
LRS/MVS Server

Installation and User's Guide

V1 R8.0

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Levi, Ray & Shoup, Inc.
2401 West Monroe Street
Springfield, IL 62704
Phone: 217-793-3800
Fax: 217-787-4014
<http://www.lrs.com>

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Summary of Enhancements

The following table contains the fix numbers assigned to major LRS/MVS Server enhancements and/or fixes.

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LRS/MVS Server (VSV) V1 R8.0.002 (07/06/2000)

- When using the VMCF internal security table with multiple user definitions, the active user is getting incorrect security access.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.046 (03/27/2001)

- SYSOUT datasets are allocated with the jobname and owner ID of the LRS Server started task.

VLS code in the LRS Server is not capable of changing the jobname and owner ID of a SYSOUT dataset. Additionally, PageCenter does not pass the original jobname and owner ID of a SYSOUT dataset to the LRS Server in the DRIB when making a VLS INIT call.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials. Also, VPS should be upgraded to level V1R8.0.098 or higher, and VPS PageCenter should be upgraded to level V1R1.1.037 or higher.

LRS/MVS Server (VSV) V1 R8.0.066 (10/02/2001)

- Product does not support Z/OS 1.2 operating system.

Changes in Z/OS 1.2 have resulted in job numbers up to 999,999, exceeding the old limit of 65,534. Without this fix, there will be problems with many processes relating to job numbers. Additionally, JES-dependent exits will get assembly errors if the revised ASM and MACLIB libraries are not used.

This fix is not available as a zap. Customers who require these changes should contact LRS to request updated product distribution materials.

WHEN LRS SERVER (VSV) V1R8.0 IS UPGRADED TO LEVEL 8.0.066 OR HIGHER, VPS V1R8.0 MUST BE UPGRADED TO LEVEL 8.0.200 OR HIGHER, AND VMCF V1R8.0 MUST BE UPGRADED TO LEVEL 8.0.045 OR HIGHER, REGARDLESS OF WHETHER OR NOT Z/OS 1.2 IS IN USE. ALL JES-DEPENDENT VPS, VMCF, LRS SERVER (VSV) AND REPORT BROWSE MODULES MUST BE RE-ASSEMBLED AND LINKED, USING THE UPDATED SOURCE (ASM) AND MACLIB LIBRARIES.

LRS/MVS Server (VSV) V1 R8.0.085 (02/04/2002)

- New keys and keywords need to be displayed in VMCF after VPS fix 8.0.246. Some keys are no longer used and should not be displayed in VMCF. The LRS/MVS Server is not currently passing the data to VMCF for display.

Various modules will be source changed to pass the new key and keyword values to VMCF, and to bypass displaying the unused keys.

This fix is not available as a zap. Customers who require this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.090 (04/09/2002)

- Two new external security keywords (VPC.stcname.appl.applname.RL1GEN and VPC.stcname.appl.applname.RL2GEN) have been added to PageCenter as PageCenter V1R1.1 fix 091. The keywords support the ability to restrict level-1 vault storage and level-2 vault storage restores.

Module VS80SCX1 will be source updated to add the new level-1 vault storage and level-2 vault storage restore keywords. Macro VSRVSEC will be source updated to designate the new restore indicators.

Note that the existing external security keyword VPC.stcname.appl.applname.RSTGEN can still be specified to override the new external security keywords (VPC.stcname.appl.applname.RL1GEN and VPC.stcname.appl.applname.RL2GEN) and simultaneously grant users both level-1 vault storage and level-2 vault storage restore authority.

This fix is not available as a zap. Customers who need this change should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.097 (05/22/2002)

- The LRS/MVS Server SSET command does not allow the mode of PageCenter to be changed.
- Message VSV1043R does not display the PageCenter mode or statistics values.
- The PageCenter task name for message VSV1044R is missing. The following PageCenter task names will appear as blanks in message VSV1044R: Vault run subtask (VLTTASK), bundle print scheduled (BDSCHED), bundle print (BDPRINT), and client (CLIENT).
- The system options request does not contain the PageCenter mode, statistics, or bundle restart values. VMCF uses the system options request to retrieve PageCenter information for the Server Options screen 3 (VMCVSR3). The values for PCMODE, PCSTATS, PCSTFILE, and PCSTSMF are not included in the request.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

PageCenter V1R1.1 fix 104 must also be applied to make this fix work correctly.

LRS/MVS Server (VSV) V1 R8.0.100 (06/11/2002)

- Some LRS Server (VSV) modules and control block need to be updated for DMCF support.

Many VSV modules and macros were source updated, and several new modules and macros were created.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

VMCF V1R8.1 must also be updated to fix level 012 or higher to make this fix work correctly.

LRS/MVS Server (VSV) V1 R8.0.102 (04/16/2002)

- When performing a SAF REFRESH from VMCF or DMCF, the DMCF security flags are all turned off. Module VS80SCMD was not copied into the distribution file when LRS Server (VSV) fix 8.0.100 was applied, so changes for DMCF security were not in effect.
- When performing a SAF REFRESH from VMCF or DMCF, module VS80SCMD was not resetting a pointer to the #VSSIB control block which results in an S0C4 abend at offset X'2C2' in module VS80SCMD.

Module VS80SCMD will be zapped to reset the pointer to the control block when doing a SAF REFRESH.

The zapped module will then be copied to the distribution library, so that source code changes made to the module as part of LRS Server fix 8.0.100, as well as the zap, are both in the distribution load module.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.103 (06/21/2002)

- After LRS Server (VSV) V1R8.0 fix 100, assembly errors occur when assembling the VMCF internal security table (VS80SECT).

The VMCFUSR macro was not checking to see if default menu options were specified on the VMCFDFLT macro, and was generating assembly errors if there were no MENUOPT or DRSMENU keywords specified on the VMCFUSR macro.

Macro VMCFUSR will be source changed to check if menu options were specified on the VMCFDFLT macro before generating the assembly errors. This macro is supplied in file LRS.VSV.V1R80.MACLIB.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.104 (06/25/2002)

- LRS/MVS Server initialization fails with message "SECURITY SYSTEM INITIALIZATION FAILED RC=0000000C" after LRS/MVS Server fix 8.0.100 if internal security is being used (SAF=N) and the internal security table load module (VS80SECT) contains a TYPE=CRT entry.

Module VS80SCI1 is checking to verify that each entry in the security table is valid and links correctly to the next entry. However, it does not consider TYPE=CRT to be valid.

The source code for module VS80SCI1 will be updated to allow both the TYPE=USER and TYPE=CRT entries.

This fix was written as a source code change, because the source code for module VS80SCI1 is supplied to customers in distribution file LRS.VSV.V1R80.ASM.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.105 (07/08/2002)

- After LRS/MVS Server V1R8.0 fix 100, assembly errors can occur when assembling the VMCF internal security table (VS80SECT).

The VMCFDEF macro was not checking to see if default menu options were specified on the VMCFSEC macro with TYPE=DEFAULT, and was generating assembly errors if there were no MENUOPT, DRSