command with the EXITOFF parameter and release the recall function. DFSMShsm runs with its volume selection.

Application Programmer Response: The user-coded exit generated an invalid value. Correct the cause of the bad value. If necessary, relink the exit module and turn on the installation-wide exit using a SETSYS command with the EXITON parameter.

ARC0317I JOB FAILED DUE TO AN ERROR IN THE RECALL INSTALLATION EXIT FOR *dsname*, ABEND CODE=*errcode*

Explanation: The ARCRDEXT exit for the recall function has abnormally ended (abended). The data set name that ARCRDEXT has been processing is *dsname.* DFSMShsm has placed a hold on the recall of all undirected data sets. DFSMShsm continues to recall any data set that is directed to a given volume, but stops returning volumes to JES3 for setup of any job requiring a migrated data set. JES3 fails all setups for any job requiring a migrated data set. To release both the recall function and JES3 setup for jobs referring to migrated data sets, issue the DFSMShsm RELEASE command with the RECALL parameter. The reason for the abend has been passed through the *errcode*.

Source: DFSMShsm

System Action: DFSMShsm processing continues with limited recall processing. All JES3 data set reservations for any job requiring a migrated data set will fail.

Operator Response: If you determine that the DFSMShsm recall function can run without the installation-wide exit, turn off the installation-wide exit using a SETSYS command with the EXITOFF parameter. DFSMShsm will run with its volume selection. If you determine that the DFSMShsm recall exit will not abend again, release the recall function.

Application Programmer Response: Correct the cause of the abend and relink the exit module. The exit can be reactivated with a SETSYS command.

ARC0318I NO PRIMARY VOLUME AVAILABLE FOR RECALL OF *dsname*

Explanation: During JES3 data set reservation, DFSMShsm was invoked because the data set *dsname* was migrated. DFSMShsm was evaluating the primary volumes that should be returned to JES3 and found no acceptable primary volumes with the required space management attributes. To determine why DFSMShsm could not find any volumes, examine the following parameters:

- RECALL parameter of the SETSYS command
- POOL parameter of the DEFINE command
- AUTORECALL parameter of the ADDVOL command
- Space management and backup device category attributes of the ADDVOL command

If the data set organization is BDAM, the data set must be recalled to a volume with the same device type from which it migrated unless the VOLUME or DAOPTION parameter of the HRECALL or RECALL command is used.

If the data set organization is not BDAM, one of the following conditions must exist:

- The data set block size plus the data set key length is less than the track size of the candidate volume.
- The candidate volume is the same device type as the device from which the data set migrated.
- The candidate volume supports track overflow and the data set record indicates track overflow.

This message can also happen in a JES3 system if all the volumes in a user-defined pool are offline during DFSMShsm initialization (when the volumes are added and the pools defined). Even when the volumes are subsequently mounted, DFSMShsm cannot recall data sets to those volumes with valid data set reservation by JES3, although the volumes will appear in response to a QUERY command with the POOL parameter. Therefore, the message can indicate a DFSMShsm error that is caused by violation of an operational restriction.

Source: DFSMShsm

System Action: DFSMShsm processing continues, but no volumes are returned to JES3. JES3 fails data set reservation for any job requiring the migrated data set. If desired, the user can perform a command recall of the data set to any volume associated with the data set.

Application Programmer Response: Examine the DFSMShsm parameters to ensure that they are correct for the volumes in the DFSMShsm pool associated with the data set.

ARC0319I UNUSED SPACE NOT RELEASED DURING RECALL/RECOVER OF PARTITIONED DATA SET *dsname*

Explanation: A RECALL or RECOVERY command was issued for the data set *dsname*. When the original data set was allocated, track overflow was requested. DFSMShsm encountered an error trying to update the JFCB that corresponds to the allocation of the primary copy of the data set.

To recall or recover partitioned data sets with track overflow whose directory spans more than one track, DFSMShsm does the following:

- Allocates the data set without the RELEASE option.
- Opens the data set without track overflow.
- Writes the directory.
- Closes the data set. The new space is not released.
- Updates the JFCB so new space is released after the data set is closed.
- Opens the data set with track overflow.
- Writes the members with track overflow.
- Closes the data set. The new space is released.
- Deallocates the data set.

Source: DFSMShsm

System Action: The data set was processed successfully, but new space was not released when the primary copy of the data set was closed.

Application Programmer Response: If the data set is large or needed to be compacted before it was migrated or backed up, release the new space.

ARC0320I BVR REFRESH STARTING

Explanation: DFSMShsm has successfully completed CDS Backup and is beginning to rebuild the BVR records into an optimal form.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The BVR records are being refreshed.

Application Programmer Response: None.

Storage Administrator Response: None.

ARC0321E BVR REFRESH NOT COMPLETED

Explanation: For a request not to be COMPLETED, a number of errors were encountered during processing causing termination of REFRESH.

Source: DFSMShsm

System Action: BVR refresh processing ends. DFSMShsm processing continues.

Application Programmer Response: Notify the Storage Administrator.

Storage Administrator Response: Refer to previous messages for reasons for failure. Take corrective action and re-execute the BVR Refresh by issuing a CDS Backup.

ARC0322I *type* VOLUME RECORD CREATED — KEY=*key*

Explanation: The BVR refresh processing successfully created the backup cycle volume record of type *type* where *type* is either DAILY ASSIGNED, BACKUP UNASSIGNED, or SPILL. This new record has a key of *key*.

Source: DFSMShsm

System Action: DFSMShsm BVR refresh processing continues.

Application Programmer Response: None.

Storage Administrator Response: None.

ARC0323I BVR RECORDS HAVE BEEN SUCCESSFULLY REFRESHED

Explanation: The BVR refresh processing successfully regenerated and reorganized all of the backup cycle volume records used by this DFSMShsm complex.

Source: DFSMShsm

System Action: BVR Refresh completed successfully. DFSMShsm processing continues.

Application Programmer Response: None.

Storage Administrator Response: None

ARC0324I OLD VERSION OF BACKUP VOLUME RECORD NOT FOUND

Explanation: The BVR conversion program issued a VSAM GET to retrieve the old backup cycle volume record, but no record was found. This condition can be expected if the DEFINE command with the BACKUP parameter had not been processed in an earlier DFSMShsm release.

Source: DFSMShsm

System Action: Conversion processing continues.

Application Programmer Response: None.

ARC0325I UNABLE TO CONVERT BACKUP VOLUME RECORDS. BACKUP NOT ENABLED

Explanation: The BVR conversion program did not complete successfully due to an error that was encountered during processing.

Source: DFSMShsm

System Action: Conversion processing ends. DFSMShsm processing continues with the backup function disabled.

Application Programmer Response: Refer to previous messages for a specific reason for failure. Take corrective action, stop DFSMShsm, and restart it so the conversion will be rerun.

ARC0326I ERROR {READING | WRITING} BVR RECORD DURING {STARTUP | DEFINE BACKUP CYCLE}, BACKUP WILL NOT BE ENABLED

Explanation: During DFSMShsm initialization or processing of a DEFINE command, an error occurred in trying to read or write a backup cycle volume record.

Source: DFSMShsm

System Action: Backup is disabled. DFSMShsm processing continues.

Application Programmer Response: Take the necessary action to correct the I/O error, restart DFSMShsm, or reenter the DEFINE command.

ARC0327I UNEXPECTED I/O ERROR OCCURRED DURING BCDS PROCESSING, KEY = ***reckey*****, CODE=*****reason-code***

Explanation: The BVR conversion program did not complete successfully due to an error that was encountered during CDS processing. The reckey is the key of the Record where the CDS operation failed

For *reason-code* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: DFSMShsm processing continues with volume backup disabled.

Application Programmer Response: Notify the storage administrator.

Storage Administrator Response: If the *reason-code* is 4, 8, or 12 correct the problem, possibly using the FIXCDS command.

If the *reason-code* is 16, an I/O error is the normal cause and an error message from the ERPs should be found in DFSMShsm job log SYSMSG data set.

If the *reason-code* is 20, an internal DFSMShsm error occurred. Call software service.

ARC0328I ERROR OPENING FILE ARCPRINT

Explanation: During the initialization of the DFSMShsm log utility program ARCPRLOG or ARCPEDIT, an open for the file ARCPRINT failed.

Source: DFSMShsm

System Action: Processing ended and the final condition code was set to 4.

Application Programmer Response: This error generally occurs when the DD statement is missing. Add the DD statement to the job and rerun.

ARC0329I ERROR OPENING FILE ARCLOG

Explanation: During the initialization of the DFSMShsm log utility program ARCPRLOG or ARCPEDIT, an open for the file ARCLOG failed.

Source: DFSMShsm

System Action: Processing ended and the final condition code was set to 4.

Application Programmer Response: This error generally occurs when the DD statement is missing. Add the DD statement to the job and rerun.

ARC0330I ERROR OPENING FILE ARCEDIT

Explanation: During the initialization of the DFSMShsm log utility program ARCPRLOG, an OPEN request for the file ARCEDIT failed.

Source: DFSMShsm

System Action: Processing ended and the final condition code was set to 4.

Application Programmer Response: This error generally occurs when the DD statement is missing. Add the DD statement to the job and rerun.

ARC0331I VOLUME ***volser*** **NOT DUMPED - SDSP IN USE BY ANOTHER DFSMSHSM FUNCTION OR HOST**

Explanation: The SDSP on the ML1 volume specified as *volser* was in use by a DFSMShsm migration task when the volume dump process attempted to dump the volume.

Source: DFSMShsm

System Action: The volume is not dumped.

System Programmer Response: Ensure that the SDSP is not in use and issue a BACKVOL DUMP command for *volser*.

ARC0332R PLEASE SATISFY THE TAPE MOUNT REQUEST ON UNIT *unitaddr* USING A (STANDARD | ENHANCED) CAPACITY CARTRIDGE, REPLY Y TO CONTINUE

Explanation: A mount for a tape volume is about to be requested on *unitaddr*. The type of tape volume specified in this message indicates the appropriate type of cartridge to be mounted. If ‘STANDARD’ is displayed, the operator should mount a tape volume of standard capacity. After a tape volume of the requested type is mounted, reply ‘Y’ to the outstanding message to allow processing to continue. If the requested type of tape volume cannot be mounted, also reply ‘Y’ to continue. In this case, the particular TAPECOPY of that volume fails, but the TAPECOPY command continues with the next volume copied. Any reply other than ‘Y’ causes the TAPECOPY not to continue, and the TAPECOPY waits until a reply of ‘Y’ is entered.

Source: DFSMShsm

System Action: DFSMShsm processing for that task waits for the tape mount requested by OPEN to be satisfied, and the operator replies to the outstanding message before continuing. All other DFSMShsm processing continues.

Application Programmer Response: This message is issued only if requested via a patch of the MCVT + 4C3 BITS(.......1). Otherwise, ARC0332A is issued for the TAPEOUTPUTPROMPT processing.

ARC0333I (BACKUP/EXPIREBV | MIGRATION/TAPE RECALL | RECYCLE | MIGRATION) HELD, GETMAIN ERROR

Explanation: A GETMAIN macro was issued for virtual storage. The macro failed to get the storage.

Source: DFSMShsm

System Action: BACKUP/EXPIREBV indicates backup and expire backup versions processing were held. DFSMShsm processing continues.

MIGRATION/TAPE RECALL indicates migration and tape recall processing were held. DFSMShsm processing continues.

RECYCLE indicates recycle processing was held. DFSMShsm processing continues.

MIGRATION indicates migration processing was held. DFSMShsm processing continues.

Application Programmer Response: BACKUP/EXPIREBV — Take corrective action based on message ARC0307I that was issued to the operator’s console and the backup activity log. When the condition has been corrected, issue the following commands:

RELEASE BACKUP
RELEASE EXPIREBV

MIGRATION/TAPE RECALL — Take corrective action based on message ARC0307I that was issued to the operator’s console and the migration activity log. When the condition has been corrected, issue the following commands:

RELEASE MIGRATION
RELEASE RECALL(TAPE)

RECYCLE — Take corrective action based on message ARC0307I that was issued to the operator’s console and the recycle activity log. When the condition has been corrected, issue the following commands:

RELEASE RECYCLE

MIGRATION — Take corrective action based on message ARC0307I that was issued to the operator’s console and the migration activity log. When the condition has been corrected, issue the following commands:

RELEASE MIGRATION

ARC0334I ERROR INVOKING *macro* MACRO SERVICE, DEVNCHAR = *dev* | UNITNAME = *unitname* | PTOKEN = *ptoken*}, RC = *return-code*, REAS = *rsncode*

Explanation: DFSMShsm attempted to invoke IOS, UCB, or EDT interface service to perform the *macro* macro service on the volume serial number *volser*, device number *dev*, unit name *unitname*, or pin token *ptoken*. *volser* cannot be determined. The macro interface service failed.

macro indicates the particular type of IOS, UCB, or EDT interface service was being processed when the error occurred. The following are the descriptions of the possible macro service for *macro*:

- **IOSVSUCB** macro — DFSMShsm invokes IOSVSUCB macro during DFSMShsm automatic function processing to obtain the UCB address for a particular volume serial *volser*. This macro is only invoked if the new UCB service (e.g. UCBLOOK macro) is not installed in the system that DFSMShsm is running.
- **IOCMAPE** macro — DFSMShsm invokes IOCMAPE macro to obtain the channel path IDs (CHPIDs) for a given primary volume (SMS and non-SMS) *volser* which is to be processed by DFSMShsm automatic function. This macro is only invoked if the new UCB service (e.g. UCBINFO macro) is not installed in the system that DFSMShsm is running.
- **UCBLOOK** macro — DFSMShsm invokes UCBLOOK macro to obtain the UCB common segment address of a given volume serial *volser* or a given device number *devnumber*. A PIN is also requested with UCBLOOK macro by DFSMShsm if a UCB obtained by UCBLOOK is to be pinned.
- **UCBPIN** macro — DFSMShsm invokes UCBPIN macro to unpin a pinned UCB its pin token was represented in pin token *ptoken*. DFSMShsm also invokes UCBPIN macro to pin a UCB for a given volume serial number *volser*. In the case of failure in unpinning, the ARC0335I message is issued after this message to provide the device number and volume serial number.
- **UCBINFO** macro — DFSMShsm invokes UCBINFO macro to obtain the CHPIDs for a given primary volume (SMS and non-SMS) *volser* which is to be processed by DFSMShsm automatic function.
- **UCBDEVN** macro — DFSMShsm invokes UCBDEVN macro to obtain 4-digit device number associated with the *volser* for issuing message ARC0354I. Since UCBDEVN macro failed to obtain the device number, an asterisk **** will be put in message ARC0354I.
- **EDTINFO** macro — DFSMShsm invokes EDTINFO macro to obtain the UCB device number list associated with a particular unit name *unitname* specified in the user esoteric unit table.

IOS, UCB, or EDT service returned the return code of *return-code* and the reason code of *rsncode*. IOS, UCB, or EDT service macros return codes and reason codes are documented in the MVS/SP macro documentation. If the return code of *return-code* is 900, the indicated *macro* abended or DFSMShsm abended when invoking the macro.

Source: DFSMShsm

System Action: DFSMShsm processing continues with the following results:

- **IOSVSUCB** macro failure — Volume serial *volser* will not be processed during this automatic function. It will be attempted at the next automatic function.

- **IOCMAPE** macro failure — The volume will be processed without updating the CHPIDs.
- **UCBLOOK** macro failure —
  - The function requesting the UCBLOOK service for the device number *devnumber* will be failed.
  - The function requesting the UCBLOOK service for the volume serial *volser* will be failed or the volume will not be processed during this automatic function if the requestor is a DFSMShsm's automatic function.
- **UCBPIN** macro failure — The function requesting the UCBPIN PIN service will be failed. In the case of failure in unpinning, the ARC0335I message is issued after this message to provide the device number and volume serial number. Stop DFSMShsm will force a pinned UCB to be unpinned.
- **UCBINFO** macro failure — The volume will be processed without updating the CHPIDs.
- **UCBDEVN** macro failure — An asterisk **** will be put in message ARC0354I.
- **EDTINFO** macro failure — The function requesting the EDTINFO service will be failed.

Application Programmer Response: Determine the error from the return and reason codes. Correct the error and retry the failing function.

ARC0335I THE DEVICE NOT UNPINNED

Explanation: DFSMShsm invoked UCBPIN macro to unpin the device *dddd* for the volume serial number *volser*. UCBPIN macro failed to unpin the device. Message ARC0334I will be preceded by this message indicating the failing return code and reason code from UCBPIN macro. Stop DFSMShsm is required to unpin the device. Otherwise, the device *dev* will not be removed from the system. the device number for the volume serial number *volser*. *volser* cannot be determined.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Inform the system programmer of the error, examine the error from the return and reason codes in ARC0334I, correct the error, and take the appropriate action to unpin the device.

ARC0336I CONFLICTING COMPACTION OPTIONS SPECIFIED - OPTION {ALL | NONE} WILL BE USED

Explanation: A SETSYS command was issued with the COMPACT parameter specifying those compaction options that are to be in effect. ALL or NONE was also specified on the command. When you specify ALL or NONE on the SETSYS COMPACT command, DFSMShsm ignores all other subparameters.

Source: DFSMShsm

System Action: If you specified the ALL subparameter, all compaction options are enabled. If you specified the NONE subparameter, all compaction options are disabled. DFSMShsm processing continues.

Application Programmer Response: If you do not want all compaction options enabled or disabled, reissue the SETSYS command with the COMPACT parameter specifying the correct compaction options.

ARC0337I {EXIT | USER UNIT | COMPACTION NAMES | CDSVB} TABLE REQUEST FAILED - NOT ENOUGH SPACE

Explanation: A SETSYS command was issued or DFSMShsm initialization is taking place which has requested an installation-wide exit table, an esoteric unit name table, a compaction names table, or a CDS version backup table. Not enough storage was available.

Source: DFSMShsm

System Action: DFSMShsm uses the general compaction tables to do compaction. If a table already exists, the names in that table still use the encode table that coincides with the existing table.

Application Programmer Response: Restart DFSMShsm in a larger region and reissue the command.

ARC0338I AN ML2 SCRATCH TAPE *volser* WAS MOUNTED IN A PRIVATE SCRATCH POOL ENVIRONMENT

Explanation: A migration or recycle task required an ML2 tape. In a search of its internal table on this host of empty and partially full ML2 tapes, DFSMShsm was not able to select a tape of the required type. As a result, a scratch tape was mounted instead for one of the following reasons:

- No ML2 tape volume has been ADDVOLed
- No tape of the required technology appears in the table
- An empty tape is required by end-of-volume processing, but the table contains only partial tapes
- The table has not yet been rebuilt to reflect the addition or deletion of ML2 tapes

With APAR OW30676, the capacity of the ML2 table is 907 volumes; previously, it was 224 volumes.

Source: DFSMShsm

System Action: DFSMShsm continues.

Application Programmer Response: Determine the candidate volumes present in the table by issuing the following command:

```
LIST TTOC SELECT(ML2 NOTFULL)
```

If the output from LIST shows that you have volumes of an older, undesired technology, for each such volume, issue the following command to remove it from the table and make it eligible for recycle:

```
DELVOL volser MIGRATION(MARKFULL)
```

If the output fromLIST shows that no empty ML2 tapes exist, issue the following command to add empty tapes of the appropriate technology to the table:

```
ADDVOL volser MIGRATION(ML2) UNITunittype
```

Note: For performance reasons, the DELVOL and ADDVOL commands do not cause the table to be rebuilt immediately. Rebuilding occurs only when 1) DFSMShsm cannot find a suitable ML2 volume in the table for some request, and 2) at least 45 minutes has elapsed since the last rebuild.

ARC0339I OPTIMUMDASDBLOCKING = {2KB | OPTIMAL}, LOGGING LEVEL = {FULL | REDUCED | EXCEPTIONONLY}, LOG TYPE = {SYSOUT(*sysout-class*) | DASD}

Explanation: A QUERY command with the SETSYS parameter was issued.

OPTIMUMDASDBLOCKING=2KB indicates that DFSMShsm blocks its output in 2K blocks.

OPTIMUMDASDBLOCKING=OPTIMAL indicates that DFSMShsm uses the optimum block size when writing data to an output device.

LOGGING LEVEL describes the type of messages that are written to the functional and command activity logs when data sets are processed.

FULL means that all normal completion and error messages are written to the activity logs.

REDUCED means the original space management or backup message is written but messages for subsequent movement and cleanup are suppressed.

EXCEPTIONONLY means messages are written only when a nonzero return code indicates an error has occurred processing a data set.

LOG TYPE indicates whether the activity logs are written to the spool or DASD. If SYSOUT(*sysout-class*) is shown, the activity logs are SYSOUT data sets belonging to the SYSOUT class shown. If DASD is shown, activity logs are created on DASD with names that have the following format: *authid.procid.xxx*LOG.D*yyddd*.T*hhmmss*

authid	DFSMShsm authorized ID
procid	DFSMShsm processing unit ID from the PROC statement preceded by the letter H
xxx	CMD, MIG, BAK, or DMP to identify which log type
yyddd	year and day of allocation
hhmmss	hour, minute, and second of allocation

Source: DFSMShsm

System Action: None. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0340I COMPACTION OPTIONS ARE: TAPEMIGRATION=[YES | NO], DASDMIGRATION=[YES | NO], TAPEBACKUP=[YES | NO], DASDBACKUP=[YES | NO], TAPEHARDWARECOMPACT=[YES | NO]

Explanation: A QUERY command was issued with the SETSYS parameter. This message is issued by DFSMShsm to describe the current environment.

If TAPEMIGRATION=YES, data can be compacted when it is migrated to a tape migration level 2 volume.
If TAPEMIGRATION=NO, data is not compacted when it is migrated to a tape migration level 2 volume.
If DASDMIGRATION=YES, data can be compacted when it is migrated to a DASD migration level 1 or level 2 volume.
If DASDMIGRATION=NO, data is not compacted when it is migrated to a DASD migration level 1 or level 2 volume.
If TAPEBACKUP=YES, data can be compacted when it is backed up to a tape backup volume.
If TAPEBACKUP=NO, data is not compacted when it is backed up to a tape backup volume.
If DASDBACKUP=YES, data can be compacted when it is backed up to a DASD backup volume.
If DASDBACKUP=NO, data is not compacted when it is backed up to a DASD backup volume.
If TAPEHARDWARECOMPACT=yes, data written to 3480X tapes will be in improved data recording capability (IDRC) format.
If TAPEHARDWARECOMPACT=no, data written to 3480X tapes will not be in IDRC format.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0341I COMPACT PERCENT IS *percent*%

Explanation: A QUERY command with the SETSYS parameter was issued. The percentage of space that must be saved when compacting a data set during migration or backup to make it eligible for compaction on subsequent migrations or backups is *percent*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0342I {SOURCENAMES | OBJECTNAMES}: *name(s)*

Explanation: A QUERY command with the SETSYS parameter was issued. The compaction control qualifiers of those data sets that are to be compacted with code tables intended for use with source data sets or object data sets are *names*. There can be up to 5 *names*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0345I COMPACTION NAMES TABLES FREED DUE TO ABEND

Explanation: During DFSMShsm processing, the command processor task abnormally ended (abended) for unknown reasons. Abend processing released all storage (including the compaction names tables) obtained by the command processor task.

Source: DFSMShsm

System Action: The command processor task is restarted. DFSMShsm processing continues. Compaction uses only the general compaction tables.

Application Programmer Response: You can rebuild the compaction names tables by issuing the appropriate SETSYS commands.

ARC0350I BCDS ELIGIBLE VOLUME RECORD CONVERSION ENDED FOR VOLUME *volser*, RC=*return-code*

Explanation: The MCP record has been converted to the extended format. If the return code *return-code* was 0, the conversion completed successfully. Otherwise, the conversion failed and the process that was in progress for the volume ended.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the return code is 4, a read or write of the MCP record failed. Refer to message ARC0184I for details.

ARC0351I CANNOT UPDATE DFSMSHSM CDS ENTRY IN THE *type* RECORD HAVING KEY *key*, IN USE BY ANOTHER HOST

Explanation: DFSMShsm attempted to gain access to a tape table of contents record or a backup cycle volume record, but the record was in use by another processor.

Source: DFSMShsm

System Action: The desired record is not updated but processing of the function continues.

Application Programmer Response: None.

ARC0352I **DATA SET *dsname* TOO LARGE FOR MAXIMUM TAPE VOLUME LIMIT**

Explanation: During migration, backup, or recycle processing, a data set *dsname* was being moved to tape volumes. The number of tape volumes required exceeded the maximum tape volume limit of 40 volumes for one data set as established by DFSMShsm.

Source: DFSMShsm

System Action: The first tape volume is marked full, all others are internally deleted and the data set is skipped.

Application Programmer Response: None.

ARC0353I **TAPE VOLUME *volser* SUCCESSFULLY {ADDED TO | REMOVED FROM} DFSMSHSM'S RACF TAPE VOLUME SET**

Explanation: RACF is installed in the computing system and is active. The system-wide RACF tape volume protection option is in effect. If the TAPEVOL resource class is inactive, this message is issued, even though no updates are made to the RACF data base. In this case the RACF tape volume status does not change. The tape volume with a volume serial number of *volser* has been either successfully added to or deleted from DFSMShsm's RACF tape volume set of either HSMHSM or DFHSMx (where *x* is the last non-blank character of the tape volume's *volser*), or HSMABR (DFSMShsm's ABARS tape volume set).

If the message indicates the tape volume has been successfully added to DFSMShsm's RACF tape volume set, DFSMShsm has RACF-protected the tape volume as part of DFSMShsm's RACF tape volume set of either HSMHSM or DFHSMx, or HSMABR. The tape volume has been RACF-protected by DFSMShsm for the following reason:

- The tape security option specified with the TAPESECURITY parameter of the SETSYS command is either RACF or RACFINCLUDE. DFSMShsm has selected the tape volume for use during migration, backup, dump, or aggregate backup and recovery processing.

If the message indicates the tape volume has been successfully deleted from DFSMShsm's RACF tape volume set, DFSMShsm has removed the RACF protection of the tape volume by removing the volume serial number from DFSMShsm's RACF tape volume set of either HSMHSM, DFHSMx, or HSMABR. DFSMShsm has removed the RACF protection of the tape volume for one of the following reasons:

- The tape volume has been successfully recycled and the TAPEDELETION option specified with the SETSYS command is SCRATCHTAPE. Because the TAPEDELETION option is SCRATCHTAPE, the tape volume is being removed from DFSMShsm's control. All DFSMShsm control data set records related to this tape volume are being deleted and the RACF protection is being removed by deleting the volume serial number from DFSMShsm's RACF tape volume set.
- The percent of valid data on the tape volume has decreased to zero, causing the tape volume to be automatically recycled. The TAPEDELETION option specified on the SETSYS command is SCRATCHTAPE. Because the TAPEDELETION option is SCRATCHTAPE, the tape volume is being removed from DFSMShsm's control. All DFSMShsm control data set records related to this tape volume are being deleted and the RACF protection is being removed by deleting the volume serial number from DFSMShsm's RACF tape volume set.
- An authorized user has issued a DELVOL command with the PURGE option for the tape volume. The tape volume is being removed from DFSMShsm's control. All DFSMShsm control data set records related to this tape volume are being deleted and the RACF protection is being removed by deleting the volume serial number from DFSMShsm's RACF tape volume set.
- A dump volume containing part of a valid dump copy has completed dump copy expiration processing. The TAPEDELETION parameter of the SETSYS command is SCRATCHTAPE. Because the parameter is SCRATCHTAPE, the tape volume is removed from control of DFSMShsm. Since the tape volume has been RACF-protected by DFSMShsm in the past, RACF protection is now removed from the tape volume.
- The tape volume has been RACF-protected by DFSMShsm some time in the past. The tape volume is now empty and DFSMShsm has selected the tape volume for reuse during backup or migration processing. The tape security option currently in effect is not RACF or RACFINCLUDE. Because the tape volume is being overwritten and the tape security option currently in effect is not RACF or RACFINCLUDE, DFSMShsm is removing the RACF protection of the tape volume by deleting the volume serial number from DFSMShsm's RACF tape volume set.
- The tape volume contains DFSMShsm ABARS data for an expired aggregate version and is being deleted as a result of aggregate version rolloff during ABACKUP, ARECOVER, or EXPIREBV ABARSVERSIONS processing.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: This is only an informational message for the storage administrator or system programmer responsible for DFSMShsm operations and the RACF security administrator. This message is to inform you that DFSMShsm is either RACF-protecting one of its tape volumes or removing the RACF protection from one of its tape volumes. An authorized user determines what is currently in a specific DFSMShsm RACF tape volume set by issuing one of the following RACF commands:

```
RLIST TAPEVOL HSMHSM ALL
RLIST TAPEVOL DFHSMx ALL
RLIST TAPEVOL HSMABR ALL
```

The sender of the command must have a certain level of access authority to the resource depending on the information being requested. For additional information, see *OS/390 Security Server (RACF) Command Language Reference*.

DFSMShsm only removes the RACF protection from tape volumes that it has RACF-protected. The system programmer or storage administrator responsible for DFSMShsm operations or the RACF security administrator can take the initiative of RACF-protecting the tape volumes by adding the tape volume to DFSMShsm's RACF tape volume set with one of the following RACF commands:

```
RALTER TAPEVOL (HSMHSM) ADDVOL(volser)
RALTER TAPEVOL (DFHSMx) ADDVOL(volser)
RALTER TAPEVOL (HSMABR) ADDVOL(volser)
```

Refer to *DFSMS/MVS DFSMShsm Implementation and Customization Guide* in the section, “Authorizing and Protecting DFSMShsm Resources” for a description of how to add tape volumes to DFSMShsm's RACF tape volume sets.

To add the tape volume to the tape volume set, the user entering the RALTER command must have a certain attribute or certain level of access authority to the resource being added. For additional information, see *OS/390 Security Server (RACF) Command Language Reference* .

If you have RACF-protected a tape volume by adding the tape volume to a DFSMShsm RACF tape volume set, you are responsible for removing the RACF protection from that tape volume when the tape volume is removed from DFSMShsm's control. DFSMShsm only removes the RACF protection from tape volumes it has RACF-protected. If you have protected the tape volume using one of the commands discussed above, you can remove the RACF protection from the tape volume by deleting the volume serial number from one of DFSMShsm's RACF tape volume sets. You can delete the volume serial number from one of DFSMShsm's RACF tape volume sets by issuing one of the following RACF commands:

```
RALTER TAPEVOL (HSMHSM) DELVOL(volser)
RALTER TAPEVOL (DFHSMx) DELVOL(volser)
RALTER TAPEVOL (HSMABR) DELVOL(volser)
```

To delete the tape volume from a tape volume set, the user entering the RALTER command must have a certain attribute or certain level of access authority to the resource being deleted. For additional information, see *OS/390 Security Server (RACF) Command Language Reference* .

ARC0354I ERROR WRITING HEADER/TRAILER LABELS DURING EOV PROCESSING ON DRIVE *driveid*

Explanation: End-of-volume (EOV) processing has encountered an error while attempting to write trailer labels on the end of a tape volume or header labels on the beginning of a new tape volume during migration, backup, or recycle processing. The address of the tape drive is *driveid*.

Source: DFSMShsm

System Action: The volume is marked full to prevent reallocation. A new tape volume is selected and migration, backup, or recycle processing continues by retrying the failing data set.

Application Programmer Response: Refer to any other associated messages to determine the cause of the failure.

ARC0355I ERROR {READING | WRITING} DFSMSHSM CONTROL DATA SET *type* **RECORD FOR KEY=***key***, RC=***return-code***. DFSMSHSM RECORD UPDATING CONTINUES FOR THIS DATA SET**

Explanation: While attempting to update the full flag for a volume in a migration volume record, backup volume record or offline control data set (OCDS) record, an I/O error has occurred.

For *return-code* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: The update is not performed. Migration, backup, or recycle processing for the data set continues.

Application Programmer Response: Notify the storage administrator, who can use the FIXCDS command to update the full flag in the appropriate CDS record.

ARC0356I NEW TAPE VOLUME *volser* **CANNOT BE ADDED. VOLUME ALREADY CONTAINS DATA**

Explanation: DFSMShsm has attempted to add a tape volume *volser* that already contains valid data.

Source: DFSMShsm

System Action: The tape volume is rejected and DFSMShsm processing continues.

Application Programmer Response: Issue a LIST TTOC (*volser*) command to determine what valid data exists on the tape. If the data on the tape volume is no longer needed, issue a FIXCDS DELETE command to delete the TTOC (tape table of contents) records for the volume. Then issue the ADDVOL command again. You can find a description of the FIXCDS command in the *DFSMS/MVS DFSMShsm Diagnosis Guide*.

ARC0357I TAPE VOLUME *volser* **IS RACF-PROTECTED BUT DOES NOT APPEAR IN DFSMSHSM'S RACF TAPE VOLUME SET, IT IS BEING REMOVED FROM DFSMSHSM'S INVENTORY OF {BACKUP | DUMP | MIGRATION} VOLUMES**

Explanation: RACF is installed in the computing system and is active. The system-wide RACF tape volume protection option is in effect. DFSMShsm selected tape volume *volser* for use during backup, full volume dump, or migration processing. The first RACHECK macro issued by DFSMShsm has indicated that the tape volume is RACF-protected. A second RACHECK macro issued by DFSMShsm has indicated that the tape volume does not appear in a DFSMShsm RACF tape volume set. Because the tape volume is RACF-protected but does not appear in a DFSMShsm RACF tape volume set and contains no DFSMShsm data, it is being removed from DFSMShsm's inventory of backup, dump, or migration volumes. DFSMShsm performs an automatic DELVOL of the tape volume just as if a DELVOL command with the PURGE parameter had been entered for this volume. Message ARC0260I should be received, following this message, indicating the results of the automatic DELVOL.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: The system programmer or storage administrator responsible for DFSMShsm operations should contact the RACF security administrator for help in resolving this problem. The RACF security administrator can determine who has protected the tape volume and has access to the tape volume by entering the following RACF command:

```
RLIST TAPEVOL volser ALL
```

The sender of the command must have a certain level of access authority to the resource depending on the information being requested. For additional information, see *OS/390 Security Server (RACF) Command Language Reference*.

If the tape volume belongs to someone else and should never have been defined to DFSMShsm using the ADDVOL command, no further action is required because DFSMShsm has automatically removed the tape volume from its inventory of backup or migration volumes.

If the tape volume should belong to DFSMShsm but has been RACF-protected by someone else, the RACF security administrator should contact the owner of the tape volume to determine why he or she has RACF-protected a tape volume that should belong to DFSMShsm. If the owner of the volume indicates that the volume does not contain any necessary data and that the tape volume can be used by DFSMShsm, the owner should remove the RACF protection from the tape volume. The RACF protection can be removed from the tape volume by one of the following methods:

- If the tape volume is RACF-protected as a single volume, the profile in the RACF data set can be deleted by entering the following RACF command:

  ```
  RDELETE TAPEVOL(volser)
  ```

- If the tape volume is RACF-protected as part of a tape volume set, the tape volume can be removed from a tape volume set by entering the following RACF command:

  ```
  RALTER TAPEVOL(resource-name) DELVOL(volser)
  ```

To delete the profile from the RACF data set or to delete the volume from a tape volume set, the user entering the RDELETE or RALTER command must have a certain attribute or certain level of access authority to the resource being deleted. For additional information, see *OS/390 Security Server (RACF) Command Language Reference*.

ARC0358I EXTENSION RECORD WITH KEY=*key* MISSING FROM DFSMSHSM CDS, {MIGRATION COPY | BACKUP VERSION} OF DSN=*dsname* NOT ADDED TO T RECORD

Explanation: A tape table of contents (TTOC) record has been scanned. An extension record with key *key* that has been previously available is missing.

Source: DFSMShsm

System Action: Updating of the TTOC record ends. The volume is marked full and another volume is selected to continue the migration, backup, or recycle process.

Application Programmer Response: Analyze the data on the tape volume to determine which migration copies or backup versions should be described in the missing extension record and use FIXCDS to re-create the record. You can find a description of the FIXCDS command in the *DFSMS/MVS DFSMShsm Diagnosis Reference*.

ARC0359I ERROR {ADDING | REMOVING} TAPE VOLUME *volser* {TO | FROM} DFSMSHSM'S RACF TAPE VOLUME SET, RC=*return-code*, REAS={*reason-code* | ABEND}

Explanation: RACF is installed in the computing system and is active. The system-wide RACF tape volume protection option is in effect. An attempt has been made by DFSMShsm to do one of the following:

- Add the tape volume with a volume serial number of *volser* to a DFSMShsm RACF tape volume set of HSMHSM or DFHSMx (where *x* is the last nonblank character of the tape volume's *volser*), or HSMABR (DFSMShsm's ABARS tape volume set). Refer to *DFSMS/MVS DFSMShsm Implementation and Customization Guide* under "Authorizing and Protecting DFSMShsm Resources" and "Implementing DFSMShsm Tape Environments" information about how to add tape volumes to DFSMShsm's RACF tape volume sets.
- Remove the tape volume with a volume serial number of *volser* from one of DFSMShsm's RACF tape volume sets.

The attempt has failed. If the *return-code* in the message is 24, DFSMShsm has intercepted a 585 abnormal end (abend). If the *return-code* is 20, RACF has failed the request or the issuance of the RACDEF SVC has resulted in a nonzero *reason-code*. If DFSMShsm has intercepted an abend, ABEND is indicated instead of a *reason-code*.

DFSMShsm attempts to add a tape volume to one of its RACF tape volume sets under the following circumstance:

- The tape security option specified with the TAPESECURITY parameter of the SETSYS command is either RACF or RACFINCLUDE and DFSMShsm has selected the tape volume for use during migration, full volume dump, backup, or aggregate backup and recovery processing.

DFSMShsm attempts to remove a tape volume from one of its RACF tape volume sets under the following circumstances:

- The tape volume has been successfully recycled. The TAPEDELETION option specified with the SETSYS command is SCRATCHTAPE. Because the TAPEDELETION option is SCRATCHTAPE, the tape volume is being removed from DFSMShsm's control. All DFSMShsm control data set records related to this tape volume are being deleted. The RACF protection is being removed by deleting the volume serial number from a DFSMShsm RACF tape volume set (HSMHSM or DFHSMx.)
- The percent of valid data on the tape volume decreased to zero, causing the tape volume to be automatically recycled. The TAPEDELETION option specified on the SETSYS command is SCRATCHTAPE. Because the TAPEDELETION option is SCRATCHTAPE, the tape volume is being removed from DFSMShsm's control. All DFSMShsm control data set records related to this tape volume are being deleted. The RACF protection is being removed by deleting the volume serial number from one of DFSMShsm's RACF tape volume sets.
- An authorized user has issued a DELVOL command with the PURGE parameter for the tape volume. The tape volume is being removed from DFSMShsm's control. All DFSMShsm control data set records related to this tape volume are being deleted and the RACF protection is being removed by deleting the volume serial number from one of DFSMShsm's RACF tape volume sets.
- The tape volume has previously contained valid DFSMShsm data and has been RACF-protected by DFSMShsm some time in the past. All the data on the tape volume has become invalid and DFSMShsm has selected the tape volume for reuse during backup or migration processing. The tape security option currently in effect is not RACF or RACFINCLUDE. Because the tape volume is being overwritten and the tape security option currently in effect is not RACF or RACFINCLUDE, DFSMShsm is removing the RACF-protection of the tape volume by deleting the volume serial number from one of DFSMShsm's RACF tape volume sets.
- The tape volume contains DFSMShsm ABARS data for an expired aggregate version and is being deleted as a result of aggregate version rolloff during ABACKUP, ARECOVER, or EXPIREBV ABARSVERSIONS processing.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: This message is intended for the storage administrator or system programmer responsible for DFSMShsm operations and the RACF security administrator. This message is informing you that an error has occurred when DFSMShsm attempted to add a tape volume to one of its RACF tape volume sets or remove a tape volume from one of its RACF tape volume sets.

If the *return-code* is 24, an ICH409I 585-*xx* message will also be issued. *xx* is the RACF reason code. For a description of the RACF abend and reason codes, see *OS/390 MVS System Messages, Vol 1 (ABA-ASA)*. If the *return-code* is 20 and an abend did not occur, the *reason-code* is one of the possible return codes from the RACDEF SVC in *OS/390 MVS Programming: Authorized Assembler Services Guide*

An authorized user determines what is currently in a specific DFSMShsm RACF tape volume set by issuing one of the following RACF commands:

```
RLIST TAPEVOL HSMHSM ALL
RLIST TAPEVOL DFHSMx ALL
RLIST TAPEVOL HSMABR ALL
```

The sender of the command must have a certain level of access authority to the resource depending on the information being requested. For additional information, see *OS/390 Security Server (RACF) Macros and Interfaces*.

DFSMShsm only removes the RACF-protection from tape volumes that it has RACF-protected. The system programmer or storage administrator responsible for DFSMShsm operations or the RACF security administrator can take the initiative of RACF-protecting the tape volumes before DFSMShsm uses the tape volume by adding the tape volume to one of DFSMShsm's RACF tape volume sets with one of the following RACF commands:

RALTER TAPEVOL (HSMHSM) ADDVOL(*volser*)
RALTER TAPEVOL (DFHSMx) ADDVOL(*volser*)
RALTER TAPEVOL (HSMABR) ADDVOL(*volser*)

To add the tape volume to a tape volume set, the user entering the RALTER command must have a certain attribute or certain level of access authority to the resource being added. For additional information, see *OS/390 Security Server (RACF) Macros and Interfaces* .

If you have RACF-protected a tape volume by adding it to one of DFSMShsm's RACF tape volume sets before DFSMShsm uses the tape volume, you are responsible for removing the RACF protection from that tape volume when it is removed from DFSMShsm's control. DFSMShsm only removes the RACF protection from tape volumes that it has RACF-protected. If you protected the tape volume using one of the commands discussed previously, you can remove the RACF protection from the tape volume by deleting the volume serial number from one of DFSMShsm's RACF tape volume sets. You can delete the volume serial number from one of DFSMShsm's RACF tape volume sets by entering one of the following commands:

RALTER TAPEVOL (HSMHSM) DELVOL(*volser*)
RALTER TAPEVOL (DFHSMx) DELVOL(*volser*)
RALTER TAPEVOL (HSMABR) DELVOL(*volser*)

To delete the tape volume from a tape volume set, the user entering the RALTER command must have a certain attribute or certain level of access authority to the resource being deleted. For additional information, see *OS/390 Security Server (RACF) Macros and Interfaces* .

ARC0360I TAPE VOLUME *volser* IS RACF-PROTECTED BUT DOES NOT APPEAR IN DFSMShsm's RACF TAPE VOLUME SET, THE VOLUME CONTAINS VALID DFSMShsm DATA

Explanation: The system-wide RACF tape volume protection option is in effect. The tape security option RACF or RACFINCLUDE is specified with the TAPESECURITY parameter of the SETSYS command.

DFSMShsm has selected tape volume *volser* for use during backup or migration processing.

The records in DFSMShsm control data sets indicate that the tape volume is not full and is not RACF-protected by DFSMShsm. Because the RACF or RACFINCLUDE tape security option is in effect, DFSMShsm is going to RACF-protect this tape volume in one of DFSMShsm's RACF tape volume sets of HSMHSM or DFHSMx (where *x* is the last nonblank character of the tape volume's volume serial number). Refer to *DFSMS/MVS DFSMShsm Implementation and Customization Guide*, under “Authorizing and Protecting DFSMShsm Resources” for a description of how to add tape volumes to DFSMShsm's RACF tape volume sets. Before RACF-protecting the tape volume, DFSMShsm issues two RACHECK macros to determine the current protection status of the tape volume.

The first RACHECK macros issued by DFSMShsm indicates that the tape volume is RACF-protected. The second RACHECK macro issued by DFSMShsm indicates that the tape volume does not appear in a DFSMShsm RACF tape volume set of either HSMHSM or DFHSMx.

Because the tape volume is RACF-protected but does not appear in a DFSMShsm RACF tape volume set, DFSMShsm will not use it. The tape volume is indicated as full in all necessary records in the DFSMShsm control data sets to prevent DFSMShsm from using it again. DFSMShsm control data set records indicate that the tape volume already contains valid DFSMShsm data.

Source: DFSMShsm

Application Programmer Response: The system programmer or storage administrator responsible for DFSMShsm operations should contact the RACF security administrator for assistance in resolving this problem. The RACF security administrator can determine who has protected the tape volume (owner) and who has access to the tape volume by entering the following RACF command: RLIST TAPEVOL *volser* ALL

The sender of the command must have a certain level of access authority to the resource depending on the information being requested.

For additional information, refer to *OS/390 Security Server (RACF) Command Language Reference*.

If the volume is defined to DFSMShsm as a backup volume or a tape migration volume, the system programmer or storage administrator responsible for DFSMShsm operations can determine which valid data is on the tape volume by entering the following DFSMShsm space manager command: LIST TTOC(*volser*) TERMINAL

If the volume is defined to DFSMShsm as a dump volume, the following command will appear if the volume contains a valid dump copy: LIST DUMPVOLUME (*volser*)

If a DUMP VTOC data set is associated with the dump copy of the tape volume, the following command will display the contents of the tape volume at the time of the dump: LIST DUMPVOLUME (*volser*) BACKUPCONTENTS

The system programmer should print the data on the tape volume to determine what data actually exists on the volume. The data printed should be visually inspected to determine if the volume contains DFSMShsm backup versions or migration copies. DFSMShsm backup versions or migration copies are written in 16K records. The beginning of the first 16K record of a backup version or migration copy contains a control black known as the common data set descriptor record (CDD). For additional information, see *DFSMS/MVS DFSMShsm Diagnosis Reference*.

The header labels (HDR1 and HDR2) and trailer labels (EOF1 and EOF2) of the data sets on the tape volume can also be useful in determining if data sets are DFSMShsm backup version or migration copies.

If the tape volume physically contains DFSMShsm backup versions or migration copies, the RACF security administrator should inform the owner of the tape volume that the tape volume contains DFSMShsm backup versions or migration copies. If the volume does not contain necessary data and can be used by DFSMShsm, the owner should remove the RACF protection.

RACF protection can be removed from the tape volume by one of the following methods:

- If the tape volume is RACF-protected as a single volume, the profile in the RACF data set can be deleted by entering the following RACF command: RDELETE TAPEVOL (*volser*)
- If the tape volume is RACF-protected as part of a tape volume set, the tape volume can be removed from the tape volume set by entering the following RACF command: RALTER TAPEVOL (*resource-name*) DELVOL (*volser*)

To delete the profile from the RACF data set or delete the volume from a tape volume set, the user entering the RDELETE or RALTER command must have a certain attribute or certain level of access authority to the resource being deleted. For additional information, see *OS/390 Security Server (RACF) Command Language Reference*.

If the owner suggests the tape volume contains the data and is needed, the system programmer should help in retrieving, recovering, and re-creating the user's data.

If the tape volume is defined to DFSMShsm as a backup volume and the volume does not physically contain any DFSMShsm backup versions but DFSMShsm thinks that valid backup versions exist on the tape volume, the system programmer should delete each backup version that DFSMShsm thinks is on the tape volume. To logically delete each backup version that resides on the tape backup volume, the system programmer should remove the volume from DFSMShsm's control by entering the following DFSMShsm space manager command: DELVOL (*volser*) BACKUP(PURGE)

The DELVOL command causes each valid backup version that DFSMShsm thinks is on the tape volume to be marked invalid in the tape table of contents record TTOC) in the offline control data set (OCDS). Also, all records about this volume are deleted from the DFSMShsm control data sets. The system programmer should consider creating a new backup version for each data set that has a backup version deleted.

If the tape volume is defined to DFSMShsm as a migration volume and the volume does not physically contain any DFSMShsm migration copies but DFSMShsm thinks that valid migration copies exist on the tape volume, the system programmer should delete each migrated data set that DFSMShsm thinks is on the tape volume. To logically delete each migrated data set that resides on the tape migration, the system program should enter the following DFSMShsm space manager command: MIGRATE VOLUME(*volser* DBA (0))

The MIGRATE command with the DBA parameter causes data set deletion to be performed on the tape migration level 2 volume. Any migrated data sets residing on the tape level 2 migration volume that are not referred to in the specified number of days (zero) will be logically deleted. Because the number of days specified is zero, DFSMShsm logically deletes all valid migrated data sets that reside on the volume. After data set deletion is completed on the tape migration volume, the system programmer can remove the volume from DFSMShsm's control by entering the following DFSMShsm space manager command: DELVOL *volser* MIGRATION(PURGE)

The DELVOL command causes all records associated with the tape volume to be deleted from the DFSMShsm control data sets. The system programmer should consider how her or she is going to recover a copy of each of the migrated data sets that has been logically deleted during data set deletion.

If the tape volume is defined to DFSMShsm as a dump volume, the volume can be removed from the control of DFSMShsm with the following command: DELVOL *volser* DUMP(PURGE)

The entire dump copy that the volume belongs to will be invalidated.

ARC0361I VOLUME *volser* DELETED BUT CONTAINS {RACF ONLY | PASSWORD ONLY | RACF AND PASSWORD } PROTECTED DATA

Explanation: Volume *volser* deletion is successful, but the deleted volume contains protected data of the specified type.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Clear the contents of the tape to maintain security.

ARC0362I TAPE VOLUME *volser* WAS DEFINED AS *oldtype* AND IS NOW A *newtype*

Explanation: The tape volume with a volume serial number of *volser* was mounted by the tape operator in response to a nonspecific (PRIVAT) tape volume mount request. The tape volume mounted by the tape operator was empty and already defined to DFSMShsm as the volume type indicated by *oldtype.* The possible message inserts for *oldtype* are:

- UNASSIGNED BACKUP VOLUME
- UNASSIGNED DAILY BACKUP VOLUME
- DAILY BACKUP VOLUME ASSIGNED TO DAY *nn*
- SPILL BACKUP VOLUME
- LEVEL 2 MIGRATION VOLUME

However, the previous tape volume (the tape volume on which the end-of-volume condition was encountered resulting in the nonspecific (PRIVAT) tape volume mount request) is defined to DFSMShsm as the volume type indicated by *newtype*. The possible message inserts for *newtype* are:

- DAILY BACKUP VOLUME ASSIGNED TO DAY *nn*
- SPILL BACKUP VOLUME
- LEVEL 2 MIGRATION VOLUME

All necessary records in the DFSMShsm control data sets have been either modified, deleted, or created to reflect that the tape volume that the operator mounted (the one with a volume serial number of *volser*) is no longer defined to DFSMShsm as the type of volume indicated by *oldtype* but it defined to DFSMShsm as the type of volume indicated by *newtype.*

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: Check for one of the following two conditions:

- *oldtype* indicates that the tape volume was defined as a backup volume and *newtype* indicates that the volume is being changed to a migration volume.
- *oldtype* indicates that the tape volume was defined as a migration volume and *newtype* indicates that the volume is being changed to a backup volume.

If one of the two conditions exist, a possible operational problem might exist and the system programmer or storage administrator responsible for DFSMShsm operations should be notified of the occurrence of this message.

Application Programmer Response: Check for the following conditions:

- *oldtype* indicates that the tape volume was defined as a backup volume and *newtype* indicates that the volume is being changed to a migration volume; the tape operator mounted a tape volume that was defined to DFSMShsm as a backup volume when an end-of-volume condition occurred on a tape migration level 2 volume. The mount request was for a nonspecific (PRIVAT) tape volume.
- *oldtype* indicates that the tape volume was defined as a migration volume and *newtype* indicates that the volume is being changed to a backup volume; the tape operator mounted a tape volume that was defined to DFSMShsm as a migration volume when an end-of-volume condition occurred on a tape backup 2 volume. The mount request was for a nonspecific (PRIVAT) tape volume.

If one of the two conditions exist, a possible operational problem might exist, especially if your installation has a separate group of tape volumes with similar volume serial numbers (such as ML2001, ML2002, ML2003) defined as migration level 2 volumes with similar volume serial numbers (such as BV0001, BV0002, BV0003) defined as backup volumes. Even if this is not so, the grouping set up by the system programmer or storage administrator responsible for DFSMShsm operations is being compromised by the tape operators. Tape volumes originally defined as backup backup volumes are being redefined as migration volumes and being used for migration, or tape volumes originally defined as migration volumes are being redefined as backup volumes and used for backup.

You should determine the extent of the problem and what possible impact, if any, this problem may have on recall or recovery processing. If the problem occurs often or is having some averse impact on recall or recovery processing, you should consider providing additional education or more explicit instructions to your tape operators. If you wish to stop the problem altogether, you should consider installing one of the following levels of the Data Facility Product (DFP) on your computing system:

- MVS/370 DFP 1.0 (5665-295)
- MVS/XA DFP Version 1 Release 1.2 (5665-284) or MVS/XA DFP Version 2 Release 1.0 (5665-XA2)

If DFP is installed, DFSMShsm will not allow the tape operator to:

- Mount a tape volume that is already defined as a migration volume when a backup volume is required.
- Mount a tape volume that is already defined as a backup volume when a migration volume is required.

ARC0364I DATA SET ENTRY FOR DSN=*dsname* CANNOT BE FOUND IN THE T RECORD WITH KEY=*key*

Explanation: The data set entry for *dsname* has not been found during an attempt to invalidate the data set entry in the tape tale of contents (TTOC) record.

Source: DFSMShsm

System Action: The update of the data set entry is not made. DFSMShsm processing continues.

Application Programmer Response: Run the AUDIT MEDIACONTROLS VOLUMES(*volser*) command against the affected tape volume. If this failure is due to an inconsistency in the CDS records, the audit function may be able to correct it.

ARC0365I {MIGRATION | BACKUP } VOLUME *volser* NOW AVAILABLE FOR RECYCLE

Explanation: A data set on a tape volume is invalid as a result of one of the following operations:

- A BDELETE or HBDELETE of a back version
- Creation of a backup version causing a previous version to exceed the maximum number of versions saved
- Recall of data set from a tape migration level 2 volume
- Data set deletion or data set retirement of a data set on a tape migration level 2 volume
- DELETE or HDELETE of a migration copy

Marking the data set invalid in the tape table of contents record has caused the percentage of valid data to drop to or below the recycle-percent-valid criteria established for migration and backup volumes by the SETSYS command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If tape volumes are needed, see *DFSMS/MVS DFSMShsm Storage Administration Reference* for information about the use of the RECYCLE command.

ARC0366A REPLY Y ONLY WHEN ALL *all* TAPE VOLUMES(S) IS/ARE COLLECTED, N IF ANY NOT AVAILABLE

Explanation: The *nn* tape volumes specified in the preceding ARC0313A message are needed to process the recovery or the recall of a data set.

Source: DFSMShsm

System Action: DFSMShsm will continue processing until the operator replies to the message. After the reply of Y is received, DFSMShsm processing stops until the tape mount request is satisfied.

Application Programmer Response: After all the requested tapes have been collected and are ready for mounting, reply Y to the message. If all of the requested tapes are not available, reply N to the message.

ARC0367I {A RECALL TASK DISABLED | MAXIMUM NUMBER OF RECALL TASKS REDUCED}, ARCFREE RC=*return-code*

Explanation: In a previous recall task, an error occurred that left an allocated DD name. This problem was detected on a subsequent attempt to reuse the recall task. The recall task has now been marked disabled and a different recall task will process the data set being recalled.

If the message said TASK DISABLED, the requested level of recall tasks is still being supported. If the message said MAXIMUM NUMBER OF RECALL TASKS REDUCED, enough recall tasks have been disabled so that the DFSMShsm design limit of 15 does not permit support of the requested maximum number of recall tasks.

Source: DFSMShsm

System Action: The data set is recalled. However, a different recall task recalls the data set. DFSMShsm processing continues.

Application Programmer Response: If the number of recall tasks is reduced and the maximum number of recall tasks requested is important, the system programmer responsible for DFSMShsm should plan to stop and restart DFSMShsm

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ARC0368I VOLUME *volser* HAS BEEN MARKED FULL

Explanation: The tape mounted for DFSMShsm output was rejected by DFSMShsm because it was a protected tape. Its label indicated that it either contained user password-protected data or unexpired date-protected data. However, if DFSMShsm had previously written on the tape and then emptied it, DFSMShsm would have written on the tape even though it was protected.

Note: Once DFSMShsm initially writes on a tape, it can continue to reuse the tape until the tape is released to become a scratch tape.

Source: DFSMShsm

System Action: DFSMShsm marks the volume *volser* full, then selects another tape.

Operator Response: Notify the storage administrator.

Application Programmer Response: None.

VOLUME *volser* **HAS BEEN MARKED FULL**

Explanation: The volume listed in the message has been rejected because it is full.

Source: DFSMShsm

System Action: DFSMShsm marks the volume *volser* full, then selects another tape.

Operator Response: Notify the storage administrator.

Application Programmer Response: None.

ARC0370I FAILED TO RESET HOSTID IN DFSMSHSM CONTROL DATA SET *type* **RECORD, KEY=***key***, I/O OPERATION={READING | WRITING}, RC=***return-code*

Explanation: The DFSMShsm control data set *type* record with key *key* has been serialized with the processing unit identifier of the processing unit in which the current task is running. In an attempt to release serialization of the control data set record, an I/O error has occurred. The processing unit identifier remains in the record. The I/O operation that has failed has been reading or writing as specified in the message text. For *return-code* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: The current DFSMShsm function continues processing.

Application Programmer Response: Correct the error and issue a FIXCDS command to reset the processing unit ID in the specified record. You can find a description of the FIXCDS command in *DFSMS/MVS DFSMShsm Diagnosis Guide*.

ARC0371I DFSMSHSM CONTROL DATA SET *type* **RECORD IN USE BY HOST** *procid***, KEY=***recordkey*

Explanation: An attempt has been made to serialize on the DFSMShsm control data set *type* record having key *recordkey* by writing into the record the processing unit identifier of the processing unit in which the current task is running. A task running in a different processing unit with processing unit identifier *procid* has already serialized the record.

Source: DFSMShsm

System Action: The current function fails. DFSMShsm processing continues.

Application Programmer Response: If it is suspected that the record should not be serialized (the information in the processing unit identifier field of the record is no longer valid), the FIXCDS command is used to reset the *procid* field. You can find a description of the FIXCDS command in the *DFSMS/MVS DFSMShsm Diagnosis Guide*. This problem can be caused when a processing unit fails while records are serialized by that processing unit. Issue the LIST command with the HOST parameter to list DFSMShsm control data set records serialized by a specified processing unit. Issue the LIST command with the HOST and RESET parameters to reset all DFSMShsm control data set records serialized by the specified processing unit.

ARC0372I {NON-SMS | SMS} VSAM DATA SET *dsname* **{TO BE UNCATALOGED | CATALOGED | IMPORTED | RESTORED BY DFSMSDSS} FOR RECALL, VOLSER=** *volser*

Explanation: During a recall of the VSAM data set with name *dsname*, DFSMShsm has found it necessary to delete the data set's catalog entry.

If TO BE UNCATALOGED is indicated in the message, this message precedes the operation and serves as a reference in case some unrecoverable error occurs during or after the uncatalog operation and DFSMShsm is unable to recatalog the data set. If DFSMShsm is unable to complete the processing of the data set, no subsequent message will be issued. The lack of a message indicating successful completion of processing means that the recall has failed and DFSMShsm has been unable to recreate a catalog entry for the data set.

If DFSMShsm is able to complete the processing of the data set either successfully or in an error situation, this same message number (ARC0372I) is issued with either the CATALOGED, IMPORTED or RESTORED BY DFSMSdss insert. IMPORTED or RESTORED BY DFSMSdss is used when the recall is a success and the data set has been correctly cataloged. CATALOGED is used when the recall has failed and DFSMShsm has detected the error. When CATALOGED is used, DFSMShsm has cataloged the data set as a non-VSAM data set using a volume serial number of MIGRAT.

This message is only issued for the base cluster even though other components of the sphere may be processed similarly. Even though a failure can occur on an associated alternate index, the recall operation is considered a success. If the recall of an associated alternate index fails, the failure is reported with message ARC0767I. In addition to the ARC0767I message, each successfully recalled alternate index is reported with message ARC0768I.

Source: DFSMShsm

System Action: The recall operation continues. DFSMShsm processing continues.

Application Programmer Response: If a pair of messages with this message number do not exist for the same data set, the recall has not been completed. In this case, the catalog entry will have to be recreated using the IDCAMS DEFINE command with the non-VSAM parameter. A non-VSAM catalog entry should always be redefined, even though a VSAM data set is being processed. MIGRAT is the volume serial number in all cases.

If the data set is SMS managed (the message text begins with SMS VSAM), it is recommend that the catalog entry that you recreate should be for an SMS-managed data set. A data set is considered SMS managed if the STORCLAS keyword is used with the data set DEFINE. If the data set is associated with a management class, the MGMTCLAS keyword should also be used.

The SMS class names to use when redefining the entry can be found in the data set's migration control data set data set record (MCD). The FIXCDS command is used to display the portion of the MCD record that contains the SMS class names. See *DFSMS/MVS DFSMShsm Diagnosis Reference* for the correct location of the class names in the MCD.

ARC0373I ERROR OCCURRED IN MACRO *macro* **WHEN OBTAINING SYSTEM CHANNEL PATH CONFIGURATION FOR VOLUME** *volser***, RC=***return-code***, REAS=***rsncode*

Explanation: While attempting to obtain the system channel path configuration, an error occurred in the macro *macro*.

The *macro* is one of the following macros:

- IOCMAPE macro — DFSMShsm invokes IOCMAPE macro to obtain the CHPIDs for the primary volume (SMS or non-SMS) during automatic processing. IOCMAPE is only invoked if the new UCB service (e.g. UCBINFO macro) is not installed in the system that DFSMShsm is running.
- UCBINFO macro — DFSMShsm invokes UCBINFO macro, if it is installed in the system that DFSMShsm is running, to obtain the CHPIDs for the primary volume (SMS or non-SMS) during automatic processing.

The *return-code* value indicates the error. The return code *return-code* is the return code passed from the system macro IOCMAPE or UCBINFO macro. The reason code *rsncode* is the reason code passed from the system macro IOCMAPE or UCBINFO macro. If the return code *return-code* is 900 and the reason code is 0, the macro *macro* abnormally ended (abended) or DFSMShsm abended when invoking the macro *macro*.

This message will go to the log of the function that the configuration was being retrieved for.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Volume channel paths are not updated. Volume selection continues using channel path identifiers saved from previous processing. SMS volumes restricted to this processing unit with no channel path identifiers will be selected after SMS volumes restricted to this processing unit that have channel path identifiers. SMS volumes not restricted to processing by any processing unit with no channel path identifiers will be selected after SMS volumes not restricted to processing by any processing unit that have channel path identifiers. The channel load save area is not updated with the contributed load from processing a volume that has no channel path identifier.

Application Programmer Response: Inform the system programmer of the message or examine the return code from IOCMAPE or UCBINFO macro which is documented in MVS/SP macro documentation.

ARC0374I ACCEPTPSCBUSERID = {YES | NO}

Explanation: A QUERY command was issued with the SETSYS parameter.

ACCEPTPSCBUSERID=YES indicates that DFSMShsm attempts to retrieve a user ID from the TSO protected step control block (PSCB) when RACF is not installed and a batch job containing TSO commands for DFSMShsm is being processed.

ACCEPTPSCBUSERID=NO indicates that DFSMShsm does not attempt to retrieve a user ID from the protected step control block (PSCB) when RACF is not installed and a batch job containing TSO commands for DFSMShsm is being processed.

These parameters have no meaning when RACF is installed on the processing unit system.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0375I CDSVERSIONBACKUP, MCDSBACKUPDSN=*dsname1***, BCDSBACKUPDSN=***dsname2***, OCDSBACKUPDSN=***dsname3***, JRNLBACKUPDSN=***dsname4*

Explanation: A QUERY command has been issued with the SETSYS or CDSVERSIONBACKUP parameter. DFSMShsm issues this message to describe its current parameter settings for multiple backup versions of the control data sets.

dsname1 indicates the set of initial qualifiers of the set of MCDS backup data sets.

dsname2 indicates the set of initial qualifiers of the set of BCDS backup data sets.

dsname3 indicates the set of initial qualifiers of the set of OCDS backup data sets.

dsname4 indicates the set of initial qualifiers of the set of journal backup data sets.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0376I BACKUPCOPIES=*backupcopies***, BACKUPDEVICECATEGORY={DASD | TAPE(UNITNAME=***unitname***, DENSITY=***density***, {RETPD=***retentionperiod* **| EXPDT=***expirationdate***}, {PARALLEL | NOPARALLEL})} LATESTFINALQUALIFIER=x***nnnnnnn***, DATAMOVER = {HSM | DSS}**

Explanation: A QUERY command was issued with the CDSVERSIONBACKUP parameter.

BACKUPCOPIES indicates the number of backup copies DFSMShsm maintains for each of the control data sets and the journal data set. The number of backup copies being maintained is indicated by *backupcopies*.

BACKUPDEVICECATEGORY indicates the device type to which the backups are made. DASD indicates a direct access device; TAPE indicates tape.

For TAPE:

- The *unitname* indicates the type of tape unit to which the backups are made.
- *density* indicates the density at which the backup copy is written to tape.
- *retentionperiod* indicates the number of days each backup data set should be kept after the backup copy is made.
- *expirationdate* indicates the date on which the backup copy is no longer required.
- PARALLEL indicates that the CDSs and the journal are to be backed up in parallel. There must be one tape drive available for each data set to be backed up.
- NOPARALLEL indicates that the CDSs and the journal are not to be backed up in parallel. Only one tape drive is required.

LATESTFINALQUALIFIER V*nnnnnnn* or D*nnnnnnn* indicates the last final qualifier that DFSMShsm used for the backups of the control data sets and the journal data sets. V indicates DFSMShsm was the data mover, and D indicates that DFSMSdss was the data mover.

DATAMOVER indicates the last data mover specified on a SETSYS command. The default, if no SETSYS CDSVERSIONBACKUP DATAMOVER command was issued, is DFSMShsm

Source: DFSMShsm

System Action: DFSMShsm processing continues.

ARC0378I TTOC RECORD AND TAPE MEDIA CONTENTS ARE INCONSISTENT ON TAPE VOLUME *volser***, {TAPE VOLUME CANNOT BE RECYCLED AT THIS TIME | RECYCLE PROCESSING HAS BEEN FORCED, ONLY KNOWN DATA SETS HAVE BEEN PROCESSED | TAPE VOLUME CANNOT BE DELETED, VALID DATA SETS MAY EXIST ON THE VOLUME | REUSE CAPACITY, VALID BLOCKS, PCT VALID, AND NUM REC DO NOT CONTAIN VALUES CONSISTENT WITH THE TAPE MEDIA}**

Explanation: TAPE VOLUME CANNOT BE RECYCLED AT THIS TIME indicates that a RECYCLE command has failed as a result of a mismatch between the indicated data sets on the tape volume *volser* as described in the offline control data set record (OCDS) tape table of contents record (TTOC) and the actual data sets residing on the volume.

RECYCLE PROCESSING HAS BEEN FORCED, ONLY KNOWN DATA SETS HAVE BEEN PROCESSED, indicates that a RECYCLE command with FORCE parameter has been allowed to run to completion. This mismatch between indicated data sets on the tape volume *volser* as described in the OCDS TTOC record and the actual data sets residing on the volume did not prevent recycle processing of known data sets.

TAPE VOLUME CANNOT BE DELETED, VALID DATA SETS MAY EXIST ON THE VOLUME, indicates a DELVOL command has failed as a result of a mismatch between the indicated data sets on the tape volume *volser* as described in the OCDS TTOC record and the actual data sets residing on the volume. This message is followed by an ARC0260I message.

REUSE CAPACITY, VALID BLOCKS, PCT VALID, AND NUM REC DO NOT CONTAIN VALUES CONSISTENT WITH THE TAPE MEDIA, indicates that a LIST TAPETABLEOFCONTENTS command has been issued and a mismatch between the indicated data sets on the tape volume *volser* as described in the OCDS TTOC record and the actual data sets residing on the volume has been found.

Without any message insert an error or a system outage has occurred while DFSMShsm has attempted to copy data sets to the tape volume *volser*. The result is a mismatch between the indicated data sets on the tape volume as described in the OCDS TTOC record and the actual data sets residing on the volume.

Source: DFSMShsm

System Action: DFSMShsm will not select the tape volume *volser* for output processing until after the mismatch is resolved (see programmer response). DFSMShsm processing continues.

Application Programmer Response: The extended AUDIT MEDIACONTROLS function is used to resolve the missing TTOC data set entries for the tape volume *volser*, except when RECYCLE processing has been forced. For information on extended AUDIT MEDIACONTROLS and RECYCLE FORCE commands, see the *DFSMS/MVS DFSMShsm Storage Administration Reference.*

See the *DFSMS/MVS DFSMShsm Storage Administration Guide* for the procedure that documents how to handle inconsistencies between tape media contents and OCDS TTOC records.

ARC0379I INVALID BLOCK COUNT OF *number* **NOT SUBTRACTED FROM THE RECORD FOR TAPE VOLUME** *volser***, RC=***return-code*

Explanation: An error has occurred in attempting to update the OCDS TTOC record with the accumulated invalid block count *number* from an in-storage TTOC invalidation element. The number of valid blocks on the tape volume *volser* is overstated by *number* in the tape volume's OCDS TTOC record.

The values for *return-code* are:

Retcode	Meaning
11	Error in updating OCDS TTOC record.
25	Error in reading OCDS TTOC record.
52	GETMAIN error.
64	Data set entry not found in OCDS TTOC record.
nnn	Three digit abnormal ending code.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: The AUDIT MEDIACONTROLS function can be used to reconstruct the valid block count in the OCDS TTOC record for the tape volume *volser* when the number of lost blocks is significant.

ARC0380A RECALL WAITING FOR VOLUME *volser* **IN USE BY HOST** *procid***, FUNCTION** *function***. REPLY WAIT, CANCEL, OR MOUNT**

Explanation: A recall request needs a tape migration volume *volser* that has been in use by another processing unit *procid* or another task on this processing unit for the past 30 minutes. The operator is being asked for direction. The *function* that has the volume is recycle, tapecopy, migration, recall, DBA/DBU, audit, abackup, or arecover.

Note: For RECYCLE and TAPECOPY functions, this time may be changed or you may choose to immediately fail recalls when the volume is in use by RECYCLE or TAPECOPY processing. See the supported PATCH commands in the *DFSMS/MVS DFSMShsm Implementation and Customization Guide* .

Source: DFSMShsm

System Action: The DFSMShsm task waits for a reply. If the reply is MOUNT, the recall task requests that the tape volume be mounted. CAUTION: Do not reply MOUNT unless the processing unit specified in the message has gone down. If the reply is WAIT, the task continues to wait for the tape to become available, checking in no less than two minute intervals for its availability. If the reply is CANCEL, the recall request fails because the volume is not available.

Operator Response: If the processing unit that is indicated as having the volume in use has gone down, reply MOUNT to the message, which causes DFSMShsm to free up the tape volume for the recall. If the volume really is still in use by another processing unit or another task on this processing unit, reply WAIT or CANCEL. If the tape volume cannot be found, reply CANCEL.

ARC0381A ALLOCATION REQUEST FAILED FOR *volser* FOR {MIGRATION | RECALL | BACKUP | RECOVER | CDSBACKUP | RECYCLE | DUMP | AUDIT | TAPECOPY | UNKNOWN} REPLY WAIT OR CANCEL

Explanation: DFSMShsm attempted to allocate a tape volume, but dynamic allocation determined there are no tape units currently available for the volume, or the operator failed the allocation request. The operator is asked for direction.

Source: DFSMShsm

System Action: The DFSMShsm task waits for a reply.

If the reply is WAIT, DFSMShsm reissues the allocation request every ten seconds up to six times. If the unit is still not available after the six retries, then the message is issued again.

Note: DFSMShsm repeats the allocation request, and the message continues to be issued until either the allocation request is satisfied, or the reply is CANCEL.

If the reply is CANCEL, the allocation fails immediately.

Operator Response: If it is possible that a tape unit may become available within a reasonable time, reply WAIT. Otherwise reply CANCEL. The installation may give further direction to the operators, such as, always reply CANCEL if the function is recycle; and always reply WAIT if the function is recall.

ARC0382I {CREATION | UPDATE | DELETION} OF RACF DISCRETE PROFILE FAILED FOR DATA SET *dsname1* (FROM *dsname2*), RC= *RACF return-code*

Explanation: During backup or recovery of the data set *dsname1*, DFSMShsm has attempted to create a RACF discrete profile for the data set. The data set *dsname2* has been the model RACF profile for the creation of the new profile. The profile creation has failed. RACF has issued the *return-code* in the message. return codes from RACF are documented in *OS/390 Security Server (RACF) Macros and Interfaces*, and contain a description of return codes from the RACDEF macro. If the return code is not found in the RACDEF macro, it is a special case and is the return code from the RACINIT macro.

If *dsname1* has the form:

*backup-prefix.*BACK.*user1.user2.*X*yddd.* T*hhmmss*,

a backup profile has been created during data set backup. If *dsname2* has that form, a backup profile has been used as a model for the recovered data set's profile.

If both *dsname1* and *dsname2* have this form, *dsname1* has been used as a model profile for transferring a backup profile during backup version deletion.

If neither *dsname1* nor *dsname2* has that form, a profile creation has been attempted for the data set specified with the NEWNAME parameter for the RECOVER or HRECOVER commands or a profile has been created after renaming the target data set to a temporary name. The model profile for *dsname2*'s profile has been that of the original data set or the renamed original data set.

If UPDATE appears in the message, an attempt has been made to update the data set's profile following data set recall or recovery. The profile should correspond with the volume serial number of the recall or recovery target volume. The RACF profile update has failed. The *return-code* in the message has been returned by RACF. If the *return-code* is 24, an abnormal end has occurred when the discrete profile has been updated, probably because the profile already contains the volume serial number being added.

If DELETION appears in the message, DFSMShsm has attempted to delete a discrete RACF data set profile associated with the backup version of a RACF-indicated data set.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: For DELETION, the RACF security administrator should determine the cause of the failure. If the profile does not exist, no further action is necessary. If the profile does exist, the security administrator should manually delete the profile using the RACF TSO DELDSD command. For UPDATE, the RACF security administrator or system programmer should determine the cause of the failure and manually update the profile.

ARC0383I DATA SET *dsname* RECOVERED WITHOUT RACF DISCRETE PROFILE

Explanation: A RACF-indicated data set *dsname* was recovered, but its RACF discrete profile could not be created. The data set is marked as though a discrete profile exists. The original data set's profile could not be used as a model for creation of a new profile. Also, either no backup profile existed for use as a model or creation of a profile with a backup profile as a model failed. The creation of a minimal discrete profile also failed. Recovery of the data set succeeds. However, the data set may not be accessible without further action to create a RACF profile.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If a RACF always-call environment is not in effect, use the RACF ADDSD *dsname* NOSET command to create a discrete profile for data sets.

In a RACF always-call environment, a generic profile may be created to allow data set access.

ARC0384I DATA SET *dsname* RECOVERED WITH MINIMAL RACF DISCRETE PROFILE

Explanation: A RACF-indicated data set *dsname* was recovered, but its original RACF discrete profile could not be re-created. The original data set's profile could not be used as a model for the new profile. Also, no backup profiles were available as models or creation of a profile with a backup profile as a model failed. A minimal RACF profile was created for the recovered data set. No access list was created with the discrete profile.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Specify a new access list if desired, with the RACF PERMIT command.

ARC0385I FAILED TO SET RACF INDICATION ON DURING RECOVERY OF VSAM DATA SET *dsname*, CATALOG RETURN CODE = *crc*, CATALOG REASON CODE = *creas*

Explanation: A discrete RACF profile has existed for the data set *dsname* or one has been recovered. The RACF indicator on the cluster's catalog record has not been properly set on. Catalog management return codes *crc* and reason codes *creas* are documented in the description for message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB).*

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: The security administrator or system programmer should determine why the catalog management request has failed, based on the return and reason codes. The discrete profile may have to be deleted and re-created with the DELDSD and ADDSD commands to RACF-indicate the VSAM cluster.

ARC0386I DISCRETE RACF PROFILE RECOVERED FOR DATA SET *dsname1***, MODEL=** *dsname2*

Explanation: A RACF-indicated data set was recovered and a discrete RACF profile was created for the data set also. If *dsname2* is the original data set name, the discrete profile for the original data set was used as a model for the profile creation. If *dsname2* is the backup version name, the backup profile associated with the backup version was used as the model for the profile creation.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: You can specify a new access list with the RACF PERMIT command.

ARC0389E TSO WAIT TYPE RECALL REQUEST FOR A DATA SET HAS BEEN CHANGED TO A NOWAIT REQUEST. {RECALL(TAPE) | RECALL(TAPE(TSO))} IS HELD.

Explanation: TSO RECALL processing requested a data set from tape and tape recall is held. This message is sent to the operator and will remain on the operator's screen until deleted. After five minutes, if a similar recall request is issued, then another ARC0389E message is to the operator. TSO tape recall requests between the five-minute intervals, will not cause ARC0389E messages to be issued.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: When the problem is corrected or the message is no longer needed, take the following action to delete the message:

- If the message identifier is not available, issue the DISPLAY R,I command to get the ID.
- To delete the message, issue the following command using the message identifier *id* obtained from the above DISPLAY R,I command:

  CONTROL C,I,*id*

Application Programmer Response: RECALL processing will be completed when the operator releases the tape recall function.

ARC0390I MIGRATED RACF-PROTECTED VSAM CLUSTER *dsname* **MUST BE RECALLED PRIOR TO DELETION**

Explanation: A delete operation was requested for a command-migrated VSAM cluster that was not eligible for volume level migration and had RACF protection on objects other than the base cluster. DFSMShsm cannot delete the RACF profiles for the VSAM cluster *dsname*.

Source: DFSMShsm

System Action: The delete operation ends. DFSMShsm processing continues.

Application Programmer Response: Delete the VSAM cluster using the following steps:

- Issue a DFSMShsm RECALL or HRECALL command.
- Issue an access method services command to delete the recalled VSAM cluster.

ARC0392I USER {*userid/consoleid***} NOT AUTHORIZED FOR {***cmd* **|** *cmd/parm***} COMMAND PARAMETER**

Explanation: RACF determined that the user/console *userid/consoleid* operator is not authorized to use the command/parameter *cmd/parm* through the RACF facility class profile defined for the command/parameter *cmd/parm*

userid is the ID of the user who issued the command/parameter *cmd/parm*.

consoleid is the console ID of the operator who issued the command/parameter *cmd/parm*.

Source: DFSMShsm

System Action: The request failed. DFSMShsm processing continues.

Operator Response: To use the command/parameter, contact your security administrator for authorization to the required RACF profile (restricted or comprehensive). Reissue the command or parameter.

Application Programmer Response: To use the command/parameter, contact your security administrator for authorization to the required RACF profile (restricted or comprehensive). Reissue the command or parameter.

ARC0396I CREATION OF THE USER ACEE FAILED FOR *userid* **DURING** *command* **AUTHORIZATION, RACF RC=** *return-code***, RACF REAS=** *reason-code***.**

Explanation: A USER ACEE is needed for the *command* authorization, but RACF has been unable to create the USER ACEE for *userid*.

userid is the user's ID who has issued the command.

command is the command that has been issued by the *userid*.

return-code is the return code from RACF.

reason-code is the reason code from RACF.

For return code and reason code values, refer to the *OS/390 Security Server (RACF) Macros and Interfaces* .

Source: DFSMShsm

System Action: The *command* fails and DFSMShsm processing continues.

Application Programmer Response: The system programmer or storage administrator responsible for DFSMShsm should contact the RACF security administrator for help in resolving this problem.

ARC0397I ACCESS TO THE FILTER OUTPUT DATA SET *dsname* **HAS BEEN DENIED TO USER** *userid***, RETURN CODE =** *return-code*

Explanation: An ABACKUP command has been issued with the FILTEROUTPUTDATASET or FODS (dsname) parameter. However, the user issuing the command does not have RACF authorization to update or allocate the data set specified in the command.

dsname is the name of the filter output data set

userid is the user ID issuing the command

The values for *return-code* are:

Retcode	**Meaning**
8	User *userid* is not authorized to update the filter output data set. A data set with the name specified with the FODS parameter existed at the time the ABACKUP command was issued.

10	User *userid* is not authorized to allocate the filter output data set. A data set with the name specified with the FODS parameter did not exist at the time the ABACKUP command was issued.
12	A data set with the name specified with the FODS parameter existed at the time the ABACKUP command was issued; this data set was also migrated (volser=MIGRAT). However, no migration copy of the data set existed.
14	A data set with the name specified with the FODS parameter existed at the time the ABACKUP command was issued; this data set was also migrated (volser=MIGRAT). However, no D record was found for the migrated data set.

Source: DFSMShsm

System Action: The command fails and DFSMShsm processing continues.

Application Programmer Response: Contact your security administrator for granting the authorization to update or allocate the filter output data set (return codes 8 and 10). Contact your system programmer regarding possible problems with the migrated, filter output data set (return codes 12 and 14).

ARC0400I VOLUME *volser* **IS** *percent%* **FREE,** *tracks* **FREE TRACK(S),** *cylinders* **FREE CYLINDER(S), FRAG** *fragx*

Explanation: This is the first of three messages DFSMShsm writes when an LSPACE is done for volume *volser*. Messages ARC0401I and ARC0402I follow. Unallocated space on the volume is *percent* of all the allocatable space on the volume. The amount of unallocated space remaining is *tracks* and *cylinders*. The fragmentation index *fragx* calculated by DFSMShsm for this volume is for information only. The storage administrator might want to reorganize volumes whose fragmentation index values are 0.6 or higher.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0401I LARGEST EXTENTS FOR *volser* **ARE CYLINDERS** *cylinders***, TRACKS** *tracks***.**

Explanation: This is the second of three messages DFSMShsm writes when an LSPACE is done for a volume. Message ARC0400I precedes this message. Message ARC0402I follows. This message describes the space available for up to five of the largest extents on the volume. The number of full cylinders in each extent is specified as *cylinders*. The number of full tracks in each extent is specified as *tracks*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0402I VTOC FOR *volser* **IS** *tracks* **TRACKS(***totdscbs* **DSCBS),** *free* **FREE DSCBS(***percent%* **OF TOTAL)** *avlspace* **AVAILABLE SPACE DSCB**

Explanation: This is the last of three messages DFSMShsm writes when an LSPACE is done for a volume. VTOC statistics are reported for the volume identified in message ARC0400I.

- *tracks* indicates the number of tracks in the VTOC of the volume.
- *totdscbs* indicates the number of data set control blocks (DSCBs) in the VTOC.
- *free* indicates the number of free DSCBs.
- *percent* indicates the percent of free DSCBs.
- *avlspace* indicates the number of available space DSCBs. If the volume has an indexed VTOC, *avlspace* represents the number of equivalent available space DSCBs.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0404I ERROR WHILE ACCESSING VOLUME'S VTOC FOR *volser***, RC=** *return-code***, REAS=** *reason-code*

Explanation: DFSMShsm has been accessing the volume with volume serial number *volser* when it has detected an error in reading the indexed VTOC.

If both *return-code* and *reason-code* are equal to zero, DFSMShsm has not been able to process the indexed VTOC for volume *volser*. The volume either has a disabled indexed VTOC or the volume has a nonindexed VTOC.

For nonzero code values, the return code and CVSTAT field returned to DFSMShsm from the CVAFDSM macro are given in the *return-code* and *reason-code* fields. For an explanation of these fields, see documentation about the CVAFDSM macro. The CVAFDSM return codes are in *DFSMS/MVS Using Data Sets*. The CVSTAT return codes are in *DFSMS/MVS DFSMSdfp Diagnosis Reference*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the *return-code* and *reason-code* are nonzero, correct the indexed VTOC using the documentation about the CVAFDSM macro, which are located in the *DFSMS/MVS Macro Instructions for Data Sets*.

If both *return-code* and *reason-code* are equal to zero and the volume has an indexed VTOC, refer to the documentation for previous I/O-error messages (IEC60nI) received for volume *volser* to see how the indexed VTOC can be reenabled.

If both *return-code* and *reason-code* are equal to zero and the volume has a nonindexed VTOC, determine why the available space DSCBs are not usable and make corrections if needed.

ARC0405I HOST *procid* **UPDATING SPACE INFORMATION ON ALL VOLUMES**

Explanation: The processing unit *procid* is space checking all volumes because it has not validated the space information in the volume records in the migration control data set (MCDS). Performance is slower during the space update. This condition can be caused by any of the following conditions:

- None of the processing units in a multiple processing unit environment is designated in the startup procedures as the primary processing unit.
- The designated primary processing unit is inactive.
- The multiple-host processor control record (MHCR) in the MCDS could not be read.
- Non-primary host *procid* has been directed (by a patched value in its MGCB data area) to wait more than five minutes after the hour before doing its space check.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If no processing unit is designated as the primary processing unit, define one processing unit as the primary processing unit in the startup procedure. For information about DFSMShsm startup procedures, see *DFSMS/MVS DFSMShsm Implementation and Customization Guide* . If the designated primary processing unit is inactive and will remain inactive for a long time, define another processing unit as the primary processing unit. If the MHCR in the MCDS could not be read and this condition persists, a permanent I/O error is occurring on the MCDS. If the patched value in the MGCB results in an unacceptable performance impact, patch that value to 5 or less.

ARC0406I SPACE PARAMETER ON QUERY COMMAND ONLY VALID WHEN ENTERED BY CONSOLE OPERATOR OR AUTHORIZED USER

Explanation: A QUERY command with the SPACE parameter was issued by a non-DFSMShsm authorized user from a TSO terminal with the HSENDCMD command. The SPACE parameter of the QUERY command is only valid when entered by a system operator or a DFSMShsm authorized user.

Source: DFSMShsm

System Action: Other parameters on the QUERY command are processed. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0407I QUERY SPACE FAILED, {{VOLUME *volser* NOT | NO PRIMARY OR MIGRATION LEVEL 1 VOLUMES} CURRENTLY MANAGED BY DFSMShsm}

Explanation: A QUERY command with the SPACE parameter was entered. If specific volumes were specified on the command, this message is issued for each requested volume that is an SMS-managed volume, a non-SMS volume that is neither a primary nor migration level 1 volume currently under DFSMShsm control, or a non-SMS primary or migration level 1 volume that is OFFLINE. (A primary or migration level 1 volume is currently under DFSMShsm control if an ADDVOL command was entered for that volume during this startup of DFSMShsm, and the volume was not removed from DFSMShsm control by a subsequent DELVOL command.)

If SPACE was not specified with specific volumes, this message is issued if there are no non-SMS primary volumes under DFSMShsm control and no migration level 1 volumes under DFSMShsm control, or if the volumes under DFSMShsm control are OFFLINE.

Source: DFSMShsm

System Action: If a set of volume serial numbers was specified on the QUERY command with the SPACE parameter, the available space is listed for each non-SMS-managed volume that is a primary or migration level 1 volume currently under DFSMShsm control. Other parameters on the QUERY command are processed. DFSMShsm processing continues.

Application Programmer Response: If you want to query the available space on a non-SMS volume using the DFSMShsm QUERY command with the SPACE parameter, the volume must be a primary or migration level 1 volume currently under DFSMShsm control and must be ONLINE. You can place a non-SMS volume under DFSMShsm control by entering an ADDVOL command for the volume. Under most conditions, an ADDVOL command for a primary or migration level 1 volume causes the available space on the volume to be listed.

If you want to query the available space on an SMS-managed volume, you must use the appropriate ISMF panel.

ARC0408I INPUT TAPE ALLOCATION= {WAIT | NOWAIT}, OUTPUT TAPE ALLOCATION= {WAIT | NOWAIT}, RECYCLE TAPE ALLOCATION= {WAIT | NOWAIT}, TAPEFORMAT= {SINGLEFILE, MAXSINGLEFILEBLOCKS=*blocks* | MULTIFILE}

Explanation: A DFSMShsm QUERY command with the SETSYS parameter was issued. This message indicates how DFSMShsm will allocate a tape unit during recovery and recall processing (INPUT TAPE ALLOCATION), backup and migration processing (OUTPUT TAPE ALLOCATION), and recycle processing (RECYCLE TAPE ALLOCATION). The message also indicates which format for the IBM 3480 Magnetic Tape Subsystem is started (TAPEFORMAT) and the maximum number of blocks that will be written to a single file format volume (MAXSINGLEFILEBLOCKS).

If INPUT TAPE ALLOCATION= WAIT, DFSMShsm will turn on the S99WTUNT bit in the S99FLAGS2 field passed to dynamic allocation when it is allocating a tape unit during recovery and recall processing. Because the S99WTUNT bit is on, dynamic allocation will wait for a tape unit to become available if one is not currently available. During the time dynamic allocation is waiting for a tape unit to become available, it holds an exclusive enqueue on the task input/output table (SYSZTIOT) resource. This outstanding enqueue can seriously affect the performance of DFSMShsm and your computing system.

If INPUT TAPE ALLOCATION= NOWAIT, DFSMShsm will not turn on the S99WTUNT bit in the S99FLAGS2 field passed to dynamic allocation when it is allocating a tape unit during recovery and recall processing. Because the S99WTUNT bit is off, dynamic allocation will not wait for a tape unit to become available if all tape units are currently being used.

If OUTPUT TAPE ALLOCATION= WAIT, DFSMShsm will turn on the S99WTUNT bit in the S99FLAGS2 field passed to dynamic allocation when it is allocating a tape unit during backup, migration and dump processing.

If OUTPUT TAPE ALLOCATION= NOWAIT, DFSMShsm will not turn on the S99WTUNT bit in the S99FLAGS2 field passed to dynamic allocation when it is allocating a tape unit during backup, migration, and dump processing.

If RECYCLE TAPE ALLOCATION= WAIT, DFSMShsm will turn on the S99WTUNT bit in the S99FLAGS2 field passed to dynamic allocation when it is allocating a tape unit during recycle processing.

If RECYCLE TAPE ALLOCATION= NOWAIT, DFSMShsm will not turn on the S99WTUNT bit in the S99FLAGS2 field passed to dynamic allocation when it is allocating a tape unit during recycle processing.

If TAPEFORMAT= SINGLEFILE, 3480 migration and backup volumes will be written as a single file on the tape.

If TAPEFORMAT= MULTIFILE, 3480 migration and backup volumes will be written as multiple data sets for each volume.

The maximum number of 16K blocks that DFSMShsm will write to a migration or backup 3480 volume in single file format is *blocks*.

If MAXSINGLEFILEBLOCKS=11,421 (the default value), a 3480 volume will have a very high probability of being able to be copied to a single 3480 volume.

If MAXSINGLEFILEBLOCKS=0, the full single file format 3480 volumes will be used.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0409I ERROR READING VTOC ON VOLUME *volser*

Explanation: DFSMShsm encountered a read error on the VTOC of the volume *volser* specified in the message. In the case of an LSPACE, processing bypasses the volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Take corrective action in the VTOC of the volume *volser*.

ARC0410I TAPEMIGRATION={DIRECT (TAPE(ANY | *unitname***)) | ML2TAPE(TAPE (ANY |** *unitname***)) | NONE(ROUTETOTAPE(ANY |** *unitname***))}, MIGDENSITY=***density***, MIGUNIT=***unit***, ML2 RECYCLE PERCENTAGE=***percent***%, TAPEMAXRECALLTASKS=***tasks*

Explanation: A DFSMShsm QUERY command was issued with the SETSYS parameter. DFSMShsm issues this message to describe its current operating environment.

If TAPEMIGRATION=DIRECT, DFSMShsm migrates all migration data sets directly to tape migration level 2 volumes.

> If TAPE(ANY), DFSMShsm selects any available tape during migration processing.
> If TAPE(*unitname*), DFSMShsm selects available *unitname* tapes during migration processing.

If TAPEMIGRATION=ML2TAPE, DFSMShsm migrates data sets from DASD migration level 1 volumes to tape migration level 2 volumes.

> If TAPE(ANY), DFSMShsm selects any available tape during migration processing.
> If TAPE(*unitname*), DFSMShsm selects available *unitname* tapes during migration processing.

If TAPEMIGRATION = NONE, a migration level 2 tape is selected when one of the following events takes place:

- The selection of tape migration level 2 by the ARCMDEXT exit, which is taken when performing migration on a level 0 volume.
- The migration of an SMS-managed data set belonging to a management class with the attribute of LEVEL-1-DAYS-NON-USAGE=0, which indicates that the data set is to be migrated directly to level 2 tape.

If ROUTETOTAPE(ANY) is displayed, DFSMShsm will select any available tape when directed to select a tape migration level 2 volume under the conditions described under “TAPEMIGRATION = NONE”, above. If no tapes are available, DFSMShsm will select a scratch tape with the unit name specified or defaulted from the MIGUNITNAME parameter of the SETSYS command.

If ROUTETOTAPE(unitname) is displayed, DFSMShsm will select any available tape, with the specific unitname shown, when directed to select a tape migration level 2 volume under the conditions described under “TAPEMIGRATION = NONE”, above.

The current tape density for migration scratch tapes is *density*.

The current tape unit for migration scratch tapes is *unit*.

The migration recycle percentage is *percent*.

The maximum number of recall tasks that are allowed to be processing concurrently from tape volumes is *tasks*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0411I TAPESECURITY={RACF | RACFINCLUDE} {PASSWORD} {EXPIRATION | EXPIRATIONINCLUDE}, {DEFERMOUNT | NODEFERMOUNT}

Explanation: A QUERY command with the SETSYS parameter has been entered. DFSMShsm issues this message to describe its current operating environment.

The current setting of the TAPESECURITY parameter is displayed along with the current setting of the DEFERMOUNT parameter. For additional information on this parameter, see *DFSMS/MVS DFSMShsm Storage Administration Reference*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0412I RECYCLEOUTPUT BACKUP={*unit* **| **NONE**}, MIGRATION={***unit* **| **NONE**}**

Explanation: A QUERY command was issued with the SETSYS parameter. DFSMShsm issues this message to describe its current parameter settings.

BACKUP=*unit* specifies that during recycle processing of a tape backup volume, only tape SPILL backup volumes that can be mounted and written on the specified type of unit are used for output. In addition, the tape SPILL backup volume is allocated using the unit name specified with the BACKUP subparameter of the RECYCLEOUTPUT parameter on the SETSYS command, overriding the *unitname* specified on the ADDVOL command for the tape SPILL backup volume.

BACKUP=**NONE** specifies there is no restriction on the type of tape spill backup volume that can be selected for output during the recycle processing of a tape backup volume.

MIGRATION=*unit* specifies that during recycle processing of a tape level 2 migration volume, only tape level 2 migration volumes that can be mounted and written on the specified type of unit are used for output. In addition, the tape level 2 migration volume is allocated using the unit name specified with the MIGRATION subparameter of the RECYCLEOUTPUT parameter on the SETSYS command, overriding the *unitname* specified on the ADDVOL command for the tape level 2 migration volume.

MIGRATION=**NONE** specifies that there is no restriction on the type of tape level 2 migration volume that can be selected for output during the recycle processing of a tape level 2 migration volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0413I QUERY SPACE FOR VOLUME *volser* **ALREADY ACTIVE - RETRY THIS VOLUME AGAIN**

Explanation: A QUERY command with the SPACE parameter was issued for a volume *volser*. The indicated volume had another QUERY SPACE request outstanding. DFSMShsm does not permit concurrent requests for this function on the same volume.

Source: DFSMShsm

System Action: Other volumes on the QUERY SPACE command are processed. DFSMShsm processing continues.

Application Programmer Response: Reissue the QUERY SPACE command for this volume.

ARC0414I SETSYS WITH ERASE-ON-SCRATCH REJECTED, ERASE-ON-SCRATCH SUPPORT NOT AVAILABLE

Explanation: A SETSYS command was specified with the ERASEONSCRATCH parameter. A level of DFP is installed on the system that does not support erase-on-scratch processing.

Source: DFSMShsm

System Action: The ERASEONSCRATCH parameter on the SETSYS command is rejected. DFSMShsm processing continues.

Application Programmer Response: When the appropriate level of DFP 2.1.0 and RACF 1.7 is installed for erase-on-scratch processing, reissue the command.

ARC0415I EXPIREBV={HELD | NOT HELD} AND {ACTIVE | INACTIVE}, LAST STORED BACKUP VERSION KEY=*bcdskey1*, LAST STORED ABARS VERSION KEY=*bcdskey2*, LAST PLANNED END KEY= *last-planned-end-key*

Explanation: A QUERY command has been issued with the ACTIVE parameter. This message gives the status of the EXPIREBV long-running command.

HELD and NOT HELD indicate whether the operator has issued a HOLD command to hold the function.

ACTIVE and INACTIVE indicate whether an EXPIREBV command is currently in progress.

The EXPIREBV command reads records from the BCDS in alphabetical order, looking for expired backup versions, or expired ABARS versions if ABARSVERSIONS is specified. The key of the record being read is periodically stored in the backup control record on this processing unit. The data set backup version key and the ABARS version key are each stored separately. The value of the stored key used when processing data set backup versions is indicated with *bcdskey1*. The value of the stored key used when processing ABARS versions is indicated with *bcdskey2*.

The planned ending key is saved when starting an EXPIREBV command. If the command processing ends prior to completion, a subsequent EXPIREBV command issued on this processing unit with the RESUME parameter, will, by default, start at the *bcdskey1* if ABARSVERSIONS is omitted, or will start at the *bcdskey2* if ABARSVERSIONS is specified.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0416I USER UNIT NAME TRANSLATED FROM ORIGINAL UNIT TO TRANSLATED UNIT

Explanation: The DFSMShsm QUERY command was issued with the SETSYS parameter. This message gives one of the esoteric unit name translations that was specified on the most recent SETSYS USERUNITTABLE command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0417I TAPE INPUT PROMPT FOR BACKUPTAPES | DUMPTAPES | MIGRATION TAPES = Y|N

Explanation: The DFSMShsm QUERY command was issued with a SETSYS parameter from the list in the message text. This message reports a DFSMShsm setting, which is either the default or the setting previously specified by a SETSYS TAPEINPUTPROMPT parameter. The TAPEINPUTPROMPT parameter determines whether or not DFSMShsm will issue action messages to prompt the operator to determine the availability of specified input tapes.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None

ARC0418I TAPEUTILIZATION PERCENT =(pct | NOLIMIT), UNIT= *unit* **| LIBRARYMIGRATION | LIBRARYBACKUP**

Explanation: These are the values specified by the SETSYS TAPEUTILIZATION command. If pct is shown, this is the amount of the tape volume that will be written until the end of the volume is forced by DFSMShsm. If NOLIMIT is specified, the tape will be written to until the actual end of volume is reached. The value for UNIT will be the unit type that these settings pertain to. If LIBRARYMIGRATION or LIBRARYBACKUP is indicated, then the value represents the percent utilization for migration or backup tapes stored in a tape library.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Verify these are the desired settings. If not, reissue the SETSYS TAPEUTILIZATION command with the proper parameters.

ARC0419I SELECTVOLUME={SPECIFIC | SCRATCH | SPECIFIC FOR *func[,func]*, **SCRATCH FOR** *func[,func]*}, **TAPEDELETION={SCRATCHTAPE | HSMTAPE | SCRATCHTAPE FOR** *func[,func]*, **HSMTAPE FOR** *func[,func]*}, **PARTIALTAPE={MARKFULL | REUSE | MARKFULL FOR** *func*, **REUSE FOR** *func*} **DISASTERMODE={YES | NO}**

Explanation: A QUERY command with the SETSYS parameter has been entered. DFSMShsm issues this message to describe its current operating environment.

The current setting of the SELECTVOLUME option is displayed:

- If SELECTVOLUME={SPECIFIC | SCRATCH} is displayed, this implies a global specification that applies to backup, dump, and migration tape volume selection.
- If SELECTVOLUME=SPECIFIC FOR *func[,func]*, SCRATCH FOR *func[,func]* is displayed, the values for *func* are BACKUP, MIGRATION and DUMP. These values reflect the different functional specifications that have been requested for tape volume selection.

The current setting of the TAPEDELETION option is displayed:

- If TAPEDELETION={SCRATCHTAPE | HSMTAPE} is displayed, this implies a global specification that applies to backup, dump, and migration tape volume deletion.
- If TAPEDELETION=SCRATCHTAPE FOR *func[,func]*, HSMTAPE FOR *func[,func]* is displayed, the values for *func* are BACKUP, MIGRATION and DUMP. These values reflect the different functional specifications that have been requested for tape volume deletion.

The current setting of the PARTIALTAPE option is displayed:

- If PARTIALTAPE={MARKFULL | REUSE} is displayed, this implies a global specification that applies to backup and migration tape volumes.
- If PARTIALTAPE=MARKFULL FOR *func*, REUSE FOR *func* is displayed, the values for *func* are BACKUP and MIGRATION. These values reflect the different functional specifications that have been requested for marking single-file format tape volumes full.

When DISASTERMODE=YES, DFSMShsm selects the disaster alternate volume, if it exists, for recall or recover.

For additional information on these three options, see the *DFSMS/MVS DFSMShsm Storage Administration Reference* .

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0420I *volser1* **DELETED, {ML2 | BACKUP} ALTERNATE=***volser2*

Explanation: A DEVOL command was entered for tape volume *volser1* or an internal DELVOL was processed. The delete was successful, but there is an alternate volume, *volser2* that exists for the deleted volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Use this message (in the command activity log) to determine what alternate tape volumes can be purged and reused.

ARC0421I *type* **VOLUME** *volser* **IS NOW MARKED FULL**

Explanation: DFSMShsm marked a tape volume full. The type reflects the type of volume processed. The type is set to either BACKUP or MIGRATION.

Source: DFSMShsm

System Action: The tape is marked full. DFSMShsm processing continues. The message is routed to both the migration log and to the console to facilitate auto-operations usage.

Application Programmer Response: None.

ARC0422I **TAPECOPY COMPLETED - RETURN CODE=***return-code*

Explanation: DFSMShsm has completed processing of a TAPECOPY command. The values for *return-code* are:

Retcode	Meaning
0	All functions requested completed without errors. This code is also issued if a TAPECOPY ALL, BACKUP, or MIGRATIONLEVEL2 command found no eligible volumes to process.
4	TAPECOPY did not successfully process the complete list of tape volumes. A subset of the tapes were copied.
8	TAPECOPY failed without completing any copies.
16	TAPECOPY abnormally ended.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Refer to the other messages issued during the tape copy process. No response is required for return code 0. For return code 4, the volume list (either the command or input data set) must be updated to remove all volumes that were successfully processed before reissuing the TAPECOPY command.

For all other codes, the command can be restarted. If operating from an explicit volume list, all volumes that were processed should be removed from the list before reissuing the TAPECOPY command.

Refer to the messages accompanying this messages to determine the state of each volume that was to be processed.

ARC0423I **VOLUME COPY COMPLETE - SOURCE =** *volser1***, TARGET =** *volser2*

Explanation: DFSMShsm successfully performed the tape copy function for *volser1*. the source tape has been copied to the target tape and the target tape's volume serial has been recorded in the source volume's TTOC.

Source: DFSMShsm

Application Programmer Response: None.

ARC0424I *volser* **NOT COPIED - REASON=***reason-code*

Explanation: DFSMShsm failed to perform the tape copy function for volume *volser*. One of the following conditions exists:

- The EXPDT parameter specified in an INDATASET record is invalid.
- Neither a migration control data set volume record (MCV) nor a backup control data set backup volume record (MCT) is found for the volume.
- The volume is not a 3480 tape volume recorded in DFSMShsm single-file mode.

The reason codes are:

1 A control data set (CDS) record (MCV or MCT) for the volume is missing. See the accompanying messages for the record type.

2 The volume is not a 3480 single-file tape volume and it cannot be copied, or the tape may be empty.

3 The EXPDT parameter in the input data set record for this volume is invalid. Possible reasons may be one of the following:

- A character is nonnumeric
- The day value is less than 1 or greater than 366
- The day value 366 is specified, but the year is not a leap year
- The date is after 2155
- The date is in the past
- The date is specified as *yyddd*, but the current date is after 1999.

4 The tape table of contents record (TTOC) is not found for the volume.

5 The TTOC record and tape media are inconsistent.

6 The alternate volume is identified as a disaster alternate volume.

Source: DFSMShsm

System Action: The volume is bypassed. The tape copy process continues to check the volume list for valid entries. DFSMShsm processing continues.

Application Programmer Response: Perform the following actions based upon the reason code:

1	A CDS record (MCV or MCT) for the volume is missing. See the accompanying messages for the record type. If a TTOC exists for the volume, ADDVOL the tape, then rerun the tape copy process. If no TTOC exists, the tape cannot be copied.
2	The volume is not a 3480 single-file tape volume and it cannot be copied, or the tape volume may be empty.
3	The expiration date field in the INDATASET record for this volume is invalid. Correct the expiration date and rerun the tape copy process.
4	The volume cannot be copied because the TTOC record is missing.
5	The volume cannot be copied because the TTOC record and tape media contents are inconsistent on the tape volume. The tape volume cannot be copied at this time. Rerun the tape copy at a later time. The extended AUDIT MEDIACONTROLS command processing is used to resolve the missing TTOC data set entries for the tape volume *volser*, except when RECYCLE processing is forced. For information on extended AUDIT MEDIACONTROLS and RECYCLE FORCE, see the *DFSMS/MVS DFSMShsm Storage Administration Reference*. See the *DFSMS/MVS DFSMShsm Storage Administration Guide* for the procedure for handling inconsistencies between tape media contents and OCDS TTOC records.
6	The volume cannot be copied while the alternate volume is marked as a disaster alternate volume.

ARC0425I COPY OF *volser* FAILED - REASON=*reason-code*

Explanation: The creation of the alternate tape copy failed. The reason code explains the error:

1	TTOC read error.
2	TTOC update error.
3	I/O error on input tape.
4	I/O error on output tape.
5	EOV on output tape (tape too short).
6	Open error on input tape.
7	Open error on output tape.
8	Close error on input tape.
9	Close error on the output tape.
10	ARCCPCTS subtask abnormally ended (abended).
11	MCV update failed. The volume may be in use by another processing unit or another task on this processing unit.
12	BVR update failed.
13	MCT read failed.
14	TTOC read failed.
15	The MCV for the tape volume indicated the volume was in use.
16	MCT update failed.
17	MCT read failed.
20	CDS I/O error.
21	An error occurred while adding RACF protection.
27	IDRC incompatibility between original unit and alternate unit.
28	The alternate unit requested for the output tape is incompatible with the tape to be copied. For example: • The alternate unit cannot be 3490 when a 3480 or 3480X tape is being copied. • The alternate unit cannot be 3480 or 3480X when a 3490 tape is being copied. • The alternate unit cannot be 3590-1 when a 3480, 3480X, or 3490 tape is being copied. • The alternate unit cannot be 3480, 3480X, or 3490 tape when a 3590-1 is being copied.
29	During processing of the TAPECOPY command, a volume to be copied is of a different length than the volume to which it is to be copied. DFSMShsm does not allow a TAPECOPY from an enhanced capacity tape cartridge to a standard capacity cartridge and DFSMShsm does not allow a TAPECOPY from a standard capacity cartridge to an enhanced capacity tape cartridge. If you do not have a tape library, and the tape operator mounted the wrong length tape because he or she was not informed of what capacity cartridge to mount, then issue the SETSYS TAPEOUTPUTPROMPT(TAPECOPY(YES)) command and then reissue the TAPECOPY command. This causes DFSMShsm to indicate to the tape operator which type of tape (standard or enhanced capacity) should be mounted on the particular device for each TAPECOPY command issued.
30	If the source volume is not RACF protected, TAPECOPY does not output to a tape volume that has RACF protection that DFSMShsm did not provide.
31	Error attempting to issue the TAPEOUTPUTPROMPT message ARC0332A.
32	Error attempting to determine if tape is standard capacity or enhanced capacity.
40	ML2 input volume was needed by RECALL.
40	ML2 input volume was needed by RECALL or ABACKUP.

All of the reason codes (except 3, 4, 5, and 40) are accompanied by another DFSMShsm message that provides details of the failure.

Source: DFSMShsm

System Action: The TAPECOPY process continues with the next tape. If two consecutive tapes end abnormally (not including RC40), the TAPECOPY process ends. DFSMShsm processing continues.

Application Programmer Response: Response is dependent upon the reason code. For all reason codes except 3, 4, 5, 9, and use the problem determination actions for the accompanying message. For *reason-code* 28, specify an alternate unit compatible with the tape to be copied.

For reason codes 3, 4, 5, 9, and 15 use the following actions:

3	Determine what the tape I/O error is by referencing the system LOGREC. If the error was a data check, use the FORCE parameter of the RECYCLE command for that volume.
4	Determine what the tape I/O error is by referencing the system LOGREC. Correct the problem causing the error and rerun the tape copy process.
5	If the SETSYS MAXSINGLEFILEBLOCKS parameter was changed, restore the DFSMShsm-supplied maximum single-file default and recycle all 3480 single-file tape volumes containing more blocks than the DFSMShsm default maximum block count. If the maximum block count was not changed, the output tape volume was defective (too short), and a different volume should be used.
9	An internal DFSMShsm error occurred, as the result of two consecutive abends for the tape copy process. Save all associated output and contact the IBM Support Center.
11, 15	If this was a user-generated TAPECOPY, rerun it when the volume is not in use. If DFSMShsm internally generated the TAPECOPY because of a duplex tape failure, secondary space management or auto backup will retry the TAPECOPY later.

ARC0426I **TAPEREPL COMPLETED - RETURN CODE=***return-code*

Explanation: DFSMShsm has completed processing of a TAPEREPL command. The possible values for *return-code* are:

0	All functions requested were completed without errors.
4	The tape replace process ended prematurely without completing the list of volumes to be processed. A subset of the CDS updates was performed.
6	The tape replace process running with DISASTERALTERNATEVOLUMES has ended prematurely.
8	The tape replace process failed without completing any functions.
16	The tape replace process abnormally ended.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

System Programmer Response: Refer to the other messages issued during the tape replace process. No response is required for return code 0. For return code 4, the volume list (either the command or input data set) must be updated to remove the volumes that have been processed before reissuing the TAPEREPL command.

For all other codes, the command can be restarted. If operating from an explicit volume list, all volumes that were processed should be removed from the list before reissuing the TAPEREPL command. Refer to the messages accompanying this message to determine the state of each volume that was to be processed.

ARC0427I *original-volser* **REPLACED BY ALTERNATE** *alternate-volser* **- RC=***return-code*

Explanation: The original volume was deleted and the CDS records for valid data sets were updated replacing the original with the alternate volume.

0	All CDS records for valid data sets on the original volume were updated successfully.
2	Not all CDS records for valid data sets on the original volume were updated.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If reason code is zero, no action taken. If reason code is two, message ARC0432I is issued to the user and the Command Activity Log for each valid data set not updated. See this message to determine what action is required.

ARC0428I *volser* **NOT UPDATED - REASON=***reason-code*

Explanation: Errors occurred during processing of the volume listed. The reason codes are:

2	No alternate tape volume reference was found in the TTOC record for the volume listed as *volser*.
4	The MCV or MCT record for the alternate volume already exists.
5	The base TTOC record for the alternate volume already exists.
20	CDS I/O error.
27	IDRC incompatibility between original unit and alternate unit.
28	The alternate unit requested is incompatible with the tape being replaced. For example: • The alternate unit cannot be 3490 when a 3480 or 3480X tape is being replaced. • The alternate unit cannot be 3480 or 3480X when a 3490 tape is being replaced. • The alternate unit cannot be 3590-1 when a 3480, 3480X, or 3490 tape is being copied. • The alternate unit cannot be 3480, 3480X, or 3490 tape when a 3590-1 is being copied.

Source: DFSMShsm

System Action: For all return codes, the CDS records that reference the original volume are not replaced. DFSMShsm processing continues.

Application Programmer Response: Refer to the messages accompanying this message for more information. For *reason-code* 28, specify an alternate unit that is compatible with the tape being replaced.

Verify that the volume serial is correct.

If the original volume MCV or MCT record is missing and a TTOC exists, ADDVOL the original volume.

If the alternate volumes MCV, MCT, or TTOC already exist and no data set records point to it, use the PURGE parameter of the DELVOL command to delete the alternate volume.

If the above actions do not correct the problem, then use the following actions for each reason code.

2	Supply alternate tape volume serial number.

4	This could result when rerunning the tape replace process and the TAPEREPL command did not complete normally. To correct this error, first determine whether the MCV/MCT should be replaced. If it should, delete the MCT/MCV record using FIXCDS and reissue the TAPEREPL command.
5	This could result when rerunning the tape replace process and the TAPEREPL command did not complete normally. To correct this error, first determine whether the TTOC should be replaced. If it should, delete the base TTOC record using FIXCDS and reissue the TAPEREPL command. Extension records that exist without the base record are automatically replaced.

ARC0429I ORIGINAL VOLUME *volser* NOT FOUND IN CONTROL DATA SET

Explanation: DFSMShsm was processing a tape replace for volume *volser*. Another DFSMShsm message will accompany this message indicating which CDS record is missing. If the volume is a backup or SPILL volume, either the TTOC or MCT record is missing or the BCDS is not available to DFSMShsm. If the volume is a migration level 2 volume, the TTOC or MCV record is missing.

Source: DFSMShsm

System Action: The tape replace process bypasses the volume. DFSMShsm processing continues.

Application Programmer Response: Verify that the volume serial is correct. If it is, determine which record is missing. If the MCV or MCT record is missing, use the ADDVOL command to add the volume. If the TTOC is missing, the TAPEREPL command cannot be run against this volume.

ARC0430I {TAPECOPY | TAPEREPL} COMMAND FAILED - *reason-code*.

Explanation: The TAPECOPY or TAPEREPL command has failed without performing all of the requested tape copies. The reason codes are:

1	The EXPDT and RETPD subparameters are both specified. Only one can be specified at a time.
2	The expiration date is invalid. Possible reasons may be one of the following: • The number of digits is not 5 or 7 • The day value is less than 1 or greater than 366 • The day value 366 is specified, but the year is not a leap year • The date is after 2155 • The date is in the past • The date is specified as *yyddd*, but the current date is after 1999
4	RETPD exceeds the century because year 2000 support is not available in MVS or RETPD exceeds year 2155 (MVS limit).
6	The list of volumes specified with the ORIGINALVOLUMES and ALTERNATEVOLUMES parameters do not contain the same number of volumes.
7	I/O error has occurred on INDATASET.
8	No input volume list has been found.
9	INDATASET allocation has failed. Another DFSMShsm message accompanies this reason code providing more information.
10	Multiple volume list sources are given.
11	ALTERNATEVOLUMES has been specified without ORIGINALVOLUMES.
12	All volumes in the list supplied with the command are invalid.
13	A HOLD command has been issued for the TAPECOPY or TAPEREPL command while the command is in progress. Some volumes may not have been processed.
14	There has been more than one abnormal end (abend) for the ARCCPCTS subtask. This message indicates that either the DFSMShsm virtual storage has been exceeded or there is an internal DFSMShsm logic error. Some volumes may not have been processed. Another DFSMShsm message accompanies this reason code providing more information.
15	The command contains a syntax error and could not be processed.
16	Input tape unit allocation has failed. Another DFSMShsm message will accompany this reason code providing more information.
17	Output tape unit allocation has failed. Another DFSMShsm message will accompany this reason code providing more information.
19	ARCCPCTS subtask attach has failed. This message indicates that either the DFSMShsm virtual storage has been exceeded or there is an internal DFSMShsm logic error. Another DFSMShsm message accompanies this reason code providing more information. The abend and associated system control blocks are traced using the problem determination aid function.
20	An error has occurred positioning to the first volume record in the MCDS or BCDS.
21	An error has occurred reading a volume record from the MCDS or BCDS.
23	The ALTERNATEUNITNAME parameter has been specified, but the unit type has not been specified.
24	The ALTERNATEUNITNAME parameter has been specified, and the unit type is incorrect.
25	The unit type specified in the UUT does not match the specified ALTERNATEUNITNAME unit type.
26	The UUT has not been defined or cannot be accessed.
27	The hardware compaction of the original unit is not compatible with the ALTERNATEUNITNAME unit type specified.
29	More than the allowable number of alternate units has been specified.
30	An error has been encountered in determining if a storage class is assigned to the output tape copy data set name.

31	An error has been encountered in reading the tape library volume record for an OVOL or an AVOL.
32	The ALTERNATE3590UNITNAME parameter has been specified, but the unit type has not been specified.
33	More than the allowable number of alternate units has been specified for the ALTERNATE3590UNITNAME parameter.
34	The unit type specified in the UUT does not match the specified ALTERNATE3590UNITNAME unit type.
35	The ALTERNATE3590UNITNAME parameter has been specified, but the unit type is incorrect.
36	The UUT has not been defined or cannot be accessed for the ALTERNATE3590UNITNAME parameter.

Source: DFSMShsm

System Action: The TAPECOPY or TAPEREPL command ends, except that TAPECOPY continues to process the next volume if the requested volume is unavailable (ARC0500I DARC=0220) and the input tape allocation has failed (ARC0430I RS=16). For all reason codes except 13, 14, 19, and 21, no tapes has been copied. Reason codes 13, 14, 19 and 21 can result in a subset of the requested copies being made.

System Programmer Response: For all but reason codes 14 and 19, correct the problem and reissue the TAPECOPY or TAPEREPL command to process the volumes.

For reason code 13, issue a RELEASE command and reissue a TAPECOPY or TAPEREPL command for the volumes not processed.

For reason codes 14 and 19, contact the IBM Support Center.

ARC0431I {ORIGINAL | PREVIOUS | SUCCESSOR} TTOC RECORD MISSING - *volser* **KEY=***ttoc-record-key*

Explanation: A TTOC record for the volume listed as *volser* was not found with a valid MCV or MCT record in the CDS.

Source: DFSMShsm

System Action: When copying a tape, the tape copy process fails this volume and continues with the next volume in the list. The tape cannot be copied.

If an original volume TTOC record is missing when replacing a tape, the tape replace process bypasses the volume.

If the previous or successor TTOC record is missing, all data set updates have been completed.

If the previous volume TTOC is missing, all data on the tape being updated is accessible except the first user data file on the tape. In this case, there is no problem associated with this tape because the data set cannot be accessed from this volume without first mounting the previous volume.

If the successor volume TTOC record is missing, all but the last data file on the tape being updated is accessible.

For both the previous and successor TTOC records, the records referencing the invalid data set are not modified.

Application Programmer Response: For original TTOC records, verify that the volume serial is correct.

For previous volumes, no corrective action is required for this tape. However, this condition indicates a problem with the previous tape that should be corrected by the storage administrator.

For successor volumes, if the last data set on the tape is a valid migration copy, use the HDELETE command to delete the data set and recover a copy from another source. If the last data set on the tape is a valid backup copy, use the HBDELETE command to delete it.

ARC0432I DATA SET NOT UPDATED - DSN=*dsname***, TTOCKEY=***ttoc record-key***, TTCENTRY INDEX=***index-number***, REASON=***reason-code*

Explanation: While processing a tape replace for a volume, An error associated with the data set listed occurred. The original volume was deleted and the data set physically resides on the alternate volume and is listed in the TTOC for the alternate volume; however, the data set records may still reference the original volume. These records must be updated prior to further processing of the alternate volume.

The reason codes are:

1	Error reading MCC/MCD/MCA record.
2	MCC/MCD update error.
4	Error reading MCB record.
5	MCB record update error.
7	Error reading MCP record.
9	MCP record update error.

The TTOC information is supplied only as an aid in correcting the problem.

Source: DFSMShsm

System Action: Tape replace continues with the next data set. DFSMShsm continues processing.

Application Programmer Response: Refer to the action stated with each reason code. ARC0184I issued to the Command Activity Log, contains the record type and the reason why the READ or UPDATE failed. When the following actions include the FIXCDS PATCH command, the VERIFY parameter must be used to assure the ALTERNATE volume serial replaces only the original volume serial.

1 or 2	If the volume being updated is a MIGRATION Level 2 volume, the record type is MCA or MCD. Only the MCD needs updating. Display the MCD using the FIXCDS command. If MCDVSN or MCDAVSN(array index) equals the original volume serial, use the FIXCDS PATCH command with VERIFY to replace the original with the alternate volume serial. If the volume being updated is a BACKUP volume, the record type is MCC. Display the MCC using the FIXCDS command. If MCCVSN or MCCAVSN(array index) equals the original volume serial, use the FIXCDS PATCH command with VERIFY to replace the original with the alternate volume serial. If the READ or UPDATE of the MCC failed, the MCB also needs to be checked. Like the MCC, display the MCB and if MCBVSN equals the original volume serial, PATCH to replace the original with the alternate volume serial.
4 or 5	Display the MCB record using the FIXCDS command. If MCBVSN equals the original volume serial, use the FIXCDS PATCH command with VERIFY to replace the original with the alternate volume serial.

	If the ARC0184I message indicates the MCB record was not found (RC4), the data set may be deleted, but the MCC record still exists.
7 and 9	Display the MCP record using the FIXCDS command. If either MCPVTOCV(array index) or MCPNXTV(array index) equals the original volume serial, use the FIXCDS PATCH command with VERIFY to replace the original with the alternate volume serial.

ARC0433I *volser* **- BVR ENTRY UPDATE ERROR - REASON=***reason-code*

Explanation: During tape replace processing, an error occurred while reading or updating the BVR.

Source: DFSMShsm

System Action: DFSMShsm performs the following actions depending upon the reason code:

1	Original volume BVR update failed. This is an attention message only because the volume is marked as in-use in the TTOC and in the BVR. The in-use marking is deleted when processing completes.
2	The alternate volume BVR entry creation failed. No data sets are updated.

System Programmer Response: For reason code 1, no action is necessary. For reason code 2, use the accompanying messages to determine the cause of the BVR update or read. Correct the problem and reissue the TAPEREPL command.

ARC0434E RECYCLE FAILED - DSN=*dsname* **ON VOLUME=***volser* **- DATA SET DELETED**

Explanation: During processing of a RECYCLE command with the FORCE parameter, an error occurred while reading the input data set within the 3480 single-file tape listed as *volser*. The data set name listed as *dsname* is the data set name from the TTOC entry being processed.

If the volume being recycled is a backup volume, only the backup version with the error is lost.

If the volume being recycled is a migration volume, all references to the data set are removed, including the system catalog entry pointing to MIGRAT. The data set is deleted.

Source: DFSMShsm

System Action: Recycle processing continues with the next data set. DFSMShsm processing continues.

Application Programmer Response: If the data set in error is the latest backup version of a data set, issue a BACKDS command to create a new backup version. If the data set in error is a migration copy, recover the data set from the latest backup version or dump copy.

ARC0435I PARTIALTAPE SPECIFIED WITHOUT “MARKFULL” OR “REUSE” - PARTIALTAPE STATUS NOT CHANGED

Explanation: A SETSYS command with the PARTIALTAPE parameter is entered, but the PARTIALTAPE parameter has no default sub-parameter. Either the MARKFULL or the REUSE sub-parameter must be specified when the PARTIALTAPE parameter is used.

Source: DFSMShsm

System Action: No change to the PARTIALTAPE state is made. DFSMShsm processing continues.

Application Programmer Response: Amend the appropriate sub-parameter to the PARTIALTAPE parameter and reissue the SETSYS command.

ARC0436I OLD ALTERNATE VOLUME=*volser1* **FOR ORIGINAL VOLUME=***volser2***, REPLACED BY** *volser3*

Explanation: When this message is issued:

- The existing alternate tape volume *volser1* has been replaced by the copy created by the TAPECOPY command (*volser3*).
- Message ARC0436I is issued.
- No record is kept of the old alternate volume.
- The ARCTVEXT tape volume exit is invoked if the alternate tape being replaced is created by DUPLEX processing. ARCTVEXT is not invoked if the alternate tape being replaced is created by TAPECOPY processing.
- If SETSYS PARTIALTAPE(MARKFULL) is specified, the original volume is marked full.

This message can be used to generate lists for offsite volume retrieval, since volume *volser1* is no longer used by DFSMShsm.

Source: DFSMShsm

System Action: All DFSMShsm references to the old alternate volume have been replaced by the new alternate volume.

Application Programmer Response: None.

ARC0437I {TAPECOPY | TAPEREPL} {HELD | NOT HELD} AND {ACTIVE | INACTIVE}

Explanation: A Query command was issued with the active parameter. This message is displayed twice, once for the tape copy function and once for the tape replace function.

HELD and NOT HELD indicate whether the operator issued a HOLD command to hold the function.

ACTIVE and INACTIVE indicate whether the function is currently in progress.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0439I ORIGINAL VOLUME *volser1* **REPLACED WITH** *volser2***, NOT** *volser3*

Explanation: A TAPEREPL command was issued with an original volume and alternate volume specified. The alternate volume shown as *volser2*, which was specified with the ALTERNATEVOLUMES parameter of the TAPEREPL command, replaced the original volume shown as *volser1*. The alternate volume specified was different from the alternate volume in the DFSMShsm records (*volser3*), so *volser3* is removed, leaving no alternate volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0440I VOLUME *volser* CONTAINS AN INVALID CDD OR A TAPE POSITIONING ERROR HAS OCCURRED

Explanation: One of the following conditions occurred during RECYCLE:

- A 3480 extended point failed.
- The TTOC indicates that CDDIDs on this tape are valid and the CDDID field did not contain *CDDID**.
- The data set name found in the common data set descriptor (CDD) record does not match the name of the data set in DFSMShsm's records.

If the extended point failed, message ARC0920I will be found in the RECYCLE log.

Source: DFSMShsm

System Action: If the RECYCLE FORCE parameter is in effect, the data set is deleted. If not, the CDS records associated with the data set are left intact.

Application Programmer Response: For a non-VSAM data set, the CDD record is in the first block of data. For a VSAM data set, a CDD exists at the beginning of the first block of data for the base cluster and within the first block of data for each alternate index.

The most likely cause of a data set name or CDDID mismatch is changes having been made to the data files on the tape. An ARC0440I message is issued once for each occurrence of a nonrecoverable point error or data set name/CDDID mismatch.

A data set name mismatch may also occur in the following situation: A VSAM data set was migrated, then backed up (prior to installation of the fix for APAR OY15173), then deleted and re-created with a different base data component name. The appropriate action in this case is to issue a BDELETE command to delete backup versions of the data set with the old base data component name and then reissue the recycle request. This is not an error condition.

ARC0441I ALTERNATE VOLUME *altvol* REMOVED AS COPY OF VOLUME *volser*

Explanation: The alternate volume reference *altvol*, which was recorded in the TTOC record for the original volume *volser*, was removed because the original volume was marked as full, or additional data sets were added to the volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0442I TAPE OUTPUT PROMPT FOR TAPECOPY = x, DUPLEX BACKUP TAPES = x, DUPLEX MIGRATION TAPES = x

Explanation: The DFSMShsm QUERY command has been issued with a SETSYS parameter from the list in the message text. This message reports a DFSMShsm setting, which is either the default or the setting previously specified by a SETSYS TAPEOUTPUTPROMPT parameter, and the status of tape duplexing for backup and migration processing. The TAPEOUTPUTPROMPT parameter determines whether DFSMShsm issues action messages to inform the operator if a standard cartridge tape or Enhanced Capacity/Extended Capacity cartridge tape is required for a 3490 TAPECOPY output allocation. The DUPLEX parameter determines the status of tape duplexing for backup and migration tapes. x is either Y or N.

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0445I VOLUME *volser* CANNOT BE RECYCLED, REASON=*rc*, EXPLANATION: {TAPE HAS DISASTER ALTERNATE | TTOC RECORD IS INCOMPLETE | TAPE IS UNASSIGNED BACKUP | TAPE CONTAINS NO DATA | CANNOT FORCE MULTIPLE VOLUMES | VOLUME RECORD NOT FOUND | CONNECTED SET TOO LONG | SET HAS MIXED TYPES}

Explanation: A RECYCLE command was issued for a specific volume serial. The volume was determined to be ineligible for EXECUTE processing.

Source: DFSMShsm

System Action: The following explains the actions required to correct each situation by return code:

Retcode	Meaning
04	TAPE HAS DISASTER ALTERNATE: You cannot recycle a tape whose TTOC record has been marked as 'no longer in existence'. Issue the TAPEREPL command against this tape so that its alternate volume can be recycled in its place.
08	TTOC RECORD IS INCOMPLETE: DFSMShsm was in the process of writing this tape when the system crashed, leaving the TTOC record incomplete, lacking vital data set information. Use the AUDIT MEDIACONTROLS command against the volume to rebuild the TTOC correctly.
12	TAPE IS UNASSIGNED BACKUP: The tape is a backup tape that is neither SPILL nor assigned to a given day in the Backup Cycle. If the tape contains valid backup versions, use the ADDVOL command to assign this tape to a specific day in the backup cycle.
16	TAPE CONTAINS NO DATA: According to the DFSMShsm inventory, DFSMShsm has not written migration or incremental backup data to this tape. The tape may contain data of another type and should not be processed by RECYCLE.
20	CANNOT FORCE MULTIPLE VOLUMES: The FORCE parameter is designed to reclaim undamaged data sets from a damaged or overwritten tape. However, you have specified a volume that has valid data spanning to other tapes. FORCE is only allowed for unconnected tapes. Issue the recycle command without the FORCE parameter to move valid data from all of the other tapes in the connected set, then use the FORCE command for the remaining damaged tape.
24	VOLUME RECORD NOT FOUND: A request to recycle a specific volume serial has failed. DFSMShsm was unable to determine if the tape was a migration or backup tape because there was neither an MCV nor MCT record representing this volume. The tape is not known to DFSMShsm. Verify that the volume serial was entered correctly. If a TTOC record exists for this tape, issue an AUDIT MEDIACONTROLS command to create the missing MCV or MCT volume record.

28	CONNECTED SET TOO LONG: DFSMShsm will not recycle connected sets exceeding 40 volumes. The volume specified belongs to a connected set exceeding this limit.
32	SET HAS MIXED TYPES: DFSMShsm will not recycle a connected set containing volumes of different types such as unassigned, spill, daily 01, daily 02, and so on.

Application Programmer Response: None.

ARC0450I CDD UNEXPECTEDLY FOUND IN DATA SET *dsname***, VOLUME** *volser***, BLOCKID=***bkid*

Explanation: Data set *dsname* was being recycled from volume *volser*. While copying the data set, a DFSMShsm data set identifier was found within the migration copy or backup version where it was not expected. The migration copy or backup version may contain data that was not there when it was originally migrated or backed up. If the migration or backup tape is in single file format, *bkid* indicates the approximate block identifier at which the data set identifier was found. If asterisks appear, either the migration or backup tape is in multifile format or an error occurred when the NOTE macro was run to determine the current tape blockid. If an error occurred when the NOTE macro was run, message ARC0920I was written to the recycle log.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Recycle of the data set fails.

Application Programmer Response: For a non-VSAM data set, the DFSMShsm data set identifier, *CDD**, is contained only within the common data descriptor record (CDD) of the first block of data. For a VSAM data set, the DFSMShsm data set identifier appears within the first block of data for the base cluster and within the first block of data for each alternate index.

If the data set legitimately contains the characters *CDD** at a position within the data block that corresponds to the position at which DFSMShsm places its own data set identifier, the message may be disregarded. Otherwise, the data set should be examined to see if changes to the data have been made since the data set was originally migrated or backed up. If the changes take the form of additional data at the end of the data set, the data may be recoverable by using the RECALL or RECOVER or RECYCLE command with the FORCE parameter. In addition, the recycle log should be examined for other instances of this message or message ARC0440I, which may indicate that additional data sets from the source tape have been altered.

ARC0460I {PRIVATE | EXTENDED PRIVATE} AREA LIMIT= *limit***, UNALLOCATED=** *unalloc***, LARGEST FREE AREAS=** *first***,** *second*

Explanation: A Query command was issued with the ACTIVE parameter. This message is displayed twice, once for private virtual storage below the 16MB line, and once for extended private above the 16MB line.

The region size provided to DFSMShsm in Kbytes is *limit*. The total unallocated space is *unalloc*. The largest contiguous virtual storage areas that are available to DFSMShsm are indicated by *first* and *second*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0461I ON-LINE JOURNAL DATA SET IS IN ERROR RETURN CODE =*return-code*

Explanation: An attempt was made to back up an online journal file. ARCBJRNL is not able to use this file to create a backup. The values for *return-code* indicate what type of error occurred:

Retcode	Meaning
4	The journal control record, ARCCR, was not found in the online journal file.
8	The journal control record, ARCCR, was the only record found in the online journal file. No data records were found.

Source: DFSMShsm

System Action: The batch job ends. The journal backup file is not created.

Application Programmer Response: For either *return-code*, use the correct online journal data set name, and rerun utility ARCBJRNL.

ARC0462I INVALID PARAMETER PASSED TO PGM ARCIMPRT

Explanation: An attempt was made to recover a backup, migration, or offline control data set. The parameter passed to program ARCIMPRT, which specifies which control data set to recover, was *not* one of the following:

- BCDS or BACKUPCONTROLDATASET
- MCDS or MIGRATIONCONTROLDATASET
- OCDS or OFFLINECONTROLDATASET

Source: DFSMShsm

System Action: The batch job ends. The control data set is not created.

Application Programmer Response: Pass the correct parameter to program ARCIMPRT in the processing step of utility ARCIMPRT and rerun utility ARCIMPRT to recover the correct control data set.

An example of how to pass the parameter to ARCIMPRT to recover a MIGRATION control data set is:

```
//STEPxx EXEC PGM = ARCIMPRT,PARM = 'MCDS'
```

ARC0463I INVALID BACKUP JOURNAL FILE

Explanation: An attempt was made to use a backed up journal file to recover a control data set file. This particular journal file does not have sequence numbers on it. Therefore, it is not eligible to be used as input to ARCIMPRT.

Source: DFSMShsm

System Action: The batch job ends. The control data set is not recovered.

Application Programmer Response: With DFSMShsm in stopped mode, use utility ARCBJRNL to backup the on-line journal. Then rerun utility ARCIMPRT.

ARC0464I *nnnnnnn* **JOURNAL RECORDS WRITTEN TO BACKUP JOURNAL DATA SET**

Explanation: Program ARCBJRNL successfully processed *nnnnnnn* records found in the on-line DFSMShsm journal data set. These records were successfully written to the backed up journal data set.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ARC0465I INVALID VALUE SPECIFIED FOR {ALTERDS|SETSYS} VERSIONS PARAMETER - VERSIONS IS SET TO {*maximum-allowable-number-of-backup-versions*}

Explanation: The value specified in the VERSIONS parameter was larger than the number of backup versions allowed for the current DFSMShsm BCDS maximum record length.

The following values are the valid maximum allowable number of backup versions for different BCDS record lengths:

- Record length of 2040 to 6543 — 29 maximum versions
- Record length of 6544 or more — 100 maximum versions

If the request was SETSYS VERSIONS(limit), the maximum number of backup versions DFSMShsm keeps for a non-SMS-managed data set is set to the maximum allowable based on the DFSMShsm BCDS maximum record length. If the request was ALTERDS dsname(s) VERSIONS(limit), the maximum number of backup versions DFSMShsm keeps for the specified non-SMS-managed data set(s) is set to the maximum allowable based on the DFSMShsm BCDS maximum record length.

Source: DFSMShsm

System Action: The maximum number of backup versions DFSMShsm keeps for a non-SMS-managed data set is set to the maximum allowable based on the DFSMShsm BCDS maximum record length. DFSMShsm processing continues.

Application Programmer Response: If the maximum number of backup versions indicated in this message is not satisfactory, reissue the command with a VERSIONS value within the current DFSMShsm BCDS maximum record length. If a larger maximum number of backup versions is desired, increase the BCDS maximum record length as described in the *DFSMS/MVS DFSMShsm Implementation and Customization Guide*.

ARC0466I INCONSISTENCIES IN THE MULTICLUSTER CDS KEY BOUNDARIES

Explanation: ARCIMPRT detected that the key boundaries of the multicluster CDS being recovered have changed since the last CDS version backup. Recovering a single cluster of a multicluster CDS will result in data loss.

System Action: ARCIMPRT processing ends.

Application Programmer Response: To recover the multicluster CDS without incurring data loss, all clusters of the multicluster CDS whose boundaries have changed must be recovered. Multicluster CDS key boundaries must be returned to the values that existed at the time of the CDS version backup. Execute ARCIMPRT for each cluster of the multicluster CDS, and then specify the FORCE parameter, which forces ARCIMPRT to perform the recovery. For information on the correct procedures for changing the key boundaries of a multicluster CDS, refer to *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0467I CLUSTER *m* OF *n* WAS RECOVERED FOR MULTI-CLUSTER {MCDS | BCDS}

Explanation: ARCIMPRT was executed for a single cluster of a multicluster CDS. *m* represents which cluster has been recovered. *n* signifies how many clusters that the CDS is divided into.

System Action: ARCIMPRT processing ends.

Application Programmer Response: None.

ARC0500I CANNOT ALLOCATE VOLUME *volser*, DARC=*reason-code*, EXTENDED REASON CODE=*extreas*, INFO CODE=*infocode*

Explanation: While DFSMShsm has been processing a request for a volume mount with volume serial number *volser*, dynamic allocation has encountered an error. The reason code from the dynamic allocation routine is *reason-code*, the extended reason code from the dynamic allocation routine is *extreas*, and the information code from dynamic allocation is *infocode*. *reason-code* and *infocode* are printed in hexadecimal format. *extreas* is printed in decimal format. For information about dynamic allocation reason codes, see the *OS/390 MVS Programming: Assembler Services Guide*.

If two ARC0500 messages have been issued together, and the second message contains the characters ***** for *extreas* and *infocode*, the DARC in that message represents an internal return code. Refer to the first message for information.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the meaning of *reason-code*, *extreas*, and *infocode*, and then retry the request. If the error occurs again with the same volume and return code, notify the storage administrator to take corrective action.

ARC0501I CANNOT PROCESS VOLUME *volser*, I/O ERROR ON VTOC

Explanation: An attempt was made to process data sets on a volume with volume serial number *volser*. An I/O error occurred during the reading of the VTOC of the volume.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the I/O encountered and retry the request.

ARC0502I *installation-wide-exit-name* USER CODED EXIT ABEND, ABEND CODE=*abend-code*, EXIT MARKED INOPERATIVE

Explanation: During processing of the specified installation-wide exit *installation-wide exit name*, an abnormal end (abend) has occurred with the abend code *abend-code*. The ESTAE routine in the module that calls the installation-wide exit has detected the failure. DFSMShsm marks the exit inoperative.

Source: DFSMShsm

System Action: DFSMShsm processing continues without using the exit.

Application Programmer Response: Correct the problem in the installation-wide exit and reload the exit. If you need a dump to debug the installation-wide exit, see the abend parameter in the section “Using Keywords to Identify the Problem” in *DFSMS/MVS DFSMShsm Diagnosis Guide* .

ARC0503I ALLOCATION ERROR, {VOLUME=*volser* | DATA SET=*dsname* | DD DUMMY}, RC=*return-code*, REASON=*reason-code*, INFO CODE=*infocode*, EXTENDED REASON CODE=*extreas*

Explanation: DFSMShsm attempted to allocate a data set or volume dynamically and the allocation failed. Dynamic allocation codes are:

- *return-code* is the dynamic allocation return code.
- *reason-code* is the dynamic allocation reason code.
- *infocode* is the dynamic allocation information reason code.
- *extreas* is the dynamic allocation extended reason code.

Return codes and reason codes from the dynamic allocation routine are printed in hexadecimal format. The extended reason code is printed in decimal format. For information about dynamic allocation return codes, reason codes, and information codes, refer to *OS/390 MVS Programming: Authorized Assembler Services Guide*.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The function requiring the data set or volume allocated ends.

Application Programmer Response: Determine the cause of the error based on the meaning of the return code, reason code, and information code. Correct the error and retry the request.

ARC0504I INSTALLATION-WIDE EXIT ARCRPEXT ABENDED, ABEND CODE=*abend-code*, ON *type* COMMAND FOR *object-type name*.

Explanation: Installation exit ARCRPEXT is invoked to establish the priority for a *type* command, where *type* can be either RECALL, DELETE, or RECOVER.

If *type* is either RECALL or DELETE, then *object-type* is DATASET, followed by the name of the data set recalled or deleted.

If *type* is RECOVER, then *object-type* is either:

DATASET, followed by the name of the data set to be recovered; or
VOLUME, followed by the volume serial of the volume to be recovered or restored.

Source: DFSMShsm

System Action: If *type* is either RECALL or DELETE, then DFSMShsm no longer invokes the exit for either recall or delete commands. Starting with the command on which the exit abended, all of either WAIT-type RECALL or WAIT-type DELETE commands are queued in strictly first-in-first-out (FIFO) sequence, each with a queuing priority of 50.

If *type* is RECOVER, then DFSMShsm no longer invokes the exit for recover commands. Starting with the command on which the exit abended, all WAIT-type RECOVER commands are queued in strictly first-in-first-out (FIFO) sequence, each with a queuing priority of 50.

System Programmer Response: Correct the problem in the installation exit, and then replace ARCRPEXT.

ARC0505D {PRIMARY SPACE MANAGEMENT | SECONDARY SPACE MANAGEMENT | INTERVAL MIGRATION | AUTOMATIC BACKUP | AUTOMATIC DUMP} ABOUT TO START, REPLY ‘Y’ TO START OR ‘N’ TO SKIP IT

Explanation: This is a message from DFSMShsm to the operator, prompting for permission to allow the DFSMShsm automatic primary space management, automatic secondary space management, interval migration, automatic backup, or automatic dump function to start.

Source: DFSMShsm

System Action: The issuing task waits for a valid reply from the operator. If the operator reply is Y, the function starts. If the operator reply is N, DFSMShsm does not perform the function until it is time for the next automatic occurrence of the function, or the system programmer initiates an action that causes DFSMShsm to prompt the operator again for permission to allow the automatic primary space management, automatic secondary space management, interval migration, automatic backup, or automatic dump function to start.

Operator Response: Reply Y to start the automatic function or N to prevent the automatic function from starting. If the reply is after the latest start time of the day on which the ARC0505D message was issued, and the new day is not a cycle day, as set by the DEFINE command, reply N. A reply of Y overrides the latest time specified in the SETSYS (PSMSTART and SSMSTART) command.

ARC0506I FAILURE TO ALLOCATE SYSOUT TYPE DATA SET, RC=*return-code*, REAS=*reason-code*, EXTENDED REASON CODE=*extreas*

Explanation: DFSMShsm has attempted to allocate a SYSOUT data set and has received a nonzero return code *return-code* from dynamic allocation. If an error occurs while mounting the volume or the data set is in use, the return code is set to 16. If no space is available, the return code is set to 20. The S99ERROR field of dynamic allocation is given as the reason code *reason-code* and is printed in hexadecimal format. The S99ERSN field of dynamic allocation is given as the extended reason code and is printed in decimal format. For all dynamic allocation error and information codes, see the *OS/390 MVS Programming: Assembler Services Guide* .

Source: DFSMShsm

System Action: DFSMShsm continues to run, but all records written to this data set are lost.

Application Programmer Response: Determine the cause of the error based on the meaning of the return code and reason code. Correct the error and retry the failing function.

ARC0507I ERROR DEALLOCATING TAPE MIGRATION VOLUME *volser*

Explanation: An error was encountered while trying to deallocate a tape migration volume *volser* during migration processing.

Source: DFSMShsm

System Action: Any processing that requires the volume in error fails. DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the deallocation error encountered and retry the request.

ARC0508I LEVEL 2 VOLUME *volser* DISASSOCIATED FROM KEYRANGE LOWKEY *lowkey*, HIGHKEY *highkey*

Explanation: A data set is migrating to a DASD migration level 2 volume *volser*. This can occur as a result of level migration to level 2 DASD, migration of a volume to level 2 DASD, or migration of an individual data set to level 2 DASD. The allocation failed for the DASD migration level 2 volume that was associated to the key range *lowkey* to *highkey* to which the data set name belongs. See the corresponding ARC0500I or ARC0503I message (from the command log) for the specific reason that the allocation failed. The DASD migration level 2 volume is no longer associated to the key range.

Source: DFSMShsm

System Action: For the following types of allocation failures, DFSMShsm attempts to associate and allocate another available DASD migration level 2 migration volume to the key range.

1. The necessary system resources are not available.
2. The volume is in use by the system.

If the association and allocation of the new DASD migration level 2 volume is successful, DFSMShsm attempts to migrate the data set. If the association and allocation of the new DASD migration level 2 volume is unsuccessful, the migration of the data set fails.

For any other type of allocation failure, the migration of the data set fails. See the related ARC0734I or ARC1001I message. These messages refer to message ARC1205I.

Application Programmer Response: When the cause of the allocation failure is detected and corrected, issue the DELVOL *volser* MIGRATION(UNASSIGN) command to mark the DASD migration level 2 volume available for association to a key range. This allows the volume whose allocation failed to be selected for association to a key range when some key range needs a new DASD migration level 2 volume. To reassociate the volume whose allocation failed to the same key range, issue the DEFINE MIGRATIONLEVEL2 (KEY(k1 k2...) VOLUMES (*volser2*...) command to redefine the key ranges and volumes associated to the key ranges. The position of the volume serial number *volser* of the volume whose allocation failed depends on the key range to which you want the volume associated.

Note: This DEFINE command is just an example; make sure that the proper keys and volumes for your system are listed in the command.

ARC0509E **DFSMSHSM JOURNAL DATA SET IS ALLOCATED AS A STRIPED DATA SET. THIS IS NOT ALLOWED. DFSMSHSM IS SHUTTING DOWN.**

Explanation: This is a message from DFSMShsm with information on the reason DFSMShsm is shutting down.

Source: DFSMShsm

System Action: DFSMShsm shuts down.

Application Programmer Response:

1. Reallocate the data set using an allowed data set organization and restart DFSMShsm
2. Delete the ARC0509E message from the console.
    a. If the message identifier *id* is not available, issue the DISPLAY R,I command to get the ID.
    b. Issue the following command to delete the message:

```
CONTROL C,I,id
```

ARC0510I **DFSMSHSM CONTROLLED VOLUME** *volser* **NOT** *fct***, A READ OR WRITE ERROR OCCURRED ON THE MCV RECORD, CODE=***return-code*

Explanation: The DFSMShsm-controlled volume *volser* is to be processed by the function *fct*. In reading or writing the MCV record for the multiple processing unit enqueue and space management attributes support, an error occurred. See message ARC0184I for details.

The values for *return-code* are:

Retcode	Meaning
4	A command function was issued for the volume.
8	The volume was processed by the automatic function.

Source: DFSMShsm

System Action: The function ends. DFSMShsm processing continues.

Application Programmer Response: Issue an ADDVOL command to create the MCV record for the volume and retry the function.

Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0511I **ERROR UPDATING {A | D | O} RECORD FOR DATA SET** *datasetname***. DATA SET CANNOT BE RECALLED BY {THE OBJECT NAME** *objectname* **| ANY NAME EXCEPT THE BASE CLUSTER NAME}**

Explanation: After a data set *datasetname* was migrated, DFSMShsm failed to write the MCA record, the MCD record, or the MCO record in the migration control data set.

- If the error occurred during the write of the MCA record, the data set cannot be recalled by the object name listed or if all MCA writes failed, the data set can only be recalled by the base cluster name.
- If the error occurred during the write of the MCD record, a FIXCDS command must be issued and the data set can only be recalled by the base cluster name.
- If the error occurred during the write of the MCO record, the data set can only be recalled by the base cluster name.

After the data set is recalled, all of its object names *objectname* will be restored properly in the catalog.

Source: DFSMShsm

System Action: The operation continues. DFSMShsm processing continues.

Application Programmer Response: Use any other valid object name of the VSAM data set to recall it.

Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0512I **UNABLE TO CATALOG {VSAM OBJECT** *objectname* **| ALL VSAM OBJECTS}. DATA SET** *dsname* **CANNOT BE RECALLED BY {THE ABOVE OBJECT NAME | ANY OF ITS OBJECT NAMES}**

Explanation: During the migration operation, DFSMShsm failed to catalog the specified VSAM object or path with the volume serial number of MIGRAT. The data set *dsname* cannot be automatically recalled by this object name or any name specified in a related message ARC0511I. After the data set is recalled, all of its object or path names will be restored properly in the catalog.

Source: DFSMShsm

System Action: The operation continues. DFSMShsm processing continues.

Application Programmer Response: Use any other names that have been cataloged successfully to recall the data set (no message is issued for these). If DFSMShsm was not able to catalog any object, use a RECALL or HRECALL command and specify the base cluster name to recall the data set.

ARC0513I FAILED TO UNCATALOG [NON] SMS ENTRY, ENTRY NAME = ***entname*****, CATALOG RC =** ***return-code***

Explanation: While DFSMShsm has been processing a request to delete a migrated data set, an attempt to delete the entry name *entname* has failed. If the message indicates NON SMS, then the data set is not SMS managed and the CAMLST UNCAT macro has been used to uncatalog the entry. In this case, the return code is from the CAMLST macro. See *DFSMS/MVS Using Data Sets*. for a description of the return codes from the CAMLST macro.

If the message indicates SMS, then the data set is SMS managed and SVC 26 has been used to uncatalog the entry. In this case, the *return-code* is the return code from the module ARCZSDEL, with the values and meanings as follows:

Retcode	Meaning
8	A catalog management error has occurred and a corresponding ARC0950I message has been issued to the command activity log with the catalog management return and reason codes.
52	A GETMAIN error has occurred.

Source: DFSMShsm

System Action: The entry name remains cataloged. However, the delete operation is considered successful and DFSMShsm deletes the migration copy. DFSMShsm processing continues.

Application Programmer Response: For each of the error conditions listed above, there is a corresponding message that contains more information about the failure. These corresponding messages are written to the command activity log.

ARC0514I ERROR UPDATING MCD RECORD FOR DATA SET ***dsname*** **AFTER DATA SET WAS MIGRATED TO VOLUME(S)** ***volser*****,** ***volser***

Explanation: After DFSMShsm migrated a data set *dsname*, it failed to write the migration control data set data set record (MCD) in the migration control data set. To recall the data set, issue a FIXCDS command and enter the *volser* of the volumes to which the data set migrated the MCD record. The volumes to which the data set migrated appear in multiple occurrences of this message, with a maximum of 15 volume serial numbers per message and a maximum of 40 volume serial numbers for the data set.

Source: DFSMShsm

System Action: The operation continues. DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0515I {COMMAND | AUTO} LEVEL-1-TO LEVEL-2 MIGRATION NOT PERFORMED, {COMMAND | AUTO} LEVEL-1-TO-LEVEL-2 MIGRATION IS RUNNING

Explanation: A command level migration is requested while level 1 to level 2 migration of the automatic secondary space management function is running, or level 1 to level 2 migration of the automatic secondary space management function is requested while a command level migration is running. If this happens, DFSMShsm will not process the second request since there is no need to run level 1 to level 2 migration at the same time.

Source: DFSMShsm

System Action: The second request fails. The first request proceeds.

Application Programmer Response: None

ARC0516I EDGTVEXT INTERFACE IS NOW DISABLED, REASON=***reason-code*****.**

Explanation: Due to an error (defined by *reason-code*), DFSMShsm will not invoke the EDGTVEXT interface until a RELEASE RMM command has been entered. The reason codes have the following meanings:

8	DFSMShsm tried to load EDGTVEXT, but the load failed.
900	DFSMShsm invoked EDGTVEXT, but an ABEND occurred.

Source: DFSMShsm

System Action: None.

Application Programmer Response: To reactivate DFSMShsm invocation of EDGTVEXT, issue the RELEASE RMM command.

ARC0517I SECONDARY SPACE MANAGEMENT {STARTING | RESTARTING}

Explanation: DFSMShsm has begun automatic secondary space management functions.

Source: DFSMShsm

System Action: Automatic secondary space management proceeds.

Application Programmer Response: None

ARC0518I SECONDARY SPACE MANAGEMENT {ENDED SUCCESSFULLY | COMPLETED, ENDING TIME REACHED | ENDED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | AUTO SPACE MANAGEMENT HELD | DFSMSHSM IN EMERGENCY MODE | RESOURCES NOT AVAILABLE | MORE THAN 10 BAD MCDS RECORDS WERE ENCOUNTERED}}

Explanation: DFSMShsm has completed automatic secondary space management successfully, automatic secondary space management has been completed because the ending time has been reached, or automatic secondary space management has been ended before completion for one of the following reasons:

- A STOP command is issued to shut down DFSMShsm.
- A HOLD command with the AUTOMIGRATION or MIGRATION parameter is issued to suspend automatic secondary space management processing.
- A SETSYS command with the EMERGENCY parameter is issued to place DFSMShsm in emergency mode.
- Resources are not available to allow automatic secondary space management to start. Message ARC0535I is issued to the operator's console and the migration activity log, indicating the resource that DFSMShsm found is unavailable.
- Secondary space management ends prematurely because too many bad or unexpected migration control data set (MCDS) records are encountered. See the preceding 11 ARC0564I messages for the hex keys of the problem messages.

Source: DFSMShsm

System Action: If the HOLD command is issued with the AUTOMIGRATION or MIGRATION parameter, the automatic secondary space management operation is stopped after the current data set is processed and no new automatic secondary space management starts until the AUTOMIGRATION or MIGRATION processing is released.

When the automatic secondary space management ending time is reached, DFSMShsm stops the automatic secondary space management functions and considers the functions are complete. The functions starts again today only if a new start time is redefined to be after the last ending time.

If the STOP command or SETSYS command with the EMERGENCY parameter is issued, the automatic secondary space management operations ends at the completion of the current data set.

DFSMShsm processing continues.

Application Programmer Response: If automatic secondary space management ends prior to completion because resources are not available, refer to message ARC0535I, which is issued to the operator console and to the migration activity log. This message indicates which resource DFSMShsm finds unavailable and the appropriate programmer response to the problem.

If too many unexpected MCDS records are encountered, use the hex keys reported in the ARC0564I messages to find and correct or delete those MCDS entries.

Automatic secondary space management can be restarted at the point of interruption by issuing one of the following commands:

- Restart (START) DFSMShsm when shutdown is completed.
- RELEASE AUTOMIGRATION when automatic space management is held.
- RELEASE MIGRATION when migration is held.
- SETSYS NOEMERGENCY when DFSMShsm is in emergency mode.
- SETSYS SECONDARYSPMGMTSTART when the current time is within the specified automatic secondary space management start window.

For automatic secondary space management to resumed at the point of interruption, the command must take effect before 24-hours have passed because the time automatic space management is first started and the current time must still be within the start window for automatic secondary space management.

If you want automatic secondary space management to begin after midnight, the value of the latest start time can be smaller than the planned start time. For example, you can specify 2330 for *hhmm1* and 0100 for *hhmm2* the same day as the command that caused automatic secondary space management to end, and the current time must still be within the start window for automatic secondary space management.

When automatic secondary space management ends because the ending time is reached, it cannot be resumed because the current time is no longer within the start window.

ARC0519I DADSM PARTREL FUNCTION RELEASED *tracks* **TRACKS ON VOLUME** *volser*

Explanation: DFSMShsm has invoked the DADSM PARTREL function for eligible SMS-managed data sets during the space management processing of volume *volser*. The number of tracks released by PARTREL is *tracks*.

To determine the criteria that is used to invoke the DADSM PARTREL function for a data set, see the *DFSMS/MVS DFSMShsm Storage Administration Guide*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0520I PRIMARY SPACE MANAGEMENT {STARTING | RESTARTING}

Explanation: DFSMShsm has begun automatic primary space management.

Source: DFSMShsm

System Action: Automatic primary space management proceeds.

Application Programmer Response: None.

ARC0521I PRIMARY SPACE MANAGEMENT {ENDED SUCCESSFULLY | COMPLETED, ENDING TIME REACHED | ENDED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | AUTO SPACE MGMT HELD | | DFSMSHSM IN EMERGENCY MODE | RESOURCES NOT AVAILABLE}}

Explanation: DFSMShsm completed automatic primary space management successfully, or automatic primary space management completed because of ending time reached, or automatic primary space management ended before completion for one of the following reasons:

- A STOP command was issued to shut down DFSMShsm.
- A HOLD command with the AUTOMIGRATION or MIGRATION parameter was issued to suspend automatic primary space management processing.
- A SETSYS command with the EMERGENCY parameter was issued to place DFSMShsm in emergency mode.
- Resources were not available to allow automatic primary space management to continue or to migrate all eligible data sets. Message ARC0560E or ARC0559I was issued to the operator's console and to the migration activity log indicating the unavailable resource.

Source: DFSMShsm

System Action: If the HOLD command was issued with the AUTOMIGRATION or MIGRATION parameter, no new space management operations are started. For volume space management operations that are in progress, the ENDOFDATASET or ENDOFVOLUME parameter that was specified with the HOLD command determines where the processing stops. If ENDOFDATASET was specified, all volume migration operations end at the completion of the current data set. If ENDOFVOLUME was specified, DFSMShsm completes any volume migration operations that are in progress.

When the automatic primary space management ending time is reached, DFSMShsm completes any volume migration operations that are in progress, but no new volume space management operations are started. DFSMShsm starts the function again today only if a new start time is redefined as after the last ending time.

If the STOP command or SETSYS command with the EMERGENCY parameter was issued, all volume migration operations end at the completion of the current data set, and no new volume migration operations are started.

DFSMShsm processing continues.

Application Programmer Response: If primary space management ends prior to completion because resources are not available, refer to message ARC0560E or ARC0559I, which are issued to the operator's console and the migration activity log. This message indicates which resource DFSMShsm found unavailable and the appropriate programmer response to the problem.

Automatic primary space management can be restarted at the point of interruption by issuing one of the following commands:

- Restart (START) DFSMShsm when shutdown is completed.

- RELEASE AUTOMIGRATION when auto space management is held.
- RELEASE MIGRATION when migration is held.
- SETSYS NOEMERGENCY when DFSMShsm is in emergency mode.
- SETSYS PRIMARYSPMGMTSTART when the current time is within the specified automatic primary space management start window.

For automatic primary space management to resume at the point of interruption, the command must take effect before 24-hours pass. This ensures that the current time and the time automatic primary space management is first started are still within the start window for automatic primary space management.

The suggested way to extend the start window and thereby cause the continuation of PSM is to respecify the automatic primary space management start time as having the same planned start time that already exists, but with a quiesce time later than the current time.

If the PSMSTART is set to (2300 0100) and the current time is 0210, enter SETSYS PSMSTART (2300 0400) and the PSM continues from where it left off and runs to completion, or until 0400 which ever comes first.

When automatic primary space management ends because the ending time is reached, it cannot resume because the current time is no longer within the start window.

ARC0522I SPACE MANAGEMENT STARTING ON VOLUME *volser* **[(SMS) | (SMSI) | (NONSMS)] AT** *time* **ON** *date*, **SYSTEM** *sysid*

Explanation: DFSMShsm space management processing is starting for the online volume *volser*. If (SMS) appears, the volume being processed is SMS managed. If (SMSI) appears, the volume being processed is SMS managed and associated with a storage group having AM=I. If (NONSMS) appears, the volume is a non-SMS-managed primary volume being processed for migration. If nothing appears following *volser*, the volume is either a DFSMShsm-owned volume or a primary volume being processed for DBA/DBU.

The starting time for space management of data sets on that volume is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The date of space management is *date*, expressed as *yy*/*mm*/*dd* (year, month, day). The SMF system identifier for the system on which the space management is performed is *sysid*. Descriptions of individual data sets processed follow in associated ARC0734I messages.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0523I SPACE MANAGEMENT ENDED ON VOLUME *volser*, *number* **DATA SET(S) MIGRATED/DELETED,** *tracks* **TRACK(S) FREED, MINAGE** *age*, **TIME** *time*

Explanation: DFSMShsm space management processing completed successfully for the volume with the volume serial number *volser*.

The term *number* refers to one of the following:

- The number of data sets migrated, deleted, and expired during the migration function.
- The number of data sets deleted during the data set deletion or retirement functions.

The term *tracks* indicates one of the following:

- The number of tracks freed by migration, deletion, and expiration processing on non-SMS-managed volumes.
- The number of tracks freed by migration and the DADSM PARTREL function on SMS-managed volumes.

The minimum age of data sets processed is *age*, expressed in days.

The completion time of the operation is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0524I *dsname* **SCRATCHED**

Explanation: The AUDIT command was issued with the VOLUMES parameter. While performing the audit operation, DFSMShsm scratched and uncataloged the temporary data set *dsname*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0525I *dsname* **SCRATCH FAILED ON VOLUME=***volser*, **RC=***return-code*

Explanation: A DFSMShsm AUDIT command has been issued to audit one or more non-SMS primary, migration, or backup volumes. While performing the audit, DFSMShsm has found a temporary data set, *dsname*, that is not needed and has attempted to scratch it. *volser* is the volume serial number of the volume specified in the scratch attempt. The CAMLST SCRATCH macro returned has *return-code* in register 15. For the meaning of the return code, see *DFSMS/MVS Using Data Sets* .

Retcode	Meaning
4	No volumes containing any part of the data set have been mounted, nor is a UCB address contained in register 0.
8	An unusual condition has been encountered on one or more volumes.

Source: DFSMShsm

System Action: The data set is not scratched. DFSMShsm processing continues.

Application Programmer Response: Run the AUDIT command with the DATASETNAMES parameter to determine whether to scratch the data set. If the data set is to be scratched and is currently migrated, issue the DELETE or HDELETE command for the data set *dsname*.

ARC0526I MIGRATION CLEANUP STARTING AT *time* **ON** *date*, **SYSTEM** *sysid*, **AT {BEGINNING RECORD |** *cdskey***} RECORD**

Explanation: Migration cleanup is starting on *sysid* at the time *time* expressed as *hh:mm:ss* (hours, minutes, seconds), and date *date* expressed as *yy/mm/dd*(year,month, day), beginning at the control data set (CDS) record key *cdskey* or at the beginning of the migration control data set data set record (MCD). The System Management Facility (SMF) system identifier of the system on which the migration is processed is *sysid*.

Source: DFSMShsm

System Action: Migration cleanup continues.

Application Programmer Response: None.

ARC0527I **MIGRATION CLEANUP ENDED AT** *time*, *num* **MCDS RECORDS DELETED**

Explanation: DFSMShsm migration cleanup has ended. The number of MCDS records that was deleted is *num*. The storage administrator can use the number of records deleted to help indicate when the MCDS should be reorganized. The completion time of the operation is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds).

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ARC0528I *dsname* **SCRATCH FAILED ON VOLUME=***volser*, **RC=***return-code* **SCRATCH STATUS CODE=***dadrc*

Explanation: An attempt has been made by DFSMShsm to scratch *dsname* from volume *volser*. The CAMLST SCRATCH macro has returned *return-code* in register 15. The SCRATCH STATUS CODE is *dadrc*. For the meaning of *return-code* see, Table 16 on page ARC-288. For the meaning of *dadrc* see, Table 17 on page ARC-288. See *DFSMS/MVS Using Data Sets* for more information.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the data set is a backup version, all associated control data set records will show that the data set is scratched even though the actual scratch has failed. DFSMShsm will not try to scratch this data set again. The data set can be scratched if desired. If the data set is a migration copy of a data set, DFSMShsm will attempt to scratch the data set during migration cleanup.

ARC0529I **MIGRATION CLEANUP PARAMETERS FOR {D | S} RECORDS, KEEP FOR** *x* **DAYS, OLDEST KEEPDATE=***yyddd*

Explanation: Migration cleanup is running, issuing the given parameters. D means migration data set records are being processed; S means daily and volume statistic records are being processed. Records are to be kept for *x* number of days. Records older than day *ddd* of year *yy* will be deleted.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the given parameters are not wanted, change them using the SETSYS command.

ARC0530I **LEVEL 1 MIGRATION STARTING AT** *time* **ON** *date* **SYSTEM** *sysid*, **AT {THE BEGINNING OF THE MCD | cdskey}RECORD**

Explanation: Migration is processing data sets on migration level 1 volumes. The migration start time is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The date of migration is *date*, expressed as *yy*/*mm*/*dd* (year, month, day). The SMF system identifier of the system on which the migration is processed is *sysid*. The CDS record at which processing will begin is *cdskey*, or at the BEGINNING OF THE MCD. Descriptions of individual data sets processed follow in associated ARC0734I messages.

Source: DFSMShsm

System Action: Migration continues.

Application Programmer Response: None.

ARC0531I **LEVEL 1 MIGRATION ENDING,** *num* **DATA SETS MIGRATED,** *x* **TRACKS FREED, MINAGE** *y*, **TIME** *time*

Explanation: Migration of data sets from level 1 to level 2 has ended. The number of data sets that have been migrated is *num*. The number of tracks that have been made available on level 1 volumes because of the migration is *x*. The minimum age in days of data sets that have been migrated is *y*. The time of day the level 1 migration has ended is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0532I **MIGRATION OF {ALL LEVEL 1 | VOLUME (***volser***)} TERMINATED DUE TO ERROR READING OR WRITING THE LEVEL 2 CONTROL RECORD**

Explanation: DFSMShsm was migrating all eligible migration level 1 copies to level 2 or all eligible migration copies on the migration volume *volser* to level 2. The migration volume *volser* can be a migration level 1 volume or a DASD migration level 2 volume. An error occurred in reading the level 2 control record for multiple processing units.

Source: DFSMShsm

System Action: The migration processing of all level 1 or of the migration volume ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or system programmer. After the problem is resolved, the migration of all level 1 to level 2, or the migration of the eligible migration copies on a specific migration volume to level 2, can be done by issuing a command.

System Programmer Response: Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0534I **MIGRATION HELD, {NO MIGRATION LEVEL 1 VOLUME AVAILABLE | NO MIGRATION LEVEL 1 VOLUME AND NO TAPE MIGRATION VOLUME AVAILABLE | NO TAPE MIGRATION VOLUME AVAILABLE}, ABEND IN INSTALLATION-WIDE EXIT.**

Explanation: If an abend in an installation-wide exit occurred, space management was held. During migration processing, DFSMShsm detected that the required target migration volumes were not available for migration to continue to run. The required target migration volume types are:

- Migration level 1 DASD and migration level 2 tapes, if either of the following is true:
  - The storage management subsystem (SMS) is installed.
  - The data set migration exit (ARCMDEXT) is active in the system.
- Migration level 1 DASD, if all of the following are true:
  - SMS is not installed on the system.
  - The data set migration exit (ARCMDEXT) is not active in the system.
  - The DFSMShsm tape migration environment is not direct-to-tape.
- Migration level 1 DASD, if all of the following are true:
  - SMS is installed on the system.
  - The SMS management class definitions do not direct any SMS-managed data set to level 2 tape.

  - The data set migration exit (ARCMDEXT) is not active in the system.
  - The DFSMShsm tape migration environment is not direct-to-tape.
- Migration level 2 tape, if all of the following are true:
  - SMS is not installed on the system.
  - The DFSMShsm tape migration environment is direct-to-tape.

Source: DFSMShsm

System Action: The migration was held; DFSMShsm processing continues.

Application Programmer Response: If an abend in an installation-wide exit occurred, see message ARC0004I to identify the exit and abend code. Bring this abend to the attention of a Storage Administrator. Refer to message ARC0560E that was issued to the operator's console and the migration activity log. This message was issued for each migration target that DFSMShsm determined was unavailable. Also, message ARC0560E contains the appropriate programmer response for the error condition encountered. After the failure has been corrected, issue the RELEASE MIGRATION command and retry the request.

ARC0535I SPACE MANAGEMENT OF {*volser* | ALL LEVEL 1 MIGRATION VOLUMES} TERMINATED, {NO TAPE MIGRATION VOLUME AVAILABLE | NO DASD LEVEL 2 MIGRATION VOLUME AVAILABLE | NO LEVEL 1 MIGRATION VOLUME AND NO DASD LEVEL 2 MIGRATION VOLUME AVAILABLE | NO LEVEL 1 MIGRATION VOLUME AND NO TAPE MIGRATION VOLUME AVAILABLE | MIGRATION HELD | AUTO MIGRATION HELD | EXCESSIVE I/O ERRORS | TAPE MIGRATION VOLUME IN USE | GETMAIN ERROR | ABEND IN INSTALLATION-WIDE EXIT | ESTAE SET UP FOR DATA MOVEMENT FAILED | DFSMSHSM SHUTDOWN | DFSMSHSM EMERGENCY MODE | I/O ERROR ON TTOC}

Explanation: DFSMShsm attempted to migrate the volume with the volume serial number *volser* or migrate all level 1 migration volumes, but encountered one of the following errors:

- The source migration level 2 tape volume was in use by another task.
- There was no target tape migration level 2 available.
- There was no DASD migration level 2 volume available.
- There was no DASD migration level 1 volume available and no DASD migration level 2 volume available.
- There was no DASD migration level 1 volume available and no tape migration level 2 volume available.
- Migration or automigration was held.
- DFSMShsm was put in emergency mode.
- DFSMShsm was being shutdown.
- For the volume that is being space managed, there have been ten I/O errors trying to read or write records in the migration control data set (MCDS) or the offline control data set (OCDS). See previous ARC0184I messages for the specifics of the I/O errors. Errors reading the MCDS management control record (MCR) are not counted in this total. See message ARC0539I or ARC0307I for more details.
- In an attempt to GETMAIN storage for the buffers needed for data movement, an error occurred. If a GETMAIN error occurs, migration will be held. See the preceding ARC0305I or ARC0307I message for the specific failing code.
- There was an abnormal end (abend) in either the tape migration data set installation-wide exit or the second level migration data set installation-wide exit. Migration has been held.
- The ESTAE environment could not be set up for the process of moving data during a DFSMShsm migration operation.

Source: DFSMShsm

System Action: The migration of the volume ends. DFSMShsm processing continues.

If there was an abend in the migrate data set installation-wide exit, migration has been held. DFSMShsm processing continues without the migration function.

Application Programmer Response:

- The message insert TAPE MIGRATION VOLUME IN USE is associated with either a MIGRATE VOLUME(*volser* DELETEBYAGE(*days*)) command or a MIGRATE VOLUME (*volser* DELETEIFBACKEDUP(*days*)) command, and an ARC0560E message has not been issued. When the indicated volume is no longer in use, reissue the volume migration command.
- Refer to message ARC0560E that was issued to the operator's console and the migration activity log. This message was issued for each migration target that DFSMShsm determined was unavailable. Also, message ARC0560E contains the appropriate programmer response for the error condition encountered.
- Release migration, if it was held. Retry the volume migration when the correction has been made.
- Issue SETSYS NOEMERGENCY, if DFSMShsm was put in EMERGENCY mode. Retry the volume migration when the correction has been made.
- Determine the cause of the I/O errors and take corrective action on the control data set.
- Stop DFSMShsm and restart DFSMShsm with additional storage requested.
- Find the cause of the abend in the installation-wide exit. When the cause is determined, fix and relink the exit module. Use the EXITON parameter of the SETSYS command to reload the exit. To start the migration function, issue the RELEASE command with the MIGRATION parameter.
- Determine why the ESTAE could not be set up and take corrective action.

Retry the migration when the correction has been made.

ARC0538I ERROR MARKING VOLUME *volser* RECORD INELIGIBLE FOR DELVOL WHILE MIGRATING *dsname*

Explanation: The migration to tape of the VSAM data set with the name *dsname* was successful, but there was an error in creating an entry in the TTOC for this migration. An attempt was made to mark the MCV record of the tape volume ineligible for deletion and this attempt failed. This tape must be marked ineligible for deletion because there is no TTOC entry for the migration copy of the data set. Recycle processing cannot move this migration copy to another tape. When recycle processing empties the tape except for this last VSAM data set, the TTOC indicates there is no more valid data on the tape. However, the unrecorded migration copy is still there. If an attempt is made to delete the volume with the DELVOL command and the volume is not marked ineligible for the DELVOL command, the only copy of a user's data set will be lost.

Source: DFSMShsm

System Action: The data set remains migrated; DFSMShsm processing continues.

Application Programmer Response: Issue a FIXCDS command to set the flag MCVFNDLV on. This marks the MCV record of the volume *volser* ineligible for deletion and protects the VSAM data set that is not listed in the TTOC. This VSAM data set *dsname* should be recalled and a FIXCDS command should be issued to set the flag MCVFNDLV off. Now that the TTOC is in sync with the actual valid data on the tape, it is safe to allow normal processing on the tape volume.

ARC0539I EXCESSIVE I/O ERRORS CHECKING IF RECALL NEEDS A {MIGRATION TAPE | SMALL DATA SET PACKING DATA SET} - MIGRATION HELD

Explanation: When DFSMShsm is in a tape migration environment, the management control record (MCR) is checked after the migration of each data set has completed to see if a recall task needs a tape that is allocated to a migration task. DFSMShsm is in a tape migration environment if you specified SETSYS TAPEMIGRATION (DIRECT) or SETSYS TAPEMIGRATION (ML2TAPE).

When DFSMShsm is migrating to or from an SDSP, the associated volume record (MCV) is checked repeatedly to see if an input function task needs an SDSP that is allocated to a migration task.

When DFSMShsm is in a multiple processing unit environment, the DASD copy of the MCR or MCV must be checked. Each time there is an error in the read of the MCR or MCV record, an ARC0184I message is issued. If 5 read errors have occurred in reading the MCR, DFSMShsm places a hold on the migration function so no more data sets can be migrated either by automatic space management or by command. If more than 5 read errors have occurred in reading the MCV record during one volume migration task, DFSMShsm places a hold on the migration function so no more data sets can be migrated either by automatic space management or by command.

Source: DFSMShsm

System Action: Migration is held. DFSMShsm processing continues without the migration function.

Application Programmer Response: To determine the cause of the errors in reading the MCR or MCV record, refer to the return code value from the ARC184I message. For *return-code* values, see Table 11 on page ARC-285.

Once the problem has been fixed, issue the RELEASE MIGRATION command so migration of data sets can resume.

ARC0540I MIGRATE REJECTED - INVALID USE OF CONVERT PARAMETER, {*volser1* IS AN HSM OWNED VOLUME | SPACE MANAGEMENT ATTRIBUTE NOT MIGRATE FOR *volser1* | MIGRATIONLEVEL2 NOT VALID WITH CONVERT | *volser2* NON-MANAGED VOLUME AND UNITTYPE NOT SPECIFIED | CONVERT UNIT DIFFERENT THAN DFSMSHSM VOLUME RECORD | CONVERT PARAMETER NOT ALLOWED IN DIRECT TO TAPE ENVIRONMENT}

Explanation: A MIGRATE command was issued with the CONVERT parameter. One of the following problems was encountered causing the command to be rejected:

- *volser1* IS A DFSMShsm OWNED VOLUME.

  The VOLUME parameter was specified with the volume identification number of *volser1*. However, if the CONVERT parameter is specified, the volume *volser1* must be a level 0 volume.

- SPACE MANAGEMENT ATTRIBUTE NOT MIGRATE FOR *volser1*.

  The volume being migrated was added using the ADDVOL command with the space management attribute of DELETEBYAGE or DELETEIFBACKEDUP, or the DELETEBYAGE or the DELETEIFBACKEDUP parameter was specified with the VOLUME parameter along with the CONVERT parameter on the MIGRATE command. Only the space management attribute of MIGRATE is supported when issuing the MIGRATE command with the CONVERT parameter. Specify MIGRATE VOLUME(*volser* MIGRATE(*days*)) CONVERT if migration of the volume is required.

- MIGRATIONLEVEL2 NOT VALID WITH CONVERT

  The MIGRATIONLEVEL2 parameter was specified along with the CONVERT parameter on the MIGRATE command. When processing the CONVERT parameter, the migration of data to level 2 volumes is not allowed.

- *volser2* NON-MANAGED VOLUME AND UNITTYPE NOT SPECIFIED.

  The CONVERT parameter was specified with the volume identification number of *volser2* and the unit type of the *volser2* was not specified. You must specify the unit type when the volume *volser2* to which the data sets are to be recalled is not managed by DFSMShsm. Either specify the unit type of the target volume or issue the ADDVOL command to make it a DFSMShsm-managed volume before you reissue this command.

- CONVERT UNIT DIFFERENT THAN DFSMShsm VOLUME RECORD.

  The CONVERT parameter was specified with the volume identification number *volser2* and the volume unit type *unittype*. A migration control data set volume record (MCV) exists for *volser2*, but the unit type in the MCV for the volume is different from the unit type specified with the CONVERT parameter. Respecify the MIGRATE command with the CONVERT parameter and specify only the *volser2* subparameter of the CONVERT parameter.

- CONVERT PARAMETER NOT ALLOWED IN DIRECT TO TAPE ENVIRONMENT

  The CONVERT parameter was specified and the SETSYS TAPEMIGRATION parameter is set to DIRECT, which is not supported. Either issue a MIGRATE command for the data set without CONVERT, followed by a RECALL command, or change the TAPEMIGRATION value to something other than DIRECT.

Source: DFSMShsm

System Action: The MIGRATE command request is rejected.

Application Programmer Response: Reissue the MIGRATE command with the appropriate parameters.

ARC0541I UNABLE TO PROCESS SMALL DATA SET PACKING DATA SET ON VOLUME *volser*, RETURN CODE=*return-code*, REASON CODE= *reason-code*{, VSAM FEEDBACK CODE= *feedbackcode*}

Explanation: An error has occurred in accessing a small data set packing (SDSP) data set on the indicated volume *volser*.

The values for *return-code* are:

Retcode	**Meaning**	
8	An error has occurred in allocating the SDSP data set. The values for *reason-code* are:	
	4	Dynamic allocation indicates the SDSP data set on volume *volser* is in use. See the preceding ARC0503I message for the return code

and the reason code from dynamic allocation.

- **6** SDSP data set serialization checking indicates the SDSP on volume *volser* is in use by another DFSMShsm function.
- **7** SDSP is marked as needed by RECALL or ABARS processing.
- **8** Operator cancels mount. See the preceding ARC0503I message for the return code and the reason code from dynamic allocation.
- **9** Control data set read error has occurred. See the preceding ARC0184I message.
- **10** Control data set update error has occurred. See the preceding ARC0187I message.
- **12** No units are available. See the preceding ARC0503I message for the return code and the reason code from dynamic allocation.
- **16** Other dynamic allocation error. See the preceding ARC0503I message for the return code and the reason code from dynamic allocation.
- **19** An error has occurred in allocating the SDSP data set. The values for *reason-code* are:
  - **11** The SDSP data set on volume *volser* is in use by another job or user.
- **20** Cancelled by installation validation routine.
- **24** An undetermined error has occurred while trying to allocate the SDSP data set.

12 An error has occurred while trying to deallocate and unserialize an SDSP data set. In this case, the SDSP may no longer be available to other tasks for migration and recall. This can be corrected by either stopping and restarting DFSMShsm or by issuing a LIST HOST(id) RESET command. Additional information about the error will be contained in the DFSMShsm PDA trace. The values for *reason-code* are:

- **4** An error has occurred in trying to dynamically deallocate the SDSP data set. DFSMShsm has removed the serialization for the data set in the MCV record.
- **8** The data set that was attempting to be unallocated did not have an entry on the small data set allocation (VSA) queue. DFSMShsm has not removed the serialization for the data set in the MCV record.
- **12** The read of the MCV record failed. DFSMShsm has not removed the serialization for the data set in the MCV record.
- **16** The update of the MCV record failed. DFSMShsm has not removed the serialization for the data set in the MCV record.

28 Catalog error. Reason code is the catalog return code.

32 VSAM macro error. Reason code is 1 if the VSAM RPL is active on another processing unit; otherwise, the reason code is the VSAM return code. When reason code is the VSAM return code, the VSAM RPL feedback code *feedbackcode* appears in the hexadecimal format. For meaning of VSAM return codes and VSAM feedback codes, see *DFSMS/MVS Using Data Sets*.

35 An error has occurred in opening the SDSP data set. An OPEN error message with component identifier IEC normally precedes this message if this is a true OPEN error. The values for *reason-code* are:

- **4** GENCB has failed on opening an SDSP data set on volume *volser*.
- **8** Failure has occurred on OPEN macro.
- **11** The SDSP data set on volume *volser* is in use by another job or user.
- **12** GENCB has failed on creating an RPL for VERIFY.
- **16** VERIFY has failed.
- **60** Failure has occurred in establishing ESTAE environment.

36 VSAM macro error has occurred in building an RPL for reading the SDSP data set. Reason code is the VSAM return code. For meaning of VSAM return codes and VSAM feedback codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

Source: DFSMShsm

System Action: The SDSP is not processed by DFSMShsm. Other DFSMShsm processing continues.

Application Programmer Response: For reason codes 4 and 6 under return code 8, reissue the command when the SDSP data set is not in use. For the other reason codes, perform problem determination and reissue the command.

ARC0542I SMALL DATA SET PACKING DATA SET *dsname* IS FULL

Explanation: During the migration of a data set to small data set packing (SDSP) data set *dsname*, an attempt to write the migration copy to the SDSP data set failed due to a lack of space for the records.

Source: DFSMShsm

System Action: The migrating data set fails. The volume to which the migration was attempted no longer is selected when attempting to migrate to an SDSP data set. This message is reported to both the migration activity log and to the console to facilitate auto-operations usage. The message is issued by each host system attempting to migrate data to the SDSP, and results in an out-of-space failure.

Application Programmer Response: Reorganize the SDSP data set using the IDCAMS REPRO or EXPORT/IMPORT command. The volume is a candidate for migration to an SDSP the next time the volume is added with the ADDVOL command and the SDSP parameter. You might do this by entering an ADDVOL command as soon as the data set is reorganized, or the next startup of DFSMShsm probably contains one. Alternatively, a reorganization of the SDSP can be auto-operations triggered upon issuance of this message to the console.

ARC0543I VOLUME *volser* NOT PROCESSED BECAUSE OF ERROR READING MCV RECORD

Explanation: While DFSMShsm was attempting to read an MCV record for the specific volume *volser*, an I/O error occurred. Message ARC184I also precedes this message, giving the specific information about the error.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or system programmer to correct the problem and reissue the command.

System Programmer Response: Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0544I OBTAIN FAILED FOR {DSN=*dsname* | CCHHR=*cchhr*} ON VOLUME = *volser*, RC = *return-code*

Explanation: An attempt has been made to read a data set control block (DSCB) from the volume table of contents (VTOC) on the volume *volser*, either by the data set name *dsname* or by the absolute track address of the DSCB *cchhr*. The CAMLST OBTAIN macro returned *return-code* in register 15. The DSCB has not been obtained. For the meaning of *return-code*, see *DFSMS/MVS Using Data Sets*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the meaning of the return code and retry the request.

ARC0545I SCRATCH RELATED FUNCTION FAILED FOR *dsname* ON VOLUME=*volser*, RC=*return-code*, REAS=*reason-code*

Explanation: An attempt has been made to scratch *dsname* from the volume. An error has been encountered.

The values for *return-code* and *reason-code* are:

Retcode	**Meaning**	
4	The *dsname* has been scratched, but the volume *volser* deallocation failed.	
	63	Volume deallocation has failed.
6	Volume in use.	
8	The *dsname* has not been scratched. The MVT entry could not be found or built for the volume *volser*.	
	4	Invalid input device type.
	22	I/O error in reading MCV or MCT record.
	20	Device type has not been provided.
12	The volume *volser* or data set *dsname* allocation has failed; the *dsname* has not been scratched.	
	76	The data set allocation has failed.
	nn	Use the dynamic allocation (DYNALLOC macro) return codes or error codes. See *OS/390 MVS Programming: Assembler Services Guide*
20	The SCRATCH macro has failed and the volume *volser* deallocation has also failed.	
	63	Volume deallocation has failed. See *OS/390 MVS Programming: Assembler Services Guide.*

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the meaning of the return code and reason code and retry the request.

ARC0546I ERROR DURING DELETION OF DATA SET RECORDS FOR *dsname* FROM SDSP DATA SET ON VOLUME=*volser*, RC=*return-code*, REAS=*reason-code*

Explanation: An attempt was made to delete the data set records for *dsname* from the small data set packing data set on the migration level 1 volume *volser.* An error was encountered.

Values for *return-code* and *reason-code* are:

Retcode	**Meaning**	
4	The MVT entry could not be found or built for the volume; the data set records are not deleted:	
	8	There is a volume type conflict.
	12	There is an I/O error when reading the MCV record.
	16	No MCV record is found.

8 The allocation for the SDSP data set on the volume *volser* failed. The *dsname* data set records are not deleted:

4	Allocation failure — data set in use.
6	SDSP serialization check indicated SDSP was in use.
7	The SDSP is marked as needed by recall.
8	Operator cancelled mount.
9	Error reading DFSMShsm MCV record during SDSP serialization checking.
10	Error updating DFSMShsm MCV record during serialization of SDSP.
12	No units are available.
16	There is other dynamic allocation error.
20	Cancelled by installation validation routine.
24	There is an invalid parameter list.

12 The open for the SDSP data set on the volume *volser* failed. The *dsname* data set records are not deleted:

4	The GENCB macro failed attempting to create an ACB for the open.
8	The open failed.
12	The GENCB macro failed attempting to create an RPL for the VERIFY macro.
16	The VERIFY macro failed.
20	There was a failure establishing the ESTAE environment.

16 The deletion of the *dsname* data set records from the SDSP data set failed:

4	The data set records are in use.
8	The GENCB macro failed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the meaning of the return code and reason code, then retry the request.

ARC0547I FAILURE INDICATING DATA SET *dsname* CAUSED TAPE MIGRATION VOLUME *volser* TO BE INELIGIBLE FOR DELVOL

Explanation: In the process of migrating VSAM data set *dsname* to tape migration volume *volser*, there was a failure to add the data set entry to the TTOC record, which caused an attempt to set an indicator in the data set record that this data set caused the tape migration volume to be ineligible for DELVOL processing. There was a failure reading or writing the data set record (MCD) and the indicator has not been set on. See the associated ARC0184I message for the exact cause of the error.

Source: DFSMShsm

Application Programmer Response: Issue a FIXCDS command to set the flag MCDFNOD on. This allows recall processing to reset the flag MCVFNDLV in the volume record to indicate that the volume is no longer ineligible for DELVOL processing after this data set is successfully recalled.

Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0548I MIGRATION OF A TAPE VOLUME IS NOT SUPPORTED

Explanation: A MIGRATE command was entered to migrate a volume, but the volume serial number entered represents a tape migration level 2 volume. DFSMShsm does not support migration from a tape migration level 2 volume to another tape migration level 2 volume.

Source: DFSMShsm

System Action: The migration of the volume ends. DFSMShsm processing continues.

Application Programmer Response: Check the volume serial number given in the preceding ARC1001I message, reenter the command with the correct volume serial number. If the attempt to migrate the tape volume is to reclaim the tape volume, use the RECYCLE command to move the valid data to another tape migration level 2 volume.

ARC0550I *count* DATA SETS ON VOLUME *volser*, WERE NOT PROCESSED BY FREEVOL

Explanation: At the end of processing a FREEVOL AGE(0) command, this message alerts system personnel that data may still remain on volume *volser*. The data remaining on the volume may include three categories of data not moved when FREEVOL AGE(0) is specified. The three categories of data are:

- BACKDS backup versions
- Migrated data sets associated with a management class defined for AUTOBACKUP and are not yet processed for backup versions
- Data sets that may have been recalled, deleted, or moved to ML2 tape, during the FREEVOL processing of this volume

count does not include the VTOC, the VTOC index data set, or SYS1.catalog entry. *count* includes the volume SDSP data set, if found, and may include data sets that have been recalled, deleted, or moved on to ML2 tape while this REEVOL command was processing. Message ARC0550I is followed by message ARC0523I.

Note: DATA SETS refers to individual DSCBs found on the volume. VSAM data sets may have multiple DSCBs.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Before removing the volume from the system, look at the data sets remaining on the volume to determine if any of them must be kept.

When the remaining data on the volume contain only BACKDS backup versions, run AUTOBACKUP on the DFSMShsm primary host to remove them from the volume.

When the remaining data on the volume contain migrated data sets for which the backup requirements are not yet satisfied:

1. Run AUTOBACKUP on the DFSMShsm primary host— to cause a backup version to be created of migrated data sets for which backup versions are yet needed. This process also removes any BACKDS backup versions from the volume.
2. Then re-issue the FREEVOL AGE(0) command—to remove the migrated data sets (those just backed up) from the volume.

System personnel must deal individually with any remaining data sets that must be kept.

ARC0551I CAUTION: THERE MAY BE DATA SETS REMAINING ON VOLUME ***volser***

Explanation: At the end of processing a FREEVOL AGE(0) command, when the target level is level 2 DASD and there are multiple key ranges defined, this message appears to alert system personnel that data may still remain on the volume. When multiple key ranges are being used, the process is MCDS driven. Since the VTOC is not read, user data sets and backup copies are not encountered. This message will be followed by completion message ARC0523I.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Before removing the volume from the system, look at the data sets remaining on the volume to determine if any of them must be kept. LIST VTOC can be used to determine which data sets remain on the volume. The DFSMShsm LIST command can be used to determine which user data set images are in an SDSP if one exists on the volume. If any backup VTOC copy data sets are on a volume, issue a FREEVOL AGE(0) command with a target level of either level 1 DASD or level 2 tape. This will force the VTOC to process. All user data sets and backup copies will be counted and VTOC backup copies will be moved to other level 1 volumes. Any backup copies of user data sets will be moved the next time daily backup is run. System personnel must deal individually with any remaining user data sets on the volume that must be kept.

ARC0552I MIGRATION CLEANUP NOT PERFORMED ON THIS PROCESSING UNIT, IT IS CURRENTLY BEING PERFORMED ON ANOTHER PROCESSING UNIT

Explanation: Migration cleanup of automatic secondary space management functions is requested on this processing unit while another migration cleanup of automatic secondary space management is running on another processing unit. If this happens, DFSMShsm will not process the migration cleanup on this processing unit since an unexpected result may occur while running two migration cleanups against the same MCDS at the same time.

Source: DFSMShsm

System Action: The second migration cleanup is skipped. The first migration cleanup proceeds.

Application Programmer Response: Do not start a second automatic secondary space management function on any processing unit if automatic secondary space management is currently running.

ARC0553I ERROR {CREATING | UPDATING} MC1 RECORD

Explanation: While creating or updating an MC1 record, an error occurred. See message ARC0184I for more details.

Source: DFSMShsm

System Action: The MC1 record is not created or updated. DFSMShsm processing continues.

Application Programmer Response: If the error occurred while creating an MC1 record and the record is not the first one on the chain, the last MC1 record will have an incorrect continuation indicator. Use the FIXCDS command to look for the last MC1 record and turn off the MC1FCONT flag to indicate that it is the last MC1 record. (The key of the first MC1 record is L1VOL-00, the key of the second MC1 record is L1VOL-01, and so on.)

Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0554I OPEN OF VTOC FOR VOLUME ***volser*** **FAILED**

Explanation: An attempt was made to open the VTOC, either to select eligible data sets to process or to update a date value in the data set VTOC entry for a selected data set. The open failed.

Source: DFSMShsm

System Action: Volume migration for the volume *volser* ends. DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the open error encountered and retry the request. If the problem persists with this volume, it could be an indication of hardware or media problems.

ARC0555I CLOSE OF VTOC FOR VOLUME ***volser*** **FAILED**

Explanation: An attempt was made to close the VTOC at the end of processing eligible data sets or updating a data set VTOC entry for a particular data set. The attempt failed. The failure was trapped by an ESTAE routine in the module issuing the close request. The volume *volser* migration continues.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the close error encountered.

ARC0556I {PRIMARY SPACE MANAGEMENT | SECONDARY SPACE MANAGEMENT} FAILED TO RESTART BECAUSE THE CURRENT TIME IS OUTSIDE THE SPACE MANAGEMENT START WINDOW

Explanation: DFSMShsm has determined that the automatic primary or automatic secondary space management did not run to completion on the current day. However, during its restart processing, it determined that the current time is outside the currently specified window for starting this processing.

Source: DFSMShsm

System Action: The indicated space management is not restarted at this time. DFSMShsm processing continues.

Application Programmer Response: If you want the indicated space management to restart on the current day, change the ending time by issuing the SETSYS command.

ARC0557I VTOC PROCESSING FOR VOLUME ***volser*** **TERMINATED, UNABLE TO READ JFCB. RETURN CODE=*****return-code***

Explanation: An error has occurred in reading the JFCB. The read has failed. DFSMShsm is unable to read the VTOC of the source volume unless it successfully reads the JFCB.

The RDJFCB macro returned *return-code* in register 15. For the meaning of *return-code*, see *DFSMS/MVS Using Data Sets*.

Source: DFSMShsm

System Action: Processing of the command ends. DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the meaning of the return code and retry the request.

ARC0558I MIGRATE COMMAND IS NOT ALLOWED FOR SPECIFIC ML1 OR ML2 VOLUMES - USE FREEVOL COMMAND

Explanation: A MIGRATE command was issued to migrate a specific volume. DFSMShsm determined that the volume was added with the ADDVOL command as a migration level 1 or migration level 2 DASD volume. The FREEVOL command is the proper vehicle for migrating data from such a volume.

Source: DFSMShsm

System Action: The MIGRATE command request is rejected.

Application Programmer Response: If the volume serial number was coded correctly on the command, issue the FREEVOL command for the volume. Otherwise, correct the volume serial number and retry the MIGRATE command.

ARC0559I SPACE MANAGEMENT OF {*volser* | ALL LEVEL 1 MIGRATION VOLUME} WILL NOT TARGET {MIGRATION LEVEL 1 | MIGRATION LEVEL 2 DASD | MIGRATION LEVEL 2 TAPE} UNTIL THE REQUESTED VOLUME TYPE IS MADE AVAILABLE

Explanation: While DFSMShsm was migrating volume *volser*, a data set was encountered that was directed to the unavailable volume type.

If the volume type was unavailable for all space management tasks, message ARC0560E is issued to the operator's console and to the migration activity log giving additional information.

Source: DFSMShsm

System Action: The processing volume does not migrate data sets to the unavailable volume type, but continues migrating data sets which are targeted for an available volume type. DFSMShsm processing continues.

Application Programmer Response: Arrange to have the volume type available when this volume is processed in order for all eligible data sets to migrate.

ARC0560E MIGRATION LIMITED: {NO LEVEL 1 MIGRATION SPACE AVAILABLE | NO LEVEL 1 MIGRATION VOLUME AVAILABLE | NO DASD LEVEL 2 MIGRATION VOLUME AVAILABLE | NO TAPE MIGRATION VOLUME AVAILABLE | EXCESSIVE I/O ERRORS | ABEND IN TAPE INSTALLATION-WIDE EXIT}

Explanation: During a volume migration (from a DFSMShsm-managed volume or from a migration volume), level 1 to level 2 migration, or data set migration, DFSMShsm failed to migrate a data set. The migration failed because of a lack of available space in the hierarchy or because some condition occurred making it impossible (or inadvisable) to continue migrating to a certain level in the hierarchy. Migration to migration level 1 may be inhibited if there is no space remaining in the VTOC or VTOC index on the volumes that are defined.

The EXCESSIVE I/O ERRORS and ABEND IN TAPE INSTALLATION-WIDE EXIT conditions occurred while trying to migrate a data set to tape.

EXCESSIVE I/O ERRORS means either

- Five I/O errors occurred while reading the management control record (MCR).
- Ten I/O errors occurred while accessing records other than the MCR in either the migration control data set (MCDS) or offline control data set (OCDS), or both.

A tape migration volume is considered not available if one of the following conditions is true:

- An attempt was made to migrate a data set to a tape migration level 2 volume, and either the operator responded to the mount request with a NO, or the timer to mount a tape expired. A new tape volume was selected and again the operator could not mount the tape.
- There have been ten I/O errors trying to read or write records in MCDS or the OCDS. See previous ARC0184I messages for the specifics of the I/O errors. Errors reading the MCDS MCR are not counted in this total.
- When DFSMShsm is in a tape migration environment (SETSYS TAPEMIGRATION(DIRECT)) or (SETSYS TAPEMIGRATION(ML2TAPE)), MCR is checked after the migration of each data set is complete to see if a recall task needs a tape that is allocated to a migration task. When DFSMShsm is in a multiprocessing unit environment, the DASD copy of the MCR needs to be checked. There have been five errors in the read of the MCR record. An ARC0184I message is issued each time the read failed.
- The tape data set installation-wide exit (ARCTDEXT) abnormally ended (abended).

No migration level 1 volume is considered available if one of the following conditions is true:

- No migration level 1 volume has been ADDVOLed to DFSMShsm.
- The space between the full volume and the high threshold of the selected migration volume is too small for a small data set, but not for a small data set packing data set. The migration failed because sufficient space was not available on the migration volumes. The failure occurred on two consecutive attempts, and the migration (level 1) volumes were space checked between attempts.

Source: DFSMShsm

System Action: The particular migration request failed. DFSMShsm issues either an ARC12*nnx* message (for data set command migration) or an associated ARC0734I message (for volume migration), giving specific reasons for the failure.

DFSMShsm continues migrating data for those cases where other target levels can still be used.

If the NO TAPE MIGRATION VOLUME AVAILABLE, EXCESSIVE I/O ERRORS, or ABEND IN TAPE INSTALLATION-WIDE EXIT condition occurred, DFSMShsm stops trying to migrate to tape.

Until a RELEASE MIGRATION or RELEASE AUTOMIGRATION or RELEASE ALL command is issued, DFSMShsm will not attempt to migrate any data set that would require using the indicated hierarchy level as a target.

Note: If DFSMShsm was migrating a volume (as the result of a MIGRATE command, FREEVOL command, interval migration or automatic primary space management), or was processing the automatic secondary space management when the condition occurred, some of the data sets on the volume may still migrate successfully.

Application Programmer Response:

- For NO LEVEL 1 MIGRATION SPACE AVAILABLE, if there is free space on ML2, then FREEVOL some ML1 volume(s) to level 2, to clear some space on level 1. Otherwise, have at least one level 1 volume ADDVOLed.

Reorganize the index, if it is full, and reissue the ADDVOL command to add the migration level 1 volume.

- For NO LEVEL 1 MIGRATION VOLUME AVAILABLE, have at least one level 1 volume ADDVOLed.
- For NO DASD LEVEL 2 MIGRATION VOLUME AVAILABLE, have at least one level 2 volume ADDVOLed.
- For NO TAPE MIGRATION VOLUME AVAILABLE, determine why no tape was made available to DFSMShsm and arrange for having at least one tape made available.
- For EXCESSIVE I/O ERRORS, analyze the most recent ARC0184I error messages against the MCDS and OCDS to determine the specific problem needing correction.
- For ABEND IN TAPE INSTALLATION-WIDE EXIT, issue the SETSYS EXITOFF command to inactivate the migration-tape data set installation-wide exit (ARCTDEXT).

  If migration can proceed without ARCTDEXT being active, migration can be released before the exit is corrected.

  The ARCTDEXT module should be examined to determine the reason for the abend; when corrected, the exit can be relinked and the SETSYS EXITON command used to reactivate the exit.

When the original problem has been corrected, issue the RELEASE MIGRATION command to allow DFSMShsm to attempt using the indicated level and device category.

If an ADDVOL command is issued for the unavailable volume type while a volume migration is in progress, data sets will be directed to the volume just added without requiring a RELEASE MIGRATION command.

Operator Response: When the original problem is corrected (or if migration can continue without exit ARCTDEXT being active):

- Delete the ARC0560E message from the console.
  - If the message identifier is not available, issue the DISPLAY R,I command to get the ID.
  - To delete the message, issue the following command using the message identifier *id* obtained from the above DISPLAY R,I command.

    CONTROL C,I,*id*
- Issue the RELEASE MIGRATION command to allow DFSMShsm to attempt using the indicated level and device category.

Note: There may be more than one such message on the console if a problem with one hierarchy level was not resolved before DFSMShsm encountered a problem with another level in the hierarchy.

ARC0561I PRIMARY-DAYS-NON-USAGE VALUE *value* SPECIFIED FOR MANAGEMENT CLASS *mgtclassname* CONFLICTS WITH DFSMSHSM INTEGRITY AGE *value*

Explanation: DFSMShsm detected that the PRIMARY-DAYS-NON-USAGE VALUE *value*, specified for the named SMS Management Class was less than the DFSMShsm integrity age *value*. Data sets associated with the management class *mgtclassname* will not be eligible for migration until the integrity age is met. This message is issued during automatic primary space management only.

Source: DFSMShsm

System Action: Volume migration processing continues. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator, who should perform one of the following:

- Change the PRIMARY-DAYS-NON-USAGE attribute value to a value equal to or greater than the DFSMShsm integrity age.
- Change the DFSMShsm integrity age to be less than or equal to the PRIMARY-DAYS-NON-USAGE attribute value. SETSYS DFHSMDATASETSERIALIZATION or SETSYS USERDATASETSERIALIZATION controls the DFSMShsm integrity age.

ARC0562I SPACE MANAGEMENT PROCESSING SKIPPED *number* DATA SETS BECAUSE THE SMALL DATA SET PACKING DATA SET ON VOLUME *volser* WAS IN USE

Explanation: Level 1 to Level 2 migration, migration cleanup, or FREEVOL command processing could not gain exclusive control of the SDSP.

Source: DFSMShsm

System Action: Migration of the number of data sets mentioned is skipped.

Application Programmer Response: Run the automatic secondary space management, command level-1-to-level-2 migration, or FREEVOL command processing functions again at a time when the SDSP will not be used by other DFSMShsm functions.

ARC0563I MIGRATION OF *number* DATA SET(S) SKIPPED BECAUSE ALL TARGET SMALL DATA SET PACKING DATA SET(S) WERE IN USE

Explanation: When DFSMShsm was migrating a data set to an SDSP, it could not gain exclusive control of any SDSP.

Source: DFSMShsm

System Action: Migration of the number of data sets mentioned is skipped.

Application Programmer Response: Run the migration function again at a time when not all SDSP data sets are being used by other DFSMShsm functions.

ARC0564I UNEXPECTED MCDS RECORD ENCOUNTERED, RECORD KEY = X(*hexrecordkey*), MCHTYPE = X(*hextype*). *nn* UNEXPECTED RECORDS HAVE BEEN ENCOUNTERED. PROCESSING WILL {CONTINUE | TERMINATE}.

Explanation: During command level migration or secondary space management, an unexpected or unknown MCDS entry has been encountered.

Source: DFSMShsm

System Action: Secondary space management or level migration continues until 11 bad records have been encountered, at which point processing ends. During secondary space management, the number of bad records is reset to zero between each phase. That is, bad records encountered during migration cleanup are not added to those that have been encountered during level 1 to level 2 migration.

Application Programmer Response: Notify the storage administrator. The storage administrator can find the bad records based on their hex keys and can either correct or delete the bad records.

ARC0565I SMPM CFQUERY FUNCTION FAILED FOR VSAM DATA SET *dsname*, RC=*return-code*, REASON=*reason-code*

Explanation: DFSMShsm invoked the CFQUERY function to test the VSAM SMS data set for retained locks and RLS inconsistency. The CFQUERY function returned the listed failing return and reason codes.

Source: DFSMShsm

System Action: The migration operation ends. DFSMShsm processing continues.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of the listed return and reason codes.

ARC0570I {PRIMARY SPACE MANAGEMENT | INTERVAL MIGRATION | COMMAND MIGRATION | AUTOMATIC BACKUP | COMMAND BACKUP | AUTOMATIC DUMP | COMMAND DUMP | RESTORE | RECOVERY} FOR {ALL SMS MANAGED | *volser* | *volser*,SGROUP=*sg*} VOLUME(S) TERMINATED, RC=*return-code*, REASON=*reason-code*

Explanation: DFSMShsm was in the process of one of the following: automatic migration, automatic backup, or automatic dump of all volumes; automatic migration, automatic backup, or automatic dump of an individual volume; or of command migration, command backup, command dump, command restore, or command recovery of a specific volume. An error occurred causing the function to end. The values of *return-code* and *reason-code* indicate what type of error occurred.

Generally, this message is issued for SMS volumes being processed. It can, however, be issued for NONSMS volumes if the error received prevents DFSMShsm from knowing if the volume is SMS- or NONSMS-managed.

During migration processing, DFSMShsm performs space checks on SMS-managed volumes if SMS is active, regardless of which SETSYS parameters were specified. This message is issued if any errors were found during the space checks.

Retcode	**Meaning**
1	SMS is not installed in the system. DFSMShsm attempted to process an SMS-managed volume.
2	An error occurred in getting an SMS lock token, which is used for future access to the same SMS configuration. SMS failed to get the lock token. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes. Also applies to storage group requests.
3	A list of data sets from an SMS-managed volume could not be retrieved. DFSMShsm volume processes, which require the list, failed. The IGDCSP00 module could not be loaded when the LOAD macro was issued to bring the module into DFSMShsm's virtual storage.
4	SMS was not active in the system when DFSMShsm attempted to process SMS-managed volumes. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes. Also applies to storage group requests.
5	An error occurred while reading the volume VTOC entry for the volume being processed. DFSMShsm read the volume VTOC entry to determine if the volume being processed is an SMS-managed volume. The read failed.
6	An error occurred while retrieving an SMS volume definition. DFSMShsm invoked SMS to retrieve an SMS volume definition. SMS failed to retrieve it.
7	An error occurred while retrieving a storage group definition for an SMS volume. DFSMShsm invoked SMS to retrieve a storage group definition for the volume. SMS failed to retrieve it.
8	An error occurred while retrieving storage group definitions in the system in which DFSMShsm is running. DFSMShsm invoked SMS to retrieve a list of all storage group definitions to select SMS-managed volumes for automatic processing or storage group requirements. SMS failed to retrieve the list. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes. Also applies to storage group requests.
9	The volume being processed is in SMS initial status. DFSMShsm cannot process a volume in SMS initial status.
10	DFSMShsm cannot determine if the volume being processed is an SMS-managed volume. The mounted volume table (MVT) and the volume VTOC entry do not agree. DFSMShsm determined an SMS-managed volume was converted to a non-SMS-managed volume, or a non-SMS-managed volume was converted to an SMS-managed volume between the automatic processes or during the volume process.
11	DFSMShsm cannot determine if the volume being processed is an SMS-managed volume. The SMS volume definition and the volume VTOC entry do not agree.
12	An error occurred while retrieving a list of all SMS-managed volumes. DFSMShsm invoked SMS to retrieve a list of all SMS-managed volumes associated with the eligible storage groups for DFSMShsm automatic processing. SMS failed to retrieve the list. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes. Also applies to storage group requests.
13	The device type of the volume that was retrieved from the SMS storage group definition is not supported by DFSMShsm.
14	An error occurred while returning an extract list entry. DFSMShsm invoked VTOC catalog entry services to retrieve a list of data sets from an SMS-managed volume. VTOC catalog entry failed to retrieve the list. The *reason-code* is the return code from VTOC catalog entry.

15	An error occurred in reading or writing a migration control data set volume record (MCV). During volume processing, DFSMShsm read an MCV record for the volume being processed. The read failed, and an ARC0184I message was issued to indicate the error. If no MCV record existed for the volume, DFSMShsm attempted to create an MCV for the volume. The creation failed and an ARC0184I message is issued to indicate the error.
16	No eligible SMS-managed volumes could be internally ADDVOLed. At the start of the DFSMShsm automatic function, DFSMShsm invoked SMS to retrieve a list of all SMS-managed volumes associated with the specified storage group for DFSMShsm automatic processing. From the list that was returned, DFSMShsm selected volumes that meet certain conditions, created MVT entries, and added the MVT entries to the DFSMShsm SMS MVT chain. DFSMShsm detected no eligible SMS-managed volumes that could be added to the SMS MVT chain. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes.
17	There are no storage groups defined that are eligible for processing. At the start of the DFSMShsm automatic function, DFSMShsm attempted to retrieve a list of storage group definitions for processing during the automatic function. DFSMShsm determined there are no eligible storage groups for processing. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes.
18	There are no SMS volumes eligible for processing. At the start of the DFSMShsm automatic function, DFSMShsm attempted to retrieve a list of SMS-managed volumes for processing during the automatic function. DFSMShsm determined there are no eligible SMS-managed volumes for processing. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes. Also applies to storage group requests.
19	The volume being processed is not mounted. DFSMShsm attempted to locate the unit control block (UCB) for the volume being processed and finds the volume is not mounted.
20	An error occurred while processing extract list entries. DFSMShsm successfully invoked VTOC catalog entry services to retrieve a list of data sets from an SMS-managed volume. DFSMShsm detected a discrepancy in the extract list while processing the extract list entries.
21	Storage group not found.
22	No volumes were in the requested storage group.
23	No volumes were eligible for storage group processing.
24	An error occurred while retrieving the base configuration. DFSMShsm invoked SMS to retrieve the base configuration. SMS failed to retrieve it.
25	There is a space management request on an SMS-managed volume with DBA or DBU specified, or a nonzero value of *days* on MIGRATE (*days*) or DAYS (*days*) is specified on a MIGRATE command.
26	There is a space management request on an SMS-managed volume without the *days* stipulated on MIGRATE (*days*) and DAYS (*days*).
27	There is a space management request on an SMS-managed volume that does not have low and high thresholds defined and has the following MIGRATE command specified: • MIGRATE VOLUME(*volser*)
28	No requested storage groups were eligible for storage group processing.
29	The volume is not eligible for processing.
30	The version of DFSMSdss installed on the system is not at a sufficient level to support SMS-managed volumes. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes.
31	The volume for restoring is an SMS-managed volume, but the most recent dump copy or the specified dump copy was made when the volume was a non-SMS-managed volume.
32	The volume for restoring is a non-SMS-managed volume, but the most recent dump copy or the specified dump copy was made when the volume was an SMS-managed volume.
33	The storage group was not eligible for processing.
52	A GETMAIN error occurred. DFSMShsm failed to get the virtual storage needed to create a mounted volume table (MVT) entry for an SMS-managed volume. The SMS-managed volume is internally ADDVOLed to DFSMShsm for automatic processing. The function terminates for all SMS-managed volumes. The Auto function may continue for the NONSMS volumes.

Source: DFSMShsm

System Action: The indicated function ends. DFSMShsm processing continues.

Application Programmer Response: Perform the action that corresponds to the return code you received.

Retcode	**Action**
2, 6, 7, 8, 12, 24	See the preceding ARC0935I message in the command activity log for the specific failing code from the subsystem interface (SSI) of SMS. Return Code 2 is issued when SMS is installed but not started in the IEFSSNxx member. An SMS lock token error occurs if DFSMShsm attempts to issue an SMS service when the IGDSSIIN program is not specified to start SMS.

3	See the preceding ARC0014I message in the command activity log for the specific reason for the failure.
5	The *reason-code* for this error is the return code from the CAMLST OBTAIN macro. An error from the OBTAIN macro can also indicate a possible problem with the volume serial number. Ensure that the volume serial number was correctly identified. See *DFSMS/MVS Using Data Sets* for further information on the CAMLIST OBTAIN macro.
10	Delete the mounted volume table (MVT) entry and the migration control data set volume record (MCV) by issuing a DFSMShsm DELVOL command. Then, issue a volume command against the DELVOLed volume.
11	Determine why the SMS volume definition and the volume VTOC entry do not agree. Correct the inconsistency and issue a volume command against the volume.
14	See the preceding ARC0936I message in the command activity log for the specific failing code from SMS VTOC catalog entry service.
15	See the preceding ARC0184I message in the appropriate activity log for the specific I/O failing code.
16	See the preceding ARC0940I message in the appropriate activity log for the specific failing code.
17	It may be valid that no defined storage groups are eligible for processing. To determine storage group eligibility, validate your storage group definitions; for example, host affinity.
20	Follow the procedures in Table I, items 13 and 29; Table III, items 2, 6, 10, and 13.
21	Correct the storage group name if needed, and issue the command for this storage group.
22	It may be valid that no volumes exist in this storage group. Check your storage group definition to validate this situation.
23, 29	It may be valid that no volume is eligible for processing in this storage group.
25, 26	Reissue the command with one of the following valid MIGRATE commands for an SMS-managed volume: • MIGRATE VOLUME(volser) • MIGRATE VOLUME(volser MIGRATE(0)) [CONVERT] • MIGRATE VOLUME(volser) DAYS(0) [CONVERT] • MIGRATE VOLUME(volser MIGRATE) DAYS(0) [CONVERT]
27	Update the associated storage group to indicate valid high and low thresholds and resubmit the command.
28	It may be valid that no volume is eligible for processing.
30	Perform one of the following: • Install a version of DFSMSdss that supports SMS-managed volumes. • Convert the volume to a non-SMS-managed volume and rerun the function.
31, 32	Perform one of the following: • Reissue the RECOVER command with the correct DATE, DUMPGENERATION, DUMPVOLUME, or DUMPCLASS with the FROMDUMP keyword to obtain a dump copy consistent with the status (SMS or non-SMS) of the volume. • Convert the volume for consistency with the desired dump copy, and reissue the /0792ER command.
33	It may be valid that this storage group is not eligible for processing. Check your storage group definition to validate this.
52	See the preceding ARC0305I message for the specific failing code.

ARC0571I NO SMS MANAGED MIGRATED DATA SETS WILL BE PROCESSED, SMS IS NOT ACTIVE IN THE SYSTEM

Explanation: DFSMShsm was in the process of automatic migration or command migration of all level 1 migration volumes or command FREEVOL of a specific migration volume. SMS is not active in the system, so DFSMShsm cannot process any SMS-managed migrated data sets.

Source: DFSMShsm

System Action: No SMS-managed migrated data sets are processed. DFSMShsm processing continues.

Application Programmer Response: Bring up SMS and rerun the function.

ARC0580I INTERVAL MIGRATION {STARTING | RESTARTING} AT *hh:mm:ss* **ON** *yyyy/mm/dd*

Explanation: DFSMShsm begins Interval Migration.

Source: DFSMShsm

System Action: Interval Migration proceeds. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0581I INTERVAL MIGRATION {ENDED SUCCESSFULLY | ENDED PREMATURELY,

{DFSMSHSM SHUTDOWN | SPACE MGMT HELD | DFSMSHSM IN EMERGENCY MODE | RESOURCES NOT AVAILABLE}} AT *hh:mm:ss* **ON** *yyyy/mm/dd*

Explanation: DFSMShsm successfully completed Interval Migration, or Interval Migration ended before completion for one of the following reasons:

- A STOP command was issued to shut down DFSMShsm.
- A HOLD command with the AUTOMIGRATION or MIGRATION parameter was issued to suspend Interval Migration processing.
- A SETSYS command with the EMERGENCY parameter was issued to place DFSMShsm in emergency mode.

- Resources were not available to allow Interval Migration to continue. Message ARC0560E was issued to the operator's console and the migration activity log, indicating the resource DFSMShsm found unavailable.

Source: DFSMShsm

System Action: If the HOLD command was issued with the AUTOMIGRATION or MIGRATION parameter, no new space management operations are started. For volume space management operations in progress, the ENDOFDATASET or ENDOFVOLUME parameter specified with the HOLD command determines where the processing stops. If ENDOFDATASET was specified, volume migration operations end at the completion of the current data set. If ENDOFVOLUME was specified, DFSMShsm completes any volume migration operations in progress. If the STOP command or SETSYS command with the EMERGENCY parameter was issued, or the conditions of RESOURCES NOT AVAILABLE occurs, all volume migration operations end at the completion of the current data set, and no new volume migration operations are started. DFSMShsm processing continues.

Application Programmer Response: If Interval Migration ends prematurely because resources are not available, refer to message ACR0560E, which is issued to the operator's console and the migration activity log. This message indicates which resource DFSMShsm finds unavailable, and the appropriate programmer response to the problem.

ARC0584I ERROR WHEN {READING | WRITING | ERASING} A SMALL DATA SET PACKING DATA SET RECORD, DATA SET NAME = *dsname*, **RECORD SEQUENCE =** *recno*, **VOLUME =***volser*, **RC=***return-code*

Explanation: An attempt to read, write, or erase a small data set packing (SDSP) data set record for *dsname* has resulted in an unexpected nonzero return code *return-code*. The record key is the *dsname* concatenated with the *recno*. A data set name that is less than 44-characters is expanded to 44-characters with blanks and the record sequence is added to form a 45-character key.

The SDSP data set name that the error has occurred in is uid.SMALLDS.Vvolser. The uid is the authorized user ID for the DFSMShsm-started procedure. SMALLDS and V are constants. The SDSP resides on the volume *volser*.

The return code is the 3-byte RPL feedback code returned in the VSAM RPL in field RPLFDBK. For *return-code* values, see *DFSMS/MVS Macro Instructions for Data Sets*. Both the return code and record sequence number are reported in hexadecimal format. A return code of `X'080074'` can be caused by an uninitialized SDSP. See *DFSMS/MVS DFSMShsm Implementation and Customization Guide* for information on creating and initializing an SDSP.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Notify the system programmer.

ARC0612I VOLUME MOUNT ISSUED FOR RECALL OR RECOVER OF *dsname*

Explanation: A request was received to recall or recover the data set named *dsname*. The source volume that contains the data set to be recalled or recovered must be mounted to process a recall or recovery operation.

Source: DFSMShsm

System Action: The command waits until the volume is mounted before processing continues.

Application Programmer Response: This message is to inform you that a mount request was issued for the required offline volume. There is a delay until the volume is mounted. The length of time required to get a volume mounted varies from installation to installation. If the recall or recovery action seems to be taking too long for your installation, check with the system operator to make sure the volume is to be mounted.

ARC0620I AUTOMATIC DUMP {STARTING | RESTARTING}

Explanation: DFSMShsm has begun automatic dump processing. If the message indicates STARTING, the automatic dump process is starting from the beginning. If the message indicates RESTARTING, the process is restarting because it did not complete the last time it was started. The following circumstances could prevent the process from successfully completing:

- MVS system failure.
- DFSMShsm abnormal end.
- DFSMShsm was shut down.
- DFSMShsm was placed in emergency mode.
- Dump or automatic dump was held.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0621I AUTOMATIC DUMP ENDING

Explanation: DFSMShsm has completed the automatic dump process.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0622I FULL VOLUME {DUMP | RESTORE} STARTING ON VOLUME *volser* **[(SMS) | (NONSMS)] AT** *time* **ON** *date* **SYSTEM** *sysid*, **TASK ID=***taskid* **[,TO DUMP CLASS(ES)=** *class***[***,class,class,class,class***]]**

Explanation: The DFSMShsm full volume dump or restore operation is starting for volume *volser*. If the function is dump, either (SMS) or (NONSMS) appears, indicating the current status of the volume.

- *class* indicates the classes being dumped to.
- *time* indicates the start time, expressed as *hh:mm:ss* (hours, minutes and seconds).
- *date* indicates the current date, expressed as *yy/mm/dd* (year, month and day).
- *sysid* indicates the SMF identifier of the system on which the dump is being processed is
- *taskid* indicates the EBCDIC name of the DFSMShsm task that is processing the request. The *taskid* is used in all ARC0640I messages that are associated with the volume being processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0623I FULL VOLUME {DUMP | RESTORE} OF VOLUME *volser* **ENDING AT** *time* **[, DCLASS=***class***, DGEN=***generation***, DATE=***date***], PROCESSING {SUCCESSFUL | ERRORS OCCURRED | FAILED}**

Explanation: The DFSMShsm full volume dump or restore operation for volume *volser* has completed. The time of day the operation completes is *time* expressed as *hh:mm:ss* (hours, minutes and seconds).

For volume dump, if processing is indicated as:

- SUCCESSFUL, then all requested dump copies were successfully made.
- ERRORS OCCURRED, then at least one but not all of the requested dump copies were successfully made.
- FAILED, then none of the requested dump copies could be made. In this case, see the dump activity log for detailed messages on errors encountered during dump processing.

For volume restore, processing is indicated either as SUCCESSFUL or FAILED.

- *class* indicates the dump class in which the dump copy was produced for volume restore operations that complete successfully.
- *generation* indicates the relative dump generation.
- *date* indicates the date the dump occurred. This part of the message will not appear if the restore failed.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: If the operation was not successful, look for related error messages in the dump or command activity log pertaining to the same volume.

ARC0624I {DUMP | RECOVER | RESTORE} OF VOLUME *volser* **TERMINATED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP DISABLED | DUMP HELD | AUTODUMP HELD | UNABLE TO MOUNT A TAPE | DFSMSHSM SHUTDOWN REQUESTED WHILE WAITING FOR A TAPE MOUNT | OUTPUT VOLUME LIMIT EXCEEDED | RECOVERY HELD | DFSMSdss FAILING RC=***return-code***}**

Explanation: The DFSMShsm full volume dump, restore, or the incremental volume recovery operation for volume *volser* has ended before it has completed processing. During the operation, one of the following conditions has occurred:

- A STOP command has been issued to shut down DFSMShsm.
- A SETSYS command with the EMERGENCY parameter has been issued to place DFSMShsm in emergency mode.
- A SETSYS command with the NOBACKUP parameter has been issued to disable DFSMShsm backup, dump, recovery, and restore functions.
- A HOLD command with the applicable DUMP or RECOVER parameter has been issued to suspend the function.
- A tape volume is required and the operator's response has been that the tape volume is not available for mounting.
- A STOP command has been issued while DFSMShsm has been waiting for a required tape volume to be mounted.
- The number of tapes required for the full volume dump has exceeded the DFSMShsm 40-volume limit.
- The DFSMSdss function has completed with a return code greater than 4, indicating a failure. The value of *return-code* is the DFSMSdss final function return code as documented in *OS/390 MVS System Messages, Vol 1 (ABA-ASA)*.

Source: DFSMShsm

System Action: The indicated operation ends. If SHUTDOWN is indicated, DFSMShsm processing ends. Otherwise, DFSMShsm processing continues. If the output volume limit has been exceeded, the dump volumes that have been used will have their contents internally invalidated.

Application Programmer Response: If the output volume limit has been exceeded, then use higher capacity tapes and reissue the command. For all other situations, no response is required. If the DFSMSdss function fails, refer to *OS/390 MVS System Messages, Vol 1 (ABA-ASA)* for information about the DFSMSdss failure and appropriate action. The request can be reissued to DFSMShsm after corrective action is taken.

ARC0625I AUTOMATIC DUMP TERMINATED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP DISABLED | DUMP HELD | AUTODUMP HELD | QUIESCE TIME REACHED}

Explanation: The DFSMShsm automatic dump function was being performed. It ended before it completed because one of the following occurred:

- A STOP command was issued to shut down DFSMShsm.
- A SETSYS command with the EMERGENCY parameter was issued to place DFSMShsm in emergency mode.
- A SETSYS command with the NOBACKUP parameter was issued to disable the backup, dump, recovery, and restore functions.
- A HOLD command with the DUMP, DUMP(AUTO), or ALL parameter was issued to suspend the dump function.
- The quiesce time is the time after which no more dumps of volumes are to be started.

Source: DFSMShsm

System Action:

- If a STOP command was issued, DFSMShsm immediately ends all active volume dumps, invalidates any partial dump copies, and ends.
- If a SETSYS command with the EMERGENCY or NOBACKUP parameter was issued, DFSMShsm immediately ends all active volume dumps, invalidates any partial dump copies, and ends.
- If a HOLD command was issued with the DUMP or DUMP(AUTO) parameter, and without the ENDOFDATASET parameter, DFSMShsm completes any volume dumps that were in progress and ends.
- If a HOLD command was issued with the DUMP or DUMP(AUTO) parameter, and with the ENDOFDATASET parameter, DFSMShsm immediately ends all active volume dumps, invalidates any partial dump copies, and ends. When the automatic dump quiesce time is reached, DFSMShsm completes any volume dump operations that were in progress, but will not dump any additional volumes.

If SHUTDOWN is indicated, DFSMShsm processing ends. Otherwise, DFSMShsm processing continues.

Application Programmer Response: If automatic dump was in progress, it can be resumed at the point of interruption by issuing one of the following:

- START DFSMShsm (DFSMShsm is the DFSMShsm cataloged procedure)
- SETSYS NOEMERGENCY
- RELEASE DUMP | RELEASE DUMP(AUTO)
- SETSYS BACKUP

For the automatic dump to be resumed at the point of interruption, the command must take effect the same day as the command that caused automatic dump to end and the current time must still be within the start window for automatic backup.

For automatic dump to begin after midnight, the value of the latest start time can be smaller than the planned start time. For example, specify 2330 for *hhmm1* and 0100 for *hhmm2* on the same day as the command that caused automatic dump to end. The current time must still be within the start window for automatic dump.

When the automatic dump ends because the quiesce time is reached, it cannot be resumed because the current time is no longer within the start window.

ARC0626I {DUMP | RESTORE} OF VOLUME *volser* TERMINATED, ERROR {READING | WRITING} A DFSMSHSM CONTROL DATA SET RECORD

Explanation: The DFSMShsm full volume dump or restore function was being performed for volume serial *volser*. An error of the indicated type was encountered trying to retrieve or record information about the dump or restore operation. See an accompanying ARC0184I message for the type and key of the record being processed.

Source: DFSMShsm

System Action: The indicated process ends for the volume. DFSMShsm processing continues.

Application Programmer Response: Identify any possible errors in the control data sets. If corrective action is taken, retry the operation.

ARC0627I SYSTEM TIMER INOPERATIVE, AUTOMATIC DUMP FUNCTION IS INOPERATIVE

Explanation: The DFSMShsm dump control task issued the STIMER macro in an effort to schedule the start of automatic dump. An error occurred indicating the system timer function was inoperative.

Source: DFSMShsm

System Action: DFSMShsm continues to process command requests for full volume dumps, but will not begin the automatic dump process.

Operator Response: If the RELEASE command, with the DUMP or ALL parameter is issued between the earliest and latest automatic dump start times, automatic dump will begin.

Application Programmer Response: Determine if the error is caused by a hardware or software malfunction.

ARC0628I AUTOMATIC EXPIRATION OF DUMP VOLUMES STARTING

Explanation: DFSMShsm has just begun the process of identifying dump volumes that have expired contents and are eligible for automatic reuse. This occurs as the first step of automatic dump in the primary processing unit or as the first step of the primary processing unit level functions associated with automatic dump on an N day in the dump cycle.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0629I AUTOMATIC EXPIRATION OF DUMP VOLUMES ENDING

Explanation: DFSMShsm has ended the process of identifying dump volumes eligible for automatic reuse. (This message does not indicate that the process completed successfully, only that it has ended). It will end early if:

- Backup or automatic backup is held at the end of the data set.
- Dump or automatic dump is held at the end of the data set.
- Emergency mode is entered.
- Backup is disabled.
- Shutdown is requested.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0630I CREATION OF DUMP VOLUME SELECTION TABLE STARTING

Explanation: DFSMShsm has begun to create an internal table of available dump volumes. This is called the dump volume selection table (DVST). The conditions under which DFSMShsm creates the tables are:

- At DFSMShsm startup during the initialization of the dump control task
- When the activity against dump volumes is high enough to warrant a refresh of the contents of the DVST

Note: The last condition occurs only when the SELECTVOLUME(SPECIFIC) parameter was specified on the SETSYS command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0631I CREATION OF DUMP VOLUME SELECTION TABLE ENDING

Explanation: DFSMShsm has completed the creation of the dump volume selection table (DVST).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0632I CREATION OF DUMP VOLUME SELECTION TABLE FAILED, RC=*retcode*

Explanation: While trying to create a table of available dump volumes, an error occurred. The conditions under which DFSMShsm creates the table are:

- At DFSMShsm start up during initialization of the dump control task
- When the activity against dump volumes is high enough to warrant a refresh of the contents of the DVST

Note: The last condition occurs only when the SELECTVOLUME(SPECIFIC) parameter was specified on the SETSYS command.

The values for *retcode* are:

Retcode	Meaning
8	While trying to access the control data set for dump volume information, more than five I/O errors occurred. See the accompanying ARC0184I or ARC0187I message.
10	While trying to access the DVL records in the control data set, a positioning error occurred. See an accompanying ARC0187I message.
52	The GETMAIN macro returned a nonzero return code when DFSMShsm attempted to get more virtual storage for the dump volume selection table. It is possible that too many volume backup, volume dump, or volume space management tasks were running concurrently. It may be necessary to reduce the number of concurrent tasks by using the SETSYS command with the MAXBACKUPTASKS, MAXDUMPTASKS, MAXMIGRATIONTASKS, or MAXINTERVALTASKS parameters. Retry the volume functions that ended with this error.

Source: DFSMShsm

System Action: This dump volume selection fails to find a specific volume, which causes the selection of a scratch tape volume. The next specific selection attempt tries to build the table again.

Application Programmer Response:

- For return code 8, take the action indicated in message ARC0184I.
- For return code 10, take the action indicated in message ARC0187I.
- For return code 52, it is possible that too many volume backup tasks, space management tasks, or volume dump tasks, were running concurrently. It may be necessary to reduce the number of concurrent tasks by using the SETSYS command with the MAXBACKUPTASKS, MAXMIGRATIIONTASKS, MAXINTERVALTASKS, or MAXDUMPTASKS parameters. Retry the volume functions that ended with this error.

ARC0633I DUMP AND RESTORE DISABLED, INSUFFICIENT LEVEL OF DFSMSDSS INSTALLED

Explanation: During DFSMShsm initialization, the dump control task checks the level of DFSMSdss installed in the system. It is found to be insufficient to support the indicated functions. DFDSS 2.2.0 or a subsequent release is required.

Source: DFSMShsm

System Action: No dump or restore operation is done. DFSMShsm processing continues.

Application Programmer Response: Verify that DFDSS 2.2.0 or a subsequent release is installed. DFSMSdss must be available for DFSMShsm to load by residing in an execution library accessible by LNKLST*xx* in SYS1.PARMLIB. The *xx* is a specified number, usually 00, however, it can be altered during an IPL.

ARC0634I AUTOMATIC DUMP FAILED TO RESTART BECAUSE THE CURRENT TIME IS OUTSIDE THE AUTOMATIC DUMP START WINDOW

Explanation: DFSMShsm has determined that the automatic dump function did not run to completion on the current day. However, during its restart processing, DFSMShsm has determined that the only reason automatic dump did not restart is because the current time is outside the currently specified window for starting this processing.

Source: DFSMShsm

System Action: Automatic dump is not restarted. DFSMShsm processing continues.

Application Programmer Response: If you want automatic dump to restart on the current day, change the latest start time by issuing the SETSYS command with the AUTODUMPSTART parameter.

ARC0635I DUMP OF VOLUME *volser* | SGROUP *sg* NOT PERFORMED, REASON=*reascode*

Explanation: An error was encountered while DFSMShsm was beginning a full volume dump of volume *volser* or of the volumes in storage group *sg*. The error caused the operation to end. The values for *reascode* are:

Reascode	Meaning
4	A volume dump or storage group dump failed because none of the dump classes is valid. This can happen in one of two instances; • A BACKVOL command was issued without specifying any dump classes and the volume has not been associated with any dump classes via an ADDVOL command or via a storage group definition. • The volume or storage group was previously associated with dump classes which have been disabled or removed since the association was made.
8	The dump process for the volume ended because all attempts to allocate tapes for output for target dump classes ended. An ARC0500I message precedes this message once for each allocation failure.
12	The dump process for the volume was ended because an error occurred in allocating the source volume.
16	Before writing a dump copy to a dump volume for a dump class with stacking, DFSMShsm encountered an error while trying to read or update the JFCB intended to represent the dump copy opened by DFSMSdss.

Source: DFSMShsm

System Action: Dump operations end for the volume or storage group. DFSMShsm processing continues.

Application Programmer Response:

- For reason code 4, look for any preceding ARC0650I messages which will indicate the invalid dump class name(s).
- For reason codes 8 and 12, see the preceding ARC0500I message(s) and follow its problem determination responses. Note that ARC0500I is also issued to the command activity log.
- For reason code 16, if *volser* was not subsequently dumped successfully during automatic dump, issue the BACKVOL command with the DUMP parameter for the source volume.

ARC0636I ERROR WRITING DUMP COPY OF VOLUME ***volser1*****, DUMPCLASS=** ***class*****, OUTPUT VOLUME=*****volser2*****, COPY WILL BE INVALIDATED**

Explanation: While writing a dump copy of volume *volser1* to dump class *class*, DFSMSdss encountered a permanent I/O error. The dump tape volume where the error occurred is *volser2*. The dump copy is invalidated, and the volumes will be internally deleted by the DELVOL command. For the completely filled volumes, if TAPEDELETION for dump is SCRATCHTAPE, the volumes are returned to the scratch pool. If TAPEDELETION for dump is HSMTAPE, the DELVOL processing is equivalent to the REASSIGN parameter of the DELVOL command. For the volume that was being written on when the error was encountered (*volser2*), the volume has its contents invalidated and is marked unavailable for selection. This message is issued for each dump copy that has a permanent I/O error.

Source: DFSMShsm

System Action: If this was the last or only dump class receiving output for this dump, the dump function ends. If at least one valid dump copy still remains, the dump function continues until completion or until no more good copies exist. DFSMShsm processing continues.

Application Programmer Response: If a dump copy is required in this dump class, retry the operation after corrective action has been taken.

ARC0637I DUMP COPY OF VOLUME ***volser*** **COMPLETE, DCLASS=** ***class*****, EXPDT={*****expdt*** **| NOLIMIT}, [DISPOSITION= '*****disposition*****']**

Explanation: The DFSMShsm dump function just completed for volume *volser*. The target dump class was *class*. If a retention period other than NOLIMIT was specified, the expiration date is given as *expdt*. If a retention period of NOLIMIT was given, NOLIMIT appears as the expiration date. If disposition information was defined for the dump class, it is given as *disposition*. This message is written to the dump activity log for each dump copy successfully created for a source volume. This message will also be issued to the system console if the disposition exists.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

Operator Response: Take the steps required to satisfy the intended distribution for the volumes.

ARC0638I MAXDUMPTASKS=***dtasks*****, ADSTART= (*****time1d time2d time3d*****), DUMPIO=(*****n*****,*****m*****), VOLUMEDUMP(CC | NOCC)**

Explanation: A QUERY command was issued with the SETSYS or BACKUP parameter.

The maximum number of full volume dump tasks allowed for concurrent processing is *dtasks*. The earliest time automatic dump can start is *time1d*, expressed as *hh:mm* (hours, minutes). The latest time automatic dump is allowed to start is *time2d*, expressed as *hh:mm* (hours, minutes). The time after which no more full volume dumps are started is *time3d*, expressed as *hh:mm* (hours, minutes). The DFSMSdss input/output optimization options for full volume dump, *n*, and for the DFSMSdss datamover function, *m*, are given for DUMPIO. VOLUMEDUMP(CC) indicates concurrent copy was specified for dump volumes. VOLUMEDUMP(NOCC) indicates concurrent copy was *not* specified for dump volumes.

These values of *n* and *m* are the same as specified for the DFSMSdss OPTIMIZE keyword:

Value	Meaning
1	DFSMSdss reads one track at a time.
2	DFSMSdss reads two tracks at a time.
3	DFSMSdss reads five tracks at a time.
4	DFSMSdss reads one cylinder at a time.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0639I DUMP VTOC COPY {SCRATCHED | NOT SCRATCHED}, DATA SET NAME=***dsname***

Explanation: Either DFSMShsm deleted the last valid dump copy of a dump generation, or the maximum number of dump VTOC copy data sets to keep has been exceeded for the source volume. The associated dump VTOC copy data set is no longer needed. DFSMShsm attempted to scratch the data set. The message indicates whether the operation was successful or unsuccessful. If it was not successful, message ARC0528I precedes this message giving the failing return code for the SCRATCH macro.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The dump VTOC copy data set remains logically deleted regardless of the results of the scratch attempt. DFSMShsm will not attempt to access the data set again.

Application Programmer Response: If the scratch failed, see the accompanying ARC0528I message, issued to the command activity log for additional information. You may try to scratch the data set using some other method.

ARC0640I *taskid - msgtext*

Explanation: DFSMShsm has been performing a full volume dump, a full volume restore, or a data set restore operation. DFSMSdss has been invoked to perform the function. During the process, DFSMSdss has issued a message related to the function, and DFSMShsm has intercepted the message for retransmission to the DFSMShsm user or to one of the activity logs. During a full volume dump, the *taskid* value is the name ARCDVOL*x*, where *x* is the identifier 1-W of the dump task processing the request. The hexadecimal identifier should be associated with message ARC0622I to track the volume that is being processed. During a full volume restore, the name ARCGRVOL is used for *taskid*. During physical data set restore, the name ARCGDSN is used for *taskid*. Inserted as *msgtext* is the DFSMSdss SYSPRINT record. DFSMSdss messages have a prefix of ADR.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Refer to “ADR Messages” on page ADR-1 for a description of the DFSMSdss messages.

ARC0641I VOL DUMP= *nvols1*, **VOL DUMP FAIL=** *fails3*, **VOL RESTORE=** *nvols2*, **VOL RESTORE FAIL=** *fails4*, **DS RESTORE=** *ndatasets3*, **DS RESTORE FAIL=***fails5*

Explanation: The QUERY command was issued with the STATISTICS parameter. This message contains dump and restore statistics for the current day.

- *nvols1* indicates the number of volumes successfully dumped.
- *fails3* indicates the number of volumes whose dumps failed.
- *nvols2* indicates the number of volumes successfully restored.
- *fails4* indicates the number of volumes whose restores failed.
- *ndatasets3* indicates the number of data sets successfully restored.
- *fails5* indicates the number of data sets whose restores failed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0642I DUMP= {NOT HELD | HELD AT END OF VOLUME | HELD}, AUTODUMP= {NOT HELD | HELD AT END OF VOLUME | HELD}, VOLUME DUMP= {ACTIVE | INACTIVE}, VOLUME RESTORE= {ACTIVE | INACTIVE}, DATA SET RESTORE={ACTIVE | INACTIVE}

Explanation: The QUERY command was issued with the ACTIVE parameter. This message indicates whether all dumping or autodump is held, and whether volume dump, volume restore, or data set restore is currently in progress. See the preceding message ARC0163I to see if the backup or recovery functions are held.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0643I {ADDVOL | BACKVOL} COMMAND REJECTED, {DUMP CLASS *class* **NOT DEFINED | NO DUMP CLASS ENABLED}**

Explanation: An ADDVOL or BACKVOL command has been issued specifying a dump *class* that is not defined to DFSMShsm.

During ADDVOL processing for a primary volume, if the AUTODUMP (*class*,...) subparameter is not specified, the MCV record is checked for dump classes specified on a previous ADDVOL command. Similarly, during ADDVOL processing for a dump volume, if the DUMPCLASS(*class*) subparameter is not specified, the DVL record is checked for a dump class specified on a previous ADDVOL command. If a dump class specified on a previous ADDVOL command no longer has a BCDS record describing it, this message is issued and the ADDVOL command fails.

During BACKVOL, either specified dump class *class* is not defined or all the specified dump classes are disabled.

Source: DFSMShsm

System Action: The command fails. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with the proper dump class name or names. Note that any preceding ARC0650I messages for the same volume will indicate the invalid dump class names.

ARC0644I WARNING: DUMP FAILED AFTER DUMP COPY SUCCESSFULLY CREATED

Explanation: This message is issued when an ending error is encountered by DFSMShsm during the ending process of a dump operation. DFSMSdss successfully completed the dump operation. DFSMShsm then encountered an error in recording the dump information in the backup control data set. DFSMShsm does not have a complete record of the successful dump copy(s). The output tapes containing the dumped data are usable and could be used as the source of a restore operation by submitting a restore request directly to DFSMSdss. DFSMShsm is not able to perform the restore because of the failure encountered in recording the dump information.

Source: DFSMShsm

System Action: The command issued fails. DFSMShsm processing continues.

Application Programmer Response: If you want to have DFSMShsm perform the operation again, issue a BACKVOL command with the DUMP parameter for the source volume just dumped. Do this after corrective action has been taken for the BCDS. Refer to the accompanying ARC0184 message and take corrective action based on that message. Otherwise, the tape volume serial numbers that contain the just-produced dump copy can be manually inventoried until they are reused.

ARC0645I *SYNADAF-diagnostic*

Explanation: An I/O error has been encountered while DFSMShsm has been reading or writing a data set. The SYNADAF macro is issued to analyze the error. The diagnostic message returned from the SYNADAF macro is the message text. Refer to *DFSMS/MVS Macro Instructions for Data Sets* for a description of the message format.

Source: DFSMShsm

System Action: The read or write fails. DFSMShsm processing continues.

Application Programmer Response: Determine the cause of the problem and retry the operation after corrective action is taken.

ARC0646I DUMP REQUEST QUEUED UNTIL AUTODUMP COMPLETES

Explanation: A BACKVOL command with the DUMP parameter was issued while automatic dump was in progress. The automatic dump function runs to completion or until ended early.

Source: DFSMShsm

System Action: The command waits. DFSMShsm processing continues.

Application Programmer Response: If the command is no longer wanted, cancel the request with the HCANCEL or CANCEL command. Otherwise, no response is required.

ARC0647I BACKUP AND DUMP HELD AT END OF VOLUME, NO MIGRATION LEVEL 1 SPACE FOR VTOC COPIES

Explanation: During a volume backup, volume dump, or FREEVOL, either an out-of-space condition was encountered on a migration level 1 volume when the VTOC copy data set was allocated or written, or no migration level 1 volumes was added to this processing unit. Because DFSMShsm attempts to select the migration level 1 volume with the most free space, DFSMShsm assumes that none of the migration level 1 volumes have enough space. No further volume backup or volume dumps are processed until action is taken to correct this problem. For volume dump and volume backup, this message is preceded by message ARC0704I or ARC0705I, indicating which volume was being dumped or backed up when this error was encountered.

Source: DFSMShsm

System Action: The command or automatic function ends. DFSMShsm processing continues.

Application Programmer Response: Migration level 1 space is required. Do one of the following to free space on a migration level 1 volume:

- Issue an ADDVOL command to add another migration level 1 volume to DFSMShsm
- Issue a MIGRATE command to migrate level 1 data sets to level 2
- Wait until automatic secondary space management runs level migration

After this, release backup and dump with the RELEASE command. Automatic backup or automatic dump restarts if they ended early because of this condition and if the current time is still within their start windows. A command to back up all primary volumes also restarts if it ended early for this reason.

ARC0648I AUTOMATIC DELETION OF EXCESS DUMP VTOC COPIES STARTING

Explanation: DFSMShsm has just begun the process of deleting dump VTOC copy data sets that are in excess of the value defined for the primary processing unit; this value was defined by the VTOCCOPIES subparameter of the DEFINE DUMPCLASS command. This occurs as the last step of automatic dump in the primary processing unit, or as the second step of the primary processing unit level functions associated with automatic dump on an N day in the dump cycle.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0649I AUTOMATIC DELETION OF EXCESS DUMP VTOC COPIES ENDING

Explanation: DFSMShsm has just completed the process of deleting dump VTOC copy data sets that are in excess of the value defined for the primary processing unit; this value was defined by the VTOCCOPIES subparameter of the DEFINE DUMPCLASS command. This message does not indicate that the process completed successfully, only that it ended. It will end early if:

- Backup or automatic backup is held at the end of the data set
- Emergency mode is entered
- Backup is disabled
- Shutdown is requested

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0650I DUMP OF VOLUME *volser* | SGROUP *sg* WILL NOT TARGET DUMP CLASS *class*, {CLASS DISABLED | CLASS NOT DEFINED | TAPE ALLOCATION FAILURE}

Explanation: DFSMShsm began a full volume dump of volume *volser* or of the volumes in storage group *sg*, either during the automatic dump function or for a BACKVOL command. (If *sg* is “**”, the message applies to all storage groups specified on a BACKVOL command.) For CLASS DISABLED or CLASS NOT DEFINED, the dump class *class* is now disabled or does not have a BCDS record. A DEFINE command was issued with the DUMPCLASS and DISABLE parameters or the DCL record was deleted with the FIXCDS command. For TAPE ALLOCATION FAILURE, a tape unit could not be allocated for the dump copy intended for dump class *class*.

Source: DFSMShsm

System Action: The dump continues as long as the volume or storage group is assigned at least one other dump class that is an eligible target for this dump and has a tape unit successfully allocated for it. DFSMShsm processing continues.

Application Programmer Response: For CLASS DISABLED or CLASS NOT DEFINED, make sure this dump class does not appear on any subsequent ADDVOL commands if the volume is a non-SMS primary or migration level 1 volume; this may require that the ARCCMDxx member of SYS1.PARMLIB to be edited to change this. Make sure this dump class does not appear in any storage group definitions if the volume is SMS managed; this may require a change to the storage group definition to be made using ISMF.

For TAPE ALLOCATION FAILURE, see the preceding ARC0500I message that gives the failure reason and problem determination. If message ARC0635I follows this message with return code 8, then the dump operation ended because no other dump copies were processed successfully or this was the only dump copy to be created. If a dump to this dump class is required for the volume or storage group, reissue a BACKVOL command after defining or enabling the dump class, as needed.

ARC0651I SMS MANAGED VOLUMES CANNOT BE DUMPED OR RESTORED, INSUFFICIENT LEVEL OF DFSMSDSS INSTALLED

Explanation: DFSMShsm has detected that the version of DFSMSdss that has been installed on this system does not support SMS-managed data. DFDSS 2.4.0 or a subsequent release is required to support dump and restore on SMS-managed volumes. Non-SMS-managed volumes can be dumped and restored under control of DFSMShsm. SMS-managed volumes will not be dumped under control of DFSMShsm. DFSMShsm will disallow restore requests of SMS-managed volumes.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0652I ERROR UPDATING DCR RECORD DURING AUTOMATIC EXPIRATION OF DUMP VOLUMES

Explanation: A positioning or read error occurred while DFSMShsm was attempting to update the DCR record for each processing unit during automatic expiration of dump volumes. As a result, the dump volume selection table (DVST) may not be promptly rebuilt in all processing units. This means that the list of available dump volumes may not immediately include the volumes just made available during automatic expiration processing.

The DVST will be rebuilt at DFSMShsm start up during initialization of the dump control task, or when the activity against dump volumes is high enough that a refresh of the contents of the DVST occurs.

See the accompanying message ARC0187I in the DFSMShsm dump activity log for information on the BCDS record which caused the error.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: See the accompanying message ARC0187I in the DFSMShsm dump activity log for information on the BCDS record which caused the error. Correct the error.

ARC0653I *tracks* TRACK READ ERRORS OCCURRED DURING DUMP OF VOLUME *volser*

Explanation: During a full volume dump operation, DFSMSdss encountered TRACKS errors reading tracks from the input volume *volser.* These tracks were not copied to the dump output.

Source: DFSMShsm

System Action: The dump operation continues unless the number of track read errors exceeds the DFSMSdss limit of 100.

Application Programmer Response: Correct the errors on the volume and monitor the next full volume dump operation.

ARC0654I STACK *nn* FOR DUMP CLASS *name* WENT TO *mm* DUMP VOLUMES, ENDING on *dmpvol*

Explanation: Dump class *name* has a STACK value of *nn*. When DFSMShsm started a dump task to stack volume dumps to that dump class, the particular set of dump copies (see message ARC0637I for each copy) resulted in spanning to *mm* dump volumes (the last one being *dmpvol*) of the dump class.

Source: DFSMShsm

System Action: DFSMShsm continues.

Application Programmer Response: To reduce the chance of this reoccurring, reduce the STACK value for the dump class before you run automatic dump again.

ARC0655I TASK ID *id* COULD NOT STACK DUMP OF VOLUME *volser*

Explanation: DFSMShsm dump task *id* was unable to stack a dump of source volume*volser* (usually after two attempts, separated by time) on a dump volume with other dumps, because another DFSMShsm function was processing *volser* at the time.

Source: DFSMShsm

System Action: During autodump—depending on the value of MAXDUMPTASKS and the time needed for the other DFSMShsm function to complete—DFSMShsm may have succeeded in stacking a dump of *volser* during some later dump task, or it may have had to dump the volume to a dump tape by itself.

During command dump, *volser* is not dumped.

Application Programmer Response: For autodump, if message ARC0632I does not appear for *volser*, issue a BACKVOL VOLUMES(*volser*) DUMP command to get a (nonstacked) dump of *volser*.

For command dumps, reissue the BACKVOL VOLUMES(*volser*) DUMP command when DFSMShsm auto functions are not executing.

ARC0680I EXPIRE {BACKUP | ABARS} VERSIONS STARTING AT *time* ON *date*, SYSTEM *sysid* [, WITH THE DEBUG OPTION IN EFFECT]

Explanation: DFSMShsm has received an EXPIREBV command and has started to process it.

- BACKUP indicates the EXPIREBV command is processing backup versions.
- ABARS indicates that ABARS versions are being processed.
- *time* and *date* indicates the time and date the processing has started.
- *sysid* indicates the SMF identifier of the system on which the function is being processed.

If the message indicates that the DEBUG option is in effect, a previous SETSYS command has been processed that put DFSMShsm into DEBUG mode.

Source: DFSMShsm

System Action: The command continues processing; and if the DEBUG option is in effect, no backup versions will actually be expired. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0681I EXPIRE {BACKUP | ABARS} VERSIONS ENDING AT *time* ON *date*, NUMBER OF VERSIONS EXPIRED= *count*, LAST BCDS KEY PROCESSED= *bcds-key*, PLANNED ENDING KEY WAS= *planned-ending-bcds-key*

Explanation: DFSMShsm has completed the processing of an EXPIREBV command.

- BACKUP indicates the EXPIREBV command has processed backup versions.
- ABARS indicates that ABARS versions have been processed.
- *time* and *date* indicates that time and date processing have been completed.
- *count* indicates the total number of backup or ABARS versions that have been expired by this process.
- *bcds-key* indicates the key of the last record that has been processed.

If the command has been processed to normal completion, the last key processed represents one of the following:

- The key of the last record in the BCDS if an ending key has not been specified on the command
- The key of the last record with a key alphabetically less than or equal to the ending key that has been specified on the command

If the command ends prior to normal completion, *bcds-key* is the key of the last backup or ABARS record processed. The RESUME keyword can be used to continue processing from the *bcds-key*. Separate ending keys are maintained for MCB and ABR records.

If the command ends at the planned ending key, specified by *planned-ending-bcds-key*, and if the next EXPIREBV command in this processing unit is issued with the RESUME option, processing will start at the beginning of the BCDS.

Source: DFSMShsm

System Action: Processing of the EXPIREBV command ends. DFSMShsm processing continues.

Application Programmer Response: If the command ends early, refer to the ARC682I message for the reason for the early end; then issue another EXPIREBV command with the RESUME option to complete the processing intended by the previous command.

ARC0682I EXPIRE {BACKUP | ABARS} VERSIONS TERMINATED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP DISABLED | EXPIREBV HELD | TASK ABENDED | MANAGEMENT CLASS NOT FOUND FOR ASSOCIATED AGGREGATE GROUP | TOO MANY BCDS I/O ERRORS}

Explanation: Processing of the EXPIREBV command ended before its normal completion because one of the following occurred:

- A STOP command was issued to shut down DFSMShsm.
- A SETSYS command with the EMERGENCY parameter was issued to place DFSMShsm in emergency mode.
- A SETSYS command with the NOBACKUP parameter was issued to disable the backup functions.
- A HOLD command with the EXPIREBV keyword was issued to suspend the expire backup versions function.
- The EXPIREBV task abnormally ended (abended). Message ARC0003I, which describes the type of abend, was issued to the command activity log.
- The EXPIREBV command was issued with the *agname* parameter but the management class for that aggregate was not found.
- DFSMShsm detected too many retryable errors while trying to read all of the MCB and ABR records in the BCDS. The error limit is normally 5 per every 500 records processed.

BACKUP indicates the EXPIREBV command was processing backup versions. ABARS indicates that ABARS versions were being processed.

Source: DFSMShsm

System Action: Processing of the EXPIREBV command ends immediately. If SHUTDOWN is indicated, DFSMShsm processing ends. Otherwise, DFSMShsm processing continues.

Application Programmer Response: For expire backup versions to be resumed at the point of interruption, another EXPIREBV command must be issued with the RESUME keyword and the same parameters which were used in the initial command. If you do not wish to resume the expire backup versions function at the point of interruption, omit the RESUME keyword on the next EXPIREBV command, and optionally use the STARTKEY parameter to indicate a starting point.

If the task abended, refer to the ARC0003I message issued to the command activity log with a task name of ARCCPEBV.

If excessive I/O errors occurred reading the BCDS, refer to the ARC0187I message(s) that precedes this message. The I/O error limit can be modified with the PATCH command. The value is contained in the MCVT in the field named MCVTRERL. The ARC0187I message contains a return code that indicates what type of error occurred.

ARC0683I SMS MANAGED DATA SETS WILL NOT BE PROCESSED FOR EXPIRE BACKUP VERSIONS, REASON= ***reascode***

Explanation: While processing an EXPIREBV command, DFSMShsm encountered a condition that prevented the backup versions of SMS-managed data sets from being processed. The condition is described by *reascode*, which has the following possible values:

Reascode	Meaning
01	SMS is not installed.
02	SMS is not active.
03	An error occurred attempting to retrieve a list of all management class definitions. Either DFSMShsm encountered an error attempting to invoke the Construct Access Services facility of SMS, or SMS encountered an error. For SMS errors, Message ARC0935I is issued to the command activity log with the actual failure reason.

Source: DFSMShsm

System Action: Processing of the EXPIREBV command continues. DFSMShsm processing continues.

Application Programmer Response: If SMS is not installed, DFSMShsm cannot process SMS-managed data sets until SMS is installed and the system is restarted.

If SMS is inactive, reissue the command after SMS becomes active again.

If the *retcode* 3 error condition has a corresponding message that contains more information about the failure, consult the corresponding message. The corresponding message is written in the command activity log. Refer to the programmer response sections of the appropriate related message for more details.

ARC0684I A NON-RETRYABLE ERROR OCCURRED ACCESSING THE BCDS DURING EXPIRE {BACKUP | ABARS} VERSIONS

Explanation: DFSMShsm was processing an EXPIREBV command when a severe error occurred while attempting to position to or read the next BCDS record. Message ARC0187I was issued prior to this message, and contains a return code indicating what type of error occurred. BACKUP indicates the EXPIREBV command was processing backup versions. ABARS indicates that ABARS versions were being processed.

Source: DFSMShsm

System Action: Processing of the EXPIREBV command ends. DFSMShsm processing continues.

Application Programmer Response: Refer to the preceding ARC0187I message, its return code, and its programmer response.

ARC0685I EXPIREBV COMMAND NOT PROCESSED - {SMS DATA SETS CANNOT BE PROCESSED AND NO NONSMSVERSIONS PARAMETERS WERE SPECIFIED | BACKUP IS NOT ENABLED | BCDS IS NOT DEFINED | STARTING KEY IS HIGHER IN COLLATING SEQUENCE THAN ENDING KEY | ABARSVERSIONS PARAMETER SPECIFIED WITH NONSMSVERSIONS PARAMETER | ABARSVERSIONS AGNAME PARAMETER SPECIFIED WITH STARTKEY, ENDKEY, OR RESUME PARAMETER | RETAINVERSIONS PARAMETER

SPECIFIED WITHOUT ABARSVERSIONS(AGNAME) | NONSMSVERSIONS PARAMETER SPECIFIED WITHOUT ANY SUBPARAMETERS | 'DISPLAY' OR 'EXECUTE' OPTION NOT SPECIFIED}

Explanation: An EXPIREBV command has been issued. DFSMShsm has determined that the command could not be processed for one of the following reasons:

- SMS is either inactive, or not installed, or a severe error has occurred while attempting to retrieve information from SMS.

  Message ARC0683I has been issued prior to this message and indicates why SMS-managed data sets cannot be processed. The EXPIREBV command does not include any parameters for processing non-SMS-managed data sets.
- The backup functions have not been enabled because no BCDS is defined or a severe error occurred trying to access the BCDS during DFSMShsm startup.
- The BCDS is not defined. The ABARSVERSIONS parameter requires a BCDS.
- Either the STARTKEY parameter has been provided or the RESUME parameter has been specified (a nonblank key has been saved in the backup control record from the previous execution), and you specified the ENDKEY parameter on the EXPIREBV command. The starting key specified with STARTKEY or the saved key is greater in collating sequence than the ending key. The collating sequence is based on the EBCDIC character set.
- You have specified the ABARSVERSIONS keyword with the NONSMSVERSIONS keyword on the EXPIREBV command. These are mutually exclusive parameters.
- You have specified the ABARSVERSIONS(AGNAME(agname)) keyword with STARTKEY, ENDKEY, or RESUME keywords on the EXPIREBV command. ABARSVERSIONS(AGNAME(agname)) implies a starting and ending point for ABR records in the BCDS.
- You have specified the RETAINVERSIONS keyword on the EXPIREBV command but have failed to supply the subparameter.
- You have specified the NONSMSVERSIONS keyword on the EXPIREBV command, but have failed to supply one of its subparameters. At least one subparameter is required when NONSMSVERSIONS is specified.
- You have failed to provide either the DISPLAY or the EXECUTE keyword on the EXPIREBV command. One or the other is required.

Source: DFSMShsm

System Action: Processing of the EXPIREBV command ends. DFSMShsm processing continues.

Application Programmer Response: If message ARC0683I has also been issued, refer to this message and its programmer response for more information.

If the command parameters are in error or are incomplete, correct the syntax and reissue the command.

If the backup functions are not enabled, DFSMShsm must be stopped. The BCDS must be defined (if not already), and any problems with the BCDS must be corrected. Restart DFSMShsm before reissuing the command.

ARC0686I MANAGEMENT CLASS *mgtclassname*, ONCE ASSOCIATED WITH [DELETED] DATA SET *dsname*, IS NOT AVAILABLE.

Explanation: While DFSMShsm was processing SMS-managed data set *dsname* with the EXPIREBV command, it detected that the active SMS configuration did not contain management class *mgtclassname*.

- If the message contains DELETED, data set *dsname* is not currently cataloged; management class *mgtclassname* was associated with the data set when the data set was last backed up.
- If the message does not contain DELETED, data set *dsname* is currently cataloged and associated with management class *mgtclassname*.

Source: DFSMShsm

System Action: In either case, DFSMShsm cannot determine how to expire the cataloged backup version(s) that may exist for the data set; no such versions are expired.

The EXPIREBV command continues with any backup versions identified as uncataloged.

Application Programmer Response: After the EXPIREBV command completes, determine the contents of the active configuration. If there are many such messages, it may be that the wrong configuration was activated.

If data set *dsname* is DELETED, it may be that *mgtclassname* was deleted from the SMS configuration after *dsname* was backed up, then deleted. The management class can be redefined, at least temporarily, to delete the backup versions using the EXPIREBV command; or you can use the BDELETE command to delete specific versions.

ARC0700I {BACKUP OF VOLUME *volser* | BACKUP OF MIGRATED DATA SETS | MOVEMENT OF BACKUP VERSIONS} SUSPENDED, TASK WAITING FOR AN AVAILABLE {DASD | TAPE} {DAILY | SPILL} BACKUP VOLUME

Explanation: A DFSMShsm task attempted to select a backup volume for use during the suggested operation. However, the type of backup volume *volser* needed was not currently available and another DFSMShsm task is currently using the type of backup volume needed. The task waits for the required type of backup volume to become available. When the required type of backup volume becomes available, the task continues the operation being performed. In a multiple processing unit environment, the task checks every 5-minutes to see if the required type of backup volume has become available. If no backup volume of the required type has become available by the end of the 5-minute interval, the task issues this message again and continues to wait for an available backup volume. The problem is that more DFSMShsm tasks are processing that require a backup volume than there are backup volumes available.

Source: DFSMShsm

System Action: The operation being performed is suspended until the required type of backup volume becomes available. When the required type of backup volume comes available, the operation continues.

Application Programmer Response: Notify the storage administrator who can use the ADDVOL command to add more backup volumes to DFSMShsm.

ARC0701I **{BACKUP | SPILL | CLEANUP | FREEVOL} OF VOLUME (*volser*) TERMINATED, ERROR {OPENING | READING | CLOSING} VTOC**

Explanation: An error occurred while DFSMShsm was opening, reading, or closing the VTOC.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator for assistance. Retry the backup operation after corrective action has been taken.

ARC0702I **{BACKUP | SPILL} OF VOLUME *volser* TERMINATED, NO {DAILY | SPILL} BACKUP VOLUME AVAILABLE**

Explanation: DFSMShsm was performing BACKUP or SPILL processing on the volume with volume serial number *volser*. DFSMShsm was attempting to select a daily backup or SPILL backup volume to continue with the BACKUP or SPILL processing, but no volume of the appropriate type was available.

Source: DFSMShsm

System Action: BACKUP or SPILL processing ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator, who can assign additional daily backup or SPILL backup volumes. Retry the backup operation when additional daily backup or SPILL backup volumes have been assigned.

ARC0703I **{BACKUP | SPILL} OF VOLUME *volser* TERMINATED, ERROR {ALLOCATING | DEALLOCATING} {DAILY | SPILL} BACKUP VOLUME**

Explanation: While performing BACKUP or SPILL processing, DFSMShsm attempted to allocate another daily backup or SPILL backup volume to continue the BACKUP or SPILL processing or to deallocate the daily backup or SPILL backup volume it was currently using in a BACKUP or SPILL function. An error occurred in the allocation or deallocation process and the daily backup or SPILL backup volume was not allocated or deallocated. The volume being backed up or SPILLed has the volume serial number *volser*. The daily backup or SPILL backup volume for which the allocation has failed is identified in message ARC0500I.

Source: DFSMShsm

System Action: BACKUP or SPILL processing ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator to determine the exact cause of the error.

ARC0704I **{BACKUP | DUMP | RECOVER} OF VOLUME *volser1* TERMINATED, ERROR {ALLOCATING | OPENING | CLOSING | READING | WRITING} VTOC COPY DATA SET [ON VOLUME *volser2*]**

Explanation: While performing a backup, dump, or recover operation on a volume with volume serial number *volser1*, DFSMShsm attempted to perform the identified operation on a copy of the VTOC of the volume being processed. This copy of the VTOC resides on a backup or migration level 1 volume for backups or recovers, or on a migration level 1 volume for dump. The copy would be used to control a volume recovery or restore if necessary. In an attempt to perform the suggested operation on the VTOC copy data set, an error occurred.

If the error was ALLOCATING VTOC COPY DATA SET the volume serial number where the allocation of the VTOC copy data set failed is identified by *volser2*.

Source: DFSMShsm

System Action: The volume operation ends. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0705I **{BACKUP | DUMP} OF VOLUME *volser* TERMINATED, NO MIGRATION LEVEL 1 VOLUME FOR VTOC COPY DATA SET**

Explanation: While beginning a volume backup or full volume dump operation on volume *volser*, DFSMShsm attempted to select a migration level 1 volume to put the VTOC copy data set on. No migration level 1 volume was available.

Source: DFSMShsm

System Action: The indicated operation ends. DFSMShsm processing continues.

Application Programmer Response: Determine why the ADDVOL command was not specified for the migration level 1 volume or why the backup or dump operation was accidentally requested. If the ADDVOL command was not specified for at least one migration level 1 volume, issue the ADDVOL command for each migration level 1 volume. Otherwise, ensure that volume backup and volume dump are not requested. Use the LIST command to see if any migration level 1 volumes have been ADDVOLed. Use the QUERY command to determine how the backup or dump functions are set up.

ARC0706I **BACKUP OF VOLUME *volser* TERMINATED, NO {DASD | TAPE} DAILY BACKUP VOLUME AVAILABLE**

Explanation: DFSMShsm was attempting to back up the volume with volume serial number *volser*. The BACKUPDEVICECATEGORY parameter was specified on the ADDVOL or BACKVOL command. However, the appropriate type of daily backup volume was not available.

Source: DFSMShsm

System Action: The volume backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Assign additional daily backup volumes of the appropriate type. Retry the backup operation when the additional daily backup volumes have been assigned.

ARC0707I **CANNOT BACK UP GDG DATA IN VSAM CATALOG *dsname*, REASON=*reascode***

Explanation: A generation data group (GDG) cannot be backed up because an error occurred. DFSMShsm ended the backup of the GDG entries in *dsname*.

The values for *reascode* are:

Reascode	**Meaning**
4	DFSMShsm attempted to obtain and read the data set VTOC entry for indexed sequential data set organization and data set extension VTOC entry of a copy data set. The read failed or the VCAT copy data set could not be allocated.
8	The backup volume is a single-file 3480 tape volume (or the equivalent). DFSMShsm tried to open the data set, but failed.

12	The backup volume is a tape volume. An error occurred on the write of the tape labels.
16	The backup volume is a tape volume. DFSMShsm tried to write to the tape, but the write failed.
20	The backup volume is a tape volume. To allocate the tape data set, the JFCB must be read. The read failed, and the copy data set could not be allocated.
24	The backup volume is a tape volume. After writing the copy data set to tape, DFSMShsm tried to update the tape table of contents record for the volume. The update failed, making the data already written on the tape useless.
28	The backup volume is a tape volume. At end-of-volume processing, DFSMShsm tried to internally add a new tape volume to the system. The addition failed.
32	A GETMAIN error occurred.
35	The VCAT copy data set is on a multifile tape volume or on a DASD volume. DFSMShsm tried to open the data set but failed.
36	An ESTAE set up error occurred.
37	There is no more space on the DASD backup volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the reason code is 4, make additional data sets available as copy data sets. For all other reason codes, notify the storage administrator who can make additional data sets available.

ARC0708I {BACKUP | SPILL | CLEANUP | RECOVER | DUMP | RESTORE } OF VOLUME *volser* TERMINATED, GETMAIN/FREEMAIN ERROR

Explanation: DFSMShsm was attempting to perform a backup, SPILL, cleanup, recover, full volume dump, or full volume restore for the volume *volser*. An error occurred in an attempt to get or free an area of virtual storage. A nonzero return code was returned by the GETMAIN or FREEMAIN macro.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: If many volume backup tasks, volume dump tasks, or both were running concurrently, it might be necessary to reduce the number of concurrent tasks by using the SETSYS command with the MAXBACKUPTASKS or MAXDUMPTASKS parameters. Retry the volume functions that ended with this error.

ARC0709I {MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, NO DAILY BACKUP VOLUME AVAILABLE

Explanation: DFSMShsm was attempting to move the backup versions off the migration level 1 volumes or to back up any eligible data sets that might have migrated. The operation could not be continued because no daily backup volume is available to move the backup versions to or to place any newly created backup versions on.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator, who can assign additional daily backup volumes.

Application Programmer Response: None.

ARC0710I {MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, ERROR {ALLOCATING | DEALLOCATING} DAILY BACKUP VOLUME

Explanation: DFSMShsm was attempting to move the backup versions off the migration level 1 volumes or to back up any eligible data sets that might have migrated. During the backup operation, DFSMShsm attempted to allocate a daily backup volume to continue the backup operation or to deallocate the daily backup volume that was currently being used for the backup operation. An error occurred in the allocation or deallocation process, and the daily backup volume was not allocated or deallocated properly. The daily backup volume for which the allocation has failed is identified in message ARC0500I.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator, who can determine the cause of the allocation or deallocation failure and assign more daily backup volumes if necessary.

Application Programmer Response: None.

ARC0711I {MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, ERROR READING OR WRITING BACKUP CYCLE VOLUME RECORD

Explanation: DFSMShsm was attempting to move the backup versions off the migration level 1 volumes or to back up any eligible data sets that might have migrated. During the backup operation, DFSMShsm attempted to read or write the control data set backup cycle volume record identified in message ARC0184I. An error occurred during the I/O operation.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Operator Response: Notify the system programmer.

Application Programmer Response: Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0712I {BACKUP | SPILL | CLEANUP} OF VOLUME *volser* TERMINATED, BACKUP CYCLE VOLUME RECORD IN USE BY ANOTHER HOST

Explanation: DFSMShsm was attempting to back up, SPILL, or clean up the volume *volser*. During BACKUP, SPILL, or CLEANUP processing, DFSMShsm attempted to use a backup cycle volume record (BVR). Each time the record was read, it could not be used because another processing unit was using it. DFSMShsm tried to obtain the record with no success.

Source: DFSMShsm

System Action: BACKUP, SPILL, or CLEANUP processing ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator, who can determine why another processing unit was using the record. Retry the backup operation after corrective action has been taken.

Application Programmer Response: None.

ARC0713I **{MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, BACKUP CYCLE VOLUME RECORD IN USE BY ANOTHER HOST**

Explanation: DFSMShsm was attempting to move the backup versions off the migration level 1 volumes or to back up any eligible data sets that might have migrated. During the backup operation, DFSMShsm attempted to use a backup control data set backup cycle volume record. Each time the record was read, it could not be used because another processing unit was using it. DFSMShsm repeatedly attempted to obtain the record with no success.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator, who can determine why another processing unit is using the record. Retry the backup operation at a later time.

Application Programmer Response: None.

ARC0714I **{BACKUP | SPILL | CLEANUP | FREEVOL } OF VOLUME** ***volser*** **TERMINATED, DFSMSHSM {SHUTDOWN | IN EMERGENCY MODE | BACKUP HELD | AUTOBACKUP HELD | BACKUP DISABLED}**

Explanation: DFSMShsm was attempting to process the volume with the volume serial number *volser*. During the backup, SPILL, freevol, or cleanup operation, one of the following conditions occurred:

- A STOP command was issued to shut down DFSMShsm.
- A SETSYS command with the EMERGENCY parameter was issued to put DFSMShsm in emergency mode.
- A HOLD command with a BACKUP or BACKUP(AUTO) parameter was issued to suspend backup or auto backup processing.
- A SETSYS command with the NOBACKUP parameter was issued to disable the backup function.

Source: DFSMShsm

System Action: BACKUP, SPILL, or CLEANUP processing ends. If SHUTDOWN is indicated, DFSMShsm processing will end. Otherwise, DFSMShsm processing continues.

Application Programmer Response: None.

ARC0715I **{MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP HELD | BACKUP DISABLED | FREEVOL ML1BACKUPVERSIONS NOT ALLOWED WHILE VOLUME BACKUP ACTIVE}**

Explanation: DFSMShsm was moving the backup versions off the migration level 1 volumes or was backing up any eligible data sets that might have migrated. During the backup operation, one of the following conditions occurred:

- A STOP command was issued to shut down DFSMShsm.
- A SETSYS command with the EMERGENCY parameter was issued to place DFSMShsm in emergency mode.
- A HOLD command with the BACKUP parameter was issued to suspend backup processing.
- A SETSYS command with the NOBACKUP parameter was issued to disable the backup function.
- Volume backup tasks are running and FREEVOL ML1BACKUPVERSIONS is not allowed to run concurrently.

Source: DFSMShsm

System Action: The backup operation ends. If SHUTDOWN is suggested, DFSMShsm processing will end. Otherwise, DFSMShsm processing continues.

Application Programmer Response: None.

ARC0716I **{MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, GETMAIN/FREEMAIN ERROR**

Explanation: DFSMShsm was attempting to move the backup versions off the migration level 1 volume or to back up any eligible data sets that might have migrated. During the operation, DFSMShsm attempted to obtain or free an area of virtual storage. A nonzero return code was received from the GETMAIN/FREEMAIN macro.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator, who can attempt to determine the cause of the error using the snap dump taken at the time of the error.

Application Programmer Response: None.

ARC0717I **{AUTOMATIC | COMMAND} BACKUP TERMINATED PRIOR TO COMPLETION, {DFSMSHSM SHUTDOWN | DFSMSHSM IN EMERGENCY MODE | BACKUP HELD | AUTOBACKUP HELD | QUIESCE TIME REACHED | BACKUP DISABLED}**

Explanation: DFSMShsm was performing a multiple-volume backup operation. Either automatic backup was in progress or a BACKVOL command with the PRIMARY parameter was being processed. During the backup operation, one of the following occurred:

- A STOP command was issued to shut down DFSMShsm.
- A SETSYS command with the EMERGENCY parameter was issued to put DFSMShsm in emergency mode.
- A HOLD command with a BACKUP or BACKUP(AUTO) parameter was issued to suspend backup or auto backup processing.
- The automatic backup quiesce time is reached.
- A SETSYS command with the NOBACKUP parameter was issued to disable the backup function.

Source: DFSMShsm

System Action: If the HOLD command with the BACKUP parameter was issued, DFSMShsm will complete any volume backup operations that were in progress and no new volume backup operations are started.

If the SETSYS command with the NOBACKUP parameter was issued, any volume backup operations that were in progress do **not** complete and no new volume backup operations are started.

When the automatic backup quiesce time is reached, DFSMShsm will complete any volume backup operations that were in progress. No new volume backup operations are started.

If the STOP command or SETSYS command with the EMERGENCY parameter was issued, all volume backup operations end at the completion of the current data set, and no new volume backup operations are started. DFSMShsm processing continues.

Operator Response: If automatic backup was in progress, it can be resumed at the point of interruption by issuing one of the following corresponding system programmer or operator commands:

- START DFSMShsm (DFSMShsm is the DFSMShsm cataloged procedure)
- SETSYS NOEMERGENCY
- RELEASE BACKUP or RELEASE BACKUP(AUTO)
- SETSYS BACKUP

For automatic backup to be resumed at the point of interruption, the command must take effect the same day as the command that caused automatic backup to end, and the current time must still be within the start window for automatic backup.

For automatic backup to begin after midnight, the value of the latest start time can be smaller than the planned start time. For example, specify 2330 for *hhmm1* and 0100 for *hhmm2* on the same day as the command that caused automatic backup to end. The current time must still be within the start window for automatic backup.

When automatic backup ends because the quiesce time is reached, it cannot be resumed because the current time is no longer within the start window.

If a BACKVOL command with the PRIMARY parameter was in progress, it can be resumed at the point of interruption only if the HOLD command with the BACKUP parameter or SETSYS command with the NOBACKUP parameter caused it to end. The BACKVOL command with the PRIMARY parameter can be resumed by issuing the corresponding RELEASE command with the BACKUP parameter or the SETSYS command with the BACKUP parameter, provided the command is issued during the same startup of DFSMShsm as the command that caused the multiple-volume backup command to end.

Application Programmer Response: None.

ARC0718I MOVEMENT OF BACKUP VERSIONS STARTING AT *time* **ON** *date* **SYSTEM** *sysid*

Explanation: DFSMShsm movement of backup versions off the migration level 1 volumes has started. When a BACKDS or HBACKDS command is issued, the backup version is temporarily placed on the migration level 1 volume with the most available space. DFSMShsm is now starting to move these backup versions to the daily backup volume. The start time is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The current date is *date*, expressed as *yy*/*mm*/*dd* (year, month, day). The SMF system identifier of the system on which the backup version movement is proceeding is *sysid*. Descriptions of individual data sets processed follow in the associated ARC0734I message.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0719I MOVEMENT OF BACKUP VERSIONS ENDING AT *time*, *nbv* **BACKUP VERSIONS MOVED**

Explanation: The DFSMShsm movement of backup versions off the level 1 migration volumes has ended. The time of day the backup operation ended is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The number of backup versions that was moved is *nbv*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0720I AUTOMATIC BACKUP {STARTING | RESTARTING}

Explanation: DFSMShsm has begun automatic backup. If the message text shows STARTING, automatic backup is starting from the beginning. If the message text shows RESTARTING, automatic backup is restarting because it did not successfully complete processing the last time it started. The following circumstances could prevent automatic backup from successfully completing:

- MVS system failure.
- DFSMShsm abnormal end.
- DFSMShsm was shut down.
- DFSMShsm was placed in emergency mode.
- Backup was held.
- Backup was disabled.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0721I AUTOMATIC BACKUP ENDING

Explanation: DFSMShsm has completed automatic backup.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0722I BACKUP STARTING ON VOLUME *volser* **{(SMS) | (NONSMS)} AT** *time* **ON** *date* **SYSTEM** *sysid*

Explanation: BACKUP command processing is starting for volume *volser*. The current status of the volume is indicated by either (SMS) or (NONSMS). The start time *time* is expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The date of backup *date* is expressed as *yy*/*mm*/*dd* (year, month, day). The SMF system identifier of the system on which the backup is processed is *sysid*. Descriptions of individual data sets processed follow in ARC0734I messages.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0723I BACKUP ENDING ON VOLUME *volser* **AT** *time*, *nds* **DATA SETS BACKED UP**

Explanation: A DFSMShsm backup operation on the volume *volser* completed. The time of day the backup operation ended is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The number of data sets backed up is *nds*. Count *nds* includes data sets with backups scheduled for retry because data set was in use at the time its backup was initially attempted. Such a retry may not be complete at the time this message is issued, and in fact may fail.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0724I {SPILL | CLEANUP | FREEVOL} STARTING ON BACKUP VOLUME *volser* **AT** *time* **ON** *date***, SYSTEM** *sysid*

Explanation: SPILL, FREEVOL or CLEANUP processing has started on the backup volume *volser*. The starting *time* is expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The current *date*, is expressed as *yy*/*mm*/*dd* (year, month, day). The SMF system identifier of the system on which the backup operation is processing is *sysid*. This message will be followed by one or more ARC0734I messages which give additional detail concerning each data set that has been processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0725I BACKUP SPILL IS USING VOLUME *volser*

Explanation: DFSMShsm is performing the SPILL operation on a backup volume. The volume with the volume serial number *volser* is being used as a SPILL volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0726I {CLEANUP | SPILL | FREEVOL} ENDING ON BACKUP VOLUME *volser* **AT** *time***,** *nds1* **DATA SETS SCRATCHED {***nds2* **DATA SETS SPILLED}**

Explanation: SPILL, FREEVOL, or CLEANUP processing on the backup volume with the volume serial number *volser* has completed. The time the operation ended is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The number of data sets scratched during the SPILL or cleanup operation is *nds1*. The number of data sets SPILLed is *nds2*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0727I VOLUME *volser1* **OWNED BY VSAM CATALOG** *catname* **ON VOLUME** *volser2*

Explanation: The backup operation is processing. The volume serial number of the volume to be backed up is *volser1*. The volume is owned by the VSAM catalog *catname*, or by the master catalog. If the master catalog owns the volume *catname* is **MASTER CATALOG**. The volume serial number of the volume on which the catalog resides is *volser2*, or for master catalog, is SYSRES, indicating a system volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0728I VTOC FOR VOLUME *volser1* **COPIED TO DATA SET** *dsname* **ON VOLUME** *volser2*

Explanation: Part of DFSMShsm incremental volume backup or full volume dump is to copy the VTOC of the volume being processed to a data set on a DFSMShsm owned volume. The volume serial number of the volume being processed is *volser1*. The data set name of the VTOC copy is *dsname*. The DFSMShsm volume containing the VTOC copy data set has a volume serial number of *volser2*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0729I ENTRIES FROM VSAM CATALOG *catname* **COPIED TO DATA SET** *dsn* **ON VOLUME** *volser2*

Explanation: DFSMShsm completed the part of the backup operation that copies VSAM catalog generation data group entries. Entries from the catalog *catname* that owns the original volume were written into data set *dsname* on the new volume having the volume serial number *volser2*. If there is no owning VSAM catalog other than the system catalog, *catname* is shown as **MASTER.CATALOG**.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0730I {BACKUP | SPILL | CLEANUP} OF VOLUME *volser* **TERMINATED, ERROR READING OR WRITING BCDS RECORD**

Explanation: DFSMShsm was attempting to back up, spill, or clean up the volume with the volume serial number *volser*. During the operation, DFSMShsm attempted to read or write a backup control data set (BCDS) record necessary to continue the operation. An error occurred during the I/O operation. The type of record and the key of the record is given in the message ARC0184I.

Source: DFSMShsm

System Action: The volume backup, spill, or cleanup operation ends. DFSMShsm processing continues.

Operator Response: Notify the system programmer, who can determine the cause of the error. Retry the backup operation after corrective action has been taken.

Application Programmer Response: Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0731I {MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, ERROR READING OR WRITING CDS RECORD

Explanation: DFSMShsm was attempting to move the backup versions off the migration level 1 volumes or to back up any eligible data sets that may have migrated. During the backup operation, DFSMShsm attempted to read or write a control data set (CDS) record necessary to continue the backup operation. An error occurred during the I/O operation. The type of record and the key of the record is given in the message ARC0184I.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Operator Response: Notify the system programmer.

Application Programmer Response: Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0732I WARNING: OWNING VSAM CATALOG NOT FOUND FOR VOLUME *volser*, VSAM DATA SETS NOT CATALOGED IN AN ICF CATALOG WILL NOT BE BACKED UP

Explanation: DFSMShsm attempted to back up a VSAM-owned volume with the volume serial number *volser*. The volume VTOC entry for the volume suggests that the volume is owned by a VSAM catalog, but DFSMShsm did not find an entry for this volume in the VSAM catalog.

Source: DFSMShsm

System Action: The non-VSAM data sets on the volume continue to be backed up, but no attempt is made to back up any VSAM data sets on the volume that are not cataloged in the integrated catalog facility (ICF) catalog. DFSMShsm processing continues.

Application Programmer Response: Determine why the volume VTOC entry and the VSAM catalog are giving conflicting information.

ARC0733I {BACKUP | SPILL | CLEANUP} OF VOLUME *volser* TERMINATED, ERROR READING OR WRITING BACKUP CYCLE VOLUME RECORD

Explanation: DFSMShsm was attempting to back up, SPILL, or clean up the volume with volume serial number *volser*. During an operation, DFSMShsm attempted to read or write a backup cycle volume record identified in message ARC0184I. An error occurred during the I/O operation.

Source: DFSMShsm

System Action: The backup, SPILL, or cleanup operation ends. DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the meaning of the return code in message ARC0184I.

Retry the operation after corrective action has been taken. This problem might have occurred because a DEFINE command with the BACKUP parameter was never issued.

ARC0734I ACTION=*action* FRVOL=*volser1* TOVOL=*volser2* {BLOCKS=*blocks* | TRACKS=*tracks*} RC=*retcode*, REASON=*reascode*, AGE=*days*, DSN=*dsname*

Explanation: This message is issued for each data set processed during level- or volume-oriented processing or for each backup version processed as a result of the EXPIREBV command. A message precedes the first ARC0734I message to show which function is in progress. The term *action* describes the processing done to the data set identified by *dsname*. The possible actions are:

- BACK-UP — Create a backup version of a data set.
- BK-SCHD — DFSMShsm, during volume or automatic backup, found a data set in use and scheduled a retry of the backup.
- DEL-AGE — Data set deletion or data set retirement. If *volser1* is a migration volume, the data set deletion or retirement is scheduled and the actual action may or may not succeed.
- DELETED — Delete a control data set record for a data set that is scratched.
- EXBACKV — DFSMShsm attempted to expire the backup version specified by the DFSMShsm generated backup version *dsname* as a result of the EXPIREBV command.
- EXPIRED — The data set *dsname* on volume *volser1* is expired and is scheduled for deletion. The *dsname* delete may fail. The possible reasons why DFSMShsm considers a data set expired are:
  - The expiration date in the data set VTOC entry indicated the data set expired, and SETSYS EXPIREDEDDATASETS(SCRATCH) is in effect. This applies to SMS and non-SMS-managed data sets.
  - For an SMS-managed data set that did not have an explicit expiration date in the data set VTOC entry, the management class associated with this data set indicates it should be expired. The management class attributes that are checked are:

    ROLLED-OFF-GDS-ACTION = EXPIRE
    EXPIRE-AFTER-DAYS-NON-USAGE
    EXPIRE-AFTER-DATE/DAYS
- MIGRATE — Migrate or convert a data set. If a data set is being converted, this message applies only to the migration process. If the migration is successful, DFSMShsm tries to recall the data set.
- MOVE BV — Move a backup version from a migration level 1 volume to a backup volume or from a daily backup volume (DASD) to a SPILL backup volume.
- MOVE VT — Move a VTOC copy data set to a migration level 1 volume during the processing of a FREEVOL command.
- PARTREL — Invoke the DADSM PARTREL function to release the unused space of a sequential or partitioned SMS-managed data set.
- RCVSCHD — A recover is scheduled for this data set.
- RECOVER — recover a backup version of a data set.
- RECYCLE — Move a backup version from a tape backup volume to a tape SPILL backup volume or from a tape migration level 2 volume to another tape migration level 2 volume.
- REDUCED — Migrate a data set to reduce the extents on recall. This message applies only to the migration process. A management work element (MWE) is created and placed on the recall queue.
- SCRATCH — Scratch a list, utility, and temporary data set from a user volume or scratch a DFSMShsm-owned data set from a DFSMShsm-owned volume.
- SPCMGMT — This action code is used when DFSMShsm is processing a data set for space management and a more specific action, such as MIGRATE or EXPIRED is not known.

The meanings of variables when *action* is BACK-UP are:

Variable	**Meaning**
volser1	Serial number of the volume being backed up.
volser2	Serial number of the volume on which the backup version is created. This field is blank if the volume was not selected.
tracks	Size of the data set in tracks. This field contains *** if the size is not known. For sequential data sets, this is the used size. For partitioned data sets, this is the highest used size. For direct access, undefined, or SYSCTLG data sets, this field contains the number of tracks originally allocated.
retcode	If the last two digits of *retcode* is nonzero, see message ARC13*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abnormal end (abend) occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend.

	If *retcode* is 9*nn* (where nn is greater than 0), see message ARC13*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see message ARC13*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days since the last backup of this data set, or *** (not applicable).

The meanings of variables when *action* is BK-SCHD are:

Variable	**Meaning**
volser1	Serial number of the volume being backed up.
volser2	*** (not applicable).
tracks	Size of the data set in tracks.
retcode	0
reascode	0
days	*** (not applicable).

The meanings of variables when *action* is DEL-AGE are:

Variable	**Meaning**
volser1	Serial number of the volume being processed by data set deletion.
volser2	*** (not applicable).
tracks	Size of the data set in tracks. This field contains *** if the size is not known.
retcode	If the last two digits of *retcode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where nn is greater than 0), see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days since the last reference to this data set.

The meanings of variables when *action* is DELETED are:

Variable	**Meaning**
volser1	*** (not applicable).
volser2	This field is blank.
tracks	*** (not applicable).
retcode	If the last two digits of *retcode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where *nn* is greater than 0), see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see the return code in message ARC12*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days since the last backup of the data set or *** (not applicable).

The meanings of variables when *action* is EXBACKV are:

Variable	**Meaning**
volser1	*** (not applicable).
volser2	*** (not applicable).
tracks	*** (not applicable).
retcode	See Table 12 on page ARC-286.
reascode	0
days	The number of days since the backup version was created.

The meanings of variables when *action* is EXPIRED are:

Variable	**Meaning**
volser1	Serial number of the volume on which the data set resides.
volser2	*** (not applicable).
tracks	Allocated size of the data set in tracks. This field contains *** if the size is not known.
retcode	If the last two digits of *retcode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where *nn* is greater than 0), see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see the return code in message ARC12*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days since the last reference to this data set.

The meanings of variables when *action* is MIGRATE are:

Variable	**Meaning**
volser1	Serial number of the volume on which migrate processing is running.
volser2	Serial number of the volume to which the data set migrated. If no migration volumes were available, this field contains ***.
tracks	Allocated size of the data set in tracks. This field contains *** if the size of the data set is not known.
retcode	If the last two digits of *retcode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where nn is greater than 0), see message ARC12*nn*I where *nn* is the last two digits of *retcode*.

	If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days since the data set was last referenced.

The meanings of variables when *action* is MOVE BV are:

Variable	**Meaning**
volser1	Serial number of the volume from which backup versions are being moved.
volser2	Serial number of the backup volume to which the data set is going to move. If no backup volumes were available, this field contains ***.
tracks	Size of the data set in tracks. This field contains *** if the size of the data set is not known.
retcode	If the last two digits of *retcode* is nonzero, see message ARC13*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where nn is greater than 0), see message ARC13*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see message ARC13*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days since the backup version was created.

The meanings of variables when *action* is MOVE VT are:

Variable	**Meaning**
volser1	Serial number of the volume from which the VTOC copy data set is being moved.
volser2	*** (not applicable).
tracks	Size of the data set in tracks. This field contains *** if the size of the data set is not known.
retcode	If the last two digits of *retcode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where nn is greater than 0), see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days is 0 since movement of VTOC copies occur only when AGE(0) is specified.
name	The name of the VTOC copy data set being processed.

The meanings of variables when *action* is PARTREL are:

Variable	**Meaning**
volser1	Serial number of the volume on which space management processing is running.
volser2	*** (not applicable).
tracks	Number of tracks released by the DADSM PARTREL function.
retcode	If *retcode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. See message ARC0003I for more information about the abend. If *retcode* is 9*nn* where *nn* is greater than 0, see message ARC12*nn*I where *nn* is the last two digits of *retcode*.
reascode	If *reascode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*.
days	*** (not applicable).

The meanings of variables when *action* is RECOVER or RCVSCHD are:

Variable	**Meaning**
volser1	Serial number of the volume on which the backup version resides. For scheduled requests (RCVSCHD), this might be ****** to indicate the tape volume is not yet determined.
volser2	Serial number of the volume being targeted.
tracks	Size of the data set in tracks. For a scheduled request (RCVSCHD), this field is **** to indicate that the size is not yet known.
retcode	If the last two digits of *retcode* is nonzero, see message ARC11*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abnormal end occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abnormal end. If *retcode* is 9*nn* (where nn is greater than 0), see message ARC11*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see message ARC11*nn*I where *nn* is the last two digits of *retcode*.
days	*** (not applicable).

The meanings of variables when *action* is RECYCLE are:

Variable	**Meaning**
volser1	Serial number of the volume being recycled.
volser2	For backup, this field contains the serial number of the target volume for the backup version, the VTOC copy data set, or the VCAT copy data set being moved. For migration, this field contains the target tape migration level 2 volume.
blocks	Size of the data set in 16K blocks. This field contains *** if the size is not known.
retcode	If retcode is 16, see Table 14 on page ARC-287. If retcode is 36, see Table 15 on page ARC-288. If *retcode* is 100 or greater, see message ARC1900I.

	If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where *nn* is greater than 0), see Table 13 on page ARC-286. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is 36, see Table 15 on page ARC-288.
days	The age of the backup version. This field contains *** if the age is not known.

The meanings of variables when *action* is REDUCED are:

Note: The following information is the result of the migration process.

Variable	**Meaning**
volser1	Serial number of the volume on which data sets are being reduced.
volser2	*** (not applicable).
tracks	Size of the data set in tracks.
retcode	If *retcode* is zero, the data set successfully migrated, but still needs recalling to accomplish extent reduction. If the last two digits of *retcode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where *nn* is greater than 0), see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days since the last reference to this data set.

The meanings of variables when *action* is SCRATCH are:

Variable	**Meaning**
volser1	Serial number of the volume on which the data set resides.
volser2	*** (not applicable).
tracks	Size of the data set in tracks. This field contains *** if the size is not known.
retcode	See Table 18 on page ARC-289. If *retcode* is 100 or greater, see message ARC1900I. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where *nn* is greater than 0), see Table 16 on page ARC-288. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	0 or DADSM scratch status code. See Table 17 on page ARC-288.
days	The number of days since the last backup of the data set for BACK-UP. The number of days since the data set was last referenced for MIGRATION.

The meanings of variables when *action* is SPCMGMT are:

Variable	**Meaning**
volser1	Serial number of the volume on which space management processing is running.
volser2	*** (not applicable).
tracks	Size of the data set in tracks. This field contains *** if the size of the data set is not known.
retcode	If the last two digits of *retcode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. There may be an associated ARC0003I message with more information about the abend. If *retcode* is 9*nn* (where *nn* is greater than zero), see message ARC12*nn*I where *nn* is the last two digits of *retcode*. If *retcode* is 400–499, see the explanation of message ARC9998I for problem determination.
reascode	If *reascode* is nonzero, see message ARC12*nn*I where *nn* is the last two digits of *retcode*.
days	The number of days since the data set was last referenced. This field contains *** if the age since last reference is unknown.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

If the action is EXBACKV, see the system action for specific return codes. in Table 12 on page ARC-286.

If the action is RECYCLE, see the system action for specific return codes in Table 13 on page ARC-286.

Application Programmer Response: Take the appropriate action as given in the meaning of the variables *retcode* and *reascode* for the specific action.

If *retcode* is 18, indicating an output I/O error, and the error is on tape, you can analyze the error in the following ways:

- Message IEA000I reports the I/O error and the failing tape volume.
- The operating system issues an END OF VOLUME action for some I/O errors, as follows:
  - Messages IEC502E and IEC501A show the new tape.
  - DFSMShsm fails the data movement request, ends the volume allocation, and begins the data movement on a new set of tapes. The last tape in the previous set does not contain any valid data.
  - You can make the last tape in the previous set available by issuing the DELVOL command with the PURGE parameter, followed by the ADDVOL command.

ARC0735I BACKUP OF MIGRATED DATA SETS STARTING AT *time* **ON** *date* **SYSTEM** *sysid*

Explanation: BACKUP processing of any eligible data sets that have migrated has been started. The start time is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The current date is *date*, expressed as *yy*/*mm*/*dd* (year, month, day). The SMF system identifier of the system on which BACKUP processing is proceeding is *sysid*. Descriptions of individual data sets processed follow in the ARC0734I messages.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0736I BACKUP OF MIGRATED DATA SETS ENDING AT *time*, *nds* **DATA SETS BACKED UP**

Explanation: BACKUP processing of any eligible data sets that have migrated has been ended. The time of day the BACKUP processing has ended is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The number of migrated data sets that was backed up is *nds*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0737I L RECORD {CREATE | UPDATE} FAILED FOR MIGRATED DATA SET *dsname*, **DATA SET WILL NOT BE BACKED UP**

Explanation: When migrating data set *dsname*, the update or creation of the L record for the data set failed. The migration continues, but the data set will not be backed up because the L record is the driving record for the backup of data sets that have migrated before they have been backed up.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If a backup version for the data set is desired, the data set can be recalled, backed up, and then migrated. Alternately, a BACKDS command can be issued for the migrated data set.

Take corrective action based on the meaning of the return code in message ARC0184I.

ARC0738I FAILURE IN {BACKUP | DUMP | RECOVER} CONTROL TASK, BACKUP DISABLED, RC=*retcode*

Explanation: DFSMShsm attempted to start the indicated control task. An error occurred that caused the task to end and disable backup. Disabling backup also disables dump, restore, and recover. The value of *retcode* shows what type of error occurred.

Retcode	Meaning
12	Failed to attach a permanent subtask. This is only issued for the dump task.
52	GETMAIN for the associated function task control blocks failed.

Source: DFSMShsm

System Action: The indicated control task ends. The functions associated with that control task will not be available until DFSMShsm is shut down and restarted. If the backup control task is ended, no data set or volume backups will occur. If the dump control task is ended, no volume dumps will occur. If the recover control task ends, no data set recoveries or restores, or volume recoveries or restores will occur. Backup is disabled. The remainder of DFSMShsm processing continues.

Application Programmer Response: If backup, dump, or recover tasks are desired, stop DFSMShsm and analyze the error conditions. After corrective action has been taken or it is determined the error will not recur, restart DFSMShsm. For any of the return codes, it is possible to leave DFSMShsm running. For a GETMAIN failure, it is highly unlikely DFSMShsm will be able to perform other functions. It may be necessary to increase the size of the region where DFSMShsm runs.

ARC0739I [BACKUP | SPILL | CLEANUP | FREEVOL | RECOVER] OF VOLUME *volser* **TERMINATED, ERROR READING JOB FILE CONTROL BLOCK**

Explanation: DFSMShsm was performing the indicated function on the volume *volser*. DFSMShsm attempted to read the job file control block (JFCB) to open the VTOC or to allocate a data set on a tape volume.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Retry the volume function for the indicated volume after corrective action has been taken.

ARC0740I CDS BACKUP STARTING AT *time* **ON** *date*, **SYSTEM** *sysid*, **TO {TAPE | DASD} IN {PARALLEL | NOPARALLEL} MODE, DATAMOVER = {HSM | DSS}**

Explanation: The DFSMShsm function to back up the DFSMShsm control data sets is about to begin. This function has been invoked either within the DFSMShsm automatic backup function or explicitly through the BACKVOL command with the CONTROLDATASETS parameter. The time of day the control data set backup function has started *time* is expressed as *hh:mm:ss* (hours, minutes, seconds). The current *date* is expressed as the *yy/mm/dd* (year, month, day). The *sysid* identifies the SMF system identifier for the system on which the control data set backup function is being performed.

TAPE indicates that the backup device is tape.

DASD indicates that the backup device is DASD.

PARALLEL indicates that the CDS and journal data sets are to be backed up in parallel. If the backup device is DASD, PARALLEL is always indicated.

NOPARALLEL indicates the CDS and journal data sets are not to be backed up in parallel.

The DATAMOVER indicates if DFSMShsm or DFSMSdss is being used for this backup.

Source: DFSMShsm

System Action: DFSMShsm continues to process.

Application Programmer Response: None.

ARC0741I (CDS BACKUP | NULL JOURNAL) ENDING AT *time* **ON** *date*, **STATUS=***status*

Explanation: The DFSMShsm function to back up the DFSMShsm control data sets or the NULLJOURNALONLY function, has been completed. The *status* shows the completion status of the function and shows SUCCESSFUL, UNSUCCESSFUL, TESTMODE or SHUTDOWN.

SUCCESSFUL shows that the DFSMShsm control data sets have been successfully backed up.

UNSUCCESSFUL suggests that DFSMShsm control data sets or journal has not been successfully backed up. If message ARC0747I preceded this message, and message ARC0743I has been issued for each data set to be backed up, then the backups are successful but the backup data sets have not been successfully renamed, or a locate error has occurred. If a locate error has occurred and the ARCTVEXT installation-wide exit is active, it will not be invoked.

TESTMODE suggests that the control data set backup function has been invoked in test mode. No backups are performed.

SHUTDOWN suggests that the STOP command has been issued before or during the control data set backup function. If NOPARALLEL has been in effect, the backup function ends after the current backup completes or before any other backup is started. If PARALLEL has been in effect, none of the backups are allowed to start and, therefore, the backups are not performed. If PARALLEL has been in effect and the backup of the control data sets has already started, the backups of the control data sets and journal run to completion.

The time of day the control data set backup function ended *time* is expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The current *date* is expressed as *yy*/*mm*/*dd* (year, month, day).

Source: DFSMShsm

System Action: DFSMShsm ends the control data set backup function and continues to process other DFSMShsm functions.

Application Programmer Response: None.

ARC0742I BACKUP FOR *dsid* **STARTING AT** *time* **ON** *date***, BACKUP COPY TECHNIQUE is {UNDEFINED | REQUIRED | PREFERRED | STANDARD}.**

Explanation: During the DFSMShsm control data set backup function, the attempt to back up the data set identified by *dsid* is about to begin.

- *dsid* specifies either MCDS, BCDS, or OCDS.
- MCDS indicates the attempt to back up the DFSMShsm migration control data set is about to begin.
- BCDS indicates the attempt to back up the DFSMShsm backup control data set is about to begin.
- OCDS indicates the attempt to back up the DFSMShsm offline control data set is about to begin.

The *time* of day the backup started is expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The current *date* is expressed as *yy*/*mm*/*dd* (year, month, day).

The BACKUP COPY TECHNIQUE is an SMS management class attribute that specifies whether the concurrent copy function should be used when backing up the data set. The BACKUP COPY TECHNIQUE can be specified as:

- CONCURRENT REQUIRED, which means the data sets must be backed up by concurrent copy, and if a concurrent copy session cannot be established, the data sets do not get backed up.
- CONCURRENT PREFERRED, which means if a concurrent copy session can be established, concurrent copy is used to back up the data sets. If a concurrent copy session cannot be established, normal backup processing is used.
- STANDARD, which means concurrent copy should not be used to back up the data sets. Normal backup processing is used.

UNDEFINED means the CDS is not SMS managed, or the DATAMOVER is specified as DFSMShsm.

Source: DFSMShsm

System Action: DFSMShsm continues to process.

Application Programmer Response: None.

ARC0743I *dsid* **SUCCESSFULLY BACKED UP TO** *dsname***, ON VOLUME(S)** *volser***, TIME=***time***, DATE=***date*

Explanation: During the DFSMShsm control data set backup function, the data set identified by *dsid* has been successfully backed up to the data set named *dsname* that is located on the volume identified by *volser*. If the data set resides on more than one volume, *volser* specifies the list of volumes on which the data set resides.

- *dsid* specifies either MCDS, BCDS, OCDS, or JRNL.
- MCDS suggests that the DFSMShsm migration control data set was successfully backed up.
- BCDS suggests that the DFSMShsm backup control data set was successfully backed up.
- OCDS suggests that the DFSMShsm offline control data set was successfully backed up.
- JRNL suggests that the DFSMShsm journal data set was successfully backed up.

The *time* of day the backup ended is expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The current *date* is expressed as *yy*/*mm*/*dd* (year, month, day).

An attempt is made to rename the data set (if renaming is required) after all control data sets have been backed up. The message ARC0748I is issued later indicating the final qualifier used in renaming the data sets.

Source: DFSMShsm

System Action: DFSMShsm continues to process.

Application Programmer Response: None.

ARC0744E *dsid* **COULD NOT BE BACKED UP, RC=***retcode***, REAS=***reascode***. MIGRATION, BACKUP, DUMP, AND RECYCLE HELD.**

Explanation: During the DFSMShsm control data set backup function, the data set identified by *dsid* was not successfully backed up.

- *dsid* specifies either MCDS, BCDS, OCDS, or JRNL.
- MCDS indicates the DFSMShsm migration control data set was not successfully backed up.
- BCDS indicates the DFSMShsm backup control data set was not successfully backed up.
- OCDS indicates the DFSMShsm offline control data set was not successfully backed up.
- JRNL indicates the DFSMShsm journal data set was not successfully backed up.

retcode shows why the particular data set was not backed up. The values for *retcode* are:

Retcode	**Meaning**
4	An error was encountered in processing the RDJFCB macro for the control data set referred to by *dsid*. *reascode* identifies the return code from the RDJFCB macro.
8	An error was encountered in processing the RDJFCB macro for the backup data set of the data set indicated by *dsid*. *reascode* identifies the return code from the RDJFCB macro.
10	The preallocated DASD CDS backup data set versions have an invalid BLKSIZE. The BLKSIZE is less than 7892 bytes.
12	The data movement function could not be successfully completed. *reascode* describes the return code from the IDCAMS EXPORT or DFSMSdss function.

13	A system abnormal end (abend) occurred during IDCAMS or DFSMSdss processing. *reascode* is the hexadecimal abend code.
14	The module performing the IDCAMS EXPORT or DSS dump abended and the program control block exists. This is probably a program error. *reascode* is the 3-digit hexadecimal abend code.
15	The module performing the IDCAMS EXPORT or DSS dump abended and the program control block does not exist. This is probably a program error. The *reascode* is zero.
16	An error was encountered allocating the data set suggested by *dsid*. *reascode* identifies the error returned by the allocation routine.
17	The module performing the IDCAMS EXPORT or DSS dump abended during return processing. This is probably a program error. The *reascode* is the 3-digit hexadecimal abend code.
18	The IDCAMS EXPORT operation failed attempting to write a record. *reascode* is the return code from the IDCAMS EXPORT function.
20	An error was encountered allocating the backup data set for the data set suggested by *dsid*. *reascode* identifies the error returned by the allocation routine.
24	An error was encountered allocating a scratch tape by backing up the specified data set *dsid*. *reascode* identifies the error returned by the tape allocation routine.
28	In backing up the DFSMShsm journal data set, the GET macro encountered an I/O error. *reascode* identifies the first byte returned in general register 1 on entry to the SYNAD routine.
32	In backing up the DFSMShsm journal data set, the PUT macro encountered an I/O error. *reascode* identifies the first byte returned in general register 1 on entry to the SYNAD routine.
34	An error occurred trying to open the output data set while getting the device entry.
36	An error was encountered in locating the backup data set of the data set indicated by *dsid*. *reascode* describes the return code from the super locate request.
38	An error occurred trying to open the output data set while reading the DSCB.
40	An error was encountered in opening the DFSMShsm journal data set. This is probably a program error. The *reascode* is set to zero.
41	The OPEN of the journal data set abended during the point, read, and check sequence. This is probably a program error. *reascode* is the 3-digit hexadecimal abend code.
42	The OPEN of the journal data set abended attempting to write EOF. This is probably a program error. *reascode* is the 3-digit hexadecimal abend code.
44	An error was encountered in opening the backup data set for the journal data set. This is probably a program error. The *reascode* = 0.
46	The CLOSE of the journal data set abended. This is probably a program error. *reascode* is the 3-digit hexadecimal abend code.
47	The CLOSE of the backup journal data set abended. This is probably a program error. *reascode* is the 3-digit hexadecimal abend code.
48	In processing the journal backup data set, the end of the output volume was reached, or an abend occurred. The *reascode* indicates a 3-digit hexadecimal abend code.
52	A GETMAIN error was encountered. *reascode* = the return code from the GETMAIN macro.
54	The MHCR is not available to the CDS backup function. The backup ends. Message ARC0740I contains default values for device and mode.
56	The QMNGRIO macro encountered a read error in attempting to access a read JFCB. The *reascode* is the return code from the QMNGRIO macro.
58	An error occurred setting up an ESTAE environment.
60	The QMNGRIO macro encountered a write error in attempting to update a real JFCB. The *reascode* is the return code from the QMNGRIO macro.
64	The STOP command was issued while the control data set backup function was in process. If DFSMShsm was not in the process of backing up a control data set or a journal data set, DFSMShsm saves all previous backups, but does not start another one. If NOPARALLEL was in effect and DFSMShsm was in the process of backing up a control data set or a journal data set, DFSMShsm completes that backup, but does not start another one. If PARALLEL was in effect and DFSMShsm was in the process of backing up a control data set or the journal data set, DFSMShsm completes backing up all of the control data sets and the journal data set.
68	An error was found in the data while DFSMShsm was placing an end-of-file marker in the journal data set during backup. *reascode* describes the reason the data is in error. • 0004 indicates no control record is found in the journal data set. • 0008 indicates only the control record is found in the journal data set. In either case, the journal data set is not backed up.
70	While DFSMShsm was attaching a subtask, an error was encountered. *reascode* identifies the return code from MVS. See message ARC0090I for further explanation of the error.
72	An error occurred when DFSMShsm attempted to open the output data set for CDS backup. An OPEN error message with component identifier IEC precedes this message. *reascode* is the 3-digit hexadecimal abend code.

74	An error occurred when DFSMShsm attempted to close the output data set for the CDS backup.
80	An abend occurred during the CDS Version Backup Services module. This is probably a program error. The *reascode* is the 3-digit hexadecimal abend code.
82	The preallocated output data set was in extended format.

If the *retcode* is 400–499, see message ARC9998I for the explanation and problem determination.

Source: DFSMShsm

System Action: The DFSMShsm functions of migration, backup, dump, and recycle are held. Any backups of other CDS data sets already started, are completed. If the journal backup fails, journaling is inhibited. DFSMShsm processing continues.

Operator Response: Notify your system programmer that the specified DFSMShsm data set is not successfully backed up. If the online journal data set is backed up successfully, it is nulled. If the online journal data set is not backed up successfully, it is not nulled. Not nulling the online journal data set could be a potential problem because the data set could soon become full.

When the problem is corrected and you can allow DFSMShsm to continue, issue the RELEASE command to allow held functions to resume processing.

Application Programmer Response: If the journal backup fails, journaling is inhibited until you either restart DFSMShsm or issue the BACKVOL CDS NULLJOURNALONLY command. Make every attempt to save the contents of the current journal before nulling it or allocating a new one. Do not release any DFSMShsm function until journaling is reestablished.

After the error is corrected, you must use the BACKVOL CDS command to create a backup up copy of the control data sets and the journal data set.

If the error occurred during AUTOBACKUP, restarting AUTOBACKUP within the backup window does not cause the control data sets to be backed up. You must use the BACKVOL CDS command to create a backup copy of the control data sets and the journal data set.

The following list shows the return codes issued for this message and the appropriate actions to be taken for each:

Retcode	Meaning
4	See the return codes issued by the RDJFCB macro in *DFSMS/MVS Using Data Sets* and take appropriate action.
8	Process a system dump before stopping DFSMShsm and then contact the IBM Support Center.
10	Make the BLKSIZE in the range of 7892 to 32760 and retry the backup, or use DFSMShsm as the datamover.
12, 13, and 18	Error messages from the IDCAMS or DFSMSdss function describe the specific error. See the IDC or ADR messages and take appropriate action. Return code 12 was found to occur during CDS backup activity when the system ACS routines direct tape output to DASD rather than tape. qf temporary data sets are directed to DASD, see the *DFSMS/MVS DFSMShsm Implementation and Customization Guide* in “Directing DFSMShsm Temporary Tape Data Sets to Tape.” in the section titled, “Specifying Commands that Define Your DFSMShsm Environment.”
14, 15, and 17	Process a system dump before stopping DFSMShsm and then contact the IBM Support Center.
16, 20, and 24	See message ARC0500I or ARC0503I issued before this message was issued. The appropriate message indicates the dynamic allocation return and reason codes.
28, 32	See the return codes issued by the GET and PUT macros in *DFSMS/MVS Macro Instructions for Data Sets* and take appropriate action.
34	Inform your system programmer or examine the reason code.
36	See the error codes issued by the catalog management function in *DFSMS/MVS Managing Catalogs*, and take appropriate action.
38	Inform your system programmer or examine the reason code.
40, 41, 42, 44, and 46	Process a system dump before stopping DFSMShsm and then contact the IBM Support Center.
47, 48	Make the journal backup data set larger and retry the backup.
52, 54, 56, 58, and 60	Inform your system programmer or examine the reason code.
64	No action required.
68	If *reascode* is 0004, the control record in the journal data set is destroyed. Restart DFSMShsm so the control record is re-created in the journal data set. If *reascode* is 0008, no other records are found in the journal data set other than the control record. In a situation where 2 consecutive BACKVOL CDS commands are issued, this error is relieved by performing an operation that makes entries to the journal. Backing up of the journal data set is not performed unless the JOURNAL parameter of the SETSYS command is specified and DFSMShsm makes entries in the data set. If the backup of the control data sets defined to DFSMShsm is successful, the backup copies are valid and the backup data set names are renamed. When the *reascode* is 0008, and when the newly backed up copies of the control data sets are imported, the DFSMShsm UPDATEC function does not need invoking, because the backup copies contain the latest changes.
70	See message ARC0090I for the programmer response and problem determination.

72	Take the action indicated by the OPEN error message with component identifier IEC. Retry the backup.
74	Take the action indicated by the CLOSE error message. Retry the backup.
80	Process a system dump before stopping DFSMShsm and then contact the IBM Support Center.
82	Ensure that the preallocated DASD output data sets are in standard format and release AUTOBACKUP.

Note: To determine the full name of the data set referred to by *dsid*, see the DFSMShsm startup procedure. To determine the full name of the backup data sets related to the data set referred to by *dsid*, see the DFSMShsm message ARC0748I that follows this message. Append the final qualifier specified in the message to the data set name specified on the SETSYS parameters for CDSVERSIONBACKUP.

ARC0745E UNABLE TO READ MHCR DURING CDS BACKUP

Explanation: The DFSMShsm control data set backup function is being performed using the CDSVERSIONBACKUP parameter of the SETSYS command. An attempt has been made to read the DFSMShsm multiple-host processor control record (MHCR), but the record cannot be read. The MHCR contains the subparameters specified on the SETSYS command with the CDSVERSIONBACKUP parameter.

Source: DFSMShsm

System Action: The control data set backup function continues. The subparameters in effect during the previous control data set backup function where the MHCR has been successfully read are used to continue the control data set backup function. DFSMShsm processing continues.

Application Programmer Response: For information on functions to be performed to reestablish the multiple backup versions of the control data set and the journal data set using the MHCR, see *DFSMS/MVS DFSMShsm Storage Administration Guide*

Operator Response: Notify your system programmer that the DFSMShsm multiple-host processor control record (MHCR) could not be read.

ARC0746I {{BACKUP | SPILL} OF VOLUME *volser* | MOVEMENT OF BACKUP VERSIONS | BACKUP OF MIGRATED DATA SETS} TERMINATED, UNABLE {TO MOUNT INITIAL TAPE | TO FULFILL END-OF-VOLUME TAPE MOUNT REQUEST}, RC= *retcode*, REAS= *reascode*

Explanation: This message is issued when a tape volume mount fails for either an initial volume mount request or an end-of-volume (EOV) mount request. The message is issued under the following conditions:

An initial tape mount for BACKUP or SPILL processing was requested. Two attempts to mount the tape failed.

Retcode	Reascode	Meaning
95	**4**	The operator was unable to mount the tape, the tape mount timer expired, or the *volser* was rejected by IKJPARS.

A tape mount was requested for BACKUP or SPILL processing at EOV mount time. Two attempts to mount the tape failed.

Retcode	Reascode	Meaning
95	**8**	The operator was unable to mount the tape, or the tape mount timer expired.

The volume serial number of the volume in the backup or spill request is *volser*.

Source: DFSMShsm

System Action: BACKUP or SPILL processing ends. DFSMShsm processing continues.

Application Programmer Response: Determine why the operator failed to mount the tape volumes and try BACKUP or SPILL processing again if the problem is resolved.

ARC0747I UNABLE TO {RENAME | CATALOG | UNCATALOG | LOCATE} DATA SET *dsname* DURING CDS BACKUP, RC=*retcode*

Explanation: Either an error or an abnormal end (abend) occurred while renaming, cataloging, uncataloging, or locating the data set *dsname* during backup of the DFSMShsm control data sets. The specified function could not be performed.

A *retcode* of FF indicates that an abend occurred.

If the *retcode* is not FF, the *retcode* indicates the return code from the RENAME, CATALOG, UNCAT, or LOCATE CAMLST macro, or the catalog return code from the SVC 26 ALTER NEWNAME request if the data set is an SMS-managed data set.

Source: DFSMShsm

System Action: If an abend did not occur, DFSMShsm attempts to rename, catalog, or uncatalog those data sets where renaming, cataloging, or uncataloging has not been attempted. DFSMShsm continues processing.

Application Programmer Response: If RENAME failed, message ARC0748I is issued following this message indicating the final qualifier to be used in renaming the specified backup data set. The specified data set *dsname* must be renamed using this final qualifier before the next control data set backup function can be used.

If CATALOG failed, the specified data set must be cataloged before the next control data set backup function can be used.

If UNCATALOG failed, the specified data set should be uncataloged, especially if the data set resides on tape, so the tape management function can reuse the tape.

If LOCATE failed and the ARCTVEXT installation-wide exit is active, it will not be invoked.

ARC0748I LAST SUCCESSFUL CDS BACKUP - SET QUALIFIER IS '*xnnnnnnn*'

Explanation: This message shows the last backup data set qualifier for the last control data set (CDS) backup, where at least the journal has been successfully backed up. If any CDS or journal data set is not successfully backed up, the system issues message ARC0744E for each data set that fails.

If it becomes necessary to recover a CDS, this qualifier is needed to determine which CDS recovery steps are to be used (the steps vary, depending on the data mover used). Determine the data mover used by displaying the backup data set names of the CDSs to be recovered. If '*M*' is *V*, then DFSMShsm is the data mover. If '*M*' is D, then DFSMSdss is the data mover. If '*M*' is X, then that specific backup has failed. Do not use that backup copy for the recovery. For more data mover information see *DFSMS/MVS DFSMShsm Storage Administration Guide*.

In the message text:

xnnnnnnn
The last backup data set qualifier for the last CDS backup, where at least the journal has been successfully backed up. *x* is one of the following:

- *V* indicates that DFSMShsm is the data mover
- *D*, indicates that DFSMSdss is the data mover used for the last backup.

Source: DFSMShsm

System Action: The CDS backup function ends. DFSMShsm continues processing.

Application Programmer Response: None.

ARC0749I CANNOT APPLY INCREMENTAL RECOVER TO VOLUME ***volser*****, REASON=** ***reascode***

Explanation: The RECOVER command was issued with the FROMDUMP and APPLYINCREMENTAL parameters. The volume requested to be restored has a valid dump copy, but DFSMShsm determined the application of incremental recoveries cannot be performed. Therefore, only the restore from the dump copy is performed.

The *reascode* value gives the reason the incremental recoveries could not be done. Valid values for *reascode* are:

Reascode	Meaning
4	A read error occurred reading a control data set record describing the source backup or dump information, or the record was not found. See message ARC0184I for the type and key of the record, and the type of error.
6	An error occurred in reading the JFCB while processing the backup VTOC copy data set.
8	A volume allocation error occurred.
10	Recovery of a more recent backup version of an OS CVOL failed. This recovery is attempted first. Since further processing may depend on the contents of this catalog, the process ends.
12	An error occurred in allocating the backup or dump VTOC copy data set.
14	An error occurred in reading the backup or dump VTOC copy data set.
16	An error occurred in opening the backup or dump VTOC copy data set.
20	The required backup or dump tape volumes are not available.
22	The volume does not have both backup and dump VTOC copy data sets to use to build a list of candidate data sets for recovery.
24	An invalid or unsupported device type was found for the source backup, dump volume, or the migration level 1 volume where the VTOC copy data set resides, in its control data set record.
25	APPLYINCREMENTAL processing is not allowed because the volume contained a VSAM catalog the last time DFSMShsm dumped or backed up the volume.
26	APPLYINCREMENTAL processing is not allowed for DFSMShsm owned volumes because these volumes are not supported for the volume backup function.
27	APPLYINCREMENTAL processing is not allowed because the correct level of the Data Facility Product (DFP) is not installed on the system. The correct level of the DFP required to support this function is Release 2 Version 3 or subsequent releases, unless otherwise noted.
28	The MCV record that describes the volume on where the dump VTOC copy resides indicates that the volume is not a migration level 1 volume.
30	SMS has not been active in the system when DFSMShsm has attempted to process SMS-managed volumes.
32	DFSMShsm cannot determine if the volume being processed is an SMS-managed volume. The SMS volume definition and the volume VTOC entry do not agree.
34	An error has occurred while retrieving an SMS volume definition. DFSMShsm has invoked SMS to retrieve an SMS volume definition. SMS has failed to retrieve it.
52	A GETMAIN error occurred in getting storage for the recovery queue elements.
60	An error occurred in establishing an ESTAE environment.
66	An internal error occurred in sorting the queue of recovery queue elements (RQEs). The queue was broken.

Source: DFSMShsm

System Action: The restore process is performed. The incremental volume recovery is not performed. DFSMShsm processing continues.

Application Programmer Response: If the volume contains an owning VSAM catalog, ensure that the catalog has been recovered with the latest backup copy and is in a usable state. DFSMShsm does not back up and recover VSAM catalogs. If the volume has been processed by volume backup, a volume recovery can be requested when the state of the catalog has been verified.

If the recovery of a catalog failed, determine if the catalog is usable and recent enough. If it is not, issue the RECOVER command for the catalog. If the catalog is usable or a later RECOVER command for the catalog succeeded, issue the RECOVER command for the volume again without the FROMDUMP and APPLYINCREMENTAL parameters and specify the date the volume was restored.

ARC0750I BACKUP FOR ***dsid*** **STARTING AT** ***time*** **ON** ***date***

Explanation: The attempt to back up the data set identified by *dsid* is about to begin during the DFSMShsm control data set backup function.

- *dsid* — specifies ‘JRNL’ (JOURNAL)
- *time* — time of day the backup started expressed as hh:mm:ss (hours, minutes, seconds)
- *date* — current date expressed as yy/mm/dd (year, month, day).

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Application Programmer Response: None.

ARC0751I CANNOT RECOVER VOLUME *volser*, **VTOC COPY CANNOT BE PROCESSED, REAS=***reascode*

Explanation: An attempt was made to recover a volume, but there is not a usable VTOC copy data set from which to perform the recovery. The processing unit processing the volume recovery is running a release of DFSMShsm or DFSMShsm that is not capable of accessing the VTOC copy data set created in a format of a later release. The values for *reascode* are:

Reascode	Meaning
4	The VTOC copy data set is written on a 3480 backup volume by DFHSM 2.2.0 or a following release in single-file format. Releases before 2.2.0 cannot access single-file format data sets.
8	The VTOC copy data set is written on a migration level 1 volume by DFHSM 2.3.0 or a following release in a format and location that cannot be read by prior releases.

Source: DFSMShsm

System Action: The recovery of the volume fails. DFSMShsm processing continues.

Application Programmer Response: Enter the RECOVER command on a processing unit that has the proper level of DFSMShsm installed and running.

ARC0752I CANNOT {RECOVER | RESTORE} VOLUME *volser*, **{BACKUP | DUMP} NOT AVAILABLE, REASON=***reascode*

Explanation: DFSMShsm attempted to read the backup control data set entry for the volume being recovered or restored. The volume serial number being processed is *volser*. An error occurred in accessing records for the volume’s backup or dump information.

The values for *reascode* are:

Reascode	Meaning
2	The device type of the original volume from which the dump copy was made, is not of a similar device type as the target volume of the restore.
4	A read error occurred in reading the control data set record describing the source backup or dump information. See message ARC0184I preceding this message for the type and key of the record.
10	The DUMPVOLUME parameter was specified for a volume restore, and the specified dump volume does not contain valid data.
18	The volume does not have a valid backup VTOC copy data set for a recovery and has not been processed by the DFSMShsm volume backup function. See message ARC0184I preceding this message for the type and key of the record.
22	The volume has not been processed by the DFSMShsm full volume dump function for volume restore.
24	An invalid or unsupported device type was found for the source backup, dump volume, or the migration level 1 volume where the VTOC copy data set resides, in its control data set record.
32	DUMPCLASS and DUMPVOLUME parameters were not specified and no dump copy was found that had a retention date other than NOLIMIT.
36	The DUMPCLASS parameter was specified for a full volume restore, and a dump copy was not found in the specified dump class.
40	The DUMPGENERATION parameter was specified for a full volume restore, and the specified generation was not found.
44	The DATE parameter was specified for a full volume restore, and no eligible dump copy was found that met the specified date criterion.
48	The volume to be restored is not the same as the source volume recorded in the dump volume (DVL) record.
50	The DUMPVOLUME parameter was specified, but the dump generation (DGN) record does not indicate that the specified dump volume contains part of a valid dump copy for the volume to be restored.
54	The DUMPVOLUME parameter was specified. The DGN record was found that lists the specified dump volume. This dump generation is not listed as a valid dump generation in the MCP record for the volume to be restored.
60	An error occurred in establishing an ESTAE environment.
64	The dump copy needed for restoring is contained in file two or higher on a dump volume. DFSMShsm encountered an error while trying to read or update the JFCB intended to represent the dump copy when opened by DFSMSdss.
66	An internal error occurred in sorting the queue of recovery queue elements (RQEs). The queue was broken.

Source: DFSMShsm

System Action: The RECOVER command ends. DFSMShsm continues.

Application Programmer Response: Ensure the volume to be recovered has been incrementally backed up or that the volume to be restored has been dumped. If it has, check if any failures have been associated with the backup or dump. If the volume has not been processed by backup or dump, ensure that volumes are available to DFSMShsm to perform these functions. If a dump generation or date was requested, ensure a volume backup or volume dump was performed that meets the date criterion. If an unsupported device type was found, correct it and reissue the command. If a dump class was specified in error, reissue the command with a valid dump class. For reason code 64, reissue the RECOVER command.

ARC0753I CANNOT RESTORE VOLUME *volser1*, **ERROR ALLOCATING DUMP VOLUME** *volser2*

Explanation: During the restore operation, DFSMShsm could not allocate the dump volumes necessary to restore the volume *volser1*. The volume serial number of the first dump volume required is *volser2*.

Source: DFSMShsm

System Action: The restore operation ends. DFSMShsm processing continues.

Application Programmer Response: Ensure the dump volumes are available to DFSMShsm.

ARC0754I CANNOT RECOVER VOLUME *volser*, ERROR RECOVERING CATALOG(S)

Explanation: DFSMShsm was processing a volume RECOVER command. Recovery of one or more catalogs on the volume failed. If the volume contained any integrated catalog facility (ICF) catalogs or an OS CVOL catalog that had backup versions that met the date requirements, these are recovered first. Because further processing can depend on the contents of one or more of these catalogs, the process ends. ICF catalogs will not be recovered if the catalog already exists on the volume. If the volume already contains the ICF catalog, this message does not indicate a failure; any other condition indicates a failure. See an associated ARC0734I message for the catalogs that had the failure.

Source: DFSMShsm

System Action: The recovery ends. DFSMShsm processing continues.

Application Programmer Response: See an associated ARC0734I message for any catalogs that had failures and proceed with the problem determination for the return codes and reason codes contained in that message. Take corrective action as appropriate. Then enter a RECOVER command for the volume again.

ARC0756I CANNOT RECOVER GDG DATA FOR VOLUME *volser*, REAS= *reascode*

Explanation: While DFSMShsm was recovering a volume, an attempt was made to recover generation data group (GDG) information in a VSAM catalog. The data set containing the VSAM catalog data could not be allocated. The volume serial number of the volume being recovered is *volser*.

The values for *reascode* are:

Reascode	Meaning
4	Allocation of the volume failed.
6	No VCAT copy data set exists.
8	An open error occurred.
10	The required backup volumes are not available.
12	A read error occurred.
16	A GETMAIN failure occurred.
20	An MCT read failure occurred.
25	An invalid unit type from MCT (X) record.
26	Unsupported device type.
28	DFSMShsm has written on this tape volume in single-file format.
54	Installation-wide exit abnormally ended.
60	Setup of an ESTAE around the open failed.
68	The POINT macro failed while opening a single-file format tape data set.

Source: DFSMShsm

System Action: The recovery of the GDG base entries ends. DFSMShsm processing continues.

Application Programmer Response: When *reascode* is 28, later recovery attempts must be made from a processing unit that has DFHSM 2.2.0 or a subsequent release installed and running.

Inspect the return code and the reason code from the previous DFSMShsm messages. Make the necessary corrections and retry the recovery operation.

ARC0757I BACKUP OF A DATA SET OF *tracks-used* TRACKS TO ML1 VOLUME *volser* FAILED FOR INADEQUATE SPACE

Explanation: A data set backup was requested and available space on the volume (including ML1 overflow volumes, if they exist) was inadequate. Sufficient space was not available on *volser*; the ML1 was volume selected.

Either there are no ML1 overflow volumes defined, or none of ADDVOLed volumes has sufficient free space.

The backup request may be from a BACKDS or HBACKDS command, an ISMF panel, the inline program ARCINBAK, or a program issuing the ARCHBACK macro.

Source: DFSMShsm

System Action: DFSMShsm fails the request with MSGARC0734I and MSGARC1337I. Processing continues.

Application Programmer Response: Consider freeing space at level 1 by issuing the FREEVOL ML1BACKUPVERSIONS command to move backup versions to daily backup volumes. If the failing data set is not less than 500 tracks in size, consider ADDVOLing a new ML1 volume with the OVERFLOW attribute. After either action, reissue the request.

ARC0758I VSAM BACKUP FAILED FOR VOLUME=*volser*, RC=*retcode*, REASON=*reascode*

Explanation: Volume backup was processing the volume *volser*, but failed with a catalog error. The reason code is the same as that given for the VSAM catalog LISTCAT.

The values for *retcode* are:

Retcode	Meaning
4	A VSAM LISTCAT error (*reascode*) was encountered while LISTCAT was building a list of all VSAM data sets not cataloged in the ICF catalog on the volume. The VSAM data sets listed before the error are backed up. Notify the storage administrator to correct the catalog.
8	VSAM data sets not cataloged in the ICF catalog on this VSAM-owned volume were not backed up. See the following reason codes for the possible causes: **0** The objects on the volume are VSAM data sets that are never eligible for backup (for example, VSAM data sets with the page-space attribute). **2** No non-ICF VSAM objects are on the volume. >**2** *reascode* is a OS/VS2 catalog management reason code encountered while building a list of objects on the volume for all VSAM data sets not cataloged in the ICF catalog.
16	For VSAM data sets, an error occurred while building the ARCSDATA control block, or a catalog LISTCAT request failed for other than a CATALOG NOT FOUND condition. Further processing of VSAM data sets on this volume is not possible. For VSAM data sets not cataloged in an ICF catalog, an error occurred while DFSMShsm was processing. No additional VSAM data sets not

cataloged in an ICF catalog can be processed from this volume.

Source: DFSMShsm

System Action: Volume backup continues. DFSMShsm processing continues.

Application Programmer Response: If *reascode* is nonzero, refer to the OS/VS2 catalog management reason code given in the associated ARC0734I message.

ARC0759I REQUIRED TAPE VOLUMES NOT AVAILABLE. {RECOVER | RESTORE} IS NOT POSSIBLE.

Explanation: More than one tape volume was needed to recover or restore a volume, but the operator was unable to locate all the required volumes. This message is preceded by message ARC0313A, indicating the necessary tape volumes. For a volume recover, the VTOC copy data set and the VCAT copy data set reside on the required volumes. For a restore operation, the dump copy resides on the required volumes.

Source: DFSMShsm

System Action: The recover or restore operation ends. DFSMShsm processing continues.

Application Programmer Response: If the required tapes will be available later, reissue the RECOVER command when the tapes become available.

ARC0760I TAPE VOLUME *volser* WILL BE NEEDED FOR RECOVERY

Explanation: A volume is being recovered. The tape volume *volser* listed in the message contains one or more of the data sets being recovered to the volume. This message is issued for each tape volume needed for the volume recovery.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: Find the tape listed in the message and ensure that it will be available when it is requested to be mounted.

ARC0761I FIRST COPY OF VTOC AND GDG BASE ENTRIES NOT AVAILABLE. SECOND COPY WILL BE USED, REASON=*reascode*

Explanation: A volume is being recovered. Because of an error that occurred while processing the most recent VTOC copy data set listed in the MCP for the volume being recovered, the alternate VTOC copy data set listed in the MCP will be used. The second set of generation data group base entries listed in the MCP will also be used.

The values for *reascode* are:

Reascode	Meaning
4	A read error occurred in reading the control data set record describing the source backup information. See message ARC0184I preceding this message for the type and key of the record.
6	An error occurred in reading the JFCB while processing the backup VTOC copy data set.
8	A volume allocation failure occurred.
12	A data set allocation failure occurred.
14	A read error occurred in reading a backup VTOC copy data set.
16	An OPEN error occurred.
20	The required tapes are unavailable.
24	An invalid unit type is in the MCT record.
28	DFSMShsm has written on this tape volume in single-file format.
32	DFHSM 2.3.0 or a subsequent release has written the VTOC copy data set in a different format.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: The volume will be recovered using the next latest version of the VTOC copy data set. If there are some data sets that are not recovered because of using a down-level copy, those data sets can be recovered individually by using a RECOVER command for a data set.

When *reascode* is 14, the volume is recovered using the next latest version of the VTOC copy data set. If some data sets are not recovered because a down-level copy is used, use the RECOVER command to recover each data set.

When *reascode* is 28, subsequent volume recovery attempts must be made from a processing unit that has DFHSM 2.2.0 or a subsequent release installed and running.

When *reascode* is 32, subsequent volume recovery attempts must be made from a processing unit that has DFHSM 2.3.0 or a subsequent release installed and running.

ARC0763I GDG BASE *gdgname* CATALOGED

Explanation: DFSMShsm has successfully cataloged the generation data group base entries for data set *gdgname*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0764I GDG BASE *gdgname* CATALOG FAILED, RC=*retcode*

Explanation: While attempting to recover generation data group (GDG) data for a VSAM catalog, DFSMShsm has received a return code of *retcode* from the LOCATE routine. The catalog locate has failed for the GDG base *gdgname*.

The values for *retcode* are documented in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009I.

Source: DFSMShsm

System Action: Processing continues for the next GDG.

Application Programmer Response: Inspect the LOCATE return code and take appropriate corrective action. Assistance of the system programmer might be necessary.

ARC0765I VOLUME=*volser* NOT CONTROLLED BY CATALOG=*catdsn* FOR RECOVER OF DSN=*dsname*, REAS=*reascode*

Explanation: A RECOVER or HRECOVER command was issued for a VSAM data set *dsname*, and the TOVOLUME parameter specified a volume *volser* that was not controlled by the same catalog *catdsn* that controlled the volume from which the backup was made.

The values for *reascode* are:

Reascode	Meaning
0	The TOVOL and DATASETNAME parameters do not match.

4	There was a LOCATE error in trying to check for mismatch.

Source: DFSMShsm

System Action: Processing of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Specify a volume that is controlled by the catalog that controlled the volume from which the backup was made, or remove the TOVOLUME parameter to cause recovery to the volume from which the backup was made. Reissue the command.

ARC0766I RECOVER NAMES FOR CLUSTER=*clname*, DATANAM=*dataname* [,INDEXNAM=*indexname*]

Explanation: A VSAM data set having a new cluster name of *clname* was recovered. The generated names for the data components and optional index components are *dataname* and *indexname*, respectively. If the data set has a relative record or entry sequence organization, no index name is given.

Source: DFSMShsm

System Action: The RECOVER command processing continues.

Application Programmer Response: None.

ARC0767I INCOMPLETE {RECOVERY | RECALL} FOR DATA SET=*dsname*, SUCCESSFUL {RECOVERY | RECALL} FOR BASE CLUSTER

Explanation: An error occurred during recovery or recall of an alternate index (AIX) cluster of a VSAM data set *dsname*. This message gives the name of the base cluster that was successfully recovered or recalled before the error occurred. Message ARC0768I can follow this message one or more times listing each AIX that was successfully processed. Message ARC1001I follows this message and explains the reason for the error.

Source: DFSMShsm

System Action: Recovery or recall of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Some AIX clusters were not recovered or recalled for this data set. If a recall failed, the AIX clusters that were not recalled must be rebuilt. If a recovery failed, the AIX clusters that were not recovered can be rebuilt, or the entire data set can be recovered again, possibly from a different backup version.

ARC0768I SUCCESSFUL {RECOVERY | RECALL} FOR ALTERNATE INDEX=*altindxname*

Explanation: This message follows ARC0767I and lists the name *altindxname* of an AIX that was successfully recalled or recovered. The base cluster is listed in ARC0767I.

Source: DFSMShsm

System Action: Recovery or recall of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Some alternate index clusters were not recovered or recalled for this data set. If a recall failed, the alternate index clusters that were not recalled must be rebuilt. If a recovery failed, the alternate index clusters that were not recovered can be rebuilt, or the entire data set can be recovered again, possibly from a different backup version.

ARC0769I IMPORT WITH EXISTING FREESPACE FAILED ON {RECALL | RECOVER} FOR DATA SET *dsname*, {RECALL | RECOVER} WILL BE RETRIED WITHOUT FREESPACE

Explanation: IDCAMS IMPORT command processing fails for this data set with message IDC3351I RC28. There is not enough space in the primary allocation to include the requested FREESPACE, and no secondary allocation is allowed or the maximum extents are exceeded.

Source: DFSMShsm

System Action: Recall or recovery of this data set can be retried without the FREESPACE specification. DFSMShsm processing continues.

Application Programmer Response: If the retry is successful, determine the data set's present allocation. If the allocation needs to be larger, take the appropriate action. If the retry without FREESPACE specified fails with message IDC3351I RC28, make another attempt after increasing the secondary space quantity. Message ARC0786I is issued if the second retry is attempted.

ARC0770I SMS GDS gdsname {RECALLED|RECOVERED} AS {ACTIVE|ROLLED-OFF|DEFERRED} GDS

Explanation: A generation data group member (GDS) was recalled or recovered as an SMS data set. The GDS status after the recall or recovery is either ACTIVE, ROLLED-OFF, or DEFERRED.

An SMS GDS in the DEFERRED status may be made an active member of the generation data group using the IDCAMS ALTER ROLLIN command.

This message is not issued if the GDS being recalled or recovered is in active status, and is being recalled or recovered to active status.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0771I RECOVER WITH FROMDUMP SPECIFIED BUT {NO ELIGIBLE DUMP COPY EXISTS | THE SOURCE AND TARGET DEVICE TYPES ARE NOT SIMILAR}, {A BACKUP VERSION HAS BEEN RECOVERED}

Explanation: The RECOVER command was issued requesting that a dump copy be restored for a data set. However, an incremental backup version was recovered for the data set instead of a dump copy. The message indicates which of the following conditions was encountered:

- No eligible dump copy was found for the restore to be done.
- The volume that was dumped is not of a similar device type to the target volume.

A more recent backup version has been recataloged and recovered for a VSAM data set.

Source: DFSMShsm

System Action: The restore request is for a VSAM data set that did not exist when the process began, or for an existing non-SMS-managed VSAM data set that is on a different volume (with the TOVOLUME parameter) than the data set is currently on. DFSMShsm found a valid backup version and recovered it first to create the data set's catalog records properly before the restore operation. This operation was successful, but a restore of a dump copy was not permitted for the reason indicated in the message. DFSMShsm processing continues.

Application Programmer Response: Verify that an eligible dump copy exists for the data set in question. Reissue the RECOVER command specifying the dump copy with the FROMDUMP and DUMPVOLUME parameters. The LIST command can be used to determine what the dump copies are for a given source volume. It can also be used to determine the contents of the VTOC at the time of the dump, if the dump VTOC copy data set exists.

ARC0772I RECOVERY STARTING ON VOLUME *volser* **AT** *time* **ON** *date* **SYSTEM** *sysid*

Explanation: DFSMShsm recovery function is starting for the volume with volume serial number *volser*. The starting time for recovery of data sets on that volume is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The date of recovery is *date*, expressed as *yy*/*mm*/*dd* (year, month, day). The SMF system identifier for the system on which the recovery is performed is *sysid*. Descriptions of individual data sets processed are contained in associated ARC0734I messages.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0773I RECOVERY ENDED ON VOLUME *volser* **TIME** *time*

Explanation: DFSMShsm volume recovery is complete. The volume serial number of the volume recovered is *volser*. The time of day the recovery operation ended is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: This message indicates completion of the recovery operation only and not success or failure. All scheduled recovery requests from incremental backup completed. Examine all associated output to determine success or failure.

ARC0774I VSAM DATA SET {*dsname***} RESTORED BUT CATALOG MAY NOT CONTAIN ACCURATE INFORMATION, REASON=***reascode*

Explanation: The RECOVER or HRECOVER command was issued for a VSAM data set. DFSMShsm found that a dump copy was the most recent copy for the criteria. DFSMShsm invoked DFSMSdss to restore the data set. This was successful. The catalog may not reflect the correct information about the data set. The *reascode* gives an indication of the conditions and the necessary action to take to correct the situation.

Reascode	Meaning
4	The command was issued for a VSAM data set that was no longer cataloged when the command was issued. If a backup version exists for the data set, DFSMShsm IMPORTS it to reconstruct the catalog records properly. If either the IMPORT fails or a backup version does not exist, DFSMShsm invokes DFSMSdss to do a restore of the data set. This is successful, but the data set may not be cataloged.
8	The TOVOLUME parameter was used on the RECOVER or HRECOVER command and the specified volume was different than the volume where the VSAM non-SMS-managed data set currently exists. If a backup version exists for the data set, DFSMShsm IMPORTS it to reconstruct the catalog records properly. Either the IMPORT fails or a backup version does not exist. DFSMShsm then invokes DFSMSdss to do a restore of the data set. This is successful. The data set and the catalog entries are restored to the target volume. The catalog records still refer to the original volume, rather than the target volume of the restore.
12	A DFSMShsm authorized user explicitly requested that a dump copy be used to restore a multivolume VSAM data set not currently cataloged or is currently cataloged as non-SMS and on a volume(s) other than the TOVOLUME specified. DFSMShsm does not IMPORT the backup version to reconstruct the catalog records even if a backup version exists, since the volume sequence number may not be the same as the original number when the dump was taken. This could cause restore to fail.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Use the IDCAMS DIAGNOSE command for the data set name and include the entry to determine what information the catalog and catalog entry contain for the data set. It may be necessary to use the IDCAMS DEFINE RECATALOG command to specify the proper data set information.

ARC0775I {ALTER OF DATA SET *dsname* **| LISTCAT OF ENTRY** *entry* **| DELETE VVR FOR DATA SET** *dsname* **| CATALOG OF DATA SET** *dsname* **| RECATALOG OF DATA SET** *dsname***} FAILED, CATALOG RETURN CODE=***crc***, CATALOG REASON CODE=***creas*

Explanation: DFSMShsm has issued SVC 26 to request a catalog management function. The request has ended with a nonzero return code. The initial phrase of the message indicates what type of request has been made. The catalog management return and reason codes are given by *crc* and *creas*.

During CATALOG and RECATALOG of DFSMShsm's VTOC COPY data sets, identified by 'VTOC' as the 2nd level qualifier of the data set name, CRC is documented in *DFSMS/MVS DFSMSdfp Storage Administration Reference* under Return Codes from Catalog, and CREASe is the return code under message IDC3009I.

The catalog management return and reason codes are documented in the description for message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response:

- If an alter error has occurred, the name must be changed with the IDCAMS ALTER command.
- If a LISTCAT has failed, determine the necessary corrective action from the response for the catalog return and reason codes.
- If a delete of a VSAM volume record (VVR) has failed, an integrated catalog facility VSAM data set component resides on the volume and the IDCAMS DELETE command must be used to delete it.
- If a RECATALOG has failed, the data set has been uncataloged by DFSMShsm. Determine the necessary corrective action from the response for the catalog return and reason codes and recatalog the uncataloged data set.

ARC0776I THE DATA SET {dsn} WAS RECOVERED BUT DFSMSDSS ENCOUNTERED A MINOR ERROR WHILE PERFORMING DATA MOVEMENT.

Explanation: The RECOVER or HRECOVER command was issued and DFSMShsm was using DFSMSdss data movement to recover the data set; however, DFSMSdss encountered a minor error and issued a return code 4.

Source: DFSMShsm

System Action: The recovery of the data set is reported as successful. DFSMShsm processing continues.

Application Programmer Response: Refer to DFSMSdss messages, contained in the DFSMShsm log, to determine the error encountered while recovering the data set.

ARC0778I DATA SET ***dsname*** **WAS RECOVERED FROM A BACKUP MADE AT** ***time*** **ON** ***date*** **[WITHOUT SERIALIZATION]**

Explanation: *dsname* was recovered from a backup made at the specified time and date. If WITHOUT SERIALIZATION appears, data in the recovered data set may not be consistent or complete, since the backup used by the RECOVER or HRECOVER command was made by DFSMShsm while the data set may have been in use. That is, DFSMShsm did not serialize on the data set before making the backup version, either because it was directed not to serialize, or because one or two serialization attempts failed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If WITHOUT SERIALIZATION appears and you detect significant inconsistent or incomplete data, you may be able to recover your data from another backup version, (if one exists).

ARC0779I RESIDUAL DATA ENCOUNTERED DURING RECALL | RECOVER OF BDAM DATA SET ***dsname***

Explanation: During the recall or recovery of a data set, an end of file (EOF) was encountered but data exists beyond the EOF. The data existing beyond the EOF (called residual data) is not recalled or recovered. This can happen if a BDAM data set was not initialized before backup or migration and a DAOPTION of RELBLK was specified. If the residual data is to be recovered, refer to the programmer response below.

Source: DFSMShsm

System Action: The recall or recovery operation continues. Only the data before the EOF is recalled or recovered.

Application Programmer Response: If the residual data is needed, recover the data set specifying either DAOPTION(SAMETRK) or DAOPTION(RELTRK).

ARC0780I RENAME OF DATA SET TO [TEMPORARY] ***dsn2*** **FROM [TEMPORARY]** ***dsn1*** **FAILED, RETURN CODE=*rc*, REASON CODE=*reas***

Explanation: When an existing SMS-managed data set is recovered, it is renamed to a temporary name before being deleted. This allows the data set to be renamed back to its original name if the recovery is unsuccessful.

When FROMDUMP is specified with NEWNAME and if the NEWNAME data set exists, the NEWNAME data set is temporarily renamed until the restore is complete and then it is deleted.

If TEMPORARY appears after TO, the data set to be recovered or replaced could not be renamed. If TEMPORARY appears after FROM, the data set to be recovered or replaced could not be renamed back to its original name after the recovery fails.

The return and reason codes are the DFP catalog management return and reason codes. See the description of message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* for detailed information on the renaming return and reason codes.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0781I RESTORE FAILED FOR DATA SET ***dsname*** **BUT A BACKUP VERSION HAS BEEN RECOVERED.**

Explanation: A restore operation failed for a data set. The data set was recovered prior to the restore in order to re-build its catalog entry. The recovered data set remains on the target volume even though the restore failed. Return code 66 will be returned because the restore failed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: The recovered data set may be used. If the version that was dumped is required, determine why the restore is unsuccessful from the ARC1166I message explanation.

ARC0782I DATA SET {*dsname*} HAS A MORE RECENT DUMP COPY BUT A BACKUP VERSION {WILL BE RECOVERED | HAS BEEN RECOVERED | HAS BEEN USED BUT THE RECOVERY FAILED}, REASON=*reascode*

Explanation: The HRECOVER command or the RECOVER command without the FROMDUMP parameter was issued to recover a data set. A dump copy more recent than the incremental backup version was found, but the incremental backup version was used to recover the data set. The *reascode* gives an indication of the reasons why the BACKUP version was used.

Reascode	Meaning
1	The version of DFSMSdss which supports physical data set restore is not installed, or is not active in the system.
2	The version of DFSMSdss installed in the system is not a sufficient level to restore an SMS-managed data set.
3	The version of DFSMSdss installed in the system is not a sufficient level to restore a PDSE data set. PDSEs processing as data sets must be done using logical processing.
4	A multivolume extended format data set is being recovered.
5	The target data set is SMS managed but the target volume selected by DFSMShsm is non-SMS managed. If a physical dump copy is desired, specify a target SMS volume either by cataloging the target data set on an SMS-managed volume or by using the TOVOLUME parameter on the RECOVER command.

The following information indicates the processing DFSMShsm performs:

- DFSMShsm uses a backup version to recover the data set.

- In the case of recovering a VSAM data set which was not cataloged or was cataloged on a volume other than the TOVOLUME specified at the beginning of the recovery:
  - DFSMShsm recovered a backup version to construct or reconstruct the catalog record before discovering a dump copy was more recent, and the correct version of DFSMSdss is not installed or not active.

If the recovery of the backup version is successful, then message ARC1000I is issued. If the recovery fails, then message ARC1001I is issued with the return code and reason code as to why it failed.

Source: DFSMShsm

System Action: No restore operation against a data set is done. DFSMShsm processing continues.

Application Programmer Response: If the reason code is 4 and the more recent physical full volume dump copy is desired, reissue the RECOVER command with the FROMDUMP(DUMPVOLUME) parameter for each extended format To find out the DUMPVOLUME which contains the physical full volume dump copy of the data set, issue a LIST command with the PVOL BCDS ALLDUMPS parameter to retrieve the information about dump copies and dump volumes of the primary volume. Then issue LIST commands with DVOL DUMPCONTENTS to retrieve the information about the dump copies of the data set. If the data set no longer exists before the restore, the data set must be cataloged by the user after all extended formats are restored. Neither DFSMSdss nor DFSMShsm catalogs the multivolume extended format data set during physical dump copy restore processing.

ARC0783I DATA SET *dsn1* RENAMED TO *dsn2* IN PREPARATION FOR RECOVERY

Explanation: Data set *dsn1* is temporarily renamed to *dsn2*. When the recovery is successful, the renamed data set is deleted. This allows the data set to be renamed back to its original name if the recovery is unsuccessful. This message is for informational purposes only.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0785E CATALOG OF DATA SET {*dsname*} ON VOLUME MIGRAT FAILED, CATALOG RETURN CODE = {*catrc*}, CATALOG REASON CODE = {*catreas*}

Explanation: RECALL processing of a VSAM data set failed. The data set was uncataloged by DFSMShsm before the RECALL was attempted. DFSMShsm was trying to recatalog the cluster name or one of the cluster's object or path names as being on the volume MIGRAT but the recatalog fails.

Source: DFSMShsm

System Action: RECALL processing ends. DFSMShsm processing continues.

Application Programmer Response: It is necessary to find out which objects need to be recataloged. To find this information, do the following:

1. Use the FIXCDS command to display the MCD record for the migrated VSAM data set.
2. Using the field MCDMCANM in the MCD record as the key, use the FIXCDS command to display the MCO record for the data set (if an MCO record exists).
3. Using the object names that exist in the MCO record, or just using the base cluster name if an MCO record does not exist, use the TSO LISTCAT command to list the catalog entry for the object name(s).
4. For any entry name that does not have a non-VSAM catalog entry with a volume serial number of MIGRAT, use the AMS DEFINE non-VSAM command to create a catalog entry for the object with a volume serial number of MIGRAT.
5. RECALL processing of the data set should be attempted using any of the object names that are now cataloged properly.

ARC0786I IMPORT FAILED TWICE FOR IDC3351I RC28 ON {RECALL | RECOVER} FOR DATA SET *dsname*, {RECALL | RECOVER} WILL BE RETRIED AFTER INCREASING THE PRIMARY OR SECONDARY SPACE QUANTITY.

Explanation: IDCAMS IMPORT command processing of this data set fails twice with message IDC3351I RC28. After the first failure, message ARC0769I is issued and IMPORT processing is retried without the FREESPACE parameter. Message ARC0786I is received if the retry without FREESPACE specified fails with message IDC3351I RC28. The second failure indicates that maximum extents are exceeded during IMPORT processing. If the data set has secondary allocation, the redrive indicated by ARC0786I will increase the secondary allocation amount. If the data set has zero secondary allocation, then the IMPORT is redriven with a larger primary allocation amount.

Source: DFSMShsm

System Action: Retry RECALL or RECOVERY processing of this data set after increasing the space allocation (primary or secondary).

If the retry is successful, determine the current allocation of the data set. If the allocation needs to be changed, take the appropriate action. For DB2-type VSAM data sets, some action may be required for full usability. Verify if VSAM data sets created by other products require changes. If the retry fails after message ARC0786I instructions are completed, see message ARC1155I.

ARC0787I *nnnn* DATA SET RECOVER REQUESTS SCHEDULED FOR VOLUME *volser*

Explanation: For volume recovery requests, all data sets requiring recovery were identified and scheduled. For volume restore with APPLYINCREMENTAL processing, the restore from dump was completed and all data sets requiring recovery from incremental backups were identified and scheduled. The volume serial number of the volume recovered is *volser*. If the DASD volume was in DISALL status, it may now be enabled.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: This message indicates that requests only were scheduled and not success or failure. When all scheduled requests complete, message ARC0773I is issued.

ARC0788I BACKUP OF VOLUME *volser* TERMINATED, ERROR OPENING BACKUP TAPE DATA SET

Explanation: DFSMShsm attempted to process the volume with volume serial number *volser*. An attempt to open the backup tape data set failed.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Operator Response: Notify the storage administrator, who can determine the cause of the failure and schedule a BACKVOL request, if necessary.

Application Programmer Response: None.

ARC0788I BACKUP OF VOLUME *volser* TERMINATED, ERROR OPENING BACKUP TAPE DATA SET

Explanation: DFSMShsm attempted to process the volume with volume serial number *volser*. An attempt to open the backup tape data set failed.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator, who can determine the cause of the failure and schedule a BACKVOL request, if necessary.

Operator Response: None.

Application Programmer Response: None.

ARC0789I *func* ENDED ON STORAGE GROUP *sg*, TIME *hh:mm:ss*

Explanation: DFSMShsm storage group *sg func*. This message indicates only completion of the *func* and not success or failure. All scheduled *func* requests were attempted. Examine all associated output to determine success or failure.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: None.

Application Programmer Response: None.

ARC0790E TAPES ARE NOT AVAILABLE FOR USERID *userid funct* REQUEST. DSN=*dsname*, VOLSER(S)=*xx*, *xx, ...*

Explanation: DFSMShsm receives a cancel request from the OAM CBRUXVNL exit or message ARC0962A. For message ARC0962A, the operator is given the opportunity to cancel because the tape needed for the function does not have the same tape library status or storage group. The message ARC0790E is written only to the system console.

- USERID is the user ID of the command requester.
- FUNCT is the function DFSMShsm is performing.
- DSN is the data set processed for a data set command. DSN is the tape data set name for the RECOVER VOLUME FROMDUMP function. DSN can be set to *** for volume functions other than RECOVER VOLUME FROMDUMP.
- VOLUME is the list of the tape volumes needed to satisfy the function command. The list may include up to a maximum of twelve volumes.

This message is received for any instance of DYNAMIC ALLOCATION return code of ‘9704’x.

Source: DFSMShsm

System Action: All DFSMShsm processing outside of this task continues. If a data set function is processing, it fails. If a volume function is processing, it continues with the next eligible volume.

Application Programmer Response: If message ARC0926A is received or the failure is from the OAM CBRUXVNL exit during allocation processing, all of these tapes have to be placed in the same tape library and storage group or all of these tapes have to be removed from the library. If the DARC=‘9704’x is received and the CBRUXVNL exit does not cancel the request, follow the procedures for DARC=‘9704’x allocation error.

ARC0791I ALL *nn* VOLUME *func* REQUESTS SCHEDULED FOR STORAGE GROUP *sg*, TIME *hh:mm:ss*

Explanation: For *func* requests for storage group *sg*, all volumes eligible for *func* were identified and scheduled. *nn* is the number of scheduled volumes, and *hh:mm:ss* is the time that all MWEs are scheduled.

If *nn* is 0, no volume in the storage group was eligible.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0792I BACKVOL CDS COMMAND FAILED DUE TO INCOMPATIBLE PARAMETERS

Explanation: Whenever DFSMShsm control data sets are accessed in record level sharing mode, DFSMSdss must be the specified datamover and the PARALLEL parameter must be specified if the backup is directed to tape. One or both of these conditions was not met.

System Action: BACKVOL CDS command processing ends. DFSMShsm processing continues.

Application Programmer Response: If DFSMShsm has been specified as the datamover, then reenter the command with DATAMOVER(DSS). If the backup is being directed to tape, then specify BACKUPDEVICECATEGORY(TAPE(PARALLEL)). Use the parameters of the SETSYS CDSVERSIONBACKUP command to make the CDS version backup environment compatible with record level sharing mode processing.

ARC0793I CDS VERSION BACKUP ENVIRONMENT OVERRIDDEN

Explanation: Automatic CDS version backup was started while the control data sets were accessed in record level sharing mode. In record level sharing mode, DFSMSdss must always be the specified data mover, and PARALLEL must be specified if the backup is directed to tape. One of both of these conditions was not met but was overridden with the necessary value.

System Action: CDS version backup processing continues, using DFSMSdss as the datamover and the PARALLEL parameter. DFSMShsm continues processing.

Application Programmer Response: Use the optional parameters of the SETSYS CDSVERSIONBACKUP command to make the CDS version backup environment compatible with record level sharing mode processing. To make DFSMSdss the datamover, specify SETSYS CDSVERSIONBACKUP(DATAMOVER(DSS)). If the backup is to be directed to tape, specify SETSYS CDSVERSIONBACKUP (BACKUPDEVICECATEGORY (TAPE(PARALLEL))). If both of these changes are needed, specify both of the optional parameters in the same SETSYS CDSVERSIONBACKUP command.

ARC0794I INCONSISTENT PARAMETERS SPECIFIED ON THE BACKVOL CDS COMMAND.

Explanation: The BACKVOL CDS command has been specified with DATAMOVER(DSS) without the BACKUPDEVICECATEGORY parameter and the DFSMShsm CDS version backup environment indicates TAPE(NOPARALLEL). If DATAMOVER(DSS) is specified, CDS version backup must run in PARALLEL.

Source: DFSMShsm

System Action: DFSMShsm continues to process; the BACKVOL CDS command processing ends.

Application Programmer Response: Reenter the BACKVOL CDS command with BACKUPDEVICECATEGORY(DASD) or BACKUPDEVICECATEGORY(TAPE(PARALLEL)) parameter. The SETSYS command can also be use to change the CDS version backup environment.

ARC0795I CHANGING ENVIRONMENT TO BE CONSISTENT WITH DATAMOVER(DSS).

Explanation: The SETSYS CDS command was specified with DATAMOVER(DSS) without the BACKUPDEVICECATEGORY parameter and the DFSMShsm CDS version backup environment indicates TAPE(NOPARALLEL). If DATAMOVER(DSS) is specified CDS version backup must run in PARALLEL.

Source: DFSMShsm

System Action: DFSMShsm continues to process; the DFSMShsm environment is changed to TAPE(PARALLEL).

Application Programmer Response: Informational only.

ARC0796I JOURNALING MUST BE DISABLED, COMMAND IGNORED.

Explanation: The BACKVOL CDS(NULLJOURNALONLY) command was entered, but the journal is currently active. The NULLJOURNALONLY parameter of the BACKVOL command can only be issued if journaling is disabled.

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Application Programmer Response: Informational only.

ARC0797I {NO | MORE THAN 30} STORAGE GROUPS WERE LISTED IN THE BACKVOL COMMAND

Explanation: A BACKVOL command was issued for storage groups, but either no storage groups or more than 30 storage groups were listed in the command. If more than 30 are listed, only the first 30 storage groups are processed.

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Application Programmer Response: Correct the BACKVOL command to specify at least one, but no more than 30 storage groups.

ARC0798E TAPE(S) CONTAINING NEEDED DATA NOT AVAILABLE.

Explanation: The tape volumes needed for the DFSMShsm function cannot be allocated.

Source: DFSMShsm

System Action: All DFSMShsm processing outside of this task continues. If the function is processing at a data set level, then that data set fails and processing continues with the next data set. If a volume function is processing, it continues with the next eligible volume or volume set.

Application Programmer Response: Contact your operator to determine the availability of tape volumes needed. Operations should check the ARC0790E message issued to the console for a list of volumes needed.

ARC0799I CDS BACKUP ENDING BECAUSE QUEUED JOURNAL ENTRIES DID NOT FINISH

Explanation: The CDS BACKUP function must wait for all queued journal entries to finish before it can start. If this does not occur within a time limit, the CDS BACKUP fails.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Run CDS BACKUP again. If the SETSYS JOURNAL option is SPEED, consider changing it to RECOVERY. This will minimize queued journal entries. If the option is already RECOVERY and you decide to contact IBM service, save the SNAP dump for analysis.

ARC0801I DFSMSHSM AUDIT STARTING

Explanation: DFSMShsm AUDIT command processing is in process.

Source: DFSMShsm

System Action: AUDIT processing continues.

Application Programmer Response: None.

ARC0802I DFSMSHSM AUDIT ENDING

Explanation: DFSMShsm AUDIT command processing has ended.

Source: DFSMShsm

System Action: Normal DFSMShsm activities resume without any intervention.

Application Programmer Response: None.

ARC0803A WARNING: AUDIT OF CATALOG MAY DEGRADE PERFORMANCE, REPLY ‘Y’ TO START AUDIT OR ‘N’ TO CANCEL AUDIT COMMAND

Explanation: DFSMShsm received a request to audit a user or master catalog with the FIX parameter. This type of audit request causes an exclusive enqueue on the migration, backup, and offline control data sets. In a multiple processing unit environment, a hardware RESERVE is issued for the resource, which stops all other DFSMShsm processing during the audit.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The audit request is not processed unless the operator responds with Y.

Operator Response: Reply Y to continue audit processing or N to cancel audit processing.

Application Programmer Response: None.

ARC0804I AUDIT OF CATALOG CANCELLED BY OPERATOR

Explanation: A request to DFSMShsm to audit a user or master catalog was cancelled. The operator response to message ARC0803A was not Y.

Source: DFSMShsm

System Action: Other DFSMShsm processing continues.

Application Programmer Response: Reissue the AUDIT command at a time when DFSMShsm activity is minimal.

ARC0805I I/O ERROR OCCURRED DURING READING OF VTOC ON VOLUME *volser*

Explanation: During processing of the AUDIT command, DFSMShsm successfully opened the volume table of contents (VTOC) on a volume for a read operation. However, a permanent I/O error occurred during the reading of the VTOC. The volume serial number of the volume is *volser*.

Source: DFSMShsm

System Action: The AUDIT command ends. Other DFSMShsm processing continues.

Operator Response: Respond to the associated I/O error message. Retry the AUDIT command when the problem has been fixed.

Application Programmer Response: None.

ARC0806I OPEN OF VTOC FOR VOLUME *volser* **FAILED**

Explanation: While performing an audit request on a primary, backup, or migration volume, DFSMShsm could not read the volume table of contents (VTOC) for the volume. There was an open failure. The volume serial number of the volume is *volser*.

Source: DFSMShsm

System Action: The audit request for the volume ends. Other DFSMShsm processing continues.

Operator Response: Respond to any associated I/O error message and reissue the audit request. If the error persists, there is probably an I/O error, or data on the VTOC has been damaged. Notify the storage administrator for assistance.

Application Programmer Response: None.

ARC0807I INSUFFICIENT SPACE FOR READING VTOC OF VOLUME *volser*

Explanation: DFSMShsm received a request to audit a volume (or list of volumes) or to migrate a volume. The space necessary for the read of the VTOC of the volume with the volume serial number *volser* could not be obtained with the GETBUF macro.

Source: DFSMShsm

System Action: The audit or migration request ends. Other DFSMShsm processing continues.

Application Programmer Response: Reissue the AUDIT command for the volume identified by *volser*. For migration of a volume, issue a MIGRATE command with the VOLUME parameter for the volume identified by *volser* in the message.

If the problem persists, increase the region size for DFSMShsm.

ARC0808I UNABLE TO AUDIT VOLUME *volser*

Explanation: DFSMShsm received a request to audit the volume with volume serial number *volser*. AUDIT processing not be performed because of one of the following conditions:

- The volume was not mounted.
- The volume is not known to DFSMShsm. The volume may be either SMS-managed or non-SMS-managed, but there is no ADDVOL for the volume.
- The volume has not been assigned by DFSMShsm as a daily backup or SPILL backup.

Source: DFSMShsm

System Action: The audit command ends. DFSMShsm processing continues.

Operator Response: Mount the necessary volume if requested to do so.

Application Programmer Response: If the volume is non-SMS-managed, make sure the volume is known to DFSMShsm. If the volume is SMS-managed, use the IDCAMS DIAGNOSE command to check the volume for inconsistencies.

ARC0809I BVR *bvrkey* **IS IN USE BY ANOTHER HOST. AUDIT PROCESSING CONTINUES**

Explanation: An AUDIT command of some or all backup volumes is being processed. The processing unit identifier in the backup cycle volume record (BVR) is not zero, meaning the BVR *bvrkey* is enqueued by another processing unit. This might result from the processing unit failing before being able to release the enqueue on the record, or another DFSMShsm function, such as backup, is running. AUDIT processing continues.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the processing unit failed before being able to release the enqueue, the processing unit identifier will be set to zero the next time DFSMShsm is started up in that processing unit, or a LIST HOST command with the RESET parameter can be issued to remove the processing unit ID from the record. If backup is running, the results of the AUDIT processing may be invalid.

ARC0810I AUDIT DSN/LEVEL REJECTED - NO DSNAME OR LEVEL QUALIFIER

Explanation: An AUDIT command was issued with the DATASETNAMES or LEVELS parameter. The data set name or qualifier was not specified.

Source: DFSMShsm

System Action: DFSMShsm processing continues by processing the next parameter for this AUDIT command.

Application Programmer Response: Supply the data set name or qualifier and reissue the command.

ARC0811I LIST BACKUPCONTENTS FOR INCREMENTAL VTOC COPY DATA SET ON A BACKUP VOLUME CANNOT BE DONE

Explanation: The LIST command was issued with the primary volume (PVOL) and BACKUPCONTENTS parameters. The specified volume has not been incrementally backed up by DFHSM 2.3.0 and does not have an incremental VTOC copy data set available on a migration level 1 volume. (Before DFHSM 2.3.0, VTOC copy data sets were kept on backup volumes.) Listing the VTOC copy data set is only supported when it is created on a migration level 1 volume by DFHSM 2.3.0 or a subsequent release. This message can also be issued if the volume has been dumped, but never backed up.

Source: DFSMShsm

System Action: The LIST command ends. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0812I LIST DUMPCONTENTS IGNORED, NO OR INVALID SOURCE VOLUME SPECIFIED

Explanation: The LIST DUMPVOLUME command was issued for all dump volumes or for a specific dump volume. The DUMPCONTENTS parameter was specified. One or more of the listed dump volumes has two or more valid stacked dump copies. Either the DUMPCONTENTS parameter specified no source volume serial number, or there is no dump copy of the specified volume serial number on the listed dump volume or volumes.

Source: DFSMShsm

System Action: DFSMShsm lists the dump copies on the dump volumes without listing the contents of any dump copy.

Application Programmer Response: From the listing of the dump volumes, determine the source volume for which the dump contents are wanted. Reissue the LIST command with the correct volume serial number specified for the DUMPCONTENTS parameter.

ARC0813I INCOMPLETE AUDIT OF {CATALOG *catalogname* | {MIGRATION | BACKUP} CDS | VOLUME *volser* | {PRIMARY AND MIGRATION | ML2} VOLUMES | {BACKUP | SPILL | UNASSIGNED} VOLUMES | DAY *dayid* | TAPE *volser* | DATASET *dsname*}, RC=*retcode*, REAS=*reascode*

Explanation: An AUDIT command has been issued to audit the item specified in the message. During AUDIT processing, an error has occurred.

The values for *retcode* are:

Retcode	Meaning
0	Normal completion; list ready for processing.
2	An error has occurred while trying to read a record from a control data set. See the *reascode* for the cause of the read failure.
4	A partial audit has been completed because of a LOCATE failure. See *reascode* for the cause of the LOCATE failure.
6	Control data set positioning has failed. See *reascode* for the cause of the positioning failure.

When the *retcode* is 4, the *reascode* is the failing return code from the LOCATE request. The return codes listed below have the following actions:

For *retcode* 2 or 6, the values for *reascode* are:

Reascode	Meaning
0	An AUDIT command has been issued for a specific volume. No volume record is found for the volume.
4	Key is not found. If the audit requested is for a backup day, this reason code could indicate that the key specified is greater than the defined backup cycle.
8	Control interval in use.
12	Work area is not large enough.
16	A physical error has occurred.
20	A logical error has occurred.
22	OCDS has not been defined.
24	BCDS has not been defined.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: For return code 4, see *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009I.

ARC0814I LIST {USER | TTOC | DATA SETS | VOLUME | BACKUPVOLUME | PRIMARYVOLUME | DUMP VOLUMES | DUMP CLASSES | AGGREGATE} PROCESSING TERMINATING EARLY, RC=*retcode*

Explanation: A LIST or HLIST command ended before normal completion of the requested function. The LIST command was issued with one of the following parameters: USER, TTOC (tape table of contents), DATASETNAME (migrated data sets or backed up data sets), VOLUME (migration and primary volumes), BACKUPVOLUME, PRIMARYVOLUME, DUMPVOLUME, or DUMPCLASS, or AGGREGATE. The reason for an early end is explained as determined by the *retcode*.

The values for *retcode* are:

Retcode	Meaning
1	An I/O error occurred in scanning DFSMShsm control data set records.
2	The LIST command was held, DFSMShsm was being shut down, or a TSO attention interrupt was issued from the terminal from which the command was issued.
3	A GETMAIN error occurred. For a list of the backup contents of a VTOC copy data set, storage is needed to hold all the records from this data set.
4	An error occurred in allocating a VTOC copy data set for BACKUPCONTENTS request processing.
5	An error occurred in opening a VTOC copy data set for BACKUPCONTENTS request processing.
6	An error occurred in reading a VTOC copy data set for BACKUPCONTENTS request processing.
7	An error occurred in reading a DGN record to determine the dump volume serial numbers associated with the dump.
8	DFSMShsm was unable to list the data sets having the TSO user's identification as the high-level qualifier. As an example, this may be caused by specifying NOPREFIX in the user's TSO profile.
9	An error occurred in processing your request. Refer to previously issued ARC0184I messages and *retcode* for further explanation of the errors.
12	An error occurred in retrieving the library name for a tape volume. Check the command activity log for messages.
13	Inconsistent parameters were used in the LIST command; for example, requesting a list of BCDS entries for a primary volume and specifying a migration volume for the volser (LIST PVOL (migration volser) BCDS).

Source: DFSMShsm

System Action: LIST command processing ends. DFSMShsm processing continues.

Application Programmer Response: If an I/O error occurred, see the preceding ARC0187I message or the ARC0184I message for the appropriate response. If a GETMAIN failure occurred, try the command again.

If the VTOC copy data set could not be accessed, or an error occurred in accessing a DGN record, resubmit the command after corrective action has been taken or the error has been identified as nonrecurring.

ARC0815I HOSTID=*procid* FOUND IN DFSMSHSM CONTROL DATA SET RECORD, TYPE=*rtype*, KEY=*rkey*

Explanation: A LIST command was issued with the HOST parameter to list DFSMShsm control data set records that are serialized with *procid*. A control data set *rtype* record with key *rkey* was found to be serialized by *procid*. This message is issued for each serialized record found.

Source: DFSMShsm

System Action: LIST processing continues. DFSMShsm processing continues.

Application Programmer Response: If the processing unit is not operational and you want to remove the processing unit ID from the DFSMShsm records, issue the LIST HOST (*hostid*) RESET command.

ARC0816I NO DFSMSHSM CONTROL DATA SET RECORDS FOUND CONTAINING HOSTID=*procid*

Explanation: A LIST command was issued with the HOST parameter to list control data set records that were serialized with *procid*. No serialized DFSMShsm control data set records were found.

Source: DFSMShsm

System Action: LIST processing ends. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0817I HOSTID=*procid* FOUND IN DFSMSHSM CONTROL DATA SET RECORD, TYPE=*rtype*, KEY=*rkey*, RESET {SUCCESSFUL | FAILED}

Explanation: A LIST command was issued with the HOST and RESET parameters to list the control data set records that are serialized with *procid* and to reset the processing unit identifier field in the listed records. A control data set *rtype* record with key *rkey* was found to be serialized by *procid*, and the reset function on that record was either successful or failed as indicated in the message. This message is issued for each serialized record found.

Note: When the record type is V, the volume as well as the SDSP serialization information is reset.

Source: DFSMShsm

System Action: LIST processing continues. DFSMShsm processing continues. If the reset failed, the processing unit identifier field in the listed record is not nulled.

Application Programmer Response: If the reset failed, notify the system programmer. See the preceding messages for the reason for the failure. After the problem is corrected as described in the preceding messages, reissue the LIST command.

ARC0825D RECYCLE TAPE LIST CREATED, DSN=*dsname*. DO YOU WISH TO CONTINUE? REPLY 'N' TO STOP RECYLE OR 'Y' WHEN READY TO MOUNT TAPES.

Explanation: Because a RECYCLE command has the EXECUTE and TAPELIST parameters specified, DFSMShsm writes the tape list output into a data set or SYSOUT file and deallocates the data set. While preventing this or another host from trying to recycle the same category of tape volumes, DFSMShsm allows the tape operator to use this tape output to retrieve nonempty tapes before requesting that they be mounted on the tape drives.

Source: DFSMShsm

System Action: No tapes of the specified category are recycled until the operator responds with 'Y'.

Application Programmer Response: Reply 'Y' to continue recycle processing when you have the first pull group of nonempty tapes available for mounting and recycling. Reply 'N' to end the recycling of the specified volume category.

ARC0830I RECYCLE COMMAND PROCESSING STARTING

Explanation: A RECYCLE command has started to process.

Source: DFSMShsm

System Action: RECYCLE processing continues.

Application Programmer Response: None.

ARC0831I RECYCLE COMMAND PROCESSING ENDING

Explanation: The RECYCLE command has completed processing.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0832I RECYCLE STARTING ON VOLUME *volser* AT *time* ON *date* SYSTEM *sysid*

Explanation: RECYCLE command processing of the volume *volser* has started. The volume serial number of the volume being recycled is *volser*. The time of day the RECYCLE processing began is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). The date of RECYCLE processing is *date*, expressed *yy*/*mm*/*dd* (year, month, day). The SMF system identifier of the system on which the RECYCLE is processing is *sysid*.

Source: DFSMShsm

System Action: RECYCLE processing of the volume proceeds.

Application Programmer Response: None.

ARC0833I RECYCLE ENDED ON VOLUME *volser*, *number* DATA SETS MOVED, TIME *time*, RC=*retcode*, REAS=*reascode*

Explanation: RECYCLE processing of volume *volser* has ended. The time of day RECYCLE processing ended is *time*, expressed as *hh*:*mm*:*ss* (hours, minutes, seconds). *number* is the number of data sets that were moved from the volume to selected output tape volumes as indicated in the associated ARC0734I messages. For *retcode* values, see Table 19 on page ARC-289. The *reascode* is either the TCB completion code if the task abnormally ended or the return code from the data mover subtask. The reason code is in hexadecimal.

Note: When RECYCLE processes a tape in which all data sets are no longer valid, this message indicates that zero data sets were moved. Zero is valid and does not represent a RECYCLE processing problem.

Source: DFSMShsm

System Action: See Table 19 on page ARC-289 for the system action related to the specific return code reported by this message.

Application Programmer Response: See the programmer response for the specific return codes reported by this message in Table 19 on page ARC-289.

ARC0834I Recycle TASK *id* **ENDING. RC=***return-code***, REAS=***reason-code***.**

Explanation: A recycle task is ending. The task is identified by *id* and can be a number between 1 and 15.

Source: DFSMShsm

System Action: Recycle processing for other recycle tasks continues. The following return code values explain the actions of the ending task and the actions required, if any, to correct the error: For return codes not listed below, see Table 19 on page ARC-289.

Retcode	Meaning
00	The task ended successfully.
23	This recycle task abended. The reason code is the ECB completion code. Respond to the preceding messages describing the abend.
24	This recycle task ended because there is no more work for it to do. This is a normal condition.
28	This task is ending because the operator requested a decrease in the number of recycle tasks.

Application Programmer Response: None.

ARC0835I RECYCLE TERMINATED EARLY, RC=*retcode***, REAS=***reascode*

Explanation: During RECYCLE command processing, an error or failure has occurred that has caused RECYCLE processing to end even though volumes remain that are eligible for recycling.

- If EXECUTE has been specified, the remaining volumes are not recycled.
- If EXECUTE TAPELIST has been specified and the tape lists have been produced but the operator's reply says not to continue recyling, no volumes are mounted and no data sets are moved for the specified tape category.
- If the VERIFY or the DISPLAY parameter has been specified, the remaining volumes are not listed.

For *retcode* values, see Table 20 on page ARC-292. For *reascode* values, see Table 19 on page ARC-289.

Source: DFSMShsm

System Action: See the system action for specific return codes. in Table 20 on page ARC-292.

Application Programmer Response: See the programmer response for specific return codes. in Table 20 on page ARC-292.

ARC0837I NO (ML2 | BACKUP) VOLUMES WERE FOUND TO BE ELIGIBLE FOR RECYCLE, CRITERIA USED=*percent%*

Explanation: A RECYCLE command has been issued that specifies the DAILY, SPILL, ML2, ALL or BACKUP parameter. The criterion is *percent.*

No volumes of the specified type are eligible for processing because DFSMShsm has detected one of the following situations:

- The specified percent-valid criterion has not been met for any volume.
- Each volume that has met the percent-valid criterion is ineligible for processing. For details about recycle eligibility, refer to *DFSMS/MVS DFSMShsm Storage Administration Guide*.

Source: DFSMShsm

System Action: Recycle processing ends. DFSMShsm processing continues.

Application Programmer Response: For eligibility information about a particular volume, issue the RECYCLE command with the DISPLAY parameters specifying the desired volume. For more information about recycle eligibility, refer to *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC0838I VOLUME *volser* **FULL={YES | NO}, PERCENT VALID=***pct***, VOLUME TYPE={ML2 | SPILL | DAILY(***day***) | UNASSIGNED}, FAILED RECYCLE={YES | NO}, DISASTER ALTERNATE={YES | NO}, FAILED CREATION={YES | NO}**

Explanation: During the processing of a recycle request for a specific volume, the information requested is displayed. If a volume belongs to a connected set, there will be an ARC0838I message for each volume in the set.

FULL=NO indicates that the tape is not yet marked full and may receive more data.
pct is the percentage of valid blocks of data on the tape volume.
DAILY, SPILL, ML2, or UNASSIGNED is the DFSMShsm volume category of *volser*.
day is the day in the backup cycle to which the volume belongs if it is a daily backup volume.
FAILED RECYCLE=YES indicates that this volume has failed a previous recycle attempt.
DISASTER ALTERNATE=YES indicates that the tape has a disaster alternate copy.
FAILED CREATION=YES indicates a mismatch between the number of data sets on the volume as recorded in the OCDS TTOC record and the actual number of data sets residing on the volumes.

Source: DFSMShsm

System Action: This message is the normal result of a RECYCLE DISPLAY request. However, if the EXECUTE parameter was specified, DFSMShsm has determined that the tape is ineligible for processing. Refer to ARC0445I message that follows.

Application Programmer Response: For more information about the volume *volser*, issue a LIST or HLIST command with the TTOC parameter and specify the volume.

When FAILED CREATION=YES, the extended AUDIT MEDIACONTROLS command should be used to resolve the missing TTOC data set entries for the tape volume *volser.* If a data check or an invalid file block identifier is encountered by AUDIT MEDIACONTROLS, the RECYCLE command can be issued with the FORCE parameter. Recycle processing will invalidate data sets that encounter a data check or invalid file block identifier. For information on extended AUDIT MEDIACONTROLS and RECYCLE FORCE, see the *DFSMS/MVS DFSMShsm Storage Administration Reference*. See the *DFSMS/MVS DFSMShsm Storage Administration Guide* for the procedure for handling inconsistencies between tape media contents and OCDS TTOC records.

ARC0839I RECYCLE TASK *id* COULD NOT BE STARTED. RC=*return-code*, REAS=*reason-code*.

Explanation: A recycle task cannot be started. The task is identified by *id* and is a number between 1 and 15.

Source: DFSMShsm

Retcode	Meaning
52	A GETMAIN error has occurred. DFSMShsm has failed to get virtual storage for the YQE.
90	A failure occurred trying to attach this recycle task. The reason code is the return code from MVS.

System Action: If the task *id* is 1, then recycle processing ends. If the task *id* is not 1, then recycle processing continues with a reduced number of tasks. DFSMShsm processing continues.

Application Programmer Response:

Retcode	Meaning
52	See the preceding ARC0305I message for the specific failing code.
90	See message ARC0090I for a further explanation of the error.

ARC0840I MAXRECYCLETASKS=*ytasks*, RECYCLE INPUT DEALLOCATION FREQUENCY BACKUP=*bfreq*, MIGRATION=*mfreq*.

Explanation: A DFSMShsm QUERY command was issued with the SETSYS parameter. The maximum number of recycle tasks allowed to process concurrently is *ytasks.* When processing backup tapes, the input drive is deallocated for every *bfreq* recycled connected sets, per task. When processing migration tapes, the input drive is deallocated for every *mfreq* recycled connected sets, per task. If either *bfreq* or *mfreq* is zero, then the input drive is not deallocated during recycle processing of that category.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ARC0841I RECYCLED NET *number* {BACKUP | ML2} VOLUMES TOWARD A LIMIT OF *limit*.

Explanation: A DFSMShsm QUERY command was issued with the ACTIVE parameter. This message identifies the net number of volumes freed by the currently active RECYCLE command, and the LIMIT specified in the RECYCLE command.

The net *number* of volumes freed is computed as the number of volumes freed minus the number of volumes used for output for the category mentioned.

not specify a limit.

Source: DFSMShsm

System Action: Processing continues.

Application Programmer Response: None.

ARC0842I {INPUT | OUTPUT} VOLUME(S) DEALLOCATION FAILED DURING TERMINATION OF A RECYCLE TASK.

Explanation: During termination of a recycle task, an attempt to deallocate an outstanding allocation failed.

Source: DFSMShsm

System Action: If other recycle tasks are still active, then the recycle processing will continue. If this task was the last active task, recycle processing will end.

Application Programmer Response: Determine the cause of the deallocation failure from ARC0200I or ARC0208I messages in the command activity log. To free the allocated tape drive you must stop DFSMShsm.

ARC0843I RECYCLE COMMAND INVALID, 'VOLUME' OR 'CATEGORY OF VOLUMES' MUST BE SPECIFIED

Explanation: A RECYCLE command was issued without specifying the VOLUME or the type of volume to be processed. One must be specified.

Source: DFSMShsm

System Action: RECYCLE processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the RECYCLE command specifying the type of volume or the specific volume to be recycled.

ARC0844I RECYCLE COMMAND INVALID. 'EXECUTE', 'VERIFY', OR 'DISPLAY' MUST BE SPECIFIED

Explanation: A RECYCLE command has been issued without specifying the EXECUTE, VERIFY, or DISPLAY parameter. One must be specified.

Source: DFSMShsm

System Action: RECYCLE processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the RECYCLE command specifying the EXECUTE, VERIFY or DISPLAY parameter.

ARC0845I CONNECTED SET BEGINNING WITH VOLUME *volser* NOT RECYCLED. RC=*return-code*.

Explanation: A connected set beginning with the volume identified by *volser* was not recycled. The recycle of the connected set has ended. For *return code* values, see Table 19 on page ARC-289.

Source: DFSMShsm

System Action: See Table 19 on page ARC-289 for the system action related to the specific return code reported by this message.

Application Programmer Response: See the programmer response for specific return codes in Table 19 on page ARC-289.

ARC0846I {ML2 | SPILL | DAILY} TAPES ARE BEING RECYCLED BY ANOTHER HOST

Explanation: During tape selection of a generic recycle request, a tape group (ML2, Spill or Daily) was found to be already in process on another host. Only one host is allowed to recycle a tape group at one time.

Source: DFSMShsm

System Action: If RECYCLE ALL or RECYCLE BACKUP was specified, processing will continue for another group of tapes, if possible. Otherwise, recycle processing will end.

Application Programmer Response: Wait until the other host has completed before reissuing the recycle request.

ARC0847I RECYCLE INPUT VOLUMES FREED=*nnnn*, OUTPUT VOLUMES USED=*nnnn*.

Explanation: At the end of a RECYCLE EXECUTE command, this message is displayed, identifying the number of input volumes returned and the number of output volumes used. When PARTIALTAPE(REUSE) is in effect, the first output tape selected for each recycle task is not included in the number of output volumes used.

Source: DFSMShsm

Application Programmer Response: DFSMShsm processing continues.

ARC0849I RECYCLE COMMAND SELECTION CRITERIA INVALID

Explanation: A RECYCLE command has been issued that specifies the SELECT parameter. However, the SELECT parameter is invalid because DFSMShsm detected one of the following parse errors:

- SELECT was specified, but neither INCLUDE nor EXCLUDE was specified.
- SELECT and VOLUME were both specified, but SELECT is only valid on the generic RECYCLE command.
- INCLUDE or EXCLUDE, or both, were specified without a subparameter.
- The EXCLUDE ranges were not within the INCLUDE ranges.
- The RANGE parameter's subparameter has an invalid volser range specified; the beginning volser was specified after the ending volser.

Source: DFSMShsm

System Action: All other RECYCLE parse errors are detected and reported. RECYCLE processing ends. DFSMShsm processing continues.

Application Programmer Response: Correct any parse errors, and resubmit the command.

ARC0850I DFSMSHSM CONTROL DATA SET UPDATE STARTING

Explanation: An UPDATEC command was issued to combine entries in the journal data set with restored copies of the migration, backup, and offline control data sets. The update is in process. ARC0854I messages follow describing individual entries processed.

Source: DFSMShsm

System Action: DFSMShsm is put into emergency mode while the update is taking place. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0851I DFSMSHSM CONTROL DATA SET UPDATE COMPLETED {SUCCESSFULLY | UNSUCCESSFULLY}

Explanation: The UPDATEC command completed either successfully or unsuccessfully or an error occurred in processing the UPDATEC command. If the message indicates that the UPDATEC was completed successfully, the DFSMShsm control data sets were successfully updated. If the message indicates that the UPDATEC command was completed unsuccessfully, a previous message was issued indicating the error that occurred causing the UPDATEC command to be unsuccessful.

If the UPDATEC command was successful and if the HOLD command was previously issued, and no more UPDATEC requests are required, the RELEASE command can be issued. If a backup version of the newly updated control data sets is required, issue the BACKVOL command with the CONTROLDATASET parameter.

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Operator Response: If the DFSMShsm UPDATEC command completed successfully, issue the BACKVOL command with the CONTROLDATASET parameter if desired.

If the DFSMShsm UPDATEC command completed unsuccessfully, notify the storage administrator.

Application Programmer Response: See the previously issued error message ARC085*x*I or ARC0025I message and determine the cause of the UPDATEC error.

ARC0852I DFSMSHSM CDS UPDATE TERMINATED { I/O ERROR ON | INVALID } JOURNAL DATA SET

Explanation: During reading of the DFSMShsm journal data set, an I/O error occurred or an invalid journal data set was used. The UPDATEC command cannot finish processing successfully.

Source: DFSMShsm

System Action: The UPDATEC command ends. DFSMShsm processing continues without further journaling.

Operator Response: Notify the system programmer. If your installation procedures require the DFSMShsm journal data, shut down DFSMShsm.

Application Programmer Response: Correct the cause of the I/O error or the invalid journal data set, and rerun the UPDATEC command for the failing journal.

ARC0853I ERROR ALLOCATING JOURNAL - ***dsname***

Explanation: An attempt was made to allocate a DFSMShsm journal data set during processing of an UPDATEC command. The journal data set whose name is *dsname* could not be allocated.

Source: DFSMShsm

System Action: The UPDATEC command ends. DFSMShsm processing continues.

Application Programmer Response: After making sure that the DFSMShsm journal data set is available and cataloged, reissue the command.

ARC0854I ACTION=*action* RC=*retcode* TYPE=*type* KEY=*key*

Explanation: An UPDATEC command was issued to apply journal records to the restored copy of the control data set. Message ARC0854I is issued describing each journal record applied. The action is either INSERT, UPDATE, or DELETE. The return code from modifying the control data set is *retcode*. For *retcode* values, see Table 11 on page ARC-285. The control data set record type is *type*. The control data set record key is *key*.

Source: DFSMShsm

System Action: The UPDATEC command processing continues.

Application Programmer Response: If a nonzero return code is associated with the message, determine the cause of the error (see ARC0184I). Use the FIXCDS command to fix the CDS record.

ARC0855I MCDS, BCDS, OCDS, OR ALL - NOT SPECIFIED

Explanation: An UPDATEC command was issued without specifying which control data set DFSMShsm should update. You must specify MIGRATIONCONTROLDATASET, BACKUPCONTROLDATASET, OFFLINECONTROLDATASET, or ALL.

Source: DFSMShsm

System Action: The UPDATEC command fails. DFSMShsm processing continues.

Application Programmer Response: Be sure to specify on the UPDATEC command which control data set DFSMShsm is to update.

ARC0860E {MCDS | BCDS | OCDS | JOURNAL} SPACE MONITORING DISABLED - RC=*retcode*. MIGRATION, BACKUP, DUMP, AND RECYCLE HELD.

Explanation: An error occurred in either accessing the multiple-host processor control record (MHCR) in the migration control data set or in initially setting up space monitoring that disabled space monitoring of the specified data set. The return code *retcode* describes the error condition. For *retcode* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: DFSMShsm space monitoring of the migration control data set, backup control data set, offline control data set, or journal is disabled. The DFSMShsm functions of migration, backup, dump, and recycle are held.

Operator Response: When the problem has been corrected or the message is no longer needed, take the following action to delete the message:

- If the message identifier is not available, issue the DISPLAY R,I command to get the ID.
- To delete the message, issue the following command using the message identifier obtained from the above DISPLAY R,I command for the *id*:

  CONTROL C,I,*id*

Application Programmer Response: The problem with the multiple-host processor control record (MHCR) in the migration control data set should be corrected through the VSAM recovery process that is required. Note that while space monitoring is disabled, the multiple-host processor control record (MHCR) is not accumulating space use statistics. The record must be brought up to date by either deleting it (DFSMShsm creates a new one) or by issuing the SETSYS command specifying the MONITOR parameter with the NEWCOPY subparameter. In either case, DFSMShsm obtains space use data from the VSAM catalog. For a return code of 28, you might have to reallocate the data set using the IDCAMS EXPORT and IMPORT commands or copy it using the IDCAMS REPRO command. Note that in a multiple processing unit environment, the only way to ensure that the catalog space use statistics are accurate is to reallocate or copy the data set by using IDCAMS EXPORT and IMPORT commands or the REPRO command.

ARC0875I BASE TTOC RECORD FOR VOLUME *volser* INDICATES SOME TTOC RECORDS WERE NOT WRITTEN TO OCDS

Explanation: The AUDIT function has detected that this volume lists in-storage TTOC records that are not written to the OCDS. This allows the audit to fast forward to an indicated point on this tape volume, reducing the time required to audit this tape and restore the OCDS records.

Source: DFSMShsm

System Action: Audit processing continues.

Operator Response: None.

Application Programmer Response: None.

ARC0900I DFSMSHSM ERROR CODE *retcode* IN MODULE *modname* TYPE {LOG | SNAP | ABEND | FATAL | SNAP FAILED}

Explanation: A DFSMShsm error occurred. The module *modname* detected an error of the type indicated in the message text. The internal DFSMShsm error code is *retcode*. If the ESTAE exit processed the error, 900 (decimal) was added to the error code to identify that the ESTAE exit was invoked.

If TYPE is SNAP FAILED, *retcode* indicates the internal return code from the SNAP macro. However, when *retcode* is 0, the SNAP data set could not be opened. A SNAP failure always causes an abnormal end (abend) to occur.

If *retcode* is 9*nn*, an abend occurred after the return code was set to *nn*. If *nn* is nonzero, the explanation for *nn* depends on what function DFSMShsm was running.

Function	Explanation of Abend
Recovery/Recall	ARC11*nn*
Space Management	ARC12*nn*
Backup	ARC13*nn*

For example, if you receive a return code of 931 and you were running RECOVERY, message ARC1131I explains the return code that was set before the abend occurred.

Source: DFSMShsm

System Action: DFSMShsm ends only if the option is FATAL. Otherwise, DFSMShsm performs the option indicated in the message and continues processing. If the option is ABEND, DFSMShsm reinstates the terminating task after the dump.

Application Programmer Response: Investigate the error using the dump. Restart DFSMShsm if necessary. The system programmer can set a trap in the module for the particular DFSMShsm error code to examine system status the next time the error occurs.

ARC0901I DFSMSHSM DEBUG, MOD=*name*, CODE=*x*

Explanation: The module producing the message is *name*, and the debugging data is *x*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0902I MODULE ARCSPCNV CALLED WITH BAD DASD DEVICE CODE OF ‘xx.’X

Explanation: Module ARCSPCNV has been called with a device code (fourth byte of DEVTYP field) that is not one of the DFSMShsm-supported DASD device types defined in the DASD volume table.

Source: DFSMShsm

System Action: DFSMShsm processing continues, but substitutes the characteristics of a 3330 volume.

Application Programmer Response: This could be caused because of local modification of the DASD volume table.

ARC0903I VSAM CONTROL INTERVAL BUSY TOO LONG ON READ-FOR-UPDATE OF DFSMSHSM RECORD TYPE=*type*, KEY=*key*

Explanation: DFSMShsm was attempting to read a record for update from one of its control data sets and received a control-interval-busy status from VSAM. DFSMShsm retried the read for update every second for 5 minutes and got the same result.

Source: DFSMShsm

System Action: DFSMShsm has failed to read the record. The DFSMShsm function running at the time has probably failed as well. See subsequent messages regarding the status of the DFSMShsm function. DFSMShsm processing continues.

Application Programmer Response: Determine whether this is a VSAM error or the result of a previous abnormal end when the control interval was in use. If the record being accessed is one critical to DFSMShsm, the control interval can be released by stopping all DFSMShsms that share the control data sets and then restarting them.

ARC0904I VSAM CONTROL INTERVAL BUSY TOO LONG ON THE WRITE OF DFSMSHSM RECORD TYPE=*type*, KEY=*key*

Explanation: DFSMShsm was attempting to write a record to one of its control data sets and received a control-interval-busy status from VSAM. DFSMShsm attempted to write the record every second for 30 seconds and got the same result.

This message can also occur if DFSMShsm was requested to shut down while the retries were occurring. In this case, there might not be an error.

Source: DFSMShsm

System Action: DFSMShsm has failed to write the record. The DFSMShsm function running at the time has probably failed as well. See subsequent messages regarding the status of the DFSMShsm function. DFSMShsm processing continues.

Application Programmer Response: Determine whether this is a VSAM error or the result of a previous abnormal end when the control interval was in use. If the record being accessed is critical to DFSMShsm, the control interval can be released by stopping all DFSMShsms that share the control data sets and then restarting them.

ARC0905E ERROR UPDATING DATA SET VTOC ENTRY FOR *dsname*, RC= *retcode*

Explanation: An error occurred during BACKUP. The CONCURRENT COPY function was used and the data-set-changed indicator was turned off when the concurrent copy session was established. After the backup failed, the error recovery path attempted to reset the data-set-changed indicator back ON, but the update of the data set VTOC entry failed. As a result, the data-set-changed indicator remains off and the data set does not have a valid current backup copy.

The request to the common VTOC access facility (CVAF) to write the data set VTOC entry failed. The return code is the contents of register 15 on return from CVAF. Refer to the *DFSMS/MVS DFSMSdfp Advanced Services* (Return Codes from CVAFDIR), for a description of the return code.

Source: DFSMShsm

System Action: None. DFSMShsm processing continues.

Application Programmer Response: Either reset the data-set-changed indicator to on so a backup is made the next time AUTOBACKUP runs, or issue a command to backup the data set. If the problem still exists, notify the storage administrator.

ARC0909E (MCDS CONTROL | BCDS CONTROL | OCDS CONTROL | JOURNAL) DATA SET IS ABOUT *percent*% FULL

Explanation: The percentage of space used in the migration control data set (MCDS), backup control data set (BCDS), offline control data set (OCDS), or journal data set is *percent*. The installation-specified threshold for space were exceeded. This threshold is specified as *thresh* on the SETSYS MONITOR command. When the specified threshold exceeds, DFSMShsm issues this attention message.

Note: If a number is concatenated to the control data set name (such as MCDS2), then the message refers to a single volume of a multicluster CDS.

The numerator is the amount of space between the beginning of the data set and the high-used point in the data set. For the control data sets, DFSMShsm does not subtract the free space below the high-used point because it can still exist when VSAM indicates the data set full. For example, there can be free space in some control intervals (CI) and control areas (CA) below the high-used point in a key-sequenced data set (KSDS). However, an insert of a new logical record may still get a return code indicating an out-of-space condition if there is no more space available above the high-used point in the KSDS. Space utilization in a VSAM KSDS is dependent on the location of a new record insert. For example, space must be free in the CI or a CI must be free in the CA where VSAM performs the insert. Otherwise, VSAM tries to obtain a new CA after the high-used point to split the current CA.

The denominator is the total space available in the data set, which is the amount of space between the beginning and the end of the data set (high-allocated).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: Notify the system programmer or storage administrator.

Application Programmer Response: Issue a QUERY command specifying the CONTROLDATASETS parameter to determine additional information about the data set in question. If you want to change the threshold at which DFSMShsm issues this message, use the SETSYS command with the MONITOR parameter to respecify the threshold.

If the DFSMShsm journal data set is full enough to require action, begin automatic backup processing by either using the SETSYS command the AUTOBACKUPSTART parameter, or the BACKVOL command with the CONTROLDATASETS parameter. This creates backup copies of the MCDS, BCDS, OCDS, and nulls the journal data set to make all the space in it available. See the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

System Programmer Response: If the MCDS, BCDS, or OCDS is full enough to require action, DFSMShsm should be shut down.

Prior to a DFSMShsm shutdown, there are some options you can use:

- Delete old or unneeded records, such as old statistics records, by using the DELETE parameter of the FIXCDS or REPORT command.
- Run migration cleanup using the SETSYS command with the SECONDARYSPMGMTSTART parameter and the DEFINE command with the SECONDARYSPMGMTCYCLE parameter.

After DFSMShsm shutdown:

- Reclaim fragmented space by performing an IDCAMS EXPORT and IMPORT of the data set or by copying the data set out and back using the IDCAMS REPRO command. If reclaiming fragmented space does not provide sufficient space, a larger control data set should be allocated.

ARC0910E DFSMSHSM {MCDS | BCDS | OCDS} IS FULL. REORGANIZE CDS. MIGRATION, BACKUP, DUMP, AND RECYCLE HELD.

Explanation: An attempt to write a record into one of the DFSMShsm control data sets has failed. This is because of a lack of space, a VSAM control area is full, or the control data set has attempted to extend to another volume that is not DEFINEd using the IDCAMS KEYRANGES parameter.

Source: DFSMShsm

System Action: The DFSMShsm functions of migration, backup, dump, and recycle are held. DFSMShsm processing continues. DFSMShsm will write another message, for example ARC0734I, to indicate the failed status of the backup, migration, or recycle request being processed when the condition occurs.

If DFSMShsm is processing a backup request, it retries the request one time. If the target volume for the backup request is a tape, that tape is marked full and another tape is selected for the retry.

If the ARC0910E message was received for the OCDS, reorganize the OCDS before you release functions that go to tape. If the backup function goes to DASD, and does not need tape, it will run without an OCDS. Primary Space Management will migrate data sets to migration level 1; however, those data sets that need to migrate directly to tape will fail. Migration will be limited to non-tape devices. Do not run recycle function without an OCDS that is defined and usable.

Operator Response: When the problem is corrected or the message is no longer needed, take the following action to delete the message:

- If the message identifier is not available, issue the DISPLAY R,I command to get the ID.
- To delete the message, issue the following command using the message identifier *id* obtained from the above DISPLAY R,I command:

  CONTROL C,I,*id*

Application Programmer Response: In a multiple processing unit environment, shut down DFSMShsm in the other processing units. Copy the data sets out and back, using the IDCAMS EXPORT and IMPORT command.

As an alternative, scratch the existing data sets, use IDCAMS to import a backup copy of the data sets, and then run the UPDATEC command to apply the journal data set. If this condition persists, you might have to reallocate the data sets with more space requested. If a backup tape has been marked full, that tape can be recycled.

For additional information, see *DFSMS/MVS DFSMShsm Storage Administration Reference* under the section “Maintaining DFSMShsm Control Data Sets,” and *DFSMS/MVS DFSMShsm Implementation and Customization Guide*.

ARC0911E (MCDS | BCDS | OCDS) INDEX DATA SET IS ABOUT *percent* % FULL

Explanation: The percentage of space used in the data set is *percent*. The installation-specified threshold for space was exceeded. This threshold is specified as *thresh* on the SETSYS MONITOR command. When the specified threshold exceeds, DFSMShsm issues this attention message.

Note: If a number is concatenated to the control data set name (such as MCDS2), then the message refers to a single volume of a multicluster CDS.

The numerator is the amount of space between the beginning of the data set and the high-used point in the data set.

The denominator is the total space in the data set, which is the amount of space between the beginning and the end of the data set (high-allocated).

Note: If the data set is defined so it can extend, the total space increases. Thus, DFSMShsm may issue this message more than once. DFSMShsm issues this message every time the percent drops below and then reaches the threshold. For this reason, DFSMShsm recommends that the data set be defined without secondary allocation. If the VSAM index data set is allowed to fill up and the index cannot extend, DFSMShsm performance degrades. This message indicates that the CDS must be reorganized and the size of the VSAM index must be increased.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: Notify the system programmer or storage administrator.

Application Programmer Response: Issue a QUERY command specifying the CONTROLDATASETS parameter to determine additional information about the data set in question. If you would like to change the current threshold, use the SETSYS command with the MONITOR parameter to respecify the threshold at which DFSMShsm should begin issuing this message.

If the MCDS, BCDS, or OCDS is full enough to require action, DFSMShsm should be shut down.

Prior to a DFSMShsm shutdown, there are some options you can use:

- Delete old or unneeded records, such as old statistics records, by using the DELETE parameter of the DFSMShsm FIXCDS or REPORT command.
- Run migration cleanup using the SETSYS command with the SECONDARYSPMGMTSTART parameter and the DEFINE command with the SECONDARYSPMGMTCYCLE parameter.

After DFSMShsm shutdown:

- Reclaim fragmented space by performing an IDCAMS EXPORT and IMPORT of the data set or by copying the data set out and back using the IDCAMS REPRO command. If reclaiming fragmented space does not provide sufficient space, a larger control data set must be allocated for the VSAM index.

ARC0920I ERROR ON POINT MACRO, BLOCKID= *blkid*, **RC=** *retcode*

Explanation: A SETSYS command has specified that the 3480 single-file format is being used.

DFSMShsm has issued a POINT macro to position to a block of data (*blkid*) on a 3480 tape volume. The POINT macro has failed. There are three possible return codes, as follows:

Retcode	Meaning
4	Does not support block ID.
8	Invalid input parameters are specified.
12	An I/O error has occurred for the LOCATE (*blkid*) command. The data set block is not found.

Source: DFSMShsm

System Action: The recall, recovery, or recycle fails. DFSMShsm processing continues.

Application Programmer Response: For more information about the POINT macro and its return codes, refer to *OS/390 MVS Programming: Authorized Assembler Services Guide* or *DFSMS/MVS Macro Instructions for Data Sets*.

ARC0921I ERROR ON NOTE MACRO, RC= *retcode*

Explanation: A SETSYS command has specified that the 3480 single-file format is being used. DFSMShsm has issued a NOTE macro for a 3480 tape volume. The NOTE macro has failed. There are three possible return codes:

Retcode	Meaning
4	Does not support block ID.
8	Invalid input parameters are specified.
12	An I/O error has occurred during the RDBLKID command.

Source: DFSMShsm

System Action: The migration, backup, or recycle action fails. DFSMShsm processing continues.

Application Programmer Response: For more information about the NOTE macro and its return codes, see *DFSMS/MVS Using Data Sets* or *DFSMS/MVS Macro Instructions for Data Sets*

ARC0922I ERROR ON SYNCDEV MACRO, RC= *retcode*, **REAS =** *reas*

Explanation: A SETSYS command has specified that the 3480 single-file format is being used. DFSMShsm has issued a SYNCDEV macro to flush the 3480 tape buffer. The SYNCDEV macro has failed. The three possible return codes follow:

Retcode	Meaning
4	Invalid device (not a buffered tape) is targeted, or invalid input parameters are specified.
8	Permanent I/O error exists for the RDBLKID or SYNCHRONIZE command.
12	Permanent I/O error exists for earlier channel program.

Source: DFSMShsm

System Action: The migration fails. DFSMShsm processing continues.

Application Programmer Response: For more information about the SYNCDEV macro and its return and reason codes, see *DFSMS/MVS Macro Instructions for Data Sets*.

ARC0923I ERROR CLOSING TAPE DATA SET *dsname*, **RC=** *retcode*

Explanation: DFSMShsm has attempted to close a single-file 3480 tape data set. The CLOSE attempt has failed. There are six possible return codes, as follows:

Retcode	Meaning
4	An error has occurred during processing of the FREEPOOL macro.
8	A nonzero return code from the CLOSE macro exists.
12	A CLOSE abnormal end (abend) (X'14') has occurred.
16	An indeterminate abend has occurred during processing of the CLOSE macro.
20	Some other abend has occurred during processing of the CLOSE macro.
24	An error has occurred in reading or writing a control data set record.

Source: DFSMShsm

System Action: The tape volume on which the CLOSE macro processing has failed is marked full to prevent further processing on the volume. DFSMShsm processing continues.

Application Programmer Response: Correct the condition causing the error.

ARC0931I (H)CANCEL COMMAND COMPLETED, NUMBER OF REQUESTS CANCELLED=*n*

Explanation: A CANCEL or HCANCEL command was issued with the REQUEST, USERID, or DATASETNAME parameter. The number of requests the command has cancelled is *n*.

Source: DFSMShsm

System Action: The number of requests indicated were cancelled. DFSMShsm only cancels commands that are waiting to be processed; commands for which processing has already started cannot be cancelled. DFSMShsm processing continues.

Application Programmer Response: None.

ARC0932I (H)CANCEL COMMAND REJECTED, USER NOT AUTHORIZED

Explanation: A CANCEL or HCANCEL command was issued with the REQUEST, USERID, or DATASETNAME parameter. The user is not an authorized DFSMShsm user, and the user ID is not the same as the request user ID.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Contact a DFSMShsm-authorized user if it is imperative to cancel requests that you are not authorized to cancel.

ARC0933I (H)CANCEL COMMAND REJECTED, (H)CANCEL CANNOT BE ISSUED VIA BATCH IN EXISTING ENVIRONMENT

Explanation: A batch request specified a CANCEL, HCANCEL, or HSENDCMD CANCEL command on a system that did not have RACF installed and had not issued the SETSYS ACCEPTPSCBUSERID command.

Source: DFSMShsm

System Action: The cancel request fails. DFSMShsm processing continues.

Application Programmer Response: If the system supports a user ID in the protected step control block (PSCB), enter SETSYS ACCEPTPSCBUSERID and a user ID. Reissue the CANCEL or HCANCEL command on the batch request. The operator issuing the command from the system console can cancel the request.

ARC0934I *userid* NOT AUTHORIZED TO ISSUE AUTH COMMAND

Explanation: An AUTH command has been issued from a user ID (*userid*) that is not permitted to authorize other users. Before a user ID can be used to authorize other users, it must be specified by the command AUTHDBA(CONTROL).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: A *userid* that has been authorized with the AUTHDBA(CONTROL) command can authorize this user ID.

ARC0935I ERROR INVOKING SSI FOR SMS SERVICES, SUBFUNCTION = *func*, DATA = *data type*, R15RC = *rcl*, SSIRC = *rc2*, SSIREAS = *reas*

Explanation: DFSMShsm has attempted to invoke the subsystem interface (SSI) to issue an SMS service.

SUBFUNCTION is the SMS-defined code for the subfunction being requested, as follows:

- 1 = Get active configuration data.
- 5 = Perform ACS processing.
- 14 = Invoke VTOC/Data Set Services Create.
- 15 = Invoke VTOC/Data Set Services Delete.

DATA is the type of configuration data being requested if SUBFUNCTION is 1. Possible values are:

- 0 = Get lock token.
- 1 = Free lock token.
- 2 = Get base configuration.
- 4 = Return a management class definition.
- 6 = Return a storage group definition.
- 7 = Return a list of volumes associated with a storage group.
- 10 = Return the list of management classes associated with configuration.
- 12 = Return the list of storage groups associated with configuration.
- 13 = Return a volume definition.

For all other subfunctions, this field will contain ****.

- R15RC is the return code from the invocation of the SSI. SSIRC is the return code from SMS services. SSIREAS is the reason code from the SMS subfunction. The values for R15RC are documented in the values for R15RC *OS/390 MVS Using the Functional Subsystem Interface*.
- SSIRC is the return code from SMS services. SSIREAS is the reason code from the SMS subfunction. The values for SSIRC and SSIREAS are documented in the *DFSMS/MVS DFSMSdfp Diagnosis Reference*.

Source: DFSMShsm

System Action: The function requesting the SSI ends. DFSMShsm processing continues.

Application Programmer Response: Determine the error from either or both return and reason codes and possible related SMS messages that precede this message in the DFSMShsm command activity log. Correct the error and retry the failing function.

ARC0936I ERROR RETRIEVING SMS VTOC/VVDS DATA, FUNC = (ACCESS | FREE), RC=*retcode*, REASON=*reas1*, SUBREAS=*reas2*

Explanation: DFSMShsm attempted to retrieve VTOC and catalog entry information from an SMS-managed volume, or attempted to free storage associated with the retrieval of this information. An error was encountered. The following table shows the possible values for RC, REASON and SUBREAS:

Code	Meaning
RC = 8 REASON = R15-CVAFFILT SUBREAS = Byte 1-internal Byte 2 or 3, CVSTAT Byte 4, X'8B'	Error reading VTOC.
RC = 12 REASON = R15-CATALOGENTRYMGR SUBREAS = 0	Error accessing CATENTRY.
RC = 16 REASON = R15-GETMAIN or FREEMAIN SUBREAS = Byte 1-internal Byte 2-0 Bytes 3 and 4, X'78' or X'05'	Processing error (GETMAIN or FREEMAIN).
RC = 32 REASON = 0 SUBREAS = 0	Parm list error.
RC = 64 REASON = 0 SUBREAS = 0	Major Error (ABEND).
RC = 900 REASON = 0 SUBREAS = 0	An abend occurred.

For further information on the reason codes and subreason codes associated with return code 8, see *DFSMS/MVS DFSMSdfp Diagnosis Reference*.

For further information on the reason codes for return code 12, see *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*, under message IDC3009I, return code 50, where the reason code under return code 50 corresponds to the reason code in this message.

For further information on the reason codes and subreason codes associated with return code 16, see *OS/390 MVS Programming: Assembler Services Guide*.

Source: DFSMShsm

System Action: The volume function processing ends. DFSMShsm processing continues.

Application Programmer Response: Determine the error from either, or both, the return and reason codes. Correct the error and retry the failing function.

ARC0937I FAILED TO SCRATCH SMS MANAGED DATA SET ***dsname*** **FROM VOLUME** ***volser*****, RC =** ***retcode*** **{, SCRATCH STATUS CODE =** ***dadrc*** **|, CATALOG REASON CODE =** ***catreas*****}**

Explanation: DFSMShsm tried to scratch (or scratch and uncatalog) SMS-managed data set *dsname* from volume *volser*.

For a scratch failure, DADSM scratch returned *retcode* and status code *dadrc*.

For a failure while uncataloging:

- *retcode* is the return code from the uncatalog request.
- *catreas* is the reason code from the uncatalog request.
- Message ARC0950I contains further data about the failure.

Source: DFSMShsm

System Action: The function requesting the scratch ends. DFSMShsm continues.

Application Programmer Response: Determine the source of the error from the return code and status or reason code. Correct the error and retry the failing function.

ARC0938I PARTIAL RELEASE OF UNUSED DASD SPACE FOR DATA SET ***dsname*** **WAS NOT SUCCESSFULLY PROCESSED, RC=*****retcode*****, REASON=*****reascode***

Explanation: DFSMShsm attempted to release unused DASD space allocated to a sequential, extended format VSAM KSDS, or partitioned data set *dsname*. The PARTREL macro returned *retcode* in register 15 and a *reascode* in the PARTREL parameter list. For the meaning of *retcode* and *reascode*, see *DFSMS/MVS DFSMSdfp Diagnosis Reference*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: For more information about the PARTREL macro and its return codes, refer to *DFSMS/MVS DFSMSdfp Diagnosis Reference*.

ARC0939I SMS MANAGED DATA SET ***dsname*** **WAS BACKED UP SUCCESSFULLY BUT UPDATE OF THE LAST-BACKED-UP DATE IN CATALOG FAILED, CATRC=*****rc*****, CATREAS=*****reas***

Explanation: DFSMShsm has attempted to invoke catalog SVC 26 to alter the last-backed-up date in the catalog. A catalog error has occurred and the alter has failed. The SMS-managed data set, indicated by *dsname*, has been backed up successfully but the last-backed-up date in the catalog has not been updated.

The catalog has returned the return code of *rc* and reason code of *reas*. Catalog services return codes and reason codes are documented in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009I.

Message ARC0950I contains further information about the failure.

Source: DFSMShsm

System Action: BACKUP processing continues.

Application Programmer Response: Determine the source of the error from the return and reason codes. Correct the error and retry the failing function.

ARC0940I ELIGIBLE SMS MANAGED VOLUME ***volser*** **NOT ADDED BY** ***func*****, RC =** ***retcode*****, REAS =** ***reascode***

Explanation: DFSMShsm attempted to internally ADDVOL a SMS-managed volume (*volser*) on behalf of a function (*func* (migration, backup, or dump)). The ADDVOL of the volume failed. Possible values of *retcode* and *reascode* are:

Retcode	**Meaning**
4	Storage group definition not found (REAS = 0).
8	Error reading MCV record (REAS = return code from read. See Table 11 on page ARC-285).
12	Error creating MCV record (REAS = return code from write. See Table 11 on page ARC-285).
13	Device table entry not found (REAS = 0).
16	Error updating MCV record (REAS = return code from update. See Table 11 on page ARC-285).
19	Volume not mounted (REAS = 0).
52	GETMAIN error (REAS = return code from GETMAIN).

Source: DFSMShsm

System Action: The volume is not processed by function *func*. DFSMShsm processing continues.

Application Programmer Response:

Retcode	**Action**
4	Define the storage group to SMS.
8, 12	See the preceding ARC0184I message for more information on the error.
13	Follow problem determination procedures.
16	See the preceding ARC0184I message for more information on the error.
19	Mount the volume.
52	Determine if more storage is needed for DFSMShsm. Correct the error and retry the failing function.

ARC0941I THE {NUMBER OF BACKUP VERSIONS (DATA SET EXISTS)| NUMBER OF BACKUP VERSIONS (DATA SET DELETED)} VALUE SPECIFIED FOR {***management class-name*****} IS GREATER THAN THE DFSMSHSM MAXIMUM ALLOWABLE NUMBER OF BACKUP VERSIONS - VERSIONS IS SET TO {*****maximum allowable number of backup versions*****}**

Explanation: The value specified in either the NUMBER OF BACKUP VERSIONS (DATA SET EXISTS) or the NUMBER OF BACKUP VERSIONS (DATA SET DELETED) for the indicated management class was larger than the number of backup versions allowed for the current DFSMShsm BCDS maximum record length. The following values are the valid maximum allowable number of backup versions for different BCDS record lengths:

- Record length of 2040 to 6543 — 29 maximum versions
- Record length of 6544 or more — 100 maximum versions

Source: DFSMShsm

System Action: The maximum allowable number of backup versions DFSMShsm keeps for a data set based on the DFSMShsm BCDS maximum record length was substituted for the value in either the NUMBER OF BACKUP VERSIONS (DATA SET EXISTS) or the NUMBER OF BACKUP VERSIONS (DATA SET DELETED). DFSMShsm processing continues.

Application Programmer Response: If the maximum number of backup versions in the indicted management class is less than or equal to 100, either increase the BCDS maximum record length (as described in the support use section of the *DFSMS/MVS DFSMShsm Implementation and Customization Guide*), or reduce the indicated management class value to a number equal to or lower than the DFSMShsm allowable maximum number of backup versions. If the maximum number of backup versions in the indicated management class is greater than 100, reduce the indicated management class value to a number equal to or lower than the DFSMShsm allowable maximum number of backup versions.

ARC0945I OPEN OF DDNAME=*ddname* FAILED, VSAM REASON CODE IS X'*reason-code*'.

Explanation: An attempt to open the DFSMShsm control data set specified by DDNAME=*ddname* was unsuccessful. VSAM failed the attempt with OPEN reason code X'*reason-code*'.

System Action: If the error occurred while opening the MCDS during DFSMShsm startup, the startup of DFSMShsm is incomplete. For other cases, DFSMShsm processing will be limited, depending on the control data set in error.

Application Programmer Response: For an explanation of the failure, refer to the IEC161I message preceding this message. For additional information, refer to Macro Instructions for Data Sets, VSAM Macro Return and Reason Codes for OPEN reason codes in the ACBERFLG field of the ACB. Correct the problem and restart DFSMShsm.

ARC0946I {MCDS | BCDS} {LOW KEY | HIGH KEY} = *key*

Explanation: A QUERY command was issued with the CONTROLDATASETS parameter. This message is issued by DFSMShsm for the low key and high key for each cluster of a multicluster CDS. Repeating `X'00'` and `X'FF'` bytes are truncated to the two most significant bytes. If this CDS was not defined with key ranges, then the displayed ranges are the boundaries that DFSMShsm has calculated to use.

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0947I CDS SERIALIZATION TECHNIQUE is *technique*

Explanation: A QUERY command was issued with the CONTROLDATASETS parameter. This message is issued by DFSMShsm to describe the current CDS serialization technique in use. Possible values for *technique* are:

ENQUEUE	The CDSs are serialized using a global enqueue product.
RESERVE	The CDSs are serialized using volume reserves.
BOTH	The CDSs are serialized using a global enqueue product as well as volume reserves.
RLS	CDSSHR=RLS was specified in the startup procedure. The CDSs are accessed in record level sharing mode.
NON-SHARED	Not processing in a shared environment.

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0948I (MCDS | BCDS | OCDS) INDEX TOTAL SPACE=*kbytes* KBYTES, CURRENTLY ABOUT *percent*% FULL, WARNING THRESHOLD=*thresh* %,

Explanation: A QUERY command was issued with the CONTROLDATASETS parameter. This message contains information about the VSAM index for the MCDS, BCDS, or OCDS data set. The message is issued once for each control data set.

Note: If a number is concatenated to the control data set name (such as MCDS2), then the message refers to a single data set of a multicluster CDS.

- TOTAL SPACE=*kbytes* KBYTES

  The total space allocated in kilobytes is *kbytes*. This figure is based on the amount of space between the beginning and end of the index (high allocated). If the index is defined so that it can extend, this value increases. This value is used as the denominator in the calculation of the %. FULL; see below.

- CURRENTLY ABOUT *percent*% FULL

  The percentage of space used in the data set is *percent*

  The numerator is the amount of space between the beginning of the data set and the high-used point in the data set.

  The denominator is the total space (TOTAL SPACE) in the data set as described above.

  This value may vary in size if the data set is defined so it can extend.

- WARNING THRESHOLD=*thresh*%

  The installation-specified threshold percentage of occupancy is *thresh* specified by the SETSYS MONITOR command which, when exceeded, causes the issuance of attention message ARC0911E.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

ARC0950I ERROR INVOKING CATALOG *function* FUNCTION, DSN = *datasetname*, VOLUME = *volser*, REQUEST=*request*, CATRC=*rc*, CATREAS = *reas*

Explanation: DFSMShsm has attempted to invoke the catalog SVC 26 to perform the *function* FUNCTION on the data set *datasetname*. indicates the volume serial on which the function has been attempted for the data set.

While processing the *function* FUNCTION, a request, indicated by *request*, is being processed when the catalog error occurs. The following are the descriptions of the possible values indicated for *request*:

- LOCATE function.
  - SUPERLOCATE — Superlocate catalog request.
  - NONSUPLOC — Regular locate catalog request (not a superlocate request).
- DEFINE function.
  - SMSDEFBCS — Define SMS BCS entry request.
  - SMSDEFNVR — Define SMS NVR entry in catalog entry request.
  - SMSGDSROLIN — Make an SMS-managed data set an active generation data set.
- ALTER function.
  - SMSALTERBCS — Alter SMS BCS entry request.

  - SMSALTRNWNM — Rename SMS-managed data set request.
  - SMSALTRCATALOGENTRY — Alter SMS catalog entry request.
  - ALTERACFIND — Turn on the RACF indicator request. The RECALL or RECOVER command processing completes.
- DELETE function.
  - SMSDELBCS — Delete SMS BCS entry request.
  - SMSDELNOBCS — Delete SMS VTOC and catalog entries request.
  - SMSDELALL — Delete entire SMS-managed data set request.

The catalog has returned the return code of *rc* and the reason code of *reas*. Catalog services return codes and reason codes are documented in the *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009I.

Source: DFSMShsm

System Action: The DFSMShsm function requesting the CATALOG function ends. DFSMShsm processing continues.

Application Programmer Response: Determine the error from the return and reason codes. Correct the error and retry the failing function.

ARC0951I DUPLEXING OF TAPE VOLUMES FOR THE CURRENT {MIGRATION | BACKUP | RECYCLE} VOLUME {volser} HAS ENDED DUE TO AN ERROR

Explanation: Duplexing for migration or backup tape volumes is active, but an error has been detected on the alternate tape volume. Continued use of this specific task will not produce concurrently created duplex tapes. However, tape copies will be scheduled for this and all subsequent volumes.

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0952I THE ORIGINAL OF A DUPLEXED PAIR WAS REPLACED BY THE ALTERNATE: ***volser*****. ALL DUPLEX INDICATORS HAVE BEEN REMOVED.**

Explanation: A TAPEREPL command requested that an alternate tape created by the duplex tape function replace the original. Because a duplex pair no longer exists, the TTOC and MCV/MCT have been updated to indicate this.

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0960I VOLUME = ***volser*****, LIBNAME =** ***libname*****, STORAGE GROUP =** ***storagegroup***

Explanation: This message is issued by DFSMShsm prior to message ARC0962A, as a result of finding that a group of tape volumes, having a spanning data set, were not stored in the same tape library or in the same storage group.

- *volser* is the volume serial of the volume found in tape library.
- *libname* is the name of the library.
- *storage group* is the storage group assigned to the tape volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0961I INCONSISTENCY IN TAPE LIBRARY VOLUME STORAGE EXISTS

Explanation: This message is issued by DFSMShsm as a result of RC06 when a group of tape volumes having spanning data sets were not stored in the same library or the same storage group.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC0962A All VOLUMES NOT CONTAINED IN THE SAME TAPE LIBRARY OR STORAGE GROUP. ENTER 'C' TO CANCEL OR MAKE CORRECTION AND ENTER 'R' TO RETRY

Explanation: Volumes specified in the preceding ARC0960I messages must be in the same library and in the same storage group for input processing by DFSMShsm.

Source: DFSMShsm

System Action: All other DFSMShsm processing outside of this task continues.

Place all tapes in the same library and storage group or remove all tapes from the library.

After a reply of R is received, DFSMShsm checks the library status again and continues processing if all volumes are found in one library and storage group or all are external to any library. Otherwise, this message is repeated.

After the reply of C is received, DFSMShsm cancels the function for which the volumes were requested.

Operator Response: After correction has been made reply R to the message. If correction cannot be made reply C to the message.

ARC0963I ERROR RETRIEVING TAPE VOLUME RECORD FOR VOLUME ***volser*****, CBRXVOL RC=*****cbrxvolrc***

Explanation: DFSMShsm was attempting to retrieve a tape volume record for a single volume from the library configuration data base when an error was encountered.

volser is the volume serial of the volume expected to be found in a tape library whose tape volume record was found to be in error.

cbrxvolrc is the return code received by DFSMShsm from CBRXVOL.

The possible values for *cbrxvolrc* are:

Value	Meaning
8	Parameter list error.
12	Internal processing error. The request could not be completed due to failure of a system service.
16	Catalog authorization error. The user of CBRXVOL does not have SAF/RACF authority to perform the requested function on the integrated catalog facility user catalog which contains the LCDB.
20	Catalog access error.

Source: DFSMShsm

System Action: DFSMShsm processing of this function ends.

Application Programmer Response: Take corrective action based on the *cbrxvolrc*.

ARC0964I ERROR RETRIEVING TAPE LIBRARY RECORD FOR LIBRARY *libname*, **CBRXLIB RC=***cbrxlibrc*

Explanation: DFSMShsm was attempting to retrieve a single tape library record from the library configuration data base when an error was encountered.

libname is the name of the library whose record was found in error.

cbrxlibrc is the return code received by DFSMShsm from CBRXLIB.

The possible values for *cbrxlibrc* are

Value	Meaning
8	Parameter list error.
12	Internal processing error. The request could not be completed due to failure of a system service.
16	Catalog authorization error. The user of CBRXVOL does not have SAF/RACF authority to perform the requested function on the integrated catalog facility user catalog which contains the LCDB.
20	Catalog access error.

Source: DFSMShsm

System Action: DFSMShsm processing of this function ends.

Application Programmer Response: Take corrective action based on the *cbrxlibrc*.

ARC0965I ERROR INVOKING LCS SERVICES TO PROCESS VOLUME = *volser*, **FUNCTION =** *func*, **RC =** *retcode*, **LCS RC =** *lcsrc*, **LCS REAS =** *lcsreas*

Explanation: An error occurred when DFSMShsm was attempting to invoke the library control system (LCS).

FUNCTION indicates the LCS service DFSMShsm was requesting. The possible values for *func* are:

- *TVE* (Test Volume Eligibility) — DFSMShsm was requesting LCS to check if volume *volser* could be mounted on the allocated device.

The possible values for *retcode* are:

Retcode	Meaning
8	DFSMShsm invoked the CBRXLCS macro to process volume *volser*. The function requested was *func*. An error occurred during this processing. *lcsrc* contains the return code from the LCS and *lcsreas* contains the reason code from the LCS.
12	An abnormal end (abend) occurred when DFSMShsm invoked the CBRXLCS macro to process volume *volser*. The function requested was *func*.

Source: DFSMShsm

System Action: If the function requested is CUA, the tape is not available for selection from the library common scratch pool. If the function requested is *TVE*, the tape is marked unavailable and DFSMShsm processing continues.

Application Programmer Response: Return codes have the following actions:

Reascode	Meaning
8	Take corrective action based on the meaning of *lcsrc* and *lcsreas*.
12	Follow the problem determination procedures.
60	Take corrective action based on the message ARC0304I that precedes this message.

ARC0966E TAPE ALLOCATION REQUESTED WAS INCORRECTLY PERFORMED FOR VOLUME = *volser*, **FOR FUNCTION =** *func*, **DSNAME =** *dsname*, **RC =** *rc*

Explanation: DFSMShsm has requested a tape device to be allocated. However, as a result of ACS filtering, the results of the allocation are not consistent with what DFSMShsm is expecting.

volser indicates the volume for which DFSMShsm has been attempting to allocate a device.

func indicates the DFSMShsm function requesting the tape device allocation.

dsname indicates the data set name DFSMShsm that has been passed to allocation.

rc indicates the particular error that has been found after the allocation. The explanation of the return codes are:

Retcode	Meaning
8	A nontape device has been allocated instead of a tape device.
12	DFSMShsm expected the allocated device to be in a tape library, and a nontape library device has been allocated.
16	DFSMShsm expected the allocated device not to be in a tape library, and a tape library device has been allocated.

Source: DFSMShsm

System Action: Processing ends for the task requesting the allocation. The function being performed is held. Other DFSMShsm processing continues.

Application Programmer Response: If the allocation results are not what the installation desires, modify the ACS routines accordingly and reissue the command.

ARC0967I ERROR DETERMINING IF A STORAGE CLASS IS ASSIGNED TO THE {BACKUP | MIGRATION | DUMP | TAPECOPY} TAPE OUTPUT DATA SET NAME *dsname*. **FUNCTION IS HELD. RC=***rc*

Explanation: DFSMShsm has attempted to determine if a storage class name has been assigned to the functional single-file tape output data set name. DFSMShsm could not access this information and cannot accurately determine if the tape output environment is controlled by ACS routines, which implies an automated tape library environment. The indicated function is held.

dsname is the data set name passed to SMS services to determine if a storage class is assigned to it.

rc indicates the error that has been encountered while attempting to determine if a storage class is assigned to the data set name *dsname*.

Retcode	Meaning
8	An error has occurred while building the data area passed to SMS services.
16	An error has occurred during the invocation of SMS services.

Source: DFSMShsm

System Action: DFSMShsm processing of this function ends.

Application Programmer Response: Determine why the routines could not access the information needed to determine whether a storage class is assigned.

ARC0968I **ERROR UPDATING TAPE VOLUME RECORD FOR VOLUME** *volser***, CBRXVOL RC =** *cbrxvolrc*

Explanation: DFSMShsm was attempting to update a tape volume record for a single volume in the library configuration data base when an error was encountered.

- *volser* is the volume serial number of the volume whose tape volume record was being updated when the error occurred.
- *cbrxvolrc* is the return code received by DFSMShsm from CBRXVOL.

The possible values for *cbrxvolrc* are as follows:

Retcode	Meaning
8	Parameter list error.
12	Internal processing error. The request could not be completed due to failure of a system service.
16	Catalog authorization error. The user of CBRXVOL does not have SAF/RACF authority to perform the requested function on the integrated catalog facility catalog which contains the library configuration data base.
20	Catalog access error.

Source: DFSMShsm

System Action: DFSMShsm processing of this function continues.

Application Programmer Response: Take corrective action based on the *cbrxvolrc*

ARC0970I **TAPE ALLOCATION REQUEST DENIED BY ARCTEEXT EXIT FOR ALLOCATION BEGINNING WITH TAPE** *volser1*

Explanation: Installation-wide exit ARCTEEXT has returned a return code 8, which indicates that tape allocation should not be attempted. *volser1* is the first or only volume in the DFSMShsm tape volume set.

Source: DFSMShsm

System Action: The command fails. DFSMShsm processing continues.

Application Programmer Response: Determine why the ARCTEEXT installation-wide exit indicates that the allocation should not be attempted. If that action is not what the installation desires, modify and replace the ARCTEEXT installation-wide exit and reissue the command.

ARC0990I **PASS 1–2 TIME STAMP SEPARATION, TIME** *hh:mm:ss* **FOR VOLUME** *volser***, FUNCTION** *function*

Explanation: This is a performance-related message mainly intended for DFSMShsm development use.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC1000I **{***dsname* **| VOL=***volser* **|** *agname***} {MIGRATE | BACKVOL | BACKDS | DELETE | RECALL | RECOVER | FREEVOL | ABACKUP | ARECOVER} PROCESSING ENDED**

Explanation: DFSMShsm completed a data set or volume request. The data set name is *dsname*. The volume serial number of the volume is *volser*. The name of the aggregate group that was processed is *agname*. The type of operation performed by DFSMShsm is indicated in the message text.

This message does not necessarily indicate success of the function, merely completion of processing.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the command failed, correct the error or errors indicated by the previous error message(s) and resubmit the command.

ARC1001I **{***dsname* **| VOL=***volser* **|** *command***}** *operation* **FAILED, RC=***retcode* **REAS=***reascode*

Explanation: A DFSMShsm request has failed. The following describes the message variables:

- *dsname* indicates the name of the data set.
- *volser* indicates the volume serial number.
- *command* indicates the command and its associated command parameters.
- *operation* indicates the requested operation.
- *retcode* indicates the return code.
- *reascode* indicates the reason code.

A following related message provides you with further information about the failure. The two digits of the message number specified as *nn*, indicate the *retcode*. The related message number also indicates the DFSMShsm function processing when the failure has occurred, as shown on the following table.

Table 5. Return Code Identifier

Function	Message Group
Recovery/Recall	ARC11*nns*
Space Management	ARC12*nns*
Backup	ARC13*nns*
Aggregate Backup/Recovery	ARC6*nnns*

For example, if the related message is ARC1131I:

> ARC1131I indicates that the recovery/recall function has failed. The *nn* is 31 which is the *retcode*. See Table 6 on page ARC-280 for the meaning of *retcode* 31 or refer to message ARC1131I for expanded information.

The *s* in the message number indicates the type code. For more information about type codes, see Table 5.

Note: All commands can cause an ARC16*nns* message to be issued if an error is detected at the time the command is entered or if an error occurs in processing a long-running command.

The following describes other conditions:

Condition	Meaning
If *reascode* **is zero**	If *reascode* is zero or the related message gives no explanation, no further information is discernible.

If *retcode* **is 900**	A *retcode* of 900 indicates an abnormal end (abend) has occurred. The abend code is listed in message ARC1900I.
If *retcode* **is 9***nn*	If *retcode* is in the form 9*nn* and *nn* is greater than zero, this indicates that an abend has occurred after the return code has been set to *nn*. For example, if *retcode* is 931 and the function is recovery: The recovery function issues ARC11*nns* messages. The *retcode* of 931 establishes 31 as the *nn* variable. The result: ARC11*nns* + 31 = message ARC1131I.

Note: Space management includes FREEVOL.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Follow the programmer response for the value of *reascode* in the related message.

ARC1003I INVALID MWE FUNCTION CODE

Explanation: ARCCTL encountered a management work element (MWE) on the general MWE queue that had an invalid function. (For example, a code of 4)

Source: DFSMShsm

System Action: The MWE failed. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1004I DFSMSHSM NOT ACTIVE - REQUEST *rnumber* QUEUED

Explanation: A nonwait-type request was issued while DFSMShsm was not active. The request was assigned the DFSMShsm request number *rnumber* and was queued for later processing. The request number is used in the QUERY or HQUERY command.

Source: DFSMShsm

System Action: The DFSMShsm request is queued until DFSMShsm is started.

Application Programmer Response: None.

ARC1005I DFSMSHSM NOT ACTIVE - REQUEST REJECTED

Explanation: A wait-type request was issued while DFSMShsm was not active. The request was rejected.

Source: DFSMShsm

System Action: OS/VS2 MVS processing continues.

Operator Response: Restart DFSMShsm, if desired.

Application Programmer Response: Request that DFSMShsm be started. Reissue the command when DFSMShsm is ready.

ARC1006I DFSMSHSM REJECTED REQUEST, RC=*retcode*

Explanation: A request to DFSMShsm was rejected. The values for *retcode* are:

Retcode	Meaning
4	DFSMShsm is not active.
8	There is no space for the DFSMShsm work element. A JES3 request was made. DFSMShsm is not accepting JES3 requests.
12	A post was requested for a nonexistent DFSMShsm work element.
16	A JES3 request was made. DFSMShsm is not accepting JES3 requests.
20	DFSMShsm is already active.
24	The user is not authorized for the request.
28	A DFSMShsm command was too long.
32	There was an invalid buffer size for the catalog read.
36	Input management work element (MWE) does not reside within a valid user storage area.
40	The allotted amount of common service area (CSA) storage for MWEs is exceeded.
44	The data set name passed to DFSMShsm was invalid.
100	There was an invalid DFSMShsm function code in the MWE.
104	There was an invalid DFSMShsm function code in the MWE that was built in the DFSMShsm address space.
108	A NOWAIT asynchronous request was received.
112	An asynchronous request was received from an unauthorized user.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response:

Retcode	Meaning
4	Retry the operation when DFSMShsm is active.
8	No CSA space is available.
12, 16, 32	
100 or 104	DFSMShsm had an internal error.
20	No action is necessary.
24	The user is not authorized for the request.
28	Break up the command into several shorter commands and reissue them.
36	Retry the request.
108 or 112	Another program issued an invalid request directly to DFSMShsm via the DFSMShsm supervisor call (SVC).

ARC1007I {COMMAND | MIGRATE | DELETE | BACKVOL | BACKDS | RECALL | RECOVER} REQUEST *rnumber* **SENT TO DFSMSHSM**

Explanation: The TSO command processor has completed verification of a request for the DFSMShsm operation indicated in the message text. The command is sent to DFSMShsm. The specific DFSMShsm request number is *rnumber*.

Source: DFSMShsm

System Action: The user is notified of the request number assigned. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1008I {*agname* **|** *dsname* **| VOL=***volser***, SGROUP=***sg* **| COMMAND | CDS }** *operation***REQUEST** *rnumber* **WAS CANCELED**

Explanation: A CANCEL or HCANCEL command with the REQUEST, USERID, or DATASETNAME parameter is specified. This message is issued to the originator of the request for each canceled request. For example, an operator can issue the CANCEL command with the DATASETNAME *dsname* parameter. In this instance, there may be management work elements (MWEs) on the queues originated from several user IDs requesting operations on the same data set. This message is then issued to each user ID that requested DFSMShsm processing against the data set. This message is also issued if the ARCRPEXT exit requests the purge of the MWE.

If SGROUP follows *volser*, the request was for a BACKVOL command specifying storage group *sg*.

The following is a list of valid *operations*:

- MIGRATE
- DELETE
- BACKDS
- BACKVOL
- RECALL
- RECOVER
- COMMAND
- EXPIREBV
- ABACKUP
- ARECOVER

Source: DFSMShsm

System Action: The user ID is notified of the canceled MWE. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1009I JES3 C/I REQUEST FAILED BY DFSMSHSM FOR DSN= *dsname***,RC=***mwerc* **REAS=***mwereas*

Explanation: The DFSMShsm SVC 26 intercept module IGG026DU failed a JES3 converter/interpreter (C/I) request for the migrated data set *dsname*. The return code *mwerc* and the reason code *mwereas* are the return and reason codes returned by DFSMShsm to IGG026DU in the DFSMShsm management work element (MWE).

The values for *mwerc* are:

- 04 — IGG026DU could find no volumes in the JES3 volume pool.
- 13 — DFSMShsm could either not determine that the data set was migrated, or could not determine candidate volumes to which the data set would be recalled.
- 20 — DFSMShsm attempted to invoke the automatic class selection (ACS) function in an SMS active environment and was unsuccessful. The data set was SMS-managed when migrated and cannot be recalled unless the ACS function is operable or the data set is forced to be recalled as non-SMS-managed.

Source: DFSMShsm

System Action: The C/I locate request is failed.

Application Programmer Response: The following action should be taken for the following *mwerc* return codes:

- 04 — Primary volume must be defined to DFSMShsm in a JES3 environment prior to attempting to process a JES3 C/I request.
- 13 — Determine whether the data set is migrated using the DFSMShsm LIST and FIXCDS commands. If the DFSMShsm recall exit ARCRDEXT is being used, then ensure that it is operable.
- 20 — If SMS is active, ensure that the ACS storage class and management class routines are functioning properly.
- Other *mwerc* return codes — Consult your DFSMShsm service representative to determine the error that occurred.

ARC1010I USER REQUEST FOR A MIGRATED DATA SET FAILED.

Explanation: DFSMShsm processing was unable to complete during an attempt to do one of the following:

- Recall a migrated data set during allocation processing
- Recall a migrated data set during open processing
- Delete a migrated data set during scratch processing
- Recall a password-protected migrated data set during scratch processing
- Read the migration control data set entry for a migrated data set during scratch processing
- Recall a migrated data set during rename processing
- Read the migration control data set entry for a migrated data set during rename processing
- Recall a migrated data set during delete or alter processing

Source: DFSMShsm

System Action: The allocation, open, scratch, rename, delete, or alter of the data set fails. DFSMShsm processing continues.

When this message is received because a TSO user pressed the ATTENTION key to interrupt the system action (such as OPEN), the system action fails but the DFSMShsm request (such as RECALL) continues processing and completes normally unless an unrelated error occurs.

Application Programmer Response: A WRITE TO PROGRAMMER message accompanies this message, providing more detail about the error. For a TSO user, the message appears on the terminal screen if the WTPMSG parameter of the PROFILE command was used. Follow the programmer response indicated for the message.

ARC1020I DFSMSHSM IS RECALLING FROM {TAPE | DASD | UNKNOWN} DSN=*dsname***, {YOU MAY CONTINUE THE RECALL IN THE BACKGROUND AND FREE YOUR TSO SESSION BY PRESSING THE ATTENTION KEY | PLEASE RETRY THE USER REQUEST AFTER THE RECALL HAS COMPLETED.}**

Explanation: While allocating the data set *dsname*, the allocation process detected that the data set is currently migrated. If “YOU MAY CONTINUE ...” appears, your session has been placed in a wait state, and the data set is then recalled. You may receive control (return to a nonwait state) without the recall having finished by pressing the ATTENTION key; the recall still happens in the background. Be aware that if the reason for the recall is an immediate need for the data, that data will likely not be available when control is returned to your session before the recall has completed. Therefore, there will likely be a failure in some non-DFSMShsm request.

If “PLEASE RETRY ...” appears, the RECALL command is scheduled, and the request fails with *retcode* 38, *reascode* 50 rather than placing the user in a wait state. After RECALL processing completes, retry the request. In either case if the data set is recalled from tape, the operator is requested to mount the tape.

A device type of UNKNOWN means the data set is in incomplete status and cataloged on a primary volume. In this case, DFSMShsm does not know if the data set is recalled from tape or DASD.

Source: DFSMShsm

System Action: If “YOU MAY CONTINUE ...” appears, the allocation and recall processing continues with the session in a wait state. If “PLEASE RETRY ...” appears, recall processing is scheduled and your session is not in a wait state.

Application Programmer Response: If “YOU MAY CONTINUE ...” appears, you may get control back before recall has completed by pressing the ATTENTION key.

ARC1023A CONVERTING TO A NON-WAIT WILL FAIL THE USER REQUEST, BUT WILL ALLOW THE {RECALL | RECOVER | MIGRATE | BACKUP | DELETE | HSENDCMD} TO COMPLETE IN THE BACKGROUND. CONVERT Y OR N?

Explanation: While a DFSMShsm command specified with the WAIT parameter was in process, an ATTENTION interruption from a TSO terminal was encountered. This message describes the command being processed and allows you to cancel the WAIT parameter without cancelling the command.

Note: *dsname* may appear as ******** if the data set name is unknown.

Source: DFSMShsm

System Action: The processing of the command continues to completion. The status of the WAIT depends upon the user’s response.

Operator Response: A Y response will terminate the wait, while the command processes to completion. An N response will keep the user in a wait state until the command has completed processing.

ARC1025A DO YOU WISH TO CANCEL DFSMSHSM LIST REQUEST? Enter Y or N

Explanation: While DFSMShsm was processing the HLIST command, an ATTENTION interruption was encountered from a TSO terminal.

Source: DFSMShsm

System Action: The continued processing of the HLIST command depends upon the operator response. DFSMShsm processing continues regardless of the response.

Operator Response: A Y response will terminate DFSMShsm processing of the HLIST command. Conversely, an N response will allow DFSMShsm processing of the HLIST command to complete.

ARC1051I UNIT OR {VOLUME | TOVOLUME } NOT SPECIFIED, BOTH REQUIRED

Explanation: In a request to DFSMShsm for recall or backup command processing, either the VOLUME or UNIT parameter has been specified, but not both. In a request to DFSMShsm for recover command processing, either the TOVOLUME or UNIT parameter has been specified, but not both.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with all the required information. Refer to *DFSMS/MVS DFSMShsm Storage Administration Reference* for a description of the required parameters.

ARC1052I UNSUPPORTED UNIT TYPE - *unittype*

Explanation: DFSMShsm does not support the unit type specified with the UNIT parameter of a command requesting a recall, recovery, or backup operation. The type specified on the command is *unittype*.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Change the unit type and reissue the command. Refer to *DFSMS/MVS DFSMShsm Managing Your Own Data* for a list of the valid unit types.

ARC1055I INVALID CHARACTERS USED IN *dsnfilter*

Explanation: A request to DFSMShsm for a recall, migrate, backup, delete, or recover operation included a data set filter, *dsnfilter*, that used an invalid sequence of characters. A filter must follow ‘**’ with either a period or blank.

Source: DFSMShsm

System Action: Processing of the data set filter ends. Processing continues on any other data sets or filters specified in the user command.

Application Programmer Response: Reissue the command with a corrected filter, deleting from the command any data set names and filters processed correctly the first time.

ARC1056I *dsname* **NOT IN CATALOG**

Explanation: A request was sent to DFSMShsm for a recall, deletion, or migration operation on a data set *dsname.* The operation could not be completed because the data set name was not found during the standard catalog search.

This can also occur if a request was sent to backup *dsname*, but the data set is not cataloged and the VOLUME parameter was not specified on the command.

Source: DFSMShsm

System Action: Processing of the data set ends. Processing continues on any other data sets or filters specified in the user command.

Application Programmer Response: Reissue the command with a corrected *dsname*, deleting from the command any data set names and filters processed correctly the first time.

If the command is HBACKDS and *dsname* is spelled correctly, add VOLUME and UNIT parameters identifying the location of the data set, and reissue the command.

ARC1058I OBTAIN ERROR - *dsname*, **RC=***retcode*

Explanation: The HBACKDS command was issued with the parameter CHANGEDONLY. To determine whether *dsname* was changed since the last backup, DFSMShsm tried retrieving the data set's VTOC entry. The OBTAIN function encountered an error trying to retrieve the VTOC entry for *dsname*.

If the HBACKDS command specified a data set filter, then *dsname* can be the name of the data component of a VSAM cluster with a name matching the filter.

If *dsname* is uncataloged, then DFSMShsm tried to retrieve the VTOC entry from the volume specified on the HBACKDS command. If *dsname* is cataloged, DFSMShsm tried to retrieve the VTOC entry from the first volume indicated in the catalog entry.

The values for *retcode* are:

Retcode	Meaning
4	The required volume was not mounted.
8	The data set VTOC entry was not found in the VTOC of the specified volume.
12	A permanent I/O error was encountered, or an invalid VTOC entry was found during the processing of the specified volume.
16	There was an invalid work area pointer.

Source: DFSMShsm

System Action: DFSMShsm treats *dsname* as unchanged and does not try to back it up. Processing continues on any other data sets or filters specified in the HBACKDS command.

Application Programmer Response: If *retcode* is 4, correct the problem and reissue the HBACKDS command, deleting from the command any data set names and filters backed up the first time. If *retcode* is 8 or 12, first ensure you spelled *dsname* correctly; if so, then notify the system programmer to take corrective action. If *retcode* is 16, notify the storage administrator to take corrective action.

ARC1059I CATALOG ERROR - *dsnfilter*, **RC=***retcode*, **REASON=***reascode*

Explanation: DFSMShsm encountered a catalog error when processing the data set name or filter *dsnfilter*. RC=*retcode* is the return code and REASON=*reascode* is the reason code returned from Catalog Management.

Return and reason codes returned by Catalog Management are documented in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009I.

In addition, return code 100 means Catalog Management detected an error while searching catalogs:

REASCODE	MEANING
4	Indicates an error returning information about a data set entry.
8	Indicates an error returning information about a catalog entry.

Source: DFSMShsm

System Action: Processing of the data set filter ends. Processing continues on any other data sets or filters specified in the user command.

Application Programmer Response: For all return codes, notify the storage administrator. Perform catalog problem determination; examine possible recovery.

ARC1060I NEWNAME SPECIFIED WITH MORE THAN ONE DSNAME

Explanation: A request to DFSMShsm to recover multiple data sets (specified in a list or using a filter) also specified the NEWNAME parameter. DFSMShsm cannot determine which of the recovered data sets should be given the NEWNAME; NEWNAME is valid only when recovering a single data set.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command without the NEWNAME parameter or limit the command to a single data set name.

ARC1061I NO DSNAMES MATCH FOR *dsfilter*

Explanation: A request to DFSMShsm for a recall, recovery, migration, backup, or deletion operation failed. No data set names were found that match *dsfilter*.

Source: DFSMShsm

System Action: Processing of the data set ends. Processing continues on any other data sets specified in the user command.

Application Programmer Response: Correct the data set name and reissue the command.

ARC1062I *number* **DATA SETS PROCESSED FOR** *dsnfilter*

Explanation: A DFSMShsm command was issued with a data set filter *dsnfilter*. The number of processed data sets is *number*. Note that DFSMShsm cannot process certain requests for a data set when another operation is concurrently processing that data set, or when a recall or delete is requested for a data set not migrated.

If *number* is zero:

> for HBACKDS CHANGEDONLY, no data set name matching the filter was for a changed data set.
> for HDELETE, no data set name matching the filter was for a migrated data set.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If more information is required about the original request, issue the HQUERY command with the REQUEST parameter. HLIST can also be used to list the data set status.

ARC1063I INVALID DATE SPECIFIED

Explanation: An HRECOVER command has been issued with an invalid DATE parameter. The format of the date is *mm*/*dd*/*yy* or *yy*/*mm*/*dd*.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with a valid date. Refer to the *DFSMS/MVS DFSMShsm Managing Your Own Data* for more information about the format of the DATE parameter.

ARC1064I INVALID VOLUME SERIAL NUMBER - *volser*

Explanation: An HBACKDS, HRECALL, or HRECOVER command was issued. The volume serial number (*volser*) is too long or contains invalid characters.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Determine the correct volume serial number and reissue the command.

ARC1065I MEMBER NAME NOT ALLOWED IN DSNAME

Explanation: DFSMShsm received a command with the member name specified in either the data set name or the new data set name. Member names cannot be specified in either the data set name or the new data set name.

Source: DFSMShsm

System Action: Processing of the data set ends. DFSMShsm processing continues with any other data set name specified in the command.

Application Programmer Response: Reissue the command with the data set name only.

ARC1066I DATA SET NOT MIGRATED

Explanation: The data set name specified in a request for an HRECALL or HDELETE command processing was not cataloged as being migrated.

Source: DFSMShsm

System Action: HRECALL or HDELETE command ends. DFSMShsm processing continues.

Application Programmer Response: Determine if the data set should be migrated by using LISTCAT, HLIST or LISTVTOC. If the data set should be migrated, then catalog the data set as being on *volser* MIGRAT.

ARC1101I ERROR READING DFSMShsm CONTROL DATA SET DURING RECALL/RECOVER/RESTORE/ DELETE

Explanation: While DFSMShsm has been processing a request to recall or delete a data set, or to recover or restore a data set, an error has occurred during the reading of the migration or backup control data set. The name of the data set or volume being processed is given in message ARC1001I.

Source: DFSMShsm

System Action: Processing of this data set or volume ends. DFSMShsm processing continues.

Application Programmer Response: If *reascode* is 16 or 20, another error message from an access method, error recovery procedure, or catalog management routine will be present. Take the corrective action suggested for that specific message.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC1067I MM/DD/YY DATE FORMAT NOT VALID AFTER 1999

Explanation: The HRECOVER command was issued before 1 January 2000 with DATE(mm/dd/yy).

Source: DFSMShsm

System Action: DFSMShsm uses the date to determine which backup version should be recovered.

Application Programmer Response: After 1999, the date must be specified as yyyy/mm/dd.

ARC1101I ERROR READING DFSMSHSM CONTROL DATA SET DURING RECALL/RECOVER/RESTORE/DELETE

Explanation: While DFSMShsm has been processing a request to recall or delete a data set, or to recover or restore a data set, an error has occurred during the reading of the migration or backup control data set. The name of the data set or volume being processed is given in message ARC1001I.

Source: DFSMShsm

System Action: Processing of this data set or volume ends. DFSMShsm processing continues.

Application Programmer Response: If *reascode* is 16 or 20, another error message from an access method, error recovery procedure, or catalog management routine will be present. Take the corrective action suggested for that specific message.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC1102I DATA SET IS NOT MIGRATED/BACKED UP

Explanation: The data set name specified in a request for a recall, recovery, delete, or alter operation was not found in the migration control data set or the backup control data set.

Source: DFSMShsm

System Action: The recall, recovery, delete, or alter ends. DFSMShsm processing continues.

Application Programmer Response: Issue the HLIST command to determine the fully qualified data set name. Reissue the recall, recovery, delete, or alter request with the corrected data set name.

ARC1103I MIGRATION/BACKUP/DUMP VOLUME NOT AVAILABLE

Explanation: A recall, recovery, or restore operation has been requested. The necessary migration, backup, or dump volume is not available.

In message ARC1001I, the *reascode* has the following values:

DASD Reascode	Meaning
4	Migration volume device type is not DASD.
8	Volume type for the migration or backup volume is incorrect.
12	An error occurred in reading MCV or MCT record.
16	No MCV or MCT record found for the migration or backup volume.
20	No MVT, MCV, or MCT record found.

Tape Reascode	Meaning
4	Record not found

8	Control interval in use
12	Work area not large enough
16	Physical error
20	Logical error
22	OCDS not defined
24	BCDS not defined

Source: DFSMShsm

System Action: Processing of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Issue the LIST or HLIST command to determine the necessary volume. Have that volume made available to the system, and reissue the request.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC1104I NO PRIMARY VOLUME AVAILABLE FOR RECALL

Explanation: During RECALL command processing (either automatic or explicit), there have been no acceptable primary volumes with the required space management attributes, or there have been no volumes available with enough free space to recall a data set. To determine why DFSMShsm cannot find any volumes, examine the following parameters:

- RECALL parameter of the SETSYS command
- VOLUMEPOOL or POOL parameter of the DEFINE command
- AUTORECALL parameter of the ADDVOL command
- Primary volume attributes of the ADDVOL command and the MCDRECAL flags in the MCD record

See *DFSMS/MVS DFSMShsm Storage Administration Guide* for details of recall target volume selection.

If the data set organization is BDAM, the data set must be recalled to a volume with the same device type from which the data set migrated unless the VOLUME or DAOPTION parameter of the HRECALL or RECALL command is used.

If the data set organization is not BDAM, one of the following conditions must exist:

- The data set block size plus the key length is less than the track size of the candidate volume.
- The candidate volume is the same device type from which the data set migrated.
- The candidate volume supports track overflow and the data set record shows track overflow.

This message can also be issued in a JES3 system if all the volumes in a user-defined pool are offline during DFSMShsm initialization when the volumes are added and the pools defined. Even when the volumes are subsequently mounted, DFSMShsm cannot recall data sets to them with valid data set reservation by JES3, although the volumes will appear in response to a QUERY command with the POOL or VOLUMEPOOL parameter. Therefore, the message can show a DFSMShsm error, but it is caused by violation of an operational restriction.

Source: DFSMShsm

System Action: The recall operation ends. DFSMShsm processing continues.

Application Programmer Response: Contact the storage administrator to make non-SMS volumes available for recall. Non-SMS volumes are made available for recall with the ADDVOL command on JES2 systems or by issuing the DEFINE VOLUMEPOOL or DEFINE POOL command.

ARC1105I RECALL OF DATA SET *dsname* TO VOLUME *volser* REJECTED. EXISTING SETUP VOLUME LIST DOES NOT INCLUDE THE VOLSER REQUESTED

Explanation: A RECALL command to a specific volume was made for the data set, but the data set has a previous request, and a JES3 setup has occurred. The data set can only be recalled to one of the preselected volumes. The volume serial numbers of the preselected volumes are contained in the MCD record in the migration control data set.

Source: DFSMShsm

System Action: RECALL command processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the RECALL command without specifying the volume to which the data set is to be returned, or specify one of the preselected volumes listed in the MCD record in the migration control data set. The MCD record can be viewed by using the FIXCDS command.

If the recall request was made by specifying a volume serial number in a JCL DD statement, remove the volume serial number. Rerun the job.

ARC1106I CANNOT ALLOCATE PRIMARY COPY ON TARGET VOLUME

Explanation: A dynamic allocation error occurred while DFSMShsm was trying to allocate the output data set during recall or recovery. The data set name is in message ARC1001I. In message ARC1001I, the *reascode* has the following values and meanings:

Reascode	**Meaning**
6	Volume is in use.
8	The volume is not be mounted.
12	Invalid SVC 99 parameter list.
16	There is another dynamic allocation error.
20	The request was cancelled by a installation-wide exit.
24	There was an invalid parameter list.
37	The unit type and volume serial number from the mounted volume table are inconsistent.
39	An error occurred in setting the RACF indicator on in the DSCB.
40	An attempt was made to place a non-SMS-managed data set on an SMS-managed volume. It is not possible to allocate a data set that is not SMS managed on a volume that is SMS managed. There are two conditions that can cause this: • The user-specified target volume of the recall or recovery is SMS managed. • The user did not specify a target volume on the request. – For recall, the volume was chosen by DFSMShsm from its list of non-SMS-managed primary volumes. – For recovery, DFSMShsm chose the volume from which the data set was backed up.

41	The volume allocated was a different volume than the one requested by DFSMShsm. This situation could arise if the ACS routines allowed a new allocation of a DFSMShsm-owned or a DFSMShsm-named output data set to be placed on SMS-managed storage. These data sets cannot be placed on SMS-managed volumes.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response:

Reascode	**Action**
6	Try the request later when the volume is not in use by another user or job.
8	Notify the storage administrator. Correct the problem and retry the operation.
12	DFSMShsm had a logic error and built an invalid parameter list for SVC 99.
16, 20	Notify the storage administrator. Correct the problem and retry the operation.
24, 37	DFSMShsm had a logical error and built an invalid parameter list.
39	An error occurred in accessing the DSCB to set the RACF indicator on. The errors are: • Failure to read the JFCB. • Failure to open the VTOC. • The wrong record was returned from the read.
40	If you specified a target volume on the RECALL or RECOVER command, then you should reissue the command specifying a volume that is not SMS managed. If DFSMShsm selected the target volume during a recall, it will remove the volume from its list of non-SMS-managed primary volumes. Reissue the command and DFSMShsm will select a different volume. To recover a cataloged SMS-managed data set as non-SMS managed, the FORCENONSMS, TOVOLUME, and UNIT parameters must be specified with the RECOVER command to provide DFSMShsm with a valid non-SMS-managed target volume. If a data set is to be recovered as non-SMS managed, the TOVOLUME and UNIT parameters should be specified with the RECOVER command to provide DFSMShsm with a valid non-SMS-managed target volume, if all of the following conditions apply: • The volume from which the data was backed up is currently SMS managed, but was not SMS managed when the backup version was made. • The data set is not currently cataloged. • System ACS routines will cause the data set to be recovered as non-SMS managed.
41	Ensure that the ACS routines do not allow DFSMShsm-owned data sets or DFSMShsm-named output data sets for recall or recovery to be filtered to SMS-managed volumes. The new allocations for these data sets are done using a specific volume and unit on the dynamic allocation request.

For all reason codes except 39 and 41, DFSMShsm issues message ARC0503I to the command log preceding this message, and it gives the dynamic allocation reason code.

ARC1107I ERROR RENAMING PRIMARY COPY

Explanation: During a recall or recover operation, an error occurred in renaming the primary copy of the data set being recalled or recovered.

If *reascode* in message ARC1001I is not 78, then *reascode* is a number that can be broken into a pair of two-digit numbers, *xxyy*, that represent the return code and status code from the RENAME macro.

If *reascode* is 78, then the error occurred when using SVC26 to perform an ALTER NEWNAME function. In this case, message ARC0780I was issued with the catalog return and reason codes.

The return code from the RENAME macro issued by DFSMShsm is *xx*. The values for *xx* are:

XX	**Meaning**
4	No volumes containing any part of the data set were mounted, nor did register 0 contain the address of a unit that was available for mounting a volume of the data set to be renamed. The data set might be a VIO data set, which cannot be renamed.
8	An unusual condition was met on one or more volumes.
12	DFSMShsm passed an invalid volume list.

The rename status code returned to DFSMShsm is *yy*. The values for *yy* are:

YY	**Meaning**
0	The data set VTOC entry for the data set has been renamed in the VTOC on the volume pointed to.
1	The VTOC of this volume does not contain the data set VTOC entry for the data set to be renamed.
2	The macro instruction failed when the correct password was not supplied in the two attempts allowed, or the user tried to rename a VSAM data space.
3	A data set with the new name already exists on this volume.
4	A permanent I/O error was met, or an invalid data set VTOC entry was found during the attempt to rename the data set on this volume.
5	The volume could not be verified as mounted, and no device was available on which the volume could be mounted.
6	The operator was unable to mount the volume. For the Mass Storage System, a volume mount failure occurred.
7	The specified data set could not be renamed on this volume because it was being used.

Source: DFSMShsm

System Action: The recall, recovery, or restore operation ends. DFSMShsm processing continues.

Application Programmer Response: Analyze the rename return and status codes to determine why the rename failed. Take the appropriate corrective action.

ARC1108I ERROR CATALOGING DATA SET

Explanation: During a recall, recovery, or restore operation, an attempt was made to catalog or recatalog the new copy of the data set, or to uncatalog the old copy prior to recovery. The CATALOG macro failed. In message ARC1001I or ARC0734I, the values for *reascode* are the return codes from the CATALOG macro. See *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009.

Source: DFSMShsm

System Action: The recall, recovery, or restore operation ends. DFSMShsm processing continues.

Application Programmer Response: Run the IDCAMS LISTCAT command to obtain a list of the catalog entries. Correct the catalog discrepancy or select a new data set name for the RECOVER or HRECOVER command.

ARC1109I ERROR UPDATING DFSMSHSM CONTROL DATA SET DURING RECALL/ RECOVER/DELETE

Explanation: While DFSMShsm was processing a request to recall, recover, or delete a data set, an error occurred during the updating of the migration control data set or the backup control data set. The name of the data set being processed is given in message ARC1001I. For *reascode* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: The recall, recover, or delete operation ends. DFSMShsm processing continues.

Application Programmer Response: If *reascode* in message ARC1001I is 4, 8, or 12, notify the storage administrator or system programmer to take the appropriate action, as defined by the reascode. If *reascode* is 16 or 20, another error message from an access method, error recovery procedure, or catalog management routine will be present. Take the corrective action suggested for that specific message.

ARC1110I DELETE OF MIGRATED DATA SET FAILED

Explanation: The migrated data set was selected for DFSMShsm deletion. If the *reascode* value on the preceding ARC1001I message is 0, the data set is protected by an expiration date in the catalog or F1 DSCB, or in both.

In the associated message ARC1001I, the reason code has the following meaning:

Reascode	Meaning
7	DFSMShsm has entered a setup for the data set for recall in a JES3 environment, but the expiration date of that setup has not been reached.
10	The data set is in incomplete status. Issue a DFSMShsm RECALL command for the data set.
12	Error when checking the catalog entry expiration date. There was either a GMAIN failure, the LISTCAT failed, or the expiration date was invalid. See any preceding messages for more information

Source: DFSMShsm

System Action: The migrated data set is not deleted. DFSMShsm processing continues.

Application Programmer Response: If the user-supplied data set expiration date has not been reached, you can use the PURGE parameter on the DELETE or HDELETE command to delete the data set. If you want to find out the expiration date, an authorized DFSMShsm storage administrator can use the FIXCDS command to display the MCDEXPDT field.

If the JES3 setup expiration date has not been reached, an authorized DFSMShsm storage administrator can use the FIXCDS command with the PATCH parameter to change the expiration date to a date in the past. Then a delete request will be successful.

ARC1111I UNEXPECTED EOF ON BACKUP/MIGRATED COPY

Explanation: During a recovery or recall operation, an unexpected end-of-file condition occurred. DFSMShsm expects a data set descriptor record to be the first record in the data set. The data set descriptor record was not found before an end-of-file mark was read, or a premature end-of-file mark was met after reading the CDD. Message ARC1001I precedes this message, giving the data set name.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: The data set might be empty or damaged. DFSMShsm cannot recover or recall this version of the data set. Recover the next latest backup version of that data set.

ARC1112I ERROR READING BACKUP/MIGRATED COPY

Explanation: During the reading of a backup version or migration copy of a data set, an error has occurred. An access method or hardware error message may precede this message or may be found in the DFSMShsm job log SYSMSG data set. Message ARC1001I also precedes this message, giving the operation in process and the name of the data set being processed. The reason codes are:

Reascode	Meaning
0	An I/O error has occurred.
4	Invalid data or record length encountered.
8	Record length larger than block size.
12	Decompaction failure.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: If *reascode* is 0, respond to the associated access method or hardware error message if available. For all reason codes, the input data set may be unusable and would have to be replaced by a backup copy.

System Programmer Response: If *reascode* is 4 while attempting to recover a VB data set, the MCVTF_NO_RECOV_TAPE_OPT bit can be temporarily patched ON to disable recovery tape mount optimitzation. This will allow DFSMShsm to retry recoveries for this type of failure. If *reascode* is 8 during volume recovery, the RECOVER *dsname* command may be used to attempt recovering the data set. To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC1113I I/O ERROR WRITING PRIMARY COPY

Explanation: While DFSMShsm was writing the primary copy of a data set during a recall or recovery operation, an I/O error occurred or invalid data was found. If an I/O error occurred an access method or hardware error message should precede this message or be found in the DFSMShsm job log SYSMSG data set.

Message ARC1001I also precedes this message, giving the operation in process, the name of the data set, and a reason code.

Reascode	**Meaning**
0	An I/O error occurred while writing a record to a sequential or partitioned data set.
1	An I/O error occurred while writing the directory.
2	An I/O error occurred while writing member data.
3	An I/O error occurred while writing the end of file.
4	Direct access output data set is out of extents or an I/O error occurred while rewriting the directory.
5	An I/O error occurred while writing the note list.
8	Direct access data records exceed the track capacity of the output device.
10	Record to be moved beyond output buffer.
12	An I/O error occurred while writing a full track of direct access records.
16	An I/O error occurred while writing a direct access block for DAOPTION(RELBLK).

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: If *reascode* in message ARC1001I is 0, 12, or 16, respond to the associated access method or hardware error message. If *reascode* in message ARC1001I is 4, DFSMShsm did not correctly allocate the space required for the data set. If *reascode* in message ARC1001I is 8, data records from a track of the source device (the original primary volume) will not fit on a track of the target device. This may be the result of the source device track length being larger than the target device track length. Another cause may be the result of hardware architecture. For example, at small block sizes (less than 256), more records will fit on a 3380 track than will fit on a 3390 track. This is true even though the maximum track capacity of a 3390 is greater than a 3380. At a blocksize of 80, the 3380 track will hold 83 records while only 78 records will fit on a 3390 track. Therefore, if such a data set is migrated from a 3380, then you need to recall the data set back to a 3380. Or, if the data is to be accessible by relative block addressing, then another option is to recall the data set to a 3390 using the DAOPTION(RELBLK) option. If *reascode* in message ARC1001I is 10, the data set may have an invalid count key data field.

ARC1114I CATALOG LOCATE ERROR

Explanation: During a recall, recovery, or restore operation, a LOCATE macro has been issued to find a data set entry using the standard catalog search. The LOCATE macro has failed. In message ARC1001I, the values for *reascode* are:

Reascode	**Meaning**
4	Either the required catalog does not exist, or it is not open.
8	One of the following conditions has occurred: • The entry is not found. • A CVOL pointer is found in a CVOL. • An alias is found for a generation data group base. • A protection check has failed for a VSAM password-protected data set.
20	There is a syntax error in the name.
24	One of the following conditions has occurred: • The self-describing record of the catalog is bad. • A permanent I/O or unrecoverable error has been encountered. • There is a nonzero ESTAE return code. • An error has been found in a parameter list.
28	The request is for a LOCATE by TTR, which is an invalid function.
40	See message ARC0765I, which is written to the user. The catalog that contains the entry for the data set name being recov- ered must own the volume to which the data set is to be recovered.
OTHERS	For the explanation of the VSAM catalog return code passed back because of the LOCATE processing, see message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB).*

Source: DFSMShsm

System Action: The recall, recovery, or restore operation ends. DFSMShsm processing continues.

Application Programmer Response: If the *reascode* is 24, and the catalog is damaged badly enough to cause a locate failure, you may have to delete the catalog using the force option before retrying the recover. With the bad catalog entry deleted the recover can succeed.

Otherwise, notify the storage administrator to take corrective action according to *reascode* in message ARC1001I.

ARC1115I DELETE NOT ALLOWED FOR VSAM CLUSTER OR COMPONENT NAME, OR MIGRATION COPY NAME

Explanation: A delete request for a migrated data set was received by DFSMShsm. The request specified a VSAM component name or cluster name, or the migration copy data set name. If the request came from the SVC 29 intercept or from the SMS subsystem delete intercept, DFSMShsm does not support deletion of migrated data sets using any of these names. For any other delete request source, DFSMShsm will only delete a VSAM data set if the base cluster name is used on the request, and will only delete a non-VSAM data set if the original data set name is used on the request.

The data set name is given in the preceding ARC1001I message, along with a *reascode*. The *reascode* indicates the type data set name used, and has the following meanings:

Reascode	**Meaning**
01	The name used on the request was a data component name.
02	The name used on the request was an index component name.
03	The name used on the request was a path name.

04	The name used on the request was an alternate index (AIX) cluster name.
05	The name used on the request was a base cluster name from either the SVC 29 or SMS subsystem delete intercept.
06	The name used on the request was the migration copy data set name.

Source: DFSMShsm

System Action: The delete request fails. If the request was processed through SVC 26 and an alternate index cluster name was specified, the data set will be recalled and the delete request for the AIX will be processed by catalog management. DFSMShsm processing continues.

Application Programmer Response: A request through SVC 29 or the SMS Subsystem should not be made with a VSAM cluster or component name. You should modify the job or program to issue the AMS DELETE command, specifying the name of the cluster that you want to delete. If you want to delete an alternate cluster, you should recall the data set first, then issue the AMS DELETE command for the AIX.

ARC1116I DATA SET ALLOCATED TO ANOTHER USER OR JOB

Explanation: During a recall or recovery operation, an attempt was made by DFSMShsm to enqueue on a data set with the ENQ service routine. Or, for a recall, the data set record in the migration control data set was serialized by another processor in a multiple processing unit environment. Multiple-processing unit serialization is done by updating the processing unit ID field in the data set record. The data set, identified by *dsname* in message ARC1001I, was allocated by another user or job and is not available for use by the request described in message ARC1001I.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

System Programmer Response: The LIST HOST(*hostid*) command can be used to determine data sets that are serialized through the data set record in a multiple processing unit environment. If the serialization is in error, the RESET keyword can be used with LIST HOST(*hostid*) to correct this situation by removing the processing unit ID. the data set is available.

ARC1117I ERROR READING JFCB

Explanation: During a DFSMShsm recovery or recall operation, DFSMShsm has issued a RDJFCB macro to read the job file control block (JFCB). This message is preceded by a SNAP dump if the JFCB is being read to allocate a data set on tape, and is preceded by message ARC1001I if the JFCB is being read to restore the creation date, expiration date, last-referenced date, or last-changed date. The RDJFCB request has failed. Message ARC1001I precedes this message with the data set name involved, *retcode*, and the RDJFCB return code. For information about the RDJFCB return code, *DFSMS/MVS Using Data Sets*.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator to assist in determining the status of the JFCB and VTOC. Correct any discrepancies, and retry the recall or recovery operation.

ARC1118I ERROR DURING PROCESSING OF THE DAOPTION FOR A DATA SET RECALL OR RECOVERY

Explanation: A recall or recovery of a data set with a DAOPTION specified was received by DFSMShsm. An error was encountered while processing the DAOPTION. The preceding ARC1001I message contains the data set name, operation in progress, and the *reascode*. *Reascode* has the following meanings:

Reascode	Meaning
2	DAOPTION(SAMETRK) was specified but either the VOLUME specified has a dif- ferent track length than the track length of the L0 device on which the data set last existed, or the TOVOLUME specified or the volume selected for a recover has a different track length than that of the L0 device on which the data set last existed.
4	DAOPTION(RELTRK) was specified but either the VOLUME specified has a track length less than the track length of the L0 device on which the data set last existed, or the TOVOLUME specified or the volume selected for a recover has a track length less than the track length than that of the L0 device on which the data set last existed.
10	Data set is to be SMS-managed upon completion of the request. Only non-SMS-managed data sets are supported in conjunction with the DAOPTION parameter.
13	DAOPTION(RELBLK) was specified but the data set block size is greater than 32K.
14	A DAOPTION was specified for a recall or recover command but the data set organization of the data set specified is not direct access.
16	The data set record format must be fixed or fixed-blocked when using DAOPTION(RELBLK).
18	DAOPTION(RELBLK) cannot be specified when a data set is to be restored from a dump copy.
	The following *reascodes* represent internal DFSMShsm errors. All errors due to an inconsistent user request are identified in the previous *reascode* definitions.
20	DAOPTION(SAMETRK) was specified but the target volume track size is not equal to the last L0 volume's track size. This indicates an internal DFSMShsm programming error.
22	DAOPTION(RELTRK) was specified but the target volume track size is smaller than the last L0 volume's track size. This indicates an internal DFSMShsm programming error.
26	No DAOPTION was specified but the target volume track size is smaller than the last L0 volume's track size. This indicates an internal DFSMShsm programming error.
28	This is possibly the result of the user entering a volume(xxxxxx) with a device type inconsistent with what was specified on the unit(yyyy) parameter for a directed recall. Otherwise, this indicates an inconsistent track length mix for the target or last L0 volume.

30	An invalid device type was detected in a BCDS MCT record while DFSMShsm was recovering a data set. This indicates an internal DFSMShsm programming error.
34	A recover is to be done but an MCC record does exist. This indicates an internal DFSMShsm programming error.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: For reason codes 2, and 4, verify consistency between DAOPTION and the selected target volume. Retry the function after corrective actions have been taken.

For reason codes 10, 13, 14, 16 and 18, verify the request and retry the function.

For reason codes 20, 22, 26, 28, 30 and 34, follow the problem determination steps.

ARC1119I ERROR UPDATING DATA SET VTOC ENTRY

Explanation: During a DFSMShsm recover or recall operation, an I/O error has occurred. The SYNAD exit from the data management CHECK service routine is taken while attempting to update a data set VTOC entry on a volume having a nonindexed VTOC. For volumes having an indexed VTOC, the CVAF macro returns a nonzero value in register 15.

This message is preceded by message ARC1001I, where *dsname* is the data set name involved. There might be an additional error message in the DFSMShsm job log SYSMSG data set.

Source: DFSMShsm

System Action: The recovery or recall operation ends. DFSMShsm processing continues.

Application Programmer Response: If recovering a deleted VSAM data set using the DFSMShsm FROMDUMP and DUMPVOLUME parameters, a DFSMSdss physical restore is attempted. The data set may have been restored even though the data set VTOC entry update has failed. If the data set has been restored, no special action is needed. See the section titled “Other Considerations for Availability Management” in *DFSMS/MVS DFSMShsm Storage Administration Guide*

If recalling a VSAM data set, a reason code of 19 in message ARC1001I indicates the original failure code. A reason code other than 19 in message ARC1001I indicates that one of the following errors occurred:

Reascode	Meaning
20	Unable to either read or write, or both, the DSCB using CVAF.
24	Unable to read the DSCB using BSAM.
28	Unable to write the DSCB using BSAM.

If the data set has a backup version, you may issue an HRECOVER or RECOVER command without the FROMDUMP parameter before issuing a RECOVER command with the FROMDUMP parameter. A catalog entry is created for the data set if the FROMDUMP parameter is not specified. Then, when the FROMDUMP parameter is used, DFSMShsm will have sufficient information to update the data set VTOC entry after restoring the data set.

Retry the operation, and if the problem still exists, notify the storage administrator.

ARC1120I UNSUPPORTED DEVICE TYPE REQUESTED

Explanation: One of the following errors occurred during a recall or recovery operation:

- In a DFSMShsm recall or recovery request for a data set, the VOLUME or TOVOLUME and UNIT parameters were specified. A parameter value was specified incorrectly or was invalid.
- An invalid unit name was detected in a BCDS MCT record while DFSMShsm was recovering the VCAT copy data set or the second VTOC copy data set listed in the MCP record for the volume being recovered. (The first VTOC copy data set was not issued because of an error that occurred during the recovery processing.)
- An invalid unit name was detected in a BCDS MCT record while DFSMShsm was recovering a data set.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: If an invalid unit name was detected in a control data set record, correct it using the FIXCDS command with the PATCH parameter. If a parameter error cannot be determined, notify the storage administrator to get the correct unit name.

ARC1121I REQUESTED VOLUME FOR RECOVERY/RECALL NOT AVAILABLE

Explanation: During a DFSMShsm data set recovery operation, the dynamic allocation of a volume ended. Dynamic allocation routines determined that the volume required was not available to the system, or the operator cancelled the mount request.

Source: DFSMShsm

System Action: The recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Use the LIST or HLIST command to identify the volume in question. Determine why the necessary volume is unavailable. Make sure the volume is mounted or online as necessary, and retry the recovery operation. The DISPLAY operator command might help to determine where the necessary volume is or its status.

ARC1122I ERROR PROCESSING PASSWORD PROTECTED DATA SET, RECOVERY/RECALL/DELETE TERMINATED

Explanation: The data set specified in a DFSMShsm command is write password protected. When DFSMShsm was checking the password, it encountered an error. The data set name and *reascode* are given in message ARC1001I.

The values for *reascode* are:

Reascode	Meaning
0	Only pertains for VSAM data sets. The user specified an incorrect password.
4	The data set is non-VSAM. The user is only authorized to read the data set, but requested to write to or delete the data set.
8	The data set is non-VSAM. The user specified an incorrect password.
12	The data set is non-VSAM. An I/O error occurred in checking the password.

16	The data set is non-VSAM. An OBTAIN error or some other error occurred while DFSMShsm was accessing the data set.

,cc

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Verify that the correct data set name was specified. Provide the appropriate password. Follow installation procedures to request that the system programmer obtain the password of the data set for you, if you have the required authority to use the data set but not the password.

ARC1123I ALTER REQUEST FAILED DURING RESTORE OF VSAM DATA SET

Explanation: While DFSMShsm has been processing a request to restore a VSAM data set with a new name, an error has occurred in trying to alter the data set name in the catalog. The data set has been restored successfully; however, an alter request (SVC 26) to change the name has failed. The name of the data set being processed is in the preceding ARC1001I message. Message ARC0775I also precedes this message, giving the catalog management return and reason codes. These return and reason codes are documented in message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*.

Source: DFSMShsm

System Action: The command ends. The data set is restored and still has its original name. DFSMShsm processing continues.

Application Programmer Response: Alter the name manually with the IDCAMS ALTER command. Analyze the catalog management return and reason code to see if any other corrective action must be taken.

ARC1124I NOT ENOUGH PRIMARY SPACE FOR RECALL/RECOVERY

Explanation: During a recall or recovery operation, an attempt was made to allocate space to restore a data set on a level 0 volume. There was not enough space on the volume selected, the VTOC was full, or the index to the VTOC was full, and there was no other primary volume available. If an attempt was made to recover an unmovable data set, it is possible that another data set is allocated to the space where the unmovable data set must go.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Reorganize the space on the level 0 volumes, or add more volumes. When space is available on a volume, retry the recall or recovery operation.

ARC1125I RECALL FAILED DUE TO BAD VALUES RETURNED FROM THE RECALL INSTALLATION-WIDE EXIT

Explanation: The installation-wide exit was taken to select up to five volumes from a list provided by DFSMShsm on which to attempt recall of the data set. All values returned by the installation-wide exit do not coincide with the positions of any of the volumes in the list provided by DFSMShsm.

Source: DFSMShsm

System Action: The recall operation ends. DFSMShsm processing continues.

Application Programmer Response: If the installation-wide exit generated the value, there might be an algorithm error. Correct the cause of the incorrect value, relink the exit module if necessary, and reload the exit with the SETSYS command. Until the recall installation-wide exit is fixed, the system programmer can use the SETSYS command to turn off the recall exit and allow DFSMShsm to process the undirected recalls.

ARC1126I RECALL FAILED - PRIOR ERROR IN RECALL INSTALLATION-WIDE EXIT

Explanation: The undirected recall (no recall target volume was specified) failed because the recall installation-wide exit routine is to be taken, but an error occurred in the exit routine during a previous recall operation.

Source: DFSMShsm

System Action: The recall operation ends. DFSMShsm processing continues.

Application Programmer Response: Fix the recall installation-wide exit routine. Issue the RELEASE command with the RECALL parameter. Retry the recall operation. Until the recall installation-wide exit is fixed, the system programmer can use the SETSYS command to turn off the recall exit and allow DFSMShsm to process the undirected recalls.

ARC1128I BACKUP/DUMP COPY DOES NOT EXIST

Explanation: A RECOVER or HRECOVER command was issued, but no backup version or dump copy exists for the specified data set or volume. Message ARC1001I precedes this message giving the data set name or volume serial number. The *reascode* in message ARC1001I gives an indication of the conditions and the necessary action to take to correct the situation.

Reascode **Meaning**

0 A BCDS record describing the data set or volume was not found. You may also get this *reascode* when the data set recovered has only a physical dump copy and the device type of the original volume that was dumped is not similar to the device type of the target volume selected for the restore.

4 The BCDS entry was found for the data set or volume. However, one of the following occurred:

- A backup version or dump copy of the data set or volume is not available.
- A backup version or dump copy of the data set or volume does not meet the date, generation, or version requirements. You may also get this reason code if a dump copy exists for the data set, but DFSMShsm cannot find it because:
  - The data set is not currently cataloged to the source volume of the dump copy.
  - There is no incremental backup version that meets the date or generation specified to allow DFSMShsm to determine where the dump copy is.
- A dump copy does not meet the date, data set restore, dump generation, dump volume, or dump class requirements.
- The data set was not found in a dump VTOC copy data set.

	• A cataloged backup version was not found for the data set when FROMVOLUME was not specified.
12	A recover request was issued without specifying FROMDUMP(DUMPVOLUME(*volser*)) for a multivolume data set. A BCDS backup version was not found for the data set. A dump copy is used to restore a multivolume data set only if FROMDUMP(DUMPVOLUME(*volser*)) was specified by a DFSMShsm authorized user. If FROMDUMP(DUMPVOLUME(*volser*)) was not specified, DFSMShsm only recovers a multivolume SMS-managed data set using an incremental backup version. This ensures the entire data set is recovered as one entity, or to verify an authorized user knows which piece of the data set is restored from which dump copy. DFSMShsm does not back up multivolume non-SMS-managed data sets.
16	A recover request was issued for a VSAM SMS key range data set. A BCDS backup version was not found for the data set. Since DFSMSdss does not support key range data sets, only the backup version is used to recover a VSAM SMS key range data set.
20	The NEWNAME parameter was specified for a VSAM data set when the original data set exists and no backup copy exists (only a DUMP COPY exists). DFSMSdss does not support the NEWNAME parameter for VSAM data sets, so the restore must use the original data set name.
24	A recovery command specified with the RCVRQD keyword was issued for a data set. A BCDS backup version was not found for the data set. DFSMShsm does not support the recovery of a physical dump copy of a data set if the RCVRQD keyword was specified.

Source: DFSMShsm

System Action: The recovery operation of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Consider the following actions and reissue the command:

Reascode	**Meaning**
0	If this occurred due to dissimilar unit types, reissue the command directing the data set to the correct unit type.
4	Issue a LIST or HLIST command with the BACKUPCONTROLDATASET and DATASETNAME parameters to retrieve information about backup versions of the data set and then perform one of the following: • Be sure you specify the correct data set name. • If the data set was cataloged at the time it was backed up, do not specify the FROMVOLUME parameter. • If the data set was uncataloged at the time it was backed up, specify the FROMVOLUME parameter with the volume serial number of the volume from which it was backed up. • If the DATE parameter was specified, a backup version created on or before the date specified does not exist. Specify a correct date. If there is an eligible dump copy, but no eligible incremental backup version, perform one of the following: – Reissue the RECOVER or HRECOVER command with the FROMVOLUME parameter. – Reissue the RECOVER or HRECOVER command with the REPLACE parameter after the data set is cataloged to the source volume of the dump copy. • If the GENERATION parameter was specified and a backup version of the specified relative generation number does not exist, specify a correct generation number. • If the VERSION parameter was specified and the specified version number does not exist, specify a correct version number.
12	Issue a LIST command with PVOL BCDS ALLDUMPS to retrieve the information about dump copies and dump volumes of the primary volume. Then issue a LIST command with DVOL DUMPCONTENTS to retrieve information about each dump copy of the data set. Perform one of the following: • Reissue the command with FROMDUMP(DUMPVOLUME(*volser*)) if a dump copy exists for a piece of the data set and only one piece of the data set is to be restored. • Reissue several RECOVER FROMDUMP(DUMPVOLUME(*volser*)) commands to restore several pieces of the data set if dump copies exist for the data set.
16	No action required.
20	If you want to retain the original data set, copy the original data set to a new data set name. Then restore the dump copy of the data set to the original data set name by issuing the RECOVER command without the NEWNAME parameter.
24	Reissue the recovery command without the RCVRQD keyword.

ARC1129I CANNOT RENAME, DATA SET ALREADY EXISTS ON VOLUME

Explanation: A RECOVER or HRECOVER command was issued with the NEWNAME parameter. The data set name specified with the NEWNAME parameter has already been used on the volume where the data set is being recovered. The data set name is indicated in message ARC1001I.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Choose a different data set name and reissue the command.

ARC1131I CANNOT MOUNT VOLUME NECESSARY FOR RECALL/RECOVERY

Explanation: During a DFSMShsm recall or recovery operation, the volume where the requested data set resides is not mounted. The allocation routine passed a return code of 8, indicating that the operator cancelled the requested mount. Message ARC1001I precedes this message, giving the data set name involved.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Have the required volume made available to the system for your use. The DISPLAY operator command might help determine the volume status. Retry the recall or recovery operation when the volume is available.

ARC1133I OLD COPY OF DATA SET EXISTS, BUT REPLACE NOT SPECIFIED

Explanation: A RECOVER or HRECOVER command was issued to DFSMShsm. The REPLACE parameter was not specified. A data set already exists on the volume with the same name as that specified in the command. If the NEWNAME parameter was specified, it is the new name that already exists. The data set name is given in message ARC1001I.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Determine whether the old copy of the data set is needed. If the old copy is not needed, reissue the command with the REPLACE parameter. If both copies of the data set are needed, reissue the command with the NEWNAME parameter or a new data set name as that parameter.

ARC1134I RECOVERY FAILED - ERROR SCRATCHING OLD COPY

Explanation: A RECOVER or HRECOVER command was issued with the REPLACE parameter. During DFSMShsm processing, the data management scratch service routine was invoked to scratch the old copy. The scratch failed. Message ARC1001I precedes this message, giving the data set name. Message ARC0528I or ARC0545I will appear in the backup activity log, giving the return and reason codes or status codes for the error.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: See the explanation for message ARC0528I or ARC0545I. Take the appropriate action.

ARC1135I ERROR OPENING INPUT DATA SET DURING RECALL/RECOVERY

Explanation: DFSMShsm issued the OPEN macro to open an input data set. During open processing, the ESTAE routine was invoked. An OPEN error message with component identifier IEC normally precedes this message if this is a true OPEN error. Message ARC1001I also precedes this message, giving the operation in process and the data set name. If the recall failure is indicated in message ARC1001I and the user data set is in the small data set packing (SDSP) data set, this error is related to opening the SDSP VSAM data set.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Take the action indicated by the OPEN error message, and retry the DFSMShsm operation.

ARC1136I ERROR OPENING OUTPUT DATA SET DURING RECALL/RECOVERY

Explanation: The OPEN macro was issued by DFSMShsm to open an output data set or the VTOC on the target volume of the recall or recovery operation. The OPEN process failed. An OPEN error message with component identifier IEC precedes this message, indicating the data set name that the OPEN failed for. Message ARC1001I also precedes this message, indicating which operation was in process and the name of the data set it was processing.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Take the action indicated by the OPEN error message, and retry the DFSMShsm operation.

ARC1137I VOLUME AND UNIT SPECIFIED ARE INCONSISTENT

Explanation: The unit type specified is not the correct unit type for the volume specified for a recovery operation.

Source: DFSMShsm

System Action: The recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Verify the unit type and volume specified. Correct the mismatch and reissue the command.

ARC1138I I/O ERROR READING FROM A BACKUP OR MIGRATION VOLUME

Explanation: DFSMShsm has taken a data control block exit because a read error has occurred in reading the VSAM data set backup version being recovered or the migration copy being recalled. Message ARC1001I gives the data set name.

The reason code displayed in the ARC1001I message could either be the return code from an internal DFSMShsm call to IDCAMS or a DFSMShsm reason code. The IDCAMS return codes are 4, 8, 12 and 16. For an explanation of these return codes, see *DFSMS/MVS Macro Instructions for Data Sets*. A reason code of 0 indicates that an I/O error has occurred. A reason code of 2 indicates that an invalid data or record length has been encountered.

Source: DFSMShsm

System Action: Recovery or recall of the data set ends. DFSMShsm processing continues.

Application Programmer Response: For reason codes 4, 8, 12, and 16, respond to the associated access method or hardware error message if available. For all reason codes, the input data set may be unusable and would have to be replaced with a backup copy.

ARC1139I ERROR PROCESSING RACF PROTECTED DATA SET, RECOVERY/RECALL/DELETE TERMINATED

Explanation: During a recall, recovery, restore, or delete operation of DFSMShsm, an attempt was made to process a Resource Access Control Facility (RACF) protected data set. The data set name and a reason code are given in the preceding ARC1001I message. For *reascode* values, see Table 21 on page ARC-292.

Source: DFSMShsm

System Action: The recall, recovery, restore, or delete operation ends. DFSMShsm processing continues.

Application Programmer Response: If RACF denied access, there is an associated RACF message. If the data set name and DSCB do not match, there is an associated access method message. If an I/O error caused the reading of the JFCB to fail, an associated error message can be found in the DFSMShsm job log SYSMSG data set. Respond to the associated message. If an abnormal end occurs during RACF processing, the reason code is 20 and probably occurs because the RACF profile does not agree with the catalog entry.

ARC1140I RECOVERY FUNCTION DISABLED

Explanation: The recovery function was disabled, or the installation is not allowing recovery.

Source: DFSMShsm

System Action: The recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: If an installation does not normally provide for the DFSMShsm recovery function, this is the result of an invalid command. If the function is disabled, retry the command at a later time. Notify the storage administrator of this condition if it is unexpected.

ARC1141I ERROR DURING CLEANUP OF DATA SET, RECALL FAILED

Explanation: RECALL command processing of the data set specified in message ARC1001I failed.

If the data set specified in message ARC1001I is a VSAM data set, then the RECALL command failed while attempting to allocate the target volume or import the migration copy. An attempt to recatalog the cluster name, or one of the cluster's object or path names (if it was eligible for RECALL processing by any of those names), failed.

If the data set specified in message ARC1001I is a non-VSAM data set, then the error occurred while trying to recatalog the data set as migrated when the RECALL command failed.

The *reascode* in message ARC1001I is the original failure code and it corresponds with message ARC11xxI, where xx is the *reascode*.

Source: DFSMShsm

System Action: The RECALL command ends. DFSMShsm processing continues.

Application Programmer Response: If it is a VSAM data set, then it is necessary to find out which object(s) need to be recataloged by you. To find this information, do the following:

1. Use the FIXCDS command to display the MCD record for the migrated VSAM data set.
2. Using the field MCDMCANM in the MCD record as the key, use the FIXCDS command to display the MCO record for the data set (if an MCO record exists).
3. Using the object names that exist in the MCO record, or just using the base cluster name if an MCO record does not exist, use the TSO LISTCAT command to list the catalog entry for the object name(s).
4. For any entry name that does not have a non-VSAM catalog entry with a volume serial number of MIGRAT, use the AMS DEFINE non-VSAM command to create a catalog entry for the object, with a volume serial number of MIGRAT.
5. The data set recall should be reattempted using any of the object names that are now cataloged properly.

If it is a non-VSAM data set then do the following:

1. Use the TSO LISTCAT command to list the catalog entry.
2. If the entry name does not have a catalog entry use the AMS DEFINE non-VSAM command to create a catalog entry for the data set, with a volume serial number of MIGRAT.
3. If the entry name does have a catalog entry but the volume serial number is not MIGRAT, then uncatalog the data set and then use the AMS DEFINE non-VSAM command to create a catalog entry for the data set, with a volume serial number of MIGRAT.
4. Use the reason code to determine the reason the recall failed. Fix the problem and then reattempt the recall of the data set.

ARC1142I FAILED TO UNCATALOG ‘A’ ENTRIES FOR THE VSAM SPHERE

Explanation: When a VSAM data set is migrated, each of the VSAM components is cataloged as a non-VSAM data set (‘A’ entry) to volume serial number MIGRAT. In preparation for a VSAM recall, the catalog entries for the migrated data set must be uncataloged. A failure, other than a no-record-found condition, was encountered. The recall of the data set cannot be performed until all the entries associated with the base cluster are uncataloged. Current status of the data set cannot be determined. The data set name for which the recall failed is given in the ARC1001I message.

Source: DFSMShsm

System Action: The recall operation ends. DFSMShsm processing continues.

Application Programmer Response: Recall the data set using the following steps:

1. List the data set by issuing a DFSMShsm LIST command for the data set name.
2. Issue uncatalog requests for all the names associated with the data set, including the base cluster name. All the cataloged names that must be uncataloged for the RECALL command to be successful are included in the output of the DFSMShsm LIST command. During the recall attempt that caused this condition, one or more of the associated names might have been uncataloged. Here, your uncatalog request will fail because of a no-record-found condition.
3. To recall the data set to a device type other than the device type it was last migrated from, use an IDCAMS DEFINE command to define the data set on the volume where the data set is to reside. If there is no device type change, skip this step.
4. Issue a RECALL command for the data set. Use the base cluster name for the recall.

ARC1143I ERROR RETRIEVING CATALOG INFORMATION DURING DATA SET RECOVER/RESTORE

Explanation: A failure occurred in retrieving information from a catalog for a data set being recovered or restored, or for the NEWNAME specified on HRECOVER/RECOVER command. For an HRECOVER/RECOVER data set request, the name of the data set being processed is in the ARC1001I message that precedes this message. For a volume request, the data set name appears in the text of the associated ARC0734I message with return code 43. In message ARC1001I or ARC0734I the *reascode* has the following values:

Reascode	**Meaning**
5	An attempt was made to recover a backup copy of a data set that has the same name as a Generation Data Group (GDG) base entry. DFSMShsm does not support the backup of GDG base entries.

6	non-VSAM catalog error.
10	A VSAM component is multivolume.
14	A locate error occurred (other than not found), or a data set is a non-ICF catalog, or a data set is a page or swap data set. If there is an associated message IDC3009I in the system log, then follow message IDC3009I return code 14, reason code NN in the programmer response.
15	A VSAM component has a logical record length that is too large.
16	A component of the VSAM data set was open.
18	An error occurred in locating catalog information for a base data or base index component of a VSAM data set.
19	An error occurred in locating catalog information for a base path of a VSAM data set.
28	An error occurred in locating catalog information for an alternate index of a VSAM data set.
38	An error occurred in locating catalog information for a data or base index component of an alternate index.
39	An error occurred in locating catalog information for an alternate index path of a VSAM data set.
52	An error occurred in getting virtual storage to contain the catalog information.
60	An attempt was made to recover an uncataloged non-SMS generation data set but the generation data group (GDG) is no longer defined or is not found through the generic catalog locate; that is, the GDG base entry cataloged in an OSCVOL catalog.

Source: DFSMShsm

System Action: Processing for the data set ends. DFSMShsm processing continues.

Application Programmer Response: Follow the corrective action in the problem determination section. Resubmit the request after corrective action has been taken. If *retcode* = 60, define the GDG and reissue the RECOVER command. To recover the generation data set, define the GDG or allocate a generation data set using the same name as the target data set and reissue the RECOVER command.

For *reascode* of 18: If a VSAM data set is cataloged and was backed up with the BACKDS command (there is no BACKUP VTOC), you may need to uncatalog the data set before recovering it. If the target volume was reformatted in preparation for the recovery, there will not be a VVDS or a NVR entry for the VSAM data set. Use a DELETE NOSCRATCH command against the data set and then RECOVER it.

ARC1145I TOVOLUME CANNOT BE A MIGRATION VOLUME OR DATA SET IS MIGRATED

Explanation: A RECOVER or HRECOVER command was issued. The receiving volume specified in the TOVOLUME parameter is a migration volume, or the data set to be recovered is a migrated data set and NEWNAME is not specified. If NEWNAME is specified, the NEWNAME data set is a migrated data set or the data set is a VSAM data set.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command. Either use an acceptable volume as the receiving volume, or, if the data set to be recovered is a migrated data set, recall the data set first or specify NEWNAME with the RECOVER command.

ARC1146I OBTAIN ERROR READING DATA SET VTOC ENTRY DURING RECALL/RECOVERY

Explanation: While DFSMShsm was performing a recovery, restore, or recall operation, the OBTAIN macro was used to read the data set VTOC entry of an original data set name, or a new name for recover or restore security checking, or the migration copy indicated in message ARC1001I. In message ARC1001I, *reascode* is the return code from the OBTAIN macro.

The values for *reascode* are:

Reascode	Meaning
4	The required volume was not mounted. This code can occur when attempting to recover from a dump copy when the original volume is no longer available. To allow this recovery to be successful, use the TOVOLUME keyword to direct the recovery to another volume. Use of the TOVOLUME keyword must reference a volume in the correct storage group if the data set is SMS-managed. This code also occurs when the user data set is moved to tape and the volser in the catalog is that of a tape. To enable a recover in this case, first delete the existing catalog entry and then re-request the recover.
8	The data set VTOC entry was not found in the VTOC of the specified volume.
12	A permanent I/O error was encountered, or an invalid data set VTOC entry was found during the processing of the specified volume.
16	There was an invalid work area pointer.

Source: DFSMShsm

System Action: The recovery, restore, or recall operation ends. DFSMShsm processing continues.

Application Programmer Response: If *reascode* in message ARC1001I is 4, correct the problem and reissue the command. If *reascode* is 8 or 12, notify the system programmer to take corrective action. If *reascode* is 16, notify the storage administrator to take corrective action.

ARC1147I RECALL/RECOVERY FAILED - PARTITIONED DATA SET HAS A MEMBER WITH MORE THAN 1 NOTE LIST

Explanation: A data set cannot be backed up or migrated with more than 1 note list. The operation fails with message ARC1215I. In this case, the data set on the migration or backup volume indicates the data set has more than 1 note list.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: The data set cannot be recalled or recovered in the current status. Notify the storage administrator to take corrective action

ARC1148I RECALL FAILED. THE DATA SET IS IN INCOMPLETE STATUS.

Explanation: A data set in incomplete status means the data set is cataloged on a primary volume, but the complete data set remains uncataloged on a migration volume. This can only occur for VSAM data sets.

In the associated message ARC1001I, the reason code has the following meaning:

Reascode	Meaning
2	During the recall of a data set in incomplete status, the data set cataloged on a primary volume must first be deleted before recalling the migrated data set. In this instance, the delete operation failed.
4	During recall, DFSMShsm attempted to alter the catalog entry to remove the incomplete status, but the alter operation failed.

Source: DFSMShsm

System Action: The recall fails leaving the data set in incomplete status.

Application Programmer Response: See the associated ARC0950I message giving the catalog return and reason codes for the failure. When the reason for the failure is corrected, reissue a RECALL command.

If your VSAM sphere has objects or options such that the DELETE of the data set fragment on L0 does not work (when APAR OY60012 is applied), the volume clean up can be done manually and the data set can be recalled. Verify that the migrated data set still exists uncataloged on a migration volume. Then proceed with the following steps:

1. Issue the TSO LISTCAT command to list the catalog entry.
2. Use the AMS DELETE NOSCRATCH command, while logged on under the RACF group ARCCATGP, to uncatalog the data set on the primary volume.
3. Use the AMS DELETE VVR command to delete each component from the primary volume(s).
4. Use the AMS DEFINE NONVSAM command to create a catalog entry for the data set with a volser of MIGRAT.
5. RECALL the data set. If the first recall fails, issue the recall again since the first recall allowed DFSMShsm to update records.

ARC1149I DEVICE AND DATA SET ARE INCOMPATIBLE

Explanation: During a recall or recovery of a non-VSAM data set, the target volume was found to have a track size less than the block size plus the key length of the data set. Either the target device does not support track overflow or the track overflow option was not requested for the RECFM parameter in the DCB when the data set was created.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Primary space is needed on a compatible device. Reissue the command directing it to a specific compatible volume.

ARC1150I NO UNIT AVAILABLE TO MOUNT MIGRATION/BACKUP COPY

Explanation: During a recall or recovery operation, an attempt was made to allocate the migration copy or backup version of the data set identified in message ARC1001I. The allocation routines determined that the required volume is not online, nor are any units available on which to request a mount.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Arrange to have a unit made available for this request, and retry the operation.

ARC1151I ANOTHER DFSMSHSM FUNCTION ACTIVE FOR DATA SET, RECALL REJECTED

Explanation: This message may or may not represent a problem. A recall request is unable to complete for either one of the following reasons:

- The data set is in use by another DFSMShsm operation; or
- The data set is on an unavailable SDSP volume.

The data set name is given in message ARC1001I.

Source: DFSMShsm

System Action: The recall operation ends. DFSMShsm processing continues.

Application Programmer Response: DFSMShsm attempted this recall several times. Retry the recall at a later time. If the recall continues to fail with message ARC1151I, or if this message occurs frequently, consult your DFHSM service representative to assist you in resolving this problem. If the ARC1001I message preceding message ARC1151I has a reason code, then save this reason code for when you contact your service representative.

ARC1152I GET/FREEMAIN ERROR - RECALL/RECOVERY TERMINATED

Explanation: During a recall or recovery operation, a GETMAIN or FREEMAIN macro was issued for virtual storage. The macro failed.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Operator Response: See the programmer response.

Application Programmer Response: Retry the recall or recovery operation. If the problem occurs again, notify the storage administrator.

ARC1153I MSS UNAVAILABLE - RECALL/RECOVERY TERMINATED

Explanation: A recall or recovery operation was requested for a data set that resides in the Mass Storage System. The Mass Storage System was either not ready to accept orders or was not initialized.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Retry the operation when the mass storage system is available.

ARC1154I RECALL FAILED DUE TO AN ERROR IN AN INSTALLATION EXIT

Explanation: The ARCRDEXT exit for the volume selection of an undirected recall of a data set ended abnormally. DFSMShsm continues to recall any data set that is automatically directed or command directed to a given volume. To release the recall function, issue the RELEASE command with the RECALL parameter.

Source: DFSMShsm

System Action: DFSMShsm processing continues with limited RECALL processing. DFSMShsm fails all undirected recalls with message ARC1126I.

Operator Response: If you determine that the recall function can run without the installation-wide exit, turn off the installation-wide exit using the SETSYS command with the EXITOFF parameter. DFSMShsm runs without the volume selection routine. If you determine that the ARCRDEXT exit will not abnormally end (abend) again, issue a RELEASE command with the RECALL parameter. DFSMShsm runs with the ARCRDEXT volume selection routine exit.

Application Programmer Response: The existing version can be reactivated using the SETSYS command. Correct the cause of the abend and reinstall the exit module.

ARC1155I VSAM RECALL/RECOVERY FAILED - ERROR IN IMPORT

Explanation: Recovery or recall has been attempted for a VSAM data set but an IDCAMS IMPORT command has been unable to complete successfully. The data set name and IDCAMS return code are given in message ARC1001I. If the reason code in the ARC1001I message is 4, 8, 12, or 16, it is the return code from IDCAMS.

The IDCAMS error messages are contained in the activity logs. If a recall fails, review the migration activity log. If a recover fails, review the backup activity log. To review the activity logs, issue the RELEASE HARDCOPY command. If the logs are on DASD, new logs are created and the logs with the messages can be browsed. If the logs are directed to SYSOUT, they are printed.

In the following two special cases the *reascode* in ARC1001I is *not:* the IDCAMS return code.

- When an IDCAMS IMPORT command fails with *retcode* 28 in message IDC3351I, DFSMShsm issues message ARC0769I and retries the IMPORT command. If IMPORT processing fails again with *retcode* 28 in message IDC3351I, DFSMShsm issues message ARC0786I and retries the IMPORT command once more. The next failure with *retcode* 28 in message IDC3351I results in this message (ARC1151I) with *reascode* 3351 in message ARC1001I. Recovery processing requires MCVTF_NO_RECOV_TAPE_OPT be patched temporarily ON for these retries to occur.
- When an IDCAMS IMPORT command fails with message IDC3020I, DFSMShsm retries IMPORT processing up to 5 times. If the 5 retries fail with error message IDC3020I, IMPORT processing is not successful; and the result is message ARC1155I with *reascode* 3020 in message ARC1001I.

Source: DFSMShsm

System Action: The recovery or recall of this data set ends without completing. DFSMShsm processing continues.

Application Programmer Response: Do one or all of the following:

- If *reascode* is 0, the data set has been recalled except for one or more alternate index clusters (AIX) that failed IMPORT processing. Manually rebuild these AIX clusters. Refer to the preceding ARC0767I or ARC0768I message.
- If *reascode* is 12 for a recover function, check the command activity log for an SMS IGD306I-UNEXPECTED ERROR DURING INTEXPDT PROCESSING, RETURN CODE 8, REASON CODE 1017 message. This message may indicate a problem with the data set expiration date in the MCC record. Use the FIXCDS command to display the MCC record and check the MCCEXPDT field for a valid date. Correct this field and retry recovering the data set. Following the RECALL or RECOVER, check the Format1 DSCB expiration field (dslexpdt) for non-VSAM data sets or the catalog expiration data for VSAM data sets and correct this field if necessary. Failing to correct this field will result in the same RECALL or RECOVER failure for the data set next time DFSMShsm tries to recall or recover it.
- Respond to the IDCAMS return code and retry the operation. The IDCAMS error messages are contained in the activity logs. If a RECALL command fails, review the migration log. If a RECOVERY command fails, review the backup log. If message IDC3032I BUFFER SPACE TOO SMALL is issued, the device type of the volume to which the data is being recovered differs from the device type of the volume from which the data has been migrated. Issue an IDCAMS DEFINE command for the data set on the target volume and retry the RECALL or HRECALL command. Before issuing the DEFINE command, uncatalog all previous object names that will be used again.

  If the IDCAMS message IDC3020I INSUFFICIENT SPACE ON USER VOLUME is issued during IMPORT processing of an AIX for a VSAM cluster, the recall ends but the base cluster is recalled successfully. The migrated copy is scratched; therefore create the alternate index from the base cluster.
- If in a multiple processing unit environment with different levels of DFP, the data set might have been migrated or backed up by control interval (CIMODE) processing. DFSMShsm can only recall or recover the data set on an MVS/XA Data Facility Product Version 2 Release 1.0 or subsequent release system with the appropriate program temporary fix (PTF) applied. Contact your system programmer to see if CIMODE processing has been in effect. If it has been in effect, try to recall or recover the data set on a processing unit with the appropriate level of MVS/XA Data Facility Product.
- An I/O error might prevent the migration version from being recalled. Therefore, if repeated attempts to recall the data set result in this message and a backup copy of the data set exists, issue a DFSMShsm DELETE command for the data set followed by a DFSMShsm RECOVER command.

ARC1156I VSAM RECALL/RECOVERY FAILED - CATALOG LOCATE ERROR

Explanation: An attempt has been made to recover or recall a VSAM data set. A LOCATE parameter has failed in getting the catalog name, catalog volume serial, or password. The reason code given in message ARC1001I is the VSAM catalog return code. For detailed information, see message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB).*

Source: DFSMShsm

System Action: The data set is not recovered or recalled. DFSMShsm continues to process other data sets that have been specified by this command or other commands.

Application Programmer Response: Correct the catalog information and retry the request.

ARC1157I RECOVERY FAILED - DATA SET CANNOT BE RECOVERED WITH NEWNAME

Explanation: A VSAM data set was being recovered with the NEWNAME parameter specified. The reason code is given in a message ARC1001I.

The values for *reascode* are:

Reascode	Meaning
4	There were alternate indexes on the original data set that cannot be recovered when NEWNAME is requested.
8	Specify a new data set name that directs allocation to the same catalog as the old data set name.
10	RECOVER command processing will not recover a VSAM data set to replace a non-VSAM data set, nor will it recover a non-VSAM data set to replace a VSAM data set. Therefore, a backup version must have the same data set organization as the data set it is to replace, or the existing data set with the same name must be deleted before recovering a backup version of it.
12	DFSMShsm cannot recover a backup version of a base cluster when NEWNAME is specified if the base cluster has a path defined on it. Therefore, if a data set exists with the same name as specified with NEWNAME, use the IDCAMS RENAME command to rename the existing data set and recover the backup version without specifying NEWNAME. If no data set exists with the old data set name, you get reason code 16.
14	The NEWNAME specified on the RECOVER command is a non-SMS-managed VSAM key range data set. DFSMShsm and DFSMSdss do not support non-SMS-managed VSAM key range data sets.
16	DFSMShsm cannot recover a backup version of a VSAM data set unless the old data set name exists from which the old object names can be found in the catalog. This reason code indicates that a catalog error occurred when DFSMShsm was trying to find the old object names.
18	This error could occur because the user is trying to recover a backup version with the NEWNAME parameter specified and the old data set name is not in the catalog. If the old data set name is in the catalog, the catalog entry's associated fields do not specify data and index components.
20	An integrated catalog facility catalog cannot be renamed when it is being recovered.
36	The NEWNAME specified on the RECOVER command is a multiple volume data set and FROMDUMP(DUMPVOLUME) was not specified. DFSMShsm does not back up and recover multiple volume non-VSAM or multiple volume VSAM non-System Managed Storage (SMS) data set. The FROMDUMP(DUMPVOLUME) is required to restore a dump copy for a multiple volume non-VSAM or multiple volume VSAM non-SMS-managed data set. This is to ensure that an authorized user knows which piece of the data set is being restored from which dump copy.

Source: DFSMShsm

System Action: If the reason code is 4, the VSAM base cluster was recovered, but none of the alternate index (AIX) clusters were recovered. In all other cases, no data was recovered. Recovery processing of this data set ends. DFSMShsm processing continues.

Application Programmer Response: If the reason code is 4 and AIX clusters are needed, use IDCAMS to build the needed AIX clusters.

ARC1158I RECOVER DATA SET FAILED

Explanation: A data set is being recovered, but a possible logical error exists relating to data integrity. Message ARC1001I or ARC0734I gives the data set name and the reason code.

The values for *reascode* are:

Reascode	Meaning
8	The data set name is currently cataloged, but it is not the name of a VSAM base cluster or a non-VSAM data set.
10	The data set name specified in the NEWNAME parameter is currently cataloged, but it is not the name of a VSAM base cluster or non-VSAM data set, or it is not the same VSAM type (LDS, KSDS, ESDS, or RRDS) as the VSAM data set being recovered.
12	The data set organization of the backup version selected differs from the data set organization of the data set for which there is a current catalog entry (one is a VSAM data set and the other is a non-VSAM data set), or the data set organization of the old data set name differs from the data set organization of the new data set name.
14	The data set is a non-SMS keyrange data set. DFSMShsm does not support backup and recovery of a non-SMS keyrange data set. This data set must be RECOVERED as an SMS-data set.
16	A backup version of an uncataloged data set is to be used to recover a data set, but a cataloged data set exists on the receiving volume. A backup version of an uncataloged data set may not be used to replace a cataloged data set.
18	RECOVER processing of a data set backed up while open is requested to a non-SMS target and FORCENONSMS is not specified.
20	During volume recovery, a data set is not recovered because a cataloged data set with the same name exists which has a creation date since the date of backup. If you want the recovered data set to replace the more recently defined data set, issue a RECOVER or HRECOVER command for the data set you want to recover and specify the REPLACE parameter. During volume restore with APPLYINCREMENTAL, a data set was not recovered because a cataloged data set with the same name exists which has a creation date since the date of backup. If the data set is not on the volume dump VTOC, but is on the volume backup VTOC, the data set has a catalog entry but not a VTOC data set entry after the volume restore with updates is done. The user may have

	to uncatalog the data set to delete the catalog entry after the volume restore with updates.
22	A extended format data set is backed up by datamover DFSMShsm.
24	The tape volume is not mounted.
26	The recovery of an integrated catalog facility (ICF) catalog is requested by an unauthorized user or an alias is specified instead of the catalog's true data set name on the HRECOVER command.
28	• A data or index component of a catalog exists on the volume where the catalog is to be recovered. • The volume could not be mounted to verify the presence of any components of the catalog. • The OBTAIN request fails for other than a not-found condition.
30	The recovery of the ICF catalog is directed to a volume other than the volume from which it is backed up.
32	During volume recovery, a data set recovery failed because the data set is currently cataloged on another volume.
34	FROMDUMP(DUMPVOLUME) is not specified to restore a multivolume extended format data set which can only be backed up by DFSMSdss physical full volume dump.
36	Cataloged multiple volume data sets are not recovered by Incremental Volume Recovery or by full Volume Restore during the APPLYINCREMENTAL process. The message ARC1158I may be received during Volume Restore with APPLYINCREMENTAL processing if the multiple volume data set is in the Dump Copy VTOC or the Backup Copy VTOC being processed. For example, the message is issued when the Restore process restored a segment of a multiple volume data set, but not all segments of the data set were restored since some segments reside on other volumes. If the multiple volume data set was backed up from the volume where the base is cataloged, then a more recent backup copy may exist. Because VSAM data sets have multiple components, more than one message may be received for the same VSAM sphere.
38	An extended format data set is filtered by ACS routines to be recovered or restored to a non-SMS-managed volume.
40	The data set is currently uncataloged, but the backup version is a cataloged data set.
44	FROMVOLUME is specified to recover or restore an extended format data set to a non-SMS-managed volume.
46	Cataloged extended format data sets are not recovered by Incremental Volume Recovery or by full Volume Restore during the APPLYINCREMENTAL process. The message ARC1158I may be received during Volume Restore with APPLYINCREMENTAL processing if the extended format data set is in the Dump Copy VTOC or the Backup Copy VTOC being processed. For example, the message is issued when the Restore process restored a segment of an extended format data set, but not all segments of the data set were restored since some segments reside on other volumes. If the extended format data set was backed up from the volume where the first portion of the data set is cataloged, then a more recent backup copy may exist. Because VSAM data sets have multiple components, more than one message may be received for the same VSAM sphere.
48	The data set organization of the target data set differs from the data set organization of the original data set from which the cataloged data set was backed up.
50	A preallocated target with record level sharing (RLS) attributes was found. DFSMShsm 1.3.0 or higher must be used to process this data set.

Source: DFSMShsm

System Action: The recovery operation of this data set ends. DFSMShsm processing continues.

For reason code 36, the RECOVER command ends because DFSMShsm does not recover multiple volume data sets during a volume recovery process. DFSMShsm recovers SMS VSAM and SMS non-VSAM multiple volume data sets only by a data set recover command.

Application Programmer Response: Consider the following actions and reissue the command:

Reascode	**Meaning**
8 or 10	Specify a new data set name, a non-VSAM data set name, or a VSAM base cluster data set name. If the VSAM base cluster is preallocated, it must be the same type (LDS, KSDS, ESDS, or RRDS) as the VSAM data set being recovered.
12	Either select a backup version whose data set organization agrees with the data set organization of the currently cataloged data set, or specify old and new data set names of data sets that agree in data set organization.
16	Delete the cataloged data set already on the target volume, move the existing data set to another volume, or specify a different target volume with the TOVOLUME parameter.
22	Verify the backup version contains good data. If not, notify your system programmer. If the backup version is good, the MCCFDMV flag could be accidentally turned off by a DFSMShsm-authorized user through a FIXCDS PATCH command. Issue a FIXCDS PATCH command to turn on MCCFDMV flag and then reissue the RECOVER command to recover the extended format data set.
26 or 30	See *DFSMS/MVS DFSMShsm Storage Administration Guide* in the section titled, “Availability Management Procedures” under the topic, “Backing Up and Recovering an ICF Catalog.”
32	To recover the backup version, issue a RECOVER or HRECOVER command for the data set and specify the REPLACE parameter.

34	Reissue the RECOVER command with the FROMDUMP(DUMPVOLUME) parameter to restore each extended format of the data set. To find out the DUMPVOLUME which contains the physical full volume dump copy of the data set, issue a LIST command with the PVOL BCDS ALLDUMPS parameter to retrieve the information about dump copies and dump volumes of the primary volume. Then issue LIST commands with DVOL DUMPCONTENTS to retrieve the information about the dump copies of the data set. If the data set no longer exists before the restore, the data set must be cataloged by the user after all extended formats are restored. Neither DFSMSdss nor DFSMShsm catalogs the multivolume extended format data set during physical dump copy restore processing.
36	DFSMShsm does not recover a cataloged multiple volume data set during Volume Recovery or during Volume Restore with APPLYINCREMENTAL processing. This provides the opportunity to work with the individual data set. If the Volume Restore restored the part of the data set that resided on this volume, and return code 58 and reason code 46 of message ARC0734I were received from the APPLYINCREMENTAL process, then the restored part of the data set may be down level. Determine the type of action required for this data set. You can rescue or repair data with REPRO, BLDINDX or similar utilities. Otherwise, you can recover using individual data set requests, such as with the RECOVER or HRECOVER data set commands.
38	Modify the ACS filter routine to direct the extended format data set to be recovered or restored to SMS-managed volumes. DFSMShsm does not recover or restore an extended format data set to non-SMS-managed volumes.
44	Reissue the RECOVER command without specifying the FROMVOLUME parameter. DFSMShsm does not recover or restore an extended format data set to non-SMS-managed volumes.
46	DFSMShsm does not recover an extended format data set that spans multiple volumes during Volume Recovery or during Volume Restore with APPLYINCREMENTAL processing. This provides the opportunity to work with the individual data set. If the Volume Restore restored the part of the data set that resided on this volume, and return code 58 and reason code 46 of message ARC0734I were received from the APPLYINCREMENTAL process, then the restored part of the data set may be down level. Determine the type of action required for this data set. You can rescue or repair data with REPRO, BLDINDX, or similar utilities. Otherwise, you can recover using individual data set requests, such as with RECOVER or HRECOVER data set commands.
48	Check the data set organization of the target data set. If the selected backup version was cataloged when the backup copy was made, then the organization of the target data set must have the same data set organization as the original data set from which the backup version was made.
50	To maintain the record level sharing (RLS) information in the target data set, use DFSMShsm 1.3.0 or higher. To perform the recovery using a down-level system, delete the preallocated target or delete the RLS attributes. Recovering the data set using a down-level system will cause the RLS attributes to be lost.

ARC1159I RECOVERY FAILED - ERROR DELETING OR ALLOCATING EXISTING DATA SET

Explanation: Recovery of a VSAM data set has been in progress when either a deletion of the existing data set fails for a reason other than its catalog entry has not been found, or an allocation error has occurred. Message ARC1001I gives the base cluster name being recovered. For a deletion error, the reason code is the VSAM catalog return code, as documented by Message IDC3009I in *OS/390 MVS System Messages, Vol 1 (ABA-ASA).* For an allocation error, the preceding message ARC0503I gives the base cluster name being allocated. Message ARC0503I also gives the return code, reason code, and information code from dynamic allocation. The reason code in preceding message ARC1001I is the return code from dynamic allocation.

Source: DFSMShsm

System Action: Recovery of the VSAM data set ends. DFSMShsm processing continues.

Application Programmer Response: For a deletion error, make the corrections indicated by the VSAM catalog return code as documented by message IDC3009I in *OS/390 MVS System Messages, Vol 1 (ABA-ASA).* For an allocation error, take corrective action based on the meaning of the return code and reason code issued in the message ARC0503I.

ARC1160I ESTAE MACRO FAILURE DURING RECALL/RECOVERY/DELETE

Explanation: DFSMShsm attempted to set up an ESTAE environment during a recall, recover, or delete process, but the MVS function was unsuccessful.

Source: DFSMShsm

System Action: The processing for this data set ends. DFSMShsm processing continues.

Application Programmer Response: Inform the system programmer of the message, and examine the return code from the previous message.

ARC1161I LICENSED PROGRAM NOT AT SUFFICIENT LEVEL

Explanation: The recall or recover of the data set failed because the required licensed program is not at a sufficient level. The data set name and the *reascode* are contained in the preceding ARC1001I or associated ARC0734I message.

The *reascode* value gives the reason the recall or recover could not be done. Valid values for *reascode* are:

Reascode	**Meaning**
4	The data set is a PDSE data set and support is not currently available on the system. A global non-recoverable SMSX resource was previously lost and DFSMS* PDSE support was disabled at that time.

8	The data set was migrated or backed up with DFSMSdss data movement and DFSMShsm determined that DFP is not of a sufficient release level to support the DFSMSdss invocation from DFSMShsm to recall or recover the data set. The minimum level for DFSMSdss data movement support is DFP version 2.3.0.

Source: DFSMShsm

System Action: The recall or recovery of the data set ends. DFSMShsm processing continues.

Application Programmer Response: It may be possible to issue the recall recover request from a different processing unit in a multiple processing unit environment. Otherwise, a sufficient level of MVS/SP and DFP must be installed on the system.

ARC1162I DFSMSDSS NOT AT SUFFICIENT LEVEL

Explanation: The recall or recover of the data set failed because DFSMSdss is not at a sufficient level. The data set name and the *reascode* are contained in the preceding ARC1001I or associated ARC0734I message.

The *reascode* value gives the reason the recall or recover could not be done. Valid values for *reascode* are:

Reascode	Meaning
4	DFSMShsm determined that it should invoke DFSMSdss to restore the data set or volume from a full volume dump copy, or the FROMDUMP parameter was specified for the RECOVER command. DFSMShsm then determined that DFSMSdss is not of a sufficient release level to support invocation from DFSMShsm. DFDSS 2.2.0 or a later release is required.
8	The data set was migrated or backed up using DFSMSdss data movement but an insufficient level of DFSMSdss is installed to recall or recover the data set. DFDSS 2.5.0 or a later release is required.

Source: DFSMShsm

System Action: The recall or recovery of the data set ends. DFSMShsm processing continues.

Application Programmer Response: It may be possible to issue the recall/recover request from a different processing unit in a multiple processing unit environment. It may also be possible to recover a backup version that is older than the most recent dump copy by using the GENERATION parameter on the RECOVER or HRECOVER command. Otherwise, a sufficient level of DFSMSdss must be installed on the system.

ARC1164I VOLUME ALLOCATION ERROR DURING RECOVERY

Explanation: An error occurred in allocating a tape under DFSMShsm control during recovery processing.

- The tape required for recovery cannot be mounted for one of the following reasons:
  - The tape is in use by another DFSMShsm function.
  - The operator cancelled the request, possibly because there are no available units, or there are physical tape problems.

Source: DFSMShsm

System Action: Any processing requiring the volume in error does not occur. DFSMShsm processing continues.

Application Programmer Response:

- For tape: retry the recovery later when resources may be available to allow allocation to succeed, or contact the operator to determine the exact cause of the problem so that the correct course of action may be taken.
- For MSS: retry later when the MSS is not so busy.

ARC1166I DATA SET RESTORE FROM DUMP VOLUME FAILED

Explanation: DFSMShsm has invoked DFSMSdss to do a physical data set restore from a dump volume. DFSMSdss has returned the nonzero reason code *reascode* in message ARC1001I preceding this message. The following are values and meanings for *reascode:*

Reascode	Meaning
8	The restore has ended prematurely, did not run, or has begun to run and an error message has been issued.
12	The restore did not run. An ending message has been issued.
16	The restore left the data set in an unusable condition.

Source: DFSMShsm

System Action: The DFSMShsm recover task ends. DFSMShsm processing continues.

Application Programmer Response: Determine if a DFSMShsm incremental backup version exists for the data set by using the LIST or HLIST command. If a DFSMShsm incremental backup version does exist and it is recent enough, issue the RECOVER or HRECOVER command specifying which backup version you want.

DFSMShsm routes the DFSMSdss messages to the user or the dump activity log. See “ADR Messages” on page ADR-1 for an explanation of any accompanying DFSMSdss messages. DFSMSdss message numbers are prefixed with ADR.

ARC1167I DATA SET REFERENCED DURING VOLUME RECOVERY

Explanation: A RECOVER command was issued with the APPLYINCREMENTAL keyword. DFSMShsm is indicating that the data set was referenced after the volume was restored but before the RECOVER of the dataset. The data set name is identified in the ARC0734I message issued to the backup activity log by the volume recovery process. Therefore, the data set may not be the most current one. If the data set was referenced but is now closed, the recover will fail.

Source: DFSMShsm

System Action: Recovery of the data set fails. DFSMShsm processing continues.

Application Programmer Response: Determine if the reference to the restored copy of the data set was appropriate. If it was not, the most recent backup copy should be recovered by using the DFSMShsm RECOVER or HRECOVER command. If the reference was made by a job or a procedure, the job or procedure may need to be rerun after the recovery.

ARC1168I DATA FORMAT OR POSITIONING ERROR DURING RECALL/RECOVERY

Explanation: During the recall or recovery of a data set, the positioning to the DFSMShsm copy of the data set has failed. In general, this error occurs when the DFSMShsm copy of the data set is stored in 3480 single file format and the POINT macro fails to locate the first record of the DFSMShsm copy. However, this error can occur with reason code 16, for either tape-stored data or DASD-stored data, if the first record does not contain a required DFSMShsm control block (the common data set descriptor (CDD)). The name of the data set targeted for recall or recovery appears either in the preceding ARC1001I message or in the associated ARC0734I message having a return code of 68. The reason code in the ARC1001I or ARC0734I message can be:

Reascode	Meaning
4	The POINT macro has failed due to a DFSMShsm internal error. The specified device does not support the block ID.
8	The POINT macro has failed due to a DFSMShsm internal error. Invalid input parameters have been supplied to the POINT macro.
12	An I/O error in the LOCATE BLOCK ID command has occurred; the data set block has not been found.
16	The first record that has been read for the DFSMShsm copy of the data set did not contain a valid common data set descriptor. The DFSMShsm copy of the data set may have been overwritten, or if the data set resides on tape, the positioning done by the POINT macro may have been incorrect.

Source: DFSMShsm

System Action: Recall or recovery of the data set fails. DFSMShsm processing continues.

Application Programmer Response: For more information about the POINT macro and its return codes, refer to *OS/390 MVS Programming: Authorized Assembler Services Guide* or *DFSMS/MVS Macro Instructions for Data Sets*.

ARC1169I RECALL/RECOVER FAILED DUE TO AN ERROR IN DFSMSDSS

Explanation: A RECALL or RECOVER command was issued for a data set originally migrated or backed up using DFSMSdss as the datamover. The DFSMSdss RESTORE command was issued to move the data set. When DFSMShsm issues this message, the corresponding DFSMSdss messages should be consulted. The DFSMSdss messages with prefix ADR are listed in the migration activity log (for RECALL) or backup activity log (for RECOVER). The data set name is contained in the preceding ARC1001I or associated ARC0734I message. The value of the last DFSMSdss message number issued for the highest severity error encountered during DFSMSdss processing is also in the ARC1001I or ARC0734I message. However, in some cases the return code is other than the DFSMSdss message number. These cases are as follows:

1. If the value of this return code is 9999, DFSMSdss did not end normally, and DFSMShsm could not determine the final RESTORE command processing return code. The DFSMSdss messages must be used to determine the cause of the failure.
2. If the value of this return code is 9990, it is the result of an abnormal end in DFSMSdss.
3. If the value of the reason code is 9928, DFSMShsm is unable to recall a data set *dsname*, because DFSMSdss datamover detected, during restore (recall), the data set had internal errors when dumped (migrated). Refer to the ARC0079E message for more information.

Source: DFSMShsm

System Action: This data set operation fails. DFSMShsm processing continues.

Application Programmer Response: Review the response required for the DFSMSdss error and take the appropriate action. The DFSMSdss messages can be found in *OS/390 MVS System Messages, Vol 1 (ABA-ASA)*.

System Programmer Response: When the DFSMSdss message requests the operation be retried using the NOPACKING option, issue the RECALL or RECOVER command with DFDSSOPTION(RETRY) to attempt a successful RECALL or RECOVER.

You must correct the errors in the partitioned data set after the successful processing of the RECALL or RECOVER command.

ARC1170I DFSMSHSM ENCOUNTERED AN SMS-RELATED ERROR WHILE PROCESSING A DATA SET

Explanation: During the recall, delete, recovery, or restore of a data set, DFSMShsm attempted to perform a task for a data set that required access to the storage management subsystem (SMS). The data set name is given in the preceding ARC1001I message, along with a *reascode*. The following are *reascode* values and meanings:

Reascode	Meaning
01	An error occurred while attempting to determine the SMS construct names. Either DFSMShsm encountered an error attempting to invoke the automatic class selection (ACS) routines or the ACS routines failed. Check the command activity log for messages indicating the actual failure reason. Look for ARC0935I for a failure reason and SMS message IGD306I. If you received SMS IGD306I— UNEXPECTED ERROR DURING INTEXPDT PROCESSING, RETURN CODE 8, REASON CODE 1017, the problem may be the data set expiration date in the DFSMShsm MCC record for a recover function or the data set expiration data in the DFSMShsm MCD record for a recall function.
02	An error occurred while attempting to allocate space on the target volume for the recall or recovery of a non-VSAM data set. Either DFSMShsm encountered an error attempting to invoke the VTOC/Data Set Services' (VDSS) create space function or VDSS had a failure creating the space. Check the command activity log for messages indicating the actual failure reason. Look for ARC0935I for a failure reason and SMS message IGD306I. If you received SMS IGD306I-UNEXPECTED ERROR DURING INTEXPDT PROCESSING, RETURN CODE 8, REASON CODE 1017, the problem may be the data set expiration date in the DFSMShsm MCC record for a recover function.
03	An error occurred while attempting to create a non-VSAM data set record (NVR) in the VSAM catalog entry on the target volume. The DEFINE NVR function failed. Message ARC0950I was

	issued to the command activity log with the actual failure reason.
04	An error occurred attempting to alter the BCS entry in the catalog for a non-VSAM data set. The data set was either SMS-managed before the recall or recovery and was being recalled or recovered to non-SMS-managed storage, or the data set was being recalled or recovered to SMS-managed storage. The target volume, device type, and SMS construct names were to be altered in the BCS entry. The alter function failed. Message ARC0950I was issued to the command activity log with the actual failure reason.
05	An error occurred in obtaining the management class definition for the data set.
06	The version of DFSMSdss installed on the system is not of a sufficient level to support SMS-managed data sets. A sufficient level of DFSMSdss is required to restore an SMS-managed data set, unless FORCENONSMS is specified.
07	An SMS-managed data set is not eligible for automatic recall through the OPEN DSCB not found exit (IFG0EX0A). One of the following occurred: • An allocation (either a batch job or TSO CLIST) with a subsequent OPEN for an SMS-managed data set specified a non-SMS-managed volume. • An allocation for an SMS-managed data set specified an SMS-managed volume, and the SMS subsystem was not installed or was not active. A 213-2C ABEND will occur. The recall is not permitted because the results would be unpredictable.
08	SMS is inactive, and the FORCENONSMS parameter was not specified for a recall or recovery. Interaction with the SMS subsystem is required in order to process the request.
09	An error occurred attempting to create a non-VSAM entry in the catalog (BCS entry). The Define BCS function failed. Message ARC0950I was issued to the command activity log with the actual failure reason.
10	An SMS-managed data set is not eligible for automatic recall directly from a VSAM OPEN call. One of the following situations occurred: • An allocation (either a batch job or TSO CLIST) with a subsequent VSAM OPEN for an SMS-managed data set specified a non-SMS-managed volume. • An allocation for an SMS-managed data set specified an SMS-managed volume, but the SMS subsystem was either not installed or was not active. • An OPEN was done without a preceding allocation. The OPEN will fail. The recall is not permitted because the results would be unpredictable. The data set would not necessarily be recalled to the volume that the OPEN request specified.
12	An SMS-managed data set could not be renamed to a temporary name. Message ARC0780I was issued to describe the problem. Message ARC0950I was issued to the command activity log with the actual failure reason.
13	A non-SMS-managed data set cannot be recovered to an SMS-managed volume. The data set being processed was determined by ACS routines to be a non-SMS-managed data set, but the target volume is an SMS-managed volume.
14	An SMS-managed data set cannot be restored from a physical dump copy to a non-SMS-managed volume. The data set being recovered has been determined by ACS routines to be SMS managed, but the target volume selected by DFSMShsm is a non-SMS-managed volume.
20	An SMS-managed data set is to be restored but not cataloged. This request may be made only by a DFSMShsm authorized user. This condition arises when a VSAM data set which does not have an applicable backup version is to be restored. DFSMShsm can catalog a VSAM data set during restore only by recovering the data set prior to the restore. All SMS-managed data sets must be cataloged.
24	An error occurred while attempting to allocate space on the target volume for the recall or recovery of a BDAM data set. Either DFSMShsm encountered an error attempting to invoke the VTOC data set services (VDSS) create space function or VDSS had a failure creating the space. The data set was a direct access data set and DFSMShsm issued an SMS track allocation request. The target volumes available either have track sizes smaller than the requested size for the data set, or the target volumes do not have enough free space available (in tracks) for the request. If DFSMShsm is the data mover and the storage class for the data set has guaranteed space specified, then this error may occur if the data set is being directed to a volume that is not in a storage group associated with that storage class. Message ARC0935I was issued to the command activity log with the actual failure reason.
25	Error in retrieving the management class definition.
26	Error in moving the management class definition.
27	Error in retrieving the default management class definition.

Source: DFSMShsm

System Action: The operation, which is indicated in the ARC1001I message preceding this message, terminates for the data set. DFSMShsm processing continues.

Application Programmer Response:

Reascode	**Meaning**
01	If the command activity log has an SMS IGD306I—UNEXPECTED ERROR DURING INTEXPDT PROCESSING RETURN CODE 8, REASON CODE 1017 message associated with the failing data set, then the problem may be the data set expiration date. If you were recalling a data set, use the FIXCDS command to display the MCD record for the data set and check the MCDEXPDT field. Correct this field and retry recalling the data set. If you were recovering a data set, use the FIXCDS command to display the MCC record for the backup version and check the MCCEXPDT field. Correct the MCCEXPDT field and retry recovering the data set. Following the RECALL or RECOVER, check the Format1 DSCB expiration field (dslexpdt) for non-VSAM data sets and correct this field if necessary. Failing to correct this field will result in the same RECALL or RECOVER failure for the data set.
02	If the command activity log has an SMS IGD306I—UNEXPECTED ERROR DURING INTEXPDT PROCESSING RETURN CODE 8, REASON CODE 1017 message associated with the failing data set, then the problem may be the data set expiration date. If you were recalling a data set, use the FIXCDS command to display the MCD record for the data set and check the MCDEXPDT field. Correct this field and retry recalling the data set. If you were recovering a data set, use the FIXCDS command to display the MCC record for the backup version and check the MCCEXPDT field. Correct the MCCEXPDT field and retry recovering the data set. Following the RECALL or RECOVER, check the Format1 DSCB expiration field (dslexpdt) for non-VSAM data sets and correct this field if necessary. Failing to correct this field will result in the same RECALL or RECOVER failure for the data set.
05	Refer to message ARC0935I in the command activity log for the specific failure. List the catalog information to determine the management class name. Define the management class if it does not exist. If the management class exists, contact the IBM Support Center.
08	Do one of the following: • Reissue the request when the SMS subsystem is active. • Reissue the request with the FORCENONSMS parameter specified.
06	Do one of the following: • Reissue the request when a sufficient level of DFSMSdss is installed. • Reissue the request without specifying the FROMDUMP parameter. Instead, use the GENERATION parameter on the command. This causes an incremental backup version to be used for the recovery of the data set. • The FORCENONSMS and TOVOLUME parameters can also be used to force the data set to a non-SMS-managed volume.
07	An HRECALL command can be used to recall the data set when SMS is active, or the explicit volume serial can be removed from the JCL or CLIST.
10	An HRECALL command can be used to recall the data set when SMS is active or an allocation of the data set can be done without specifying the volume serial number.
13	Issue a data set RECOVER command with either FORCENONSMS or TOVOLUME, specifying a non-SMS-managed volume. This recovers the data set to a non-SMS-managed volume.
14	Issue a data set RECOVER command with the TOVOLUME parameter specifying an SMS-managed volume that has a device type similar to the original volume that has been dumped. This restores the data set to an SMS-managed volume.
20	Do one of the following: • Preallocate the SMS VSAM data set. • Have the recover request issued by a DFSMShsm authorized user. • If the data set is not preallocated, a DEFINE CLUSTER RECATALOG IDCAMS command must be issued after the restore is complete.
24	Ensure the ACS routine does not target the data set to a pool of volumes with smaller track sizes than the original source device. Ensure that at least one volume in the volume pool has enough free space to honor the allocation request. If DFSMShsm is the data mover, ensure the data set is not directed to a device that is not in a storage group associated with the storage class of the data set.

For each of the other error conditions listed above that have a corresponding message containing more information about the failure, consult the corresponding message. The corresponding message is written in the command activity log. Refer to the programmer response sections of the appropriate related message for more details.

Retry the operation after corrective action has been taken, or after investigation has determined the error will not recur.

If not attempted previously, an authorized DFSMShsm user may use the FORCENONSMS parameter to recall or recover the data set to non-SMS-managed storage. This may provide a temporary bypass for the problem.

ARC1171I USER NOT AUTHORIZED TO RECOVER OS CVOL

Explanation: Data set recovery of an OS CVOL can only be issued by a user with space management authority or by the system operator. Message ARC1001I precedes this message giving the data set name.

Source: DFSMShsm

System Action: The recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: Use the HSENDCMD command or see the storage administrator for authorization.

ARC1172I DFSMSHSM ENCOUNTERED AN SMS-RELATED ERROR WHILE SELECTING A TARGET VOLUME

Explanation: During the recovery or restore of a data set, DFSMShsm has attempted to select an initial target volume for processing the recovery or restore function. An error has occurred that has caused the function to end. The data set name is given in the preceding ARC1001I message, along with a reason code. The reason code has the following meanings:

Reascode	Meaning
1	SMS is not installed in the system. DFSMShsm has attempted to process an SMS-managed volume, as indicated in the volume VTOC entry, but SMS is not installed on the system in which DFSMShsm is running. A DFSMShsm-authorized user may resubmit the request with the FORCENONSMS parameter to recover the data set to non-SMS-managed storage.
4	SMS is not active in the system. DFSMShsm has attempted to process an SMS-managed volume but SMS is not active in the system; reattempt the request when SMS is active. Also, a DFSMShsm-authorized user may resubmit the request with the FORCENONSMS parameter to recover the data set to non-SMS-managed storage.
5	An error has occurred in reading the volume VTOC entry for the volume being selected. DFSMShsm has read the volume VTOC entry to determine if the volume being selected is an SMS-managed volume. The read fails.
6	An error has occurred in retrieving an SMS volume definition. After the volume being selected has been determined to be an SMS-managed volume (by reading the volume VTOC entry), DFSMShsm has invoked SMS to retrieve an SMS volume definition. SMS fails to retrieve it.
7	An error has occurred while retrieving a storage group definition for an SMS volume. After the volume definition has been retrieved for the volume, DFSMShsm has invoked SMS to retrieve a storage group definition for the volume. SMS fails to retrieve it.
9	The volume being selected is in SMS initial status. DFSMShsm has read the volume VTOC entry to determine if the volume being selected is an SMS-managed volume. The volume VTOC entry indicates that the volume is in SMS initial status. DFSMShsm cannot process a volume in SMS initial status. A DFSMShsm authorized user may resubmit the request with the FORCENONSMS parameter to recover the data set to non-SMS-managed storage.
11	It cannot be determined if the volume being selected is an SMS-managed volume. The SMS volume definition and the volume VTOC entry do not agree.
13	The device type of the volume retrieved from the SMS storage group definition is not supported by DFSMShsm.
15	An error has occurred while reading or writing a migration control data set (MCDS) volume record (MCV). DFSMShsm has read an MCV record for the volume being selected. The read has failed, and an ARC0184I message has been issued to indicate the error. If no MCV record exists for the volume, DFSMShsm has attempted to create an MCV record for the volume. The creation has failed. An ARC0184I message has been issued to indicate the error.
19	The volume being selected is not mounted. DFSMShsm has attempted to read the volume VTOC entry to determine if the volume being selected is an SMS-managed volume, or has attempted to locate the unit control block (UCB) for the volume being selected and finds that the volume is not mounted. Contact the storage administrator to determine why the volume is not mounted.
52	A GETMAIN error has occurred. DFSMShsm has failed to get virtual storage for creating a mounted volume table (MVT) entry for an SMS-managed volume. A retry may be successful if the GETMAIN failure occurs while DFSMShsm is performing many simultaneous activities which require large amounts of virtual storage.

Source: DFSMShsm

System Action: The recovery or restore processing ends. DFSMShsm processing continues.

Application Programmer Response: Perform the action that corresponds to the reason code you received.

System Programmer Response: To aid in problem resolution, see the information on maintaining DFSMShsm control data sets in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC1173I RECOVERY OF A VSAM COMPONENT FAILED

Explanation: The RECOVER command was issued for a component of a VSAM data set other than the base cluster name. DFSMShsm does not support the individual recovery of any VSAM components.

Source: DFSMShsm

System Action: The RECOVER command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command, specifying the base cluster name.

ARC1174I DATA SET/VOLUME RECOVER/ RECALL/DELETE FAILED - THE FUNCTION IS HELD

Explanation: A data set recovery, recall, or delete function was requested. The request failed because the requested function was held. Message ARC1001I gives the data set name. The reascode in ARC1001I gives the function that was held as follows:

Reascode	Meaning
4	RECOVER was held.
8	RECOVER(TAPEDATASET) was held.
12	RECALL was held.
16	RECALL(TAPE) was held.
20	RECALL(TAPE(TSO)) was held.

Source: DFSMShsm

System Action: The backup version of the data set is not recovered, the migrated data set on tape is not recalled, or the migrated data set is not deleted. DFSMShsm processing continues.

Application Programmer Response: Reissue the command after the operator issues the appropriate RELEASE command.

ARC1175I RECALL OF A DATA SET HAS BEEN CHANGED TO A NOWAIT REQUEST. REQUEST NUMBER IS *nnnn*.

Explanation: A TSO RECALL command requested a data set from tape, but tape recall is held. Message ARC1001I gives the data set name. The request number *nnnn* allows the interactive user to query or cancel the request.

Source: DFSMShsm

System Action: The request is changed to a NOWAIT request for later processing when RECALL is released. DFSMShsm processing continues.

Application Programmer Response: None. RECALL processing is completed when the operator releases the tape recall function.

ARC1176I ERROR LINKING TO DFSMSDSS DURING RECALL OR RECOVERY

Explanation: DFSMShsm is recalling or recovering a data set using DFSMSdss as a data mover because the data set was migrated or backed up using DFSMSdss. A request sent to DFSMShsm to recall or recover a data set failed when the LINK macro used to invoke DFSMSdss for data movement failed. The data set name is contained in the preceding ARC1001I or associated ARC0734I message.

Source: DFSMShsm

System Action: The recall or recovery of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Review the abnormal end code that is displayed as the reason code in the preceding ARC1001I or associated ARC0734I message.

A corresponding ARC0200I message is issued with the module name ARCRDSS and return code 16. A SNAP dump occurs the first time this error is issued. All occurrences of this error are logged. A DFSMShsm initialization resets the occurrence count, so if DFSMShsm is reinitialized, a SNAP dump occurs again.

The TRAP command can also be used for this message.

ARC1177I ERROR ALLOCATING DUMMY DD DURING RECALL OR RECOVERY

Explanation: DFSMShsm is recalling or recovering a data set using DFSMSdss as the data mover because the data set was migrated or backed up using DFSMSdss. A request sent to DFSMShsm to recall or recover a data set failed when the allocation of a dummy dd for DFSMSdss restore failed. The dynamic allocation error codes are identified in the preceding ARC0503I message. The data set name is contained in the preceding ARC1001I or associated ARC0734I message.

Source: DFSMShsm

System Action: The recall or recovery of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Review the allocation error codes contained in the preceding ARC0503I message.

ARC1178I DFSMSHSM NOT AT SUFFICIENT LEVEL

Explanation: RECALL or RECOVER command processing of the data set failed because DFSMShsm is not at a sufficient level. Message ARC1001I precedes this message, giving the data set name and the *reascode*.

The *reascode* value gives the reason the RECALL or RECOVER processing could not be done. Valid values for *reascode* are:

Reascode	Meaning
4	The data set was migrated or backed up using DFHSM 2.6.0 but an insufficient level of DFSMShsm is installed to recall or recover, the data set. DFHSM 2.6.0 or a later release is required.
5	The current level of DFSMShsm cannot recall or recover an extended format data set (sequential striped or compressed). A minimum of DFSMShsm 1.1.0 is required for sequential striped data sets, and a minimum of DFSMShsm 1.2.0 is required for extended format compressed data sets.

Source: DFSMShsm

System Action: The RECALL or RECOVER processing of the data set ends. DFSMShsm processing continues.

Application Programmer Response: It may be possible to issue the RECALL or RECOVER command from a different processing unit in a multiple processing unit environment. Otherwise, a sufficient level of DFSMShsm must be installed on the system.

ARC1179I ERROR RECALLING DATA SET

Explanation: An error has occurred while recalling a data set. The name of the data set being processed is in the ARC1001I message that precedes this message. In message ARC1001I the *reascode* has the following values:

Reascode	Meaning
1	The MCD for the data set is inconsistent. The MCD indicates the data set is striped and DFSMShsm has been used as the data mover. Striped data sets must be migrated and recalled with DFSMSdss.
3	Automatic class selection (ACS) has not returned a storage class for the striped data set.

Source: DFSMShsm

System Action: Processing of the data set ends. DFSMShsm processing continues.

Application Programmer Response: The *reascode* has the following actions:

Reascode	Meaning
1	Determine which field, MCDFSTRP or MCDFDSS, is in error and use a FIXCDS command to correct it. Reissue the RECALL command for the data set.
3	See the system administrator.

ARC1180I RECALL FAILED - NEEDED VOLUME IN USE BY RECYCLE OR TAPECOPY FUNCTION

Explanation: A RECALL command fails because a tape volume that is needed to perform the recall is allocated and is being used for recycle or tapecopy processing. The data set being recalled is identified in the preceding ARC1001I message.

Source: DFSMShsm

System Action: The RECALL command ends. DFSMShsm processing continues.

Application Programmer Response: Either wait for recycle or tapecopy function to complete or issue a HOLD command for the recycle or tapecopy function and reenter the RECALL command.

ARC1181I RECALL FAILED - ERROR ALLOCATING TAPE VOLUME

Explanation: A RECALL command failed because of an error in allocating a needed tape volume. The volume being allocated and the type of allocation error that occurred are identified in the preceding ARC0500I message issued to the command activity log. To review the activity log, issue the DFSMShsm RELEASE HARDCOPY command. The data set being recalled is identified in the preceding ARC1001I message.

Source: DFSMShsm

System Action: The RECALL command ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator to isolate the cause of the error.

ARC1182I RECALL FAILED - TAPE VOLUME NOT AVAILABLE

Explanation: A RECALL command failed because the volume on which the data set resides is in use, and the operator, when asked whether the volume would soon be available, responded to cancel the mount request.

Source: DFSMShsm

System Action: The RECALL command ends. DFSMShsm processing continues.

Application Programmer Response: Retry the RECALL command at a later time.

ARC1183I WHILE PROCESSING IN DISASTER MODE, AN ERROR OCCURRED DURING THE RECALL OR RECOVER OF A DATA SET

Explanation: While processing in disaster mode, an error occurred causing the RECALL or RECOVER command to fail. The name of the data set is given in message ARC1001I or ARC0734I. When message ARC1001I or ARC0734I indicates a *retcode* = 83, the *reascode* may have the following values:

Reascode	Meaning
4	The volser in the data set control record (MCD/MCC) is invalid.
12	Failed to read the TTOC for the original volser.
16	Failed to read the backup control data set backup volume record (MCT).
18	The MWE and MCD records do not agree on the device type where the migrated data set resides. Most likely, multiple RECALL commands were issued for the same data set. One recall completed and the data set was migrated to a different device type before the second recall was attempted.
52	Failed to GETMAIN storage for the disaster alternate volume list.

Source: DFSMShsm

System Action: The RECALL or RECOVER command fails. DFSMShsm processing continues.

Application Programmer Response: The *reascode* has the following actions.

Reascode	Meaning
4	Use the FIXCDS command to verify the volser in the data set control record (MCD/MCV).
12 or 16	See the associated ARC0184I message.
52	See the associated ARC0307I message.

ARC1186I RECALL/RECOVER/RESTORE FAILED - DFSMSHSM SHUTDOWN OCCURRED WHILE WAITING FOR A TAPE MOUNT

Explanation: An attempt was made to recall, recover, or restore a data set, or restore a volume from a tape migration level 2, backup, or dump volume. Before the tape volumes could be mounted, a command was entered to shut down DFSMShsm. See the preceding ARC1001I message for the data set name or volume serial number.

Source: DFSMShsm

System Action: The operation fails. DFSMShsm processing continues.

Application Programmer Response: Reissue the RECALL or RECOVER command after DFSMShsm is restarted.

Contact the operator to see when the tape volume will become available.

ARC1188I RESTORE OF DATA SET FAILED

Explanation: The RECOVER command has been issued with the FROMDUMP parameter, but DFSMShsm has determined that restore cannot be performed. Message ARC1001I precedes this message, giving the data set name and the *reascode*.

The *reascode* value gives the reason the restore cannot be done. Valid values for *reascode* are:

Reascode	Meaning
2	The device type of the original volume that has been dumped is not of a similar device type as the target volume of the restore.
4	A read error has occurred in reading the control data set record describing the source backup or dump volume. See message ARC0184I preceding this message for the type and key of the record. Notify the storage administrator or system programmer.
6	An SMS-managed data set cannot be restored to a non-SMS-managed volume. The data set being recovered has been determined by ACS routines to be SMS managed, but the target volume is a non-SMS-managed volume.
8	An error has occurred in allocating the dump VTOC copy data set.
10	The DUMPVOLUME subparameter has been specified for a volume restore, and the specified dump volume does not contain valid data.
14	An error has occurred in reading the backup or dump VTOC copy data set.
16	An error has occurred in opening the dump VTOC copy data set.
22	One of the following has occurred: Either the volume on which the data set is currently cataloged or the volume from which the latest backup version has been made, does not have a dump VTOC copy data set to verify that the data set has been dumped to the existing dump copy. • The volume specified with the FROMVOLUME parameter has not been processed by full volume dump, thus does not have a dump VTOC copy data set to verify that the data set has been dumped to the existing dump copy. • No dump copy is found that has the data set restore attribute.
24	An invalid or unsupported device type is found in the control data set record for the source backup, dump volume, or migration level 1 volume where the VTOC copy data set resides.
30	The data set is not currently cataloged, no backup version exists, and there is no DUMPVOLUME subparameter provided to indicate what dump copy is required.
32	DUMPCLASS and DUMPVOLUME parameters has not been specified, and no dump copy is found that has a retention date other than NOLIMIT.
34	Restore of an unmovable data set has failed because not enough information is available to preallocate the data set. For an unmovable data set to be successfully restored by DFSMSdss, the data set must exist on the target volume before the restore occurs.
36	The DUMPCLASS parameter has been specified, and a dump copy is not found in the specified dump class, or there is no dump VTOC copy data set to verify that the data set has been dumped to the existing dump copy.
38	No VTOC copy data set entry is found for the requested data set.
40	The DUMP generation that has been specified is not found or is invalid.
44	The DATE parameter has been specified, and no eligible dump copy is found that meets the specified date requirements.
48	The volume that has been specified with the FROMVOLUME parameter is not the same as the original dump source volume recorded in the dump volume (DVL) record.
50	The DUMPVOLUME parameter has been specified, but the dump generation (DGN) record does not indicate that the specified dump volume contains part of a valid dump copy for the volume to be restored.
52	The RECOVER data set name command was issued with the FROMDUMP parameter. The dump volume needed has two or more valid dump copies stacked on it, of two or more different volumes. DFSMShsm cannot tell which dump copy is needed; the FROMVOLUME parameter is not specified or is specified incorrectly; the data set is not cataloged or is migrated, and it has not been backed up; and the SOURCEVOLUME parameter is not specified or is specified incorrectly.
54	The DUMPVOLUME parameter has been specified. The DGN record has been found that lists the specified dump volume. This dump generation is not listed as a valid dump generation in the MCP record for the volume to be restored.
56	For a VSAM data set restore of a cluster, the data component name has not been found in the dump VTOC copy data set. If there has been an index component in the data set, it is found in the VTOC copy.
58	For a VSAM data set restore of a cluster, the index component name has not been found in the dump VTOC copy data set. The data component is found in the VTOC copy.
60	An error has occurred in establishing an ESTAE environment.
62	Both NEWNAME and FROMDUMP parameters have been requested on the RECOVER command for a VSAM data set, and the original data set exists. DFSMSdss does not support the NEWNAME parameter for VSAM data sets, so the restore must use the original data set name. Two versions of the same data set (one with the original name and one with the new name that

	contains the restored data after the restore is done) cannot exist when FROMDUMP has been specified. If FROMDUMP and NEWNAME have been specified, the existing data set with the original name must be deleted.
64	The dump copy needed for restoring is contained in file two or higher on a dump volume. DFSMShsm encountered an error trying to read or update the JFCB intended to represent the dump copy when opened by DFSMSdss.
70	DFSMShsm cannot restore an integrated catalog facility (ICF) catalog data set.
72	DFSMSdss does not support key range VSAM data sets.
74	FROMDUMP has been specified without DUMPVOLUME for a multivolume VSAM data set. A dump copy is used to restore a multivolume data set only if DUMPVOLUME has been specified with the FROMDUMP parameter by a DFSMShsm authorized user. If FROMDUMP has been specified without any subparameter or with a subparameter other than DUMPVOLUME, DFSMShsm does not restore the data set. This is to ensure that an authorized user knows which piece of the data set is being restored from which dump copy.
76	DFSMSdss does not support data set restore for a VSAM data set currently cataloged in a non-ICF catalog.

Source: DFSMShsm

System Action: The RECOVER command ends. DFSMShsm processing continues.

Application Programmer Response: Use the LIST command to list the contents of a dump VTOC copy data set, the dump copy information for a given source volume, or the information concerning a dump volume. Correct the information for the RECOVER command and reissue it. If an allocation, open, or read error has occurred, take appropriate corrective action; then, resubmit the command.

For *reascode* 6, issue a data set RECOVER command with the TOVOLUME parameter specifying an SMS-managed volume that has a device type similar to the original volume that has been dumped. This restores the data set from a physical dump copy to an SMS-managed volume.

For reason code 52, specify or correct the FROMVOLUME parameter, or specify or correct the SOURCEVOLUME parameter and reissue the command.

For reason code 62, to restore a data set with the NEWNAME option, rename the existing data set with the original name.

If a backup version exists for the data set and you wish to explicitly recover it, use the GENERATION parameter on either RECOVER or HRECOVER command.

If an ICF catalog data set is to be restored from a dump copy made through DFSMShsm, a DFSMShsm LIST command can be used to find the dump tape volumes that contain the dump copy of the catalog data set. The restore will follow the steps documented in *DFSMS/MVS DFSMShsm Storage Administration Guide*, in section, “Availability Management Procedures” under, “Backing Up and Recovering an ICF Catalog.”

For reason code 64, reissue the RECOVER command.

For *reascode* 72 or 76, reissue the RECOVER command without specifying the FROMDUMP keyword if an incremental backup version exists for the data set.

For *reascode* 74, issue a LIST command with the PVOL BCDS ALLDUMPS parameter to retrieve the information about dump copies and dump volumes of the primary volume. Then issue a LIST command with DVOL DUMPCONTENTS parameter to retrieve the information about the dump copies of the data set.

ARC1190I MIGRATED RACF-PROTECTED VSAM CLUSTER MUST BE RECALLED PRIOR TO DELETION

Explanation: A delete operation was requested for a command-migrated VSAM cluster that was not eligible for volume level migration and had RACF protection on objects other than the base cluster. DFSMShsm cannot delete the RACF profiles for the VSAM cluster identified in the preceding ARC1001I message.

Source: DFSMShsm

System Action: The delete operation ends. DFSMShsm processing continues.

Application Programmer Response: Delete the VSAM cluster using the following steps:

1. Issue a RECALL or HRECALL command.
2. Issue an IDCAMS command to delete the recalled VSAM cluster.

ARC1191I ERROR UNCATALOGING DATA SET

Explanation: During RECOVERY or RESTORE command processing, the catalog macro has failed while attempting to uncatalog a data set. In message ARC0734I or ARC1001I, the value for *reascode* is the return code from the catalog macro. See *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009I.

Source: DFSMShsm

System Action: The RECOVER or RESTORE command ends. DFSMShsm processing continues.

ARC1191X ERROR UNCATALOGING DATA SET

Explanation: During RECOVERY or RESTORE command processing, the catalog macro has failed while attempting to uncatalog a data set. In message ARC0734I the value for *reascode* is the return code from the catalog macro. See *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009I.

Source: DFSMShsm

System Action: The RECOVER or RESTORE command ends. DFSMShsm processing continues.

ARC1192I TERMINATING DFSMSHSM RECALL/RECOVERY WAIT REQUEST, DFSMSHSM SHUTTING DOWN

Explanation: DFSMShsm is shutting down because of an abnormal end, MVS CANCEL, FORCE, or normal shutdown. During shutdown all wait-type recall and recovery requests not yet processed are purged from the common service area (CSA) queue.

Source: DFSMShsm

System Action: DFSMShsm ends.

Application Programmer Response: Restart DFSMShsm and resubmit the request.

ARC1194I VOLUME RECOVERY FAILURE

Explanation: See the messages that have been issued prior to the ARC1001I RC94 for the specific cause of the failure.

Source: DFSMShsm

System Action: DFSMShsm ends.

Application Programmer Response: See the Programmer Response for the specific messages that have been issued prior to the ARC1001I RC94 message. An ARC0503I will be issued for an allocation error.

ARC1195I RECALL/RECOVER/RESTORE FAILED - TAPE VOLUME COULD NOT BE MOUNTED

Explanation: An attempt was made to recall, recover, or restore a data set, or to recover a volume from a tape migration level 2 or backup volume. The operator responded in one of five ways:

1. Issued an N in response to message ARC0366A or ARC0314A, which was preceded by message ARC0313A.
2. Issued an N to the resulting ARC0310A message because the timer expired that was monitoring the tape mount requested by open processing.
3. Issued an N to the resulting ARC0311A message because the timer could not be set.
4. Issued a Y to the resulting ARC0310A, ARC0313A, ARC0314A, and/or ARC0366A messages because the time period specified in the SETSYS MOUNTWAITTIME parameter has expired for the second time.
5. Issued a C in response to ARC0962A requesting a correction in tape library volume storage.

See the preceding ARC1001I message for the data set name or volume serial number.

Source: DFSMShsm

System Action: The command fails. HSM processing continues.

Application Programmer Response: Determine why the operator cannot mount the required tape volumes, or why the tape library volume set cannot be changed. Retry the operation when the tapes are available for mounting, or when all of the tapes are contained in one tape library.

ARC1196I VOLUME RESTORE FAILURE

Explanation: See the message that has been issued prior to the ARC1001I RC96 and ARC0623I messages for the specific cause of the failure.

Source: DFSMShsm

System Action: The command fails. DFSMShsm processing continues.

Application Programmer Response: See the programmer response for the specific message that has been issued prior to the ARC1001I RC96 and ARC0623I messages. If you receive DFSMSdss message ADR367E during volume restore, refer to topic “Volume Recovery and Restore Considerations” under, “Other Considerations for Availability Management” in the *DFSMS/MVS DFSMShsm Storage Administration Guide* for information to aid in problem resolution.

ARC1197I DFSMSHSM INTERNAL ERROR DURING RECALL/RECOVERY

Explanation: An unknown error has occurred during allocation of a data set that has been identified in message ARC1001I.

Associated with this message is a dynamic allocation message in the MSYSOUT data set. There is a SNAP dump associated with this error in the SYSOUT data set for the DFSMShsm job.

The user can detect the error using the DFSMShsm TRAP command with a code of 97. The return and reason codes are given in message ARC1001I.

The reason code is the dynamic allocation return code and is printed in hexadecimal format. If the dynamic allocation return code is 1708, the error may have occurred because DFSMShsm has attempted to recall or recover a VSAM data set as a non-SMS-managed data set and the volume that has been specified on the RECALL or RECOVER command is an SMS-managed volume. Non-SMS-managed data sets cannot be allocated on SMS-managed volumes. For information about dynamic allocation return codes and reason codes, see the *OS/390 MVS Programming: Assembler Services Guide*.

Source: DFSMShsm

System Action: The RECALL or RECOVER command ends. DFSMShsm processing continues.

Application Programmer Response: There might be a data set with a duplicate name on the volume. If so, scratch the data set with the duplicate name, and retry the command. If not, respond as indicated to the dynamic allocation message.

If an allocation error of 1708 has occurred, the specified volume may have been converted to SMS managed. Either remove the specification of a volume on the RECALL or RECOVER command, or specify a non-SMS-managed volume.

ARC1198E TAPE(S) CONTAINING NEEDED DATA NOT AVAILABLE.

Explanation: The tape volumes needed for the DFSMShsm function cannot be allocated. This message may be proceeded by message ARC1001I or ARC1020I containing the data set name.

Source: DFSMShsm

System Action: All DFSMShsm processing outside of this task continues. If a data set function is processing it fails. If a volume function is processing it continues with the next eligible volume.

Application Programmer Response: Contact your operator to determine the availability of tape volumes needed. Operations should check the ARC0790E message issued to the console for a list of volumes needed for this data set.

ARC1199I ERROR DURING RECALL/RECOVERY

Explanation: An error was detected while DFSMShsm was performing a recall or recovery operation. The return and reason code are given in message ARC1001I. The possible values for the reason code are:

Reascode	**Meaning**
4	A data set was requested to be reblocked and the accumulated record length was greater than the DCBLRECL.
8	A direct access data set was targeted to a volume with a smaller track capacity than the volume where the data set originally resided.

12	The DFSMShsm CDS record that describes the data set indicated a source volume device type that is not supported by DFSMShsm.

Source: DFSMShsm

System Action: The recall or recovery operation ends. DFSMShsm processing continues.

Application Programmer Response: The return codes have the following actions:

Retcode	Meaning
4	Recall or recover the data set to the device type of the L0 volume the data set came from and correct the data set. When attempting to recover a data set, the MCVTF_NO_RECOV_TAPE_OPT bit can be temporarily patched ON to disable recovery tape mount optimization. This will allow DFSMShsm to retry recoveries for this type of failure.
8	Recall or recover the data set to the same device type it originally resided on. Or, specify DAOPTION(RELBLK) for the command if relative block accessing of the data set is acceptable.
12	Issue the FIXCDS command with the PATCH parameter to correct the device type. • For a recall operation, this value is taken from field MCDUCBTY of the data set MCD record. • For a recover operation, this value is taken from field MCCFRUCB of the data set MCC record.

ARC1202I CATALOG LOCATE ERROR DURING MIGRATION

Explanation: During a DFSMShsm space management operation, a LOCATE macro has been issued for a data set entry in the system catalog. The LOCATE has failed. In message ARC1001I, the *reascode* is the return code from the catalog macro.

For the meaning of the reason codes, see Message IDC3009I in *DFSMS/MVS Using Data Sets*.

Source: DFSMShsm

System Action: The space management operation ends. DFSMShsm processing continues.

Application Programmer Response: Take corrective action according to *reascode* in message ARC1001I or ARC0734I.

ARC1203I OBTAIN ERROR READING DATA SET VTOC ENTRY DURING MIGRATION

Explanation: While DFSMShsm was performing a space management operation, the OBTAIN macro was used to read the data set VTOC entry of the data set indicated in message ARC1001I or ARC0734I. An error was encountered. In the ARC1001I or ARC0734I message, *reascode* is the return code from the OBTAIN macro.

The values for *reascode* are:

Reascode	Meaning
4	The required volume was not mounted.
8	The data set VTOC entry was not found in the VTOC of the specified volume.
12	A permanent I/O error was encountered, or an invalid data set VTOC entry was found in processing the specified volume.
16	There was an invalid work area pointer provided to the OBTAIN macro by DFSMShsm.

Source: DFSMShsm

System Action: The space management operation ends. DFSMShsm processing continues.

Application Programmer Response: The *reascode* values in message ARC1001I or ARC0734I are as follows:

Reascode	Meaning
4	Correct the problem and retry the space management.
8, 12	Notify the storage administrator to take the appropriate corrective action.
16	Contact the IBM Support Center

ARC1204I DATA SET IS NOT MOVABLE

Explanation: The migration request is not acceptable to DFSMShsm because the data set VTOC entry for this data set indicates that the data set is a VSAM data set not cataloged in the integrated catalog facility (ICF) catalog, ISAM, user-labeled, or unmovable. VSAM data sets not cataloged in the ICF catalog cannot migrate.

Source: DFSMShsm

System Action: The space management of the data set ends. DFSMShsm processing continues.

Application Programmer Response: To archive this data set, use another program.

ARC1205I NO MIGRATION VOLUME AVAILABLE

Explanation: A DFSMShsm migration request ended because no level 1 or level 2 migration volume was available. The corresponding ARC1001I or ARC0734I message gives the name of the data set whose migration failed. The cause of the failure can be identified by the *reascode* field in the ARC1001I or ARC0734I message:

Reascode	Meaning
4	No level 1 volumes are available. No level 1 volumes were defined for migration, or no more space is available on level 1 volumes that are defined, or there is no space remaining in the VTOC or VTOC index on the volumes that are defined. Reorganize the index, if it is full, and reissue the ADDVOL command to add the migration level 1 volume.
6	SDSP serialization checking indicated that all SDSPs were in use.
8	No level 2 volumes available. There are no DASD level 2 volumes available for association to a key range. One of the following caused DFSMShsm to attempt to associate a DASD level 2 volume to a key range: • No level 2 volume was associated to the data set's key range. • Allocation for the volume associated to the data set's key range failed because the necessary system resources were not available or the volume was already in use by the system. • Allocation for the data set failed because there was not enough free space on the

	volume or the volume was an MSS volume that could not be mounted. There are no tape level 2 volumes available. The allocation for the tape volume failed because the necessary system resources were not available or the volume was already in use by the system.
9	Error reading DFSMShsm MCV record during SDSP serialization checking. See the associated ARC0184I message to determine the specific read failure.
10	There are no DASD level 2 volumes available for association to a key range because of an error in reading or writing the DFSMShsm migration control data set level 2 control record (L2CR). DFSMShsm must read the L2CR record for each data set that is migrated by command to DASD level 2. It is possible that the error occurred while DFSMShsm was attempting to associate a DASD level 2 volume to a key range for one of the reasons explained in *reascode* 8. If tape migration was being used, there are no tape level 2 volumes available because of an error in reading or writing the DFSMShsm migration control data set level 2 (L2CR) record.
12	No DASD level 2 volumes are available for association to a key range because there were 2 errors in reading or writing DFSMShsm migration control data set volume (MCV) records. See the associated ARC0184I or ARC0187I message for the specific record. DFSMShsm attempted to associate a level 2 volume to a key range for one of the reasons explained in *reascode* 8. If tape migration was being used, there are no tape level 2 volumes available because there were 2 errors in reading or writing DFSMShsm migration control data set volume (MCV) records.
16	Invalid device type for the volume associated to the key range of the data set. There was a level 2 volume associated, but the device type in the migration control data set level 2 (L2CR) record listed a device type that is not supported by DFSMShsm. It is possible that the device type in the migration control data set volume (MCV) record is also incorrect.
20	The allocation of the level 2 volume failed. When there is a DASD level 2 volume associated to a key range, DFSMShsm attempts to allocate the volume. If the allocation of the volume fails because necessary system resources are not available or the volume is already in use by the system, DFSMShsm disassociates the DASD volume from the key range and associates another DASD level 2 volume. DFSMShsm tried to allocate the new volume and the allocation failed again. If tape migration was being used, DFSMShsm tried to allocate a tape migration level 2 volume, and the allocation failed. If the allocation of the volume failed because the necessary system resources were not available or the tape volume was already in use by the system, DFSMShsm tried to allocate another tape volume. The allocation failed again.

Source: DFSMShsm

System Action: The migration of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Take corrective action based on the meaning of the return code, and retry the request.

Check for additional error codes in the migration activity log to identify which data set could not allocate on migration level 1.

Check to see if message ARC0560E was issued that will result in all migration to migration level 1 being inhibited.

ARC1206I DUPLICATE DATA SET NAME IN DFSMSHSM DATA BASE

Explanation: A MIGRATION command was ended because a data set with the requested name has already migrated. If the data set is a VSAM data set, a DFSMShsm control data set entry exists with the same name as the VSAM data set and with a non-VSAM organization.

Source: DFSMShsm

System Action: The space management of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Issue the LIST or HLIST command to display the MCDS information associated with the data set. If the data set does not exist on a migration volume (it has been recalled), issue the FIXCDS command to turn off the MCDFASN bit.

If a listcat shows the data set is cataloged on a primary volume, issue a RECALL command in case the previous recall failed due to a product or system outage.

ARC1207I OBTAIN ERROR ON DATA SET EXTENSION VTOC ENTRY DURING MIGRATION

Explanation: While DFSMShsm was performing a space management operation, the OBTAIN macro was used to read the data set extension VTOC entry of the data set indicated in message ARC1001I or ARC0734I. An error was encountered. In the ARC1001I or ARC0734I message, *reascode* is the return code from the OBTAIN macro.

The values for *reascode* are:

Reascode	**Meaning**
4	The required volume was not mounted.
8	The data set VTOC entry was not found in the VTOC of the specified volume.
12	A permanent I/O error was encountered, or an invalid volume VTOC entry was found during the processing of the specified volume.
16	There was an invalid work area pointer. If the data set being migrated is an HFS File System, then one of the following may have occurred: • HFS is not running. The operator must start HFS. • The requested HFS File System has been quiesced. The file system must be unquiesced. • The DFSMShsm ID has not been identified as a valid OMVS ID. The ID must be defined to OMVS as a valid ID.

20	The SEEK parameter was specified, and the absolute track address (CCHH) is not within the boundaries of the VTOC.
24	DFSMShsm detected an inconsistent size calculation as a result of data obtained from the data set extension VTOC entry. The data set VTOC entry or data set extension VTOC entry for this data set may be damaged.

Source: DFSMShsm

System Action: The space management operation ends. DFSMShsm processing continues.

Application Programmer Response: If *reascode* in message ARC1001I or ARC0734I is 4, correct the problem and retry the space management. If *reascode* is 8 or 12, notify the system programmer to take corrective action. If *reascode* is 16 and none of the HFS errors applies, or if *reascode* is 20, notify the storage administrator to take corrective action.

ARC1208I ERROR ALLOCATING MIGRATION COPY

Explanation: During a space management operation, the dynamic allocation routine has attempted to allocate a migration data set. The allocation has failed with other than a no space indication. In message ARC1001I or ARC0734I, the reason codes *reascode* have the following values:

Reascode	Meaning
4	More than one data set exists with the same name (migration version) on the volume.
6	The SDSP serialization check indicates that SDSP is in use.
7	The SDSP is needed by recall.
8	The volume could not be mounted.
10	The DFSMShsm-owned copy of the data set to be migrated is estimated to be greater than 64K tracks. Data sets greater than 64K tracks cannot be migrated to DASD if the owned copy will also be greater than 64K tracks.
16	There is another dynamic allocation error.
20	An installation-wide exit has cancelled the request.
24	There is an invalid parameter list.
37	The unit type and volume serial number from the mounted volume table are inconsistent.
39	An error has occurred in setting the RACF indicator on in the DSCB of the migration copy.
40	The volume is SMS managed.
41	The volume where the migration copy has been allocated (as returned by DYALLOC) is not the same volume that DFSMShsm has requested. In an SMS environment, the data set is allocated to SMS-managed storage.

Source: DFSMShsm

System Action: The space management operation for the data set ends. DFSMShsm processing continues.

Application Programmer Response: Reason codes received in message ARC1001I or ARC0734I have the following meanings:

Reascode	Meaning
7	Retry the operation at a later time.
8, 16, 20	Contact the storage administrator or system programmer to correct the problem, and retry the operation.
10	If you want to migrate the data set, migrate it to tape. Or, if the data mover is DFSMSdss and less than 64K tracks of data are actually in use, try migrating the data set using DFSMShsm as the data mover if the DFSMShsm data mover supports the data set's organization. If compaction is not in use for the data set, try migrating the data set with compaction.
24, 37	A logical error has occurred and has built an invalid parameter list.
39	An error has occurred in accessing the DSCB to set the RACF indicator on. The errors are either failure to read the JFCB, failure to open the VTOC, or the wrong record has been returned from the read.
40, 41	Update the SMS storage class routine so migration copies are filtered to a null storage class. See *DFSMS/MVS DFSMShsm Implementation and Customization Guide* for an explanation on how to code the storage class routine.

ARC1209I ERROR RENAMING MIGRATED COPY

Explanation: DFSMShsm has been unable to create a migration name that does not already exist. A migration name is created when DFSMShsm migrates a data set or when DFSMShsm moves a migration copy that does not have a migration name. In creating the migration name, DFSMShsm uses the time of the day and an algorithm that is described in *DFSMS/MVS DFSMShsm Storage Administration Guide*.

Source: DFSMShsm

System Action: Migration processing fails for the data set. DFSMShsm processing continues.

Application Programmer Response: Determine why so many migration copies are being created at the same time with nearly identical names.

ARC1210I CANNOT MIGRATE VSAM DATA SET WITH OUTSTANDING MIGRATION RECORD

Explanation: The data set has an outstanding MCA record. DFSMShsm failed to delete the record and cannot migrate the data set.

Source: DFSMShsm

System Action: The migration operation ends. DFSMShsm processing continues.

Application Programmer Response: Use the FIXCDS command to retrieve the MCD record for the data set. The MCD contains the key to the MCA record. Use the FIXCDS command to delete the MCA record. Retry the migration request.

ARC1211I ERROR CREATING/UPDATING RECORD IN MIGRATION CONTROL DATA SET

Explanation: While DFSMShsm was trying to create a new entry in the migration control data set or update an existing entry, an error occurred. The preceding ARC1001I or the associated ARC0734I message gives the name of the data set. The *reascode* in message ARC1001I or ARC0734I indicates the type of failure. For *reascode* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: The data set operation ends. DFSMShsm processing continues.

Application Programmer Response: Notify the system programmer. If *reascode* is 4, 8, or 12, correct the problem, possibly using the FIXCDS command. If *reascode* is 16, an I/O error is the cause. There is an error message from the error recovery procedure in the DFSMShsm job log SYSMSG data set. If *reascode* is 20, an internal DFSMShsm error occurred.

ARC1212I DUPLICATE MIGRATED COPY ALREADY EXISTS ON ANOTHER MIGRATION VOLUME

Explanation: During a FREEVOL operation, migration of a data set was ended, because it was a duplicated migration copy. Another copy exists on a volume indicated by the MCDVSN field in the MCD record.

Source: DFSMShsm

System Action: The migration copy will not be migrated to another volume. FREEVOL processing will continue.

Application Programmer Response: The data set will remain on the source volume. You will probably want to do something with the duplicate data set on the ML1 volume as there will not be a DFSMShsm record associated with it.

Using the FIXCDS command and information provided in message ARC0734I, you can locate additional information about the data set which is causing the problem. If the migration *copy* name appears in message ARC0734I, read the MCA record first to find the *user* data set name. Then, use the *user* data set name to read the MCD record. If you do not have the migration *copy* name, then use the MCD record first.

Once you have the exact information describing the data set and its locations, you can determine what should be done. For example, you may choose to either delete or recall the data set.

ARC1213I ERROR UPDATING SYSTEM CATALOG DURING MIGRATION

Explanation: While DFSMShsm has been processing a migration request, the CATALOG macro has attempted to update the computing system catalog. An error has occurred. In message ARC1001I or ARC0734I, the data set name is given, and *reascode* is the return code from the CATALOG macro.

For the meaning of the reason codes, see *DFSMS/MVS Managing Catalogs*. For detailed information, see Message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*.

Source: DFSMShsm

System Action: The migration operation ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator to take corrective action for the system catalog based on the meaning of the reason code. Retry the migration after the problem is fixed.

ARC1214I ERROR SCRATCHING DATA SET DURING MIGRATION

Explanation: During a DFSMShsm space management operation, either the SCRATCH macro (for a non-VSAM data set) or an access method services DELETE command (for a VSAM data set) was issued to delete a data set, or an attempt was made to delete a data set from a VSAM small data set packing (SDSP) data set. The preceding ARC1001I message or the associated ARC0734I message gives the name of the data set.

- For a migration copy that resides in an SDSP dataset, see the associated ARC0546I or ARC0584I message in the appropriate migration or command activity log.
- Otherwise, in message ARC1001I or ARC0734I, the values for *reascode* are:
  - For a non-VSAM data set not residing in an SDSP data set the *reascode* value is:

Reascode	Meaning
4	The *dsname* was scratched, but the volume deallocation failed.
8	The MVT entry could not be found or built for the volume. The *dsname* scratch failed.
12	The volume allocation failed. The *dsname* was not scratched.
16	The SCRATCH macro failed.
20	The SCRATCH macro and the volume deallocation failed.
24	Error uncataloging data set. For SMS data sets, see Message ARC0937I for further details.

  - For a VSAM data set not residing in an SDSP data set, the *reascode* value is the return code from the access method services.
  - For a migration copy that resides in an SDSP dataset, see the associated ARC0546I or ARC0584I message for the return and reason codes.

Source: DFSMShsm

System Action: The space management operation for the data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the system programmer to take the appropriate corrective action.

ARC1215I CANNOT MIGRATE PDS WITH MORE THAN 1 NOTELIST IN MEMBER

Explanation: A MIGRATE or HMIGRATE command was entered specifying a partitioned data set (PDS). At least one member was found to have more than 3 user TTRs or more than one note list. There is a DFSMShsm restriction that such partitioned data sets will not migrate.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1216I ERROR READING PRIMARY COPY DURING MIGRATION

Explanation: While DFSMShsm was attempting to read the primary copy of a data set, an I/O error occurred for data sets of any format or invalid records found in a variable format data set.

In the case of incorrect records, a block descriptor word indicates one of the following:

- A block size greater than the record size
- A block size less than 8
- A block size larger than the maximum block size of 32760

If an I/O error occurred, an access method or hardware error message associated with this message was found in the DFSMShsm job log SYSMSG data set. The name of the data set being migrated appears either in the preceding ARC1001I message, or in the associated ARC0734I message, with a return code 16. For the ARC0734I message, refer to the migration activity log. In message ARC1001I or ARC0734I, the value for the *reascode* is:

Reascode	Meaning
0	Actual I/O error on input data set.
2	User header label is bad.
4	User trailer label is bad.
6	Block descriptor word (BDW) indicates an incorrect blocksize.
8	Partitioned data set with no EOF marker after members.
10	Data set was not found in SDSP.
12	GENCB error occurred.
14	Accumulated count fields indicate more than the allowable bytes on a track.
16	Record 1 indicates more than the allowable bytes on a track.
18	Data set in SDSP is greater than 254 2K blocks. The data set is not migrated to an ML2 tape. The data set can be recalled.
20	A count field error occurred.
22	An error occurred reading the input data set residing on ML1 DASD. The data set is a VSAM with at least 1 alternate index.
54	PDS member has an incorrect record length.

Source: DFSMShsm

System Action: The migration operation for the data set ends. DFSMShsm processing continues.

Application Programmer Response: Reason code 22 indicates that your data set has a record with an invalid length. A dump was taken and the address of the invalid record is in the PDA trace. If an I/O error occurs, respond to the associated access method or hardware error message. For information about the block descriptor word (BDW), see *DFSMS/MVS Using Data Sets*

ARC1217I I/O ERROR READING PDS DIRECTORY DURING MIGRATION

Explanation: During a DFSMShsm space management operation, the READ and CHECK macros were used to read the directory of the data set indicated in message ARC1001I or ARC0734I. There was an error, and the SYNAD exit was taken from CHECK. In Message ARC1001I or ARC0734I the values for *reascode* are:

Reascode	Meaning
4	The data set directory is empty.

Source: DFSMShsm

System Action: The space management for the data set ends. DFSMShsm processing continues.

Application Programmer Response: There may be an I/O error message associated with this problem in the data set defined for the ddname MSYSOUT in the DFSMShsm cataloged procedure or in the DFSMShsm job log SYSMSG data set. Respond to the associated error message.

ARC1218I I/O ERROR WRITING MIGRATED COPY

Explanation: While DFSMShsm was writing the migrated copy of a data set, an I/O error occurred. An access method or hardware error message precedes this message. Message ARC1001I or ARC0734I gives the data set name.

Source: DFSMShsm

System Action: The migration operation for the data set ends. DFSMShsm processing continues.

Application Programmer Response: Respond to the associated access method message or hardware error message. Issue a command to cause migration of the data set if forced migration is required.

ARC1219I DATA SET IN USE BY ANOTHER USER OR JOB, MIGRATION REJECTED

Explanation: During DFSMShsm space management processing, an attempt was made to allocate a data set. The allocation failed because:

- The data set was already allocated to another user or job.
- The data set was already allocated to another step within the batch job which issued the DFSMShsm command.
- The migration control data set data set record (MCDS) was updated by another processor in a multiple processing unit environment.
- The data set VTOC entry was modified by another program during DFSMShsm migration processing because the data set was updated by another processor in a multiple-processor environment.

The preceding ARC1001I message or the associated ARC0734I message gives the name of the data set. In message ARC1001I or ARC0734I, the values for *reascode* are:

Reascode	Meaning
1	An error occurred in allocating the non-VSAM data set to be migrated.
2	The data set VTOC entry was changed after the first OBTAIN was done by the DFSMShsm at the beginning of the migration process and before the actual migration.
3	The MCD record of the data set was changed during the migration, or an error occurred in reading the MCD record.
4	The data set VTOC entry was changed after DFSMShsm recataloged the data set with the volume serial number MIGRAT, but before DFSMShsm scratched the source copy.
5	An error occurred in enqueing on the base generation name of the generation data set being migrated.
6	An error occurred in enqueing on the VSAM base data object name.
7	An error occurred in enqueing on the VSAM alternate index (AIX) data object name.
8	An error occurred in allocating the VSAM base cluster to be migrated.
9	The data set VTOC entry for the VSAM cluster has been changed after the first OBTAIN macro processing was done by DFSMShsm at the

	beginning of the migration process but before the actual migration.
10	An error occurred in allocating the AIX cluster to be migrated.
11	The small data set packing (SDSP) data set serialization check indicated that SDSP was in use.
12	The data set was already allocated to another user.

Note: *reascode* values 1 through 5 are for non-VSAM data sets. *reascode* values 6 through 11 are for VSAM data sets. *reascode* value 12 is for either non-VSAM or VSAM data sets.

Source: DFSMShsm

System Action: The space management operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: If forced migration is required, retry the request when the data set is not in use.

ARC1220I DATA SET NOT ELIGIBLE FOR MIGRATION

Explanation: A request sent to DFSMShsm to migrate a data set failed. The data set name is contained in the preceding ARC1001I or associated ARC0734I message. The values for *reascode* in message ARC1001I or ARC0734I are:

Reascode	Meaning
1	The data set is extended format, but DFSMSdss was not the datamover for extended format data sets.
2	The data set is extended format, but it is on a non-SMS-managed volume.
4	A non-SMS-managed data set was cataloged on the wrong volume. A data set cataloged on the wrong volume can result from processing an uncataloged data set that has the same name as a cataloged data set.
5	The current level of DFSMShsm cannot migrate an extended format data set (sequential striped or compressed). A minimum of DFSMShsm 1.1.0 is required for sequential striped data sets, and a minimum of DFSMShsm 1.2.0 is required for extended format compressed data sets.
8	The device type of the volume the data set resides on, as indicated by the catalog, is different from the device type of the same volume currently mounted.
12	The data set is a non-SMS-managed multiple volume data set. This type of data set is not supported.
16	The data set is an SMS-managed multiple volume non-VSAM data set, but the datamover is DFSMShsm. This type of data set is only supported if DFSMSdss is the datamover. Multiple volume standard user label data sets are not supported by either data movement method.
20	The data set is an SMS-managed multiple volume, non-VSAM data set, and DFSMSdss is the datamover, but USERDATASETSERIALIZATION is not specified and is required for support of this data set.
22	A VSAM data set contains an invalid expiration date. The expiration date obtained from the catalog contains a year greater than 2155. This data set is not supported.
24	The data set is an SMS-managed multiple volume, non-VSAM data set, DFSMSdss is the datamover and USERDATASETSERIALIZATION is specified; However, the data set is RACF-indicated. This data set is not supported.
26	The DSCB for this migrated data set indicates DS1LSTAR=0, which should not occur for a migrated data set.
28	The data set has retained locks.
30	The data set is RLS inconsistent.
32	The data set is empty, SMS-managed, multiple volume, and physical sequential with a block size of zero.
60	Space management is processing a data set on a primary volume, but the MCD record indicates a valid migrated data set exists with the same name. Issue a RECALL command in case the previous recall failed due to a product or system outage.
98	An attempt was made to migrate a data set from ML1 to ML2, but the data set was either not cataloged or was cataloged with a volume serial of other than MIGRAT.

Source: DFSMShsm

System Action: The migration operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator. If the data set is cataloged on the wrong volume, the storage administrator can correct the catalog and retry the migration. Multivolume data sets can only be migrated under the restrictions above. To process an unsupported multivolume data set, use another method. If the device type of the volume, as indicated in the catalog, is incorrect, correct the catalog entry and retry the migration. If the data set is updated by another processor in a multiple processing unit environment, review the present status of the data set and proceed accordingly. The values for *reascode* are:

Reascode	Meaning
1	Set DFSMSdss as the datamover for extended format data sets.
2	Move the data set to an SMS-managed volume.
4	The storage administrator can correct the catalog and retry the command.
5	No action required.
8	If the device type of the volume, as indicated in the catalog, is incorrect, correct the catalog entry and retry the command.
12	No action required.
16	Select DFSMSdss as the datamover.
20	See the storage administrator.
22	If the expiration date is invalid, the storage administrator can correct the catalog and retry the command.
24	Use a generic instead of discrete RACF profile to protect the data set.

26	Recall the data set.
28	The RLS backouts pending for the data set must be completed before the data set is eligible for migration.
30	The data set must be forward recovered before it is eligible for migration.
32	No action required.
60	Issue a RECALL command in case the previous recall failed due to a product or system outage. If the second recall fails, follow the instructions applicable for all reason codes for this message under Application Programmer Response.
98	Issue a TSO LISTCAT command. If the data set is cataloged on a primary volume, issue a RECALL command in case the previous recall failed due to a product or system outage. If the second recall fails, follow the instructions applicable for all reason codes for this message under Application Programmer Response.

ARC1221I MISSING OR UNSUPPORTED DEVICE TYPE FOR SPACE MANAGEMENT

Explanation: If this message has been issued as a result of a volume space management request, DFSMShsm has received a space management request that is either missing the required UNIT parameter or that has the UNIT parameter specified with an unsupported device type.

If this message has been issued as a result of a request to migrate an individual data set, the volume on which the data set resides is a type of volume that is not supported by DFSMShsm. This volume can be either a volume that is not managed by DFSMShsm or a primary volume that has not been added to this particular processing unit. For this type of migration, DFSMShsm has scanned the device table for the device type for the volume, but the type has not been found. See *DFSMS/MVS DFSMShsm Implementation and Customization Guide* for a list of supported devices.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: If a volume space management request has been issued, correct the invalid parameter and retry the operation.

If a request to migrate an individual data set has been issued, notify the storage administrator.

ARC1222I ERROR PROCESSING PASSWORD PROTECTED DATA SET, MIGRATION TERMINATED

Explanation: The data set specified in the DFSMShsm command is password protected. The password was not specified in the command or was specified incorrectly. In message ARC1001I, the operation, the data set name, and the reason code are given.

The values for *reascode* are:

Reascode	Meaning
0	Only pertains for VSAM data sets. The user specified an incorrect password.
4	The data set is non-VSAM. The user is only authorized to read the data set, but requested to write to or delete the data set.
8	The data set is non-VSAM. The user specified an incorrect password.
12	The data set is non-VSAM. An I/O error occurred in checking the password.
16	The data set is non-VSAM. An OBTAIN error or some other error occurred while DFSMShsm was accessing the data set.
20	The data set is non-VSAM. DFSMShsm is in a nonauthorized test mode of operation in which password checking is not attempted.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Verify that the correct data set name was specified and that the password, if required, was specified correctly. Notify the system programmer for password assistance if necessary.

ARC1223I CANNOT MOUNT VOLUME NECESSARY FOR MIGRATION

Explanation: During a migration operation, the volume on which the specified data set resides could not be mounted. Message ARC1001I precedes this message, giving the data set name.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Determine the volume in question using the DFSMShsm LIST or HLIST command. Have the required volume made available to the system for your use. The DISPLAY operator command might help determine the volume status. Reissue the command when the volume is available.

ARC1224I DATA SET NOT AVAILABLE FOR MIGRATION

Explanation: DFSMShsm received a migration request for the data set identified in message ARC1001I. One of the following occurred:

- The data set is already migrated, and the migration request is not a request to migrate to a level 2 volume.
- The data set is already migrated, but the migration volume it resides on has not been added to DFSMShsm control.
- The data set is not migrated, but it resides on a migration volume.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator.

ARC1225I ERROR READING DFSMSHSM CONTROL DATA SET DURING MIGRATION

Explanation: During a migration operation, a GET macro was issued to read a DFSMShsm control data set record. An error occurred. Message ARC1001I precedes this message or the associated message ARC0734I gives the data set name and *reascode*, from DFSMShsm GET failure. For *reascode* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: The migration operation for the data set ends. DFSMShsm processing continues.

Application Programmer Response: Take the appropriate action for the reason code you received.

Reascode	Meaning
4, 8, 12, 16	Take corrective action based on the meaning of the return code in message ARC0184I. When the condition is corrected, retry the operation. When the *reascode* is 16, another error message, either an access method message or a hardware error recovery procedures message, appears on the data set defined by the DFSMShsm cataloged procedure with ddname MSYSOUT.
20	An unidentified error happened during execution of the GET macro. Take corrective action based on the meaning of the return code in message ARC0184I.

ARC1226I DFSMSHSM CONTROL DATA SET ENTRY IN USE, MIGRATION TERMINATED

Explanation: During a migration operation, the GET macro was issued to read a DFSMShsm control data set. The GET macro ended because the necessary control interval was already being used. The preceding ARC1001I message or the associated message ARC0734I gives the name of the data set failing the migration.

Source: DFSMShsm

System Action: The migration operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Retry the operation.

ARC1227I DATA SET HAS NO EXTENTS, MIGRATION REJECTED

Explanation: DFSMShsm received a migration request for the data set identified in message ARC1001I or ARC0734I. The data set VTOC entry for the data set is a model data set VTOC entry with no extents defined. DFSMShsm cannot cause migration of data sets with no extents defined.

Source: DFSMShsm

System Action: The migration of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Be sure the correct data set was specified and that it contains movable data.

ARC1228I SMPM CFQUERY FUNCTION FAILED DURING MIGRATION

Explanation: DFSMShsm invoked the SMPM CFQUERY function, but the macro failed.

Source: DFSMShsm

System Action: The migration operation ends. DFSMShsm processing continues.

Application Programmer Response: Inform the system programmer of the message and examine the return code and reason code from the previous ARC0565I message.

ARC1229I DATA FORMAT ERROR DURING MIGRATION OF A MIGRATED DATA SET

Explanation: During migration of an already migrated data set (from a DASD level 1 migration volume to a level 1 or level 2 volume, or from a DASD level 2 migration volume to a DASD or tape level 2 migration volume), the first record read for the DFSMShsm copy of the data set did not contain a valid common data set descriptor (CDD). The DFSMShsm copy of the data set may have been overwritten. The name of the data set being processed appears in the associated ARC1001I or ARC0734I message having a return code of 29.

Source: DFSMShsm

System Action: Processing of the data set fails. DFSMShsm processing continues.

Application Programmer Response: Determine if the DFSMShsm copy of the data set is corrupted.

ARC1230I DATA SET NOT CATALOGED

Explanation: A DFSMShsm space management operation was requested for a data set that is not cataloged. Uncataloged data sets cannot be space managed. The preceding ARC1001I message or the associated message ARC0734I gives the name of the data set.

Source: DFSMShsm

System Action: The space management of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or the system programmer if the data set is supposed to be cataloged. The data set must be cataloged for space management of the data set to occur.

ARC1231I EXTENSION RECORD MISSING IN TTOC RECORD

Explanation: A tape table of contents (TTOC) record is being scanned, and it is discovered that an extension record that was previously available is missing. The preceding ARC0358I message gives the record type.

Source: DFSMShsm

System Action: Updating of the volumes record ends. DFSMShsm continues processing.

Application Programmer Response: Analyze the data on the tape volume and use the FIXCDS command to re-create the missing TTOC record in the offline control data set.

ARC1232I VOLUME NOT ELIGIBLE FOR COMMAND SPACE MANAGEMENT

Explanation: A command was issued to perform space management. If the command was a space management request to migrate a volume, the volume specified in the DFSMShsm migration request is not eligible for space management. One of the following occurred:

- Space management by volume processing cannot occur on this volume because SETMIG VOLUME(*volser*) NOMIGRATION was previously issued.
- The volume specified in the migration request is a backup volume. DFSMShsm does not support space management of a backup volume.

If the command was a space management request to migrate an individual data set:

- The data set specified in the migration request resides on a backup volume. DFSMShsm does not support space management of a backup volume. The name of the data set is given in the previous ARC1001I message.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response:

- If the space management command is a volume command that failed because space management by volume processing cannot occur on the volume, issue SETMIG VOLUME(*volser*) MIGRATION and retry the space management command.
- If the space management command is a volume command that failed because the volume is a backup volume, issue a DELVOL command to temporarily remove the backup volume from DFSMShsm control, retry the migration command, and when the migration of the volume completes, issue an ADDVOL command to put the backup volume back in DFSMShsm control.
- If the space management command is a request to migrate an individual data set, notify the storage administrator.

ARC1233I DATA SET NOT ON LEVEL 1 OR LEVEL 2

Explanation: DFSMShsm received a MIGRATE or HMIGRATE command to cause the data set identified in message ARC1001I to migrate to migration level 2. The system catalog indicates that the data set has migrated, but the migration control data set record for the data set does not exist.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator. The LIST or HLIST command will help identify the level of your data.

ARC1234I LEVEL 2 NOT DEFINED FOR MIGRATION

Explanation: The DFSMShsm migration request is ended because no migration level 2 structure has been defined.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator and determine if the MIGRATIONLEVEL2 parameter should be used.

ARC1235I ERROR OPENING INPUT DATA SET DURING MIGRATION

Explanation: DFSMShsm issued the OPEN macro to open either the data set that is to migrate or the SDSP data set that contains the migrated data set. During OPEN processing, the ESTAE routine was invoked. An OPEN error message with component identifier IEC normally precedes this message if this is a true OPEN error. The preceding message ARC1001I or associated message ARC0734I gives the name of the data set that was being migrated.

Source: DFSMShsm

System Action: The migration operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Take the action indicated by the OPEN error message. If the data set cannot be opened, recover the data set from a suitable backup version.

ARC1236I ERROR OPENING/CLOSING OUTPUT DATA SET DURING MIGRATION

Explanation: DFSMShsm issued the OPEN or CLOSE macro to open or close either an output data set or the SDSP data set during a migration operation. During OPEN or CLOSE processing, the ESTAE routine was invoked. An OPEN or CLOSE error message with component identifier IEC precedes this message. Message ARC1001I or the associated message ARC0734I gives the name of the data set that was being migrated.

Source: DFSMShsm

System Action: The migration operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Take the action indicated by the OPEN error message. Issue a command to cause migration of the data set if forced migration is required.

ARC1237I NO SPACE FOR MIGRATION COPY

Explanation: During a DFSMShsm migration operation, an attempt was made to allocate space on a migration volume or in the small data set packing data set for the new migrated copy of the data set identified in message ARC1001I or ARC0734I. The allocation routine passed back a return code of 12, indicating there was no space on the volume, the VTOC was full, the index to the VTOC was full, or the small data set packing data set was full.

Source: DFSMShsm

System Action: The migration operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: If this message is in response to a data set migration command, retry the data set migration. If the error persists, notify the storage administrator, who can provide space on migration volumes for DFSMShsm to use.

ARC1238I PASSWORD PROTECTED DATA SET CANNOT BE MIGRATED TO A NON-PASSWORD PROTECTED TAPE

Explanation: A password-protected data set was found to be eligible for migration to a tape volume, but the target volume is not a password-protected tape, and the tape security is not EXPIRATIONINCLUDE or RACFINCLUDE. The data set name is given in the ARC1001I or ARC0734I message.

Source: DFSMShsm

System Action: The data set being processed is not migrated. Migration processing continues. DFSMShsm processing continues.

Application Programmer Response: Change the security option for DFSMShsm tape volumes so that password-protected data sets can be migrated to tape, or remove password-protected data sets from volumes that are managed by DFSMShsm.

ARC1239I ERROR PROCESSING RACF PROTECTED DATA SET, MIGRATION TERMINATED

Explanation: During a migration operation of DFSMShsm, an attempt was made to process a resource access control facility (RACF) protected data set. One of the following occurred:

- RACF denied access.
- The data set name did not match the data set control block (DSCB).
- There was an error in reading the job file control block (JFCB).
- There was an abnormal end (abend) in RACF processing.

The data set name and a reason code are indicated in message ARC1001I or ARC0734I. For *reascode* values, see Table 21 on page ARC-292.

Source: DFSMShsm

System Action: The migration operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: If RACF denied access, there is an associated RACF message. If the data set name and DSCB do not match, there is an associated access method message. If an I/O error caused the reading of the JFCB to fail, there is an associated error message. Respond to the associated message. If an abend occurs during RACF processing, the reason code is 24 and probably occurs because the RACF profile does not agree with the catalog entry.

ARC1240I THE DATA SET MIGRATED, BUT MAY BE CATALOGED ON THE SOURCE VOLUME

Explanation: Due to the unusual conditions during migration, the migrated data set may be cataloged on the source volume.

Source: DFSMShsm

System Action: The data set has already migrated. DFSMShsm processing continues.

Application Programmer Response: Issue the IDCAMS LISTCAT command. If the data set is cataloged on the source volume rather than on MIGRAT, see the storage administrator.

ARC1241I PREMATURE END OF VOLUME ENCOUNTERED DURING MIGRATION OF A DATA SET

Explanation: During migration processing, an end of volume condition was encountered before the tape had reached the expected percent full capacity. The tape volume was marked full, and the data set was retried but failed with the same error on retry.

Source: DFSMShsm

System Action: The task is ended.

Application Programmer Response: None.

ARC1242I ERROR READING JFCB FOR PRIMARY COPY DURING MIGRATION

Explanation: During a DFSMShsm migration to tape operation, a RDJFCB macro was issued. The RDJFCB request failed. A data management error message associated with this problem can be found in the DFSMShsm job log SYSMSG data set. Message ARC1001I or ARC0734I identifies the name of the data set in question.

Source: DFSMShsm

System Action: The migration operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Respond to the data management error message as indicated, and retry the operation.

ARC1244I VTOC ERROR DURING ALLOCATION OF DATA SET ON THE TARGET VOLUME

Explanation: During migration to DASD, a VTOC error was encountered on the target volume. The specific type of error can be determined by checking the reason code issued from the ARC0503I message that accompanies this message.

Source: DFSMShsm

System Action: The target volume is marked full to prevent further selection of that volume. The migration operation will attempt to select another target volume and retry the operation.

Application Programmer Response: Perform the appropriate VTOC maintenance on the target volume that failed. After the error has been corrected, issue the ADDVOL command to cause DFSMShsm to remove the full indication associated with the volume. This allows DFSMShsm to select the volume as a target for migration.

ARC1245I DATA SET NOT ELIGIBLE FOR MIGRATION

Explanation: A space management operation has been requested for a data set that is not eligible for space management processing. In the preceding ARC1001I message or in the ARC0734I message, the values for *reascode* are:

Reascode	Meaning
1	The data set is a system data set, a VSAM catalog, or an integrated catalog facility (ICF) catalog. Either the first four characters of the data set name are HSM., or the first five characters of the data set name are SYS1., or the data set name is SYSCTLG.
2	The SETMIG command restricts the data set by initial characters of the data set name.
3	The SETMIG command restricts the data set by the full data set name.
4	The data set has been temporarily prevented from migrating because a JES3 job plans to use it. The end date of this restriction is in the MCD record for the data set.
5	The management class attribute COMMAND-OR-AUTO-MIGRATE = COMMAND restricts migration of this SMS-managed data set.
6	The management class attribute COMMAND-OR-AUTO-MIGRATE = NONE restricts migration of this SMS-managed data set.
7	The setting of the backup-while-open bits restricts migration of this SMS-managed data set. **Note:** Reason codes 90 and higher are not produced unless you have installed a patch titled “Getting an ARC0734I Message Issued with the Appropriate Reason Code for Data Sets Not Selected during Volume Migration or Backup.” For more information about this patch, refer to *DFSMS/MVS DFSMShsm Diagnosis Guide* topic, “PATCH: Changing Storage in the Address Space of DFSMShsm” under section, “DFSMShsm Maintenance Commands.”
8	The SMS-managed data set is not eligible for migration because it is checkpointed and the minimum number of days since the date last referenced has not elapsed. **Note:** Reason codes below 90 are not produced during interval migration regardless of the patch described above.

90	The SMS-managed data set is not eligible for migration by space management because it is checkpointed and the minimum number of days since the date last referenced has not elapsed.
91	The SMS-managed data set is not eligible for migration because it has not gone unused for the number of days specified in the management class definition for PRIMARY DAYS NON USAGE.
92	The return code passed back from the data set migration exit (ARCMDEXT), indicates the data set should not be migrated.
93	The data set is not eligible for migration because it does not have a current backup copy and it is being directed to tape.
94	The data set is not eligible for partial release because it is a multivolume data set.
95	The data set is not eligible for migration because it has more than 1 AIX, more than 1 path on the base cluster, or more than 1 path on the AIX.
96	The data set is not eligible for migration because the date last referred to in the data set VTOC entry is 0.
97	The return code passed back from the space management exit (ARCSAEXT) indicates the data set should not be processed.
98	The data set is not eligible for space management because the data set's age is less than the DFSMShsm integrity age. (For SMS temporary data sets under JES3, this is always 2-days regardless of USERDATASETSERIALIZATION.)
99	For VSAM data sets, this reason code is issued when the data set VTOC entry is not for the base data object of a VSAM data set, or is the secondary piece of a key range data set. For non-VSAM data sets, this reason code is issued when the data set sequence number is not 1. This indicates that the data set is part of a multivolume data set, but is not the first segment of that data set.

Source: DFSMShsm

System Action: The space management operation of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Perform the action that has been assigned to the *reascode* you have received.

Reascode	**Meaning**
1	There is no response needed.
2, 3	Contact the storage administrator.
4	Reenter the request after the JES3 prevent-migration date (MCDJDATE) has expired. To determine this date, use the FIXCDS command to display the MCD record.
5, 6	This data set will only be migrated if the management class definition is changed to allow migration, or the management class associated with the data set is changed to one that allows migration.
7	This data set can only be migrated if the data base administrator removes it as a candidate for backup-while-open processing.
8	The default minimum number of days that must have elapsed since the date last referenced is five. This value may be modified with a patch command documented in the *DFSMS/MVS DFSMShsm Implementation and Customization Guide*.
90	The default minimum number of days that must have elapsed since the date last referenced is five. This value may be modified with a patch command documented in the *DFSMS/MVS DFSMShsm Implementation and Customization Guide*.
91	The data set will be eligible for migration after it has gone unused for the number of days specified in the management class definition for PRIMARY DAYS NON USAGE. If the data set should be considered eligible for migration sooner, it needs to be associated with a management class whose definition of PRIMARY DAYS NON USAGE is smaller than the value specified in the management class currently associated with the data set.
92	If the data set should be considered eligible for migration, the data set migration exit (ARCMDEXT) needs to be updated to not exclude the data set from migration.
93	To migrate the data set directly to tape, perform one of the following: 1. Create a backup copy of the data set. This can be done by automatic backup or by issuing a data set backup command (HBACKDS or BACKDS). 2. Do not require a current backup copy to exist before the data set can be migrated to tape. This can be done by specifying AUTO BACKUP = N in the management class definition associated with the data set.
94	No response required. The only way to release the unused allocated space for a multivolume data set through DFSMShsm is to migrate the data set and then recall it.
95	The data set can only be migrated by a data set migration command (HMIGRATE or MIGRATE).
96	No response required. DFSMShsm resets the date last referred to in the DFCB to the current date. The next time volume space management is performed, migration eligibility will be done using this date.
97	If the data set should be considered eligible for migration, the space management exit (ARCSAEXT) needs to be updated to not exclude the data set from migration.
98	No response required. The data set is not eligible for migration because the data set's age is less than the DFSMShsm integrity age. For a discussion of integrity age, refer to *DFSMS/MVS DFSMShsm Storage Administration Guide*.
99	No response required. DFSMShsm processes a VSAM data set when it encounters the data set VTOC entry of the base data object. For a key

range data set, the data set VTOC entry must be for the first segment of the data set.

For a non-VSAM data set, processing occurs when the volume with a data set sequence number of 1 is encountered.

ARC1246I OFFLINE CONTROL DATA SET NOT FOUND

Explanation: An attempt has been made to update the offline control data set (OCDS) but the data set does not exist.

Source: DFSMShsm

System Action: The command fails. DFSMShsm processing continues.

Application Programmer Response: Create the OCDS and restart DFSMShsm. For details on creation of the OCDS, see *DFSMS/MVS DFSMShsm Implementation and Customization Guide*.

ARC1247I TAPE END OF VOLUME ERROR DURING MIGRATION

Explanation: An end-of-volume error or ABEND*x*37 occurred.

Source: DFSMShsm

System Action: The volume is marked full to prevent its allocation. A new tape volume is selected, and the data set that was in process is retried.

Application Programmer Response: Check the preceding messages and the dump, if applicable, to determine the cause.

ARC1248I MIGRATION COPY OF DATA SET EXCEEDS MAXIMUM NUMBER OF ALLOWABLE TAPE VOLUMES

Explanation: During migration processing, a data set was being moved that exceeded the space on the maximum number of tape volumes allowed for one data set (40). See message ARC0352I for more detail.

Source: DFSMShsm

System Action: The migration of the data set fails. The first volume is marked full, and all other volumes are automatically deleted with an internal DELVOL command.

Application Programmer Response: None.

ARC1249I FAILURE ATTEMPTING TO REMOVE RACF PROTECTION FROM TAPE MIGRATION VOLUME

Explanation: Deletion of a tape table of contents (TTOC) entry from the offline control data set (OCDS) was requested. The migration volume was RACF protected, and the removal of that protection failed. See message ARC0359I for the volume serial number and RACF return code. The return code is the result of the failure of the DFSMShsm removal of RACF protection.

Source: DFSMShsm

System Action: The deletion of the record fails. DFSMShsm processing continues.

Application Programmer Response: See message ARC0359I for the appropriate corrective action. Contact the RACF administrator and have the RACF protection removed from the tape volume manually.

ARC1250I NO UNIT AVAILABLE TO MOUNT MIGRATION VOLUME

Explanation: During a migration operation, an attempt was made to allocate the data set that was to migrate. For data set migration, the identity of this data set is found in message ARC1001I. For volume migration, the identity of this data set is found in message ARC0734I. The allocation routines determined that the required volume is not online, nor are any units available on which a mount can be requested.

Source: DFSMShsm

System Action: The migration operation ends. DFSMShsm processing continues.

Application Programmer Response: See message RAC0503I for dynamic allocation return codes, reason codes, and information reason codes. Arrange to have a unit made available for your request, and retry the operation.

ARC1251I ANOTHER DFSMSHSM FUNCTION ACTIVE FOR DATA SET, MIGRATION REJECTED

Explanation: A migration request is rejected because another DFSMShsm operation is processing the data set. The data set name is given in message ARC1001I for data set migration, or in message ARC0734I for the individual data set during volume migration. Valid values for the *reascode* are:

Reascode	Meaning
0	The MCD record was in use by another processor.
1	The data set was moved by another processor or function while this function was processing it.

Source: DFSMShsm

System Action: The migration operation ends for the data set. DFSMShsm processing continues.

Application Programmer Response: Retry the operation when the data set is available.

ARC1252I GET/FREEMAIN ERROR - MIGRATION TERMINATED

Explanation: During a migration operation, a GETMAIN or FREEMAIN macro was issued for input buffer space. The macro failed.

Source: DFSMShsm

System Action: The migration operation ends. DFSMShsm processing continues.

Application Programmer Response: Retry the migration operation. If the problem occurs again, notify the storage administrator.

ARC1253I DATA SET NEEDS BACKUP SO IT WAS NOT EXPIRED

Explanation: During SMS expiration processing, the data set was found to still be in need of backup. It is not expired until the backup is done.

DFSMShsm determines a data set is NOT in need of backup if one of the following situations exists:

- The data set change flag is off in the VTOC entry AND the last backup date in the catalog is nonzero. Note that DFSMShsm does not verify the existence of the backup version.
- The data set change flag is off in the VTOC entry AND the last backup date in the catalog is zero AND the management class does not request autobackup for this data set.

- The data set change flag is on in the VTOC entry AND the management class does not request autobackup for this data set.
- The MCVT bit (MCVTNDBU) is on, which indicates bypassing the current SMS DBU requirement that a backup copy needs to exist before expiring a data set.

This message is referenced by an associated ARC0734I message. The name of the data set is included in the ARC0734I message.

Note: ADMIN OR USER COMMAND BACKUP must not be specified as NONE and AUTO BACKUP must be specified as Y to request automatic backup.

Source: DFSMShsm

System Action: The individual data set is not expired. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1254I SPACE MANAGEMENT FAILED DUE TO AN ERROR IN AN INSTALLATION EXIT

Explanation: The ARCMDEXT exit for migration processing, or the ARCADEXT exit for data set deletion or data set retirement processing ended abnormally (abended) DFSMShsm has placed a hold on the migration function so no migration or data set deletion commands can be processed until the hold is removed by using the DFSMShsm RELEASE command.

Source: DFSMShsm

System Action: DFSMShsm processing continues without the migration function.

Operator Response: If you determine that the DFSMShsm migration function (migration and data set deletion) can process without the installation-wide exit, using the SETSYS command with the EXITOFF parameter, turn off the installation-wide exit, and release the migration function.

Note: If the ARCADEXT exit abends and you turn off the exit and release the migration function, DFSMShsm might delete data sets that the exit would have kept.

Application Programmer Response: Correct the cause of the abend, and relink the exit module. The exit can be reactivated with a SETSYS command.

ARC1255I VSAM MIGRATION FAILED - ERROR IN EXPORT

Explanation: Migration was attempted for a VSAM data set, but the IDCAMS EXPORT command was unable to complete successfully. The data set name and IDCAMS return code are given in the ARC1001I message for data set migration or in ARC0734I for an individual data set during volume migration. The IDCAMS error messages are contained in the migration activity log. To review the activity log, issue a RELEASE HARDCOPY command. If the logs are on DASD, new logs are created and the log with the messages can be browsed. If the logs are directed to SYSOUT, they are printed.

Source: DFSMShsm

System Action: The migration of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Respond to the IDCAMS return code and retry the operation. The migration activity log contains messages that further explain the reason for the IDCAMS return code.

ARC1256I ERROR LOCATING DSCB FOR UPDATE

Explanation: A data set was being migrated from a user volume. The data set VTOC entry has been read using the common VTOC access facility, but the DSCB read was not the correct one. The read was for restoring the user’s last reference date so that interleave access by DFSMShsm and the user could be detected.

If ACTION=PARTREL is indicated in message ARC0734I, the update of the last used track (null data set organization) in the VTOC entry fails for an empty data set.

Source: DFSMShsm

System Action: The space management of the data set fails. DFSMShsm processing continues.

Application Programmer Response: Access the VTOC to be sure that the entry for this data set is not damaged. An associated hardware, data management, or system error message can be found in the DFSMShsm job log SYSMSG data set.

ARC1257I I/O ERROR UPDATING DSCB

Explanation: During a DFSMShsm space management operation, an error occurred in updating the data set VTOC entry for the data set being migrated. This message is either preceded by message ARC1001I, or referenced by an associated ARC0734I message. Both messages include the name of the data set being space managed and a reason code. If the reason code is 0, an unrecoverable I/O error occurred, and the DCB SYNAD exit was taken from the data management CHECK service routine. If the reason code is nonzero, a request to the common VTOC access facility (CVAF) to read or write the data set VTOC entry failed. The reason code is the contents of register 15 upon return from CVAF. An associated hardware, data management, or system error message can be found in the DFSMShsm job log SYSMSG data set.

If ACTION=PARTREL is indicated in message ARC0734I, the update of the last used track (null data set organization) in the VTOC entry fails for an empty data set.

Source: DFSMShsm

System Action: The individual data set is not space managed. DFSMShsm processing continues.

Application Programmer Response: Retry the space management operation. If the problem still exists, notify the storage administrator.

ARC1258I MIGRATION OR DBA/DBU FAILED FOR DATA SET

Explanation: Space management was attempted for a data set, but was unsuccessful. The data set name and reason codes are given in message ARC1001I or ARC0734I.

The values for *reascode* are:

Reascode	Meaning
4	The data set VTOC entry for a non-VSAM data set indicates that it is possibly multivolume but the catalog entry indicates it is a single volume.
5	The catalog entry is a generation data group (GDG) entry name.
6	There was an error in a catalog entry for a data set.
7	An error occurred trying to convert the symbolic volser to a real volser.
8	No catalog entry was found.

9	Unsupported data set for migration. The catalog entry shows the data set as a non-SMS-managed VSAM data set defined with key ranges.
10	The catalog entry indicates that the data set is multiple volume. If the data set is a VSAM data set, it is not an SMS-managed data set, and one component is multiple volume.
11	Unsupported data set for migration. The catalog entry shows at least one AIX defined with key ranges and the base cluster is *not* defined with key ranges.
12	The components of the non-SMS-managed VSAM cluster are on different volumes.
14	The catalog entry is not a VSAM base cluster or a non-VSAM data set. The catalog entry might be a VSAM page space, or a locate error occurred for the data set name.
15	A component of the VSAM data set has a logical record length that is too large for DFSMShsm. The maximum allowable record length is 32 752 bytes for a relative record data set and 32 756 bytes for entry sequenced or key sequenced data sets.
16	A component of the VSAM data set is open for output.
18	A LOCATE error occurred for the data or index component in the VSAM base cluster.
19	A LOCATE error occurred for a path component in the VSAM base cluster.
20	The data set name is a VSAM component name instead of a cluster name.
28	A LOCATE error occurred for the VSAM alternate index (AIX) cluster.
38	A LOCATE error occurred for the data or index component in a VSAM AIX cluster.
39	A LOCATE error occurred for a path component in the VSAM AIX cluster.
40	A least one component of the VSAM data set is empty. The VSAM data component had no data for IDCAMS to move.
48	A LOCATE error occurred for the data set or its alias.
52	Two or more directory entries for a partitioned data set had the same TTR.
53	A directory entry in a partitioned data set has an invalid length value.
54	An imbedded record has a zero or negative length. The member name is reported in the associated ARC0901I message with module ARCMPDS.
56	A VSAM data set has an invalid expiration date. The expiration date obtained from the catalog contains a year greater than 2155. This data set is not supported.
57	A generated name was not found in MCDMCANM for a data set not in an SDSP and migrated by DFSMShsm R 1.3 or later. Space management is not performed on this data set.
58	The authorized program facility (APF) is not available to DFSMShsm to determine if the data set being processed is in the APF list.
60	An SMS definition conflict is detected. DFSMShsm indicates an SMS-managed data set. The APF QUERY function indicates a non-SMS-managed data set.
62	An error occurred while invoking APF for determining if a data set is in the APF list.
64	The system list of APF libraries is not available.

Source: DFSMShsm

System Action: The data set is not space managed. DFSMShsm processing continues.

Application Programmer Response: If a LOCATE error occurred, update the catalog entry, and retry the command. If *reascode* is 40, load data in all the components. If *reascode* is 57, contact your storage administrator or the IBM Support Center for help.

ARC1259I DBA/DBU FAILED - ERROR DELETING DATA SET

Explanation: A VSAM data set was selected and met the criteria for deletion from the volume. The attempted scratch failed, and the data set on the primary volume was not scratched.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: An associated ARC0734I message contains the return code from the delete request. Take the action indicated by the return code from delete.

ARC1260I ESTAE MACRO FAILURE DURING MIGRATION

Explanation: DFSMShsm attempted to set up an ESTAE environment, but the MVS function was unsuccessful during a migration process.

Source: DFSMShsm

System Action: The migrate operation ends. DFSMShsm processing continues; however, the migration may be held and need to be released before further migration can occur.

Application Programmer Response: Inform the system programmer of the message and examine the return code from the previous ARC0304I message.

ARC1261I ERROR DURING INTERNAL ADDVOL OF TAPE MIGRATION VOLUME

Explanation: During migration processing, a tape end-of-volume was encountered, and an internal ADDVOL command for a scratch tape was attempted. The ADDVOL command was unsuccessful because of an I/O error on a control data set record or because the volume already contains valid DFSMShsm data. For additional information about the error, see the preceding ARC0184I or ARC0356I message.

Source: DFSMShsm

System Action: The tape volume specified in the previous ARC0120I message is not added to DFSMShsm control. Another volume is selected, and DFSMShsm processing continues.

Application Programmer Response: If the error is because of an I/O error, determine the cause of the error and take corrective action. If the tape volume already contains valid data, a possible operations problem could exist that might need to be investigated.

ARC1262I CDS RECORD IN USE BY ANOTHER HOST

Explanation: During space management processing, an update was attempted on a control data set record that another processing unit is using.

Source: DFSMShsm

System Action: The update to the control data set record is not made. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1263I DATE FORMAT IS INVALID

Explanation: The format of the packed decimal date indicated by the *reason-code* is bad. The format should be X'00*yyddds*'. where *yy* is the year and *ddd* is the Julian date. The sign bit is *s* and should be either a C or F. The name of the data set being space managed appears either in the associated ARC1001I or ARC0734I message with a return code of 63. The reason code in the ARC0734I or ARC1001I message further clarifies the error that has occurred as follows:

Reascode	Meaning
0	Either the MCDDLR or the MCDDLC is bad.
2	The SDATADAT field is bad.
4	The MCDEXPDT field is bad.

Source: DFSMShsm

System Action: The data set is not processed. DFSMShsm processing continues.

Application Programmer Response: Perform the action assigned to the *reascode* you received:

Reascode	Meaning
0	Use the FIXCDS command to patch the MCDDLR or MCDDLC field in the MCD record to a date with the correct format.
2	Contact the IBM Support Center to report the problem.
4	Use the FIXCDS command to patch the MCDEXPDT field in the MCD record to a date with the correct format.

ARC1264I ERROR CLOSING INPUT DATA SET DURING MIGRATION

Explanation: During the migration of a data set, an error has occurred when DFSMShsm has attempted to close the input data set. The input data set is the data set being migrated. The name of the data set being migrated appears either in the preceding ARC1001I message, or in the associated ARC0734I message with a return code of 64. The reason code in the ARC0734I or ARC1001I message further clarifies the error that has occurred, as follows:

Reascode	Meaning
4	A nonzero return code is in register 15 on completion of a FREEPOOL macro. After closing the input data set, DFSMShsm has issued a FREEPOOL macro to free any I/O buffers that have been acquired by the data management access method routines.
8	A nonzero return code is in register 15 on completion of a CLOSE macro. DFSMShsm has issued a CLOSE macro to close the input data set.
12	A CLOSE abnormal end (abend) (X14) has occurred during the processing of the CLOSE macro. DFSMShsm has issued a CLOSE macro to close the input data set. An ESTAE recovery routine has been given control during close processing. The DCB ABEND exit may also have been given control. If the DCB ABEND exit has been given control, the parameter list on entry to the DCB ABEND exit has indicated that it is not acceptable to ignore the abend condition. Therefore, the DCB ABEND exit has returned to data management with an indication to continue abend processing.
16	An abend, other than a CLOSE abend, has occurred during the processing of a CLOSE macro. DFSMShsm has issued a CLOSE macro to close the input data set. An ESTAE recovery routine has been given control during close processing. The DCB ABEND exit may also have been given control. If the DCB ABEND exit has been given control, the parameter list on entry to the DCB ABEND exit has indicated that it is not acceptable to ignore the abend condition. Therefore, the DCB ABEND exit returns to data management with an indication to continue abend processing.
20	An abend has occurred during the execution of the CLOSE macro. The DCB ABEND exit has been given control. The parameter list on entry to the DCB ABEND exit has indicated that it is acceptable to ignore the abend condition. Therefore, the DCB ABEND exit returns to data management with an indication to ignore the abend.

Source: DFSMShsm

System Action: The data set is not successfully migrated. DFSMShsm processing continues.

Application Programmer Response: For *reascode* 12, 16, and 20, there should be an associated data management message (prefix IEC) at the computing system console and in the DFSMShsm job log. For information about the CLOSE and FREEPOOL macros and their associated return codes, refer to *DFSMS/MVS Macro Instructions for Data Sets*.

ARC1265I ERROR CLOSING OUTPUT DATA SET DURING MIGRATION

Explanation: During the migration of a data set, an error has occurred when DFSMShsm has attempted to close the output data set. The output data set is a migration copy on the DFSMShsm migration level 1 or level 2 volume. The name of the data set being migrated appears either in the preceding ARC1001I message, or in the associated ARC0734I message with a return code of 65. The *reascode* in the ARC0734I or ARC1001I message further clarifies the error that has occurred, as follows:

Reascode	Meaning
4	A nonzero return code is in register 15 on completion of a FREEPOOL macro. After closing the input data set, DFSMShsm has issued a FREEPOOL macro to free any I/O buffers that have been acquired by the data management access method routines.

8	A nonzero return code is in register 15 on completion of a CLOSE macro. DFSMShsm has issued a CLOSE macro to close the input data set.
12	A CLOSE abnormal end (abend) (X14) has occurred during the processing of the CLOSE macro. DFSMShsm has issues a CLOSE macro to close the input data set. An ESTAE recovery routine has been given control during CLOSE processing. The DCB ABEND exit may also have been given control. If the DCB ABEND exit has been given control, the parameter list on entry to the DCB ABEND exit has indicated that it is not acceptable to ignore the abend condition. The DCB ABEND exit returns to data management with an indication to continue abend processing.
16	An abend, other than a CLOSE abend, has occurred during the processing of a CLOSE macro. DFSMShsm has issued a CLOSE macro to close the input data set. An ESTAE recovery routine has been given control during CLOSE processing. The DCB ABEND exit may also have been given control. If the DCB ABEND exit is given control, the parameter list on entry to the DCB ABEND exit has indicated that it is not acceptable to ignore the abend condition. The DCB ABEND exit returns to data management with an indication to continue abend processing.
20	An abend has occurred during the processing of the CLOSE macro. The DCB ABEND exit has been given control. The parameter list on entry to the DCB ABEND exit has indicated that it is acceptable to ignore the abend condition. Therefore, the DCB ABEND exit returns to data management with an indication to ignore the abend.

Source: DFSMShsm

System Action: The data set is not successfully migrated. DFSMShsm processing continues.

Application Programmer Response: For *reascode* 12, 16, and 20 there should be an associated data management message (prefix IEC) at the computing system console and in the DFSMShsm job log. For information about the CLOSE and FREEPOOL macros and their associated return codes, refer to *DFSMS/MVS Macro Instructions for Data Sets*.

ARC1266I SPECIFIED L0 VOLUME NOT AVAILABLE FOR SPACE MANAGEMENT

Explanation: A command has been issued to perform space management on a specific level 0 volume, but the volume is not available for the request. The volume is unavailable because another DFSMShsm volume function is using it.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1267I ERROR OBTAINING BLOCKID DURING MIGRATION

Explanation: A SETSYS command has specified that the 3480 single-file format be used. During migration of a data set to a 3480 tape volume, DFSMShsm has issued a NOTE macro to obtain the block ID of the next data block to be written. The NOTE macro has failed. The data set being migrated is named either in the preceding ARC1001I message, or in the associated ARC0734I message containing the return code 67. The reason codes for ARC1001I or ARC0734I are as follows:

Reascode	Meaning
4	Does not support this block ID.
8	Invalid input parameters have been specified.
12	An I/O error has occurred during the RDBLKID command.

Source: DFSMShsm

System Action: Migration of the data set fails. The 3480 tape volume used for output is marked full to prevent its further use, and another tape volume is selected. DFSMShsm processing continues.

Application Programmer Response: For more information about the NOTE macro and its return codes, see *DFSMS/MVS Using Data Sets* or *DFSMS/MVS Macro Instructions for Data Sets*.

ARC1268I MIGRATION FAILED DUE TO AN ERROR IN DFSMSDSS

Explanation: An attempt has been made to migrate a data set with DFSMSdss as the data mover. The DFSMSdss logical DUMP command has been issued to move the data set.

When this message is issued, the corresponding DFSMSdss messages should be consulted. The DFSMSdss messages with prefix ADR are listed in the migration activity log for this failure.

The preceding ARC1001I or associated ARC0734I message contains the data set name and the value of the last DFSMSdss messages that have been issued for the highest severity error encountered during DFSMSdss processing. In some cases, this return code is other than a DFSMSdss message number. Those cases are as follows:

1. If the value of the return code is 9999, DFSMSdss has abnormally ended (abended) and DFSMShsm could not determine the final DUMP return code. The DFSMSdss messages must be used to determine the cause of the failure.
2. If the value of the return code is 9990, then it is the result of an abend in DFSMSdss.

Source: DFSMShsm

System Action: The data set operation ends. DFSMShsm processing continues.

Application Programmer Response: Review the response required for the DFSMSdss error and take the appropriate action. The DFSMSdss messages can be found in *OS/390 MVS System Messages, Vol 1 (ABA-ASA)*.

ARC1269I ERROR ON SYNCDEV DURING MIGRATION

Explanation: During migration of a data set to a 3480 single-file format tape volume, DFSMShsm has issued a SYNCDEV macro to flush the tape buffer and write the data to the tape. The SYNCDEV macro has failed. The data set targeted for migration has been named either in the preceding ARC1001I message, or in the associated ARC0734I message, containing the return code 69. The ARC1001I or ARC0734I reason codes are as follows:

Reascode	**Meaning**
4	An invalid device (not a buffered tape) has been targeted for migration, or invalid input parameters have been specified.
8	A permanent I/O error has occurred during the RDBLKID or SYNCHRONIZE command.
12	A permanent I/O error has been indicated for an earlier channel program.

Source: DFSMShsm

System Action: Migration of the data set fails. The 3480 tape volume used for output is marked full to prevent its further use. Another tape volume is selected for the migration process. DFSMShsm processing continues.

Application Programmer Response: For more information about the SYNCDEV macro and its return codes see *DFSMS/MVS Using Data Sets* or *DFSMS/MVS Macro Instructions for Data Sets*.

ARC1270I AN ERROR OCCURRED WHILE DFSMSHSM WAS PROCESSING AN SMS MANAGED DATA SET

Explanation: A space management operation was requested for an SMS-managed data set. The data set name was either given in the preceding ARC1001I message or in the associated ARC0734I message, along with the *reascode*. The reason codes have the following meanings:

Reascode	**Meaning**
1	The data set is unmatched. VTOC catalog entry access services indicated the data set being processed does not have all the related data. A data set VTOC entry was not found for the data set. Refer to *DFSMS/MVS Using Data Sets* for more information.
2	The data set is unmatched. VTOC catalog entry access services indicated the data set being processed does not have all the related data. A VVR entry was not found for the data set. Refer to *DFSMS/MVS Using Data Sets* for more information.
3	The data set is unmatched. VTOC catalog entry access services indicated the data set being processed does not have all the related data. A duplicate VVR entry was found for the data set. Refer to *DFSMS/MVS Using Data Sets* for more information.
4	SMS is either not active or not installed.
5	An error occurred while obtaining the management class definition for the data set.
6	An error occurred while updating the catalog entry for the data set.
7	DFSMShsm detected a discrepancy between the data set VTOC entry and the catalog information for the data set being processed. The discrepancy is one of the following: • The catalog information indicated this is an SMS-managed data set (data set is associated with a storage class), but the data set VTOC entry indicated this is a non-SMS-managed data set. • The catalog information indicated this is a non-SMS-managed data set (data set is not associated with a storage class), but the data set VTOC entry indicated this is an SMS-managed data set.
8	An error occurred while attempting to release unused space for a data set (DADSM PARTREL function). DFSMShsm was processing a data set associated with a management class that specified the attribute PARTIAL-RELEASE=YES.
9	An error occurred while locating the 'minus *n*th' GDG when checking the management class attribute #-GDG-ELEMENTS-ON-PRIMARY.
10	An error occurred while deleting an SMS-managed data set.
11	There is no storage class definition in the extract list entry returned by VTOC catalog entry access services. The data set resides on an SMS-managed volume and requires a storage class definition to be processed.
12	An SMS-managed migrated data set was not migrated during level 1 migration. The data set is associated with a management class that specified the attribute LEVEL-1-DAYS-NON-USAGE=NOLIMIT.
13	The data set is unmatched. The data set being processed is uncataloged or cataloged to a different volume. VTOC catalog entry access services indicated the data set has a catalog entry for the volume being processed. Refer to *DFSMS/MVS Using Data Sets* for more information.
14	A failure occurred retrieving catalog information. See the associated ARC0950I message for the return code and reason code from Superlocate.
60	Expiration of a VSAM data set failed, because the data set is in incomplete status. Issue a RECALL command for the data set.

Source: DFSMShsm

System Action: The migration of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Perform the action assigned to the *reascode* you received.

Reascode	**Meaning**
1, 2, 3	Run the IDCAMS DIAGNOSE against the catalog and or VVDS for the unmatched data set. Take corrective action for any problems detected.
4	If SMS is not installed on your system, it must be installed before DFSMShsm can process any SMS-managed data sets or volumes; if installed, SMS needs to be activated.
5	Refer to message ARC0935I in the command activity log for the specific failure. List the catalog information for the data set to determine the

	management class name. Define the management class if it does not exist. If the management class exists, contact the IBM Support Center.
6	Refer to message ARC0950I in the command activity log for the specific failure.
7	Correct the discrepancy, and reissue the request.
8	Check for message ARC0938I in the command activity log for the specific PARTREL failure. If there is no ARC0938I message, the exclusive ENQ for the data set failed and the PARTREL was not performed. In this case, no action is required.
9	Update the catalog entry.
10	Refer to message ARC0528I or ARC0545I in the command activity log for the specific failure.
11, 13, 14	Correct the discrepancy, and reissue the request.

ARC1272I DFSMSHSM ENCOUNTERED AN SMS-RELATED ERROR WHILE OBTAINING AN MVT ENTRY FOR AN SMS-MANAGED VOLUME

Explanation: During the migration of a data set, DFSMShsm has attempted to find or build a mounted volume table (MVT) entry for the volume containing the data set to be migrated. An error has occurred which has caused the migration to end. The data set name is given in the preceding ARC1001I message or in the associated ARC0734I message, along with a reason code. The reason codes have the following meanings:

Reascode	Meaning
1	SMS is not installed in the system. DFSMShsm has attempted to process an SMS-managed volume, as indicated in the volume VTOC entry, but SMS is not installed on the system in which DFSMShsm is running.
4	SMS is not active in the system. DFSMShsm has attempted to process an SMS-managed volume, but SMS is not active in the system.
5	An error has occurred in reading the volume VTOC entry for the volume being selected. DFSMShsm has attempted to read the volume VTOC entry to determine if the volume containing the data set to be migrated is an SMS-managed volume. The read has failed.
6	An error has occurred in retrieving an SMS volume definition. After the volume containing the data set to be migrated has been determined to be an SMS-managed volume (by reading the volume VTOC entry), DFSMShsm has invoked SMS to retrieve an SMS volume definition. SMS fails to retrieve it.
7	An error has occurred while retrieving a storage group definition for an SMS volume. After the volume definition has been retrieved for the volume, DFSMShsm has invoked SMS to retrieve a storage group definition for the volume. SMS fails to retrieve it.
9	The volume containing the data set to be migrated is in SMS initial status. DFSMShsm has attempted to reads the volume VTOC entry to determine if the volume is an SMS-managed volume. The volume VTOC entry has indicated that the volume is in SMS initial status. DFSMShsm cannot process a volume in SMS initial status.
11	DFSMShsm cannot determine if the volume containing the data set to be migrated is an SMS-managed volume. The SMS volume definition and the volume VTOC entry do not agree.
13	The device type of the volume that has been retrieved from the SMS storage group definition is not supported by DFSMShsm.
15	An error has occurred while reading or writing a migration control data set (MCDS) volume record (MCV). DFSMShsm has read an MCV record for the volume containing the data set to be migrated. The read has failed, and an ARC0184I message has been issued to indicate the error. If no MCV record exists for the volume, DFSMShsm has attempted to create an MCV record for the volume. The creation has failed, and an ARC0184I message has been issued to indicate the error.
19	The volume containing the data set to be migrated is not mounted. DFSMShsm has attempted to locate the unit control block (UCB) for the volume containing the data set to be migrated and has found that the volume is not mounted.
52	A GETMAIN error has occurred. DFSMShsm has failed to get virtual storage for creating an MVT entry for an SMS-managed volume.

Source: DFSMShsm

System Action: The migration ends. DFSMShsm processing continues.

Application Programmer Response: Perform the action that corresponds to the reason code you received.

Reascode	Meaning
5	The *reascode* for this error is the return code from the CAMLST OBTAIN macro. See *DFSMS/MVS Using Data Sets* for further information on the CAMLIST OBTAIN macro.
6, 7	See the preceding ARC0935I message in the command activity log for the specific failing code from the subsystem interface (SSI) of SMS.
11	Determine why the SMS volume definition and volume VTOC entry do not agree. Correct the inconsistency and issue the MIGRATE command.
15	See the preceding ARC0184I message in the appropriate activity log for the specific I/O failing code.

52	See the preceding ARC0305I message for the specific failing code.

ARC1273I PDSE DATA SET COULD NOT BE PROCESSED FOR MIGRATION

Explanation: A request sent to DFSMShsm to migrate a partitioned data set extended (PDSE) data set has failed. The data set name is contained in the preceding ARC1001I or associated ARC0734I message. The *reascode* in the ARC1001I or ARC0734I message gives the reason that DFSMShsm could not migrate the data set.

Reascode	Meaning
4	The datamover is DFSMShsm.
8	PDSE support is not available on the system. A global, non-recoverable SMSX resource has been lost and DFSMS PDSE support has been disabled.

Source: DFSMShsm

System Action: The migration operation of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator. If DFSMShsm is running in a multiprocessing unit environment, and there is another processing unit that can support PDSE data sets, process this data set on the other processing unit.

ARC1274I DATASET/VOLUME MIGRATION FAILED - MIGRATION HELD

Explanation: Migration was being requested, but the HOLD MIGRATION command was in effect. Message ARC1001I gives the data set name or volume serial number.

Note: Volume migration includes the FREEVOL command.

Source: DFSMShsm

System Action: The data set or the volume is not migrated. DFSMShsm processing continues.

Application Programmer Response: Reissue the command after issuing the RELEASE MIGRATION command.

ARC1276I ERROR LINKING TO DFSMSDSS DURING MIGRATION

Explanation: A request sent to DFSMShsm to migrate a data set failed when the LINK macro used to invoke DFSMSdss for data movement failed. The data set name is contained in the preceding ARC1001I or associated ARC0734I message. The reason code indicates the abnormal end (abend) code from the LINK macro.

Source: DFSMShsm

System Action: The migration operation of the data set ends. A SNAP dump is generated on the first occurrence of this error. DFSMShsm backup and migration functions are held.

Application Programmer Response: Review the abend code of the LINK macro.

ARC1277I ERROR ALLOCATING DUMMY DD DURING MIGRATION

Explanation: DFSMShsm is migrating a data set using DFSMSdss data movement. A request sent to DFSMShsm to migrate the data set failed when the allocation of a dummy DD for DFSMSdss dump failed. The dynamic allocation error codes are identified in the preceding ARC0503I message. The data set name is contained in the preceding ARC1001I or associated ARC0734I message.

Source: DFSMShsm

System Action: The migration of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Review the allocation error codes contained in the preceding ARC0503I message.

ARC1278I DATA SET NOT CATALOGED IN AN ICF CATALOG

Explanation: A request was sent to DFSMShsm to migrate a data set. The request failed because DFSMSdss was the data mover; however, the data set was not cataloged in an integrated catalog facility (ICF) catalog. The data set name is contained in the preceding ARC1001I or associated ARC0734I message.

Source: DFSMShsm

System Action: The migration operation of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Catalog the data set in an ICF catalog.

ARC1280I MIGRATION FAILED - DATA SET IS IN NEED OF BACKUP

Explanation: DFSMShsm attempted to migrate a data set to a tape migration level 2 volume, but determined that the data set needed to be backed up. See the preceding ARC1001I message or the associated ARC0734I message for the data set name.

Source: DFSMShsm

System Action: Migration of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Back up the data set by command or wait until it is backed up automatically and then retry the migration of the data set.

ARC1281I MIGRATION FAILED - ERROR ALLOCATING TAPE VOLUME

Explanation: A migration request failed due to an error in allocating the target tape volume. The volume being allocated and the type of allocation error that occurred are identified in the preceding ARC0500I message issued to the command activity log. To review the activity log, issue the DFSMShsm RELEASE HARDCOPY command. The data set being migrated is identified in the preceding ARC1001I message or the associated ARC0734I message. The reason code in message ARC1001I or ARC0734I gives additional information about the error.

Retcode	Meaning
8	A GETMAIN error occurred during the selection or allocation of a migration tape volume.
12	Two allocation errors occurred or the allocation of a scratch tape failed.
16	No unit was available for allocation.
20	An error occurred while trying to determine whether a storage class is assigned to the single-file tape output data set name.

Source: DFSMShsm

System Action: The migration of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator to isolate the cause of the error.

ARC1282I MIGRATION OF DATA FROM A TAPE VOLUME IS NOT SUPPORTED

Explanation: A command was entered to migrate a data set from a tape migration level 2 volume. Migration from a tape migration level 2 volume to another tape migration level 2 volume is not supported.

Source: DFSMShsm

System Action: Migration of this data set fails. DFSMShsm processing continues.

Application Programmer Response: If you want to move the data set from one tape migration level 2 volume to another tape migration level 2 volume, issue the RECYCLE command. If you want to do anything else with the data set, you must first recall it.

ARC1283I CANNOT MOVE VTOC COPY DATA SET

Explanation: DFSMShsm was moving a VTOC copy data set from the migration level 1 volume to a target ML1 volume, and the move failed. The data set identified in the associated ARC0734I message could not be moved. The reason code in message ARC0734I has the following meaning:

Reascode	Meaning
4	Error allocating or opening the VTOC copy data set on the source volume.
8	Error allocating, opening, or cataloging the new VTOC copy data set on the ML1 target volume.
12	I/O error reading the old VTOC copy data set.
16	I/O error writing to the new VTOC copy data set.
20	Error closing or deallocating the new VTOC copy data set.
24	Dump generation record (DGN) or eligible volume record (MCP) not found.
28	Error reading the associated DGN or MCP record. Message ARC0184I is also issued to indicate the error.
32	Error updating the associated DGN or MCP record. Message ARC0184I is also issued to indicate the error.

Source: DFSMShsm

System Action: Processing of VTOC copy data set fails. DFSMShsm processing continues.

Application Programmer Response: Determine the cause of the error and take the appropriate corrective action.

ARC1284I CONVERT OPTION FOR DATA SET MIGRATE NOT ALLOWED IN A DIRECT TO TAPE ENVIRONMENT

Explanation: A MIGRATE command was entered for a data set with the CONVERT parameter to cause the migration and immediate recall of the data set. The processing unit is running in a direct-to-tape environment, which does not support the CONVERT parameter for data set migration.

This message may also be issued if the ARCHMIG macro was used with the FORCML1=YES parameter specified in a direct-to-tape environment.

Source: DFSMShsm

System Action: The MIGRATE command ends. DFSMShsm processing continues.

Application Programmer Response: In order to obtain the desired function of the CONVERT parameter, issue a MIGRATE command for the data set followed by a RECALL command directing the data set to the desired volume.

ARC1285I VSAM DATA SET IS MIGRATED TO TAPE, NO TTOC ENTRY EXISTS

Explanation: A VSAM data set was successfully migrated to tape, but there was an error updating the TTOC to reflect the migration of this data set to tape. There is no entry in the TTOC for the migrated data set. For the name of the data set, see the previous ARC1001I message or the associated ARC0734I message with a return code of 85.

Source: DFSMShsm

System Action: The migration of the data set was successful, and the data set can be recalled. DFSMShsm processing continues.

Application Programmer Response: Call the system programmer and ask if an ARC0538I message has been issued to the operator. If this message has been issued, make sure the system programmer takes appropriate action (see the explanation of message ARC0538I).

ARC1286I MIGRATION FAILED - DFSMSHSM SHUTDOWN OCCURRED WHILE WAITING FOR A TAPE MOUNT

Explanation: An attempt was made to migrate a data set to a tape migration level 2 volume and before the tape volume could be mounted, a command was entered to shut down DFSMShsm. The migration of the data set failed. See the preceding ARC1001I message or the associated ARC0734I message for the name of the data set.

Source: DFSMShsm

System Action: Migration of the data set ends. DFSMShsm processing ends because of the shutdown request.

Application Programmer Response: Retry the migration of the data set after DFSMShsm is restarted.

ARC1287I A DISCREPANCY WAS FOUND IN THE DATA SET VTOC ENTRY

Explanation: DFSMShsm was attempting to perform space management on a data set and encountered a data set VTOC entry that is inconsistent with IBM standards. The data set name is given in the preceding ARC1001I message or in the associated ARC0734I message along with the *reascode* for the type of discrepancy found. The *reascode* has the following meaning:

Reascode	Meaning
2	The data set has a discrepancy in the data set VTOC entry and is indicated to be a PDSE data set. The data set VTOC entry indicates the data set to be a non-SMS-managed data set. PDSE data sets must be SMS-managed.
4	A data set has a discrepancy between its catalog entry and its data set VTOC entry indicating this is not a PDSE data set. The catalog entry indicates this data set is a PDSE and the data set VTOC entry indicates it is not a PDSE.
6	The data set has a discrepancy between its data set VTOC entry and its catalog entry indicating this is not a PDSE data set. The data set VTOC entry indicates this data set is a PDSE and its catalog entry indicates it is not a PDSE.
8	The data set has a discrepancy between its data set VTOC entry and its VSAM volume data set (VVDS) entry indicating this is not a PDSE data

	set. The data set VTOC entry indicates this data set is PDSE and the VVDS indicates this data set is not PDSE.
10	The data set has a discrepancy between its VSAM volume data set (VVDS) entry and its data set VTOC entry indicating this is not a PDSE data set. The VVDS indicates this data set is PDSE and the data set VTOC entry indicates this data set is not PDSE.

Source: DFSMShsm

System Action: The space management of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Correct the discrepancy. In most cases the data set VTOC entry needs to be corrected based on the true attributes of the data set.

ARC1288I ERROR ALLOCATING A DATA SET

Explanation: An error occurred in dynamic allocation during DFSMShsm space management. The data set name is given in the preceding ARC1001I or ARC0734I message along with the *reascode* for the type of error found. There may also be an associated ARC0503I message. The reason codes have the following meanings:

Reascode	Meaning
4	The data set was in use.
8	Operator cancelled volume mount. During a DFSMShsm migration operation, the volume on which the specified data set resides could not be mounted.
12	The allocation routines determined that the volume on which the data set to be migrated resides is not online, nor are any units available on which a mount can be requested.
16	There was some other dynamic allocation error.
20	The allocation was cancelled by the installation validation routine for dynamic allocation.
24	Invalid parameter list for dynamic allocation.

Source: DFSMShsm

System Action: The operation for the data set ends. DFSMShsm processing continues.

Application Programmer Response: Perform the following actions based upon the reason code:

Reascode	Action
4	Try again later.
8	Determine the volume in question using the DFSMShsm LIST or HLIST command. Have the required volume made available to the system for your use. The DISPLAY operator command might help determine the volume status. Reissue the command when the volume is available.
12	Arrange to have a unit made available for your request, and retry the operation.
16	There may be an associated ARC0503I message with additional information.
20	Contact your installation system programmer for help.
24	Contact the IBM Support Center.

ARC1290I MORE THAN 10 BAD MCDS RECORDS WERE ENCOUNTERED.

Explanation: During command level migration, 11 unexpected or unknown migration control data set (MCDS) entries have been encountered.

Source: DFSMShsm

System Action: Command level migration is discontinued.

Application Programmer Response: Notify the storage administrator to find the bad records based on their hex keys and either correct or delete the records. The preceding 11 ARC0564I messages contain the hex keys for the problem MCDS records.

ARC1292I TERMINATING DFSMShsm MIGRATION WAIT REQUEST, DFSMSHSM SHUTTING DOWN

Explanation: DFSMShsm is shutting down because of an abnormal end, MVS CANCEL, FORCE, or normal shutdown. During shutdown all wait-type migration requests not yet processed are purged from the common service area (CSA) queue.

Source: DFSMShsm

System Action: DFSMShsm ends.

Application Programmer Response: Restart DFSMShsm and resubmit the request.

ARC1294I UNABLE TO OPEN THE VTOC

Explanation: A data set was being space managed from a user volume. The data set VTOC entry for the data set was to be updated, but an error occurred in opening the VTOC. For the name of the data set, see the previous ARC1001I message, or the associated ARC0734I message with a return code of 94.

If ACTION=PARTREL is indicated in message ARC0734I, the update of the last used track (null data set organization) in the VTOC entry fails for an empty data set.

Source: DFSMShsm

System Action: Space management of the data set fails. DFSMShsm processing continues.

Application Programmer Response: Take the action indicated by the OPEN error message and retry the operation.

ARC1295I MIGRATION FAILED - TAPE VOLUME COULD NOT BE MOUNTED

Explanation: An attempt was made to migrate a data set to a tape migration level 2 volume, and either the operator responded to the mount request with NO, or the timer to mount a tape expired. A new tape volume was selected, and again the operator could not mount the tape. See the preceding ARC1001I message or the associated ARC0734I message for the name of the data set.

The values for *reascode* in either the ARC1001I message or ARC0734I message are:

Reascode	Meaning
4	The failure occurred during initial selection.
8	The failure occurred during EOV.

Source: DFSMShsm

System Action: The migration of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Determine why the operator cannot mount the tape volume. When the problem is resolved, retry the migration of the data set.

ARC1296I ERROR READING JFCB TO UPDATE VTOC

Explanation: A data set was being space managed from a user volume. The data set VTOC entry for the data set was to be updated, but an error occurred during the JFCB read for the VTOC. For the name of the data set, see the preceding ARC1001I message or the associated ARC0734I message with a return code of 96.

If ACTION=PARTREL is indicated in message ARC0734I, the update of the last used track (null data set organization) in the VTOC entry fails for an empty data set.

Source: DFSMShsm

System Action: Space management of this data set fails. DFSMShsm processing continues.

Application Programmer Response: Access the VTOC to be sure it is usable.

ARC1297I DFSMSHSM INTERNAL ERROR DURING MIGRATION

Explanation: An unknown error has occurred during allocation of a data set that has been identified in message ARC1001I or the associated message ARC0734I. Associated with this message is a dynamic allocation message in the data set that has been defined as MSYSOUT by the DFSMShsm cataloged procedure. There is a SNAP dump that has been associated with this error in the SYSOUT data set for the DFSMShsm job. The return code and reason code are given in message ARC1001I or the associated message ARC0734I. If the return code is 97, the reason code is the dynamic allocation return code and is printed in hexadecimal format. For information about dynamic allocation return codes and reason codes, see *OS/390 MVS Programming: Assembler Services Guide*.

Source: DFSMShsm

System Action: The space management of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or system programmer. There might be a data set with a duplicate name on the volume. If so, scratch the data set with the duplicate name and retry the command. If not, respond as indicated to the dynamic allocation message.

ARC1299I UNSUPPORTED DATA SET FOR MIGRATION

Explanation: DFSMShsm was considering if a data set was eligible for a space management operation and determined that the data set type is one that DFSMShsm does not process, by command or automatically, regardless of the selection criteria being applied. The name of the data set is given in the preceding ARC1001I message or the associated ARC0734I message. The return code field in the ARC1001I or ARC0734I message has a value of 99 (to correspond to the ARC1299I message). The reason code field in the ARC1001I or ARC0734I message lists the reason that DFSMShsm could not space manage the data set.

Reascode	**Meaning**
2	The data set is VSAM. One of the following is true: • The data set is not cataloged in an integrated catalog facility (ICF) catalog. • The data set is a VSAM catalog. • The data set has the ERASE attribute.
4	The data set has a data set organization other than one of the following: • Physical sequential • Partitioned • Direct access • VSAM
6	The data set organization is supported, but the block size is invalid. The block size of the data set is zero, or the block size of the data set plus the key length is greater than the maximum block size supported (which is device dependent), and the track overflow bit (in the data set VTOC entry for the data set, or in the UCB for the device) is off.
8	The data set is defined as unmovable.
10	The data set has an extent for user labels and is empty or not sequential.
12	The data set is split over different cylinders.
14	The data set is an authorized program facility (APF) authorized library.
16	The data set is a password-protected, generation data set.
20	The integrated catalog facility VSAM data set is not migrated, because it has the ERASE parameter specified in the catalog. This data set can be migrated if the ERASE parameter is removed from the catalog and indicated in the data set's RACF profile. RACF 1.7, or greater, and the appropriate level of DFP 2.1.0, or greater, must be installed on the system for full erase-on-scratch processing with DFSMShsm.
22	The data set is a multivolume BDAM data set.
36	The data set name is invalid.
40	The data set occupies more than 65535 tracks and it is not a VSAM, PDSE, or extended format data set.
45	The data set is a VSAM data set with more than 1 alternate index (AIX), more than 1 path on the base cluster, or more than 1 path on the AIX.

Source: DFSMShsm

System Action: The space management of this data set ends. DFSMShsm processing continues.

Application Programmer Response: For *reascode* 20, remove the ERASE parameter from the catalog record, indicate it in the data set's RACF profile, and retry the data set operation. Otherwise, process this data set using a method other than DFSMShsm.

Storage Administrator: (optional action) If you want DFSMShsm to stop issuing this message, use the management class attribute of the management class with which the data set is associated to instruct DFSMShsm not to process the data set.

ARC1302I CATALOG LOCATE ERROR DURING BACKUP

Explanation: During a DFSMShsm backup operation, a LOCATE macro was issued for a data set entry in the system catalog. The LOCATE macro failed. In the ARC1001I message, the values for *reascode* are:

Reascode	**Meaning**
4	The required catalog does not exist or it is not open.

8	One of the following conditions occurred: • The entry was not found. • A CVOL pointer was found in a CVOL. • An alias was found for a generation data group (GDG) base. • A protection check failed for a VSAM password-protected data set.
12	One of the following conditions occurred: • An index or generation base entry was found when the list of qualified names was exhausted. • An alias entry was found and was replaced by the true name. • An invalid low level GDG name was found.
16	A data set exists at other than the lowest index level specified.
20	There was a syntax error in the name.
24	One of the following conditions occurred: • A permanent I/O or unrecoverable error was encountered. • There was a nonzero ESTAE return code. • An error was found in a parameter list.
28	The request was for a LOCATE by TTR, which is an invalid function.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Take corrective action according to *reascode* in message ARC1001I.

ARC1303I OBTAIN ERROR READING DATA SET VTOC ENTRY DURING BACKUP

Explanation: While DFSMShsm was performing a backup operation, the OBTAIN macro was used to read the data set VTOC entry of the data set indicated in message ARC1001I. An error was encountered. In the ARC1001I message, *reascode* is the return code from the OBTAIN macro.

The values for *reascode* are:

Reascode	Meaning
4	The required volume was not mounted.
8	The data set VTOC entry was not found in the VTOC of the specified volume.
12	A permanent I/O error was encountered, or an invalid data set VTOC entry was found during the processing of the specified volume.
16	There was an invalid work area pointer.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: If *reascode* in message ARC1001I is 4, correct the problem, and issue a command to start the backup. If *reascode* is 8 or 12, notify the system programmer to take corrective action. If *reascode* is 16, notify the storage administrator to take corrective action.

ARC1304I CANNOT MOVE BACKUP VERSION OR BACKUP MIGRATED DATA SET, MIGRATION VOLUME REQUIRED NOT AVAILABLE

Explanation: DFSMShsm was moving backup versions off the migration level 1 volumes or was backing up a migrated data set. The data set identified in the associated ARC0734I message could not be moved or backed up. The migration volume that the backup version resides on or the migration volume containing the eligible data set to be backed up is not available to DFSMShsm.

Source: DFSMShsm

System Action: The movement of the backup version or the backup of the migrated data set ends. DFSMShsm processing continues.

Application Programmer Response: If it is necessary for the backup version to be moved to the daily backup volume or a backup version of the migrated data set to be created, ensure that the migration volume is available to DFSMShsm.

ARC1305I NO MIGRATION LEVEL 1 VOLUME AVAILABLE FOR BACKUP

Explanation: A DFSMShsm backup operation ended because no level 1 volume was available to put the backup copy of the data set on. One of the following occurred:

- No level 1 volumes were defined.
- No more space is available on level 1 volumes that are defined.
- Volumes that are defined have either the DRAIN, OVERFLOW, or both attributes turned on.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Provide space on level 1 volumes.

ARC1306I CANNOT MOVE BACKUP VERSION OR BACKUP MIGRATED DATA SET, NO DAILY BACKUP VOLUME OF REQUIRED TYPE AVAILABLE

Explanation: DFSMShsm was moving backup versions off the migration level 1 volumes or backing up a migrated data set. The data set identified in the associated ARC0734I message could not be moved or backed up. At the time the data set migrated or was backed up by a BACKDS or HBACKDS command, it resided on a primary volume that was to be backed up only to tape, but no tape daily backup volume is available, or the data set resided on a primary volume that was to be backed up only to DASD, and no DASD daily backup volume is available. The reason code in the associated ARC0734I message indicates which condition was encountered. The values for *reascode* are:

Reascode	Meaning
4	The data set originated from a primary volume that is to be backed up to tape, but no tape backup volumes are available.
8	The data set originated from a primary volume that is to be backed up to DASD, but no DASD backup volumes are available.

Source: DFSMShsm

System Action: The movement of the backup version or the backup of the migrated data set ends. DFSMShsm processing continues.

Application Programmer Response: Assign backup volumes of the appropriate type. Retry the backup operation when the additional backup volumes have been assigned.

ARC1307I OBTAIN ERROR READING DATA SET EXTENSION VTOC ENTRY DURING BACKUP

Explanation: While DFSMShsm is performing a backup operation, the OBTAIN macro is used to read the data set extension VTOC entry for the data set indicated in message ARC1001I. An error is encountered. In message ARC1001I, *reascode* is the return code from the OBTAIN macro.

The values for *reascode* are:

Reascode	Meaning
4	The required volume is not mounted.
8	The data set VTOC entry is not found in the VTOC of the specified volume.
12	A permanent I/O error is encountered, or an invalid volume VTOC entry is found during the processing of the specified volume.
16	There is an invalid work area pointer.
20	The SEEK option is specified, and the absolute track address (CCHH) is not within the boundaries of VTOC.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Reason codes received in message ARC1001I or ARC0734I are:

Reascode	Meaning
4	Correct the problem and issue a command to start the backup.
8	If the data set was deleted since the beginning of the volume backup, no action is required. Otherwise, notify the system programmer to take corrective action.
12	Notify the system programmer to take corrective action.
16, 20	Notify the storage administrator to take corrective action.

ARC1308I ERROR ALLOCATING BACKUP COPY

Explanation: During a DFSMShsm backup operation, the dynamic allocation routine has been called to allocate a backup version of a data set. The allocation has failed with other than a no space indication. The data set name is in message ARC1001I. In message ARC1001I and ARC0734I, the reason code *reascode* has the following values:

Reascode	Meaning
4	There is more than one data set with the same name on the volume.
8	The volume is not mounted.
10	The DFSMShsm-owned copy of the data set to be backed up is estimated to be greater than 64K tracks. Data sets greater than 64K tracks cannot be backed up to DASD.
16	There has been another dynamic allocation error.
20	An installation-wide exit has cancelled the request.
24	There is an invalid parameter list that has been passed to dynamic allocation from DFSMShsm.
37	The unit type and volume serial number from the mounted volume table are inconsistent.
39	An error has occurred in setting the RACF indicator on in the DSCB.
40	The volume is SMS managed.
41	The volume where the backup copy has been allocated (as returned by DYALLOC) is not the same volume that DFSMShsm has requested. In an SMS environment, the data set is allocated to SMS-managed storage.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Reason codes received in message ARC1001I.

Reascode	Meaning
8, 16, 20	Enlist the aid of the storage administrator or system programmer to correct the problem, and retry the operation.
10	If you want to back up the data set, back it up to tape. Or, if the data mover is DFSMSdss and less than 64K tracks of data are actually in use, try backing up the data set using DFSMShsm as the data mover if the DFSMShsm data mover supports the data set's organization. If compaction is not in use for the data set, try backing up the data set with compaction.
24, 37	A logical error has occurred and has built an invalid parameter list.
39	An error has occurred in accessing the DSCB to set the RACF indicator on. The errors are failure to read the JFCB, failure to open the VTOC, or the wrong record has been returned from the read.
40, 41	Update the SMS storage class routine so backup copies are filtered to a null storage class. See the topic on "Writing an Automatic Class Selection Routine that Directs DFSMShsm-Owned Data Sets to Non-SMS-Managed Storage" under the section, "Specifying Commands that Define Your DFSMShsm Environment" in *DFSMS/MVS DFSMShsm Implementation and Customization Guide*, for an explanation on coding the storage class routine.

ARC1309I ERROR RENAMING BACKUP COPY

Explanation: In backing up a data set, DFSMShsm has been unable to create a backup version of a name that does not exist. In creating the backup version name, DFSMShsm has used the time of day and the date. See topic, "Specifying the Names of the Backup Data Sets" under section "Names of Backup Versions of Data Sets," in the *DFSMS/MVS DFSMShsm Storage Administration Guide*, for a more detailed explanation on how to create the backup version name.

Source: DFSMShsm

System Action: Backup processing for the data set fails. DFSMShsm processing continues.

Application Programmer Response: Determine why backup versions are being created at the same time with identical names.

ARC1310I ERROR DEALLOCATING BACKUP VOLUME OR UPDATING BVR ENTRY

Explanation: The data set was being processed when it became necessary to select a new backup volume. There was either an error deallocating the backup volume that was being used or updating its backup cycle volume record (BVR) entry.

Source: DFSMShsm

System Action: The data set is not processed, and the volume backup operations ends.

Application Programmer Response: See the message associated with the ending of the volume backup. These messages are ARC0703I, ARC0712I, and ARC0733I.

ARC1311I ERROR CREATING OR UPDATING RECORD IN DFSMSHSM CONTROL DATA SET

Explanation: An error occurred while DFSMShsm was creating a new entry in the DFSMShsm control data set or updating an existing entry. Message ARC1001I precedes this message, where *reascode* is the return code indicating the type of failure. For *reascode* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator. If *reascode* is 4, 8, or 12, correct the problem, possibly using the FIXCDS command. If *reascode* is 16, an I/O error is the normal cause, and an error message from the ERPs should be found in the DFSMShsm job log SYSMSG data set. If *reascode* is 20, an internal DFSMShsm error occurred.

ARC1312I FAILING TO CREATE MCM RECORD, BACKUP VERSION WILL REMAIN ON MIGRATION VOLUME

Explanation: A BACKDS or HBACKDS command was issued to back up the data set identified in message ARC1001I. During the data set backup operation, DFSMShsm failed to create the backup control data set BACKDS record (MCM). This record is created for each data set backed up by the BACKDS or HBACKDS command. The record is used to drive the movement of the backup versions (created by the BACKDS or HBACKDS command) from their temporary location on the migration level 1 volumes to the daily backup volumes. Because the MCM record was not created, the backup version will remain on the migration level 1 volume. This message is preceded by message ARC1001I, which is preceded by message ARC0184I.

Source: DFSMShsm

System Action: The data set is backed up. DFSMShsm processing continues.

Application Programmer Response: Message ARC0184I contains the type of record, the key to the record being created, and the reason the creation failed. If it is necessary that the backup version be moved to the daily backup volume, you can issue a FIXCDS command and create an MCM record for the backup version.

ARC1315I CANNOT BACK UP PDS WITH MORE THAN 1 NOTELIST IN MEMBER

Explanation: DFSMShsm received a request to back up a partitioned data set (PDS). At least one member of the data set was found to have more than three user TTRs or more than one note list. DFSMShsm will *not* back up a PDS with more than one note list in any member user TTRs.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Use some other method of backup, if this PDS must be backed up.

ARC1316I ERROR READING PRIMARY COPY DURING BACKUP

Explanation: While DFSMShsm has attempted to read the primary copy of a data set, an I/O error has occurred, or incorrect records have been found in a variable format data set.

For incorrect records, a block descriptor word suggests a block size greater than the record size, a block size less than 8, or a block size larger than the maximum block size of 32760.

If an I/O error has occurred, an access method or hardware error message associated with this message can be found in the DFSMShsm job log SYSMSG data set. The name of the data set being backed up appears either in the preceding ARC1001I message, or in the associated ARC0734I message, with a return code of 16. For the ARC0734I message, refer to the backup activity log. In Message ARC1001I, the value for the *reascode* is:

Reascode	**Meaning**
0	Actual I/O error on input data set.
2	User header label is bad.
4	User trailer label is bad.
6	Block descriptor word (BDW) indicates an incorrect block size.
8	Partitioned data set with no EOF marker after members.
10	Data set not found in SDSP.
12	GENCB error has occurred. If the data set being backed up is an HFS File System, then one of the following may have occurred: • HFS is not running. The operator must start HFS. • The requested HFS File System has been quiesced. The file system must be unquiesced. • The DFSMShsm ID has not been identified as a valid OMVS ID. The ID must be defined to OMVS as a valid ID.
14	Accumulated count fields indicate more than the allowable bytes on a track.
16	Record 1 indicates more than the allowable bytes on a track.
54	PDS member has an incorrect record length. See previously issued message ARC0901I for the member name.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: If an I/O error has occurred, respond to the associated access method or hardware error message. For information about the block descriptor word (BDW), see *DFSMS/MVS Using Data Sets*.

ARC1317I I/O ERROR READING PDS DIRECTORY DURING BACKUP

Explanation: During a backup operation, the data management READ and CHECK service routines were used to read the directory of the data set indicated by message ARC1001I. There was an I/O error, and the SYNAD exit was taken from CHECK. In Message ARC1001I, the values for *reascode* are:

Reascode	Meaning
0	An I/O error occurred.
4	The data set directory is empty.

Source: DFSMShsm

System Action: The backup operation identified in message ARC1001I ends. DFSMShsm processing continues.

Application Programmer Response: There may be an I/O error message associated with this problem in the data set defined in the DFSMShsm cataloged procedure for the MSYSOUT DD name or in the DFSMShsm job log SYSMSG data set. Respond to the associated error message.

ARC1318I I/O ERROR WRITING BACKUP COPY

Explanation: While DFSMShsm has been writing the backup copy of a data set, an I/O error has occurred. An access method or hardware error message associated with this message has been found in the DFSMShsm job log SYSMSG data set. Message ARC1001I precedes this message, giving the data set name.

When this message text is considered because of a related ARC0734I message, and the data set backed up is in VSAM format, the reason code displayed in the associated ARC0734I message is the return code from DFSMShsm's internal call to IDCAMS. For an explanation of these return codes, see *DFSMS/MVS Access Method Services for ICF*

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Respond to the associated access method or hardware error message. Retry the backup operation.

ARC1319I DATA SET IN USE BY ANOTHER USER OR JOB, BACKUP REJECTED

Explanation: During backup command processing, an attempt was made to serialize use of a data set. The serialization failed because the data set was already in use for update by another job or user. In message ARC1001I or ARC0734I, the values for *reascode* are:

Reascode	Meaning
0	An error occurred in enqueing or allocating the non-VSAM data set to be backed up.
8	An error occurred in allocating the VSAM base cluster to be backed up.
12	An error occurred in enqueing the VSAM base cluster to be backed up.

Source: DFSMShsm

System Action: The backup command ends. DFSMShsm processing continues.

Application Programmer Response: Retry the backup command when the data set is not in use.

ARC1320I DATA SET NOT ELIGIBLE FOR BACKUP

Explanation: A request sent to DFSMShsm to back up the data set identified in the preceding ARC1001I or associated ARC0734I failed because one of the following occurred:

- The data set was cataloged on the wrong volume.

  A data set being cataloged on the wrong volume can result from processing an uncataloged data set that has the same name as a cataloged data set.

  Another possibility is that DFSMShsm scheduled a retry of the backup of a data set in use. When the retry was attempted, the catalog entry for the data set indicated that the data set was on a different volume, with a different device type, or using a different access category (VSAM vs non-VSAM) from the data set of the same name at the time the retry was scheduled.

- The data set is a multivolume or multivolume extended format data set.

  Under DFSMShsm movement, the only multivolume data sets that are supported are SMS-managed VSAM data sets. Under DFSMSdss movement, SMS-managed non-VSAM data sets are also supported if they are not protected by a discrete RACF profile and if USERDATASETSERIALIZATION is used. Multiple volume standard user label data sets and multiple volume unmovable data sets are not supported by either data movement method.

- The device type of the volume on which the data set resides and as indicated by the catalog, is different from the device type of the same volume currently mounted.
- A VSAM data set contains an invalid expiration date. The expiration date obtained from the catalog contains a year greater than 2155. This data set is not supported.

Source: DFSMShsm

System Action: The backup operation for the data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator to change the environment to allow backup. If the data set is cataloged on the wrong volume, the storage administrator can correct the catalog and retry the command. Multivolume data sets can only be backed up under the restrictions above. To process an unsupported multivolume data set, use another method. If the device type of the volume, as indicated in the catalog, is incorrect, correct the catalog entry and retry the command. If the data set is being updated by another processor in a multiple processing unit environment, review the present status of the data set and proceed accordingly. If the VSAM data set contains an invalid expiration date, change the expiration date in the catalog to a year less than 2155.

ARC1321I MISSING OR UNSUPPORTED DEVICE TYPE FOR BACKUP

Explanation: If this message has been issued as the result of a request to backup an uncataloged data set, the request is missing the required UNIT parameter or the UNIT parameter has been specified with an unsupported device type.

If this message is issued as the result of a request to back up a cataloged data set, the data set has been cataloged to an unsupported device type.

See *DFSMS/MVS Planning for Installation*, for a list of supported devices.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: If the data set is uncataloged, correct the invalid UNIT parameter and retry the operation. If the data set is cataloged, notify the storage administrator.

ARC1322I ERROR PROCESSING PASSWORD PROTECTED DATA SET, BACKUP TERMINATED

Explanation: The data set specified in the DFSMShsm command is write password protected. When DFSMShsm was checking the password, it encountered an error. In message ARC1001I, the values for *reascode* are:

Reascode	Meaning
0	Only pertains for VSAM data sets. The user specified an incorrect password.
4	The data set is non-VSAM. The user is only authorized to read the data set, but requested to write to or delete the data set.
8	The data set is non-VSAM. The user specified an incorrect password.
12	The data set is non-VSAM. An I/O error occurred in checking the password.
16	The data set is non-VSAM. An OBTAIN error or some other error occurred while DFSMShsm was accessing the data set.
20	The data set is non-VSAM. DFSMShsm is in a nonauthorized test mode of operation in which password checking is not attempted.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Verify that the correct data set name was specified and that the password, if required, was specified correctly. Notify the storage administrator for password assistance if necessary.

ARC1323I CANNOT MOUNT VOLUME NECESSARY FOR BACKUP

Explanation: During BACKUP command processing, the volume on which the specified data set resides could not be mounted. The allocation routine passed a return code of 8. Message ARC1001I precedes this message, giving the data set name.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Use the LIST or HLIST command to determine the volume in question. Have the required volume made available to the system for your use. The DISPLAY operator command might help to determine the volume status. Reissue the command request when the volume is available.

ARC1324I DFSMSHSM CONTROL DATA SET ERROR DURING BACKUP

Explanation: When a data set was being backed up, an error was encountered during the creation or modification of a migration control data set record. Message ARC1001I gives the data set name of the data set being backed up.

Source: DFSMShsm

System Action: The data set is not backed up. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator, who can determine if there is a problem with the DFSMShsm control data sets.

ARC1325I ERROR READING DFSMSHSM CONTROL DATA SET DURING BACKUP

Explanation: During a backup operation, a GET macro was issued to read a control data set, and an error occurred. Message ARC1001I precedes this message with the data set name and *reascode*, the code from the GET failure. For *reascode* values, see Table 11 on page ARC-285.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: If the *reascode* is 0, and the command was a BACKVOL, then check if the UNIT parameter was specified if the volume is not ADDVOLed to DFSMShsm. If the *reascode* is 4, 8, 12, or 16, notify the storage administrator. When the condition is corrected, retry the operation. If the *reascode* is 16, another error message, either an access method message or a hardware error recovery procedures message, appears in the data sets defined by the DFSMShsm cataloged procedure with ddname MSYSOUT. If the *reascode* is 20, an unidentified error happened during processing of the GET macro. Notify the system programmer.

ARC1328I BACKUP FAILED - NO ALIAS IN MASTER CATALOG FOR DATA SET HIGH LEVEL QUALIFIER AND DATA SET NOT CATALOGED IN MASTER CATALOG

Explanation: During a backup operation, one of the following occurred:

- A VSAM data set that was encountered during volume backup is inaccessible through the standard catalog search. The data set is not cataloged in the computing system master catalog, nor is there an alias in the master catalog that corresponds to the data set high level qualifier. DFSMShsm cannot back up data sets that are inaccessible through the standard catalog search.
- DFSMShsm scheduled a retry of the backup of a data set. When the retry was attempted, the data set to be backed up was no longer cataloged.

The most likely cause of this problem is that the alias for the high level qualifier was deleted. An alias name in the master catalog points to the user catalog in which data set information is found.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The backup for the data set is ended.

ARC1329I DATA FORMAT ERROR DURING BACKUP OR MOVEMENT OF A BACKUP VERSION

Explanation: During the movement of a backup version or backup of a migrated data set, the first record read for the DFSMShsm copy of the data set did not contain a valid common data set descriptor (CDD). The DFSMShsm copy of the data set may have been overwritten. The name of the data set being processed appears in the associated ARC1001I or ARC0734I message having a return code of 29.

Source: DFSMShsm

System Action: Processing of the data set fails. DFSMShsm processing continues.

Application Programmer Response: Determine if the DFSMShsm copy of the data set is corrupted.

ARC1330I DATA SET NOT CATALOGED, AND VOLUME NOT SPECIFIED

Explanation: The data set identified in message ARC1001I is not cataloged, and the VOLUME parameter was not specified. If the data set is not cataloged, the VOLUME parameter must be specified.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with the VOLUME parameter specified.

ARC1331I EXTENSION RECORD MISSING IN T RECORD

Explanation: While a tape table of contents record is being scanned, it is discovered that an extension record that was previously available is missing. The accompanying ARC0358I message gives the record key.

Source: DFSMShsm

System Action: Updating of the volume record ends. DFSMShsm processing continues.

Application Programmer Response: Determine, if possible, the cause for the missing record and take corrective action.

ARC1332I REQUEST FOR BACKUP OF AN UNCATALOGED DATA SET FAILED, ONLY A CATALOGED DATA SET WAS FOUND ON THE SPECIFIED VOLUME

Explanation: A BACKDS command has been issued to back up a data set. The VOLUME and UNIT parameters have been specified on the BACKDS command, which implies that the data set to be backed up is an uncataloged data set. However, an uncataloged data set with the specified name does not exist on the volume indicated in the command.

In message ARC1001I, the values for *reason-code* are:

4 The computing system catalog indicates that a non-VSAM data set with the specified name exists on the volume.

8 The computing system catalog indicates that a VSAM data set with the specified name exists on the volume. Also, the data set VTOC entry for the data set has not been found in the VTOC.

12 An OBTAIN for the data set VTOC entry in the VTOC has been successful. The data set VTOC entry has indicated that the data set organization is VSAM. This data set VTOC entry could be for a VSAM base cluster not cataloged in the integrated catalog facility (ICF) or for a component of a VSAM data set cataloged in the ICF. In either case, an uncataloged data set does not exist on the volume.

Source: DFSMShsm

System Action: The backup of the indicated data set ends. DFSMShsm processing continues.

Application Programmer Response: If the intent is to back up a cataloged data set, reissue the command without specifying the VOLUME and UNIT parameters. If the intent is to back up an uncataloged data set, ensure that the correct volume serial number is specified. For information about the use of the BACKDS command, refer to *DFSMS/MVS DFSMShsm Storage Administration Guide*.

ARC1333I CANNOT BACK UP MIGRATIONLEVEL2 DATA SET

Explanation: The data set identified in message ARC1001I resides on a migration level 2 volume. Backup from level 2 volumes is not supported.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: A data set must be on a level 1 or primary volume to be eligible for DFSMShsm backup. If you want to back up a data set on a level 2 volume, you must recall it.

ARC1334I BACKUP VERSION NOT CREATED

Explanation: DFSMShsm attempted to create a backup version of a data set. The reason code in message ARC1001I indicated the conditions encountered and the reason the backup version was not created.

In message ARC1001I, the values for *reason-code* are:

1 The data set is extended format, but DFSMSdss is not specified as the datamover for extended format data sets. DFSMShsm datamover cannot move extended format data sets.

2 The data set is extended format, but it is not SMS managed. Only SMS-managed extended format data sets can be backed up.

4 A BACKDS or HBACKDS command was issued to back up the non-SMS-managed data set identified in the message ARC1001I. The backup version was not created because the maximum number of backup versions DFSMShsm is to maintain is 0. Either an ALTERDS or HALTERDS command was issued for the data set, and the value specified for VERSIONS is 0, or if never specified on an ALTERDS or HALTERDS command, the value specified for VERSIONS on the SETSYS command is 0.

5 The current level of DFSMShsm cannot backup an extended format data set (sequential striped or compressed). A minimum of DFSMShsm 1.1.0 is required for sequential striped data sets, and a minimum of DFSMShsm 1.2.0 is required for extended format compressed data sets.

8 A backup version was not created for an SMS-managed data set because the management class attribute ADMIN-OR-USER-COMMAND-BACKUP indicates the data set should not be backed up.

For a BACKDS or HBACKDS command, one of the following applies:

- The management class attribute ADMIN-OR-USER-COMMAND-BACKUP = BOTH is not indicated.
- A management class attribute of ADMIN-OR-USER-COMMAND-BACKUP = ADMIN is indicated, and the user is not DFSMShsm authorized to back up the data set.

For a data set processed during volume backup, ADMIN-OR-USER-COMMAND-BACKUP = NONE is specified.

12 The backup-while-open candidate data set is not available to be backed up at the time of the request.

14 The data set is eligible for backup-while-open processing, but DFSMShsm is the datamover.

Note: Reason codes 90 and higher are not produced unless you have installed a problem determination patch for volume backup. For information about this patch, see the section on “Determining Why SMS-Managed Data Set Are Not Processed” in Appendix C of *DFSMS/MVS DFSMShsm Diagnosis Guide*.

90 The management class attribute AUTO BACKUP = N prevents backup of the data set.

91 The backup installation-wide exit (ARCSAEXT) indicates the data set should not be processed.

92 The data set VTOC entry is not for the first segment of a key range data set, or the data set VTOC entry is for the index component of a key range data set.

93 For VSAM data sets, this reason code is issued when the data set VTOC entry is not for the base data object of a VSAM data set.

For non-VSAM data sets, this reason code is issued when the data set sequence number is not 1. This indicates the data set is part of a multivolume data set, but is not the first segment of that data set.

94 A backup version was not created because the data set was not changed since the last time a backup version was made and SETSYS INCREMENTALBACKUP(CHANGEDONLY) was specified.

95 A backup version was not created because the data set was not changed since the last time a backup version was made. SETSYS INCREMENTALBACKUP(ORIGINAL) was specified and the existence of a backup version is based on the last backup date in the catalog entry record.

96 A backup version was not created because the data set was not changed since the last time a backup version was made. SETSYS INCREMENTALBACKUP(ORIGINAL) was specified and the existence of a backup version is based on the last backup date in the MCB record.

97 The number of days specified in the management class attribute BACKUP FREQUENCY have not elapsed. The existence of a backup version is based on the last backup date in the catalog entry record.

98 The number of days specified in the management class attribute BACKUP FREQUENCY have not elapsed. The existence of a backup version is based on the last backup date in the MCB record.

Source: DFSMShsm

System Action: The BACKUP command processing of the indicated data set ends. DFSMShsm processing continues.

Application Programmer Response: Perform the action which corresponds to the reason code you received. The values for *reason-code* are:

1 Specify DFSMSdss as the datamover for extended format data sets.

2 See the system administrator to bring the data set under SMS management.

4 Issue an ALTERDS or HALTERDS command for the data set and specify a positive nonzero value for the VERSIONS parameter. Then reissue the BACKDS or HBACKDS command.

5 It may be possible to backup the data set from a different processing unit in a multiple processing unit environment. Otherwise, a sufficient level of DFSMShsm must be installed on the system.

8 If a BACKDS or HBACKDS command is failing because the user is not authorized:

- Issue the command from a DFSMShsm authorized user.
- Associate the data set with a management class that does not require the user to be DFSMShsm authorized.

If a data set is not backed up because ADMIN-OR-USER-COMMAND-BACKUP = NONE, associate the data set with a management class that does not specify ADMIN-OR-USER-COMMAND-BACKUP = NONE.

12 Retry the backup operation when the data set is available. For example, when the reorganization of a data set completes.

14 Specify the DFSMSdss parameter on the SETSYS DATAMOVER command.

90 If the data set should be considered eligible for backup, it needs to be associated with a management class defined with AUTO BACKUP = Y.

91 If the data set should be considered eligible for backup, the backup exit (ARCSAEXT) needs to be updated to not exclude the data set from backup.

92 No response required. DFSMShsm processes the key range data set when it encounters the data set VTOC entry for the first segment of the data set.

93 No response required. DFSMShsm processes the VSAM data set when it encounters the data set VTOC entry for the base data object.

For a non-VSAM data set, processing occurs when the volume with a data set sequence number of 1 is encountered.

94 No response required. A current backup version exists.

95 No response required. A current backup version exists.

96 No response required. A current backup version exists.

97 If a backup version was created before the BACKUP FREQUENCY defined for the management class elapsed, perform one of the following:

1. Issue the BACKDS or HBACKDS command to cause a backup version to be created.
2. Associate the data set with a management class whose definition of BACKUP FREQUENCY is small enough to satisfy the data set’s backup requirements.

98 If a backup version was created before the BACKUP FREQUENCY defined for the management class elapsed, perform one of the following:

1. Issue the BACKDS or HBACKDS command to cause a backup version to be created.
2. Associate the data set with a management class whose definition of BACKUP FREQUENCY is small enough to satisfy the data set's backup requirements.

ARC1335I ERROR OPENING INPUT DATA SET DURING BACKUP

Explanation: DFSMShsm issued the open macro during BACKUP or SPILL processing. An open error message with component identifier IEC normally precedes this message if this is a true open error.

Source: DFSMShsm

System Action: The backup processing ends. Spill processing continues. DFSMShsm processing continues.

Application Programmer Response: For backup, take the action indicated by the open error message. Retry the backup operation. For spill, take the action indicated by the open error message except, when all the following conditions are true, no action is required:

- The backup version does not exist as indicated by ABEND213-04, MSGIEC143I 213-04 without MSGIOS000I (NO I/O ERROR), accompanied by MSGARC0834I ACTION=MOVE BV, RC35, which gives the data set name.
- Another DFSMShsm function is running concurrently that could have deleted the backup version named in the ARC0734I message.

ARC1336I ERROR OPENING OUTPUT DATA SET DURING BACKUP

Explanation: DFSMShsm issued the OPEN macro to open an output data set during a backup operation. During OPEN processing, the ESTAE routine was invoked. An OPEN error message with component identifier IEC precedes this message. Message ARC1001I also precedes this message, giving the data set name.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Take the action indicated by the OPEN error message. Retry the backup operation.

ARC1337I NO SPACE FOR BACKUP COPY

Explanation: During a DFSMShsm backup operation, an attempt was made to allocate space for the new backup copy of the data set identified in message ARC1001I. The allocation routine passed back a return code of 12, indicating there was no space on the volume, the VTOC was full, or the index to the VTOC was full.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: Provide more space on backup volumes for DFSMShsm. The DFSMShsm LIST or HLIST command can be used to determine the volumes in question.

If the failed request was a data set backup, then the failure occurred on ML1 volumes. Provide more ML1 space for backup versions and consider providing 1 or more ML1 volumes with the OVERFLOW attribute.

ARC1338I PASSWORD PROTECTED DATA SET CANNOT BE BACKED UP TO A NON PASSWORD PROTECTED TAPE

Explanation: A password-protected data set was found to be eligible for backup, but the target volume is not a password-protected tape, and the tape security protection is not EXPIRATIONINCLUDE or RACFINCLUDE. You can find the data set name of the password-protected data set in an associated ARC0734I message.

Source: DFSMShsm

System Action: The data set being processed is not backed up. Backup processing continues. DFSMShsm processing continues.

Application Programmer Response: Change the security option for DFSMShsm tape volumes so that password-protected data sets can be backed up to tape, or remove password-protected data sets from volumes that are managed by DFSMShsm.

ARC1339I ERROR PROCESSING RACF PROTECTED DATA SET, BACKUP TERMINATED

Explanation: During a DFSMShsm backup operation, an attempt was made to process a resource access control facility (RACF) protected data set. The data set name and a reason code are given in message ARC1001I. For *reason-code* values, see Table 21 on page ARC-292.

Source: DFSMShsm

System Action: The backup operation ends. DFSMShsm processing continues.

Application Programmer Response: If RACF denied access, there is an associated RACF message. If the data set name and DSCB do not match, there is an associated access method message. If an I/O error caused the reading of the JFCB to fail, an associated error message can be found in the DFSMShsm job log SYSMSG data set. Respond to the associated message.

ARC1340I BACKUP OR DUMP FUNCTION DISABLED

Explanation: A BACKDS or BACKVOL command was issued. If the reason code in message ARC1001I preceding this message is 0, either backup is disabled or the computing system is not allowing backup.

Source: DFSMShsm

System Action: The backup or dump operation ends. DFSMShsm processing continues.

Application Programmer Response: If backup processing is disabled, retry the command at a later date. Backup was either never enabled properly or was disabled due to a subsequent processing error. The storage administrator can refer to the system logs to determine the problem. Some of the messages that may indicate a problem are ARC0738I, ARC1374I, ARC0715I, ARC0134I, ARC0326I, and ARC0103I. If a sufficient level of DFSMSdss is not installed, the dump request is invalid. If the dump function is desired, DFSMSdss must be a Version 2, Release 2.0 or subsequent releases.

ARC1341I PREMATURE END OF VOLUME ENCOUNTERED DURING BACKUP OF A DATA SET

Explanation: During backup processing, an end of volume condition was encountered before the tape had reached the expected percent full capacity. The tape volume was marked full, and the data set was retried but failed with the same error on retry.

Source: DFSMShsm

System Action: The task is ended.

Application Programmer Response: None.

ARC1342I ERROR READING JFCB FOR PRIMARY COPY DURING BACKUP

Explanation: During a backup command processing, an RDJFCB macro was issued. The RDJFCB request failed. A data management error message associated with this problem can be found in the DFSMShsm job log SYSMSG data set. Message ARC1001I precedes this message, identifying the data set name in question.

Source: DFSMShsm

System Action: The backup command processing ends. DFSMShsm processing continues.

Application Programmer Response: Respond to the data management error message as indicated, and retry the command.

ARC1343I ERROR REWRITING DSCB FOR PRIMARY COPY DURING BACKUP

Explanation: During backup command processing, an error occurred in updating the data set VTOC entry for the data set being backed up. This message is either preceded by message ARC1001I or referred to by an associated ARC0734I message. Both messages include the name of the data set being backed up and a reason code. If the reason code is 0, an unrecoverable I/O error occurred and the DCB SYNAD exit was taken from the data management CHECK service routine. If the reason code is nonzero, a request to the common VTOC access facility (CVAF) to read or write the data set VTOC entry failed. The reason code is the contents of register 15 on return from CVAF. An associated hardware, data management, or system error message can be found in the DFSMShsm job log SYSMSG data set.

Source: DFSMShsm

System Action: The backup command processing ends. DFSMShsm processing continues.

Application Programmer Response: Retry the backup command. If the problem still exists, notify the storage administrator.

ARC1344I TAPE VOLUME CANNOT BE ADDED FOR BACKUP, VOLUME ALREADY CONTAINS VALID DFSMSHSM DATA

Explanation: DFSMShsm attempted to add to its control a volume that contains valid data.

Source: DFSMShsm

System Action: The tape volume is rejected. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1345I ERROR DELETING A DFSMSHSM CDS RECORD

Explanation: During backup processing, a tape table of contents record was being deleted when an error occurred. Refer to message ARC0188I for more detail.

Source: DFSMShsm

System Action: The record deletion is unsuccessful. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1346I NO OFFLINE CONTROL DATA SET FOUND

Explanation: An attempt was made to update the offline control data set, but the data set does not exist.

Source: DFSMShsm

System Action: The command fails. DFSMShsm processing continues.

Application Programmer Response: Create the offline control data set and reenter the command.

ARC1347I TAPE END-OF-VOLUME ERROR DURING BACKUP

Explanation: An end-of-volume error or ABEND*x*37 occurred.

Source: DFSMShsm

System Action: The volume is marked full to prevent its allocation. A new tape volume is selected and backup continues.

Application Programmer Response: Check the preceding messages and the dump, if applicable, to determine the cause.

ARC1348I BACKUP VERSION OF DATA SET EXCEEDS MAXIMUM NUMBER OF ALLOWABLE TAPE VOLUMES

Explanation: During backup processing, a data set was being moved that exceeded the space on the maximum number of tape volumes allowed for one data set. See message ARC0352I for the data set name.

Source: DFSMShsm

System Action: The first tape volume is marked full and all other volumes are deleted.

Application Programmer Response: None.

ARC1349I FAILURE ATTEMPTING TO REMOVE RACF PROTECTION FROM BACKUP TAPE VOLUME

Explanation: Deletion of a tape table of contents entry from the offline control data set was requested. The volume was RACF protected. The removal of that protection failed. The return code is the result of the failure of a DFSMShsm removal of the RACF protection. See message ARC0359I for the volume serial number and return code.

Source: DFSMShsm

System Action: The deletion of the record fails. DFSMShsm processing continues.

Application Programmer Response: Determine why the RACF protection removal failed and take corrective action.

ARC1350I NO UNIT AVAILABLE TO MOUNT VOLUME DURING BACKUP

Explanation: During backup command processing, an attempt was made to allocate the data set to be backed up, which is identified in message ARC1001I. The allocation routines determined that the required volume is not online, nor are any units available to which a mount can be requested.

Source: DFSMShsm

System Action: The backup command processing ends. DFSMShsm processing continues.

Application Programmer Response: Arrange to have a unit made available for your request, and retry the operation.

ARC1351I ANOTHER DFSMShsm FUNCTION ACTIVE FOR DATA SET, BACKUP REJECTED

Explanation: A backup command is rejected because another DFSMShsm operation is processing the data set. The data set name is given in message ARC1001I.

Source: DFSMShsm

System Action: The backup command ends. DFSMShsm processing continues.

Application Programmer Response: Retry the command when the data set is available.

ARC1352I GET/FREEMAIN ERROR - BACKUP TERMINATED

Explanation: During backup command processing, a GETMAIN or FREEMAIN macro was issued for input buffer space. The macro failed.

Source: DFSMShsm

System Action: The backup command ends. DFSMShsm processing continues.

Application Programmer Response: Retry the backup command. If the problem occurs again, notify the storage administrator.

ARC1353I VSAM OPEN RESOURCE NOT AVAILABLE, BACKUP OF DATA SET FAILED

Explanation: During backup command processing of a VSAM data set, an attempt was made to enqueue on the VSAM open resource for the data set. The resource was not immediately available.

Source: DFSMShsm

System Action: The backup command processing ends for the data set. DFSMShsm processing continues.

Application Programmer Response: Try the backup command again later, or wait for the next automatic backup.

ARC1354I BACKUP FAILED DUE TO AN ERROR IN AN INSTALLATION EXIT

Explanation: The ARCBDEXT exit for backup command volume processing abnormally ended (abended). DFSMShsm has placed a hold on the backup command processing so no data set will be backed up until the hold is removed with a DFSMShsm RELEASE command with the BACKUP parameter. The reason for the abend is given in the associated ARC0734I message, in the reason code field.

Source: DFSMShsm

System Action: DFSMShsm processing continues without the backup function.

Operator Response: If the backup function can run without the installation-wide exit, turn off the installation-wide exit with a SETSYS command with the EXITOFF parameter and release the backup function with the RELEASE command with the BACKUP parameter. DFSMShsm will then run without the exit and its own backup data set criteria. If this was an unusual circumstance, the exit will not abend again. The backup function should be started again with the RELEASE command with the BACKUP parameter.

Application Programmer Response: Fix the cause of the abend and relink the exit module. The exit can be reactivated with a SETSYS command when DFSMShsm is started.

ARC1355I VSAM BACKUP FAILED - ERROR IN EXPORT

Explanation: A backup command was issued for a VSAM data set, but the IDCAMS EXPORT command was unable to complete successfully. The data set name and IDCAMS return code are given in the ARC1001I message for data set backup or in the ARC0734I message for an individual data set during volume backup.

The IDCAMS error messages are contained in the backup activity log. To review the activity log, issue the RELEASE HARDCOPY command. If the logs are on DASD, new logs are created and the log with the messages can be browsed. If the logs are directed to SYSOUT, they are printed.

Source: DFSMShsm

System Action: The backup command ends without a backup version being made. DFSMShsm processing continues.

Application Programmer Response: Respond to the IDCAMS return code and retry the operation. The backup activity log contains messages that further explain the reason for the IDCAMS return code.

ARC1356I BACKUP FAILED FOR DATA SET

Explanation: A backup command was issued for a data set. The data set name and reason codes are given in message ARC1001I.

The values for *reason-code* are:

5	An attempt was made to backup a GDG base entry. The data set is only an entry in the catalog and not a cataloged data set.
6	There was an error in a catalog entry for a non-VSAM data set.
7	An error occurred trying to convert the symbolic volser to a real volser.
8	No catalog entry was found for a VSAM data set.
9	Unsupported data set for backup. The catalog entry shows the VSAM data set to be a non-SMS-managed data set defined with key ranges.
10	The catalog entry indicates that the data set is a multivolume data set. If the data set is VSAM, it is not an SMS-managed data set, and one component is multivolume.
11	Unsupported data set for backup. The catalog entry shows at least one AIX defined with key ranges and the base cluster is *not* defined with key ranges.
12	The components of the non-SMS-managed VSAM cluster are on different volumes.
14	The catalog entry is not a VSAM base cluster or a non-VSAM data set; the catalog entry is a VSAM page space, or a locate error occurred for the data set name.
14	The catalog entry is not a VSAM base cluster and not a non-VSAM data set, or the catalog entry is a VSAM page space or swap space, or a locate error occurred for the data set name.
15	A component of the VSAM data set has a logical record length too large for DFSMShsm. The maximum allowable logical record length is 32 752 bytes for a relative record data set and 32 756 bytes for entry-sequenced or key-sequenced data sets.
16	A component of the VSAM data set is open for output.
18	A LOCATE error occurred for the data or index component of the VSAM base cluster.

19 Locate error on base path component.

20 The data set name is a VSAM component name instead of a cluster name.

24 The catalog entry indicates that the data set is a non-VSAM multivolume data set. The data set's *volser* list also indicates multiple volumes.

28 A LOCATE error occurred for a VSAM alternate index (AIX) cluster.

38 A LOCATE error occurred for the data or index component of the VSAM AIX cluster.

39 Locate error on AIX path component.

40 At least one component of the VSAM data set is empty.

48 A LOCATE error occurred for the data set.

52 A GETMAIN error occurred during the process of getting the catalog information about a VSAM data set.

54 Backup-While-Open data sets are not supported when bypass of the data set enqueue is requested through the ARCHBACK macro or the ARCBDEXT user exit. They are also not supported by the inline backup function.

56 A VSAM data set has an invalid expiration date. The expiration date obtained from the catalog contains a year greater than 2155. This data set is not supported.

60 Backup of a VSAM data set failed because the data set is in incomplete status. Issue a RECALL command for the data set.

405 The VTOC entries for the data set indicate that there are more tracks allocated to a VSAM data set on the first volume than the total number of tracks allocated to the data set.

Source: DFSMShsm

System Action: The data set is not backed up. If the reason code is 48, no VSAM data sets are backed up from the volume. DFSMShsm processing continues.

Application Programmer Response: If a locate error occurred, fix the catalog entry and retry the command. If the reason code is 40, load data in all the components. If the reason code is 405 examine the VTOC entries for the data set on all volumes to ensure that they are correct. Backing up a component of a VSAM cluster or an association such as an AIX results in a reason code 14. DFSMShsm backs up the entire VSAM base cluster, which includes all the components and associations.

ARC1357I VSAM BACKUP FAILED - PASSWORD LOCATE ERROR

Explanation: The backup of a VSAM data set was in progress. A LOCATE could not find the password of the catalog that owns the volume. Message ARC1001I gives the data set name and the VSAM catalog return code.

Source: DFSMShsm

System Action: The data set is not backed up. DFSMShsm processing continues.

Application Programmer Response: Correct the problem identified by the VSAM catalog return code.

ARC1358I BACKUP FAILED FOR DATA SET

Explanation: A backup command was issued for a data set but was unsuccessful. The data set name and reason code is given in message ARC1001I, as follows:

52 Two or more directory entries for a partitioned data set had the same TTR.

53 A directory entry in a partitioned data set has an invalid length value.

54 An imbedded record has zero or negative length. The member name is reported in the associated ARC0901I message with module ARCMPDS.

Source: DFSMShsm

System Action: The data set is not backed up. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1360I ESTAE MACRO FAILURE DURING BACKUP

Explanation: DFSMShsm attempted to set up an ESTAE environment, but the MVS function was unsuccessful during a backup process.

Source: DFSMShsm

System Action: The module issuing the macro ends processing.

Application Programmer Response: Examine the return code from the previous ARC0304I message, and take appropriate action based on that return code explanation.

ARC1361I ERROR DURING INTERNAL ADDVOL OF TAPE VOLUME

Explanation: During backup processing, a tape end-of-volume was encountered and an internal ADDVOL command was attempted for the next tape. The command was unsuccessful because of an I/O error on a control data set record or because the volume already contains valid DFSMShsm data.

Source: DFSMShsm

System Action: The tape volume specified in the previous ARC0120I message is not added to DFSMShsm control. DFSMShsm processing continues.

Application Programmer Response: If the error is because of an I/O error, determine the cause of the error and take corrective action. If the tape volume already contains valid data, an operations problem could exist that might need to be investigated.

ARC1362I CDS RECORD IN USE BY ANOTHER HOST

Explanation: During backup processing, an update was attempted on a control data set record that is in use by another processor.

Source: DFSMShsm

System Action: The update will not be made. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1363I VOLUME DEALLOCATION ERROR DURING BACKUP

Explanation: An error was encountered during the backup process in deallocating a volume under DFSMShsm control.

Source: DFSMShsm

System Action: Any processing that requires the volume in error will not occur. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1364I ERROR CLOSING INPUT DATA SET DURING BACKUP

Explanation: During the backup command processing of a data set or the movement of a backup version from one volume to another, an error has occurred when DFSMShsm has attempted to close the input data set. If a data set is being backed up, the input data set is the data set being backed up. If a backup version is being moved, the input data set is the already existing backup version on the source volume. The name of the data set being backed up or the name of the backup version being moved appears either in the preceding ARC1001I message, or in the associated ARC0734I message, with a return code of 64. The *reason-code* in the preceding ARC1001I message or in the associated ARC0734I message further clarifies the error that has occurred, as follows:

4	A nonzero return code is in register 15 on completion of a FREEPOOL macro. After closing the input data set, DFSMShsm has issued a FREEPOOL macro to free any I/O buffers that have been acquired by the data management access method routines.
8	A nonzero return code is in register 15 on completion of a CLOSE macro. DFSMShsm has issued a CLOSE macro to close the input data set.
12	A CLOSE abnormal end (abend) (X14) has occurred during the processing of the CLOSE macro. DFSMShsm has issued a CLOSE macro to close the input data set. An ESTAE recovery routine has been given control during CLOSE processing. The DCB ABEND exit may also have been given control. If the DCB ABEND exit has been given control, the parameter list on entry to the DCB ABEND exit has indicated that it is not acceptable to ignore the abend condition. The DCB ABEND exit has been returned to data management with an indication to continue abend processing.
16	An abend, other than a CLOSE abend, has occurred during the processing of a CLOSE macro. DFSMShsm has issued a CLOSE macro to close the input data set. An ESTAE recovery routine has been given control during CLOSE processing. The DCB ABEND exit may also have been given control. If the DCB ABEND exit has been given control, the parameter list on entry to the DCB ABEND exit has indicated that it is not acceptable to ignore the abend condition. The DCB ABEND exit has been returned to data management with an indication to continue abend processing.
20	An abend has occurred during the processing of the CLOSE macro. The DCB ABEND exit has been given control. The parameter list on entry to the DCB ABEND exit has indicated that it is acceptable to ignore the abend condition. The DCB ABEND exit has been returned to data management with an indication to ignore the abend.

The data set has not been successfully backed up, or the backup version has not been successfully moved.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: For *reason-code* 12, 16, and 20 there should be an associated data management message (prefix IEC) at the computing system console and in the DFSMShsm job log. For information about the CLOSE and FREEPOOL macros and their associated return codes, see *DFSMS/MVS Using Data Sets* and *DFSMS/MVS Macro Instructions for Data Sets*, respectively.

ARC1365I ERROR CLOSING OUTPUT DATA SET DURING BACKUP

Explanation: During the backup of a data set or the movement of a backup version from one volume to another, an error has occurred when DFSMShsm has attempted to close the output data set. The output data set is the DFSMShsm backup version on the target volume. The name of the data set being backed up, or the name of the backup version being moved, appears either in the preceding ARC1001I message, or in the associated ARC0734I message, with a return code of 65. The *reason-code* in the ARC0734I or ARC1001I message further clarifies the error that has occurred, as follows:

4	A nonzero return code is in register 15 on completion of a FREEPOOL macro. After closing the input data set, DFSMShsm issues a FREEPOOL macro to free any I/O buffers that are acquired by the data management access method routines.
8	A nonzero return code is in register 15 on completion of a CLOSE macro. DFSMShsm issues a CLOSE macro to close the input data set.
12	A CLOSE abnormal end (abend) (X14) has occurred during the processing of the CLOSE macro. DFSMShsm issues a CLOSE macro to close the input data set. An ESTAE recovery routine has been given control during CLOSE processing. The DCB ABEND exit may also have been given control. If the DCB ABEND exit has been given control, the parameter list on entry to the DCB ABEND exit has indicated that it has not been acceptable to ignore the abend condition. The DCB ABEND exit returned to data management with an indication to continue abend processing.
16	An abend, other than a CLOSE abend, has occurred during the processing of a CLOSE macro. DFSMShsm issues a CLOSE macro to close the input data set. An ESTAE recovery routine has been given control during CLOSE processing. The DCB ABEND exit may also have been given control. If the DCB ABEND exit has been given control, the parameter list on entry to the DCB ABEND exit has indicated that it has not been acceptable to ignore the abend condition. The DCB ABEND exit returned to data management with an indication to continue abend processing.
20	An abend has occurred during the processing of CLOSE macro. The DCB ABEND exit has been given control. The parameter list on entry to the DCB ABEND exit has indicated that it has been acceptable to ignore the abend condition. The DCB ABEND exit returned to data management with an indication to ignore the abend.

The data set is not successfully backed up, or the backup version is not successfully moved.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: For *reason-code* 12, 16, and 20, there should be an associated data management message (prefix IEC) at the computing system console and in the DFSMShsm job log. For information about the CLOSE and FREEPOOL macros and their associated return codes, refer to *DFSMS/MVS Macro Instructions for Data Sets*.

ARC1366I BACKUP OF DATA SET FAILED, DATA SET HAS A RETIRED VERSION

Explanation: One or more backup versions is marked as being a retired version, for example, a backup version of a data set that has been deleted. Because backup command processing can result in the deletion of old backup versions, the request is rejected.

Source: DFSMShsm

System Action: The backup command ends. DFSMShsm processing continues.

Application Programmer Response: The LIST or HLIST commands can be used to determine which backup versions are considered retired. If the backup version is no longer needed, the BDELETE or HBDELETE commands can be used to delete retired backup versions when the VERSIONS parameter is specified. If the backup version is needed, the RECOVER or HRECOVER command (without the NEWNAME parameter) can be used to recover the data set and turn off the retired version indicators.

ARC1367I ERROR OBTAINING BLOCKID DURING BACKUP

Explanation: A SETSYS command has specified that the 3480 single-file format has been used. During backup command processing of a data set to a 3480 tape volume, DFSMShsm has issued a NOTE macro to obtain the block ID of the next block to be written. The NOTE macro processing has failed. The data set targeted for backup is named either in the preceding ARC1001I message, or in the associated ARC0734I message, with the return code 67. The ARC1001I or ARC0734I reason codes are as follows:

4	Does not support this block ID.
8	Invalid input parameters are specified.
12	An I/O error has occurred during the RDBLKID command.

Source: DFSMShsm

System Action: The backup command fails. The 3480 tape volume used for output is marked full to prevent its further use and another tape volume is selected for the backup procedure. DFSMShsm processing continues.

Application Programmer Response: For more information about the NOTE macro and its return codes, refer to *DFSMS/MVS Using Data Sets* or *DFSMS/MVS Macro Instructions for Data Sets*.

ARC1368I BACKUP FAILED DUE TO AN ERROR IN DFSMSDSS

Explanation: A backup command has been issued for a data set and DFSMSdss is the data set data mover. The DFSMSdss DUMP command has been issued to move the data set. When this message is issued, the corresponding DFSMSdss messages should be consulted. The DFSMSdss messages with prefix ADR are listed in the backup activity log for this failure. The data set name is contained in the preceding ARC1001I or associated ARC0734I message. The value of the last DFSMSdss message number issued for the highest severity error encountered during DFSMSdss processing is also in the ARC1001I or ARC0734I message. In some cases the return code is other than the DFSMSdss message number. These cases are as follows:

1. If the value of this return code is 9999, DFSMSdss has abnormally ended (abended) and DFSMShsm could not determine the final DUMP return code. The DFSMSdss messages must be used to determine the cause of the failure.
2. If the value of this return code is 9990, then it is a result of an abend in DFSMSdss.

Source: DFSMShsm

System Action: The data set operation ends. DFSMShsm processing continues.

Application Programmer Response: Review the response required for the DFSMSdss error and take the appropriate action. The DFSMSdss messages are found in *OS/390 MVS System Messages, Vol 1 (ABA-ASA)*.

ARC1369I ERROR ON SYNCDEV DURING BACKUP

Explanation: A SETSYS command has specified that the 3480 single-file format is being used. During backup command processing of a data set to a 3480 tape volume, DFSMShsm has issued a SYNCDEV macro to flush the tape buffer and write the data to the tape. The SYNCDEV macro has failed. The data set targeted for backup is named either in the preceding ARC1001I message, or in the associated ARC0734I message, containing the return code 69. The ARC1001I or ARC0734I reason codes are as follows:

4	An invalid device (not a buffered tape) is targeted for the backup function, or invalid input parameters are specified.
8	A permanent I/O error has occurred during the RDBLKID or SYNCHRONIZE command.
12	A permanent I/O error is indicated for an earlier channel program.

Source: DFSMShsm

System Action: The backup command fails. The 3480 tape volume used for output is marked full to prevent its further use, and another tape volume is selected for the backup procedure. DFSMShsm processing continues.

Application Programmer Response: For more information about the SYNCDEV macro and its return codes, refer to *DFSMS/MVS Using Data Sets*.

ARC1370I AN ERROR OCCURRED WHILE DFSMSHSM WAS PROCESSING AN SMS MANAGED DATA SET

Explanation: A backup command was issued for an SMS-managed data set. The data set name is given in the preceding ARC1001I or ARC0734I message, along with the *reason-code*. The reason code has the following meanings:

1 The data set is unmatched: The catalog indicates that the data set processing does not have all related data. A data set VTOC entry is not found for the data set.

2 The data set is unmatched: The catalog indicates that the data set processing does not have all related data. A VVR entry is not found for the data set. This condition could be the result of a recall being in process at the same time that backup is processing the volume.

3 The data set is unmatched: The catalog indicates that the data set processing does not have all related data. A duplicate VVR entry is found for the data set.

4 DFSMS is not active or is not installed.

5 Error obtaining the management class definition for the data set.

7 DFSMShsm detected a discrepancy between the data set VTOC entry and the catalog information associated with the data set processing. The discrepancy is one of the following:

- The catalog information indicates that this is an SMS-managed data set (data set is associated with a storage class), but the data set VTOC entry indicates this is a non-SMS-managed data set.

- The catalog information indicates that this is a non-SMS-managed data set (data set is not associated with a storage class), but the data set VTOC entry indicates this is an SMS-managed data set.

10 Error deleting an SMS-managed data set.

11 There is no storage class name in the extract list entry of catalog information. The data set resides on an SMS-managed volume and requires a storage class definition to be processed.

13 The data set is unmatched. The data set processing is uncataloged or cataloged to a different volume than the volume DFSMShsm processed on which the data set is found. The data set is not indicated as being an uncataloged data set, and hence DFSMShsm attempts to process a cataloged data set.

DFSMShsm was attempting to process the data set as cataloged and found it to be unmatched for one of the following conditions:

- The data set is uncataloged.
- The data set was deleted by another job or user while backup was processing the volume.
- The data set was found on the volume being backed up, but is cataloged to a different volume.

Source: DFSMShsm

System Action: Backup command processing of the data set ends. DFSMShsm processing continues.

Application Programmer Response:

1, 2, 3 Run IDCAMS DIAGNOSE against the catalog and or VVDS for the unmatched data set. Take corrective action for any problems detected.

4 If SMS is not installed on the system, it must be installed before DFSMShsm can process any SMS-managed data sets or volumes. If SMS is installed, it needs to be activated.

5 List the catalog information for the data set to determine the management class name. Refer to message ARC0935I in the command activity log for the specific failure. Define the management class if it does not exist. If the management class exists, contact the IBM Support Center.

7 Correct the discrepancy and reissue the request.

10 Refer to message ARC0528I or ARC0545I in the backup activity log or to message ARC0937I or ARC0950I in the command activity log for the specific failure.

11 Correct the discrepancy and reissue the request.

13 If the data set is uncataloged, recatalog the data set using the IDCAMS DEFINE RECATALOG function.

If a catalog entry exists for the same named data set, the data set which failed to be backed up may have been erroneously uncataloged and a new data set with the same name may have been created. If you wish to delete the uncataloged data set in order to prevent DFSMShsm from producing this error for the data set, use the IDCAMS DELETE NVR function.

Note: Refer to *DFSMS/MVS Access Method Services for ICF* for information regarding the IDCAMS DEFINE and DELETE functions.

ARC1371I USER NOT AUTHORIZED TO BACKUP OS CVOL

Explanation: A backup command was issued for a data set of an OS CVOL. The BACKUP command can only be issued by a user with space management authority or by the system operator. Message ARC1001I precedes this message giving the data set name.

Source: DFSMShsm

System Action: The backup command ends. DFSMShsm processing continues.

Application Programmer Response: Use the HSENDCMD command or see the storage administrator for authorization.

ARC1372I DFSMSHSM ENCOUNTERED AN SMS-RELATED ERROR WHILE OBTAINING AN MVT ENTRY FOR AN SMS MANAGED VOLUME

Explanation: During backup command processing of a data set, DFSMShsm has attempted to find or build an MVT entry for an SMS-managed volume for processing the backup command. An error has occurred that has caused the function to end. The data set name is given in the preceding ARC1001I message, along with a reason code. The reason codes have the following values and meanings:

4 SMS is not active in the system.

DFSMShsm attempts to process an SMS-managed volume, but SMS is not active in the system.

5 Error reading volume VTOC entry for the volume being selected.

DFSMShsm reads the volume VTOC entry to determine if the volume being selected is an SMS-managed volume. The read fails.

6 Error retrieving an SMS volume definition.

After the volume being selected is determined to be an SMS-managed volume (by reading the volume VTOC entry), DFSMShsm has invoked SMS to retrieve a SMS volume definition. SMS fails to retrieve it.

7 An error has occurred while retrieving a storage group definition for an SMS volume.

After the volume definition has been retrieved for the volume, DFSMShsm invoked SMS to retrieve a storage group definition for the volume. SMS fails to retrieve it.

9 The volume being selected is in SMS initial status.

DFSMShsm reads the volume VTOC entry to determine if the volume being selected is an SMS-managed volume. The volume VTOC entry indicates that the volume is in SMS initial status. DFSMShsm cannot process a volume in SMS initial status.

11 DFSMShsm cannot determine if the volume being selected is an SMS-managed volume. The SMS volume definition and the volume VTOC entry do not agree.

13 If the data set is uncataloged, recatalog the data set using the IDCAMS DEFINE RECATALOG function.

If a catalog entry exists for the same named data set, the data set which has failed to be backed up may have been erroneously uncataloged and a new data set with the same name may have been created. If you wish to delete the uncataloged data set in order to prevent DFSMShsm from producing this error for the data set, use the IDCAMS DELETE NVR command.

Note: See *DFSMS/MVS Access Method Services for ICF* for information regarding the IDCAMS DEFINE and DELETE commands.

15 An error has occurred while reading or writing a migration control data set (MCDS) volume record (MCV).

DFSMShsm reads an MCV record for the volume being selected. The read failed, and an ARC0184I message has been issued to indicate the error. If no MCV record existed for the volume, DFSMShsm has attempted to create an MCV record for the volume. The creation has failed, and an ARC0184I message has been issued to indicate the error.

19 The volume being selected is not mounted.

DFSMShsm has attempted to locate the unit control block (UCB) for the volume being selected and finds that the volume is not mounted.

52 A GETMAIN error has occurred.

DFSMShsm has failed to get virtual storage for creating a mounted volume table (MVT) entry for an SMS-managed volume.

Source: DFSMShsm

System Action: The backup ends. DFSMShsm processing continues.

Application Programmer Response: Perform the action that corresponds to the reason code you received:

5 The *reason-code* for this error is the return code from the CAMLST OBTAIN macro. Refer to *DFSMS/MVS DFSMSdfp Advanced Services* for further information on the CAMLIST OBTAIN macro.

6, 7 See the preceding ARC0935I message in the command activity log for the specific failing code from the subsystem interface (SSI) of SMS.

11 Determine why the SMS volume definition and volume VTOC entry do not agree. Correct the inconsistency and issue the BACKDS command.

15 See the preceding ARC0184I message in the appropriate activity log for the specific I/O failing code.

52 See the preceding ARC0305I message for the specific failing code.

ARC1373I PDSE DATA SET COULD NOT BE PROCESSED FOR BACKUP

Explanation: A request sent to DFSMShsm to back up a PDSE data set, failed because one of the following conditions occurred. The data set name is contained in the preceding ARC1001I or associated ARC0734I message.

The values for *reason-code* are:

4 DFSMShsm is the data mover.

8 The level of MVS/SP on the processing unit that attempted to process this data set was insufficient to support PDSE data sets. MVS/SP 3.2 and DFP 3.2.0, or greater, are required.

Source: DFSMShsm

System Action: The backup command processing of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator. If DFSMShsm is running in a multiprocessing unit environment, and there is another processing unit that can support PDSE data sets, process this data set on the other processing unit.

ARC1374I DATA SET/VOLUME BACKUP OR VOLUME DUMP FAILED - FUNCTION HELD

Explanation: A data set or volume backup was being requested, but HOLD BACKUP was in effect, or a volume dump was being requested, but HOLD DUMP was in effect. Message ARC1001I gives the data set or volume name.

Source: DFSMShsm

System Action: The data set or volume is not processed. DFSMShsm processing continues.

Application Programmer Response: Reissue the command after the operator issues a RELEASE BACKUP or RELEASE DUMP command.

ARC1376I ERROR LINKING TO DFSMSDSS DURING BACKUP

Explanation: A request sent to DFSMShsm to back up a data set failed when the LINK macro used to invoke DFSMSdss for data movement failed. The data set name is contained in the preceding ARC1001I or associated ARC0734I message.

Source: DFSMShsm

System Action: The backup of the data set ends if this is HBACKDS or BACKDS command processing. The backup of the volume ends if this is volume or automatic processing. Backup and migration are held until the problem is fixed. A SNAP dump is generated on the first occurrence. DFSMShsm processing continues.

Application Programmer Response: Review the abnormal end code that is displayed as the reason code in the preceding ARC1001I or associated ARC0734I message.

ARC1377I ERROR ALLOCATING DUMMY DD DURING BACKUP

Explanation: DFSMShsm is backing up a data set using DFSMSdss data movement. A request sent to DFSMShsm to back up the data set failed when the allocation of a dummy DD for DFSMSdss dump failed. The dynamic allocation error codes are identified in the preceding ARC0503I message. The data set name is contained in the preceding ARC1001I or associated ARC0734I message.

Source: DFSMShsm

System Action: Backup command processing of the data set ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator. The storage administrator should review the ARC0503I message and its dynamic allocation codes to determine the type of failure and possible causes.

ARC1378I UNCATALOGED DATA SET COULD NOT BE PROCESSED FOR BACKUP

Explanation: A request sent to DFSMShsm to back up an uncataloged data set failed because DFSMSdss was the data mover. The data set name is contained in the preceding ARC1001I or associated ARC0734I message. The *return-code* in the ARC1001I or ARC0734I message has a value of 78 (to correspond to the ARC1378I message). The *reason-code* in the ARC1001I or ARC0734I message lists the reason that DFSMShsm could not back up the data set.

The values for *reason-code* are:

0 User specified *volser* and unit *unittype* on the BACKDS or HBACKDS command which indicates backup of an uncataloged data set.

4	Data set is not cataloged.
8	Data set is cataloged, but not in an integrated catalog facility (ICF) catalog.

Source: DFSMShsm

System Action: Backup command processing of this data set ends. DFSMShsm processing continues.

Application Programmer Response: Catalog the data set in an ICF catalog.

ARC1380I BACKUP VERSION INVALIDATED DURING SPILL PROCESSING

Explanation: The SPILL process was running. A VTOC to the DASD backup volume was read and a list of valid versions to move was built. Later, when the movement occurred, the BCDS data set record that describes the backup version was found to be missing. The most likely reason for this to occur is that the backup version was deleted between the time the list was built and the time the list was processed.

Another possible reason for this error is that the index to the BCDS has been destroyed and must be recovered. This condition would be indicated by the occurrence of several messages related to errors accessing the BCDS. The delete can happen because a new version was created (automatically or by command), or a BDELETE command was issued for it.

Source: DFSMShsm

System Action: None.

Application Programmer Response: No action is needed now unless this message is issued frequently. DFSMShsm will correct the situation the next time the backup volume is cleaned up.

ARC1384I FAILURE DURING BACKVOL DUMP PROCESSING

Explanation: An error was detected by the module ARCDRDSS while DFSMShsm was performing volume dump processing. The corresponding ARC1001I message identifies the volume being dumped. The cause of the failure can be identified by the *reason-code* field in the ARC1001I message:

2	Early termination, DFSMShsm shut down. RECOVER held at END-OF-DATA-SET, DUMP held at END-OF-DATA-SET, AUTO DUMP held at END-OF-DATA-SET, BACKUP disabled, or DFSMShsm is in emergency mode.
4	Error creating, updating or reading the DVL record during DUMP or error adding the volume to DFSMShsm's RACF tape volume set.
6	Operator refused to mount a tape during an end of volume condition.
8	Operator refused to mount a tape during initial open processing.
10	Shutdown was requested while waiting for a tape to be mounted.
12	40 volume limit was exceeded during DUMP operation.
16	DFSMSdss error.
20	Failure attempting to attach DFSMSdss task.
400	Invalid macro identifier.
401	Function request not specified.
402	Full volume DUMP requested, but the pointer to the DGN record was not specified.
403	Pointer to the caller's RCB not specified.
404	Pointer to input volume MVT not specified.
405	Pointer to output volume MVT not specified for restore request.
406	Pointer to the data set name to be restored not specified.
407	RENAMEUNCONDITIONAL requested, but the pointer to the new name of the data set was not specified.
408	Full volume dump requested, but the number of DUMP copies to be created for this generation was not specified.
409	The number of output MVTs passed is not the same as the number of dump copies to be reproduced for this generation.
410	Invalid completion code in ECB.
411	More than one function was requested.
412	Data set restore requested without DFSMS work area pointer.
9XX	Abend occurred in the DFSMSdss task (*xx* is the return code from DFSMSdss prior to 900 being added to it).

Source: DFSMShsm

System Action: The BACKVOL processing fails. DFSMShsm processing continues.

Application Programmer Response: Take corrective action according to the *reason-code* in message ARC1001I.

ARC1387I A DISCREPANCY WAS FOUND IN THE DATA SET VTOC ENTRY

Explanation: DFSMShsm was attempting to backup a data set and encountered a data set VTOC entry that is inconsistent with IBM standards. The data set name is given in the preceding ARC1001I message along with the *reason-code* for the type of discrepancy found. The reason codes have the following meanings:

2	The data set has a discrepancy in the data set VTOC entry and is indicated to be a PDSE data set. The data set VTOC entry indicates the data set to be a non-SMS-managed data set. PDSE data set must be SMS-managed.
4	A data set has a discrepancy between its catalog entry and its data set VTOC entry indicating this is not a PDSE data set. The catalog entry indicates this data set is a PDSE and the data set VTOC entry indicates it is not a PDSE.
6	The data set has a discrepancy between its data set VTOC entry and its catalog entry indicating this is not a PDSE data set. The data set VTOC entry indicates this data set is a PDSE and its catalog entry indicates it is not a PDSE.
8	The data set has a discrepancy between its data set VTOC entry and its VSAM volume data set (VVDS) entry indicating this is not a PDSE data set. The data set VTOC entry indicates this data set is PDSE and the VVDS indicates this data set is not PDSE.
10	The data set has a discrepancy between its VSAM volume data set (VVDS) entry and its data set VTOC entry indicating this is not a PDSE data set. The VVDS indicates this data set is PDSE and the data set VTOC entry indicates this data set is not PDSE.

Source: DFSMShsm

System Action: Backup command processing ends. DFSMShsm processing continues.

Application Programmer Response: Correct the discrepancy. In most cases, the data set VTOC entry needs to be corrected based on the true attributes of the data set.

ARC1392I TERMINATING DFSMSHSM BACKUP WAIT REQUEST, DFSMSHSM SHUTTING DOWN

Explanation: DFSMShsm is shutting down because of an abnormal end, MVS CANCEL, FORCE, or normal shutdown. During shutdown, all wait-type backup requests not yet processed are purged from the common service area (CSA) queue.

Source: DFSMShsm

System Action: DFSMShsm ends.

Application Programmer Response: Restart DFSMShsm and resubmit the request.

ARC1396I FAILURE DURING BACKVOL DUMP PROCESSING

Explanation: An error was detected while DFSMShsm was processing a dump of a volume or storage group. The corresponding ARC1001I message identifies the volume being dumped. The cause of the failure can be identified by the *reason-code* field in the ARC1001I message:

01	Source volume in use by another DFSMShsm function (usually after 2 attempts, separated in time).
08	Serialization of the source volume, or the SDSP data set on the source volume failed.
10	No eligible dump classes.
11	Nonzero return code other than 10 from volume dump processing.
12	Nonzero return code from volume allocation.
14	Nonzero return code from dump volume selection.
16	Early termination condition exists.
17	Nonzero return code from generating a VTOC or VCAT copy data set name.
18	Nonzero return code from VTOC copy data set utility.
20	Nonzero return code from invoking DFSMSdss dump or restore function.
22	Error writing new DGN record.
24	Error reading MCP record.
26	Error updating MCP record.
52	GETMAIN error.
400	Invalid input index.
401	Input index does not point to valid DTCB.

Source: DFSMShsm

System Action: BACKVOL command processing fails. DFSMShsm processing continues.

Application Programmer Response: Take corrective action according to the *reason-code* in message ARC1001I.

ARC1397I DFSMSHSM INTERNAL ERROR DURING BACKUP

Explanation: An unknown error has occurred during allocation of a data set identified in message ARC1001I. Associated with this message is a dynamic allocation message in the data set defined in the DFSMShsm cataloged procedure as MSYSOUT. There is a SNAP dump associated with this error in the SYSOUT data set for the DFSMShsm job. The return code and reason code are given in message ARC1001I. If the return code is 97, the reason code is the dynamic allocation return code and is printed in hexadecimal format. For information about dynamic allocation return codes and reason codes, see, *OS/390 MVS Programming: Assembler Services Guide*.

Source: DFSMShsm

System Action: The backup operation described in message ARC1001I ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator or system programmer. There might be a data set with a duplicate name on the volume. If so, scratch the data set with the duplicate name, and retry the command. If not, respond as indicated to the dynamic allocation message.

ARC1398I SOURCE BACKUP COPY COULD NOT BE SCRATCHED WHILE MOVING BACKUP VERSION

Explanation: While trying to move a backup copy from one device to another, the scratch of the source data set failed. There may be an associated ARC0528I message with further information.

Source: DFSMShsm

System Action: The affected backup copy is not moved.

Application Programmer Response: No response is necessary. The next time that autobackup processing moves backup versions, it will retry the move. Or if you want, you can run the FREEVOL command with the ML1BACKUPVERSIONS parameter.

ARC1399I UNSUPPORTED DATA SET FOR BACKUP

Explanation: A backup command was issued for a data set that DFSMShsm did not back up. There are some data set types not be backed up by the DFSMShsm, either automatically or by command. The data set name is contained in the preceding ARC1001I or associated ARC0734I message. In the ARC1001I or ARC0734I message, *return-code* has a value of 99 (corresponding to the ARC1399I message). The *reason-code* in the ARC1001I or ARC0734I message lists the reason DFSMShsm could not back up the data set.

The values for *reason-code* are:

4	Unsupported data set organization.
7	Unable to determine data set size.
8	The data set organization is supported, but the block size is invalid. The block size of the data set is zero, or the block size of the data set plus the key length is greater than the maximum block size supported (which is device dependent), and the track overflow bit (in the data set VTOC entry for the data set, or in the UCB for the device) is off.
12	Unsupported standard-user-label data set, which is either a model DSCB, a nonsequential data set, an empty data set, or an unmovable data set.
14	Standard-user-label data sets are not supported by the inline backup function.
16	Split cylinder (or shared extent) data set.
20	Unmovable data set with more than one extent on the volume.

22	The data set is a multivolume BDAM data set.
24	Unsupported sequential data sets with the last-volume indicator turned off, or any data set with the volume sequence number greater than 1, and the data set name is not SYSCTLG. This usually occurs on a multivolume data set. Non-SMS multivolume data sets are not supported.
28	VSAM volume data set (SYS1.CATALOG ENTRY).
36	Invalid data set name.
40	The data set occupies more than 65535 tracks and it is not a VSAM, PDSE, or extended format data set.
45	The data set is a VSAM data set with more than 17 AIXs defined to it.

Source: DFSMShsm

System Action: The data set backup operation ends. DFSMShsm processing continues.

Application Programmer Response: If it is necessary to have a backup version of the data set, create the backup version using a method other than DFSMShsm.

ARC1492I TERMINATING DFSMSHSM LIST WAIT REQUEST, DFSMSHSM SHUTTING DOWN

Explanation: DFSMShsm is shutting down because of an abnormal end (abend), MVS CANCEL, FORCE, or normal shutdown. During shutdown, all wait-type list requests not yet processed are purged from the common service area (CSA) queue.

Source: DFSMShsm

System Action: DFSMShsm ends.

Application Programmer Response: If DFSMShsm ends because of an abend, determine the cause of the abend and correct the problem. Restart DFSMShsm and resubmit the request.

ARC1500I PLEXNAME = HSM*PLEX_name*, PROMOTE PRIMARYHOST = [YES | NO], PROMOTE SSM = [YES | NO]

Explanation: A QUERY command was issued with the SETSYS parameter. This messages describes the current HSMplex environment.

Parameter	Meaning
PLEXNAME=*HSMplex_name*	The name of the HSMplex of which this host is a member. The default name is ARCPLEX0. If this host is active on a system in XCF-local mode, then this value is not used.
PROMOTE PRIMARYHOST=YES	This host is eligible to be promoted for the responsibilities of the DFSMShsm primary host.
PROMOTE PRIMARYHOST=NO	This host is not eligible to be promoted for the responsibilities of the DFSMShsm primary host.
PROMOTE SSM=YES	This host is eligible to be promoted for the responsibilities of a DFSMShsm SSM host.
PROMOTE SSM=NO	This host is not eligible to be promoted for the responsibilities of a DFSMShsm SSM host.

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Application Programmer Response: None.

ARC1520I UNABLE TO PERFORM SECONDARY HOST PROMOTION FUNCTIONS, RC=*return-code*, REASON=*reason-code*

Explanation: DFSMShsm was unsuccessful in initializing or maintaining the necessary processes to perform secondary host promotion functions. The possible values of *return-code* are:

2	DFSMShsm's XCF group user routine could not be loaded. *reason-code* gives the abend code from the load error.
4	DFSMShsm was unable to join the DFSMShsm XCF application group.
6	DFSMShsm's XCF group user routine had repeated failures. This host will be made ineligible for secondary host promotion functions.

Source: DFSMShsm

System Action: DFSMShsm continues processing. Secondary host promotion functions are unavailable.

Application Programmer Response: The possible values of *return-code* are:

2	Determine the cause of the load failure for the XCF group user routine (ARCJGRPU), and restart DFSMShsm.
4	Verify that XCF is properly enabled on the system. If it is, contact IBM support.
6	Contact IBM support.

ARC1521I A SECONDARY SPACE MANAGEMENT HOST IS NOT ELIGIBLE TO BE PROMOTED FOR ANOTHER SECONDARY SPACE MANAGEMENT HOST

Explanation: SETSYS PROMOTE(SSM(YES)) was issued on a host that is itself configured to run secondary space management. Because there can be multiple SSM hosts running at different times of the day, a host that is configured to run secondary space management is not eligible to be promoted for another secondary space management host.

Source: DFSMShsm

System Action: The host will be a secondary space management host, but it cannot be promoted for another secondary space management host. DFSMShsm continues processing.

Application Programmer Response: Do not issue SETSYS PROMOTE(SSM(YES)) on a host configured to run secondary space management.

ARC1522I THIS HOST HAS TAKEN OVER THE [PRIMARY | SSM] HOST RESPONSIBILITIES FOR HOST *hostid* ON SYSTEM *sysid*

Explanation: Through XCF, this host was notified that host *hostid* was no longer performing its primary or SSM responsibilities. Being eligible to do so, this host took over those responsibilities. This host will perform those responsibilities until the primary or SSM host is once again available, or until this host can no longer perform them.

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Application Programmer Response: None.

ARC1523I THIS HOST HAS TAKEN BACK ITS [PRIMARY | SSM] HOST RESPONSIBILITIES FOR HOST *hostid* ON SYSTEM *sysid*

Explanation: This host was either restarted or taken out of emergency mode, and is once again eligible to perform its primary or SSM responsibilities. As such, it took back its responsibilities from the promoted host. If *sysid* equals 00000, then the system ID was unavailable.

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Application Programmer Response: None.

ARC1524I AN XCF FUNCTION COMPLETED UNSUCCESSFULLY FOR HOST *hostid*, ON SYSTEM *sysid*, RC=*return-code*

Explanation: While performing secondary host promotion functions, an error occurred during the processing of an DFSMShsm XCF member event. The possible values of *return-code* are:

2	This host was attempting to take over the responsibilities for host *hostid*. Host *hostid* may not be able to be demoted.
4	This host was attempting to record the host ID of the host for which it had been promoted. Refer to message ARC1522I to determine which host that was. This host will be unable to determine when the demoted host is ready to take back its responsibilities. Thus, it will perform those responsibilities until it is disabled.
6	This host was attempting to notify promoted host *hostid* that it has been demoted. If host *hostid* is in emergency mode but changes to noemergency mode without being shutdown, then it will continue to function as a promoted host. Host *hostid* should be restarted.
8	This host was attempting to demote itself, but could not. It will continue as a promoted host until it is restarted.
10	This host was unable to take back the primary or SSM host responsibilities, or both, for which it was demoted. If the promoted host has already been demoted, then no host will be performing the primary or SSM responsibilities, or both, of this host. This host should be restarted.
12	This host was attempting to signal that it is in emergency mode. If it is a primary, SSM, or promoted host, its responsibilities will not be taken over by another host.
14	This host was attempting to signal that it is no longer in emergency mode. If it is a primary or SSM host, it may not be able to take back its responsibilities.
16	This host was attempting to update its status as an SSM host. This will cause miscellaneous problems.
18	This host was attempting to disassociate itself from XCF. If it is a primary or SSM host, then it may be unexpectedly demoted.
20	An internal DFSMShsm error occurred while processing DFSMShsm XCF member events. One or more events will be missed.
22	An error occurred while querying XCF.
24	This host was attempting to indicate that it is no longer promoted for the demoted host *hostid*. Until demoted host *hostid* restarts, no host will be able to take over the functions for which this host had been promoted.

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Application Programmer Response: Contact IBM support to determine the cause of the unsuccessful completion of the XCF function.

ARC1525I UNABLE TO COMPLETE PROMOTION OF [AUTOBACKUP | SSM] FUNCTIONS FOR HOST *hostid* ON SYSTEM *sysid*

Explanation: During the promotion process, this host was unsuccessful in acquiring the specified function's window, cycle, and user exit setting from the original primary or SSM host *hostid*, or from both. For autobackup and autodump functions, this host acts as the primary host, but will use its own currently defined window, cycle, and exit setting instead of those of the original primary host. If the error occurred for SSM, SSM will not be processed.

Source: DFSMShsm

System Action: DFSMShsm continues processing.

Application Programmer Response: To temporarily bypass the problem, issue the appropriate SETSYS and DEFINE commands on this host to configure the appropriate window, cycle, and exit settings for the function in error.

ARC1601I COMMAND HAD SCAN ERROR

Explanation: A DFSMShsm module built an invalid parameter list for the TSO scan routine (IKJSCAN).

Source: DFSMShsm

System Action: The command ends with a SNAP dump. DFSMShsm processing continues.

Application Programmer Response: Be certain the command issued was complete and valid. If no errors are found and the problem occurs again, notify the storage administrator.

ARC1603I INVALID COMMAND NAME

Explanation: Either the TSO scan routine (IKJSCAN) determined that an input line for DFSMShsm contained a syntactically incorrect command name, or the command name specified is not a valid DFSMShsm command.

Source: DFSMShsm

System Action: The command is rejected. DFSMShsm processing continues.

Application Programmer Response: Verify the command name and syntax. Reissue the corrected command.

ARC1604I COMMAND NOT AUTHORIZED FOR USER

Explanation: The DFSMShsm command issued can only be issued by a user with data base authority, the system operator, or a user defined to the STGADMIN.ARC.BACKUP RACF profile for the ABACKUP command. Message ARC1001I precedes this message giving the command entered with a return code of 4 and a *reason-code*.

The values for *reason-code* are:

0	The user has not been authorized for the command by the AUTH command.
0392	Refer to message ARC0392I for an explanation of why the command failed for the user.
0396	Refer to message ARC0396I for an explanation of why the command failed for the user.
0397	Refer to message ARC0397I for an explanation of why the command failed for the user.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: Determine the correct user command, if any, or see the storage administrator for authorization. Use the LIST USER command to determine the current authorized users.

ARC1605I COMMAND HAD PARSE ERROR

Explanation: The TSO IKJPARS routine was called to check the syntax of a DFSMShsm request and encountered an error. Message ARC1001I precedes this message giving the operation entered, the *reason-code*, and the parse return code.

The values for *reason-code* are:

4	The command parameters were incomplete or invalid, and IKJPARS was unable to prompt.
8	IKJPARS did not complete. An attention interruption occurred during IKJPARS processing.
12	The parse parameter block contains invalid information.
16	IKJPARS issued a GETMAIN, and no space was available.
20	A validity checking routine requested to end.
24	Conflicting parameters were found on the IKJTERM, IKJOPER, or IKJRSVWD macro instruction.
28	The terminal has been disconnected.
32	The command is not allowed during automatic migration or backup.
36	An ABARS command received a syntax error after the command was successfully parsed.
40	An ONLYIF command failed for one or more of the following reasons: • A parse error occurred while trying to parse command. • The required parameter, HSMHOST, was not specified. • The required host ID value was not specified.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: If *reason-code* is 4, 8, 16, 28, 36, or 40 correct the problem and retry the command. If *reason-code* is 12, 20, or 24, DFSMShsm encountered a logical error. Notify the storage administrator or the system programmer.

ARC1606I {BACKUPTYPE | OFFLINECONTROLDATASET | DIRECTORYCONTROLS | MEDIACONTROLS | VOLUMECONTROLS} WAS SPECIFIED IN AUDIT BUT..... NO SUBPARAMETERS WERE GIVE. AUDIT TERMINATES

Explanation: The AUDIT command was issued specifying one of the parameters listed in the message, but no subparameters were specified.

Source: DFSMShsm

System Action: The AUDIT command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the AUDIT command specifying parameters and appropriate subparameters.

ARC1609I LONG RUNNING COMMAND TYPE FAILED IN ATTACH

Explanation: DFSMShsm has attempted to process a long-running command. An MVS ATTACH macro has been issued but returns a nonzero return code. The return code is given in the following ARC1001I message and is explained in *DFSMS/MVS Macro Instructions for Data Sets*.

Source: DFSMShsm

System Action: The function to be processed is ended.

Application Programmer Response: Inform the system programmer or the storage administrator of this error.

ARC1610I LONG RUNNING COMMAND DID NOT FULLY COMPLETE

Explanation: A DFSMShsm long-running command ended before it completed the full function that was requested. Either DFSMShsm was shut down or a HOLD command was issued for the particular function that was running. The function being held can be determined from the reason code in the following ARC1001I message.

The values for *reason-code* are:

4	The audit function is held.
8	The list function is held.
12	The report function is held.
16	The recycle function is held.

Source: DFSMShsm

System Action: The function to be processed was ended.

Application Programmer Response: After examining the partial output, if the function must be run again, reissue the command when DFSMShsm is running and the function is not being held.

ARC1611I BACKUP DAY SPECIFIED FOR AUDIT GREATER THAN MAXIMUM BACKUP CYCLE LENGTH ALLOWED. AUDIT TERMINATES

Explanation: An AUDIT command was issued to audit the offline control data set or a backup type, and the DAILY(*day*) parameter was specified. The *day* of the DAILY parameter was greater than the maximum backup cycle length allowed by DFSMShsm. The maximum backup cycle length allowed is 31 days.

Source: DFSMShsm

System Action: The AUDIT command ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the AUDIT command specifying a value less than 32 for the *day* of the DAILY parameter.

ARC1612I DELVOL COMMAND REJECTED - DELVOL OF PRIMARY VOLUME NOT ALLOWED DURING AUTO SPACE MANAGEMENT, AUTO BACKUP OR AUTO DUMP

Explanation: A DELVOL command was issued to delete a primary volume from DFSMShsm control, but the command was rejected because either:

- Automatic space management, automatic backup or automatic dump was active.
- The command was entered and processed before the space management, backup, and dump control tasks were initialized at startup.

Source: DFSMShsm

System Action: Processing of the DELVOL command ends. DFSMShsm processing continues.

Application Programmer Response: Wait until automatic space management, automatic backup, or automatic dump completes and reenter the DELVOL command.

ARC1613I DELVOL COMMAND REJECTED - DELVOL OF MIGRATION VOLUME NOT ALLOWED DURING AUTO SPACE MANAGEMENT

Explanation: A DELVOL command was issued to delete a migration volume from DFSMShsm control, but automatic space management was active, or the command was entered immediately after initialization and processed before the space management control tasks were initialized.

Source: DFSMShsm

System Action: Processing of the DELVOL command ends. DFSMShsm processing continues.

Application Programmer Response: Wait until automatic space management completes and reenter the DELVOL command.

ARC1614I DELVOL COMMAND REJECTED - DELVOL OF BACKUP VOLUME NOT ALLOWED WHEN THE VOLUME IS IN USE

Explanation: A DELVOL command was issued to delete a backup volume, but the volume was in use.

Source: DFSMShsm

System Action: Processing of the DELVOL command ends. DFSMShsm processing continues.

Application Programmer Response: Wait until the volume is available and reenter the DELVOL command.

ARC1615I FIXCDS COMMAND REJECTED

Explanation: A FIXCDS command was issued with the DISPLAY, PATCH, CREATE, DELETE, ASSIGNEDBIT, EXPAND, NEWKEY, or ADDMIGRATEDDATASET parameter, and the command failed. See the preceding ARC0195I message for the reason the FIXCDS command failed.

Source: DFSMShsm

System Action: The FIXCDS command ends. DFSMShsm processing continues.

Application Programmer Response: Correct the problem described in the ARC0195I message and reissue the corrected command.

ARC1616I MEMBER NAME NOT ALLOWED IN DSNAME, DELETE COMMAND REJECTED

Explanation: A DELETE command was issued with the member name specified in the data set name. Member names cannot be specified in the data set name because DFSMShsm does not delete partitioned data set members individually.

Source: DFSMShsm

System Action: The DELETE command ends. The data set is not deleted. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with the data set name only.

ARC1617I DELVOL COMMAND REJECTED- DELVOL OF DUMP VOLUME NOT ALLOWED DURING AUTO DUMP

Explanation: A DELVOL command was issued to delete a dump volume, but automatic dump was active, or the command was entered and processed before the dump control task was initialized at startup.

Source: DFSMShsm

System Action: Processing of the DELVOL command ends. DFSMShsm processing continues.

Application Programmer Response: Wait until automatic dump completes and reenter the DELVOL command.

ARC1618I ABARS COMMAND REJECTED, FUNCTION DISABLED OR HELD

Explanation: An ABACKUP or ARECOVER command was entered when the function was disabled or held. Message ARC1001I precedes this message giving the operation entered, the *return-code*, and the *reason-code*. The values for *reason-code* are:

4	A wait-type ABACKUP or ARECOVER command issued when the function is held.
8	An ABACKUP or ARECOVER command issued when ABARS is disabled.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the *reason-code* is 4, indicating the function is held, then the function must be released prior to issuing another wait-type request.

If the *reason-code* is 8, the system programmer must determine why ABARS was initially DISABLED and the condition corrected.

ARC1619I DELVOL COMMAND REJECTED-VOLUME IS IN USE

Explanation: A DELVOL command was issued for a volume that is in use by an automatic periodic function. A volume cannot be DELVOLed while it is in use.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: The volume can be DELVOLed when the automatic periodic function completes on this volume.

ARC1620I MEMBER NAME NOT ALLOWED IN DSNAME OR IN NEWDSNAME, RECOVER COMMAND REJECTED.

Explanation: A RECOVER command was issued with the member name specified in either the data set name or the new data set name. Member names cannot be specified in either the data set name or the new data set name because DFSMShsm does not recover partitioned data set members individually. The values for *reason-code* are:

4	Member name is specified in the data set name field.
6	Member name is specified in the new data set name field.

Source: DFSMShsm

System Action: The recovery ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with the data set name only.

ARC1621I BACKVOL COMMAND FAILED

Explanation: The BACKVOL command was issued to back up or dump a list of volumes or a list of storage groups. Every volume in the list or every volume in each storage group in the list encountered an error (perhaps in a command parameter), so that DFSMShsm could not initiate a backup or dump of any volume.

Source: DFSMShsm

System Action: The BACKVOL command ends. DFSMShsm processing continues.

Application Programmer Response: Review the error messages (in the backup or dump activity log) for each volume or storage group, or in the command parameters. Correct each error condition. Reissue the BACKVOL command, specifying those volumes or storage groups for which the error conditions have been corrected.

ARC1635I ERROR OPENING INPUT DATA SET DURING AUDIT

Explanation: DFSMShsm issued the OPEN macro to open a tape data set for AUDIT. During OPEN processing, the ESTAE routine was invoked. An OPEN error message with component identifier IEC normally precedes this message if this is a true OPEN error. Message ARC1001I also precedes this message giving the command that was being processed.

Source: DFSMShsm

System Action: The AUDIT command has completed. DFSMShsm processing continues.

Application Programmer Response: Review the AUDIT output. Rerun AUDIT for the tape volumes that failed.

ARC1652I GETMAIN ERROR - COMMAND TERMINATED

Explanation: A DFSMShsm command processor issued a GETMAIN that failed because not enough virtual storage was available.

Source: DFSMShsm

System Action: The command is ended. DFSMShsm processing continues.

Application Programmer Response: Increase the size of the DFSMShsm address space and try the command again, or try again when there is less DFSMShsm activity.

ARC1674I LONG RUNNING COMMAND FAILED - FUNCTION IS HELD AND REQUEST SPECIFIED WAIT

Explanation: A DFSMShsm long-running command was failed before it could be started. The corresponding function is held, and the initial request specified the WAIT option. The function being held can be determined from the reason code in the preceding ARC1001I message.

The values for the *reason-code* are:

4	The audit function is held.
8	The list function is held.
12	The report function is held.
16	The recycle function is held.
20	The tape copy function is held.
24	The tape replace function is held.
28	The expire backup versions function is held.

Source: DFSMShsm

System Action: DFSMShsm did not start the function. DFSMShsm processing continues.

Application Programmer Response: If the command must be run immediately, you should issue the RELEASE command with the appropriate parameter to release the desired function. Then the command can be reissued. Otherwise, the command should be reissued when the function is released later on.

ARC1800I DFSMSHSM WAIT REQUEST CANCELLED BY ATTENTION

Explanation: A DFSMShsm command is in process, and the WAIT parameter was specified on the command. The WAIT parameter was canceled by an attention interruption from the TSO terminal.

Source: DFSMShsm

System Action: The command ends. DFSMShsm processing continues.

Application Programmer Response: None.

ARC1900I DFSMSHSM ABEND *code* OCCURRED PROCESSING REQUEST

Explanation: A system or user abnormal end (abend) has occurred with an abend code *code* of the form S*xxx* or U*xxxx*. A dump has been performed automatically and will be a part of the SYSUDUMP or SYSABEND data set for the DFSMShsm job. If the error has occurred during a DFSMShsm automatic backup or migration, an associated ARC0734I message is produced. If the error has occurred during the processing of a RECALL, MIGRATION, BACKUP, or DUMP command, message ARC1001I precedes this message giving the data set name or volume serial number and the operation. For information about system abend codes, see *OS/390 MVS System Codes*.

Source: DFSMShsm

System Action: The operation ends. DFSMShsm processing continues.

Application Programmer Response: Notify the storage administrator of the abend.

ARC2001I THE ARCMSG DD FAILED TO OPEN

Explanation: The ARCPRPDO utility was unable to open the ARCMSG file.

Source: DFSMShsm

System Action: DFSMShsm processing continues. All message output bound for ARCMSG will be lost.

Application Programmer Response: Provide a DD statement for ARCMSG if informational and error messages are desired for ARCPRPDO.

ARC2002I OPEN OF DDNAME ARCPDO FAILED

Explanation: ARCPRPDO utility was unable to open the ARCPDO file.

Source: DFSMShsm

System Action: DFSMShsm processing ends with *return-code* 8.

Application Programmer Response: Provide a DD statement for ARCPDO.

ARC2003I OPEN OF DDNAME SYSIN FAILED

Explanation: ARCPRPDO utility was unable to open SYSIN file.

Source: DFSMShsm

System Action: DFSMShsm processing ends with *return-code* 8.

Application Programmer Response: Provide a DD statement for SYSIN.

ARC2004I OPEN OF DDNAME ARCPRINT FAILED

Explanation: ARCPRPDO utility was unable to open ARCPRINT file.

Source: DFSMShsm

System Action: DFSMShsm processing ends with *return-code* 8.

Application Programmer Response: Provide a DD statement for ARCPRINT.

ARC2005I OPEN OF DDNAME ARCOUT FAILED

Explanation: ARCPRPDO utility was unable to open file ARCOUT and copy was specified as an option.

Source: DFSMShsm

System Action: DFSMShsm processing ends with a *return-code* 8.

Application Programmer Response: Provide a DD statement for ARCOUT.

ARC2006I INCORRECT DATE ***yyddd***

Explanation: The ARCPRPDO program was invoked with a START(*yyddd*) or END(yyddd) option. The value *yyddd* is not a valid date.

Source: ARCPRPDO

System Action: ARCPRPDO ends.

Application Programmer Response: Correct the *yyddd* value and invoke ARCPRPDO again.

ARC2007I INCORRECT DATE RANGE

Explanation: The ARCPRPDO program was invoked with both START(*yyddd*) and END(yyddd) options. However, the end date is earlier than the start date.

Source: ARCPRPDO

System Action: ARCPRPDO ends.

Application Programmer Response: Correct the start or end date, or both, and invoke ARCPRPDO again.

ARC2008I INCORRECT TIME ***hhmmss***

Explanation: The ARCPRPDO program was invoked with a START(*yyddd*,*hhmmss*) or END(yyddd,hhmmss) option. The value *hhmmss* is not a valid time.

Source: ARCPRPDO

System Action: ARCPRPDO ends.

Application Programmer Response: Correct the *hhmmss* value and invoke ARCPRPDO again.

ARC2009I INCORRECT TIME RANGE

Explanation: The ARCPRPDO program was invoked with a START(*yyddd*,*hhmmss*) and END(yyddd,hhmmss) options. The start and end dates are equal, but the end time is earlier than the start time.

Source: ARCPRPDO

System Action: ARCPRPDO ends.

Application Programmer Response: Correct the start or end time, or both, and invoke ARCPRPDO again.

ARC2010I RECORD *xxxxxxxx* **HAS AN UNKNOWN TVTYP**

Explanation: ARCPRPDO utility detected unexpected data in the data read from the ARCPDO file.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Ensure the ARCPDO DD points to a valid DFSMShsm PDO trace data set. If the problem continues, contact the IBM Support Center.

ARC2011I INVALID CONTROL CARD DETECTED

Explanation: ARCPRPDO utility detected an unknown formatting control card in the SYSIN data stream.

Source: DFSMShsm

System Action: DFSMShsm processing ends with *return-code* 8.

Application Programmer Response: Correct control parameters in the SYSIN file.

ARC2012I RECORD *xxxxxxxx* **HAS AN UNKNOWN CALLER**

Explanation: ARCPRPDO utility detected an unknown caller in a ENTR trace entry.

Source: DFSMShsm

System Action: DFSMShsm processing ends with *return-code* 8.

Application Programmer Response: Ensure the ARCPDO DD points to a valid DFSMShsm PDO trace data set. If the problem continues, contact the IBM Support Center.

ARC2013I CONTROL PARAMETER IS GREATER THAN 6 BYTES: *xxxxxx*

Explanation: ARCPRPDO utility detected a parameter that should have been 6-bytes long but was longer.

Source: DFSMShsm

System Action: DFSMShsm processing ends with *return-code* 8.

Application Programmer Response: Check the control parameters that are contained in SYSIN. If none of the subparameters are greater than 6-characters long, contact the IBM Support Center.

ARC2099I UNKNOWN MESSAGE *xxxx*

Explanation: ARCPRPDO utility had a request to output an error message for number *xxxx*. This message does not exist.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Contact the IBM Support Center.

ARC6001E DFP IS NOT AT THE PROPER LEVEL TO PERFORM AGGREGATE {BACKUP | BACKUP/RECOVERY}. {AGGREGATE BACKUP IS HELD | FUNCTIONS ARE DISABLED}

Explanation: DFSMS/MVS is not at the proper release level to perform the tasks necessary to complete the function.

Source: DFSMShsm

System Action: If the required level of DFSMS/MVS is not installed, aggregate backup is held. Aggregate recovery can run with a lower release level of DFSMS/MVS installed than aggregate backup. If the level of DFSMS/MVS required to run aggregate recovery is not installed, both aggregate backup and recovery are disabled. When aggregate backup and recovery are disabled, subsequent ABACKUP, ARECOVER, and DEFINE ARPOOL commands fail and DFSMShsm processing continues without ABARS.

Application Programmer Response: If the message reads AGGREGATE BACKUP IS HELD, do not issue any ABACKUP commands until the proper level of DFSMS/MVS is installed. If the message reads FUNCTIONS ARE DISABLED, do not issue any ABACKUP or ARECOVER commands until the proper level of DFSMS/MVS is installed.

ARC6002E EITHER XMIT OR VOLUMES IS REQUIRED ON THE ARECOVER DATASETNAME COMMAND. ARECOVER COMMAND IS REJECTED.

Explanation: An ARECOVER command was issued with DATASETNAME specified, but without either an XMIT or VOLUMES parameter specified. This message can also be issued to indicate that both XMIT and VOLUMES were specified when the ARECOVER command was issued with the DATASETNAME parameter. XMIT and VOLUMES are mutually exclusive parameters, one of these must be specified when the ARECOVER command is issued with the DATASETNAME parameter, not both.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command specifying XMIT or VOLUMES.

ARC6003E DFSMSDSS IS NOT AT THE PROPER LEVEL TO PERFORM AGGREGATE BACKUP/RECOVERY, FUNCTIONS ARE DISABLED

Explanation: DFSMSdss is not at the proper release level to perform the tasks necessary to complete the function.

Source: DFSMShsm

System Action: The aggregate backup or aggregate recovery function will be disabled. Subsequent ABACKUP, ARECOVER, and DEFINE ARPOOL commands will fail.

Application Programmer Response: Do not issue any more aggregate backup or aggregate recovery commands until the proper level of DFSMSdss is installed.

ARC6004I *function-asid-msgtext*

Explanation: DFSMShsm has been performing an aggregate backup or aggregate recovery operation. DFSMSdss has been invoked to perform the function. During the process, DFSMSdss issues a message related to the function, and DFSMShsm intercepts the message for retransmission to the DFSMShsm user or to the ABARS activity log.

function value is ABACKUP if issued during aggregate backup.
function value is ARECOVER if issued during aggregate recovery.
asid is the address space ID in hexadecimal of the DFSMShsm secondary address space that is being used to perform the function.
msgtext is the DFSMSdss SYSPRINT record. DFSMSdss messages have a prefix of ADR.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: See “ADR Messages” on page ADR-1 for a description of the DFSMSdss messages.

ARC6005E DASD UNIT TYPE INVALID ON {ABACKUP | ARECOVER} COMMAND, COMMAND FAILED

Explanation: An ABACKUP or ARECOVER command has been issued specifying a DASD unit type. DASD is not supported as a unit type for the aggregate backup output or the aggregate recovery input.

- ABACKUP indicates that the invalid unit type has been specified on an ABACKUP command.
- ARECOVER indicates that the invalid unit type has been specified on an ARECOVER command.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery is not started.

Application Programmer Response: Specify a tape unit type in the ABACKUP or ARECOVER command.

ARC6006E VOLUME *volser* **TO BE ADDED AS DFSMSHSM {PRIMARY | BACKUP | ML1 | ML2 | DUMP} VOLUME ALREADY DEFINED TO AGGREGATE RECOVERY AS {ML1VOL | L0VOL}, ADDVOL FAILED**

Explanation: An ADDVOL command has been entered for the specified *volser.* The ADDVOL command has failed because the *volser* has been previously defined to aggregate recovery via the DEFINE ARPOOL command with a volume type that is incompatible with the volume type on the ADDVOL command.

Source: DFSMShsm

System Action: The ADDVOL command fails. DFSMShsm processing continues.

Application Programmer Response: If this volume is to be ADDVOLed to DFSMShsm, the volume type must be compatible. If the volume should not be in the pool, the DEFINE ARPOOL command can be reissued specifying only those volumes that should be in the pool.

ARC6007E {ABACKUP | ARECOVER} COMMAND REJECTED - REQUIRED PARAMETER = *parm*, NOT SPECIFIED

Explanation: An ABACKUP or ARECOVER command has been issued without specifying one of the required parameters.

- ABACKUP indicates the command is an ABACKUP command.
- ARECOVER indicates the command is an ARECOVER command.
- *parm* indicates the required parameter that has not been specified on the command.
  - VERIFY|EXECUTE is displayed if VERIFY or EXECUTE is not specified on the ABACKUP command. VERIFY and EXECUTE are mutually exclusive parameters. The ABACKUP command requires that either VERIFY or EXECUTE is specified.
  - PREPARE|VERIFY|EXECUTE is displayed if PREPARE, VERIFY, or EXECUTE is not specified on the ARECOVER command. PREPARE, VERIFY, and EXECUTE are mutually exclusive parameters. The ARECOVER command requires that either PREPARE, VERIFY, or EXECUTE is specified.

Source: DFSMShsm

System Action: The command fails. DFSMShsm processing continues.

Application Programmer Response: Reissue the command using all the required parameters.

ARC6008I AGGREGATE BACKUP/RECOVERY PROCNAME = *procname*

Explanation: A QUERY command with the SETSYS or ABARS parameter has been issued. This message displays the name of the procedure to be used to start the ABARS secondary address space.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6009I AGGREGATE BACKUP/RECOVERY MAXADDRESSSPACE = *number*

Explanation: A QUERY command with the SETSYS or ABARS parameter has been issued. This message displays the maximum number of secondary address spaces that DFSMShsm allows to be in concurrent existence, as represented by *number*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6010E VOLUME *volser* TO BE DEFINED TO AGGREGATE RECOVERY AS {ML1VOL | L0VOL} VOLUME, ALREADY ADDED AS {PRIMARY | BACKUP | MIGRATION | ML2 | DUMP} VOLUME, DEFINE FAILED

Explanation: A DEFINE ARPOOL command has been entered with the *volser* specified. The DEFINE has failed because the *volser* has previously been ADDVOLed to DFSMShsm with a volume type that is incompatible with the volume type on the DEFINE command.

Source: DFSMShsm

System Action: The DEFINE command fails. DFSMShsm processing continues.

Application Programmer Response: Reissue the DEFINE command without this volume or DELVOL and then ADDVOL the volume with a compatible volume type.

ARC6011I {ARECOVERREPLACE | NOARECOVERREPLACE} ISSUED FOR AGGREGATE RECOVERY

Explanation: A QUERY command has been issued with the SETSYS or ABARS parameter. This message indicates if the ARECOVERREPLACE or NOARECOVERREPLACE option has been specified on the SETSYS command.

- ARECOVERREPLACE indicates that the REPLACE parameter can be specified on the ARECOVER command.
- NOARECOVERREPLACE indicates that the REPLACE parameter cannot be specified on the ARECOVER command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6012I STOP COMMAND ISSUED AND DFSMSHSM SECONDARY ADDRESS SPACE(S) ACTIVE. STOP WILL TAKE EFFECT WHEN SECONDARY ADDRESS SPACE(S) COMPLETE PROCESSING.

Explanation: A STOP command has been issued and there is at least one ABARS secondary address space that is actively processing an ABACKUP or ARECOVER command. The STOP command takes effect as soon as all ABARS secondary address space processing has been completed.

Source: DFSMShsm

System Action: DFSMShsm will accept no new commands and will end processing as soon as all ABARS secondary address spaces have completed processing.

Application Programmer Response: None.

ARC6013I DEFINE ARPOOL FOR AGGREGATE GROUP = *agname*, SUCCESSFUL

Explanation: A DEFINE ARPOOL command has been issued to define a pool of volumes to be used as target volumes for data sets being recovered during aggregate recovery. The command has been completed successfully.

- *agname* indicates the aggregate group for which the volumes have been defined.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6014E DEFINE ARPOOL FOR AGGREGATE GROUP = ***agname*****, FAILED**

Explanation: A DEFINE ARPOOL command has been issued to define a pool of volumes to be used as target volumes for data sets being recovered during aggregate recovery. The command has failed, and the volumes specified in the DEFINE ARPOOL command will not be included in the volume pool.

- The *agname* indicates the aggregate group for which the volumes have been defined.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: See previous messages to determine the cause of the failure. Reissue the DEFINE ARPOOL command when the problem is resolved.

ARC6015I

Explanation:

ARC6015I ARPOOL NAME = *agname*,

ARC6015I (CONT.) ML1VOLS= *volser1...volsern*,

ARC6015I (CONT.) L0VOLS = *volser1...volsern*

A QUERY ARPOOL(*agname*) command has been issued to determine the volumes assigned to one aggregate recovery volume pool or to all aggregate recovery volume pools. If the *agname* has been specified, the pool for the specified *agname* and the associated volume serials are listed. If the *agname* has not been specified, this message is issued once for each aggregate recovery pool defined to DFSMShsm. All pools and the associated volumes for each pool are listed.

- *agname* indicates the aggregate group for which the pool has been defined. This is also the name of the pool. If a general pool of volumes has been defined, *agname* is an asterisk (*).
- *volser* indicates the volume serials that are defined to the pool.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6016I *function* **REJECTED, FUNCTIONS ARE DISABLED**

Explanation: An ABACKUP or ARECOVER command has been issued. The command has failed because the minimum system requirements have not been met for aggregate backup or recovery.

function indicates if the ABACKUP or ARECOVER command has been specified.

Source: DFSMShsm

System Action: DFSMShsm fails the command. Aggregate backup and aggregate recovery support are disabled. DFSMShsm processing continues without aggregate backup and aggregate recovery support.

Application Programmer Response: Do not issue any aggregate backup or recovery commands until the system is at the proper level or levels.

Check the command activity log for messages ARC6001E, ARC6002E, and ARC6003E to determine which system levels have not been met. Refer to *DFSMS/MVS DFSMShsm Implementation and Customization Guide* to determine the system levels required for aggregate backup and aggregate recovery support.

ARC6018I AGGREGATE BACKUP/RECOVERY = {ACTIVE | INACTIVE | DISABLED}

Explanation: A QUERY command has been issued with the ACTIVE parameter. This message indicates the status of the aggregate backup and aggregate recovery functions.

ACTIVE indicates the function is processing a request.
INACTIVE indicates the function is not processing a request.
DISABLED indicates the function has been disabled due to insufficient level of supporting software or incorrect system environment.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Check the DFSMShsm command activity log for messages ARC6001E, ARC6002E, and ARC6003E to determine which system levels are not met. Refer to *DFSMS/MVS DFSMShsm Implementation and Customization Guide* to determine the system levels required for aggregate backup and aggregate recovery support.

ARC6019I AGGREGATE BACKUP = {HELD | HELD EOD | NOT HELD}, AGGREGATE RECOVERY = {HELD | HELD EOD | NOT HELD}

Explanation: A QUERY command has been issued with the ACTIVE parameter. This message indicates the status of the aggregate backup and aggregate recovery functions.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6020I {BACKING UP | RECOVERING} {AGGREGATE GROUP *agname* **| CONTROL FILE** *dsname***} FOR USER** *userid* **REQUEST** *request number*

Explanation: A QUERY command has been issued with the ACTIVE parameter.

The aggregate backup or aggregate recovery function is processing the aggregate group or the control file specified in the message.

When the ARECOVER command is issued with the DATASETNAME parameter, the aggregate group name is not known to DFSMShsm until the ARECOVER command has processed for a period of time. The data set name of the control file is displayed if the aggregate group name is not known.

The user initiating the request is identified by *userid*. The request number assigned by DFSMShsm is identified by *request number*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6021E *function* **FOR {AGGREGATE GROUP** *agname* **| CONTROL FILE DATA SET** *data-set-name***} FAILED BECAUSE** *function* **HAS BEEN HELD**

Explanation: A wait-type ABACKUP or ARECOVER command has failed because the requested function has been held. If ABACKUP processing has been held because an insufficient level of DFSMSdfp is installed on the system, both wait-type and nonwait-type ABACKUP requests fail.

AGGREGATE GROUP is displayed when *function* is ABACKUP or ARECOVER when the ARECOVER command has been issued with the *agname* parameter.

CONTROL FILE DATA SET is displayed when *function* is ARECOVER and the ARECOVER command has been issued with the *data-set-name* parameter.

- *agname* is the aggregate group that has been specified in the ABACKUP or ARECOVER command.
- *data-set-name* is the name of the data set that has been specified for the control file in the ARECOVER command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Determine why the requested function has been held. When the function no longer needs to be held, release the function and reissue the ABACKUP or ARECOVER command.

ARC6022I DFSMSHSM ADDRESS SPACE HAS BEEN SET TO {NON-SWAPPABLE | SWAPPABLE}

Explanation: If NON-SWAPPABLE is displayed, an ABACKUP or ARECOVER command has been issued while the DFSMShsm address space is swappable. DFSMShsm sets the DFSMShsm address space to NON-SWAPPABLE so that it can support interaddress space communication.

If SWAPPABLE is displayed, DFSMShsm is reset to its original swappable configuration when ABACKUP or ARECOVER commands are no longer processing or queued.

Source: DFSMShsm

System Action: The DFSMShsm address space remains nonswappable while ABACKUP or ARECOVER commands are processing or queued. DFSMShsm processing continues.

Application Programmer Response: None.

ARC6023E INCORRECT DFSMSHSM SECONDARY ADDRESS SPACE INVOCATION

Explanation: An ABARS secondary address space has been incorrectly started with the MVS START command issued from the system console.

Source: DFSMShsm

System Action: The ABARS secondary address space ends without establishing communications with the DFSMShsm primary address space.

Issued By:ABARS secondary address space to the operator console.

Application Programmer Response: None.

Operator Response: If DFSMShsm is not active, it must be started. If DFSMShsm is active, issue the appropriate DFSMShsm command, which is either ABACKUP or ARECOVER.

ARC6024I ADDRESS SPACE *asid* STARTED USING PROCNAME = *procedurename.identifier*

Explanation: An ABARS secondary address space has been started.

- *asid* is the address space ID in hexadecimal of the started DFSMShsm secondary address space.
- *procedurename.identifier* is the started task name under which the secondary address space is running.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6025E {ALLOCATION | OPEN | I/O} ERROR OCCURRED IN WRITING THE ACTIVITY LOG DATA SET *data-set-name1* - AGGREGATE {BACKUP | RECOVERY} FAILED FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name2*}

Explanation: A DASD data set has been requested for the activity log, and either the allocation or open routine has failed, or an I/O error condition has been detected while writing to the data set. A SYSOUT data set could not be allocated for the activity log to recover from the error.

If a SYSOUT data set has been requested for the activity log, the SYSOUT data set could not be allocated or opened.

The message is issued to the operator console and the task ends.

- ALLOCATION indicates that the activity log could not be allocated.
- OPEN indicates that the activity log could not be opened.
- I/O indicates that the activity log received an I/O error while writing the data set.
- *data-set-name1* is the name of the activity log data set that received the error if DASD, or SYSOUT is the name if a SYSOUT activity log has been requested.
- BACKUP indicates that the error has occurred during aggregate backup processing.
- RECOVERY indicates that the error has occurred during aggregate recovery processing.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed.
- CONTROL FILE DATA SET *data-set-name2* is the name of the control file used in the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery fails. This message is issued by the ABARS secondary address space to the operator console.

Application Programmer Response: A programming or system problem is indicated.

Operator Response: Notify your system programmer.

ARC6026I {ALLOCATION | OPEN | I/O} ERROR OCCURRED IN WRITING THE ACTIVITY LOG DATA SET *data-set-name1* DURING AGGREGATE {BACKUP | RECOVERY} FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name2*}

Explanation: A DASD data set has been requested for the activity log and either the allocation or open routine has failed, or an I/O error has been detected while writing to the data set. A new activity log has been allocated as a SYSOUT data set. The message is issued to the operator console and is written to the SYSOUT data set allocated for the new activity log.

- ALLOCATION indicates that the DASD activity log could not be allocated.
- OPEN indicates that the DASD activity log could not be opened.
- I/O indicates that the DASD activity log has received an I/O error while writing the data set.
- *data-set-name1* is the name of the activity log data set that has received the error.
- BACKUP indicates that the error has occurred during aggregate backup processing.

- RECOVERY indicates that the error has occurred during aggregate recovery processing.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed.
- CONTROL FILE DATA SET *data-set-name2* is the name of the control file being used in the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery continues. The activity log is allocated to SYSOUT. This message is issued by the ABARS secondary address space to the operator console and to the activity log.

Application Programmer Response: None.

Operator Response: Notify your system programmer.

ARC6027I DFSMSHSM PRIMARY ADDRESS SPACE ISSUED '*command*' TO CANCEL A SECONDARY ADDRESS SPACE. [AGGREGATE {BACKUP | RECOVERY} IS HELD.]

Explanation: The DFSMShsm primary address space has issued an MVS CANCEL command to cancel a secondary address space. The time allotted for an address space to start has been exceeded, the ABARS control task has abnormally ended (abended) when secondary address spaces are active, or a recursive abend has occurred in the ABARS subtasks when the secondary address spaces are active.

- *command* indicates which ABARS secondary address space has been cancelled. An example is as follows:

  “C ABARnntt,A=asid”
  where:
  C = MVS CANCEL command
  ABAR = DFSMShsm aggregate backup and aggregate recovery function
  nn = task number from 01 to 15
  tt = individual time stamp
  A = address space ID
  asid = address space number

Source: DFSMShsm

System Action: The aggregate backup or aggregate recovery function is held if the CANCEL is a result of a secondary address space not starting within an allotted time interval. This is dependent upon which command has been processing. In this case the command that has been processing will *not* be purged from DFSMShsm’s work queue. If the cancel is issued as a result of an abnormal end, the affected function is not held, but the command being processed *will* be purged from DFSMShsm’s work queue. DFSMShsm processing continues.

Application Programmer Response: In the case of a timing failure, verify that the procedure name used by DFSMShsm to start a secondary address space exists. In this case, the aggregate backup or aggregate recovery command remains on the queue. When the problem is corrected, release the function that has been held. If the message has been issued as a result of a timing problem, verify that the maximum amount of time allowed for an ABARS secondary address space to start is sufficient.

```
(This is verified by using the DFSMShsm DISPLAY command
for .ARCABRCB.+3C8.)
```

This full word contains the hexadecimal equivalent of 300 (`X'12C'`), which signifies that 5 minutes are allowed for the ABARS secondary address space to start. This field is patchable by the DFSMShsm PATCH command: PATCH .ABRCB.+3C8 x‘nnnnnnnn’, where ‘nnnnnnnn’ is the hexadecimal time value in seconds that you are allowing for ABARS’ secondary address spaces to start.

Operator Response: Ensure that the address space for which the MVS CANCEL command has been issued is cancelled. If the task is still active in the system, issue an MVS FORCE command to cancel the address space.

ARC6028E VOLUME *volser* TO BE DEFINED TO AGGREGATE RECOVERY AS {ML1VOL | L0VOL} VOLUME ALREADY DEFINED TO AGGREGATE RECOVERY AS {ML1VOL | L0VOL}; DEFINE FAILED.

Explanation: A DEFINE ARPOOL command has been entered with the *volser* specified. The DEFINE command has failed because the *volser* has been previously DEFINEd to DFSMShsm with a volume type that is incompatible with the volume type on this DEFINE command or the DEFINE command has used the same *volser* with both the ML1VOLS and L0VOLS parameters.

Source: DFSMShsm

System Action: The DEFINE command fails. DFSMShsm processing continues.

Application Programmer Response: Correct conflicts and reissue this command.

ARC6029E VOLUME *volser* TO BE DEFINED TO AGGREGATE RECOVERY AS {ML1VOL | L0VOL} VOLUME IS AN SMS MANAGED VOLUME; DEFINE FAILED.

Explanation: A DEFINE ARPOOL command has been entered with the *volser* specified. The DEFINE command has failed because the *volser* is an SMS-managed volume.

Source: DFSMShsm

System Action: The DEFINE command fails. DFSMShsm processing continues.

Application Programmer Response: Reissue the DEFINE command without this volume.

ARC6030I ACTIVITY LOG FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name1*} WILL BE ROUTED TO {*datasetname2* | SYSOUT=*class*}

Explanation: An activity log has been allocated to either DASD or SYSOUT. This message informs the issuer of the ABACKUP or ARECOVER command of the activity log data set name or SYSOUT class.

- *agname* is the name of the aggregate group that is being processed by aggregate backup.
- *data-set-name1* is the name of the control file data set that is being processed by aggregate recovery.
- *data-set-name2* is the name of the activity log data set when allocated to DASD.
- SYSOUT=*class* indicates that the activity log has been allocated to SYSOUT in the specified class *class*.

Source: DFSMShsm

System Action: DFSMShsm processing continues. This message is issued to the user that has entered the ABACKUP or ARECOVER command.

Application Programmer Response: None.

ARC6031E SECONDARY ADDRESS SPACE START COMMAND FAILED. AGGREGATE BACKUP/RECOVERY IS HELD

Explanation: DFSMShsm has attempted to start a secondary address space as a result of an ABACKUP or ARECOVER command being issued. The internally generated MVS START command has failed.

Source: DFSMShsm

System Action: Aggregate backup and aggregate recovery are held. Other DFSMShsm functions are not affected.

Application Programmer Response: Do not issue any new ABACKUP or ARECOVER commands until the problem is resolved. Once the problem is corrected, release aggregate backup and aggregate recovery and then reissue the commands.

This error will most likely occur if adequate system storage is not available or the system has exceeded the maximum number of address spaces allowed by MVS.

ARC6032E FAILURE IN CANCELLING A DFSMSHSM SECONDARY ADDRESS SPACE USING *'command'***. AGGREGATE {BACKUP | RECOVERY} IS HELD**

Explanation: A failure has occurred in issuing a command to cancel a secondary address space during aggregate backup or aggregate recovery processing.

- *command* indicates the command being issued. This will give the *taskname.identifier* that is associated with the secondary address space being cancelled. *command* also gives the hexadecimal address space ID of the address space it has been attempting to cancel.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery is held. Other DFSMShsm processing continues.

Operator Response: If the address space is still active, use either the MVS CANCEL or FORCE command, using the identifier displayed in the error message. This should cause the address space to be cancelled.

Application Programmer Response: This error is most likely a timing problem. The address space is probably in a state where it cannot be cancelled at this time. Manually issuing the MVS CANCEL or FORCE command should allow the address space to be cancelled.

Once the failure is corrected, release the affected function and reissue the command.

ARC6033I AGGREGATE RECOVERY UNIT NAME = *unittype*

Explanation: A QUERY command has been issued with the SETSYS or ABARS parameter. The unit type that has been used to recover nonmigrated data sets to tape during an aggregate recovery is indicated by *unittype*.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6034E DFSMSDSS {DUMP | RESTORE} RETURN CODE *return-code* **RECEIVED DURING AGGREGATE {BACKUP | RECOVERY}**

Explanation: DFSMSdss has returned a nonzero return code during aggregate backup or aggregate recovery processing.

- DUMP indicates DFSMSdss has been invoked by aggregate backup to dump data sets.
- RESTORE indicates DFSMSdss has been invoked by aggregate recovery to restore data sets.
- *return-code* is the return code received from DFSMSdss.

Source: DFSMShsm

System Action: Return code 4 indicates that the DFSMSdss operation has completed, but a warning (W) message has been issued during processing. In this case, aggregate backup or aggregate recovery continues but completes with a nonzero return code.

Issued By:ABARS secondary address space.

Application Programmer Response: Refer to message ARC6004I to determine the cause of the DFSMSdss nonzero return code. Message ARC6004I contains the text of the messages issued by DFSMSdss that describe the error.

Resolve the problem and reissue the ABACKUP or ARECOVER command if it is deemed necessary based on the associated DFSMSdss messages.

ARC6035E *taskname* **TASK ABENDED, CODE** *ffsssuuu* **IN MODULE** *modname* **AT OFFSET** *offset***, STORAGE LOCATION** *location*

Explanation: A DFSMShsm task has abnormally ended (abended).

- *taskname* is the name of the failing task.
- *ffsssuuu* is the abend code.
  - *ff* is the name of the indicator flags.
  - *sss* is the system completion code.
  - *uuu* is the user completion code.
- *modname* is the name of the abend module.
- *offset* is the abend module offset.
- *location* is the address where the abend has occurred.

This message is not issued when ABARS secondary address space is cancelled via an MVS CANCEL command.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery fails.

Application Programmer Response: Reissue the ABACKUP or ARECOVER command after the error is resolved.

ARC6036I AGGREGATE {BACKUP | RECOVERY | BACKUP/RECOVERY} *parmname* **=** *parmvalue*

Explanation: A QUERY command with the SETSYS or ABARS parameter has been issued.

- BACKUP indicates that the parameter applies to aggregate backup.
- RECOVERY indicates that the parameter applies to aggregate recovery.
- BACKUP/RECOVERY indicates that the value applies to both aggregate backup and aggregate recovery.
- *parmname* = indicates the SETSYS parameter that applies to ABARS that is being displayed.

  - PERCENTUTILIZED indicates the percent of the DASD that is allowed to be filled by DFSMSdss during ARECOVER processing. This can be anywhere from 1 to 100 percent of the DASD.
  - ABARSVOLCOUNT indicates the method for determining volume count for SMS target data set allocations performed by DFSMSdss. This parameter affects only the ARECOVER of data sets dumped from primary volumes (L0 data sets).
  - ABARSOPTIMIZE allows an installation to adjust performance when it backs up level 0 DASD data sets specified in the INCLUDE list.
  - ABARSTGTGDS indicates to ARECOVER processing how to set the TGTGDS parameter that is passed to DFSMSdss when restoring SMS-managed generation data sets.
  - ABARSDELETEACTIVITY indicates that DFSMShsm automatically deletes the ABARS activity log during ABARS roll off processing or during EXPIREBV ABARSVERSIONS processing when the log resides on DASD.
  - ABARSTAPES specifies whether ABACKUP stacks the output files onto a minimum number of tape volumes and that ARECOVER continue processing as if the ABACKUP output files are stacked. ARECOVER fails if it determines that the files are not stacked.
  - ABARSKIP specifies whether data sets protected by Peer-to-Peer Remote Copy (PPRC) or eXtended Remote Copy (XRC) should be skipped by ABACKUP.
- *parmvalue* = indicates the value assigned to the SETSYS parameter specified in *parmname*.
  - *percent* indicates the value assigned by the PERCENTUTILIZED parameter of the ARECOVER command, or the SETSYS ARECOVERPERCENTUTILIZED default value of 80%.
  - The following ABARSVOLCOUNT values are valid:
    - *NONE* indicates that the ABARSVOLCOUNT parameter is not passed to DFSMSdss.
    - ANY indicates that the ABARSVOLCOUNT parameter is passed to DFSMSdss.
  - The following ABARSOPTIMIZE values are valid:
    - If 1, then DFSMSdss reads one track at a time.
    - If 2, then DFSMSdss reads two tracks at a time.
    - If 3, then DFSMSdss reads five tracks at a time.
    - If 4, then DFSMSdss reads one cylinder at a time.
  - The following ABARSTGTGDS values are valid:
    - ACTIVE indicates that SMS-managed generation data sets are assigned the active status; for example, rolled into the GDG base.
    - DEFERRED indicates that SMS-managed generation data sets are assigned the deferred status.
    - ROLLEDOFF indicates that SMS-managed generation data sets are assigned the rolled off status.
    - SOURCE indicates that SMS-managed generation data sets are assigned the same status as the source data set.
  - The following ABARSDELETEACTIVITY values are valid:
    - YES indicates whether the ABARS activity log will be deleted during ABARS roll off processing or during EXPIREBV ABARSVERSIONS processing.
    - NO indicates that no automatic deletion is performed. NO is the default.
  - The following ABARSTAPE values are valid:
    - STACK indicates to ABACKUP to stack the ABACKUP output files on a minimum number of tape volumes.
    - NOSTACK indicates to ABACKUP not to stack the ABACKUP output files to DASD.
  - The following ABARSKIP values are valid:
    - PPRC, XRC, directs ABACKUP to skip data sets protected by either PPRC or XRC.
    - PPRC, NOXRC directs ABACKUP to skip only data sets protected by PPRC.
    - NOPPRC, XRC directs ABACKUP to skip only data sets protected by XRC.
    - NOPPRC, NOXRC directs ABACKUP not to skip data sets protected by either PPRC or XRC.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ARC6051I AN INSTRUCTION DATA SET WAS NOT SPECIFIED FOR AGGREGATE GROUP *agname*

Explanation: An instruction data set name has not been specified for the aggregate group.

- *agname* is the name of the aggregate group.

Source: DFSMShsm

System Action: Aggregate backup processing continues.

Application Programmer Response: If an instruction data set is desired for the aggregate group, redefine the aggregate group with an instruction data set name included. The instruction data set specified must be allocated and have any instructions to the recovery site edited into it. Reissue the ABACKUP command. Aggregate backup defines a dummy instruction data set if one is not specified. If an instruction data set is not desired, no action is required and the aggregate backup processing can continue.

ARC6052E SELECTION DATA SET *data-set-name***[(***membername***)] IN AGGREGATE GROUP** *agname* **NOT FOUND - AGGREGATE BACKUP FAILED**

Explanation: A data set in the aggregate group has been specified as a selection data set and could not be found. Either the name of the selection data set has been misspelled or it has not been created prior to issuing the ABACKUP command.

- *data-set-name* is the name of the selection data set that has not been found.
- *membername* is the member of the selection data set that has not been found if the selection data set is a partitioned data set.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: DFSMShsm ends ABACKUP processing for the specified aggregate group.

Application Programmer Response: Determine if the name of the selection data set is spelled incorrectly or if the data set actually exists. If the name of the selection data set is spelled incorrectly, use the ISMF panels to correct the aggregate group. This change will require that the SMS configuration be reactivated via the SETSMS command. Reissue the ABACKUP command after correcting the aggregate group. If the selection data set does not exist, it must be allocated and the data sets to be backed up must be entered into the selection data set. Reissue the ABACKUP command.

ARC6053E {AGGREGATE GROUP | MANAGEMENT CLASS} *name* **NOT FOUND - AGGREGATE BACKUP FAILED**

Explanation: During an aggregate backup, an attempt has been made to read the required SMS construct.

- AGGREGATE GROUP indicates the aggregate group specified in the ABACKUP command does not exist. Either the aggregate group name has been misspelled or it has not been defined prior to issuing the ABACKUP command.
- MANAGEMENT CLASS indicates the management class specified in the aggregate group does not exist. Either the management class name has been misspelled or it has not been defined prior to issuing the ABACKUP command.
- *name* is the name of the SMS construct being processed.

Source: DFSMShsm

System Action: DFSMShsm ends ABACKUP processing for the specified aggregate group.

Application Programmer Response: Determine if the construct name has been misspelled or if the specified construct has been defined at all.

- Use the ISMF panels to determine the correct name of the construct. If the name was spelled incorrectly on the ABACKUP command, reissue the ABACKUP command using the correct name of the aggregate group. If the name is spelled incorrectly for one of the constructs, correct the appropriate construct.
- If the SMS construct has not been defined at all, use the appropriate ISMF panels to define the SMS construct. Reissue the ABACKUP command.

ARC6054I AGGREGATE BACKUP STARTING FOR AGGREGATE GROUP *agname***, AT** *time***, STARTED TASK =** *procedurename.identifier*

Explanation: An aggregate backup function has been started to process the aggregate group.

- *agname* is the name of the aggregate group being processed.
- *time* is the time of day the aggregate backup has been started. It is expressed as hh:mm:ss (hours, minutes, seconds).

  Note: The time stamp in this message may not be the same from the ABARS secondary address space and the DFSMShsm primary address space.
- *procedurename.identifier* is the started task name that the secondary address space is running under.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Issued By: This message is issued by both the DFSMShsm primary address space and the ABARS secondary address space so that it will be entered into their respective activity logs. For the DFSMShsm primary address space this message is issued only to the command activity log. For the ABARS secondary address space this message is issued to the activity log and to the user that entered the ABACKUP command.

Application Programmer Response: None.

ARC6055I AGGREGATE BACKUP HAS COMPLETED FOR AGGREGATE GROUP *agname***, AT** *time***, RETCODE =** *nnn*

Explanation: DFSMShsm completed an aggregate backup function.

If the RETCODE is zero, the aggregate backup completed successfully. If the RETCODE is nonzero, an error condition occurred and RETCODE is set to *nnn*. Refer to message ARC6*nnn* for an explanation of the error condition.

Note: The message referred to indicates the first error encountered that causes aggregate backup to fail. Other error conditions encountered afterward would also cause aggregate backup to fail. The ABARS secondary address space activity log indicates all error occurrences.

- *agname* is the name of the aggregate group processed.
- *time* is the time of day aggregate backup ended. It is expressed as hh:mm:ss (hours, minutes, seconds).

  Note: The time stamp in this message may not be the same from the ABARS secondary address space and the DFSMShsm primary address space.
- *nnn* indicates the first error condition encountered by the aggregate backup function.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Issued By: This message is issued by both the DFSMShsm primary address space and the ABARS secondary address space, so it is entered into their respective activity logs. For the DFSMShsm primary address space this message is issued to the command activity log. The message is also routed to the console in order to facilitate automatic operations usage.

Application Programmer Response: If the RETCODE value is nonzero, refer to message ARC6*nnn* in the ABARS secondary address space activity log for this aggregate backup task to determine the specific error condition that caused the failure.

ARC6056E SPECIFIED INSTRUCTION DATA SET *data-set-name* **NOT FOUND FOR AGGREGATE GROUP** *agname* **- AGGREGATE BACKUP FAILED**

Explanation: The instruction data set that has been specified in the aggregate group could not be found. Either the data set name has been misspelled or the data set has not been allocated before issuing the ABACKUP command.

- *data-set-name* is the name of the instruction data set specified in the aggregate group.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: DFSMShsm ends ABACKUP processing for the specified aggregate group.

Application Programmer Response: Determine if the instruction data set name is spelled incorrectly or if it is not allocated.

- Use the aggregate group ISMF panel to determine the name of the instruction data set as it is defined to the aggregate group. If the name of the instruction data set is different, change the name of the instruction data set in the aggregate group. This will require that the SMS configuration be reactivated via the SETSMS command. Reissue the ABACKUP command.
- If the instruction data set is not allocated, allocate the instruction data set, insert the desired information and instructions in the instruction data set, and reissue the ABACKUP command. This does *not* require reactivation of the SMS configuration.

ARC6057E {ALLOCATION | OPEN | I/O} ERROR OCCURRED IN READING SELECTION DATA SET *data-set-name***[(***membername***)] FOR AGGREGATE GROUP** *agname* **- AGGREGATE BACKUP FAILED**

Explanation: An allocation, OPEN, or I/O error has occurred in attempting to read a selection data set.

- ALLOCATION indicates that the data set has received an allocation error.
- OPEN indicates that the data set has received an open error.
- I/O indicates that the data set has received an I/O error in reading the data set.
- *data-set-name* is the name of the selection data set that received the error.
- *membername* is the member of the selection data set that has received the error when the selection data set is a partitioned data set.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: For specific error return codes and reason codes associated with the failure, refer to previous message ARC0645I or ARC6164E in the ABARS secondary address space activity log for this aggregate group.

Reissue the ABACKUP command after the error is corrected.

ARC6058E {ALLOCATION | OPEN | I/O} ERROR OCCURRED IN WRITING THE {CONTROL FILE | DATA FILE} DATA SET *data-set-name***, FOR AGGREGATE GROUP** *agname* **- AGGREGATE BACKUP FAILED**

Explanation: An allocation, open, or I/O error has occurred in attempting to write to one of the ABACKUP output data sets.

- ALLOCATION indicates that the data set has received an allocation error.
- OPEN indicates that the data set has received an open error.
- I/O indicates that the data set has received an I/O error while writing to the data set.
- CONTROL FILE indicates that the output control file has received the error.
- DATA FILE indicates that the output data file has received the error.
- *data-set-name* is the name of the data set that has received the error.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: For specific error return codes and reason codes associated with the failure, refer to previous message ARC0645I or ARC6164E in the ABARS secondary address space activity log for this aggregate group.

Reissue the ABACKUP command after the error is corrected.

ARC6059E ERROR OCCURRED IN OBTAINING DFSMSHSM CONTROL DATA SET RECORDS FOR DATA SET *data-set-name* **BEING PROCESSED FOR AGGREGATE GROUP** *agname* **- RECORD TYPE THAT FAILED IS {MCA | MCD | MCO | MCV}**

Explanation: An error has occurred in attempting to read the DFSMShsm migration control data set during aggregate backup.

- *data-set-name* is the name of the data set whose DFSMShsm CDS records have received the error.
- *agname* is the name of the aggregate group being processed by this ABACKUP command.
- MCA indicates the DFSMShsm control data set record that has received the error is an MCA control data set record.
- MCD indicates the DFSMShsm control data set record that has received the error is an MCD control data set record.
- MCO indicates the DFSMShsm control data set record that has received the error is an MCO control data set record.
- MCV insert indicates the DFSMShsm control data set record that received the error is an MCV control data set record.

Source: DFSMShsm

System Action: If installation-wide exit ARCBEEXT is active and indicates that the data set should be bypassed, aggregate backup continues, bypassing this data set. If installation-wide exit ARCBEEXT is not active or it does not indicate that the data set should be skipped, aggregate backup fails after the completion of the verification process.

Issued By: ABARS secondary address space.

Application Programmer Response: Reissue the aggregate backup command after the error is corrected. If the record type is MCV, ensure that the volume the data set resides on is ADDVOLed to DFSMShsm. Refer to message ARC0184I, issued by the DFSMShsm primary address space. The DFSMShsm primary address space command activity log can be used for further information.

ARC6060I VOLUMES USED FOR DATA FILE *data-set-name* **DURING AGGREGATE BACKUP FOR AGGREGATE GROUP** *agname* **ARE:** *volser1* **[,***...volsern***]**

Explanation: The volumes that have been used by aggregate backup to contain the data file information are listed.

- *data-set-name* is the data set name of the data file.
- *agname* is the aggregate group that has been processed.
- *volser*,...*volsern* are the volume serials of the volumes used to contain the data file information.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6061I VOLUMES USED FOR CONTROL FILE *data-set-name* **DURING AGGREGATE BACKUP FOR AGGREGATE GROUP** *agname* **ARE:** *volser1* **[,***...volsern***]**

Explanation: The volumes that have been used by aggregate backup to contain the control file information are listed.

- *data-set-name* is the data set name of the control file.
- *agname* is the aggregate group that has been processed.
- *volser*,...*volsern* are the volume serials of the volumes used to contain the control file information.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6062I VOLUMES USED FOR ACCOMPANY DATA SETS DURING AGGREGATE BACKUP FOR AGGREGATE GROUP *agname* **ARE:** *volser1* **[,***...volsern***]**

Explanation: The message lists he volumes that have been used by aggregate backup for accompany data sets. These volumes are to be transported with the aggregate backup package.

- *agname* is the aggregate group that was being processed.
- *volser,...volsern* are the volume serials of the volumes used for the accompany data sets.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6063I INSTRUCTION DATA SET NAME FOR AGGREGATE GROUP *agname* **IS** *data-set-name*

Explanation: An instruction data set has been specified for the aggregate group. The name of the aggregate group and the instruction data set are listed.

- *agname* is the aggregate group that has been processed.
- *data-set-name* is the name of the instruction data set that has been specified by the installation in the aggregate group.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6064I DATA SET *data-set-name* **HAS BEEN SUCCESSFULLY BACKED UP DURING AGGREGATE BACKUP FOR AGGREGATE GROUP** *agname*

Explanation: A data set has been successfully backed up by the aggregate backup function.

- *data-set-name* is the name of the data set that has been backed up.
- *agname* is the aggregate group that has been processed.

This message is only issued for migrated or tape data sets. Data sets processed by DFSMSdss will be listed under message ARC6004I.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6065E AGGREGATE GROUP *agname* **CURRENTLY PROCESSING - ABACKUP COMMAND FAILED**

Explanation: A wait-type ABACKUP command has been issued to process an aggregate group that is already processing on the system. Aggregate backup cannot process the same aggregate group simultaneously in multiple address spaces.

- *agname* is the aggregate group that has been processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Wait until the current processing of the aggregate group is complete. If the aggregate group is to be processed again, reissue the ABACKUP command.

ARC6066E CATALOG DATA SET *data-set-name1* **HAS BEEN INCLUDED IN SELECTION DATA SET** *data-set-name2* **FOR AGGREGATE GROUP** *agname* **- AGGREGATE BACKUP FAILED**

Explanation: An integrated catalog facility (ICF) catalog has been specified in the include or accompany list, or a catalog not supported by the ABACKUP command has been included in the selection data set being processed. Only ICF user catalogs in the allocate list are supported during the aggregate backup process. The aggregate backup fails.

- *data-set-name1* is the name of the catalog that is listed in the selection data set.
- *data-set-name2* is the name of the selection data set that contains the catalog name.
- *agname* is the aggregate group that is being processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Edit the selection data set that contains the catalog name and delete the catalog name from the list of data sets. Reissue the ABACKUP command.

ARC6067E SDSP *sdspname* **COULD NOT BE ALLOCATED FOR DATA SET** *data-set-name* **FOR AGGREGATE GROUP** *agname*

Explanation: An attempt has been made to allocate an SDSP data set for aggregate backup processing. The allocation has been unsuccessfully tried every 5 seconds for 15 minutes. In addition, the DFSMShsm primary address space has been called to have migration relinquish the SDSP every minute.

- *sdspname* is the name of the SDSP data set that could not be allocated.
- *data-set-name* is the name of the data set that resides in the SDSP that could not be allocated. This is the data set that is to have been backed up by the aggregate backup processing.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: After the final unsuccessful attempt, if an installation-wide exit ARCBEEXT is not active or indicates that processing is to continue normally, aggregate backup fails. If installation-wide exit ARCBEEXT is active and indicates that the data set should be bypassed, aggregate backup continues, bypassing this data set.

Application Programmer Response: Determine why the SDSP could not be allocated. The most common reason is that the DFSMShsm primary address space has the SDSP allocated for migration or recall. Refer to message ARC6164E for return codes and information codes to determine the cause of the failure. When the situation that caused the allocation failure is corrected, reissue the ABACKUP command.

ARC6068I SELECTION DATA SET *data-set-name***[(***membername***)] IS EMPTY FOR AGGREGATE BACKUP OF AGGREGATE GROUP** *agname*

Explanation: During aggregate backup, the specified selection data set has been found to be empty. The data set has been ignored.

- *data-set-name* is the name of the selection data set that has received the attention message.

- *membername* is the member of the selection data set that has received the attention message when the selection data set is a partitioned data set.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup continues.

Application Programmer Response: None.

ARC6069E ALL SPECIFIED SELECTION DATA SETS ARE EMPTY FOR AGGREGATE GROUP ***agname***

Explanation: All selection data sets that have been specified for the aggregate group are empty.

- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: Define the selection data sets properly, ensuring that each contains the INCLUDE keyword and a valid parameter list. Then reissue the ABACKUP command.

ARC6070E DATA SET ***data-set-name*** **WAS SPECIFIED IN BOTH THE {INCLUDE | ACCOMPANY | ALLOCATE} and {ACCOMPANY | ALLOCATE} LISTS. AGGREGATE BACKUP FAILED FOR AGGREGATE GROUP** ***agname*****.**

Explanation: The data set name has been specified in more than one of the following data set lists: INCLUDE, ACCOMPANY, ALLOCATE. Aggregate backup processing will fail.

- *data-set-name* is the name of the data set that has been specified in more than one of the above-mentioned data set lists.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Edit the selection data set so that the same data set name is not specified in more than one of the following data set lists: INCLUDE, ACCOMPANY, ALLOCATE. Reissue the ABACKUP command.

ARC6071I VOLUMES USED FOR INSTRUCTION/ACTIVITY LOG FILE ***data-set-name*** **DURING AGGREGATE BACKUP FOR AGGREGATE GROUP** ***agname*** **ARE:** ***volser1*** **[,*...volsern*]**

Explanation: The volumes that have been used by aggregate backup to contain either the instruction data set information or the ABACKUP activity log information, or both, are listed.

- *data-set-name* is the name of the instruction/activity log file.
- *agname* is the aggregate group that has been processed.
- *volser*,...*volsern* are the volume serials of the volumes used to contain either or both the instruction data set information and ABACKUP activity log information.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6072I THE MIGRATED DATA SET ***data-set-name*** **SPECIFIED IN THE ALLOCATE LIST WILL BE RECALLED**

Explanation: A data set that has been specified in the ALLOCATE list is migrated. This data set will be recalled to enable the aggregate backup function to obtain the information needed for allocation.

- *data-set-name* is the name of the data set that will be recalled.

Source: DFSMShsm

System Action: Aggregate backup continues.

Application Programmer Response: None.

ARC6073E ERROR OCCURRED IN ATTEMPTING TO {ENQUEUE | DEQUEUE} ON DATA SET ***data-set-name*****, AGGREGATE BACKUP FAILED FOR AGGREGATE GROUP** ***agname*****. RETURN CODE=*return-code***

Explanation: All DASD data sets belonging to an aggregate to be backed up must be ENQUEUED and then DEQUEUED to prevent DFSMShsm from processing them while ABACKUP is processing. The ENQUEUE or DEQUEUE has failed for a data set.

- *data-set-name* is the data set that fails the ENQUEUE or DEQUEUE.
- *agname* is the name of the aggregate group being processed.
- *return-code* is the ENQ or DEQ macro return code.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: If an ENQUEUE fails, the DFSMShsm primary address space has been processing a data set that belongs to this aggregate. Ensure that DFSMShsm space maintenance is not active for data sets belonging to this aggregate and reissue the ABACKUP command. If a DEQUEUE fails, see your system programmer.

ARC6074E ERROR IN ADDING TAPE VOLUME ***volser*** **TO ABARS RACF TAPE VOLUME SET, RETURN CODE =** ***rc*****, REASON CODE =** ***reas***

Explanation: RACF is installed in the computing system and is active. The system-wide RACF tape volume protection option is in effect. DFSMShsm makes an attempt to add the tape volume serial number of *volser* to the ABARS tape volume set of HSMABR and fails.

- If the return code is 24, DFSMShsm has intercepted a 585 abnormal end (abend).
- If the return code is 20, RACF has failed the request or the issuance of the RACDEF SVC has resulted in a nonzero return code.
- If DFSMShsm has intercepted an abend, ABEND is indicated instead of a reason code.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: This message informs you of an error that has occurred when DFSMShsm has attempted to add a tape volume to the ABARS RACF tape volume set.

- If the return code is 24, an ICH409I message will also be issued. The RACF reason code is *xx*. For a description of the RACF abend and reason codes, see *OS/390 Security Server (RACF) Messages and Codes*.
- If the return code is 20 and an abend did not occur, the reason code is one of the possible return codes from the RACDEF SVC

in *OS/390 MVS Programming: Authorized Assembler Services Guide*

ARC6075E TAPE VOLUME *volser* SUCCESSFULLY ADDED TO ABARS RACF TAPE VOLUME SET

Explanation: RACF is installed in the computing system and is active. The system-wide RACF tape volume protection option is in effect. The volume serial number of *volser* has been successfully added to the ABARS RACF tape volume set of HSMABR.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: This message informs you that DFSMShsm is RACF protecting one of its tape volumes. An authorized user can determine what is currently in the ABARS RACF tape volume set by issuing the following RACF command:

```
RLIST TAPEVOL HSMABR ALL
```

ARC6076E TAPE VOLUME *volser* REJECTED, VOLUME IS PROTECTED BUT DOES NOT APPEAR IN ABARS RACF TAPE VOLUME SET

Explanation: RACF is installed in the computing system and is active. The system-wide RACF tape volume protection option is in effect. DFSMShsm has selected the volume *volser* for use during aggregate backup or recovery processing and the tape is RACF protected, but does not appear in the ABARS RACF tape volume set.

Source: DFSMShsm

System Action: DFSMShsm processing continues. A new tape mount will be requested.

Application Programmer Response: The system programmer or storage administrator responsible for DFSMShsm should contact the RACF security administrator for help in resolving this problem.

ARC6077E TAPE VOLUME *volser* REJECTED, VOLUME ALREADY IN ABARS RACF TAPE VOLUME SET

Explanation: RACF is installed in the computing system and is active. The system-wide RACF tape volume protection option is in effect. DFSMShsm has selected the volume *volser* for use during aggregate backup or recovery processing and the tape is RACF protected in the ABARS RACF tape volume set. ABARS will reject the tape volume if it is already in the ABARS RACF tape volume set. In this case it is assumed that it has been added to RACF during a previous aggregate backup or aggregate recovery process.

Source: DFSMShsm

System Action: DFSMShsm processing continues. A new tape mount will be requested.

Application Programmer Response: The system programmer or storage administrator responsible for DFSMShsm should contact the RACF security administrator for help in resolving this problem.

ARC6078I {DEFINITION | DELETION} OF RACF PROFILE FAILED FOR DATA SET *data-set-name1* USING CONTROL FILE DATA SET *datasetname2*, RACF RETURN CODE = *return-code*, REASON CODE = *reason-code*

Explanation: During aggregate recovery, DFSMShsm has attempted to either define or delete a RACF profile for a RACF-indicated migrated data set. The definition or deletion of the RACF profile has failed.

- DEFINITION indicates that an attempt to define a RACF profile has failed for a RACF-indicated migrated data set.
- DELETION indicates that a RACF profile has been defined for a RACF-indicated migrated data set, but subsequent recovery of the data set has failed. An attempt to delete the RACF profile has failed.
- *data-set-name1* is the name of the migrated data set being recovered.
- *data-set-name2* is the name of the control file that has been specified in the ARECOVER command.
- *return-code* is the RACF return code.
- *reason-code* is the RACF reason code.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: If the failure has occurred in defining a RACF profile and the data set has been recovered, you must define a RACF profile to allow access to this data set. If the failure has occurred in deleting a RACF profile, a RACF profile has been defined; however, the data set has not been recovered. This RACF profile should be deleted before attempting another ARECOVER.

ARC6079E DELETE OF (CONTROL | DATA | INSTRUCTION/ACTIVITY LOG) FILE *data-set-name* FOR AGGREGATE GROUP *agname* FAILED, DELETE RETURN CODE = *return-code*

Explanation: The ABACKUP command processing failed due to an error or HOLD was specified. The ABACKUP command processing attempted to delete the associated control, data, or instruction activity log file for this version, but the delete has failed.

- *control file* indicates that the output control file received the error.
- *data file* indicates that the output data file received the error.
- *instruction activity log file* indicates that the output instruction activity log file received the error.
- *data-set-name* is the name of the ABACKUP output file.
- *agname* is the name of the aggregate group being processed.
- *return-code* is the SVC 26 return code.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: The deletion of the ABACKUP output file has failed and the ABR record for this copy has not been written. You must manually delete the ABACKUP output file *data-set-name*.

ARC6080E {SPECIFIED INSTRUCTION DATASET *data-set-name* | DASD ACTIVITY LOG} WAS NOT BACKED UP DURING AGGREGATE BACKUP FOR AGGREGATE GROUP *agname*

Explanation: ABACKUP has failed to include the specified instruction data set or a DASD activity log in the ABACKUP output tapes. The ABACKUP output tapes can be used as input for ARECOVER, but the instruction data set and the activity log cannot be recovered at the recovery site.

- *data-set-name* is the name of the specified instruction data set.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Refer to previous error messages in the ABACKUP activity log to determine the cause of the error.

ARC6081E ALLOCATION FAILED FOR {*dsname*} DURING AGGREGATE {BACKUP | RECOVERY} FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name*}. A NON-TAPE DEVICE WAS ALLOCATED INSTEAD OF A TAPE DEVICE

Explanation: An allocation has been requested for dataset name *dsname* and a nontape device has been allocated when a tape device is expected.

Source: DFSMShsm

System Action: Aggregate backup fails. Aggregate recovery proceeds to recover as much as possible.

Application Programmer Response: If the allocation results are not what the installation desires, modify the ACS routines accordingly and reissue the command.

ARC6082E LIBRARY CONSISTENCY CHECK FAILED DURING AGGREGATE {BACKUP | RECOVERY} FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name1*} FOR DATA SET {*datasetname2*}. RETURN CODE = {*return-code*}

Explanation: A library inconsistency has been found prior to allocating data set *data-set-name2*. The tape volumes for data set *datasetname2* are not stored in the same library, or all volumes are not stored outside of a library, or a failure has occurred in determining the library status of a set of volumes.

- Return code 8 indicates that all volumes are not contained within one library or all volumes are not stored outside a library.
- Return code 16 indicates a failure in determining library status.

An associated ARC0960I message is issued for each volume on which data set *data-set-name2* resides, indicating the name of the library containing the volume.

Source: DFSMShsm

System Action: Aggregate backup fails. Aggregate recovery fails.

Application Programmer Response: None

ARC6083A ALLOCATION REQUEST FAILED FOR *volser* DURING AGGREGATE {BACKUP | RECOVERY} FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name*}, REPLY WAIT OR CANCEL

Explanation: An aggregate backup or recovery command attempted an allocation on the volume *volser* or data set name *dsname* in use by another task for the past 30 minutes. The operator is asked for direction.

- *agname* is the name of the aggregate group processing.
- *data-set-name* is the name of the control file specified in the ARECOVER command.

Source: DFSMShsm

System Action: The DFSMShsm task waits for a reply. If the reply is WAIT, the task continues to wait for the volume or data set to become available, checking in no less than 20 second intervals for its availability. If the reply is CANCEL, the aggregate backup or recovery request fails because the volume or data set is not available.

Operator Response: If the volume or data set really is still in use by another task, reply WAIT or CANCEL. If the tape volume cannot be found, reply CANCEL.

ARC6084E DURING ARECOVER PROCESSING, THE ATTRIBUTES OF VSAM DATA SET *data-set-name* MAY CHANGE

Explanation: A VSAM data set has been encountered in the ABACKUP ALLOCATE list during ABACKUP processing. The possibility exists that the attributes of this data set may change as a result of ARECOVER command processing. The ABACKUP RETURN CODE, appearing in message ARC6055I, is set to 084.

Source: DFSMShsm

System Action: DFSMShsm processing continues. **Issued By**: ABARS secondary address space.

Application Programmer Response: This message is intended to warn that the attributes of the VSAM data set could change during ARECOVER processing. This potential problem can be avoided by including all VSAM data sets in the ABACKUP INCLUDE list instead of the ALLOCATE list.

A patchable bit in the ABRCB, when set ON, prevents the ABACKUP RETURN CODE from being set to 084 when VSAM data sets are encountered in the ABACKUP ALLOCATE list. For example,

```
PATCH .ABRCB.+81 BITS(........1)
```

ARC6085I ICF CATALOG *catalogname* SPECIFIED IN THE ALLOCATE LIST WAS NOT SELECTED DURING AGGREGATE BACKUP FOR AGGREGATE GROUP *agname*

Explanation: ABACKUP processing did not select the specified ICF catalog from the ALLOCATE/ALLOCATEEXCLUDE filtering. The ICF catalog was not specified as a fully qualified data set name in the ALLOCATE list, and was found to be unavailable during processing. There is a catalog entry in the standard search order for the specified ICF catalog, but the actual ICF catalog does not exist on the cataloged volume. The ICF catalog is not backed up.

- The *catalogname* is the name of the ICF catalog that was not selected during aggregate backup processing.
- The *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: This message informs you that an error was intercepted during catalog filtering and the ICF catalog was not selected. Previous messages in the SYSLOG further describe the error. Refer to the explanation of messages IDC3009I RC4 REAS108, IEC331I RC4 REAS38, IEC331I RC4 REAS86, and IEC161I RC4 REAS80.

ARC6086I RETURN CODE *return-code* RECEIVED FROM INSTALLATION-WIDE EXIT *installation-wide exit name*, EXIT MARKED INOPERATIVE DURING AGGREGATE BACKUP FOR AGGREGATE GROUP *agname*

Explanation: The specified installation-wide exit *installation-wide exitname* returned a nonzero return code during aggregate backup processing for aggregate group *agname*. The return code *return-code* indicates an abnormal condition.

Source: DFSMShsm

System Action: The specified exit is disabled for the currently active ABARS secondary address space, which is processing the specified aggregate group *agname*. DFSMShsm processing continues.

Application Programmer Response: Determine the reason for the specified return code from exit. If you determine that it is an unusual circumstance, reactivate the exit. If the exit has an error, correct it and reactivate it.

ARC6087I GDG BASE *gdgbasename* **HAS BEEN SUCCESSFULLY DEFINED FOR (CONTROL | DFSMSDSS DATA | INTERNAL I/O DATA | INSTRUCTION) FILE** *data-set-name2* **USING DFSMSHSM DEFAULT ATTRIBUTES DURING AGGREGATE RECOVERY**

Explanation: During aggregate recovery of DFHSM 2.6.0 ABACKUP output, it was found that the GDG base for the indicated ABACKUP output file did not exist. A GDG base was defined using the following DFSMShsm default attributes to allow the indicated file to be cataloged.

-
  - LIMIT(255)
  - Attributes
    - NOEMPTY
    - SCRATCH
- OWNER(*authid*) where *authid* is the DFSMShsm authorized userid
- T0(99365)
- *gdgbasename1* is the name of the GDG base that was defined.
- CONTROL indicates that the GDG base was defined for the ABACKUP output control file data set.
- DFSMSdss DATA indicates that the GDG base was defined for the ABACKUP output DFSMSdss data file data set.
- INTERNAL I/O DATA indicates that the GDG base was defined for the ABACKUP output INTERNAL I/O data file data set.
- INSTRUCTION indicates that the GDG base was defined for the ABACKUP output instruction file data set.
- *data-set-name2* is the name of the related ABACKUP output file.

Source: DFSMShsm

System Action: The named GDG base is defined. DFSMShsm processing continues.

Application Programmer Response: None.

ARC6088E DEFINED FAILED FOR GDG BASE *gdgbasename1* **FOR CONTROL | DFSMSDSS DATA | INTERNAL I/O DATA | INSTRUCTION FILE** *data-set-name2* **- AGGREGATE RECOVERY FAILED**

Explanation: During aggregate recovery of DFHSM 2.6.0 ABACKUP output, it was found that the GDG base for the indicated ABACKUP output file did not exist. An error occurred attempting to define the GDG base.

- *gdgbasename1* is the name of the GDG base that could not be defined.
- CONTROL indicates that the GDG base was required for the ABACKUP output control file data set.
- DFSMSdss DATA indicates that the GDG base was required for the ABACKUP output DFSMSdss data file data set.
- INTERNAL I/O DATA indicates that the GDG base was required for the ABACKUP output INTERNAL I/O data file data set.
- INSTRUCTION indicates that the GDG base was required for the ABACKUP output instruction file data set.
- *data-set-name2* is the name of the related ABACKUP output file.

Source: DFSMShsm

System Action: The named GDG base is not defined. Aggregate recovery processing fails. DFSMShsm processing continues.

Application Programmer Response: Refer to previous message ARC6158E in the aggregate recovery activity log for the specific details concerning the error. Resolve the error and retry the ARECOVER command.

ARC6089I *function-amsmsgtext*

Explanation: DFSMShsm is in the process of performing an aggregate backup or aggregate recovery operation. Access Method Services (AMS) has been invoked to perform the function. During the process, AMS issues a message related to the function, and DFSMShsm intercepts the message for re-transmission to the ABARS activity log. This message is output if SETSYS ABARSACTLOGMSGLVL(FULL) had been issued, or if an error occurs during AMS processing.

- *function* is set to ABACKUP if issued during an aggregate backup operation.
- *function* is set to ARECOVER if issued during an aggregate recovery operation.
- *amsmsgtext* is the AMS SYSPRINT record. AMS messages have a prefix of IDC.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Refer to “IDC Messages” in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*for a complete explanation of AMS messages.

ARC6090E AN ERROR OCCURRED DURING AMS *amsfunction* **PROCESSING FOR DATA SET** *data-set-name1*, **RETURN CODE IS** *return-code* **- AGGREGATE** *abarsfunction* **FAILED**

Explanation: Access Method Services (AMS) was invoked during aggregate backup or recovery processing and encountered errors during processing. The return code *return-code* has been returned by the AMS function as a result of the error or exception condition.

- *amsfunction* is the name of the AMS function being performed.
- *data-set-name1* is the name of the data set that received the AMS error.
- *return-code* is the return code associated with the AMS error.
- *abarsfunction* is set to the ABARS function being performed; BACKUP for aggregate backup processing, or RECOVERY for recovery processing.

Source: DFSMShsm

System Action: Aggregate backup or recovery processing fails. DFSMShsm processing continues.

Application Programmer Response: Refer to previous messages ARC6089I in the aggregate backup or recovery activity log for the specific details concerning the error. Resolve the error and retry the aggregate backup or recovery operation.

ARC6091E VSAM DATA SET *data-set-name1* FROM THE ALLOCATE LIST CANNOT BE RECOVERED AS SMS-MANAGED, DATA SET WILL NOT BE RECOVERED

Explanation: During aggregate recovery, verification processing determined that a VSAM data set from the allocate list cannot be recovered as an SMS-managed data set. The data set is not recovered.

- *data-set-name1* is the name of the data set that received the verification failure.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Aggregate recovery continues. The remaining data sets are verified. If the EXECUTE parameter is specified for the ARECOVER command, data sets that are not receiving verification errors are recovered.

Application Programmer Response: Refer to previous messages ARC6151E, ARC6153E, and/or ARC6192E in the aggregate recovery activity log for the specific details concerning the error. The error can be resolved by causing the data set to be SMS managed. This can be done by modifying the SMS ACS routines or defining the necessary SMS construct(s), or both. The data set can then be recovered during an aggregate recovery restart operation.

Note: These previous messages (ARC6151E, ARC6153E, and ARC6192E) are issued if there were previous errors invoking various SMS services. However, there may be a situation where the ACS routines are coded so that the data set is not SMS-managed. In this case, there may be no errors accessing these SMS services; therefore, there are no other messages issued.

ARC6092I DELETE OF {CONTROL | DATA | INSTRUCTION/ACTIVITY LOG} FILE *filename* FOR AGGREGATE GROUP *agname* WAS SUCCESSFUL

Explanation: The aggregate backup output file for the version currently being created already existed and was successfully deleted in order to allow this aggregate backup to continue processing. Refer to the programmer response for instructions on how to prevent the files from being deleted by aggregate backup.

- CONTROL indicates the file name for the control file was deleted.
- DATA indicates the file name for the data file was deleted.
- INSTRUCTION/ACTIVITY LOG indicates the file name for the instruction/activity log was deleted.
- *filename* is the name for the file deleted.
- *agname* is the name of the aggregate group processed.

System Action: DFSMShsm deletes the file and processing continues.

Application Programmer Response: Issue the following DFSMShsm patch command to prevent aggregate backup from deleting the output file:

```
PATCH .ABRCB.+81 BITS(......1.).
```

This patch results in the issuance of message ARC6165E, and the user needs to manually rename or delete the file.

ARC6093E {STACK | NOSTACK} PARAMETER INVALID ON ARECOVER COMMAND WHEN AGGREGATE SPECIFIED. ARECOVER {agname} CONTINUES.

Explanation: The installation requested the STACK or NOSTACK option on an ARECOVER AGGREGATE request, which is an invalid combination.

System Action: DFSMShsm processing continues. ARECOVER processing continues using the STACK/NOSTACK setting from the ABR record associated with this AGGREGATE group.

Application Programmer Response: If you want to specify the STACK option, then use the ARECOVER command with the DATASETNAME option.

ARC6094E STACK PARAMETER INVALID ON ABACKUP COMMAND IF OUTPUT IS REDIRECTED TO DASD. ABACKUP FAILED FOR AGGREGATE GROUP {agname}.

Explanation: The installation requested the STACK option on the ABACKUP command, but attempted to redirect the ABACKUP output files to DASD via ACS routines. *agname* is the name of the failing aggregate.

System Action: DFSMShsm processing continues. The ABACKUP request fails.

Application Programmer Response: If you want to STACK the ABACKUP output files, then do *not* redirect any ABACKUP output file to DASD via ACS routines.Refer to the *DFSMS/MVS DFSMShsm Storage Administration Guide* under the topic “Aggregate Backup Output,” for further information on the filenames that ABACKUP output creates.

ARC6095I SKIPPED {PPRC | XRC} DATA SET dsname

Explanation: Either by a SETSYS parameter or by the ABACKUP command, ABACKUP was directed to skip backing up data sets protected by Peer-to-Peer Remote Copy (PPRC) or eXtended Remote Copy (XRC). The LIST(SKIPPED) parameter was specified for the ABACKUP command. *dsname* identifies a skipped data set.

Source: DFSMShsm

System Action: None.

Application Programmer Response: None.

ARC6096E ERROR FROM MACRO UCBLOOK FOR VOLUME volser DURING ABACKUP OF AGGREGATE GROUP agname. RETURN CODE IS retcode. REASON CODE IS reascode.

Explanation: The ABACKUP command was directed to skip processing of data sets protected by PPRC or XRC. While trying to determine whether <volume> is protected by PPRC or XRC, an error was encountered from UCBLOOK function.

Source: DFSMShsm

System Action: DFSMShsm fails the ABACKUP command.

Application Programmer Response: Volume *volser* is probably offline. If not, determine the problem by checking the return code in the message against those defined for the UCBLOOK macro in *OS/390 MVS Authorized Assembler Services Reference* SET-WTO.

If the problem with *volser* can be corrected, do so. Otherwise, remove data sets on *volser* from *agname*. Then re-issue the ABACKUP command.

ARC6100E SPECIFIED MODEL ENTITY *mentity* **IS NOT DEFINED - AGGREGATE RECOVERY FAILED FOR AGGREGATE GROUP** *agname* **USING CONTROL FILE DATA SET** *data-set-name*

Explanation: The model entity has been specified by the *mentity* parameter of the ARECOVER command does not exist. It must be defined prior to issuing the ARECOVER command.

- *mentity* is the model entity that has been specified on the ARECOVER command.
- *agname* is the name of the aggregate group being processed.
- *data-set-name* is the name of the control file data set associated with the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate recovery processing ends. DFSMShsm processing continues.

Application Programmer Response: Create the data set to be used for a model and define the model entity to RACF as a model profile. Reissue the ARECOVER command.

ARC6101E *entryname* **CURRENTLY CATALOGED ON THE SYSTEM AND THE CONFLICT WAS NOT RESOLVED**

Explanation: A data set (or, if VSAM, a related VSAM component) to be recovered currently has a catalog entry on the recovery site's system. The conflict resolution options of the ARECOVER command did not resolve the conflict. Either no conflict resolution action has been specified, or the action that has been specified is invalid and could not be taken. In this case, refer to previous message ARC6296I for an indication of the reason the action could not be taken.

- *entryname* is the duplicate catalog entry (or if VSAM, is the cluster whose related component encountered a duplicate catalog entry). If *entryname* is a generation data set name, the related GDG definition (GDG base) may have received the error. In this case, previous message ARC6110E will have been issued.

Source: DFSMShsm

System Action: DFSMShsm adds an entry into the conflict resolution data set and bypasses further processing of the data set. The remaining data sets are verified. If EXECUTE has been specified, data sets not receiving verification errors are recovered.

Application Programmer Response: Decide on what action to take to resolve the conflict. Update the conflict resolution data set entry for the data set to indicate the desired action; BYPASS, REPLACE, RENAMESOURCE(level), or RENAMETARGET(level). After all the data set conflicts are resolved, reissue the ARECOVER command.

ARC6102I AGGREGATE RECOVERY STARTING USING CONTROL FILE DATA SET *data-set-name***, AT** *time***, STARTED TASK =** *procedurename.identifier*

Explanation: An aggregate recovery function has been started.

- *data-set-name* is the name of the control file data set to be processed by the ARECOVER command. The control file data set name has been either specified as the subparameter of *data-set-name* in the ARECOVER command, or has been obtained from the aggregate version (ABR) record for use during ARECOVER processing.
- *time* is the time of day that the aggregate recovery started. It is expressed as hh:mm:ss (hours, minutes, seconds).

  Note: The time stamp in this message may not be the same from the ABARS secondary address space and the DFSMShsm primary address space.
- *procedurename.identifier* is the started task name that the secondary address space is running under.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Issued By: This message is issued by both the DFSMShsm primary address space and the ABARS secondary address space so that it will be entered into their respective activity logs. For the DFSMShsm primary address space this message is issued only to the command activity log. For the ABARS secondary address space this message is issued to the activity log and to the user that entered the ARECOVER command.

Application Programmer Response: None.

ARC6103I AGGREGATE RECOVERY HAS COMPLETED FOR AGGREGATE GROUP *agname***, USING CONTROL FILE DATA SET** *data-set-name***, AT** *time***, RETCODE =** *nnn*

Explanation: DFSMShsm completed an aggregate recovery function.

If the RETCODE is zero, the aggregate recovery completed successfully. If the RETCODE is nonzero, an error condition occurred and RETCODE is set to *nnn*. Refer to message ARC6*nnn* for an explanation of the error condition.

Note: The message referred to indicates the first error encountered causing aggregate recovery to fail; other error conditions encountered afterward would also cause aggregate recovery to fail. The ABARS secondary address space activity log indicates all error conditions.

- *agname* is the name of the aggregate group that was processed.
- *data-set-name* is the name of the control file data set processed by the ARECOVER command.
- *time* is the time of day that the aggregate recovery ended. It is expressed as hh:mm:ss (hours, minutes, seconds).

  Note: The time stamp in this message may not be the same from the DFSMShsm secondary address space and the DFSMShsm primary address space.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Issued By: This message is issued by both the DFSMShsm primary address space and the ABARS secondary address space, so it is entered into their respective activity logs. For the DFSMShsm primary address space this message is issued to the command activity log. The message is also routed to the console in order to facilitate automatic operations usage.

Application Programmer Response: If the RETCODE value is nonzero, refer to message ARC6*nnn* in the ABARS secondary address space activity log for this aggregate recovery task, to determine the specific error condition that caused the failure.

ARC6104E INSUFFICIENT SPACE ON LEVEL 0 VOLUMES TO RECOVER DATA SET *data-set-name1*, FOR AGGREGATE GROUP *agname* USING CONTROL FILE DATA SET *data-set-name2*

Explanation: There is not sufficient space on level 0 volumes to allocate this data set. Aggregate recovery continues processing.

- *data-set-name1* is the name of the data set being recovered.
- *agname* is the name of the aggregate group being processed.
- *data-set-name2* is the name of the data set that has been specified for the control file in the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate recovery continues.

Application Programmer Response: Use the DEFINE ARPOOL command with the L0VOLS parameter to redefine the volume pool to be used for the aggregate recovery, adding level 0 volumes to the pool to make available sufficient space for the aggregate recovery to complete. Reissue the ARECOVER command to restart processing using the restart data set.

ARC6105E INSUFFICIENT SPACE ON MIGRATION LEVEL 1 VOLUMES TO RECOVER DATA SET *data-set-name1*, FOR AGGREGATE GROUP *agname* USING CONTROL FILE DATA SET *data-set-name2*

Explanation: There is not sufficient space on migration level 1 volumes for aggregate recovery to recover the migrated data set. Aggregate recovery function continues.

- *data-set-name1* is the name of the data set that has failed allocation.
- *agname* is the name of the aggregate group being processed.
- *data-set-name2* is the name of the data set that has been specified for the control file in the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate recovery continues.

Application Programmer Response: Redefine the volume pool to be used for the aggregate recovery, adding migration level 1 volumes to the pool to make available sufficient space for the aggregate recovery to complete. Reissue the ARECOVER command to restart processing using the restart data set.

ARC6106E NO LEVEL 0 VOLUMES AVAILABLE FOR AGGREGATE GROUP *agname* USING CONTROL FILE DATA SET *data-set-name* - RECOVERY CONTINUES

Explanation: No level 0 volumes are available for this recovery. Data sets exist on the aggregate backup output data file which must be recovered to level 0 volumes.

SMS is inactive and either no volumes are defined for the recovery, the volumes defined for the recovery are not available to the system, or the volumes defined for the recovery are all full.

- *agname* is the name of the aggregate group being processed.
- *data-set-name* is the name of the data set specified as the control file in the ARECOVER command.

Source: DFSMShsm

System Action: The aggregate recovery function continues; DFSMShsm processing continues.

Application Programmer Response: Define more level 0 volumes to the recovery, using the DEFINE ARPOOL command, or make available any volumes that are defined but unavailable to the system.

ARC6107E NO MIGRATION LEVEL 1 VOLUMES AVAILABLE FOR AGGREGATE GROUP *agname* USING CONTROL FILE DATA SET *data-set-name* - RECOVERY FAILED

Explanation: No migration level 1 volumes are available for this recovery. Data sets exist on the aggregate backup output data file which must be recovered to migration level 1 volumes.

Either no volumes are defined for the recovery, the volumes defined for the recovery are not available to the system, or the volumes defined for the recovery are all full.

- *agname* is the name of the aggregate group being processed.
- *data-set-name* is the name of the control file data set being processed by the ARECOVER command.

Source: DFSMShsm

System Action: The aggregate recovery function continues; DFSMShsm processing continues.

Application Programmer Response: Define more migration level 1 volumes to the recovery, using the DEFINE ARPOOL command, or make available any volumes that are defined but unavailable to the system.

ARC6108I DATA SET *data-set-name1* HAS BEEN {DELETED | UNCATALOGED} DURING AGGREGATE RECOVERY

Explanation: During aggregate recovery, a data set to be recovered was found to have a duplicate data set name already existing at the recovery site. The conflict resolution processing selected the REPLACE option to resolve the conflict. The duplicate data set has been deleted or uncataloged.

- *data-set-name1* is the name of the like-named data set that has been deleted or uncataloged.
- DELETED indicates that the data set has been deleted.
- UNCATALOGED indicates that the data set has been uncataloged.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Issued By: ABARS secondary address space. This message will go only to the activity log.

Application Programmer Response: None.

ARC6109I REPLACE OPTION SPECIFIED, GDG DATA SET *data-set-name1* HAS BEEN RESTORED USING EXISTING GDG ATTRIBUTES

Explanation: The ARECOVER command has been issued with the DSCONFLICT(REPLACE) option specified. A generation data group (GDG) is already defined for a GDG data set that is being recovered. The data set will be restored using the attributes of the GDG that was existing on the system before the ARECOVER was issued.

- *data-set-name1* is the name of the data set being restored under the existing GDG attributes.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Issued By: ABARS secondary address space. This message will only go to the activity log.

Application Programmer Response: None.

ARC6110E GDG DEFINITION FOR *gdgdefinition* CURRENTLY EXISTS ON THE SYSTEM AND THE CONFLICT WAS NOT RESOLVED

Explanation: The generation data group (GDG) associated with generation data sets being recovered exist on the system and the conflict resolution options of the ARECOVER command did not resolve the conflict. Either no conflict resolution action was specified, or the action specified was invalid and could not be taken. In this case, refer to previous message ARC6296I for an indication of the reason the action could not be taken.

- *gdgdefinition* is the name of the GDG that is already defined on the system.

Source: DFSMShsm

System Action: DFSMShsm adds an entry into the conflict resolution data set (for the generation data sets) and bypasses further processing of the generation data sets associated with the GDG that received the error. The remaining data sets are verified. If EXECUTE was specified, data sets not receiving verification errors are recovered.

Application Programmer Response: Decide on what action to take to resolve the conflict. Update the conflict resolution data set entry for the generation data sets to indicate the desired action; BYPASS, REPLACE, RENAMESOURCE(level), or RENAMETARGET(level). After all the data set conflicts have been resolved, reissue the ARECOVER command.

ARC6111I AGGREGATE RECOVERY RESTART DATA SET IS *data-set-name1* FOR CONTROL FILE DATA SET *data-set-name2*

Explanation: An ARECOVER command completed and one or more datasets were not successfully recovered. A restart data set was retained. The names of all the data sets that have been successfully recovered have been placed in the restart data set. This message precedes ARC6103I.

- *data-set-name1* is the name of the restart data set that contains the names of the successfully recovered data sets.
- *data-set-name2* is the name of the control file specified in the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate recovery continues.

Application Programmer Response: Correct the error condition that occurred and determine if a restart of the aggregate recovery is desired. When a restart data set is used, only those data sets in the control file that are not in the restart data set will be processed.

If a restart is desired:

- Reissue the ARECOVER command.

If a restart is not desired:

- Scratch the existing restart data set indicated in the message.
- Reissue the ARECOVER command.

When a restart is not desired, the data sets indicated in the restart data set as successfully processed must be deleted manually, or they cause the subsequent ARECOVER command to fail (unless the conflict is resolved through the conflict resolution data set, the DATASETCONFLICT parameter or the conflict resolution installation-wide exit ARCCREXT).

ARC6112E {ALLOCATION | OPEN | I/O | LOCATE} ERROR OCCURRED IN READING THE {CONTROL FILE | DATA FILE} DATA SET *data-set-name* - AGGREGATE RECOVERY FAILED

Explanation: An allocation, OPEN, I/O, or LOCATE error occurred while attempting to read one of the aggregate recovery input data sets. The aggregate recovery function ends.

- ALLOCATION indicates that aggregate recovery received an error while allocating the data set.
- OPEN indicates that aggregate recovery received an error while opening the data set.
- I/O indicates that aggregate recovery received an I/O error while reading the data set.
- LOCATE indicates that aggregate recovery received a LOCATE error while attempting to locate the data set.
- CONTROL FILE indicates that the control file received the error.
- DATA FILE indicates that the data file received the error.
- *data-set-name* is the name of the data set that received the error.

Source: DFSMShsm

System Action: Aggregate recovery fails.

Application Programmer Response: For specific error return codes and reason codes associated with the failure, refer to previous message ARC0645I or ARC6164E in the ABARS secondary address space activity log for this aggregate recovery task. Correct the error and reissue the ARECOVER command.

ARC6113E ERROR OCCURRED IN WRITING A DFSMSHSM CONTROL DATA SET RECORD FOR DATA SET *data-set-name1* USING CONTROL FILE DATA SET *datasetname2* - RECORD TYPE THAT FAILED IS {MCA | MCD | MCO}

Explanation: An error occurred in attempting to write to the DFSMShsm migration control data set during aggregate recovery. The indicated data set is not recovered, but aggregate recovery continues with the next data set.

- *data-set-name1* is the name of the data set whose DFSMShsm CDS records received the error.
- *data-set-name2* is the name of the control file specified in the ARECOVER command.
- MCA indicates that the DFSMShsm control data set record that received the error is an MCA control data set record.
- MCD indicates that the DFSMShsm control data set record that received the error is an MCD control data set record.
- MCO indicates that the DFSMShsm control data set record that received the error is an MCO control data set record.

Source: DFSMShsm

System Action: The indicated data set is not recovered. If any DFSMShsm MCDS records were written, they are deleted along with the recovered data set. The aggregate recovery task continues to process the remaining data sets to recover as many data sets as possible.

Issued By:ABARS secondary address space.

Application Programmer Response: Refer to message ARC0184I, issued by the DFSMShsm primary address space. Reissue the ARECOVER command after the error has been corrected.

ARC6115I AGGREGATE RECOVERY USING CONTROL FILE DATA SET *data-set-name* **WILL USE VOLUMES** *volser1* **[,** *...volsern***]**

Explanation: An ARECOVER command was issued and the verification step produced a list of the volumes that contains the data required to perform the recovery. This list includes the volume serial numbers for all data file, instruction file, and accompany data sets required for the aggregate recovery.

- *data-set-name* is the name of the data set specified for the control file in the ARECOVER command.
- *volser1*,...*volsern* are the volume serial numbers of the volumes used to perform the aggregate recovery.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Verify that all the volumes listed are available and, if so, proceed with the aggregate recovery. If the volumes listed are not available, the aggregate recovery cannot proceed until the volumes are made available.

ARC6116I THE FOLLOWING DATA SETS WERE {SUCCESSFULLY | NOT SUCCESSFULLY} {RECOVERED | CATALOGED | ALLOCATED} USING {CONTROL FILE DATA SET *data-set-name* **| AGGREGATE GROUP** *agname***}** *data-set-name1* **[,...***data-set-namen***]**

Explanation: An ARECOVER command was issued with the EXECUTE parameter. Following this message, is a list of all data sets that were successfully or unsuccessfully recovered, cataloged, or allocated.

- RECOVERED — lists the data sets in the include list during ABACKUP that were processed during ARECOVER.
- CATALOGED — lists the tape data sets in the accompany list during ABACKUP that were or were not cataloged during ARECOVER.
- ALLOCATED — lists the data sets that were or were not allocated and cataloged during ARECOVER.
- *data-set-name* is the name of the data set name specified for the control file in the ARECOVER command.
- *agname* is the name of the aggregate group that was specified in the ARECOVER command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

Source: DFSMShsm

ARC6118E AGGREGATE RECOVERY USING {CONTROL FILE DATA SET *data-set-name* **| AGGREGATE GROUP** *agname***} IS CURRENTLY PROCESSING - ARECOVER COMMAND FAILED**

Explanation: A wait-type ARECOVER command was issued and a like-named ARECOVER request is already processing on the system. Aggregate recovery cannot process the same control file data set or the same aggregate group simultaneously in multiple address spaces.

- *data-set-name* is the name of the data set specified for the DATASETNAME subparameter in the ARECOVER command.
- *agname* is the name of the aggregate group specified for the AGGREGATE subparameter in the ARECOVER command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Wait until the current processing of the ARECOVER request is complete. If the control file or aggregate group version is to be processed again, reissue the ARECOVER command.

ARC6119I {DATA | STORAGE | MANAGEMENT} CLASS NAMES EXISTED DURING AGGREGATE BACKUP OF AGGREGATE GROUP *agname* **FOR CONTROL FILE DATA SET** *data-set-name name1* **[,...***namen***]**

Explanation: The list of names indicates the specified SMS class names that existed at the backup site.

- DATA indicates the names are associated with a data class.
- STORAGE indicates the names are associated with a storage class.
- MANAGEMENT indicates the names are associated with a management class.
- *agname* is the name of the aggregate group that was processed.
- *data-set-name* is the name of the control file data set specified in the ARECOVER command.
- *name1*,...*namen* are the names of the SMS classes.

Source: DFSMShsm

System Action: Aggregate recovery continues.

Application Programmer Response: The listed classes should be defined at the aggregate recovery site with the same attributes as those at the aggregate backup site. If the names and attributes are not the same, unpredictable results may occur during the aggregate recovery. The proper names and attributes should be included in the instruction data set or otherwise communicated to the aggregate recovery site.

ARC6120I CONFLICT RESOLUTION ACTION *action* **WILL BE USED FOR DATA SET** *data-set-name* **DURING AGGREGATE RECOVERY**

Explanation: During aggregate recovery, a data set being recovered *data-set-name*, had the same name as a data set already existing at the recovery site.

The like-named conflict will be resolved during the actual data movement phase of aggregate recovery, using the *action* described by the message text:

- BYPASS indicates that the source data set will be bypassed.
- REPLACE indicates that the target data set will be deleted and replaced by the source data set.
- RENAMESOURCE(*level* | *dsname*) indicates that the source data set will be renamed using the new high level qualifier or data set name specified.
- RENAMETARGET(*level*) indicates that target data sets causing a conflict will be renamed using the new high level qualifier.

Source: DFSMShsm

System Action: DFSMShsm recovery continues.

Application Programmer Response: None.

Source: DFSMShsm

ARC6122I GDG ENTRY *entryname* HAS BEEN DEFINED FOR AGGREGATE RECOVERY USING CONTROL FILE DATA SET *data-set-name*

Explanation: A generation data group (GDG) entry has been defined.

- *entryname* is the name of the GDG.
- *data-set-name* is the name of the control file data set being processed by the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate recovery continues.

Application Programmer Response: None.

ARC6123E DATA SET *data-set-name* IS NOT SUPPORTED ON THIS SYSTEM LEVEL

Explanation: During aggregate recovery, a preallocated target with record level sharing (RLS) attributes was found. DFSMShsm 1.3.0 or higher must be used to process this data set.

Source: DFSMShsm

System Action: Aggregate recovery for this data set fails. DFSMShsm processing continues.

Application Programmer Response: To maintain the RLS information in the target data set, use DFSMShsm 1.3.0 or higher. To perform the recovery using a down-level system, delete the preallocated target or delete the RLS attributes. Recovering the data set using a down-level system will cause the RLS attributes to be lost.

ARC6124E CONTROL FILE HAS EXCEEDED 15 VOLUME LIMIT - AGGREGATE BACKUP FAILED

Explanation: The control file created during aggregate backup has exceeded the limit of 15 volumes.

Source: DFSMShsm

System Action: Aggregate backup fails. DFSMShsm processing continues.

Application Programmer Response: The most likely reason that the control file exceeded 15 volumes is because the selection data sets for this aggregate group defined an extremely large quantity of data to be backed up. The definition of this aggregate group should be changed so it does not attempt to back up such a large amount of data. Split this aggregate into 2 or more aggregate groups and reissue the ABACKUP command for each of the new aggregate groups.

ARC6125E USER *userid* NOT AUTHORIZED TO DATA SET *data-set-name1*, AGGREGATE BACKUP WILL FAIL AFTER VERIFICATION FOR AGGREGATE GROUP *agname*.

Explanation: If the user only has authority to issue the ABACKUP command for specified aggregate groups (RESTRICTED COMMAND AUTHORITY), then the ABACKUP command issuer must be authorized by RACF to use *data-set-name1*. RACF determined that the user was not authorized to use *data-set-name1*.

- *userid* is the ID of the user who issued the ABACKUP command.
- *data-set-name1* is the name of the data set that the user is *not* authorized to by RACF.
- *agname* is the name of the aggregate group that failed during ABACKUP.

Source: DFSMShsm

System Action: The aggregate backup verification processing continues. Aggregate backup will fail after the completion of the verification process.

Application Programmer Response: Contact your security administrator for granting at least read access to the data set and reissue the command.

ARC6126E ERROR CREATING A USER ACEE FOR *userid*, DURING AGGREGATE BACKUP. AGGREGATE BACKUP WILL FAIL AFTER VERIFICATION FOR AGGREGATE GROUP *agname*, RACF RETURN CODE IS *return-code*

Explanation: Aggregate backup invoked RACF to create a USER ACEE for the ABACKUP command issuer, *userid*. The user has RESTRICTED COMMAND AUTHORITY. RACF was unable to create the USER ACEE for *userid*.

- *userid* is the user's ID who issued the ABACKUP command.
- *agname* is the name of the aggregate group that failed during ABACKUP.
- *return-code* is the return code from RACF. For return code values, see Table 10 on page ARC-285.

Source: DFSMShsm

System Action: The aggregate backup verification processing continues. Aggregate backup will fail after the completion of the verification process.

Application Programmer Response: The system programmer or storage administrator responsible for DFSMShsm should contact the RACF security administrator for help in resolving this problem.

ARC6127E DATA SET(*dsname*) IS IN INCOMPLETE RECALL STATUS, AGGREGATE BACKUP FAILS AFTER VERIFICATION FOR AGGREGATE GROUP(*group*).

Explanation: A data set in incomplete status means the data set is cataloged on a primary volume, but the complete data set remains uncataloged on a migration volume. This can only occur for VSAM data sets.

Source: DFSMShsm

System Action: Aggregate backup fails after verification.

Application Programmer Response: Recall the data set. Then reissue the ABACKUP command.

ARC6131I INACTIVE SMS GDS *data-set-name* WAS NOT CATALOGED DURING ARECOVER, GDS RECOVERED AS NONSMS

Explanation: An SMS-managed, generation data set (GDS) at the backup site with a status of ROLLED OFF or DEFERRED (directed by ACS to be recovered as non-SMS or because SMS is not active at the recovery site) was recovered as an uncataloged generation data set. The data set was recovered as uncataloged to prevent current ACTIVE generation data sets from rolling off. This occurs for migrated GDSs in the INCLUDE list only.

- *data-set-name* is the name of the data set that was recovered as an uncataloged non-SMS-managed GDS.

Source: DFSMShsm

System Action: Aggregate recovery continues.

Application Programmer Response: To catalog the data set, issue the IDCAMS command: DEFINE NONVSAM (NAME(*data-set-name*) VOLUMES(MIGRAT) DEVICETYPES(*device*) -

NORECATALOG). This will catalog the data set as an active generation data set.

Source: DFSMShsm

ARC6136E THE PERCENTUTILIZED VALUE {*value*} SPECIFIED ON THE ARECOVER COMMAND IS NOT AN ACCEPTABLE VALUE (1–100)

Explanation: The ARECOVER command was issued specifying the PERCENTUTILIZED parameter. The associated value for PERCENTUTILIZED was not an integer in the range of 1 to 100.

Source: DFSMShsm

System Action: The ARECOVER command fails. DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command specifying PERCENTUTILIZED parameter with the associated *value* of 1 to 100 enclosed in parentheses.

ARC6140E ERROR OCCURRED WHILE PROCESSING A VSAM SPHERE FOR WHICH THE BASE CLUSTER NAME IS *cluster name*

Explanation: During aggregate recovery function, an error was encountered while DFSMShsm was processing a VSAM sphere. One or more of the components of the sphere could not be successfully processed. *cluster name* is the base cluster name of the failing component.

Source: DFSMShsm

System Action: Aggregate recovery continues.

Issued By: ABARS secondary address space.

Application Programmer Response: If your installation procedure specifies DFSMShsm rerun the aggregate recovery and request ABARS reprocess the base cluster name, then you must use the following steps:

1. Correct the error condition that caused the component to fail.
2. Edit the associated RESTART data set.
3. Delete the entry for the base cluster name indicated in the message text.

ARC6141E NO BASE CLUSTER FOUND FOR VSAM COMPONENT *dsname*

Explanation: A VSAM component, appearing in the ALLOCATE list, did not have a base cluster associated with it.

Source: DFSMShsm

System Action: The aggregate backup fails.

Application Programmer Response: Ensure there is a base cluster associated with the VSAM component, *dsname*, appearing in this message text. If no base cluster exists, remove the data set from the ALLOCATE list.

ARC6149E DATA SET *data-set-name* **SPECIFIED IN THE {INCLUDE | ALLOCATE | ACCOMPANY} SELECTION DATA SET LIST FOR AGGREGATE GROUP** *agname* **HAS ENCOUNTERED AN ERROR DURING LOCATE PROCESSING.**

Explanation: A partially qualified data set name specified in an INCLUDE, ALLOCATE, or ACCOMPANY list in one of the selection data sets for this aggregate group encountered an error during LOCATE processing. This partially qualified data set name resolves to at least one data set name that belongs to a catalog that is no longer available.

data-set-name	Specifies the partially qualified data set name from the selection data set which resulted in the failure.
INCLUDE	Indicates that the data set name is specified in the INCLUDE keyword of a selection data set.
ALLOCATE	Indicates that the data set name is specified in the ALLOCATE keyword of a selection data set.
ACCOMPANY	Indicates that the data set is specified in the ACCOMPANY keyword of a selection data set.
agname	Specifies the name of the aggregate group processing.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: Ensure that all required catalogs are available and online, or more clearly define the data sets for inclusion as part of this aggregate. This error generally occurs with overuse of wildcards and or placeholders in the high-level qualifier of the data set names contained in your selection data sets. Refer to the message ARC6158E for additional information.

ARC6150E {GETMAIN | FREEMAIN} FAILURE IN MODULE *modname*, **RETURN CODE IS** *return-code*

Explanation: The DFSMShsm module *modname* has attempted to obtain or free storage, but the MVS function has been unsuccessful. *return-code* is the return code from the GETMAIN or FREEMAIN macro.

Source: DFSMShsm

System Action: If the error is a GETMAIN error, the module ends processing. If the error is a FREEMAIN error, the module continues processing.

Application Programmer Response: Refer to *DFSMS/MVS Macro Instructions for Data Sets*, for an explanation of GETMAIN/FREEMAIN return codes. If the function fails, reissue the ABACKUP or ARECOVER command after the error is corrected.

ARC6151E ERROR OCCURRED IN ATTEMPTING TO {RETRIEVE | INVOKE} {AGGREGATE GROUP *agname* **| SMS CONSTRUCT** *constructname* **| ACS FILTERING FOR DATA SET** *data-set-name1* **| SMS VTOC DATA SET SERVICES TO DEFINE DATA SET** *data-set-name2***} AGGREGATE {BACKUP | RECOVERY} FAILED - SMS RETURN CODE IS** *return-code*, **REASON CODE IS** *reason-code*

Explanation: An SMS request described by the message inserts has failed. The request may be one of the following:

- *agname* indicates a request to RETRIEVE the aggregate group.
- *constructname* indicates a request to RETRIEVE the SMS construct.
- *data-set-name1* indicates a request to INVOKE SMS ACS filtering for the data set.
- *data-set-name2* indicates a request to INVOKE SMS VTOC data set services to define the the data set.
- *return-code* indicates the return code passed back by the SMS request.
- *reason-code* indicates the reason code passed back by the SMS request.

Source: DFSMShsm

System Action: Aggregate backup ends. Aggregate recovery ends unless invoking ACS filtering for a data set, in which case aggregate recovery recovers the *data-set-name1* as non-SMS managed. DFSMShsm processing continues.

Application Programmer Response: Refer to *DFSMS/MVS DFSMSdfp Diagnosis Guide* for diagnostic information on SMS. Reissue the ABACKUP or ARECOVER command after the error is corrected.

ARC6152I THE FOLLOWING DATA SETS WERE SUCCESSFULLY PROCESSED FROM THE {ACCOMPANY | ALLOCATE} LIST DURING AGGREGATE BACKUP FOR AGGREGATE GROUP *agname data-set-name1* **[,***...datasetnamen***]**

Explanation: The listed data sets have been included in the backup package.

- ACCOMPANY indicates that the data set names listed were specified with the ACCOMPANY keyword in the selection data sets for this aggregate group.
- ALLOCATE indicates that the data set names listed were specified with the ALLOCATE keyword in the selection data sets for this aggregate group.
- *agname* is the name of the aggregate group being processed by aggregate backup.
- *data-set-name1*,...*datasetnamen* are the names of the data sets selected.

Source: DFSMShsm

System Action: Aggregate backup continues.

Application Programmer Response: None.

ARC6153E ERROR OCCURRED IN THE MVS SUBSYSTEM INTERFACE - AGGREGATE {BACKUP | RECOVERY} FAILED, SSI RETURN CODE IS *return-code*

Explanation: An error occurred in the MVS subsystem interface during processing of a request to SMS.

- BACKUP indicates that the failure occurred during an aggregate backup request.
- RECOVERY indicates that the failure occurred during an aggregate recovery request.
- *return-code* is the return code associated with the MVS subsystem interface error:

04	Subsystem does not support this function.
08	Subsystem exists, but is not active.
12	Subsystem does not exist.
16	Function not completed. Severe error.
20	Logical error (such as an incorrect SSOB format or length).

Source: DFSMShsm

System Action: Aggregate backup fails. Aggregate recovery fails unless SMS is invoked for a particular data set and fails. In this case, aggregate recovery continues.

Application Programmer Response: None.

ARC6154E SDSP *sdspname* **CANNOT BE {OPENED | CLOSED} TO BACK UP DATA SET** *data-set-name* **FOR AGGREGATE GROUP** *agname***, VSAM RETURN CODE IS** *return-code***, REASON CODE IS** *reason-code*

Explanation: The specified SDSP data set cannot be opened or closed for backing up a migrated data set in an SDSP.

- *sdspname* indicates the name of the SDSP data set that received the error.
- OPENED indicates that the specified SDSP data set could not be opened.
- CLOSED indicates that the specified SDSP data set could not be closed.
- *data-set-name* indicates the name of the migrated data set being backed up.
- *agname* indicates the name of the aggregate group being processed.
- *return-code* indicates the return code associated with the VSAM OPEN or CLOSE error.
- *reason-code* indicates the reason code associated with the VSAM OPEN or CLOSE error.

Source: DFSMShsm

System Action: If an OPEN error occurs and installation-wide exit ARCBEEXT is active, the exit is called to determine whether the data set should be bypassed or if aggregate backup should fail. If a CLOSE error occurs, aggregate backup continues.

Application Programmer Response: Refer to *DFSMS/MVS DFSMSdfp Diagnosis Reference* to identify the problems indicated by the return code and the reason code. Reissue the ABACKUP command after the error is corrected.

ARC6155E I/O ERROR OCCURRED IN READING SDSP *sdspname* **FOR DATA SET** *data-set-name* **WHILE PROCESSING AGGREGATE GROUP** *agname***, VSAM RETURN CODE IS** *return-code***, REASON CODE IS** *reason-code*

Explanation: An I/O error has occurred in reading an SDSP data set for the indicated migrated data set. If installation-wide exit ARCBEEXT is active, the exit is called to determine whether the data set should be bypassed or if aggregate backup should fail.

- *sdspname* is the name of the SDSP data set that could not be read.
- *data-set-name* is the name of the migrated data set being backed up.
- *agname* is the name of the aggregate group being processed.
- *return-code* is the return code associated with the VSAM I/O read error.
- *reason-code* is the reason code associated with the VSAM I/O read error.

Source: DFSMShsm

System Action: If installation-wide exit ARCBEEXT indicates that the data set should be bypassed, aggregate backup continues. If installation-wide exit ARCBEEXT is not active or indicates that the data set should be processed, aggregate backup fails.

Application Programmer Response: Refer to *DFSMS/MVS Macro Instructions for Data Sets* to identify the problems indicated by the return code and the reason code. Reissue the ABACKUP command after the error is corrected.

ARC6156E OBTAIN ERROR OCCURRED IN READING THE DATA SET VTOC ENTRY FOR *data-set-name* ON VOLUME *volser* FOR AGGREGATE GROUP *agname* - OBTAIN RETURN CODE IS *return-code*

Explanation: An error has been encountered in reading the data set VTOC entry for the specified data set on the indicated volume. If installation-wide exit ARCBEEXT is active, the exit is called to determine whether the data set should be bypassed or if aggregate backup should fail.

- *data-set-name* is the name of the data set that received the error.
- *volser* is the volume serial number of the volume containing the data set that received the error.
- *agname* is the name of the aggregate group being processed.
- *return-code* is the return code associated with the OBTAIN macro instruction.

Source: DFSMShsm

System Action: If installation-wide exit ARCBEEXT indicates that the data set should be bypassed, aggregate backup continues. If installation-wide exit ARCBEEXT is not active or indicates that the data set should be processed, aggregate backup fails.

Application Programmer Response: Refer to “ARC Return Codes and Reason Codes” on page ARC-280 for an explanation of OBTAIN return codes. Reissue the ABACKUP command after the error is corrected.

ARC6157E UNABLE TO ESTABLISH ESTAE EXIT - AGGREGATE {BACKUP | RECOVERY} FAILED FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name*} ESTAE RETURN CODE IS *return-code*

Explanation: The ABARS secondary address space could not establish an ESTAE exit and, therefore, could not process abnormal ends.

- BACKUP indicates that processing has failed during aggregate backup.
- RECOVERY indicates that processing has failed during aggregate recovery.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed (aggregate backup only).
- CONTROL FILE DATA SET *data-set-name* is the name of the control file specified in the ARECOVER command (aggregate recovery only).
- *return-code* is the return code associated with the error executing the ESTAE macro instruction.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery fails.

Application Programmer Response: Refer to *OS/390 MVS Programming: Authorized Assembler Services Guide* for an explanation of the ESTAE macro instruction.

ARC6158E CATALOG ERROR OCCURRED DURING *functionname* FUNCTION FOR DATA SET *data-set-name1* FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name2*}, CATALOG RETURN CODE IS *return-code*, REASON CODE IS *reason-code*

Explanation: The return code *return-code* and reason code *reason-code* have been returned by catalog management as a result of a catalog error or exception condition.

- *functionname* is the name of the SVC 26 catalog function.
- *data-set-name1* is the name of the data set that has received the catalog error.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed.
- CONTROL FILE DATA SET *data-set-name2* is the name of the control file specified in the ARECOVER command.
- *return-code* is the return code associated with the catalog error.
- *reason-code* is the reason code associated with the catalog error.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery fails.

Application Programmer Response: Refer to message IDC3009I in *OS/390 MVS System Messages, Vol 3 (GDE-IEB)*for specific catalog management return code and reason code definitions. Be sure the data sets to be processed occur in the standard catalog search order. Reissue the ABACKUP or ARECOVER command after the error is corrected.

ARC6159E {POINT | NOTE | SYNCDEV} MACRO FAILED FOR DATA SET *data-set-name1* DURING AGGREGATE {BACKUP | RECOVERY} FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name2*} [- RETURN CODE IS *return-code*, REASON CODE IS *reason-code*]

Explanation: An error has occurred in an input/output device control macro.

- POINT indicates the error has occurred in the POINT macro.
- NOTE indicates the error has occurred in the NOTE macro.
- SYNCDEV indicates the error has occurred in the SYNCDEV macro.
- *data-set-name1* is the name of the data set that has encountered the error.
- BACKUP indicates that the error has occurred during aggregate backup.
- RECOVERY indicates that the error has occurred during aggregate recovery.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed (aggregate backup only).
- CONTROL FILE DATA SET *data-set-name2* is the name of the control file specified in the ARECOVER command (aggregate recovery only).
- *return-code* is the return code from the macro.
- *reason-code* is the reason code from the macro.

Source: DFSMShsm

System Action: Aggregate backup fails. Aggregate recovery proceeds to recover as much as possible.

Application Programmer Response: Refer to *DFSMS/MVS Macro Instructions for Data Sets* for an explanation of macro return and reason codes. Correct the error and reissue the ABACKUP or ARECOVER command.

ARC6160E I/O ERROR OCCURRED IN {READING | WRITING} DATA SET *data-set-name1* **DURING AGGREGATE {BACKUP | RECOVERY} FOR {AGGREGATE GROUP** *agname* **| CONTROL FILE DATA SET** *data-set-name2***}**

Explanation: An I/O error has occurred while processing the specified data set.

- READING indicates the I/O error has occurred while backing up the data set from the source volume during aggregate backup processing.
- WRITING indicates the I/O error has occurred while recovering the data to a target volume during aggregate recovery processing.
- *data-set-name1* is the name of the data set that received the error.
- BACKUP indicates that the error has occurred during aggregate backup processing.
- RECOVERY indicates that the error has occurred during aggregate recovery processing.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed (aggregate backup only).
- CONTROL FILE DATA SET *data-set-name2* is the name of the control file specified in the ARECOVER command (aggregate recovery only).

Source: DFSMShsm

System Action: For aggregate backup, the function ends. For aggregate recovery, the data set is bypassed and aggregate recovery continues. The data set name is *not* written to the restart data set.

Application Programmer Response: For an ABACKUP failure, refer to the *DFSMS/MVS Macro Instructions for Data Sets* to identify the problem. You may not be able to recall the migration version. In this case, if a backup copy exists, issue a DFSMShsm DELETE command for the data set, followed by a DFSMShsm RECOVER command. Reissue the ABACKUP command after the error is corrected.

For an ARECOVER failure, refer to the *DFSMS/MVS Macro Instructions for Data Sets* to identify the problem. Reissue the ARECOVER command after the error is corrected.

For specific error return codes and reason codes associated with the failure, refer to previous message ARC0645I in the DFSMShsm secondary address space activity log for this aggregate group.

ARC6161E {OPEN | CLOSE} ERROR OCCURRED FOR DATA SET *data-set-name1* **DURING AGGREGATE {BACKUP | RECOVERY} FOR {AGGREGATE GROUP** *agname* **| CONTROL FILE DATA SET** *data-set-name2***}, COMPLETION CODE =** *abcode***, RETURN CODE =** *return-code*

Explanation: An OPEN or CLOSE error has occurred for the specified data set.

- OPEN indicates that the error has occurred during OPEN processing.
- CLOSE indicates that the error has occurred during CLOSE processing.
- *data-set-name1* is the name of the data set that has received the error.
- BACKUP indicates that the error has occurred during aggregate backup processing.
- RECOVERY indicates that the error has occurred during aggregate recovery processing.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed.
- CONTROL FILE DATA SET *data-set-name2* is the name of the control file specified in the ARECOVER command.
- *abcode* is the system completion code that has been passed to the DCB ABEND exit during OPEN or CLOSE processing.
- *return-code* is the return code passed to the DCB ABEND exit during OPEN or CLOSE.

Source: DFSMShsm

System Action: If the error has occurred during OPEN or CLOSE of the data file or control file, aggregate backup or aggregate recovery fails. If the error has occurred during OPEN or CLOSE of a data set to be backed up or recovered, the following action is taken:

- For aggregate backup, if an OPEN error has occurred and installation-wide exit ARCBEEXT is active, the exit is called to determine whether the data set should be bypassed or aggregate backup should fail. If a CLOSE error has occurred, aggregate backup continues.
- For aggregate recovery, the data set is bypassed and aggregate recovery continues. The data set name is *not* written to the restart data set.

Application Programmer Response: Refer to *OS/390 MVS System Codes* to identify the problem. Correct the error and reissue the ABACKUP or ARECOVER command. If *data-set-name1* is a migrated data set, you can find the original user data set name by issuing the command HSEND FIXCDS A *data-set-name1*.

ARC6162I ARPOOL NOT FOUND FOR AGGREGATE GROUP *agname* **USING CONTROL FILE DATA SET** *data-set-name* **- ARECOVER WILL CONTINUE**

Explanation: An ARPOOL was not defined for the specified aggregate group prior to issuing the ARECOVER command and no general ARPOOL was defined. Also, no temporary ARPOOL was created because there were no ADDVOLed volumes to use. SMS is active on the system and no migrated data sets are being recovered. Aggregate recovery allows existing ACS routines to direct the allocation of data sets to volumes. If there are no ACS routines or existing ACS routines do not direct the data set to a specific volume, then DFSMShsm attempts to recover the data set to the *volser* where the data set resided when it was backed up.

Note: An installation must ensure that ACS routines are in place to direct data set allocation to existing volumes or that *volsers* matching those at the backup site exist at the recovery site.

- *agname* is the name of the aggregate group being processed.
- *data-set-name* is the name of the data set specified for the control file in the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate recovery will continue.

Application Programmer Response: Define an ARPOOL for the specified aggregate group, or a general ARPOOL using the DEFINE ARPOOL command. This will allow data sets which are not SMS-managed to be successfully processed by aggregate recovery.

ARC6163E {ALLOCATION | OPEN | I/O} ERROR OCCURRED IN WRITING THE {SYSIN | FILTER | INSTRUCTION} DATA SET *data-set-name1*, **AGGREGATE {BACKUP | RECOVERY} FAILED FOR {AGGREGATE GROUP** *agname* **| CONTROL FILE DATA SET** *data-set-name2***}**

Explanation: An allocation, OPEN, or I/O error occurred in writing to the indicated data set used during aggregate backup or aggregate recovery.

- ALLOCATION indicates the data set received an allocation error.
- OPEN indicates the data set received an open error.
- I/O indicates an error occurred in writing output to the data set.
- SYSIN indicates that the SYSIN data set containing DFSMSdss control cards received the error.
- FILTER indicates that the FILTER data set containing the list of data set names to be processed by DFSMSdss received the error.

  Note: This is not the data set specified in the FILTEROUTPUTDATASET parameter of the ABACKUP command.
- INSTRUCTION indicates that the dummy instruction data set created (because none was specified in the aggregate group definition) received the error.
- *data-set-name1* is the name of the data set that received the error.
- BACKUP indicates that the error occurred during aggregate backup processing.
- RECOVERY indicates that the error occurred during aggregate recovery processing.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed (aggregate backup only).
- CONTROL FILE DATA SET *data-set-name2* is the name of the control file specified in the ARECOVER command (aggregate recovery only).

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery fails.

Application Programmer Response: For allocation errors, ensure that public or storage DASD volumes are available on the system.

For specific error return codes or reason codes associated with the failure, refer to previous message ARC0645I or ARC6164E in the ABARS secondary address space activity log for this aggregate group.

Correct the error and reissue the ABACKUP or ARECOVER command.

ARC6164E DYNAMIC {ALLOCATION | DEALLOCATION | RETRIEVAL} FAILED FOR {*dsname* **|** *volser* **|** *ddname***} DURING AGGREGATE {BACKUP | RECOVERY} - SVC 99 REASON CODE IS** *reason-code*, **INFORMATION CODE IS** *infocode*, **EXTENDED REASON CODE IS** *extreas*

Explanation: The reason code and information code were returned by SVC 99. An error occurred in attempting to perform dynamic allocation or deallocation.

- ALLOCATION indicates the error occurred during an SVC 99 allocation attempt.
- DEALLOCATION indicates the error occurred during an SVC 99 deallocation attempt.
- RETRIEVAL indicates the error occurred during an SVC retrieval attempt.
- *dsname* is the name of the data set that could not be allocated. If backing up or recovering a migrated data set, this is the DFSMShsm migration version data set name, unless the MCDMCANM field of the MCD record contains zeroes or blanks. In this case, the true name of the data set is used.
- *volser* is the volume serial number of the volume that could not be allocated.
- *ddname* is the DD name of the data set that could not be deallocated.
- BACKUP indicates the error occurred during aggregate backup.
- RECOVERY indicates the error occurred during aggregate recovery.
- AGGREGATE GROUP *agname* is the name of the aggregate group processing.
- CONTROL FILE DATA SET *data-set-name* is the name of the control file specified in the ARECOVER command.
- *reason-code* is the SVC 99 reason code.
- *infocode* is the SVC 99 information code.
- *extreas* is the SVC 99 extended reason code.

Source: DFSMShsm

System Action: Aggregate backup fails. Aggregate recovery proceeds to recover as much as possible.

Issued By:ABARS secondary address space.

Application Programmer Response: Refer to *OS/390 MVS Programming: Authorized Assembler Services Guide* for an explanation of SVC 99 reason and information codes. Correct the error and reissue the ABACKUP or ARECOVER command.

Refer to *DFSMS/MVS DFSMSdfp Diagnosis Reference* for an explanation of SVC 99 extended reason codes.

ARC6165E {CONTROL | DATA | INSTRUCTION/ACTIVITY LOG} FILE NAME *filename* **CURRENTLY EXISTS FOR THE AGGREGATE BACKUP OF AGGREGATE GROUP** *agname*

Explanation: The file name for one of the aggregate backup output files currently exists.

- *filename* is the name of the file in conflict.
- CONTROL indicates that the file name for the control file is in conflict.
- DATA indicates that the file name for the data file is in conflict.
- INSTRUCTION/ACTIVITY LOG indicates that the file name for the instruction/activity log is in conflict.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: If the file name in conflict is the control file or the data file, then the aggregate backup fails. If the file name in conflict is the instruction/activity log then the aggregate backup continues.

Application Programmer Response: Rename or delete the data set whose name conflicts with the backup file name and reissue the ABACKUP command.

ARC6166I THE FOLLOWING DATA SETS WERE SELECTED TO BE PROCESSED BY AGGREGATE BACKUP FOR AGGREGATE GROUP *agname* **FOR THE {INCLUDE/EXCLUDE | ACCOMPANY/ACCOMPANYEXCLUDE | ALLOCATE/ALLOCATEEXCLUDE} SPECIFICATION** *data-set-name1***[,***...datasetnamen***]**

Explanation: The VERIFY option was specified on the ABACKUP command. The list of data sets that follows this message represents those data sets that would have been included in the backup package.

- *agname* is the name of the aggregate group being processed by aggregate backup.
- INCLUDE/EXCLUDE indicates that the data set names listed are a result of filtering the data set names and masks that were specified with the INCLUDE and EXCLUDE keywords in the selection data sets for this aggregate group.
- ACCOMPANY/ACCOMPANYEXCLUDE indicates that the data set names listed are a result of filtering the data set names and masks that were specified with the ACCOMPANY and ACCOMPANYEXCLUDE keywords in the selection data sets for this aggregate group.
- ALLOCATE/ALLOCATEEXCLUDE indicates that the data set names listed are a result of filtering the data set names and masks that were specified with the ALLOCATE and ALLOCATEEXCLUDE keywords in the selection data sets for this aggregate group.
- *data-set-name1*,...*datasetnamen* are the names of the data sets selected.

Source: DFSMShsm

System Action: The aggregate backup function ends after listing the selected data sets.

Application Programmer Response: Ensure that VERIFY processing generated the desired list of data sets. If the list is acceptable, reissue the ABACKUP command using the EXECUTE keyword to perform the aggregate backup. If the list of data sets generated by VERIFY processing is not acceptable, update the applicable INCLUDE, EXCLUDE, ACCOMPANY, ACCOMPANYEXCLUDE, ALLOCATE, or ALLOCATEEXCLUDE criteria in the selection data sets for the aggregate group being processed. Reissue the ABACKUP command after the corrections have been made.

ARC6167E DATA SET *data-set-name* **SPECIFIED AS FULLY QUALIFIED IN {INCLUDE | ALLOCATE | ACCOMPANY} SELECTION DATA SET LIST FOR AGGREGATE GROUP** *agname* **WAS NOT FOUND**

Explanation: A fully qualified data set name specified in an INCLUDE, ALLOCATE, or ACCOMPANY list in one of the selection data sets for this aggregate group was not found.

- *data-set-name* is the name of a data set that was not found.
- INCLUDE indicates that the data set name was specified in the INCLUDE keyword of a selection data set.
- ALLOCATE indicates that the data set name was specified in the ALLOCATE keyword of a selection data set.
- ACCOMPANY indicates that the data set name was specified in the ACCOMPANY keyword of a selection data set.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: Ensure that all data sets specified as fully qualified in INCLUDE, ALLOCATE and ACCOMPANY lists exist and are cataloged on the system.

ARC6168E CROSS MEMORY ERROR OCCURRED. REQUEST TYPE WAS {DISCONNECT | CDS I/O | PDA I/O} - AGGREGATE {BACKUP | RECOVERY} FAILED FOR {AGGREGATE GROUP *agname* **| CONTROL FILE DATA SET** *data-set-name***} RETURN CODE =** *return-code***[, REASON CODE =** *reason-code***]**

Explanation: An error occurred in attempting cross memory communication.

- DISCONNECT indicates that the request type was DISCONNECT.
- CDS I/O indicates that the request type was CDS I/O.
- PDA I/O indicates that the request type was PDA I/O.
- BACKUP indicates that the request failed during aggregate backup.
- RECOVERY indicates that the request failed during aggregate recovery.
- AGGREGATE GROUP *agname* is the name of the aggregate group being processed.
- CONTROL FILE DATA SET *data-set-name* is the name of the control file specified in the ARECOVER command.
- *return-code* is the cross memory module return code:

10	Invalid parameter list address.
12	Invalid control block address.
14	Error occurred in obtaining storage in extended private area. The *reason-code* is the return code from the GETMAIN macro.
16	An abnormal end (abend) occurred. The *reason-code* is the system completion code.

- The *reason-code* is the cross memory module reason code. The values for the *reason-code* are:

04	Error occurred in obtaining storage in extended private area.
08	Error occurred during cross-memory POST of the DFSMShsm primary address space.
12	Invalid token in MASIP.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery fails.

Application Programmer Response: None.

ARC6169E VOLUME *volser* **WAS INCLUDED IN THE AGGREGATE RECOVERY POOL, BUT WAS NOT ONLINE AND MOUNTED - AGGREGATE RECOVERY CONTINUES USING CONTROL FILE DATA SET** *data-set-name*

Explanation: A volume specified in the aggregate recovery pool was not online and mounted.

- *volser* is the name of the volume.
- *data-set-name* is the name of the control file used during ARECOVER processing.

Source: DFSMShsm

System Action: Aggregate recovery continues to recover as many data sets as possible. The ARECOVER return code will be nonzero.

Application Programmer Response: If any data sets were not recovered due to the volume not being online and mounted, ensure that the specified volume is mounted and online and reissue the ARECOVER command.

ARC6171E INSTALLATION-WIDE EXIT ARCCREXT ATTEMPTED TO RENAME DATA SET *data-set-name1* **TO** *datasetname2* **FOR CONTROL FILE DATA SET** *data-set-name3***. REPLACEMENT NAME ALREADY EXISTS.**

Explanation: The installation-wide exit module ARCCREXT was called because a like-named data set was found at the aggregate recovery site. (The exit module indicated to rename a data set to a new data set name but the new name specified also already exists at the recovery site.) The data set will not be renamed. An IDCAMS DELETE command for the existing data set with the new name is written to the IDCAMS command file and the data set will be bypassed.

- *data-set-name1* is the old name of the data set that received the error.
- *data-set-name2* is the new name of the data set that received the error.
- *data-set-name3* is the name of the control file specified in the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate recovery fails. Processing ends when verification is complete.

Application Programmer Response: Issue the IDCAMS DELETE command in the editable command file or resolve the name conflict by other means. Reissue the ARECOVER command.

ARC6172E DATA SET *data-set-name* **IS NOT SUPPORTED IN AN {INCLUDE | ALLOCATE | ACCOMPANY} LIST FROM A SELECTION DATA SET FOR AGGREGATE GROUP** *agname*

Explanation: A fully qualified data set name specified in an INCLUDE, ALLOCATE or ACCOMPANY list from a selection data set for this aggregate group is not supported by aggregate backup.

- *data-set-name* is the name of the data set that is not supported.
- INCLUDE indicates that the data set is in an INCLUDE list.
- ALLOCATE indicates that the data set is in an ALLOCATE list.
- ACCOMPANY indicates that the data set is in an ACCOMPANY list.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: Ensure that all data sets specified in the INCLUDE, ALLOCATE, or ACCOMPANY lists are acceptable for processing by aggregate backup.

ARC6173E {ALLOCATION | OPEN | I/O} ERROR OCCURRED IN {READING | WRITING} THE {RESTART DATA SET | CONFLICT RESOLUTION DATA SET } *data-set-name* **- AGGREGATE RECOVERY FAILED**

Explanation: An I/O, OPEN, or ALLOCATION error occurred in reading or writing to one of the files used for aggregate recovery.

- ALLOCATION indicates the data set received an allocation error.
- OPEN indicates the data set received an open error.
- I/O indicates the data set received a read or write error.
- READING indicates an error in reading the data set.
- WRITING indicates an error in writing to the data set.
- RESTART DATA SET indicates that the restart data set received the error.
- CONFLICT RESOLUTION DATA SET indicates that the conflict resolution data set received the error.
- *data-set-name* is the name of the data set that received the error.

Source: DFSMShsm

System Action: Aggregate recovery fails. DFSMShsm processing continues.

Application Programmer Response: Determine if the content of the data set is invalid. Reissue the ARECOVER command after the error has been corrected.

For specific error return codes and reason codes associated with the failure, refer to previous message ARC0645I or ARC6164E in the ABARS secondary address space activity log for this aggregate group.

ARC6175I DATA SET *data-set-name* **WILL BE BYPASSED DURING AGGREGATE BACKUP FOR AGGREGATE GROUP** *agname*

Explanation: Installation-wide exit ARCM2EXT was called during aggregate backup because a data set residing on a MIGRATIONLEVEL2 volume was encountered. The exit indicated that the specified data set should be bypassed.

- *data-set-name* is the name of the data set that will be bypassed.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup continues.

Application Programmer Response: None.

ARC6176E SYNTAX ERROR IN SELECTION DATA SET *data-set-name***[(***membername***)] ON LINE** *linenumber* **FOR AGGREGATE GROUP** *agname***, ERROR CODE =** *nn*

Explanation: A syntax error was encountered in parsing a selection data set for the aggregate group being processed by aggregate backup.

- *data-set-name* indicates the name of the selection data set that contains the syntax error.
- *membername* indicates the member of the selection data set that contains the syntax error when the selection data set is a partitioned data set.
- *linenumber* indicates the line number in the selection data set where the syntax error was encountered.
- *agname* indicates the name of the aggregate group being processed.
- *nn* indicates the type of syntax error:

Code	**Meaning**
01	Invalid character.
02	Invalid use of continuation character.
03	Invalid data set name mask.
04	Member names are not allowed.
05	Data set qualifier is greater that eight characters.

06	Data set name is longer than 44 characters.
07	Data set name must begin with alpha or national character.
08	End of comment missing.
09	Include keyword is required.
10	Invalid keyword.
11	DSN masks can only be specified as INCLUDE and EXCLUDE parameters.
12	Invalid parameter list.
13	Keywords can only be specified once.
14	Missing left parenthesis.
15	Missing right parenthesis.
16	Data set name cannot end with a period.
17	Relative generation data group (GDG) data set name has an invalid generation number.

Source: DFSMShsm

System Action: Aggregate backup will fail.

Application Programmer Response: Edit the specified selection data set to correct the indicated error. Reissue the ABACKUP command.

ARC6177E INSTALLATION-WIDE EXIT MODULE *modname* **{DOES NOT EXIST | EXISTS BUT WAS NOT SUCCESSFULLY LOADED}, AGGREGATE {BACKUP | RECOVERY} FAILED FOR {AGGREGATE GROUP** *agname* **| CONTROL FILE DATA SET** *data-set-name***} - LOAD ABEND CODE IS** *abcode***, REASON CODE** *reason-code*

Explanation: An installation-wide exit module either does not exist or exists but an error has occurred when attempting to load the module.

- *modname* indicates the name of the installation-wide exit module that has received the error.
- DOES NOT EXIST indicates the abnormal end (abend) has occurred because the installation-wide exit module is not available.
- EXISTS BUT WAS NOT SUCCESSFULLY LOADED indicates the abend has occurred because the installation-wide exit module is available but could not be loaded.
- BACKUP indicates the error has been encountered during aggregate backup.
- RECOVERY indicates the error has been encountered during aggregate recovery.
- AGGREGATE GROUP *agname* indicates the name of the aggregate group being processed during aggregate backup or aggregate recovery (when ARECOVER AGGREGATE is specified).
- CONTROL FILE DATA SET *data-set-name* indicates the name of the control file data set specified in the ARECOVER command, if ARECOVER DATASETNAME has been specified.
- *abcode* indicates the abend code associated with the LOAD attempt.
- *reason-code* indicates the reason code associated with the LOAD abend code.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery fails. DFSMShsm processing continues.

Application Programmer Response: Refer to *OS/390 MVS System Codes*for a description of abend and associated reason codes. Reissue the ABACKUP or ARECOVER command after the error is corrected.

ARC6178I INSTALLATION-WIDE EXIT MODULE *modname* **WAS SUCCESSFULLY LOADED DURING AGGREGATE {BACKUP | RECOVERY} FOR {AGGREGATE GROUP** *agname* **| CONTROL FILE DATA SET** *data-set-name***}**

Explanation: An installation-wide exit module was loaded for use during aggregate backup or aggregate recovery processing.

- *modname* indicates the name of the installation-wide exit module that was loaded.
- BACKUP indicates the installation-wide exit module was loaded for use during aggregate backup processing.
- RECOVERY indicates the installation-wide exit module was loaded for use during aggregate recovery processing.
- AGGREGATE GROUP *agname* indicates the name of the aggregate group being processed during aggregate backup or aggregate recovery (when ARECOVER AGGREGATE is specified).
- CONTROL FILE DATA SET *data-set-name* indicates the name of the control file specified in the ARECOVER command, in the ARECOVER command, if ARECOVER DATASETNAME was specified.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery processing continues.

Application Programmer Response: None.

ARC6179E ERROR OCCURRED WHILE UPDATING THE MCV RECORD FOR MIGRATION LEVEL 2 VOLUME *volser***. THE AGGREGATE BACKUP FAILED FOR AGGREGATE GROUP** *agname*

Explanation: During the ABACKUP of a migration level 2 (ML2) data set, an attempt was made to update the MCV_FABACKUP flag (volume in use by ABACKUP) of the MCV record associated with the ML2 volume on which the data set resides. The update of the MCV failed.

volser indicates the ML2 volume on which the data resides.

agname indicates the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: When the cause of the MCV update error is corrected, reissue the ABACKUP command.

ARC6181I ERRORS ENCOUNTERED IN PROCESSING DATA SET *data-set-name***, DATA SET WILL BE BYPASSED DURING AGGREGATE BACKUP FOR AGGREGATE GROUP** *agname*

Explanation: During aggregate backup, an error occurred in processing a data set. Installation-wide exit ARCBEEXT was called to resolve the error. The exit indicated that the data set should be bypassed.

- *data-set-name* is the name of the data set that received the error.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: Aggregate backup continues.

Application Programmer Response: For specific error return and/or reason codes associated with the error that caused the data set to be bypassed, refer to previous messages in the ABARS secondary address space activity log for this aggregate group.

ARC6182I DATA SET ***data-set-name1*** **WILL BE BYPASSED DURING AGGREGATE RECOVERY USING CONTROL FILE DATA SET** ***data-set-name2***

Explanation: Installation-wide exit ARCSKEXT was called and indicated that the data set should be bypassed.

- *data-set-name1* is the name of the data set that will be bypassed.
- *data-set-name2* is the name of the control file data set.

Source: DFSMShsm

System Action: Aggregate recovery continues.

Application Programmer Response: None.

ARC6183E DATA SET ***data-set-name*** **SPECIFIED IN THE {ALLOCATE | ACCOMPANY} LIST FOR AGGREGATE GROUP** ***agname*** **CURRENTLY EXISTS**

Explanation: During verification processing for aggregate recovery, a data set specified in the ALLOCATE or ACCOMPANY keyword list was found to exist on the system. The conflict resolution options of the ARECOVER command did not resolve the conflict. Either no conflict resolution action was specified, or the action specified was invalid and could not be taken. In this case, refer to previous message ARC6296I for an indication of the reason the action could not be taken. The data set will not be recovered.

- *data-set-name* is the name of the data set that received the error.
- ALLOCATE indicates that the data set was specified in an ALLOCATE list at the aggregate backup site.
- ACCOMPANY indicates that the data set was specified in an ACCOMPANY list at the aggregate backup site.
- *agname* is the name of the aggregate group definition that contained the data set in error at the aggregate backup site.

Source: DFSMShsm

System Action: DFSMShsm adds an entry into the conflict resolution data set and bypasses further processing of the data set. The remaining data sets are verified. If EXECUTE was specified, data sets not receiving verification errors are recovered.

Application Programmer Response: Decide on what action to take to resolve the conflict. Update the conflict resolution data set entry for the data set to indicate the desired action; BYPASS, REPLACE, RENAMESOURCE(*level*), or RENAMETARGET(*level*). After all the data set conflicts have been resolved, reissue the ARECOVER command.

ARC6185E RENAME LIMIT EXCEEDED. ***data-set-name1*** **COULD NOT BE RENAMED TO** ***data-set-name2*** **FOR CONTROL FILE DATA SET** ***datasetname3*****. DATA SET WILL NOT BE PROCESSED.**

Explanation: The installation-wide exit module ARCCREXT was called because a like-named data set was found at the aggregate recovery site. The exit module indicated that the data set should be renamed to resolve this conflict, but the rename limit of 255 for level 0 data sets has been reached. More than 255 level 0 data sets may not be renamed in one invocation of the ARECOVER command due to DFSMSdss command syntax restrictions. The data set will not be processed. Aggregate recovery processing will continue for the remaining data sets but will not complete successfully.

- *data-set-name1* is the old name of the data set that received the error.
- *data-set-name2* is the new name of the data set that received the error.
- *data-set-name3* is the name of the control file being processed.

Source: DFSMShsm

System Action: Aggregate recovery fails. The aggregate recovery will continue to process the remaining data sets in order to recover as many data sets as possible.

Application Programmer Response: Reissue the ARECOVER command. A restart data set exists to allow aggregate recovery to identify those data sets that have not been successfully processed for this aggregate group. Optionally, modify the rename processing in the installation-wide exit module ARCCREXT before reissuing the ARECOVER command.

ARC6186E NO DATA SETS SELECTED FROM INCLUDE PARAMETER LIST - AGGREGATE BACKUP FAILED FOR AGGREGATE GROUP ***agname***

Explanation: No data sets were found cataloged on the system that satisfy the data set names or masks specified in the INCLUDE and EXCLUDE lists in the selection data sets for this aggregate group. Aggregate backup requires at least one data set to be selected for the INCLUDE parameter list.

- *agname* is the name of the aggregate group being processed by aggregate backup.

Source: DFSMShsm

System Action: Aggregate backup will fail. Processing ends following completion of verification processing.

Application Programmer Response: Edit the selection data sets for the specified aggregate group to modify the INCLUDE and EXCLUDE parameter lists. Supply fully or partially qualified data set names that are cataloged on the system and are to be included in the aggregate backup. Reissue the ABACKUP command after the error has been resolved.

ARC6187E INSTALLATION-WIDE EXIT, MODULE ***modname*** **ABENDED, ABEND CODE IS** ***abendcode***

Explanation: An abnormal end (abend) occurred during processing of a given installation-wide exit. The failure was detected by the ESTAE routine in the module which called the installation-wide exit.

- *modname* is the name of the installation-wide exit module in which the abend occurred.
- *abendcode* is the return code passed from the ESTAE routine for the abend.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery fails.

Issued By:ABARS secondary address space.

Application Programmer Response: Refer to *OS/390 MVS System Codes* for a description of abend and associated reason codes. Reissue the ABACKUP or ARECOVER command after the error is corrected.

ARC6188E AN ABEND OCCURRED WHILE PROCESSING *data-set-name1*. AGGREGATE RECOVERY FOR CONTROL FILE DATA SET *data-set-name2* WILL CONTINUE. ABEND CODE WAS *abcode*

Explanation: A data set has experienced an abnormal end (abend) from which aggregate recovery is able to recover. The data set is not successfully recovered.

- *data-set-name1* is the name of the data set that experienced the abend.
- *data-set-name2* is the name of the control file specified in the ARECOVER command.
- *abcode* is the code of the abend that has occurred.

Source: DFSMShsm

System Action: Aggregate recovery continues processing with the next data set.

Application Programmer Response: Refer to the *OS/390 MVS System Codes* for a description of abend codes. Evaluate the abend and reissue the ARECOVER command after the error has been corrected.

ARC6189E SMS IS INACTIVE, THE FOLLOWING VSAM DATA SETS FROM THE ALLOCATE LIST WILL NOT BE RECOVERED

Explanation: Aggregate recovery attempted to process a VSAM data set specified in an ALLOCATE list at the aggregate backup site. VSAM data sets from the ALLOCATE list must be recovered as SMS-managed, and SMS was found to be inactive. A list of VSAM data sets from the ALLOCATE follows this message. The listed VSAM data sets are not recovered.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Aggregate recovery continues to process the remaining data sets, but does not complete successfully.

Application Programmer Response: Activate SMS and reissue the ARECOVER command, or allocate the VSAM data set by other means.

ARC6191E SELECTION DATA SET *data-set-name*[(*membername*)] FOR AGGREGATE GROUP *agname* DOES NOT ADHERE TO FILE FORMAT RESTRICTIONS

Explanation: The specified selection data set does not follow the required file format restrictions. The RECFM of the file must be fixed-blocked format, the LRECL must be 80, and the DSORG must be PO or PS. Any SMS aggregate definition must indicate a member name whenever the selection data set is a partitioned data set.

- *data-set-name* is the name of the selection data set that could not be processed.
- *membername* is the name of the selection data set that could not be processed when the selection data set is a member of a partitioned data set.
- *agname* is the name of the aggregate group.

Source: DFSMShsm

System Action: DFSMShsm processing ends after attempting to process all selection data sets.

Issued By:ABARS secondary address space.

Application Programmer Response: Redefine the specified selection data set to follow the required format specifications and reissue the ABACKUP command.

ARC6192E *smsmsgtext*

Explanation: DFSMShsm has been performing an aggregate backup operation. SMS has been invoked to retrieve the aggregate group. During the process, SMS issues a message related to the function, and DFSMShsm intercepts the message for retransmission to the ABARS secondary address space activity log.

- *smsmsgtext* is the message passed back from SMS services. SMS messages have a prefix of IGD.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: Reissue the ABACKUP command after the error is resolved.

Refer to message ARC6151E, issued by the ABARS secondary address space. You can also use the *DFSMS/MVS DFSMSdfp Diagnosis Guide* for a description of the SMS messages.

ARC6193E NO SELECTION DATA SETS WERE SPECIFIED FOR AGGREGATE GROUP *agname* - AGGREGATE BACKUP FAILED

Explanation: No selection data sets were specified in the definition for the named aggregate group. At least one selection data set must be specified to provide input for the aggregate backup task.

- *agname* is the name of the aggregate group which did not include any selection data sets.

Source: DFSMShsm

System Action: Aggregate backup fails.

Application Programmer Response: Redefine the specified aggregate group to include one or more selection data sets.

ARC6194E SEQUENCE ERROR OCCURRED IN READING THE CONTROL FILE DATA SET *data-set-name* - AGGREGATE RECOVERY FAILED

Explanation: During the reading of the named control file data set, an unexpected record was encountered.

- *data-set-name* is the name of the control file that received the error.

This error may occur for the following reasons:

- The first volume serial number passed in the VOLUMES parameter of the ARECOVER command is not the first volume serial number of the control file data set name specified in the data set name parameter of the ARECOVER command.
- The volume serial numbers passed in the VOLUMES parameter of the ARECOVER command were not specified in the correct order.

Source: DFSMShsm

System Action: Aggregate recovery fails.

Application Programmer Response: Refer to message ARC6061I in the activity log for the aggregate backup that created this control file for the proper volume serial numbers and the proper order. Reissue the ARECOVER command after the error has been resolved.

ARC6195E UNEXPECTED END OF FILE OCCURRED IN READING THE CONTROL FILE DATA SET ***data-set-name*** **- AGGREGATE RECOVERY FAILED**

Explanation: During the reading of the named control file data set, an end-of-file condition was detected before it was expected. This error can occur when all the volume serial numbers for this control file data set were not specified in the VOLUMES parameter of the ARECOVER command.

- *data-set-name* is the name of the control file that received the error.

Source: DFSMShsm

System Action: Aggregate recovery fails.

Application Programmer Response: Refer to message ARC6061I in the activity log for the aggregate backup that created this control file for the proper volume serial numbers and the proper order. Reissue the ARECOVER command after the error has been resolved.

ARC6196W SMS CONSTRUCT ***construct_name*** **WAS UNABLE TO BE RETRIEVED. AGGREGATE {BACKUP | RECOVERY} WILL CONTINUE PROCESSING. SMS RC=***return-code***, REASON=***reason-code***.**

Explanation: SMS is trying to retrieve a construct a DATA, MANAGEMENT, or STORAGE CLASS, but is unable to do so due to either an undefined construct, or a construct redefined with a different name.

Source: DFSMShsm

System Action: If the missing construct is DATACLASS, then the process continues normally. Otherwise, an error may occur in the RECOVERY process

Issued By: ABARS secondary address space.

Application Programmer Response: If the construct missing is management or storage class, redefine the construct with the same attributes as the original to prevent unpredictable results.

ARC6197I MULTI-VOLUME BDAM DATA SET ***dsname*** **WAS BYPASSED DURING AGGREGATE BACKUP FOR AGGREGATE GROUP** ***agname***

Explanation: The aggregate backup bypassed the data set specified because the ABRCB bit (PATCH .ABRCB.+A8 BITS(.....1..)) was set to ON to bypass multivolume BDAM data sets.

Source: DFSMShsm

System Action: Aggregate backup continues.

Application Programmer Response: No response, unless the installation prefers to have ABACKUP process the multivolume BDAM data sets. To prevent ABACKUP from bypassing multivolume BDAM data sets, issue the following patch command: PATCH .ABRCB.+A8 BITS(.....0..)

Note: If the patch is set to OFF, ABACKUP successfully processes the multivolume BDAM data sets, but ARECOVER fails to recover the multivolume BDAM data sets if they are SMS-managed.

ARC6250I {NO | THE FOLLOWING} TAPE VOLSERS WILL BE REQUIRED DURING ABACKUP FOR AGGREGATE GROUP ***agname volser*** **[,...***volsern***]**

Explanation: An ABACKUP command has been issued with the VERIFY parameter. No verification errors have been found. The message indicates the tape volumes that are required when a subsequent ABACKUP command with the EXECUTE parameter is issued. If no tapes are required, the message indicates this.

- NO indicates that no tape volume serial numbers are required.
- THE FOLLOWING indicates that a list of required tape volume serial numbers follows.
- *agname* is the name of the aggregate group being processed.
- *volser* is the volume serial number of each required tape volume.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

Operator Response: Collect the required tapes in the order listed. Reissue the ABACKUP command with the EXECUTE parameter to back up the aggregate group.

ARC6251E NO VERSION NUMBER AVAILABLE FOR AGGREGATE GROUP ***agname***

Explanation: An ABACKUP command has been issued with the EXECUTE parameter. No version number is available for use in the key of the aggregate version record.

- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Aggregate backup fails.

Application Programmer Response: Issue an EXPIREBV ABARSVERSIONS command to roll off expired aggregate group versions. Reissue the ABACKUP command.

ARC6252E {DELETION | ALLOCATION }OF DATA SET ***dsname*** **FAILED DURING MOVE FUNCTION - UNABLE TO DELETE DATA SET**

Explanation: An error has been encountered while attempting to delete a data set for the MOVE function.

- DELETION indicates that a catalog delete error has occurred.
- ALLOCATION indicates that an error has occurred while attempting to allocate a data set.
- *dsname* is the name of the data set that has not been deleted.

Source: DFSMShsm

System Action: DFSMShsm processing continues. ABACKUP processing continues.

Application Programmer Response: Refer to one of the following error messages for further information and the appropriate action to be taken.

- For a CATALOG error see message ARC6158E.
- For an ALLOCATION error see message ARC6164E.

ARC6253I MOVE FUNCTION HAS COMPLETED {WITH | WITHOUT} ERRORS

Explanation: The MOVE function has completed. It may or may not have deleted all the data sets.

- WITH indicates that one or more data sets have not been deleted.
- WITHOUT indicates that all the data sets have been deleted successfully.

Source: DFSMShsm

System Action: DFSMShsm processing continues. ABACKUP processing continues.

Application Programmer Response: If one or more errors is indicated, consult the activity log for any ARC6252E messages.

ARC6254A ABACKUP CANNOT ALLOCATE TAPE VOLUME *volser* **BECAUSE IT IS IN USE BY ANOTHER DFSMSHSM FUNCTION. RETRY ? REPLY Y OR N**

Explanation: An ABACKUP command has been issued and the tape volume *volser* is being used by another DFSMShsm function. Reply Y if it is requested that ABACKUP retry the allocation. If the reply is N, the mount request ends and ABACKUP processing fails.

Source: DFSMShsm

System Action: If the reply is Y, ABACKUP continues trying to allocate the tape volume. If the reply is N, the mount request ends and ABACKUP processing fails. DFSMShsm processing continues.

Issued By:ABARS secondary address space.

Application Programmer Response: None.

Operator Response: Reply to the prompt.

ARC6255I THE OPERATOR HAS REPLIED YES TO A REQUEST TO RETRY ALLOCATION FOR A TAPE VOLUME THAT IS BUSY

Explanation: An ABACKUP command has been issued and the tape volume is being used by another DFSMShsm function. The operator's response is displayed in this message. The operator has responded Y, therefore, the allocation is retried.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6256E {ALLOCATION | OPEN | I/O} ERROR OCCURRED IN WRITING THE FILTEROUTPUTDATASET *data-set-name* **- ABACKUP PROCESSING CONTINUES FOR AGGREGATE GROUP** *agname*

Explanation: The user has specified the FILTEROUTPUTDATASET (FODS) parameter on the ABACKUP command to list the filtered fully qualified data set names from the INCLUDE/EXCLUDE, ALLOCATE/ALLOCATEEXCLUDE, and ACCOMPANY/ACCOMPANYEXCLUDE lists into an output data set. During processing, the allocation or open has failed, or an I/O error condition has been detected while writing to the data set.

- ALLOCATION indicates that the FODS data set could not be allocated.
- OPEN indicates that the FODS data set could not be opened.
- I/O indicates that an I/O error has occurred while writing the FODS data set.
- *data-set-name* is the name of the specified FILTEROUTPUTDATASET data set.
- *agname* is the name of the aggregate group being processed.

Source: DFSMShsm

System Action: ABACKUP processing continues. DFSMShsm processing continues.

Application Programmer Response: A programming or system problem is indicated. Refer to one of the following error messages for further information and the appropriate action to be taken:

- For an ALLOCATION/DEALLOCATION error see message ARC6164E.
- For an OPEN/CLOSE error see message ARC6161E.
- For an I/O error see messages ARC6160E, ARC0645I.

Operator Response: Notify your system programmer.

ARC6257E SPECIFIED FILTEROUTPUTDATASET *data-set-name* **DOES NOT ADHERE TO FILE FORMAT RESTRICTIONS - ABACKUP PROCESSING CONTINUES**

Explanation: The user has requested to list the filtered fully-qualified data set names from the INCLUDE/EXCLUDE, ALLOCATE/ALLOCATEEXCLUDE, and ACCOMPANY/ACCOMPANYEXCLUDE lists into an output data set by specifying the FILTEROUTPUTDATASET parameter on the ABACKUP command. The specified data set could not be used since it already exists with invalid attributes and is not empty, or is empty with invalid DSORG or RECFM. A valid data set must be DASD, with DSORG=PS, RECFM=FB or F, LRECL=121, and BLKSIZE=121*n.

- *data-set-name* is the name of the specified FILTEROUTPUTDATASET data set.

Source: DFSMShsm

System Action: ABACKUP processing continues.

Application Programmer Response: None.

ARC6258I THE FOLLOWING CATALOG AND ASSOCIATED ALIASES WERE SUCCESSFULLY VERIFIED BY AGGREGATE {BACKUP | RECOVERY }: CATALOG = *catname* **ALIASES = {***aliasname1* **[,...***aliasnamen***] |** *NONE* **}**

Explanation: This message is issued for each integrated catalog facility (ICF) user catalog that has been successfully verified by aggregate backup or aggregate recovery. The associated aliases have also been verified for like-named conflicts during aggregate recovery.

- *catname* is the name of the ICF user catalog.
- *aliasname1,...aliasnamen*are the alias names for the listed catalog.
- NONE is specified if no aliases are found.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6259E THE OPERATOR HAS REPLIED NO TO A REQUEST TO RETRY ALLOCATION FOR A TAPE VOLUME THAT IS BUSY

Explanation: An ABACKUP command has been issued and the tape volume is being used by another DFSMShsm function. The operator's response is displayed in this message. The operator has responded N, therefore ABACKUP fails.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Refer to the previous message ARC6254A in the command activity log or to the ABARS activity log for the volume serial number of the tape volume that is busy.

ARC6280E {INSTRUCTION | ACTIVITY LOG} DATASET CANNOT BE RECOVERED FROM OUTPUT CREATED PRIOR TO DFSMSHSM RELEASE 1.1.0, AGGREGATE RECOVERY WILL CONTINUE

Explanation: An ARECOVER command has been issued with the INSTRUCTION or ACTIVITY parameter specified. The ABACKUP tapes have been created prior to DFSMShsm Version 1 Release 1.0, and either or both the activity log data set and instruction data set cannot be automatically recovered.

- *INSTRUCTION* indicates that the INSTRUCTION parameter has been used on the ARECOVER command.
- ACTIVITY LOG indicates that the ACTIVITY parameter has been used on the ARECOVER command.

Source: DFSMShsm

System Action: Aggregate recovery continues. DFSMShsm processing continues.

Issued By:ABARS secondary address space.

Application Programmer Response: If the INSTRUCTION/ACTIVITY LOG is needed, it may be retrieved manually by invoking DFSMSdss using JCL.

ARC6281I ARECOVER INPUT FILE *filename* HAS BEEN SUCCESSFULLY CATALOGED DURING AGGREGATE RECOVERY

Explanation: An ARECOVER input file has been successfully cataloged during aggregate recovery with DATASETNAME specified as the subparameter.

- *filename* indicates the file (control, DFSMSdss, internal I/O, or instruction/activity log) that has been successfully cataloged.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6282E {INSTRUCTION | ACTIVITY} SPECIFIED ON ARECOVER COMMAND. {INSTRUCTION DATA SET | ACTIVITY LOG} DOES NOT EXIST ON TAPE

Explanation: An ARECOVER command has been issued with the INSTRUCTION or ACTIVITY parameter, and the corresponding file does not exist on the tape

- INSTRUCTION DATA SET indicates the instruction data set does not exist on the tape.
- ACTIVITY LOG indicates the activity log does not exist on the tape.

Source: DFSMShsm

System Action: DFSMShsm processing continues. No attempt is made to recover these data sets.

Application Programmer Response: If the activity log/instruction data set exist on the ABACKUP output tapes, then refer to the preceding DFSMSdss messages to determine why DFSMSdss failed to find the activity log or instruction data set.

ARC6283E RECOVERY TO ML2 VOLUMES IS DISABLED. AGGREGATE RECOVERY OF *data-set-name1* FAILED USING {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name2* }

Explanation: MIGRATEDDATA(SOURCELEVEL) or MIGRATEDDATA(ML2) has been specified on the ARECOVER command. Attempts to internally ADDVOL tapes to perform aggregate recovery have failed.

- *data-set-name1* specifies the data set that has failed to be recovered.
- AGGREGATE GROUP indicates that the AGGREGATE parameter has been specified in the ARECOVER command, with the specified *agname* as the subparameter.
- CONTROL FILE DATA SET indicates that the DATASETNAME parameter has been specified in the ARECOVER command, with the specified *data-set-name2* as the subparameter.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Aggregate recovery continues with recovery to ML2 volumes disabled.

Application Programmer Response: Refer to the preceding ARC0113I and ARC0127I messages and their programmer response.

ARC6284E CONFLICT RESOLUTION ACTION *action* FAILED FOR DATA SET *data-set-name*, DATA SET WILL BE BYPASSED DURING AGGREGATE RECOVERY

Explanation: A like-named conflict has been found during ARECOVER processing. The conflict resolution processing has selected the indicated *action* to resolve the conflict. An error has been encountered when attempting to perform the requested action. As a result, the data set is not recovered.

- *data-set-name* indicates the data set name in conflict.

Source: DFSMShsm

System Action: ARECOVER processing continues. Data sets not receiving errors are recovered. If there is no entry, an entry is added to the conflict resolution data set indicating a conflict resolution action of BYPASS.

Application Programmer Response: Refer to previous messages in the ABARS activity log for details regarding the nature of the error. After correcting the error, reissue the ARECOVER command to complete the aggregate recovery for the data sets not already recovered. The user may wish to modify the action in the conflict resolution data set entry for the bypassed data set.

ARC6285E VALID AGGREGATE VERSION RECORD ALREADY EXISTS FOR DATASETNAME *data-set-name*, PREPARE FUNCTION FAILED

Explanation: An ARECOVER has been issued with the DATASETNAME(*data-set-name*) and PREPARE parameters. An existing aggregate version record has been found in the BCDS for the associated aggregate group with all the ARECOVER input files cataloged. The PREPARE function fails.

- *data-set-name* is the name of the control file data set specified in the DATASETNAME(*data-set-name*) subparameter of the ARECOVER command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command with the VERIFY or EXECUTE parameters, or issue the ARECOVER command with the AGGREGATE(*agname*) subparameter to continue the aggregate recovery process.

ARC6286E NO VALID AGGREGATE VERSION RECORD FOUND FOR [AGGREGATE GROUP(*agname*) {, VERSION(*vvvv*) | DATE(*yyyy/mm/dd*) } | DATASETNAME(*data-set-name*)], ARECOVER COMMAND FAILED

Explanation: An ARECOVER command has been issued. If the AGGREGATE parameter has been specified, no aggregate version record have been found in the BCDS for the indicated aggregate group name, or an aggregate version record has been found but one or more associated ARECOVER input files are not cataloged.

If the DATASETNAME parameter has been specified along with VERIFY or EXECUTE, an aggregate version record has been found but one or more associated ARECOVER input files are not cataloged.

- AGGREGATE(*agname*) indicates that AGGREGATE has been specified on the ARECOVER command. *agname* is the aggregate group name that has been specified.
- VERSION(*vvvv*) indicates that VERSION has been specified on the ARECOVER command. *vvvv* is the version number that has been specified.
- DATE(*yyyy/mm/dd*) indicates that DATE has been specified on the ARECOVER command. *yyyy/mm/dd* is the date that has been specified.
- DATASETNAME(*data-set-name*) indicates that DATASETNAME has been specified on the ARECOVER command. *data-set-name* is the control file data set name that has been specified.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command with the DATASETNAME and PREPARE parameters to cause the aggregate group version record to be created. If the PREPARE function has been performed, correct the subparameters to reflect the proper aggregate group name, version, date, or control file data set name, and reissue the ARECOVER command.

To determine if an aggregate version record has been found but one or more associated ARECOVER input files are not cataloged, you can issue the LIST AGGREGATE(agname) command to determine if an ABR record exists. If it exists, then the LIST command will indicate if there are uncataloged files. If an associated ARECOVER input file is not cataloged, then two options are available. Delete the ABR record and reissue the ARECOVER command with the DATASETNAME parameter, or catalog the control, data, instruction/activity log files and reissue the ARECOVER command with the DATASETNAME or AGGREGATE parameter.

ARC6289I ALL ELIGIBLE DATA SETS WILL BE RENAMED FOR RECOVERNEWNAMEALL DURING AGGREGATE RECOVERY USING THE SPECIFIED LEVEL *level*

Explanation: An ARECOVER command has been issued with the RECOVERNEWNAMEALL parameter. The specified *level* subparameter is used to rename all eligible data sets during aggregate recovery.

Data sets that are *not* eligible for rename include:

- Tape data sets from the ACCOMPANY list
- Migrated VSAM data sets
- Integrated catalog facility user catalogs from the ALLOCATE list

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6290I ELIGIBLE DATA SETS WILL BE RENAMED FOR RECOVERNEWNAMELEVEL DURING AGGREGATE RECOVERY USING THE FOLLOWING RENAME LEVEL PAIRS: *oldlevel* **[,...***newlevel***]**

Explanation: An ARECOVER command has been issued with the RECOVERNEWNAMELEVEL parameter. The listed level pairs are used to rename all eligible data sets during aggregate recovery. Data sets matching the *oldlevel* qualifier are renamed using the corresponding *newlevel*.

Data sets that are *not* eligible for rename include:

- Tape data sets from the ACCOMPANY list
- Migrated VSAM data sets
- Integrated catalog facility user catalogs from the ALLOCATE list

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6291I SOURCE DATA SET *data-set-name* **WILL NOT BE RENAMED FOR RECOVERNEWNAMEALL/LEVEL DURING AGGREGATE RECOVERY**

Explanation: An ARECOVER command has been issued with the RECOVERNEWNAMEALL or RECOVERNEWNAMELEVEL parameter. The specified data set *data-set-name* has matched the rename filtering criteria but may not be renamed due to restrictions. The data set is recovered with the original name.

Restrictions that cause a data set to be ineligible for rename include:

- Tape data sets from the ACCOMPANY list
- Migrated VSAM data sets
- Integrated catalog facility user catalogs from the ALLOCATE list

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6293E ARECOVER REPLACE PARAMETER IS NO LONGER SUPPORTED. THE PROPER PARAMETER IS DATASETCONFLICT(REPLACE). ARECOVER COMMAND IS REJECTED

Explanation: An ARECOVER command has been issued with the REPLACE parameter. This parameter has been replaced by DATASETCONFLICT(REPLACE), which may be specified regardless of the specification of SETSYS ARECOVERREPLACE | NOARECOVERREPLACE.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command with the DATASETCONFLICT parameter.

ARC6294I TRUNCATION WILL OCCUR DURING RENAME FOR DATA SET *data-set-name1* **DURING AGGREGATE RECOVERY, NEW DATA SET NAME WILL BE** *data-set-name2*

Explanation: An ARECOVER command has been issued with one of the following parameters, causing the specified data set *data-set-name1* to be selected for rename.

- RECOVERNEWNAMEALL(*level*)
- RECOVERNEWNAMELEVEL(*olevel,nlevel*)
- DATASETCONFLICT(RENAMESOURCE(*level*))
- DATASETCONFLICT(RENAMETARGET(*level*))

During rename processing, the new data set name would have been greater than 44 characters. The new name is truncated to *data-set-name2*.

- *data-set-name1* indicates the original data set name.
- *data-set-name2* indicates the resulting new data set name after truncation.

Source: DFSMShsm

System Action: Processing continues.

Application Programmer Response: None.

ARC6295E INSTALLATION-WIDE EXIT ARCCREXT RETURNED INVALID {DATA SET NAME *data-set-name1* **| LEVEL** *level***}, {SOURCE | TARGET} DATA SET** *data-set-name2* **COULD NOT BE RENAMED, SOURCE DATA SET WILL BE BYPASSED DURING AGGREGATE RECOVERY**

Explanation: A like-named conflict has been found during ARECOVER processing. The installation-wide exit ARCCREXT has been called and has passed back an exit return code. Exit return code 12 indicates to rename the source data set to the specified data set name *data-set-name1*. The specified data set name returned by the exit is invalid. Exit return code 16 indicates to rename the target data set to the specified level *level*. The specified level returned by the exit is invalid. As a result, the conflicting data set is recovered.

- *data-set-name1* indicates the new (invalid) data set name that has been returned by ARCCREXT.
- *level* indicates the new (invalid) level that has been returned by ARCCREXT.
- SOURCE indicates that ARCCREXT has attempted to rename a source data set.
- TARGET indicates that ARCCREXT has attempted to rename a target data set.
- *data-set-name2* indicates the conflicting data set name.

Source: DFSMShsm

System Action: Processing continues. The remaining data sets to be recovered are verified. An entry for the data set is added into the conflict resolution data set with an action of BYPASS. If EXECUTE has been specified, data sets not receiving verification errors are recovered.

Application Programmer Response: None.

ARC6296I CONFLICT RESOLUTION ACTION *action* **FROM THE {CONFLICT RESOLUTION DATA SET | DATASETCONFLICT PARAMETER | INSTALLATION-WIDE EXIT ARCCREXT} {IS INVALID | DID NOT RESOLVE THE CONFLICT | IS NOT AUTHORIZED} FOR DATA SET** *data-set-name* **FROM** *listtype* **LIST DURING AGGREGATE RECOVERY**

Explanation: A like-named conflict has been found during ARECOVER processing. The requested *action* has been either invalid, not RACF-authorized, or did not resolve the like-named conflict for the data set.

- *action* indicates the requested conflict resolution action for the data set.
- CONFLICT RESOLUTION DATA SET indicates that the *action* is from the conflict resolution data set.
- DATASETCONFLICT PARAMETER indicates that the *action* is from the DATASETCONFLICT parameter.
- INSTALLATION-WIDE EXIT ARCCREXT indicates that the *action* is from the installation-wide exit ARCCREXT.
- IS INVALID indicates that the *action* is invalid for the data set.
- IS NOT AUTHORIZED indicates that the *action* is not RACF-authorized.
- DID NOT RESOLVE THE CONFLICT indicates that the *action* did not resolve the like-named conflict for the data set.
- *data-set-name* indicates the data set name in conflict.
- *listtype* indicates the data set came from the INCLUDE, ACCOMPANY, or ALLOCATE list.

If IS INVALID is indicated, the *action* is invalid because:

- If the *action* is RENAMESOURCE:
  - RENAMESOURCE is not supported for migrated VSAM data sets, or for ACCOMPANY (tape) data sets.
- If the *action* is RENAMETARGET:
  - RENAMETARGET is not supported for existing catalogs, generation data group (GDG) or generation data set (GDS) data sets, or tape data sets, and is only supported for the following catalog entry types:
    - non-VSAM DASD
    - VSAM cluster (not a catalog)
    - VSAM alternate index (AIX)
    - Data or index component, or path, related to a VSAM cluster (not a catalog) or AIX
- If the *action* is REPLACE:
  - REPLACE is not supported for ALLOCATE or ACCOMPANY data sets, or existing catalogs, and is only supported for the following catalog entry types:
    - Non-VSAM.
    - VSAM cluster (not a catalog).
    - VSAM AIX.
    - If a conflict is detected for a data component, index component, or path related to a VSAM cluster (not a catalog) or a VSAM AIX, the entire related VSAM base cluster is replaced.

  If IS NOT AUTHORIZED is indicated, the user did not have RACF facility class authorization to the STGADMIN.ARC.ARECOVER command profile. RACF authority to resolve the conflict has been denied for one of the following reasons:

  - If the *action* is REPLACE:

  - The user does not have RACF FACILITY class authorization to the STGADMIN.ARC.ARECOVER.*agname*.REPLACE command profile.
  - The user has the proper FACILITY class authorization, but does not have RACF ALTER access authority to the indicated data set.
- If the *action* is RENAMETARGET:
  - The user does not have RACF FACILITY class authorization to the STGADMIN.ARC.ARECOVER.*agname*.RENTGT command profile.
  - The user has the proper FACILITY class authorization, but does not have RACF ALTER access authority to the indicated data set.

If DID NOT RESOLVE THE CONFLICT is indicated, the following are possible reasons why the action did not resolve the like-named conflict:

- If the *action* is RENAMESOURCE:
  - The new name of the data set already exists at the ARECOVER site.
  - If the data set is VSAM, all components of the source data set must be renamed and checked for existing duplicates. Either the cluster or components are not renamed because of existing duplicates.
  - If the data set is a GDS, both the GDS and the GDG base must be renamed and checked for existing duplicates. Either the GDS or the GDG base are not renamed because of existing duplicates.
  - If the data set is an integrated catalog facility (ICF) user catalog, another ICF user catalog to be recovered may include an alias that would cause the catalog to fail the DEFINE. ICF user catalogs cannot have their alias defined in another ICF user catalog.
- If the *action* is RENAMETARGET:
  - The new name of the data set already exists at the ARECOVER site.
  - If the data set is VSAM, all components of the target data set must be renamed and checked for existing duplicates. Either the cluster or components are not renamed because of existing duplicates.
  - Another data set being recovered is already being renamed to the new target data set name selected for the data set.
- If the *action* is REPLACE:
  - ARECOVER has detected this multivolume data set which is cataloged at the ARECOVER site. ARECOVER is unable to resolve the conflict because one or more of the indicated volumes are offline and an F1DSCB has been detected on at least one of the online volumes.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Change the requested conflict resolution action, or provide the required RACF authority. The order of priority for conflict resolution is:

- If a conflict resolution data set exists and there is an entry for the data set in conflict, the requested action is taken. The action may be changed (prior to issuing the ARECOVER command) from BYPASS to the desired action, or the entry in the conflict resolution data set may be deleted.
- If the DATASETCONFLICT parameter has been specified on the ARECOVER command, and the conflict is not resolved, the action indicated by the subparameter is taken if it is valid. If required, change the subparameter to the desired action.
- If the conflict is not resolved, and the installation-wide exit ARCCREXT is active, the exit is called to resolve the conflict. In this case, the exit must be changed to specify the desired action.

Once the conflict resolution action is requested, or the conflict is resolved through external means, reissue the ARECOVER command to recover the remaining data sets.

ARC6297E DATA SET *data-set-name1* COULD NOT BE RENAMED TO NEW NAME *data-set-name2*, DATA SET WILL BE BYPASSED DURING AGGREGATE RECOVERY

Explanation: An attempt has been made to rename a data set as a result of the RECOVERNEWNAMEALL, RECOVERNEWNAMELEVEL, or DATASETCONFLICT(RENAMESOURCE|RENAMETARGET) parameter on the ARECOVER command, or a conflict resolution data set entry, or installation-wide exit ARCCREXT processing. The data set to be recovered could not be renamed, because the new name matches the name of another data set to be recovered, or because another data set to be recovered has already been renamed to the same new name. The data set is not recovered.

- *data-set-name1* indicates the name of the data set that could not be renamed. This data set is bypassed.
- *data-set-name2* indicates the new data set name that has caused the error.

Source: DFSMShsm

System Action: Processing continues. The remaining data sets to be recovered are verified. If EXECUTE was specified, data sets not receiving verification errors are recovered.

Application Programmer Response: Correct the source of the rename error and reissue the ARECOVER command.

ARC6298E CATALOG DATA SET *catalogname* FAILED VERIFICATION DURING AGGREGATE RECOVERY

Explanation: A catalog data set cannot be recovered because of an error has been encountered during ARECOVER verification processing.

- *catalogname* indicates the name of the catalog that has failed the ARECOVER verification process.

The following condition may be the cause of the verification error:

- A like-named catalog entry already exists on the system. Either no conflict resolution action has been indicated, or a conflict resolution action has been specified that is invalid.

Source: DFSMShsm

System Action: ARECOVER processing ends when verification is complete. DFSMShsm processing continues.

Application Programmer Response: Refer to previous messages in the ARECOVER activity log for detailed information on the cause of the error. Resolve the rename or like-named conflict error and reissue the ARECOVER command.

ARC6299E THE {DATE | VERSION | XMIT | VOLUMES | UNIT} PARAMETER IS INVALID WITH THE {DATASETNAME | AGGREGATE} PARAMETER. ARECOVER COMMAND IS REJECTED

Explanation: An invalid combination of parameters has been specified on the ARECOVER command.

- The DATE and VERSION parameters are not valid with the DATASETNAME parameter on the ARECOVER command. DATE or VERSION may be specified on the ARECOVER command only if AGGREGATE is also specified.
- The XMIT, VOLUMES, and UNIT parameters are not valid with the AGGREGATE parameter on the ARECOVER command. XMIT, VOLUMES, or UNIT may be specified only if DATASETNAME is also specified.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command.

ARC6300E THE ACTIVITY AND/OR INSTRUCTION PARAMETER IS REQUIRED WHEN THE PREPARE AND AGGREGATE PARAMETERS ARE SPECIFIED ON THE ARECOVER COMMAND. ARECOVER COMMAND IS REJECTED

Explanation: When the ARECOVER command has been issued with the AGGREGATE and PREPARE parameters specified, either or both the INSTRUCTION or ACTIVITY parameters must also be specified.

Source: DFSMShsm

System Action: ARECOVER processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command using proper command syntax.

ARC6302E INVALID LEVEL *level* SPECIFIED FOR RECOVERNEWNAMELEVEL. ARECOVER COMMAND IS REJECTED

Explanation: A high level qualifier specified as a RECOVERNEWNAMELEVEL subparameter is invalid when:

- The new high level qualifier is the same as the old high level qualifier.
- The same old high level qualifier has been listed more than once.

This message has been issued only for the first occurrence of the error.

Source: DFSMShsm

System Action: ARECOVER processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with a valid high level qualifier name.

ARC6303E (ODD NUMBER | MORE THAN 30 PAIRS) OF LEVELS SPECIFIED FOR RECOVERNEWNAMELEVEL. ARECOVER COMMAND IS REJECTED

Explanation: An even number of high level qualifiers, consisting of no more than 30 pairs, may be specified in the RECOVERNEWNAMELEVEL subparameter list.

Source: DFSMShsm

System Action: ARECOVER processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with an even number of high level qualifiers consisting of no more than 30 pairs.

ARC6304E THE VOLUMES PARAMETER IS REQUIRED WHEN UNIT IS SPECIFIED ON THE ARECOVER DATASETNAME COMMAND. ARECOVER COMMAND IS REJECTED

Explanation: The UNIT parameter may not be specified with the AGGREGATE parameter on the ARECOVER command. This is optional when the DATASETNAME parameter has been specified. When the UNIT parameter has been specified, the VOLUMES parameter must also be specified.

Source: DFSMShsm

System Action: ARECOVER processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command using proper command syntax.

ARC6305I A TARGET DATA SET HAS BEEN RENAMED FOR AGGREGATE RECOVERY OF DATA SET *data-set-name1*, NEW DATA SET NAME IS:

Explanation: *cat_entry_type data-set-name2 cat_entry_typen data-set-namen*

During aggregate recovery, a data set to be recovered has been found to have a duplicate data set name already existing on the remote site's system. The conflict resolution processing has selected the RENAMETARGET option to resolve the conflict. The duplicate data set has been renamed. If the data set is VSAM, all related components existing on the remote site's system are renamed and listed.

Multiple target data sets may have to be renamed to resolve the conflict if the source data set being recovered is VSAM and has components that have a like-named conflict with different target objects. In this case, this message is issued for each occurrence of a different target object that has been renamed.

- *data-set-name1* is the name of the data set to be recovered.
- *cat_entry_type* is a description of the catalog entry type of the conflicting target data set that has been renamed. It will indicate NONVSAM, CLUSTER, COMPONENT, AIX, or PATH.
- *data-set-name2* is the new name of the conflicting target data set (or component) that has been renamed.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6306I RESTART DATA SET *data-set-name* NOT DELETED DURING AGGREGATE RECOVERY

Explanation: Aggregate recovery processing has been successfully completed, but one or more data sets has been bypassed as a result of an entry in the conflict resolution data set. The restart data set is not automatically deleted.

- *data-set-name* is the name of the restart data set that has been retained.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Determine if any of the data sets listed in the conflict resolution data set should not be bypassed. If necessary correct the conflict resolution for these data sets and reissue the ARECOVER command. Otherwise, delete the restart data set manually. If the aggregate recovery is found to be complete, the conflict resolution data set may also be deleted.

ARC6307E CONFLICT RESOLUTION ACTION *action* FAILED FOR CATALOG DATA SET *catalogname* DURING AGGREGATE RECOVERY

Explanation: During aggregate recovery, an integrated catalog facility (ICF) catalog in the ALLOCATE list to be recovered has been found to have a duplicate catalog entry existing on the remote site’s system. The conflict resolution processing has selected the indicated *action* to resolve the conflict. An error has occurred while attempting the indicated conflict resolution action.

- *action* indicates the selected conflict resolution action. selected.
- *catalogname* indicates the name of the catalog that cannot be recovered.

Source: DFSMShsm

System Action: ARECOVER processing ends following the completion of remaining verification processing. No further ABARS processing takes place even if the EXECUTE parameter has been specified. DFSMShsm processing continues.

Application Programmer Response: Refer to previous messages in the ARECOVER activity log for details regarding the nature of the error. After correcting the error, reissue the ARECOVER command to complete the aggregate recovery.

ARC6308I CONFLICT RESOLUTION DATA SET *data-set-name* {WILL BE USED | WAS CREATED | WAS MODIFIED} DURING AGGREGATE RECOVERY

Explanation: During aggregate recovery, a conflict resolution data set has been created to contain a list of data set names and conflict resolution actions. The data set may be edited by the user to add, modify, or delete data set names and resolutions. Conflict resolution utilizes the conflict resolution data set to resolve conflicts during the next aggregate recovery.

- *data-set-name* is the name of the conflict resolution data set that contains the data set names and resolutions for conflict resolution.
- WILL BE USED indicates that the conflict resolution data set previously existed and will be used during the current ARECOVER invocation.
- WAS CREATED indicates that the conflict resolution data set did not previously exist and has been created as a result of verification errors.
- WAS MODIFIED indicates that the conflict resolution data set previously existed and has been modified because some conflicts have been resolved, or new conflicts have been found, or both.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6309E CONFLICT RESOLUTION DATA SET *data-set-name1* FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name2*} DOES NOT ADHERE TO FILE FORMAT RESTRICTIONS

Explanation: The identified conflict resolution data set does not follow the required file format restrictions. The RECFM of the file must be fixed or fixed-blocked format, the LRECL must be 80, and the DSORG must be PS. If RECFM=FB, BLKSIZE must be 80 or a multiple of 80.

- *data-set-name1* is the name of the conflict resolution data set that could not be processed.
- AGGREGATE GROUP indicates that the AGGREGATE parameter has been specified in the ARECOVER command, with *agname* specified as the subparameter.
- CONTROL FILE DATA SET indicates that the DATASETNAME parameter has been specified in the ARECOVER command, with the *data-set-name2* specified as the subparameter.

Source: DFSMShsm

System Action: DFSMShsm processing continues. ARECOVER processing continues and ends following verification processing. The conflict resolution data set is ignored during the verification process.

Application Programmer Response: If conflicts are found during the verification process, the existing conflict resolution data set is deleted by ABARS processing and rewritten in the proper format. Refer to message ARC6308I in the ARECOVER activity log indicating that the conflict resolution data set has been modified. If no conflicts are found, the invalid conflict resolution data set is retained. Either delete the data set (and allow subsequent ARECOVER verification processing to create it internally if needed), or delete the invalid data set and redefine it with the proper attributes. Reissue the ARECOVER command.

ARC6326I OPEN WILL BE RETRIED USING {STACK | NOSTACK} OPTION. ARECOVER PROCESSING WILL CONTINUE.

Explanation: The ARECOVER command has been specified with either the STACK or NOSTACK option, but the ABACKUP output format conflicts, which causes an OPEN failure to occur.

- **STACK** indicates that the ARECOVER command will retry processing as if the STACK option had been requested.
- **NOSTACK** indicates that the ARECOVER command will retry processing as if the NOSTACK option had been requested.

System Action: DFSMShsm processing continues.

Application Programmer Response: ARECOVER will switch options and continue processing. If you want to reissue the ARECOVER command, make sure that you use the correct STACK or NOSTACK option.

ARC6310E CONFLICT RESOLUTION DATA SET *data-set-name* **CONTAINS PARSE ERROR ON LINE** *line_num***, LINE='***line_text***'**

Explanation: A parse error has been encountered while parsing the contents of the conflict resolution data set. Either the data set name or conflict resolution action, or both, is invalid or not specified. The following is the format of an entry in the conflict resolution data set:

```
entryname        conflict_resolution_action
```

Valid entry names are fully qualified 1–44 character data set names (member names are not allowed). Valid conflict resolution actions are RENAMESOURCE(*level*), RENAMETARGET(*level*), REPLACE, and BYPASS.

- *data-set-name* is the name of the conflict resolution data set that contains the data set names and resolutions for conflict resolution.
- *line_num* is the line number in the conflict resolution data set that contains a parse error.
- *line_text* is the line in the conflict resolution data set that contains a parse error.

Source: DFSMShsm

System Action: DFSMShsm processing continues. ARECOVER processing continues. The entries receiving parse errors are not used in resolving conflicts during verification.

Application Programmer Response: Correct the parse error indicated in the conflict resolution data set and reissue the ARECOVER command.

If the conflict resolution data set is modified during aggregate recovery processing (because conflicts were resolved, or new conflicts were found; refer to the ARECOVER activity log for message ARC6308I), the erroneous entry is not rewritten in the modified conflict resolution data set.

ARC6311E CONFLICT RESOLUTION DATA SET *data-set-name1* **CONTAINS AN ENTRY FOR DATA SET** *data-set-name2* **THAT DOES NOT EXIST IN CONTROL FILE DATA SET** *data-set-name3*

Explanation: The specified conflict resolution data set contains a data set name that is not part of the aggregate recovery.

- *data-set-name1* is the name of the conflict resolution data set that is being processed.
- *data-set-name2* is the name of the data set that is not part of the aggregate recovery.
- *data-set-name3* indicates the control file name being processed.

Source: DFSMShsm

System Action: DFSMShsm processing continues. ARECOVER processing continues. The extraneous entry is ignored during the conflict resolution process.

Application Programmer Response: Correct or remove the data set name from the conflict resolution data set.

If the conflict resolution data set is modified during aggregate recovery processing (because conflicts were resolved, or new conflicts were found; refer to the ARECOVER activity log for message ARC6308I), the erroneous entry is not rewritten in the modified conflict resolution data set.

ARC6312E CONFLICT RESOLUTION DATA SET *data-set-name* **CONTAINS DUPLICATE ENTRIES FOR DATA SET** *entry*

Explanation: The specified conflict resolution data set contains duplicate entries.

- *data-set-name* is the name of the conflict resolution data set that is processed.
- *entry* is the name of the duplicate entry in the conflict resolution data set.

Source: DFSMShsm

System Action: DFSMShsm processing continues. ARECOVER processing continues. The duplicate entries are ignored during the conflict resolution process.

Application Programmer Response: Correct or remove the duplicate data set name from the conflict resolution data set.

If the conflict resolution data set is modified during aggregate recovery processing (because conflicts were resolved, or new conflicts were found; refer to the ARECOVER activity log for message ARC6308I), the erroneous entry is not rewritten in the modified conflict resolution data set.

ARC6313I DUPLICATE ALIAS WAS FOUND AND WILL NOT BE DEFINED BY ARECOVER. ALIAS *aliasname* **OF CATALOG** *catalogname1* **IS ASSOCIATED WITH CATALOG** *catalogname2* **AT TARGET SITE**

Explanation: During ARECOVER verification processing, the integrated catalog facility (ICF) user catalog *catalogname1* to be recovered has been found to have an associated alias *aliasname* that is in conflict with an alias of the existing ICF user catalog *catalogname2* at the target site. The alias *aliasname* will not be defined.

Any data sets recovered that begin with *aliasname* will be cataloged in the existing ICF user catalog *catalogname2* during aggregate recovery processing.

- *aliasname* is the name of the alias which could not be defined due to a conflict with an existing catalog entry.
- *catalogname1* is the name of the ICF user catalog being recovered.
- *catalogname2* is the name of the ICF user catalog already existing at the target site, with which alias *aliasname* is already associated.

Source: DFSMShsm

System Action: ARECOVER processing continues. DFSMShsm processing continues.

Application Programmer Response: None.

ARC6314I ALIAS NAME WILL NOT BE DEFINED BY ARECOVER. ALIAS *aliasname* **OF CATALOG** *catalogname* **IS IN CONFLICT WITH AN EXISTING CATALOG ENTRY AT THE TARGET SITE**

Explanation: During ARECOVER verification processing, the integrated catalog facility (ICF) user catalog *catalogname* to be recovered has been found to have an associated alias *aliasname* that is in conflict with a catalog entry already in place at the target site.

The alias *aliasname* could not be defined.

- *aliasname* is the name of the alias which could not be defined due to a conflict with an existing catalog entry.
- *catalogname* is the name of the ICF user catalog being recovered.

Source: DFSMShsm

System Action: ARECOVER processing continues. DFSMShsm processing continues.

Application Programmer Response: The alias could not be defined. This message is issued when the alias *aliasname* is in conflict with a catalog entry at the target set that is *not* an existing alias or ICF user catalog. In this case, there is a data set name already existing on the target system that begins with the high level qualifier *aliasname*.

ARC6315E DASD UNIT IS INVALID FOR THE SETSYS (ARECOVERML2UNIT | ARECOVERUNITNAME | ABARSUNITNAME) PARAMETER

Explanation: A SETSYS command was issued specifying a DASD unit. Only a valid tape unit name may be specified as the subparameter for ARECOVERML2UNIT, ARECOVERUNITNAME, or ABARSUNITNAME.

Source: DFSMShsm

System Action: Processing of other SETSYS command parameters continues. DFSMShsm processing continues.

Application Programmer Response: Reissue the SETSYS command with a valid tape unit name subparameter.

ARC6316E MEMBER NAMES ARE NOT ALLOWED IN THE CONTROL FILE DATA SET NAME. ARECOVER COMMAND IS REJECTED

Explanation: An ARECOVER command was issued with DATASETNAME specified, but the control file data set name contained parentheses.

Source: DFSMShsm

System Action: ARECOVER processing is discontinued. DFSMShsm processing continues.

Application Programmer Response: Reissue the ARECOVER command with a valid data set name for the DATASETNAME parameter.

ARC6317E VERSION 0000 SPECIFIED FOR (*command*) COMMAND IS INVALID

Explanation: An ARECOVER or LIST command was issued with the VERSION parameter. The specified VERSION(0000) is not valid for an ABR record.

- *command* indicates the command being processed.

Source: DFSMShsm

System Action: The specified command processing fails. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with a valid VERSION.

ARC6318E INSUFFICIENT SPACE ON LEVEL 0 VOLUMES TO RECOVER ICF USER CATALOG *catalogname* FOR AGGREGATE GROUP *agname* USING CONTROL FILE DATA SET *data-set-name*. AGGREGATE RECOVERY FAILED

Explanation: There is insufficient space on level 0 volumes to recover the integrated catalog facility (ICF) user catalog.

- *catalogname* indicates the ICF user catalog being processed.
- *agname* indicates the aggregate group being processed.
- *data-set-name* indicates the control file name being processed.

Source: DFSMShsm

System Action: ARECOVER processing ends. DFSMShsm processing continues.

Application Programmer Response: Use the DEFINE ARPOOL command with the L0VOLS parameter to redefine the volume pool to be used for the aggregate recovery, adding level 0 volumes to the pool to make available sufficient space for the aggregate recovery to complete. Reissue the ARECOVER command.

ARC6319E CATALOG DATA SET *catalogname1* COULD NOT BE RENAMED TO NEW NAME *catalogname2*, AGGREGATE RECOVERY WILL FAIL FOLLOWING VERIFICATION.

Explanation: An attempt has been made to rename a catalog data set as a result of the DATASETCONFLICT(RENAMESOURCE|RENAMETARGET) parameter on the ARECOVER command, a conflict resolution data set entry, or user exit ARCCREXT processing. The catalog data set to be recovered could not be renamed because the new name matches the name of another data set to be recovered, or because another data set to be recovered has already been renamed to the same new name. The catalog data set will not be recovered and verification will fail.

- *catalogname1* indicates the name of the catalog data set that could not be renamed.
- *catalogname2* indicates the new data set name that caused the error.

Source: DFSMShsm

System Action: ARECOVER processing ends following the completion of remaining verification processing. No further ABARS processing takes place even if the EXECUTE parameter is specified. DFSMShsm processing continues.

Application Programmer Response: Correct the source of the rename error and reissue the ARECOVER command.

ARC6320E ERROR OCCURRED DURING DEFINE OF ALIAS *aliasname* RELATED TO ICF USER CATALOG *catalogname*

Explanation: An error has occurred while attempting to define an alias.

- *aliasname* is the name of the alias that has received the error.
- *catalogname* is the name of the integrated catalog facility (ICF) user catalog to which the alias is related.

Source: DFSMShsm

System Action: Aggregate recovery processing continues if the alias could not be defined because a duplicate entry exists at the aggregate recovery site. Aggregate recovery processing ends if any other error is encountered.

Application Programmer Response: For specific error return codes and reason codes associated with the failure, refer to the previous message ARC6158E in the DFSMShsm secondary address space activity log for this aggregate recovery task. Correct the error and reissue the ARECOVER command.

ARC6321E AN ADDVOL FOR TAPE VOLUME *volser* WAS REJECTED BY THE DFSMSHSM PRIMARY ADDRESS SPACE

Explanation:

- *volser* is the name of the volume that has been rejected.

Source: DFSMShsm

System Action: An attempt was made to ADDVOL the tape as a migration (ML2) volume; however, the ADDVOL was rejected. Recovery to ML2 tape volumes is disabled and the ARECOVER continues. A different scratch tape should be mounted to satisfy the ML2 volume mount request, whenever the ARECOVER is attempted again.

Application Programmer Response: None.

Operator Response: Mount a different scratch tape whenever ARECOVER is attempted again.

ARC6322E USER {*userid* | *consoleid*} NOT AUTHORIZED FOR {*command* | *command parameter*} COMMAND/PARAMETER

Explanation: RACF processing has determined that the user or console operator is not authorized to use the COMMAND/PARAMETER through the RACF FACILITY class profile defined for the COMMAND/PARAMETER.

- *userid* is the ID of the user who has issued the COMMAND/PARAMETER.
- *consoleid* is the console ID of the operator who has issued the COMMAND/PARAMETER.

Source: DFSMShsm

System Action: Aggregate recovery processing ends. DFSMShsm processing continues.

Operator Response: To use the command/parameter, contact your security administrator for authorization to the required RACF profile (restricted or comprehensive). Reissue the command or parameter.

Application Programmer Response: To use the command/parameter, contact your security administrator for authorization to the required RACF profile (restricted or comprehensive). Reissue the command or parameter.

ARC6323E CREATION OF THE USER ACEE FAILED FOR *userid* DURING *command* authorization, RACF RC= *return-code*, RACF REAS= *reason-code*.

Explanation: A USER ACEE is needed for the *command* authorization, but RACF has been unable to create the USER ACEE for *userid*.

- *userid* is the user's ID who has issued the command.
- *command* is the command that has been issued by the *userid*
- *return-code* is the return code from RACF.
- *reason-code* is the reason code from RACF.

For return code and reason code values, refer to the *OS/390 Security Server (RACF) Macros and Interfaces*.

Source: DFSMShsm

System Action: The *command* fails and DFSMShsm processing continues.

Application Programmer Response: The system programmer or storage administrator responsible for DFSMShsm should contact the RACF security administrator for help in resolving this problem.

ARC6325E DATA SET *old-dsname* WAS INCORRECTLY RENAMED TO *new-dsname* BY THE ABARS CONFLICT RESOLUTION EXIT

Explanation: An attempt was made to rename a migrated, non-VSAM data set using the ABARS conflict resolution exit (ARCCREXT) to change more than just the data set's high level qualifier.

- *old-dsname* is the name of the data set passed to the conflict resolution exit.
- *new-dsname* is the new name for the data set returned by the ARCCREXT installation-wide exit.

Source: DFSMShsm

System Action: This data set is skipped and Aggregate Recovery continues.

Application Programmer Response: When using the ABARS conflict resolution exit to rename a migrated, non-VSAM data set, only the data set's high level qualifier can be changed.

ARC6327E CATALOG LOCATE ERROR OCCURRED FOR DATA SET *data-set-name* DURING ABACKUP PROCESSING

Explanation: An ABACKUP command issued a catalog locate for the data set *data-set-name*. The catalog locate function failed or the data set was not found.

Source: DFSMShsm

System Action: Aggregate backup processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the ABACKUP command. The data set was most likely deleted or was being rolled off during backup processing.

ARC6328E AN ERROR OCCURRED PROCESSING DATA SET *dsname* DURING ABACKUP OF AGGREGATE *agname*, RC=*returncode*

Explanation: During ABACKUP processing of a migrated data set an error was detected in the data.

- *dsname* is the name of the migrated data set which caused the failure.
- *agname* is the name of the aggregate group that failed processing.
- *returncode* is the return code from the module that detected the failure.

The return codes that can be expected are:

- 8 - terminate.
- 12 - getmain error, terminate.
- 41 - blks written not what was expected.
- 42 - crdlen>max_crdval.
- 43 - blks written not what was expected.

Source: DFSMShsm

System Action: Aggregate backup processing ends. DFSMShsm processing continues.

Application Programmer Response: Recall the data set and reissue the ABACKUP command.

ARC6360E DISPLAY {ABACKUP | ARECOVER} COMMAND REJECTED - REQUIRED PARAMETER {AGNAME | AGNAME/CONTROLFILEDSN}, NOT SPECIFIED

Explanation: A DISPLAY ABACKUP or ARECOVER command has been issued without specifying one of the required parameters.

- ABACKUP indicates the command is a DISPLAY ABACKUP command.
- ARECOVER indicates the command is a DISPLAY ARECOVER command.
- AGNAME indicates the name of an aggregate group has not been specified on the DISPLAY ABACKUP command.
- AGNAME/CONTROLFILEDSN indicates that the name of an aggregate group or control file data set name has not been specified on the DISPLAY ARECOVER command.

Source: DFSMShsm

System Action: DISPLAY processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command using all the required parameters.

ARC6361E {ABACKUP | ARECOVER} {AGNAME | AGNAME/CONTROLFILEDSN} SELECTED FOR DISPLAY IS NOT ACTIVE

Explanation: A DISPLAY command has been issued with the ABACKUP or ARECOVER parameter. This message indicates that the selected aggregate backup or aggregate recovery is not currently active and cannot be displayed.

- ABACKUP indicates the command is a DISPLAY ABACKUP command.
- ARECOVER indicates the command is a DISPLAY ARECOVER command.
- AGNAME indicates the name of an aggregate group has been specified on the DISPLAY ABACKUP command.
- AGNAME/CONTROLFILEDSN indicates that the name of an aggregate group or control file data set name has been specified on the DISPLAY ARECOVER command.

Source: DFSMShsm

System Action: DISPLAY processing ends. DFSMShsm processing continues.

Application Programmer Response: Verify that the ABARS function is active before attempting to display the memory associated with it.

ARC6362E ALL CANNOT BE USED WITH ML1VOLS AND/OR L0VOLS IN THE DEFINE ARPOOL COMMAND

Explanation: A DEFINE ARPOOL command has been issued using the ALL parameter with either the ML1VOLS parameter, the L0VOLS parameter, or both.

Source: DFSMShsm

System Action: DEFINE ARPOOL processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command using the correct parameters.

ARC6363I {ALL | ML1VOLS(*) | L0VOLS(*)} USED IN DEFINE ARPOOL COMMAND

Explanation: A QUERY ARPOOL command has been issued and the ARPOOL parameter has been defined using the DEFINE ARPOOL command with the ALL parameter, or either or both the ML1VOLS(*) and L0VOLS(*) parameters. This message is followed by message ARC6015I displaying volsers associated with the ARPOOL.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6364I A HOLD WAS ISSUED FOR {AGGREGATE GROUP *agname* | CONTROL FILE DATA SET *data-set-name*}, BUT THE COMMAND IS CURRENTLY RUNNING. THE COMMAND IS NOT HELD

Explanation: A HOLD command has been issued for an ABACKUP or ARECOVER command that is currently running. The command is not held.

AGGREGATE GROUP is displayed when *function* is ABACKUP.

AGGREGATE GROUP or CONTROL FILE DATA SET is displayed when *function* is ARECOVER.

- *agname* is the aggregate group that has been specified in the ABACKUP or ARECOVER command.
- *data-set-name* is the name of the data set that has been specified for the control file in the ARECOVER command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Reissue the HOLD command with the EOD (end of data set) option to stop a currently running command.

ARC6365E INVALID DATE(*yyyy/mm/dd*) SPECIFIED IN THE *command* COMMAND

Explanation: An ARECOVER or LIST command has been issued with the DATE parameter. The specified DATE(*yyyy/mm/dd*), is invalid. Either the *yyyy*, *mm*, or *dd* is invalid, or the date could not be resolved to a valid Julian date.

- (*yyyy/mm/dd*) indicates the date specified in the DATE parameter on the command.
- *command* indicates the command being processed.

Source: DFSMShsm

System Action: The specified command processing fails. DFSMShsm processing continues.

Application Programmer Response: Reissue the command with a valid date.

ARC6366I AGGREGATE BACKUP/RECOVERY UNIT NAME = *unitname*

Explanation: A QUERY command with the SETSYS or ABARS parameter has been issued. This message displays the unit name to be allocated for the control file, instruction/activity log file and data file.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6367I AGGREGATE BACKUP/RECOVERY EXITS = {NONE | *exitname*}

Explanation: A QUERY ABARS command has been issued. If EXITS = NONE, no ABARS installation-wide exits are active. If EXITS = *exitname*, two character abbreviations appear specifying the installation-wide exits that are currently active. The exits are: BE - ARCBEEXT CR - ARCCREXT ED - ARCEDEXT M2 - ARCM2EXT SK - ARCSKEXT TV - ARCTVEXT

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6368I AGGREGATE BACKUP/RECOVERY ACTIVITY LOG MESSAGE LEVEL IS {FULL | REDUCED}

Explanation: A QUERY command with the SETSYS or ABARS parameter has been issued. This message displays the level of the aggregate backup or aggregate recovery activity log as either full (all DFSMSdss messages written) or reduced (only DFSMSdss attention and error messages are written).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6369I STORAGE REQUIREMENTS FOR AGGREGATE GROUP *agname*, ARE: L0=*number* {K|M|G|T}, ML1=*number* {K|M|G|T}, ML2=*number*{K|M|G|T}, TOTAL=*number* {K|M|G|T}

Explanation: An ABACKUP EXECUTE command has been issued and the storage requirements used by ABACKUP and to be used in the subsequent ARECOVER are displayed.

An ARECOVER {VERIFY | PREPARE} command has been issued and the storage requirements for a successful ARECOVER are displayed.

An ARECOVER VERIFY command has been issued and a restart data set exists. The unrecovered data set storage requirements are displayed.

An ARECOVER EXECUTE command has been issued and has failed. The unrecovered data set storage requirements are displayed. The values will include any data set not successfully recovered.

- *agname* specifies the aggregate group name.
- *number* {K|M|G|T} specifies the estimated storage requirement for the specified storage hierarchy level and the estimated total in kilobytes (K), megabytes (M), gigabytes (G), or terabytes (T).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None

ARC6370I ERROR OCCURRED ATTEMPTING TO ROLL OFF AN EXPIRED VERSION FOR AGGREGATE GROUP *agname*, KEY *aggregate key*

Explanation: A rolloff error occurred for aggregate group *agname* when an ABACKUP or ARECOVER command was issued. Refer to the primary address space command activity log for associated messages.

- *agname* indicates the aggregate group processing.
- *aggregate key* indicates the key of the ABR record which could not be rolled off.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The expired version for the aggregate group still exists in the backup control data set. **Issued By:**ABARS secondary address space.

Application Programmer Response: An ARC0184I message may be issued by the DFSMShsm primary address space if the error relates to reading or writing to a DFSMShsm control data set. The DFSMShsm primary address space command activity log can also be used for further information. Correct error and issue EXPIREBV ABARSVERSIONS command to expire the version.

ARC6371I AGGREGATE RECOVERY ML2 TAPE UNIT NAME = *unitname*

Explanation: A QUERY command with the SETSYS or ABARS parameter has been issued. This message displays the tape unit name to use when mounting a nonspecific volume to recover data sets to MIGRATIONLEVEL2 tape.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6372I NUMBER OF ABARS I/O BUFFERS = *number*

Explanation: A QUERY command with the SETSYS or ABARS parameter has been issued. This message displays the number of ABARS I/O buffers specified in the SETSYS command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6373I ABARS ACTIVITY LOG OUTPUT TYPE = {SYSOUT(class) | DASD}

Explanation: A QUERY command with the SETSYS or ABARS parameter has been issued. This message displays the ABARS activity log output data set type.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6374E BCDS IS NOT DEFINED, AGGREGATE BACKUP AND RECOVERY FUNCTIONS ARE DISABLED

Explanation: A backup control data set (BCDS) is required to maintain an inventory of aggregate backup and recovery activity.

Source: DFSMShsm

System Action: The aggregate backup and aggregate recovery functions are disabled. DFSMShsm processing continues.

Application Programmer Response: To support the ABARS functions, the DFSMShsm BCDS must be defined. Refer to the *DFSMS/MVS DFSMShsm Implementation and Customization Guide* for information on defining and referencing the BCDS. Once these changes are made, issue the STOP command and restart DFSMShsm to enable the ABARS functions.

ARC6375E I/O ERROR READING AGGREGATE VERSION RECORD IN BCDS, AGGREGATE BACKUP AND RECOVERY FUNCTIONS ARE HELD

Explanation: An I/O error has occurred while reading an aggregate version record from the BCDS.

Source: DFSMShsm

System Action: The aggregate backup and aggregate recovery functions are held. DFSMShsm processing continues.

Application Programmer Response: When the cause of the I/O error is corrected, release either the ABACKUP or ARECOVER, or both, and reissue the request. See ARC0184I in the DFSMShsm command activity log for further information concerning the nature of the I/O error.

ARC6376I ABARS VERSION *vvvv*, FOR AGGREGATE GROUP *agname*, KEY *aggregate key* WAS {DELETED | NOT DELETED} BY EXPIREBV ABARSVERSIONS COMMAND, RC=*return-code*

Explanation: This message is issued for each ABR record processed as a result of the EXPIREBV ABARSVERSIONS command. The aggregate group *agname* with a key of *aggregate key* is the ABR record which has been processed. The possible values of *return-code* are:

0	The ABARS version has been successfully scratched or scheduled to be scratched.
8	An error has occurred trying to obtain memory for the volume lists of the control, DFSMSdss data, internal I/O, and the instruction/activity log files.
12	An error has occurred in processing one of the files associated with the ABR record.
16	An I/O error has occurred trying to delete the BCDS ABR record.

Source: DFSMShsm

System Action: The command continues processing. DFSMShsm processing continues.

Application Programmer Response: Refer to the previous messages in the backup activity log for details regarding the nature of the error. After correcting the error, reissue the EXPIREBV command.

ARC6377I ABARS FILE *data-set-name* {SUCCESSFULLY | UNSUCCESSFULLY} PROCESSED BY EXPIREBV ABARSVERSIONS COMMAND, RC=*return-code*

Explanation: This message is issued for each aggregate file in the ABR record when the EXPIREBV ABARSVERSIONS EXECUTE command has been issued. The aggregate file *data-set-name* is the control file, DFSMSdss data file, internal I/O data file or the instruction and activity log file associated with the ABR record. The possible values of *return-code* are:

0	The file has been successfully uncataloged.
4	The file does not exist in the catalog.
8	DFSMShsm has not been able to determine whether the file has been cataloged.
12	A RACF error has occurred when trying to remove the file volumes from the RACF HSMABR tape volume set.
16	A catalog error has occurred when trying to uncatalog the file.

Source: DFSMShsm

System Action: The command continues processing. DFSMShsm processing continues.

Application Programmer Response: Refer to the previous messages in the backup activity log for details regarding the nature of the error. After correcting the error, reissue the EXPIREBV command.

ARC6379I THE {DATA | STORAGE | MANAGEMENT} CLASS CONSTRUCTS USED IN THE AGGREGATE GROUP, *agname*, ARE: *constructdefinition1* [,...*constructdefinitionn*]

Explanation: An ABACKUP or ARECOVER command was issued and the list of SMS construct definitions associated with the aggregate group is listed.

- *agname* indicates the aggregate group being processed by the aggregate backup or aggregate recovery.
- *constructdefinition1,...constructdefinitionn* are the construct definitions associated with the data sets being processed by the aggregate backup or aggregate recovery.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Issued By:ABARS secondary address space.

Application Programmer Response: None.

ARC6380I AGGREGATE {BACKUP(*agname*) = {HELD | HELD EOD}} | {AGGREGATE RECOVERY (DATASETNAME *data-set-name* | AGGREGATE *agname*) = {HELD | HELD EOD}}

Explanation: A QUERY command has been issued with the ACTIVE parameter. This message indicates the specific aggregate backup and aggregate recovery functions that have been held.

- *agname* is the aggregate group name specified for the ABACKUP or ARECOVER command.
- *data-set-name* is the name of the control file data set specified for the ARECOVER command.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6381E THE VERSION PARAMETER IS INVALID WITH THE AGGREGATE(*) PARAMETER. LIST COMMAND IS REJECTED

Explanation: VERSION is not a valid parameter when LIST AGGREGATE(*) has been specified. DATE is valid for both LIST AGGREGATE(*) and LIST AGGREGATE(*agname*). VERSION is only valid for LIST AGGREGATE(*agname*).

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Reissue the LIST command.

REQTEXT

ARC6382I {INSTRUCTION DATA SET | ACTIVITY LOG *data-set-name*} HAS BEEN SUCCESSFULLY {BACKED UP | RECOVERED}

Explanation: An ABACKUP or ARECOVER command has been issued and the either the instruction data set or the activity log, or both, have been successfully backed up or recovered.

- INSTRUCTION DATA SET indicates the instruction data set has been processed.
- ACTIVITY LOG indicates the activity log has been processed.
- *data-set-name* indicates the name of the instruction data set or activity log that has been processed.
- BACKED UP indicates an ABACKUP command has been issued.
- RECOVERED indicates an ARECOVER command has been issued.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

ARC6383E AN ERROR OCCURRED {BACKING UP | RECOVERING} THE {INSTRUCTION DATA SET *data-set-name* | ACTIVITY LOG *datasetname*}

Explanation: An ABACKUP or ARECOVER command has been issued and either the instruction data set or the activity log, or both, have failed to be successfully backed up or recovered.

- BACKING UP indicates an ABACKUP command has been issued.
- RECOVERING indicates an ARECOVER command has been issued.
- INSTRUCTION DATA SET indicates the instruction data set has failed to be processed.
- ACTIVITY LOG indicates the activity log has failed to be processed.
- *data-set-name* indicates the name of the instruction data set or activity log that has failed to be processed.

Source: DFSMShsm

System Action: ABACKUP or ARECOVER processing continues. DFSMShsm processing continues.

Application Programmer Response: None.

ARC6384I {INSTRUCTION | ACTIVITY} SPECIFIED ON ARECOVER COMMAND, BUT NO LEVEL 0 VOLUMES ARE AVAILABLE

Explanation: An ARECOVER command has been issued with the INSTRUCTION or ACTIVITY parameter, but no level 0 volumes are available.

- INSTRUCTION — indicates the INSTRUCTION parameter has been specified.
- ACTIVITY — indicates the ACTIVITY parameter has been specified.

Source: DFSMShsm

System Action: The activity log or instruction data set is not recovered. DFSMShsm processing continues.

Application Programmer Response: ADDVOL L0 volumes and resubmit the ARECOVER command.

ARC6388E INVALID USE OF * IN THE DEFINE ARPOOL COMMAND

Explanation: A DEFINE ARPOOL command has been issued using either the L0VOLS or ML1VOLS parameters, or both, with the * as one of many subparameters. The * should be the first and only subparameter used for the L0VOLS and ML1VOLS.

Source: DFSMShsm

System Action: DFSMShsm DEFINE ARPOOL processing ends. DFSMShsm processing continues.

Application Programmer Response: Reissue the command using the correct parameters.

ARC6389E GETMAIN ERROR - COMMAND PROCESSING FAILED - AGGREGATE BACKUP AND RECOVERY FUNCTIONS ARE HELD

Explanation: An ABACKUP or ARECOVER command has issued a GETMAIN request that has failed because not enough virtual storage is available.

Source: DFSMShsm

System Action: The command being processed fails. The aggregate backup and aggregate recovery functions are held. DFSMShsm processing continues.

Application Programmer Response: Increase the region size of the DFSMShsm primary address space, release the held functions, and reissue the command, or release the held functions and reissue the command when there is less DFSMShsm activity. Refer to message ARC0307I in the DFSMShsm command activity log for additional information regarding the nature of the GETMAIN error.

ARC6390E CATALOG LOCATE ERROR OCCURRED FOR DATA SET *data-set-name* DURING *functionname* PROCESSING - COMMAND PROCESSING FAILED. AGGREGATE BACKUP AND RECOVERY FUNCTIONS ARE HELD

Explanation: An ABACKUP or ARECOVER command issued a catalog locate for the data set *data-set-name.* The catalog locate function failed.

Source: DFSMShsm

System Action: The command processing is ended. Aggregate backup and recovery are held. DFSMShsm processing continues.

Application Programmer Response: Refer to message ARC0377I in the DFSMShsm command activity log for additional information regarding the nature of the catalog locate error. Once the error has been corrected, release the functions and reissue the command.

ARC6391E ERROR DELETING DFSMSHSM CONTROL DATA SET *type* RECORD, KEY=*key*, RC=*return-code*

Explanation: An ARECOVER command has attempted to delete a DFSMShsm CDS record. The delete attempt fails.

Source: DFSMShsm

System Action: ARECOVER processing is discontinued. DFSMShsm processing continues.

Application Programmer Response: Refer to the *DFSMS/MVS DFSMShsm Storage Administration Guide*, in the section “Maintaining DFSMShsm Control Data Sets” for information to aid in problem resolution.

ARC6392I ALLOCATION ERROR OCCURRED DURING {ABACKUP | ARECOVER } FOR THE INSTRUCTION/ACTIVITY LOG FILE *data-set-name*, **{ABACKUP | ARECOVER } PROCESSING CONTINUES**

Explanation: An allocation error has occurred while attempting to process the instruction/activity log file.

- ABACKUP indicates that aggregate backup has received an error while allocating the data set.
- ARECOVER indicates that aggregate recovery has received an error while allocating the data set.
- *data-set-name* indicates the name of the instruction/activity log file being allocated.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery continues. DFSMShsm processing continues.

Application Programmer Response: None.

ARC6393I {ALLOCATION | OPEN | OUTPUT} ERROR OCCURRED WRITING THE SYSIN DATA SET FOR THE INSTRUCTION/ACTIVITY LOG FILE *data-set-name*

Explanation: An ALLOCATION, OPEN, or OUTPUT error has occurred while attempting to write the SYSIN data set for an ABACKUP or ARECOVER command. ABACKUP or ARECOVER processing continues.

- *data-set-name* is the name of the instruction or activity log file.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery continues. The instruction or activity log is either not backed up when processing an aggregate backup or not recovered when processing an aggregate recovery. DFSMShsm processing continues.

Application Programmer Response: None.

ARC6394E ERROR OCCURRED IN WRITING AGGREGATE VERSION RECORD *aggregate key* **TO THE DFSMSHSM BACKUP CONTROL DATA SET**

Explanation: A error has occurred writing an aggregate version record to the backup control data set (BCDS). If the record is a copy record, the write to the BCDS may have been bypassed due to a previous write error in another copy record.

- *aggregate key* indicates the key of the ABR record which could not be written to the BCDS.

Source: DFSMShsm

System Action: DFSMShsm processing continues. The aggregate version record is not written to the BCDS.

Issued By:ABARS secondary address space.

Application Programmer Response: Refer to message ARC0184I, issued by the DFSMShsm primary address space. The DFSMShsm primary address space command activity log and the output from the problem determination aid can be used for further information.

ARC6395I ROLLOFF PROCESSING FOR AGGREGATE GROUP *agname* **DID NOT TAKE PLACE, THE ASSOCIATED MANAGEMENT CLASS** *mgmt class name* **WAS NOT FOUND**

Explanation: The management class associated with aggregate group (*agname*) has not been found, therefore no aggregate backup records have been rolled off.

- *agname* indicates the aggregate group name.
- *mgmt class name* indicates the management class name.

Source: DFSMShsm

System Action: DFSMShsm processing continues. Excess aggregate version records are not deleted from the backup control data set.

Application Programmer Response: None.

ARC6396E THE VERSION AND DATE PARAMETERS ARE ONLY VALID WITH THE AGGREGATE PARAMETER. LIST COMMAND IS REJECTED

Explanation: The VERSION and DATE parameters apply only to the LIST command with the AGGREGATE parameter. VERSION and DATE parameters are not valid with any command parameters except LIST AGGREGATE.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Reissue the LIST command.

ARC6397E ERROR OCCURRED IN {READING | WRITING} THE {MCV | TTOC} RECORD KEY *key*

Explanation: An error has occurred reading or writing an MCV or TTOC record to its associated control data set.

- *key* indicates the key of the MCV or TTOC record which could not be read from or written to its associated control data set.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: Refer to message ARC0184I, issued by the DFSMShsm primary address space. The DFSMShsm primary address space command activity log can be used for further information. Issue an AUDIT DIRECTORYCONTROLS VOLUMES command to cross-check the control records.

ARC6398E {ABACKUP | ARECOVER} PROCESSING HAS BEEN STOPPED BY A HOLD EOD COMMAND

Explanation: A HOLD EOD command has been issued to stop the processing of an ABACKUP or ARECOVER command.

Source: DFSMShsm

System Action: ABACKUP or ARECOVER command processing is discontinued. DFSMShsm processing continues.

Application Programmer Response: The programmer should issue the RELEASE ABACKUP or ARECOVER command with the appropriate parameters to remove the HOLD.

If this message is issued during ABACKUP processing, the programmer needs to decide whether to reissue the ABACKUP command. If it is determined that the output tapes have been written, the ABACKUP processing is considered complete and no further action is necessary.

If this message is issued during ARECOVER processing, reissue the ARECOVER command at a later time to complete the aggregate recovery processing.

ARC6399E ERROR OCCURRED DURING TSO TERMINAL MONITOR PROGRAM INITIALIZATION, STACK RC=*stackrc*, AGGREGATE RECOVERY FAILED

Explanation: An error occurred during the initialization of the Terminal Monitor Program (TSO), required for TSO communications. The STACK macro returned a nonzero return code indicated by the *stackrc* value.

Source: DFSMShsm

System Action: DFSMShsm processing continues. ARECOVER processing ends. **Issued By:**ABARS secondary address space.

Application Programmer Response: Correct the error indicated by the *stackrc*. If the *stackrc* is `X'00000008'`, verify that MSYSIN and MSYSOUT DD statements are in the DFSMShsm ABARS startup JCL. This procname is either DFHSMABR or what is specified in the SETSYS ABARSPROCNAME command. Reissue the ARECOVER command. Refer to *OS/390 TSO/E Programming Guide* for more information about the STACK macro and associated return codes.

ARC6400E THE {AGGREGATE | DATASETNAME} PARAMETER MAY ONLY BE USED WITH THE {HOLD | RELEASE} ARECOVER COMMAND

Explanation: The AGGREGATE or DATASETNAME parameter has been specified for the HOLD or RELEASE command. These parameters are only valid when performing a HOLD or RELEASE for an ARECOVER command.

Source: DFSMShsm

System Action: HOLD or RELEASE processing is discontinued. DFSMShsm processing continues.

Application Programmer Response: Reissue the HOLD or RELEASE command using proper command syntax.

ARC6401I TAPE VOLUME *volser* SUCCESSFULLY DELETED FROM THE ABARS RACF TAPE VOLUME SET

Explanation: RACF is installed in the computing system and is active. The system-wide RACF tape volume protection option is in effect. The volume serial number of *volser* has been successfully deleted from the ABARS RACF tape volume set of HSMABR.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: None.

Operator Response: This message informs you that DFSMShsm is removing RACF protection from a tape volume.

ARC6403I THE ELASPED CPU TIME FOR THIS {ABACKUP | ARECOVER} IS NOT RELIABLE DUE TO A TIMEUSED MACRO FAILURE.

Explanation: Due to a TIMEUSED macro failure, the CPU time in the WWFSR and ABR records for this ABACKUP or ARECOVER is not reliable.

Source: DFSMShsm

System Action: Aggregate backup or aggregate recovery continues. DFSMShsm processing continues.

Application Programmer Response: None.

ARC6402I CONCURRENT COPY INITIALIZATION IS COMPLETE FOR AGGREGATE *agname*. ANY SERIALIZATION HAS BEEN RELEASED. JOB = *jobname*.

Explanation: The initialization of the concurrent copy session completed. Therefore, serialization of the data being dumped with concurrent copy is no longer necessary and it was released. The data is now available for update activity without affecting the dump operation already in progress.

- *agname* is the name of the aggregate group processing.
- *jobname* is the name of the job submitted by the ABACKUP command if issued by a batch job, a batch TMP, or a TSO terminal.

  Note: If the ABACKUP command was issued from the console, then *jobname* is CONSOLE.

Source: DFSMShsm

System Action: Aggregate backup processing continues. **Issued By**: ABARS secondary address space.

Application Programmer Response: This message informs you the level 0 DASD data sets dumped with concurrent copy, are now available for update activity. Refer to the DFSMSdss message ADR734I for the number of data sets successfully established into the concurrent copy session, and the total number of data sets selected for concurrent copy. If the number of concurrent copy data sets is less than the number of selected data sets, one or more ADR735W messages are issued indicating what data sets were not successfully established into the concurrent copy session and why.

Operator Response: Serialization was released for all data sets processed by the concurrent copy function in ABARS aggregate backup. This message can be used by the console operator to submit a follow-on job, initiate a data base application, or request another backup. This message can also be used as input for console automation products to invoke similar activities.

ARC9000–ARC9299

Explanation: Message numbers ARC9000 through ARC9299 have been set aside for use by DFSMShsm installation-wide exits, either as samples supplied by DFSMShsm or messages written by customers. For an explanation of these messages, customers have to locate the issuing exit or any user-created documentation for that exit. Message numbers ARC9000I through ARC9099I are intended for installation messages pertaining to RECALL commands. Message numbers ARC9100I through ARC9199I are intended for installation messages pertaining to RECOVER commands.

ARC9997I TPUT REQUEST TO USER *userid* COULD NOT BE PROCESSED. AFTER RETRYING TPUT, DATA WAS DISCARDED

Explanation: DFSMShsm has received a buffer full condition attempting to TPUT a message to TSO user *userid*. After 20 TPUT attempts, DFSMShsm has discarded the message.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Application Programmer Response: The buffer full condition has been caused by a TSO user's failure to clear the screen. Either increase the number of buffers available to TSO or do not let messages accumulate on the screen.

ARC9998I INTERNAL DFSMSHSM FAILURE, PARAMETER LIST ERROR

Explanation: An internal call from one module to another has an error in the parameter list. The function could not be performed, and the modules involved have been recorded in the command log (message ARC0200I/ARC0208I). The return code generated was 400–499.

Source: DFSMShsm

System Action: The task currently running fails the request. DFSMShsm processing continues.

Application Programmer Response: Notify the system programmer to take appropriate action.

ARC9999I MESSAGE NOT FOUND

Explanation: DFSMShsm has attempted to write a message to the user or the operator. The message could not be found among DFSMShsm messages.

Source: DFSMShsm

System Action: DFSMShsm processing continues.

Operator Response: Notify the system programmer for assistance.

Application Programmer Response: This is a programming error.

Status Messages on the DATA SPACE ADMINISTRATION LIST Panel

This appendix contains a list of the messages that can appear on the DATA SPACE ADMINISTRATION LIST panel when you use space maintenance. The messages are listed in alphabetical order.

Messages appear on the DATA SPACE ADMINISTRATION LIST panel if you do not supply correct information to continue. The messages that are generated by a specific data set name are logged in the ISPF log. You also receive TSO line I/O messages for any errors that occur from TSO functions. If DFSMShsm is not operational, TSO rejects the command.

The messages follow the format of ISPF messages. The 24-character message appears in the upper right hand corner. If you press the HELP key, the optional 72-character extended message appears on the third line. If you press the HELP key again, the panel HELP tutorial is displayed.

The following messages are arranged in alphabetical order by the short message. The DFQxxx message number is not displayed on the panel; however, it is documented here with the message for future reference in *DFSMS/MVS DFSMShsm Diagnosis Guide*.

• CAMLST LOCATE ERROR (DFQ031)

Explanation: A LOCATE ERROR USING A CAMLST OCCURRED, R0=r0, RC=*return-code*

User Response: Request assistance from the system programmer. Register 0 error code and the register 15 return code *return-code* from CAMLST are reported in hexadecimal numbers. For the meaning of these codes, see *DFSMS/MVS Using Data Sets*.

• CAMLST OBTAIN ERROR (DFQ035)

Explanation: AN I/O ERROR OCCURRED READING THE VTOC, RC=*return-code*, VOLUME=*volume*

User Response: Request assistance from the system programmer. The register 15 return code *return-code* from CAMLST is reported in hexadecimal numbers. For the meaning of these codes, see *DFSMS/MVS Using Data Sets*.

• CANNOT CONDENSE DATASET (DFQ052)

Explanation: CANNOT CONDENSE A DATASET WITH A VOLUME SERIAL OF MIGRAT

User Response: Specify CONDENSE only with data sets that are not migrated.

• CHARACTERS NOT FOUND (DFQ028)

Explanation: THE DATA SET SPECIFIED WITH LOCATE WAS NOT FOUND IN THE DATA SPACE ADMINISTRATION LIST

User Response: The DATA SPACE ADMINISTRATION LIST was obtained with at least one sort parameter. Here the LOCATE command requires that the list have an exact match to the LOCATE operand. The LOCATE argument is left in the command area if a misspelling was the cause.

• CLIST NAME MISSING (DFQ036)

Explanation: A CLIST NAME MUST BE PRESENT TO ALLOW THE CLIST OPTION

User Response: Use the CLIST maintenance option after specifying a CLIST name. This message appears on the CLIST OPERAND screen.

• DATA SET NAME TOO LONG (DFQ023)

Explanation: THE DATA SET NAME WITH YOUR PREFIX APPENDED EXCEEDS 44 CHARACTERS

User Response: Enter the correct name or put the name in quotes if the PREFIX should not be added. This message appears on the DATA SPACE ADMINISTRATION SELECTION ENTRY panel or the DATA SPACE ADMINISTRATION FILTER ENTRY panel.

• DATA SET SIZE INVALID (DFQ032)

Explanation: DATA SET SIZE ZERO OR NOT NUMERIC

User Response: Do not specify zero or a non-numeric value for DATA SET SIZE. This message appears on the DATA SPACE ADMINISTRATION FILTER ENTRY panel.

• DFSMShsm MCDS READ ERROR (DFQ039)

Explanation: AN MCDS READ FOR A D RECORD PRODUCED AN MWE ERROR=*return-code*

User Response: The register 15 MWE ERROR *return-code* is reported in hexadecimal numbers. Consult the error codes for DFSMShsm I/O in “ARC Return Codes and Reason Codes” on page ARC-280.

For an error code of 0, the catalog indicates that the data set is migrated but the control data set indicates that it is not migrated. If this problem persists, the catalog and the control data set MCD record must be synchronized through a FIXCDS command. This can also be a problem of short duration and can be resolved by simply retrying the command which generated the message.

• DFSMShsm NOT OPERATIONAL (DFQ038)

Explanation: THE DFSMShsm SUBSYSTEM IS NOT OPERATIONAL

User Response: Contact the system program programmer to find out why DFSMShsm is not in operation.

• DSN NOT IN CATALOG(s) (DFQ011)

Explanation: THE DSN SPECIFIED IS NOT LOCATED IN ANY AVAILABLE CATALOG

User Response: On the DATA SPACE ADMINISTRATION SELECTION ENTRY panel, specify a DATA SET NAME that exists.

• DSORG MUST BE PS/PO (DFQ019)

Explanation: DATA SET ORG FOR A CONDENSE MUST BE PARTITIONED (PO) OR SEQUENTIAL (PS)

User Response: Specify the CONDENSE operator only with partitioned or sequential data sets.

• FIELD NOT NUMERIC (DFQ042)

Explanation: THE FIELD WHERE THE CURSOR IS LOCATED MUST BE NUMERIC

User Response: The field values must be digits 0 through 9.

• FREEMAIN ERROR (DFQ034)

Explanation: A RETURN CODE FROM A FREEMAIN AT ADDRESS WAS RC=*return-code*

User Response: Request assistance from the system programmer. The register 15 return code *return-code* from the FREEMAIN is reported in HEX. The storage was originally obtained from subpool 0. For the return code meanings, see *DFSMS/MVS Macro Instructions for Data Sets*.

• INSUFFICIENT STORAGE (DFQ027)

Explanation: THE RETURN CODE FROM A GETMAIN FOR *byte* BYTES WAS RC=*return-code*

User Response: Contact the system programmer for problem determination. The amount of storage requested from the ISPF address space and the register 15 return code *return-code* are reported in hexadecimal numbers. The storage was attempted to be obtained from subpool 0. For the return code meanings, see *OS/390 MVS Programming: Authorized Assembler Services Guide* or *DFSMS/MVS Macro Instructions for Data Sets*.

• INVALID BACKUP VERSIONS (DFQ040)

Explanation: BACKUP VERSIONS MUST BE A 1 TO 2 DIGIT NUMBER, 0 TO 13

User Response: Enter versions that follow the rules of a one or two digit number and supply a number no larger than 13.

Space Maintenance Messages

• CATALOG DOES NOT EXIST (DFQ026)

Explanation: A CAMLIST LOCATE GAVE A RETURN CODE OF 4

• INVALID CONDENSE FUNC (DFQ024)

Explanation: CONDENSE CANNOT BE ISSUED FOR A TAPE ONLY MIGRATE SYSTEM

• INVALID DATA SET NAME (DFQ014)

Explanation: DSN IS 1 OR MORE 1-TO-8 ALPHAMERIC QUALIFIERS OR A * OR A ** BETWEEN .S

User Response: Specify a DATA SET NAME on the DATA SPACE ADMINISTRATION SELECTION ENTRY panel or the DATA SPACE ADMINISTRATION FILTER ENTRY panel as one to eight character alphameric qualifiers or a * or a ** separated by periods. If the DATA SET NAME is not entered in quotes, the TSO prefix is placed at the beginning of the entered name.

• INVALID DATE/DAYS (DFQ016)

Explanation: FIELD MUST BE NUMERIC, DATE MUST BE YYDDD OR YYMMDD FORMAT

User Response: For EXPIRATION, CREATION, or LASTUSE, specify a numeric field. For EXPIRATION DATE, CREATION DATE, and LAST REFER DATE, specify a numeric field in the form *yyddd* or *yymmdd*. If *yyddd* is used, *ddd* must be 1 to 366. If *yymmdd* is used, *mm* must be 01 to 12, and *dd* must be 01 to 31. This message appears on the DATA SPACE ADMINISTRATION FILTER ENTRY panel.

• INVALID INPUT COMMAND (DFQ021)

Explanation: THE INPUT COMMAND MUST BE L, LO, LOC, LOCA, LOCAT, LOCATE

User Response: Specify the input command as L, LO, LOC, LOCA, LOCAT, or LOCATE. ISPF commands are also valid in this field. This message appears on the DATA SPACE ADMINISTRATION LIST.

• INVALID INPUT COMMAND (DFQ053)

User Response: errorAoccurredDinOscanningS ENTERED IN THE COMMAND FIELD

• INVALID LINE POSITION (DFQ037)

Explanation: ENTER A MAINTENANCE FUNCTION IN THE FIRST LINE OPERATOR FIELD FOR THIS DATA SET

User Response: When the data set name length causes the entry to take two lines on the selection list, enter an operator in only the first of the possible fields. This message appears on the DATA SPACE ADMINISTRATION LIST panel.

• INVALID MAINT FUNCTION (DFQ025)

Explanation: THE MAINT FUNCTION MUST BE VALID OR A VALID ABBREVIATION

User Response: The maintenance option must be one of the supported operators. These are BROWSE, DELETE, CLIST, HMIGRATE, HRECALL, HBACKDS, HRECOVER, HBDELETE, HALTERDS, or CONDENSE. This message appears on the DATA SPACE ADMINISTRATION LIST.

• INVALID SCROLL AMOUNT (DFQ022)

Explanation: SCROLL AMOUNT MUST BE MAX, M, HALF, PAGE, OR A 1 TO 4 DIGIT NUMBER

User Response: Specify the scroll amount as 1 to 9999 (data sets) or MAX, M, HALF, or PAGE. This message appears on the DATA SPACE ADMINISTRATION LIST.

• INVALID SORT OPTIONS (DFQ013)

Explanation: UP TO 3 SORT FIELDS...1,2,3 MAY BE SPECIFIED BUT NOT DUPLICATED

User Response: Specify sort fields as 1..or..1,2..or..1,2,3. Do not duplicate or leave out any of the numbers. This message appears on the DATA SPACE ADMINISTRATION SORT ENTRY panel.

• INVALID VERSION DATE (DFQ048)

Explanation: THE DATE MUST BE *YY/MM/DD* OR *MM/DD/YY* OR *MM/DD* - LEADING 0S NOT REQD

User Response: The date must be one of three valid formats, *YY/MM/DD* or *MM/DD/YY* or *MM/DD*. In the last format, the year is the current year.

• INVALID VERSION LIST (DFQ046)

Explanation: SPECIFY UP TO 13, 1 TO 3 DIGIT VERSION NUMBERS, SEPARATED BY COMMAS

User Response: Specify no more than 13 numeric values no more than 3 digits each.

• LEADING * OR ** INVALID (DFQ010)

Explanation: DO NOT START DATA SET NAME WITH * OR ** IF ENTERED WITH QUOTES

User Response: When specifying a DATA SET NAME on the DATA SPACE ADMINISTRATION SELECTION ENTRY panel, if the data set name is entered in quotes, do not start the field with an * or an **.

• MISSING LOCATE OPERAND (DFQ020)

Explanation: THE LOCATE COMMAND MUST BE FOLLOWED BY AN OPERAND

User Response: Specify an operand for locate on the DATA SPACE ADMINISTRATION LIST.

• MUST BE Y OR BLANK (DFQ015)

Explanation: THE FIELD WHERE THE CURSOR IS LOCATED MUST BE Y OR BLANK

User Response: Specify either Y or blank.

• MUST BE Y, N, OR BLANK (DFQ017)

Explanation: THE FIELD WHERE THE CURSOR IS LOCATED MUST BE Y, N, OR BLANK

User Response: Specify either Y, N, or blank.

• MUST BE Y OR N (DFQ018)

Explanation: THE FIELD WHERE THE CURSOR IS LOCATED MUST BE Y OR N

User Response: Specify either Y or N.

• MUTUALLY EXCLUSIVE FIELD (DFQ044)

Explanation: THIS FIELD IS MUTUALLY EXCLUSIVE WITH THE PRECEDING FIELD

User Response: Specify this field only when the preceding field is blank.

• NEWNAME REQUIRED (DFQ049)

Explanation: NEWNAME IS REQUIRED WITH NEW PASSWORD

User Response: Specify NEWNAME if a NEW PASSWORD is given.

• NO DATA SETS FOUND (DFQ012)

Explanation: NO DATA SETS MEET THE FILTER CRITERIA SPECIFIED

User Response: Broaden or change the selection criteria for this selection. This message appears on the DATA SPACE ADMINISTRATION FILTER ENTRY panel.

• PCNT SP USED NOT NUMERIC (DFQ033)

Explanation: PERCENT SPACE USED NOT NUMERIC

User Response: Do not specify a non-numeric value for PERCENT SPACE USED. This message appears on the DATA SPACE ADMINISTRATION FILTER ENTRY panel.

• REQUIRED INPUT FIELD (DFQ045)

Explanation: WHEN VOLUME OR UNIT IS SPECIFIED, SPECIFY BOTH

User Response: Specify both unit and volume when required. Do not specify only one.

• RETIRED VERSION NUMBER INVALID (DFQ050)

Explanation: RETIRED VERSION NUMBER CANNOT BE IN THE VERSION INPUT FIELD

User Response: Specify a Y in the DELETE RETIRED VERSION field. This is the only way that you can delete the retired version.

• SVC 26 LOCATE ERROR (DFQ030)

Explanation: SVC 26 LOCATE, RC=*return-code*

User Response: Request assistance from the system programmer. The register 15 return code *return-code* for an SVC 26 LOCATE request error is reported in hexadecimal numbers. For a detailed list of these codes, see *OS/390 MVS System Messages, Vol 3 (GDE-IEB)* under message IDC3009.

• TSO COMMAND ERROR (DFQ041)

Explanation: A TSO COMMAND WAS ISSUED AND PRODUCED AN ERROR, RC=*return-code*

User Response: The register 15 return code *return-code* for a TSO command request error is reported in hexadecimal numbers. Follow the action indicated by the associated TSO message.

• VERSIONS INVALID (DFQ043)

Explanation: EACH VERSION MUST BE 1, 2, OR 3 DIGITS, ONLY 13 ARE ALLOWED

• WILL NOT DISPLAY ALIAS (DFQ051)

Explanation: WILL NOT ALLOW YOUR ALIAS TO BE DISPLAYED

User Response: On the DATA SPACE ADMINISTRATION SELECTION ENTRY panel, you cannot display the data set (alias) the same as the TSO prefix.

ARC Return Codes and Reason Codes

This appendix contains error return codes and reason codes from DFSMShsm.

Table 6 (Page 1 of 2). Return Codes for RECALL/RECOVER Functions for ARC11nnI Error Messages

Retcode	Meaning
1	Error reading a control data set record.
2	The data set is not backed up or migrated.
3	The MVT or MCV record is not found for the migration volume.
4	No primary volume is available for RECALL.
5	Volume setup list does not include the volume requested.
6	Error in allocating the output data set.
7	Error renaming the primary copy of the data set.
8	Error in cataloging or recataloging the recovered data set.
9	Error in updating the MCB or MCD records.
10	Delete failed due to a JES3 setup expiration data or a data set expiration date.
11	Premature end-of-file.
12	I/O error in reading the input data set.
13	I/O writing primary copy data set.
14	Catalog locate error.
15	Delete failed due to specification of cluster or component name, migration copy name.
16	Data set in use.
17	Error in reading the JFCB.
19	Error in updating the data set VTOC entry.
20	Unsupported device type.
21	The requested volume is unavailable.
22	A failed password check.
23	Alter NEWNAME request failed.
24	Not enough space on the target volume.
25	Bad values returned from the RECALL installation-wide exit.
26	Undirected recall after prior recall installation-wide exit failed.
28	BACKUP/DUMP copy does not exist.
29	NEWNAME data set exists on target volume.
31	Operator cancelled the mount for input volume.
33	The old copy exists but REPLACE was not specified.
34	Error in scratching the old copy of the data set.
35	Error in opening the input data set.
36	Error in opening the output data set.
37	Invalid unit type specified.
38	I/O error reading from a backup version or migration copy data set.
39	Authorization failed.
40	RECOVERY function is disabled.
41	Error during cleanup of VSAM during recall.
42	“A” entries for the VSAM sphere were not cataloged.

Table 6 (Page 2 of 2). Return Codes for RECALL/RECOVER Functions for ARC11nnI Error Messages

Retcode	Meaning
43	Error retrieving catalog information during RECOVER.
45	The data set is migrated or the target volume is a migrated volume.
46	OBTAIN failed for data set VTOC entry.
47	Partitioned data set has more than 1 NOTE list.
49	Device type and data set are incompatible.
50	There are no units available for mount.
51	Another DFSMShsm process is using this data set.
52	There is a GETMAIN or FREEMAIN error.
53	MSS is inactive.
54	Error in installation-wide exit.
55	Error during IDCAMS IMPORT of VSAM data set.
56	Catalog locate error.
57	Cannot recover with the new name.
58	Recovery failed due to data integrity problem.
59	Delete of the existing VSAM failed.
60	Error in establishing the ESTAE environment.
62	DFSMSdss not at sufficient level.
63	Volume deallocation error.
64	Volume allocation error.
66	Data set RESTORE from dump volume failed.
67	Data set referenced after start of RECOVER command processing with the APPLYINCREMENTAL parameter.
68	Error in positioning to input data set.
70	Error while processing an SMS-managed data set.
71	User not authorized to recover an OS CVOL.
72	SMS-related error while selecting a target volume.
73	VSAM component specified for recovery.
74	The request function was held.
75	RECALL of a data set was changed to NOWAIT.
80	The tape migration volume is in use by recycle.
81	Error in allocating the tape data set.
82	The tape volume is in use by migration.
86	A shutdown was encountered during OPEN.
88	RESTORE of a data set failed.
90	Cluster can be recalled but not deleted.
91	Error uncataloging data set.
92	DFSMShsm is shutting down.
95	Tape unavailable or unable to be mounted.
97	There was an internal error during allocation.
99	VBS data set RECOVER/RECALL attempted to incompatible device.

Table 7 (Page 1 of 3). Return Codes for MIGRATION Functions for ARC12nnI Error Messages

Retcode	Meaning
2	Catalog locate error during migration.
3	Obtain error in reading data set VTOC entry.
5	No migration volume available.
6	The data set is already migrated, or duplicate data set name in MCDS.
7	OBTAIN error on data set extension VTOC entry.
8	Error in allocating the output data set.
9	Unique migration name is not created. I/O cannot migrate VSAM data set with outstanding migration control record.

Table 7 (Page 2 of 3). Return Codes for MIGRATION Functions for ARC12nnI Error Messages

Retcode	**Meaning**
10	Cannot migrate VSAM data sets with outstanding migration control record.
11	Error in creating or updating the MCDS record.
13	Error in cataloging the data set from the source volume to migrate.
14	Error in scratching the data set from the source volume during migration.
15	More than one note list in PDS, target volume is DASD.
16	An I/O error in reading of a data set.
17	An I/O error in reading input of a directory of a PDS.
18	An I/O error in writing the output data.
19	Data set is in use by another job or user, migration rejected.
20	Data set not eligible for migration.
21	Missing or unsupported device type for space management.
22	Error processing password-protected data set.
23	The input volume is not mounted.
24	Data set not available for migration.
25	Error in reading the CDS record during migration.
26	CDS control interval is in use.
27	Data set has no extents.
30	Data set not cataloged.
32	Volume not eligible for command space management.
33	Data set not on Level 1 or Level 2.
34	Level 2 not defined for migration.
35	Error in opening the input data set.
36	Error in opening the output data set.
37	No space on the migration volume.
38	Password protected data set is not allowed on a non-password protected tape.
39	A RACF check failed to obtain ERASE status.
42	Error reading JFCB.
44	VTOC error during data set allocation on target volume.
45	The data set is not eligible for migration.
46	Offline control data set not found.
47	Tape label error.
48	Data set exceeds 40 tape limitation.
49	Failure attempting to remove RACF protection from tape migration volume.
50	No units are available to mount a migration volume.
51	The data set is in use by another DFSMShsm function, migration rejected.
52	GETMAIN or FREEMAIN error, migration terminated.
54	Abnormal end in the tape data set installation-wide exit.
55	Error in EXPORT during VSAM data set migration.
56	Invalid data set name when reading VTOC.
57	An I/O error in updating DSCB.
58	Migration failed for data set.
59	DBA/DBU failed ...error deleting data set.
60	Failure to establish an ESTAE environment during migration.
61	Error during internal ADDVOL of tape migration volume.
62	CDS record is in use by another processing unit.
64	Failure in closing the input data set.
65	Error closing output data set.
66	Specified I/O volume not available for Space Management.
67	Error obtaining block ID.

Table 7 (Page 3 of 3). Return Codes for MIGRATION Functions for ARC12nnI Error Messages

Retcode	**Meaning**
69	SYNCDEV error.
70	Error while processing an SMS-managed data set.
72	SMS-related error allocating a target volume.
74	Migration requested, but HOLD MIGRATION was in effect.
80	Data set is in need of BACKUP.
81	Error allocating tape volume.
82	Migration of data from a tape volume is not supported.
83	Cannot move VTOC COPY data set.
84	CONVERT option in a Direct-to-Tape environment is not allowed.
85	VSAM data set is migrated to tape; not TTOC entry exists.
86	DFSMShsm shutdown occurred while waiting for a tape mount.
92	Termination of DFSMShsm MIGRATION WAIT request.
94	Unable to open VTOC.
95	Tape volume could not be mounted.
96	Error in reading JFCB to update VTOC.
97	An internal DFSMShsm error during allocation of a source data set.
99	Unsupported data set organization.

Table 8 (Page 1 of 2). Return Codes for BACKUP Functions for ARC13nnI Error Messages

Retcode	**Meaning**
2	A catalog locate error.
3	OBTAIN error reading data set VTOC entry.
4	Required migration volume not available.
5	No volume available for backup.
6	An error occurred reading JFCB for the VTOC copy data set.
7	OBTAIN error in reading data set extension VTOC entry.
8	Error in allocating target backup version of DASD backup volumes.
9	Failed to generate a unique backup version name.
11	Error in creating or updating the backup control data set record.
12	Failure to create BCDS MCM record.
15	A partitioned data set cannot be backed up with more than one note list in the member.
16	I/O error in reading or opening the source data set.
17	I/O error in reading the PDS directory.
18	I/O error writing the backup copy.
19	Error in allocating a backup version on source volume because the backup version is in use.
20	Data set not eligible for backup.
21	Missing or unsupported device type requested.
22	Error processing password-protected data set.
23	Error in allocating a backup version on source volume because the volume cannot be mounted.
24	Error in reading or updating a record in the MCDS.
25	Error in reading the MCB record backup.
28	No alias name in the master catalog for the data set high level qualifier, and the data set is not cataloged in the master catalog.
30	Data set not cataloged, and the volume was not specified.
32	Request for an uncataloged data set failed. Only a cataloged data set was found on the specified volume.
33	Cannot backup an ML2 data set.
34	Backup version not created.
35	Error in opening the input data set.
36	Error in opening the output data set.
37	Out of space on target DASD daily backup volume.

Table 8 (Page 2 of 2). Return Codes for BACKUP Functions for ARC13nnI Error Messages

Retcode	Meaning
38	Attempt to place a backup version of a password-protected data set on a non-password-protected tape backup volume in a tape security environment that is not expiration-include RACF-INCLUDE.
39	Attempt to create backup profile for a RACF-indicated data set failed, or RACF check failed to obtain an erase status of a backup version.
40	Backup or dump function is disabled.
41	Wrong DSCB found when module attempted to turn off the data-set-update bit and reset the date last referenced.
42	Error in reading the job file control block.
43	Error in updating data set VTOC entry.
44	Tape volume cannot be added for BACKUP; volume already contains valid DFSMShsm data.
45	Error deleting a DFSMShsm CDS record.
46	No offline CDS found.
47	Tape end-of-volume error.
48	Backup version of data set exceeds maximum number of allowable tape volumes.
49	Failure while attempting to remove RACF protection from a backup tape volume.
50	Error in allocating a backup version on a source volume because no units are available to mount the volume.
51	Data set is in use by another DFSMShsm function.
52	GETMAIN or FREEMAIN error.
53	ENQ failed on VSAM open resource.
54	Error in moving a backup version to a tape backup volume due to an abnormal end in the tape data set exit.
55	An export I/O error.
56	VSAM backup failed.
57	Failed to obtain a catalog password.
60	Error in establishing an ESTAE environment.
61	Internal ADDVOL failed.
63	Volume deallocation error.
64	Error closing input data set.
65	Error in closing the out data set during backup.
66	Data set has a retired version.
67	Error obtaining block ID.
69	SYNCDEV error.
70	Error while processing an SMS-managed data set.
71	User not authorized to backup OS CVOL.
72	SMS-related error obtaining an MVT entry.
74	Data set, volume backup, or volume dump was requested, but HOLD BACKUP was in effect.
80	The backup control data set record is not found.
84	Failure during BACKVOL DUMP processing (ARCDRDSS).
92	DFSMShsm is shutting down.
96	Failure during BACKVOL DUMP processing (ARCDVOL).
97	An internal DFSMShsm allocation error.
99	Unsupported data set organization.

Table 9 (Page 1 of 2). Return Codes for ARC0570I Error Messages

Retcode	Meaning
1	SMS is not installed.
2	SMS lock token not retrieved.
3	VTOC/catalog entry load module (IGDCSP00) was not loaded into DFSMShsm address space.
4	SMS is not active in the configuration that DFSMShsm is running in.
5	Error reading the volume VTOC entry of the volumes.
6	Error retrieving SMS volume definition list.

Table 9 (Page 2 of 2). Return Codes for ARC0570I Error Messages

Retcode	Meaning
7	Error retrieving a storage group definition.
8	Error retrieving all the storage group definition.
9	Volume is in initial status.
10	There is a conflict in the SMS status recorded in the MVT and the data set extension VTOC entry.
11	SMS volume definition and volume VTOC entry indicate conflicting SMS status.
12	Error retrieving a list of all SMS-managed volumes.
13	Device type of volume retrieved from SMS storage group is not supported by DFSMShsm.
14	Error retrieving data set list from VTOC catalog entry services.
15	Error reading/writing MCV record for an SMS-managed volume.
16	No eligible SMS-managed volumes could be processed by an internal ADDVOL.
17	No eligible storage groups to process.
18	No eligible SMS volumes to process.
19	Volume not mounted.
25	Space management request on an SMS-managed volume with DBA or DBU specified, or a nonzero value of days on MIGRATE(*days*), or DAYS(*days*) was specified on a MIGRATE command.
26	Space management request on an SMS-managed volume with neither days specified on MIGRATE(*days*) nor DAYS(*days*) specified on the MIGRATE command.
27	Space management request on an SMS-managed volume which does not have low and high thresholds defined and MIGRATE VOLUME (*volid*) command was issued.
30	The version of DFSMSdss is not at a sufficient level to support SMS-managed volumes.
31	The volume to be restored is an SMS-managed volume, but the dump copy was made when the volume was a non-SMS-managed volume.
32	The volume to be restored is a non-SMS-managed volume, but the copy was made when the volume was an SMS-managed volume.
52	GETMAIN error.

Table 10. Return Codes for ABARS Functions for ARC6nnn Error Messages

Retcode	Meaning
1	MVS/DFP not at proper level to allow ABARS processing to continue.
2	MVS/XA not at proper level to allow ABARS processing to continue.
3	DFSMSdss not at proper level to allow ABARS processing to continue.

Table 11. Error Codes from Control Data Set Reads, Writes or Deletes

Code	Meaning
0	An error occurred and was reported previously. Commands related to space usage cannot be performed.
4 (read) (write)	The record was not found. The record is a duplicate record.
8 (read) (write)	The record is in use. The record is too large.
10 (delete)	The read of the record to be deleted failed.
12 (read) (write)	The work area is too small. The control data set is full.
16	A physical I/O error occurred.
20	A logical I/O error occurred.
22	The offline control data set is not defined.
24	Backup control data set or journal is not being used by DFSMShsm.
25	Inconsistency reading MCDS MCD record. The data set is cataloged as MIGRAT indicating the data set is migrated. An error occurred in reading the MCD record, or the MCD record indicated that no migration copy exists. In the latter case, the reason code is zero. In other cases, the reason code is the return code from ARCZREAD. For details, see message ARC1325I.
26	Access to the control data sets has been lost due to an SMSVSAM server error. This error is only issued if the CDSs are accessed using RLS.
28	The catalog locate failed while reading a catalog record for the indicated data set.

Table 12. Return Codes for Message ARC0734I When the Action is EXBACKV

Code	Meaning	System Action	Programmer Response
0	The backup version was successfully scratched or scheduled to be scratched.	DFSMShsm processing continues.	None.
4	An I/O error occurred reading a BCDS C record.	The backup version remains. DFSMShsm processing continues.	See the previous ARC0184I message in the backup activity log.
8	An I/O error occurred reading an OCDS T record.	The backup version remains. The EXPIREBV command continues.	See the previous ARC0184I message in the backup activity log.
12	An I/O error occurred trying to update the BCDS B record.	The backup version remains. The EXPIREBV command continues.	See the previous ARC0184I message in the backup activity log.
16	An I/O error occurred trying to delete the BCDS B record.	The backup version remains. The EXPIREBV command continues.	See the previous ARC0188I message in the backup activity log.
20	DFSMShsm was not able to determine whether the backed up data set was cataloged.	The backup version remains. The EXPIREBV command continues.	See the previous ARC0950I message in the command activity log.
24	For an SMS-managed data set, DFSMShsm was unable to access the management class definition.	The backup version remains. The EXPIREBV command continues.	See the previous ARC0686I message in the backup activity log.

Table 13 (Page 1 of 2). Return Codes for Message ARC0734I When the Action is RECYCLE

Code	Meaning	System Action	Programmer Response
0	The data set was successfully moved.	DFSMShsm processing continues.	None.
2	DFSMShsm was in emergency mode.	Recycle processing ends.	None.
11	An I/O error occurred in writing the BCDS C record or MCDS D record for the data set.	Recycle processing continues with the next eligible connected set.	See the previous ARC0184I message in the recycle command log.
12	An abnormal end occurred closing the input or output data set.	Recycle processing continues with the next eligible connected set.	Respond to preceding messages describing the close error.
16	An I/O error occurred on the input tape volume.	Recycle of the current data set ends. Recycle continues with the next eligible data set.	Respond to the preceding access method or hardware error message. If necessary, create another backup version to replace this one.
18	An I/O error occurred on the output tape volume.	Movement of this data set is retried on a different volume.	Respond to the preceding access method or hardware error message.
20	Failure to update the offline control data set T record for the output volume.	Recycle of this data set fails. Processing continues with the next eligible connected set.	See the previous ARC0184I message in the recycle command log.
21	Failure to update the MVC or MCT record after successfully opening the output data set.	Recycle of this data set fails. Processing continues with the next eligible connected set.	See the previous ARC0184I message in the recycle command log.
25	An I/O error occurred in reading a BCDS C record or MCDS D record for the data set.	Recycle processing continues with the next eligible connected set.	See the previous ARC0184I message in the recycle command log.
31	Failure to mount an input volume.	Recycle of the current connected set ends. Recycle continues with the next eligible connected set.	See the tape librarian.
32	Failure to mount an output volume.	Recycle of the current connected set ends. Recycle processing ends for this task.	See the tape librarian.
33	DFSMShsm was shut down.	Recycle processing ends.	None.
35	The OPEN macro was issued by DFSMShsm to open the data set for input. OPEN processing was not successful.	Recycle of the current connected set ends. Recycle continues with the next eligible connected set.	See the preceding IEC message and take the action indicated.
36	The OPEN macro was issued by DFSMShsm to open the data set for output. OPEN processing was not successful.	See the system action for the specific reason code in Table 15 on page ARC-288. Recycle processing ends for this task.	See the response for the specific reason code. in Table 15 on page ARC-288.
46	An error occurred in closing the output data set.	Recycle processing ends for this task.	See the preceding IEC message and take the corrective action given.
48	The number of tape volumes required for this data set exceeded the maximum allowable.	Recycle processing continues with the next valid data set on the volume.	None.

Table 13 (Page 2 of 2). Return Codes for Message ARC0734I When the Action is RECYCLE

Code	Meaning	System Action	Programmer Response
50	There was a failure to attach a subtask.	Recycle of the current connected set ends. Recycle processing ends for this task.	See message ARC0090I earlier in this manual.
52	There was a GETMAIN error.	Recycle processing ends for this task.	Attempt to recycle this volume again.
54	Tape data set installation-wide exit abnormal end.	Recycle processing ends.	Turn off the exit if possible or release recycle and rerun. If the exit is in error, correct it and turn the exit back on.
60	Failure to establish ESTAE protection.	Recycle processing ends for this task.	Examine the return code from the previous ARC0304I message, and take the appropriate action based on that return code explanation.
61	During an attempt to add a new volume to DFSMShsm control, an I/O error occurred in reading or writing a control data set record, or the OCDS was not defined.	Recycle of the current connected set ends. Recycle processing continues with the next eligible connected set.	See the preceding ARC0184I or ARC0133I message in the recycle command log.
67	An error in obtaining the volume block ID occurred.	The recycle fails for the current connected set. Recycle processing continues.	See message ARC01267I in this manual.
68	An error in positioning to data occurred.	The recycle fails for the current data set. Recycle processing continues.	See message ARC01168I in this manual.
69	An error on SYNCDEV occurred.	The recycle fails for the current connected set. Recycle processing continues.	See message ARC01269I in this manual.

Table 14 (Page 1 of 2). Reason Codes for Message ARC0734I when the Action is RECYCLE and Return Code is 16

Code	Meaning	System Action	Programmer Response
0	Read error on input volume.	Recycle of the data set fails. If you are processing with multibuffer data movement, recycle of the connected set fails. The next time the connect set is recycled, single-buffer data movement will be used. If RC16 occurs when processing with single-buffer, processing continues with the next valid data set on the volume. In all cases, the volume being recycled is marked as FAILED RECYCLE and can only be recycled by specific volume command.	Use RECYCLE with FORCE option if data set fails to recover or recall.
4	Extra CDD record before end of file.	Recycle of the data set fails. If you are processing with multibuffer data movement, recycle of the connected set fails. The next time the connect set is recycled, single-buffer data movement will be used. If RC16 occurs when processing with single-buffer, processing continues with the next valid data set on the volume. In all cases, the volume being recycled is marked as FAILED RECYCLE and can only be recycled by specific volume command.	Use RECYCLE with FORCE option if data set fails to recover or recall.
5	End of file reached and more data blocks need to be copied.	Recycle of the data set fails. If you are processing with multibuffer data movement, recycle of the connected set fails. The next time the connect set is recycled, single-buffer data movement will be used. If RC16 occurs when processing with single-buffer, processing continues with the next valid data set on the volume. In all cases, the volume being recycled is marked as FAILED RECYCLE and can only be recycled by specific volume command.	Use RECYCLE with FORCE option if data set fails to recover or recall.

Table 14 (Page 2 of 2). Reason Codes for Message ARC0734I when the Action is RECYCLE and Return Code is 16

Code	Meaning	System Action	Programmer Response
6	Correct number of blocks moved and end of file not detected.	Recycle of the data set fails. If you are processing with multibuffer data movement, recycle of the connected set fails. The next time the connect set is recycled, single-buffer data movement will be used. If RC16 occurs when processing with single-buffer, processing continues with the next valid data set on the volume. In all cases, the volume being recycled is marked as FAILED RECYCLE and can only be recycled by specific volume command.	Use RECYCLE with FORCE option if data set fails to recover or recall.
12	ABEND237-0C or ABEND 237-04 occurred during EOV or FEOV processing.	Recycle of the data set fails. If you are processing with multibuffer data movement, recycle of the connected set fails. The next time the connect set is recycled, single-buffer data movement will be used. If RC16 occurs when processing with single-buffer, processing continues with the next valid data set on the volume. In all cases, the volume being recycled is marked as FAILED RECYCLE and can only be recycled by specific volume command.	Use RECYCLE with FORCE option if data set fails to recall or recover.

Table 15. Reason Codes for Message ARC0734I when the Action is RECYCLE and Return Code is 36

Code	Meaning	System Action	Programmer Response
0	Open processing completed, but the DCB indicated that the data set was not open.	Recycle of the current data set fails. Recycle processing ends for this task.	None.
4	An I/O error occurred in reading or writing the backup control data set R record.	Recycle of the current data set fails. Recycle processing ends for this task.	See the previous ARC0184I message in the recycle command log.
8	An I/O error occurred in reading or writing some other backup control data set record.	Recycle of the current data set fails. Recycle processing ends for this task.	See the previous ARC0184I message in the recycle command log.
12	There was a failure to deallocate or allocate a volume.	Recycle of the current data set fails. Recycle processing ends for this task.	See the previous ARC0200I or ARC0208I message in the command activity log.
16	A GETMAIN or FREEMAIN failure occurred.	Recycle of the current data set fails. Recycle processing ends for this task.	Try again to recycle the volume this data set is on.
20	The backup control data set R record was in use by another processing unit.	Recycle of the current data set fails. Recycle processing ends for this task.	See the ARC0371I message that precedes this message in the recycle command log.
24	No backup volume was available.	Recycle of the current data set fails. Recycle processing ends for this task.	See the previous ARC0500I message on allocation failures or see the tape librarian.
28	DFSMShsm shutdown or DFSMShsm is in emergency mode.	Recycle processing ends.	None.

Table 16. Return Codes for Message ARC0528I during Scratch Processing

Retcode	Meaning
0	Successful data set deletion.
4	No volumes containing any part of the data set were mounted, nor did register 0 contain the address of a unit that was available for mounting a volume of the data set.
8	An unusual condition was encountered on one or more volumes.
12	One of the following conditions occurred: • The DADSM SCRATCH parameter list is invalid. • The volume list is invalid. • At entry to SCRATCH, register 0 was not zero and did not point to a valid UCB.

Table 17 (Page 1 of 2). Status Codes for Messages ARC0528I and ARC0734I during Scratch Processing

Status Code	Meaning
0	The DSCB for the data set was deleted from the VTOC on the volume pointed to.
1	The VTOC of this volume does not contain the DSCB to be deleted.

Table 17 (Page 2 of 2). Status Codes for Messages ARC0528I and ARC0734I during Scratch Processing

Status Code	Meaning
2	One of the following conditions occurred: • The data set could not be scratched because the console operator or TSO terminal operator did not specify the correct password in the two attempts allowed. • The user tried to scratch a VSAM data space or an ICF VSAM data set. • The user tried to scratch the VTOC index data set. • An SMS validation failure occurred. • The verify of the last referenced data failed.
3	The DSCB was not deleted because either the OVRD option was not specified or the retention cycle had not expired.
4	One of the following conditions occurred: • An invalid FIDSCB was encountered when processing this volume. • An unexpected CVAF error return code was encountered. • An installation-wide exit rejected the request. • An I/O error occurred while the DASD tracks occupied by the data set were being erased. Either the ERASE option was specified in the scratch parameter list or the ERASE attribute was specified for a RACF-defined data set.
5	It could not be verified that this volume was mounted nor was there a unit available for mounting the volume. If one or more of the volumes was an MSS virtual volume, see the explanation of message IEC666I in *OS/390 MVS System Messages, Vol 4 (IEC-IFD)*.
6	The operator was unable to mount this volume. If the volume is an MSS virtual volume and is running in a JES3 environment, JES3 would not allow the volume to be mounted.
7	The DSCB was not deleted because the data set was open.
8	The DSCB indicates that the data set is defined to RACF, but the user is not authorized to the data set or to the volume, or the data set is a VSAM data space, or the data set is not defined to RACF.
10	An error occurred while deleting an SMS-managed data set.
Note: For any code not in this list, refer to . *DFSMS/MVS Using Data Sets*	

Table 18. Return Codes for Message ARC0734I When the Action is SCRATCH

Retcode	Meaning
0	Scratch is successful.
4	Scratch is successful, but the volume deallocation failed.
8	MVT entry can not be found/built, so the scratch is not performed.
10	Migration cleanup attempted to scratch an old migrated copy from an SDSP data set, but the scratch attempt failed. See the associated ARC0546I message for the appropriate action.
12	Volume allocation failed, so scratch is not performed.
14	Migration cleanup was trying to scratch an old migration copy from an SDSP data set but the ML1 volume was not mounted, so the scratch was not issued. If you want the copy deleted, have the migration volume mounted the next time migration cleanup is run.
16	Scratch failed. See the previous ARC0528I message for more information.
20	Scratch failed and volume deallocation also failed.
24	Uncataloging failed.
28	Migration DASD volume is not mounted, so scratch is not performed. If the migrated data set needs to be scratched from the volume, the volume has to be mounted before migration cleanup starts at the next time. If the migrated data set was scratched from the volume, but the MCD record is still marked as needs-scratch (MCDFNSCR flag is on), issue a FIXCDS PATCH command to turn off the needs-scratch flag.
40	A DFSMShsm CDS read error was encountered.
44	A DFSMShsm CDS update error was encountered.
70	An error occurred deleting an SMS-managed data set.

Table 19 (Page 1 of 4). Return Codes for Messages ARC0833I, ARC0834I and ARC0845I and Reason Codes for Message ARC0835I

Code	Meaning	System Action	Programmer Response
0	All valid data sets were successfully moved from the volume, and the volume was removed from DFSMShsm control.	Recycle processing continues with the next eligible volume in the connected set or continues with the next eligible connected set.	None.

Table 19 (Page 2 of 4). Return Codes for Messages ARC0833I, ARC0834I and ARC0845I and Reason Codes for Message ARC0835I

Code	Meaning	System Action	Programmer Response
1	All valid data sets were successfully moved, but the attempt to remove the volume from DFSMShsm control failed.	Recycle of the volume fails. Recycle processing continues with the next eligible volume in the connected set or continues with the next eligible connected set.	See the ARC0260I message that precedes this message in the recycle command log. An error during the DELVOL process may cause the BVR, MCT, and/or TTOC entries to become out of sync with one another. For example, all entries may not show the same unassigned status. Correct the respective volume entries as appropriate.
2	DFSMShsm is in emergency mode.	Recycle of the volume fails. Recycle processing ends for all tasks.	None.
3	A failure occurred during volume allocation. The volume to be used is in use by another function.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	For a description of the volumes eligible for recycle, refer to *DFSMS/MVS DFSMShsm Storage Administration Reference*.
4	Movement of a data set failed when the output volume was a scratch tape (no volume is available for selection).	Recycle of the connected set fails. Recycle processing ends for this task.	See the previous ARC0184I, ARC0371I, or ARC0500I message, if any, or notify the system programmer.
5	A failure occurred during deallocation of the output tape volumes.	Recycle of the connected set fails. Recycle processing ends for this task.	See message ARC0200I or ARC0208I for the reason for the deallocation failure.
6	A failure occurred during allocation of the input tape volumes.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	1. See message ARC0500I for the reason for the allocation failure. 2. Contact the operator to determine why the reply given was no. 3. See the previous ARC0184I message.
7	A failure occurred during deallocation of the input tape volumes.	Recycle of the connected set fails. Recycle processing ends for this task.	See message ARC0200I or ARC0208I for the reason for the deallocation failure.
8	The connected set is no longer needed.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	See the previous ARC0833I message in the Recycle command log.
9	The OCDS T record for the volume being recycled was in use by another processing unit.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	See the ARC0371I message that precedes this message in the recycle command log.
10	Security of the tape label cannot be determined or DFSMShsm never successfully wrote to the tape volume (the tape volume is empty.)	Examine the tape label and contents. If the tape has no useful data, do the following: • Use the PURGE parameter with the DELVOL command. • Reinitialize the volume. • Add the volume with the ADDVOL command. Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	None.
11	An I/O error occurred in writing a control data set record.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	See the ARC0184I message that precedes this message in the recycle command log.
12	The RECYCLE command was held.	Recycle of the connected set fails. Recycle processing ends for all tasks.	None.
13	Movement of the data set failed and was retried unsuccessfully 3 times. Processing for the volume ends.	Recycle of the connected set fails. Recycle processing ends for this task.	See the appropriate ARC0734I messages associated with this message in the recycle command log.
14	An attempt was made to recycle an unassigned volume that is invalid.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	For a description of the volumes eligible for recycle, refer to *DFSMS/MVS DFSMShsm Storage Administration Reference*.
15	The input volumes are not all in the same library.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	Notify the tape librarian.
16	A read error occurred in reading input data.	Recycle of the volume fails. If processing with multibuffer data movement, recycle of the connected set fails and processing continues with the next eligible connected set. If processing with single-buffer, recycle processing continues with the next eligible volume or connected set.	See the appropriate ARC0734I messages associated with this message in the recycle command log.

Table 19 (Page 3 of 4). Return Codes for Messages ARC0833I, ARC0834I and ARC0845I and Reason Codes for Message ARC0835I

Code	Meaning	System Action	Programmer Response
17	Percent valid for the volume was 0 but valid data was found.	The valid block field is updated and recycle of the volume fails. Recycle processing continues with the next eligible connected set.	Use the recycle by volume command to recycle the volumes. Or, wait until the next recycle for your installation and this volume is recycled if it is eligible.
20	Failure to update the offline control data set T record for the output volume.	Recycle of this data set fails. Processing continues with the next eligible connected set.	See the previous ARC0184I message in the recycle command log.
21	Failure to update the MVC or MCT record after successfully opening the output data set.	Recycle of this data set fails. Processing continues with the next eligible connected set.	See the previous ARC0184I message in the recycle command log.
25	An I/O error occurred in reading a control data set record or the requested record was not found in the control data set.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	If an I/O error occurred, there is a preceding ARC0184I message. See that message for the required action. There is no ARC0184I message if the record was not found. The recycle command was in error.
30	RECYCLE EXECUTE TAPELIST was specified for ML2 (or ALL) volumes. After the pull list was created, the operator replied to message ARC0825D that ML2 volumes should not continue to recycle.	Recycle processing of ML2 volumes ends.	Determine why the operator replied that the ML2 volumes should not continue to recycle, and then decide whether to use the pull list to issue another RECYCLE command.
31	One or more input volumes could not be mounted.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	Notify the tape librarian.
32	Mount of output volume failed.	Recycle of the connected set fails. Recycle processing ends for this task.	Notify the tape librarian.
33	DFSMShsm was being shut down.	Recycle of the connected set fails. Recycle processing ends for all tasks.	None.
34	Recall or ABACKUP needed a source volume.	Recycle of the connected set ends. Recycle processing continues with the next eligible connected set.	None.
35	The OPEN macro was issued by DFSMShsm to open a data set for input. OPEN processing was not successful.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	See the appropriate ARC0734I messages associated with this message in the recycle command log.
36	The OPEN macro was issued by DFSMShsm to open a data set for output. OPEN processing was not successful.	Recycle of the connected set fails. Recycle processing ends for this task.	See the associated ARC0734I message in the recycle command log.
40	RECYCLE EXECUTE TAPELIST was specified for backup (or ALL) volumes. After the pull list was created, the operator replied to message ARC0825D that backup volumes should not continue to recycle.	Recycle processing of backup volumes ends.	Determine why the operator replied that the backup volumes should not continue to recycle, and then decide whether to use the pull list to issue another RECYCLE command.
42	An error occurred in processing an RDJFCB macro.	Recycle of the connected set fails. Recycle processing ends for this task.	None.
50	There was a failure to attach a subtask.	Recycle of the connected set fails. Recycle processing ends for this task.	See message ARC0090I in this publication.
52	There was a GETMAIN error.	Recycle processing ends for this task.	Attempt to recycle this volume again.
54	Tape data set installation-wide exit abnormal end.	Recycle processing ends for this task.	Turn off the exit if possible or release recycle and rerun. If the exit is in error, correct it and turn the exit back on.
61	During an attempt to add a new volume to DFSMShsm control, an I/O error occurred in reading or writing a control data set record, or the OCDS was not defined.	Recycle of the current connected set ends. Recycle processing continues with the next eligible connected set.	See the preceding ARC0184I or ARC0133I message in the recycle command log.
68	There was an error in positioning to data during recycle.	Recycle fails for the current data set. Recycle processing continues.	See the appropriate ARC0734I messages associated with this message in the recycle command log.
69	An error on SYNCDEV occurred.	Recycle fails for the current connected set. Recycle processing continues.	See the appropriate ARC0734I messages associated with this message in the recycle command log.
98	The file sequence number or the volume sequence number exceeds the limit.	Recycle of the connected set fails. Processing continues with the next eligible connected set.	None.

Table 19 (Page 4 of 4). Return Codes for Messages ARC0833I, ARC0834I and ARC0845I and Reason Codes for Message ARC0835I

Code	Meaning	System Action	Programmer Response
99	*reason-code* is the TCB completion code if the task abnormally ended or is a termination ECB. The termination ECB is the return code from the data mover subtask. The reason code is in hexadecimal.	Recycle of the connected set fails. Recycle processing continues with the next eligible connected set.	See the appropriate ARC0734I messages associated with this message in the recycle command log.
4xx	Internal parameter list error.	This recycle task ends. Other recycle tasks continue.	See message ARC9998I in this manual.

Table 20. Return Codes for Message ARC0835I

Code	Meaning	System Action	Programmer Response
1	DFSMShsm failed to open the recycle command log.	Recycle processing ends. DFSMShsm processing continues.	See message ARC0141I. This message was written to the operator's console and to the DFSMShsm log.
2	DFSMShsm is in emergency mode.	Recycle processing ends. DFSMShsm processing continues.	None.
3	An I/O error occurred in scanning the OCDS T records or a positioning error occurred reading the OCDS.	All connected sets already identified are allowed to recycle. No new connected sets are identified to be recycled. DFSMShsm processing continues.	Either message ARC0187I or message ARC0133I precedes this message in the recycle command log. Perform the problem determination indicated in this message.
5	Recycle command parse error.	Recycle processing ends.	Correct the syntax and reissue the command.
9	The attach of the recycle multitasker failed.	Recycle processing ends.	See message ARC0090I in this manual.
12	The RECYCLE command was held or DFSMShsm was being shut down.	Recycle processing ends. DFSMShsm processing continues.	None.
30	The RECYCLE EXECUTE TAPELIST was specified for ML2 (or ALL) volumes. After the pull list was created, the operator replied to message ARC0825D that ML2 volumes should not continue to recycle.	Recycle processing of ML2 volumes ends.	Determine why the operator replied that ML2 volumes should not continue to recycle, and then decide whether to use the pull list to issue another RECYCLE command.
33	DFSMShsm is being shut down.	Recycle processing ends. DFSMShsm processing ends.	None.
40	The RECYCLE EXECUTE TAPELIST was specified for backup (or ALL) volumes. After the pull list was created, the operator replied to message ARC0825D that backup volumes should not continue to recycle.	Recycle processing of backup volumes ends.	Determine why the operator replied that backup volumes should not continue to recycle, and then decide whether to use the pull list to issue another RECYCLE command.
52	A GETMAIN error occurred in the recycle multitasker.	Recycle processing ends.	See the preceding ARC0305I message in this manual.
90	Failure trying to attach the first recycle task.	Recycle processing ends.	See message ARC0090I in this publication.
99	A non-recycle task caused the control program to abend.	Recycle processing ends.	Reissue the command.
4xx	Recycle parameter list error.	Recycle processing ends.	See message ARC9998I in this publication.

Table 21 (Page 1 of 2). Reason Codes for Messages ARC1139I, ARC1239I, and ARC1339I

Reason code	Meaning
8	One of the following conditions occurred: • There is no RACF profile for a data set. • The user is not authorized to perform the requested function against the data set because the user does not have a sufficient level of resource access authority. • RACF protect-all support is enabled and the data set is not protected by either a discrete or generic profile. In this instance, the user should create a profile for the data set and then retry the request.
12	An error occurred when DFSMShsm added, deleted, or changed a volume in a RACF discrete data set profile.
15	An attempt to write to a RACF protected User or Master Catalog is made during RECOVER processing. The user ID (UID) issuing the command does not have sufficient RACF authority to perform the UPDATE/ALTER.
20	An error occurred in adding or deleting the tape volume to or from the DFSMShsm RACF tape volume set.
24	An attempt was made to add an already protected tape volume to the DFSMShsm RACF tape volume set.
28	Failure to set up ESTAE environment.

Table 21 (Page 2 of 2). Reason Codes for Messages ARC1139I, ARC1239I, and ARC1339I

Reason code	**Meaning**
36	A LOCATE failure occurred in getting catalog information for the RACF ERASE status check of the original data set.
40	A failure occurred in reading the migration control data set (MCDS) record to get information for the RACF ERASE status check of a migrated data set.
44	A field that contains the *volser* is null or blank when a valid value is required.
99	DFSMShsm is in test mode, a RACHECK was requested, and the data set RACF-INDICATOR was on.

ASA Messages

ASA001I **ERROR(S) FOUND IN PROCESSING PARMLIB MEMBER=*memname*: *text***

Explanation: *text* is one of the following:

PARMLIB MEMBER NOT FOUND. DETECTING MODULE IS *detmod*

PARMLIB I/O ERROR. DETECTING MODULE IS *detmod*

SYNTAX ERROR - MESSAGES FOLLOW. DETECTING MODULE IS *detmod*

INSUFFICIENT STORAGE FOR PARMLIB BUFFER. DETECTING MODULE IS *detmod*

PARMLIB CANNOT BE READ. DETECTING MODULE IS *detmod*

DYNAMIC ALLOCATION OF PARMLIB FAILED. DETECTING MODULE IS *detmod*

OTHER PARMLIB ERROR. DETECTING MODULE IS *detmod*

The system could not process the indicated parmlib member.

In the message text:

memname
The name of the parmlib member in which the error was found.

detmod
The name of the module that detected the error.

PARMLIB MEMBER NOT FOUND. DETECTING MODULE IS *detmod*
The system could not find parmlib member *memname*.

PARMLIB I/O ERROR. DETECTING MODULE IS *detmod*
An I/O error occurred while the system was processing parmlib member *memname*.

SYNTAX ERROR - MESSAGES FOLLOW. DETECTING MODULE IS *detmod*
Syntax errors were found while processing the parmlib member.

INSUFFICIENT STORAGE FOR PARMLIB BUFFER. DETECTING MODULE IS *detmod*
The system tried to read the entire parmlib member into storage prior to parsing but was unable to acquire enough storage to do so.

PARMLIB CANNOT BE READ. DETECTING MODULE IS *detmod*
The system could not read the parmlib member.

DYNAMIC ALLOCATION OF PARMLIB FAILED. DETECTING MODULE IS *detmod*
The system could not allocate the parmlib member.

OTHER PARMLIB ERROR. DETECTING MODULE IS *detmod*
Accompanying messages explain the error.

Source: Shown in the message text.

System Action: The system ignores the parmlib member.

Operator Response: If PARMLIB MEMBER NOT FOUND. DETECTING MODULE IS *detmod* appears in the message text, ensure that you specified an existing parmlib member. If the parmlib member exists, enter the command again. If the problem recurs or if the parmlib member does not exist, notify the system programmer.

For all other message texts, notify the system programmer.

System Programmer Response: If PARMLIB I/O ERROR. DETECTING MODULE IS *detmod* appears in the message text, correct the I/O error. Tell the operator to enter the command again.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

If INSUFFICIENT STORAGE FOR PARMLIB BUFFER. DETECTING MODULE IS *detmod* appears in the message text, check the private storage utilization.

ASA002I **SYNTAX ERROR IN PARMLIB MEMBER=*memname* LINE *line-number*: *symbol1* EXPECTED BEFORE *symbol2*. DETECTING MODULE IS *detmod*. INPUT LINE: *input-line***

Explanation: The system found a syntax error while processing a parmlib member. The parmlib member is:

- Missing a necessary character or symbol, or
- Contains a character or symbol in error.

In the message text:

memname	The name of the parmlib member containing a syntax error.
line-number	The number of the line in parmlib member *memname* that contains the syntax error.
symbol1	The missing character or symbol that the system expects.
symbol2	The character or symbol after the missing symbol, *symbol1*. Either *symbol1* is missing, or *symbol2* is not correct.
detmod	The name of the module that detected the error.
input-line	The text of the line containing the syntax error.

Source: Shown in the message text.

System Action: The system ignores the statement that contains the syntax error. The system may check the syntax for the remaining statements in the parmlib member.

Operator Response: Contact the system programmer.

System Programmer Response: Correct the syntax error in the parmlib member before reusing it.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA003I **SYNTAX ERROR IN PARMLIB MEMBER=*memname* ON LINE *line-number*, POSITION *position-number*: *symbol* WAS SEEN, WHERE ONE OF (*yyy* [*yyy*...]) WOULD BE CORRECT. DETECTING MODULE IS *detmod*. INPUT LINE: *input-line***

Explanation: The system found a syntax error in a parmlib member.

In the message text:

memname	The name of the parmlib member containing a syntax error.

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line-number	The number of the line in parmlib member *memname* that contains the syntax error.
position-number	The position of the error in the line. The position number is the number of columns in from the left.
symbol	The missing character or symbol that the system expects.
yyy	One or more correct symbols or characters to choose in place of *symbol*.
detmod	The name of the module that detected the error.
input-line	The text of the line containing the syntax error.

Source: Shown in the message text.

System Action: The system ignores the statement that contains the syntax error. The system may check the syntax for the remaining statements in the parmlib member.

Operator Response: Contact the system programmer.

System Programmer Response: Correct the syntax error in the parmlib member before reusing it.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA004I **PARSING OF PARMLIB MEMBER=***memname* **CONTINUED AT** *symbol***, LINE** *line-number***. DETECTING MODULE IS** *detmod***. INPUT LINE:** *input-line*

Explanation: The system found a syntax error in a parmlib member. The system ignores the portion of the parmlib member containing the syntax error, but continues processing at the point indicated in the message text.

In the message text:

memname	The name of the parmlib member containing a syntax error.
symbol	The next statement, keyword, or character after the syntax error (where the system begins processing the parmlib member again).
line-number	The number of the line in parmlib member *memname* where the system resumes processing.
detmod	The name of the module that detected the error.
input-line	The text of the line after the syntax error (where the system begins processing the parmlib member again).

Source: Shown in the message text.

System Action: The system does not check the syntax in the portion of the parmlib member containing the syntax error, but continues processing at the point indicated in the message text.

Operator Response: Contact the system programmer.

System Programmer Response: Look in the portion of the parmlib member that was not processed for the syntax error. Correct the error before reusing the parmlib member.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA005I *symbol* **SHOULD BE DELETED FROM PARMLIB MEMBER=***memname***, LINE** *line-number***. DETECTING MODULE IS** *detmod***. INPUT LINE:** *input-line*

Explanation: The system found a syntax error in a parmlib member.

In the message text:

symbol	The statement, keyword, or character that should be removed from parmlib member *memname*
memname	The name of the parmlib member containing a syntax error.
line-number	The number of the line in parmlib member *memname* containing the statement, keyword, or character that should be removed.
detmod	The name of the module that detected the error.
input-line	The text of the line that contains the statement, keyword, or character that should be removed.

Source: Shown in the message text.

System Action: The system continues processing the parmlib member. The system previously issued message ASA002I or ASA003I to describe the problem further.

Operator Response: Contact the system programmer.

System Programmer Response: See the explanation for any preceding messages. Correct the syntax error and, if necessary, delete the keyword statement, or symbol provided in the *symbol* field before reusing the parmlib member.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA006I *symbol* **WAS ASSUMED BEFORE THE ERROR POINT IN PARMLIB MEMBER=***memname***, LINE** *line-number***. DETECTING MODULE IS** *detmod***. INPUT LINE:** *input-line*

Explanation: The system found a syntax error in a parmlib member. The system did not find a necessary statement, keyword, or other input in the parmlib member, but continues to process the member as if the symbol was entered correctly.

In the message text:

symbol	The statement, keyword, or character that the system assumed to be in place.
memname	The name of the parmlib member containing the error point.
line-number	The number of the line in parmlib member *memname* that contains the error point.
detmod	The name of the module that detected the error.
input-line	The text of the line containing the error point.

Source: Shown in the message text.

System Action: The system continues processing the parmlib member. The system previously issued message ASA002I or ASA003I to describe the problem further.

Operator Response: Contact the system programmer.

System Programmer Response: See the explanation for any preceding messages and correct the error before reusing the parmlib member.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center.

Provide the name of the detecting module shown in the message text.

ASA007I **ERRORS IN PARMLIB MEMBER=**_memname_**, REFER TO HARDCOPY LOG. DETECTING MODULE IS** _detmod_

Explanation: The system found errors while processing parmlib member *memname*. The system wrote error messages to the hardcopy log.

In the message text:

memname	The name of the parmlib member containing the syntax errors.
detmod	The name of the module that detected the error.

Source: Shown in the message text.

System Action: The system writes error messages to the hardcopy log. Processing continues.

Operator Response: Contact the system programmer.

System Programmer Response: Look in the hardcopy log for messages that describe the syntax errors in the parmlib member. Correct any errors in the parmlib member before reusing it.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA008I **ERROR IN PARMLIB MEMBER=**_memname_ **ON LINE** _line-number_**, POSITION** _position-number_**: VALUE IS NOT VALID -** _error_ **DETECTING MODULE IS** _detmod_**. INPUT LINE:** _input-line_

Explanation: In a parmlib member, the system found an incorrect value for a keyword.

In the message text:

memname	The name of the parmlib member in which the error was found.
line-number	The number of the line in parmlib member *memname* containing the error.
position-number	The position of the error in the line. The position number is the number of columns in from the left.
error	is one of the following: **CONTAINS BAD CHARACTER(S).** The value contains characters that are not valid. **FIRST CHARACTER IS NOT VALID.** The first character specified for the value is not valid. **IT IS TOO LONG.** The specified value contains too many characters. **OUT OF RANGE.** The specified value does not fit within the required range. **NUMBER OF ENTRIES EXCEEDS LIMIT.** The number of entries specified is greater than is allowed. **MISSING OPERAND.** The required operand is not specified. **NO MATCH FOUND.** The requested operand does not exist within the system. **IT IS TOO SHORT.** The specified value contains too few characters.
detmod	The name of the module that detected the error.
input-line	The text of the line containing the syntax error.

Source: Shown in the message text.

System Action: The system ignores the statement but continues processing the parmlib member with the next statement.

Operator Response: Contact the system programmer.

System Programmer Response: Correct the value for the keyword in the parmlib member

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA009I **SYNTAX ERROR IN PARMLIB MEMBER=**_memname_ **ON LINE** _line-number_**, POSITION** _position-number_**: WHEN** _symbol_ **IS SPECIFIED,** _relation_ **(**_yyy_ **[** _yyy_**...]). DETECTING MODULE IS** _detmod_**. INPUT LINE:** _input-line_

Explanation: The system found a syntax error in a parmlib member.

In the message text:

memname	The name of the parmlib member containing a syntax error.
line-number	The number of the line in parmlib member *memname* that contains the syntax error.
position-number	The position of the error in the line. The position number is the number of columns in from the left.
symbol	The symbol that the system found in the command text. The symbol is not valid because of the condition described in the message.
relation	is one of the following: **THE FOLLOWING MAY NOT BE SPECIFIED:** When *symbol* is specified, the other named symbols may not be. **THE FOLLOWING MUST ALSO BE SPECIFIED:** When *symbol* is specified, the other named symbol must be. **ALL OF THE FOLLOWING MUST ALSO BE SPECIFIED:** When *symbol* is specified, the other named symbols must be. **ONE OF THE FOLLOWING MUST ALSO BE SPECIFIED:** When *symbol* is specified, one of the other named symbol(s) must be.

ONE OR MORE OF THE FOLLOWING MUST ALSO BE SPECIFIED:
When *symbol* is specified, at least one of the other named symbol(s) must be.

yyy	One or more correct symbols or characters that relate to *symbol*, as described in the *relation* field.
detmod	The name of the module that detected the error.
input-line	The text of the line containing the syntax error.

Source: Shown in the message text.

System Action: The system ignores the statement that contains the syntax error. The system may check the syntax for the remaining statements in the parmlib member.

Operator Response: Contact the system programmer.

System Programmer Response: Correct the syntax error in the parmlib member before reusing it.

If the problem recurs, search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA100I SYNTAX ERROR: *symbol1* EXPECTED BEFORE *symbol2*. DETECTING MODULE IS *detmod*

Explanation: The system found a syntax error while processing a command. The command is:

- Missing a necessary character or symbol, or
- Contains a character or symbol in error.

In the message text:

symbol1	The missing character or symbol that the system expects.
symbol2	The character or symbol after the missing symbol *symbol1*. Either *symbol1* is missing, or *symbol2* is not correct.
detmod	The name of the module that detected the error.

Source: Shown in the message text.

System Action: The system ignores the command.

Operator Response: Correct the syntax error. Enter the command again. If the error recurs, contact the system programmer.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA101I SYNTAX ERROR: *symbol* WAS SEEN, WHERE ONE OF (*yyy* [*yyy*...]) WOULD BE CORRECT. DETECTING MODULE IS *detmod*

Explanation: The system found a syntax error in a command.

In the message text:

symbol	An incorrect symbol that appeared in the command text.
yyy	One or more correct symbols or characters that should replace *symbol* in the command text.
detmod	The name of the module that detected the error.

Source: Shown in the message text.

System Action: The system ignores the command.

Operator Response: Correct the syntax error. Enter the command again. If the error recurs, contact the system programmer.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA102I *symbol* WAS ASSUMED BEFORE THE ERROR POINT. DETECTING MODULE IS *detmod*

Explanation: The system found a syntax error while processing a command. The system did not find a necessary statement, keyword, or other input in the command, but continues as if the statement was present.

In the message text:

symbol	The statement, keyword, or character that the system assumed to be present so that processing could continue.
detmod	The name of the module that detected the error.

Source: Shown in the message text.

System Action: The system continues processing the command. The system previously issued message ASA100I or ASA101I to describe the error further.

Operator Response: See the explanations for messages ASA100I or ASA101I. Correct the syntax error. Enter the command again. If the error recurs, contact the system programmer.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA103I SYNTAX ERROR: WHEN *symbol* IS SPECIFIED, *relation* (*yyy* [*yyy*...]). DETECTING MODULE IS *detmod*

Explanation: The system found a syntax error in a command.

In the message text:

symbol	The symbol that the system found in the command text. The symbol is not valid because of the condition described in the message.
relation	is one of the following: **THE FOLLOWING MAY NOT BE SPECIFIED:** When *symbol* is specified, the other named symbols may not be. **THE FOLLOWING MUST ALSO BE SPECIFIED:** When *symbol* is specified, the other named symbol must be. **ALL OF THE FOLLOWING MUST ALSO BE SPECIFIED:** When *symbol* is specified, the other named symbols must be. **ONE OF THE FOLLOWING MUST ALSO BE SPECIFIED:** When *symbol* is specified, one of the other named symbol(s) must be. **ONE OR MORE OF THE FOLLOWING MUST ALSO BE SPECIFIED:** When *symbol* is specified, at least one of the other named symbol(s) must be.
yyy	One or more correct symbols or characters that relate to *symbol*, as described in the *relation* field.

detmod The name of the module that detected the error.

Source: Shown in the message text.

System Action: The system ignores the command.

Operator Response: Correct the syntax error. Enter the command again. If the error recurs, contact the system programmer.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA104I SYNTAX ERROR IN POSITION *position*. ERROR IN VALUE FOR KEYWORD *keyword* - *error*. DETECTING MODULE IS *detmod*

Explanation: The system found an incorrect value in a parameter.

In the message text:

position The position of the error in the line. The position is the number of columns counting from the left, starting at 0.

keyword The keyword with the syntax error.

error One of the following:

CONTAINS UNACCEPTABLE CHARACTER(S)
The value contains characters that are not valid. For example, a decimal value might be required, but the value contained a character that was not 0 through 9.

FIRST CHARACTER IS NOT VALID
The first character specified for the value is not valid.

IT IS TOO LONG
The specified value contains too many characters.

OUT OF RANGE
The specified value does not fit within the required range.

NUMBER OF ENTRIES EXCEEDS LIMIT
The number of entries specified is greater than allowed.

MISSING OPERAND
The required operand is not specified.

detmod The name of the module that detected the error.

Source: Shown in the message text.

System Action: The system stops processing the statement.

Operator Response: Correct the syntax error. Enter the command again. If the error recurs, contact the system programmer.

System Programmer Response: Search problem reporting data bases for a fix for the problem. If no fix exists, contact the IBM Support Center. Provide the name of the detecting module shown in the message text.

ASA105I DATA SET NAME *dsname* IS NOT CORRECT - *error*. DETECTING MODULE IS *detmod*

Explanation: The system found an incorrectly specified data set name.

In the message text:

dsname The input data set name.

error is one of the following:

LENGTH EXCEEDS 44 CHARACTERS
The data set name is too long.

A CHARACTER IS NOT VALID
The name contains a character that is not alphabetic, numeric, national, or a period.

SEGMENT LENGTH IS NOT 1-8
A segment of the name - between periods or at the beginning or end - is not of an acceptable length

FIRST CHARACTER IS NOT VALID
The first character is not alphabetic or national.

FIRST CHARACTER OF A SEGMENT IS NOT VALID
The first character of a segment of the name was not alphabetic or national.

detmod The name of the module that detected the error.

Source: Shown in the message text.

System Action: The system may stop processing the statement.

Operator Response: If no message prompt follows, correct the syntax and re-issue the command.

**ASA2000I SUBSYSTEM *ssname*:
PRODID=*productid* PRODLVL=*productlvl* COMPID=*compid*
(C) COPYRIGHT IBM CORP. *year* ALL RIGHTS RESERVED.
U.S. GOVERNMENT USERS RESTRICTED RIGHTS -
USE, DUPLICATION, OR DISCLOSURE RESTRICTED BY
GSA ADP SCHEDULE CONTRACT WITH IBM CORP.**

Explanation: This is a proprietary statement concerning the use of the product. The second line of the message indicates the product identifier, product level, and component identifier of the product.

In the message text:

ssname
The name of the subsystem.

productid
The product identifier.

productlvl
The product level.

compid
The component identifier.

year
The year to which the copyright applies.

Source: Shown in the message text.

Detecting Module: Many.

System Action: Subsystem processing continues

ASA2005I SUBSYSTEM JOBNAME *jobname* IS NOT VALID. COMPONENT ID=*compid*

Explanation: The job name/procedure name, which is used as the name of the subsystem, is not a valid subsystem name. The name must be from 1 to 4 characters.

In the message text:

jobname
The name of the job or started procedure.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The address space is terminated.

Operator Response: Notify your system programmer.

System Programmer Response: Ensure that the job name/procedure name is a valid subsystem name (1-4 characters).

ASA2006I *ssname* **INPUT COMMAND PREFIX IS NOT VALID. DEFAULT PREFIX USED. COMPONENT ID=***compid*

Explanation: A command prefix value that was specified as input to the subsystem *ssname* is not valid. The prefix value is either greater than 8 characters, begins with an incorrect symbol, or contains an imbedded blank.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: Subsystem initialization continues. The system ignores the specified command prefix value and uses subsystem name *ssname* as the default command prefix.

Operator Response: If the default command prefix is unacceptable, enter a CANCEL command prefixed by *ssname* to cancel the subsystem immediately. Then, if you entered the incorrect command prefix as a parameter on the START command when you first started the subsystem, re-enter the START command to restart the subsystem with a valid command prefix value.

If you did not specify the incorrect command prefix on the START command, notify your system programmer.

System Programmer Response: If the incorrect command prefix was specified as a parameter in the job procedure that was used to start the subsystem, correct the command prefix parameter in the procedure so the system will use the correct command prefix the next time the subsystem is started.

ASA2007I *ssname* **COMMAND PREFIX IS** *cmdprefix***. COMPONENT ID=***compid*

Explanation: The command prefix that is in use for subsystem *ssname* is *cmdprefix.* All commands entered for the subsystem should begin with this prefix.

In the message text:

ssname
The name of the subsystem.

cmdprefix
is a 1-8 character command prefix.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: Subsystem initialization continues.

Operator Response: Whenever you enter one of the commands supported by the subsystem, you must begin the command with the indicated command prefix (such as *cmdprefix* STATUS).

ASA2008I **SUB=***ssname* **WAS NOT SPECIFIED. COMPONENT ID=***compid*

Explanation: When the subsystem was started, the START command did not specify SUB=*ssname*.

In the message text:

ssname
The name of the required subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The system terminates the address space.

Operator Response: Specify SUB=*ssname* when starting the subsystem.

ASA2011I *ssname* **INITIALIZATION COMPLETE. COMPONENT ID=***compid*

Explanation: Subsystem *ssname* has completed its initialization.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The subsystem continues processing. It is now ready to process any data set whose DD statement specifies the SUBSYS= keyword indicating this subsystem (that is, *ssname*).

ASA2012I *ssname* **ENDED. COMPONENT ID=***compid*

Explanation: The subsystem *ssname* has completed shutting itself down.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The subsystem address space terminates.

ASA2013I *ssname* **INITIALIZATION FAILED. COMPONENT ID=***compid*

Explanation: The system could not initialize subsystem *ssname* successfully. An error message or abend issued just prior to this message indicates the specific initialization error.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The subsystem terminates.

Operator Response: Notify your system programmer.

System Programmer Response: Examine the SYSLOG to locate the error message or abend that describes the error that caused initialization to fail, then correct the condition that caused the error.

ASA2014I *ssname* **ALREADY ACTIVE. COMPONENT ID=***compid*

Explanation: One instance of subsystem *ssname* already exists. The system does not allow starting more than one subsystem with the same name.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The subsystem that issued this message terminates.

Operator Response: Ensure you specified the correct name on the START command when starting the subsystem.

If you were restarting the subsystem after an error, ensure that the first instance of the subsystem ends before issuing the START command.

ASA2016I *ssname* **IS NOT A VALID SUBSYSTEM. COMPONENT ID=***compid*

Explanation: Subsystem *ssname* is not a defined subsystem name that the system recognizes.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The subsystem terminates.

Operator Response: Notify your system programmer.

System Programmer Response: Ensure the subsystem name *ssname* is defined as a valid subsystem name in the IEFSSNxx parmlib member that was used to IPL the system.

ASA2326I **SUBSYSTEM** *ssname* **ALTERED TO USE THE PRIMARY SUBSYSTEM. COMPONENT ID=***compid*

Explanation: Subsystem *ssname* has been set to indicate that it is to be started only under the primary subsystem.

This message occurs if the installation has specified the subsystem initialization routine on the initialization statement for the subsystem in its IEFSSNxx parmlib member. The subsystem initialization routine will always force the specified subsystem to be initialized under only the primary subsystem.

This message is written to hardcopy only.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: System initialization continues.

ASA2432I *ssname* **PARMLIB MEMBER** *memname* **READ. COMPONENT ID=***compid*

Explanation: Parmlib member *mname* was successfully read and processed.

In the message text:

ssname
The name of the subsystem.

memname
The name of the parmlib member that was read.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: Subsystem processing continues.

ASA2960I *ssname* **SUBSYSTEM FUNCTIONS DISABLED. COMPONENT ID=***compid*

Explanation: During the process of terminating either normally or abnormally, subsystem *ssname* disabled the subsystem functions it normally provides for jobs.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The subsystem will proceed to terminate. Any jobs that attempt to allocate, open, or close resources managed by subsystem *ssname* will fail during allocation, open, or close processing.

ASA2962I *ssname* **SUBSYSTEM FUNCTION DISABLEMENT FAILED. COMPONENT ID=***compid*

Explanation: During the process of terminating either normally or abnormally, subsystem *ssname* attempted to disable the subsystem functions it normally provides. However, a failure occurred that prevented the subsystem from completely disabling all the subsystem functions it provides.

In the message text:

ssname
The name of the subsystem.

compid
The component identifier.

Source: Shown in the message text.

Detecting Module: Many.

System Action: The subsystem will proceed to terminate. Any jobs that attempt to allocate, open, or close resources managed by subsystem *ssname* might end abnormally.

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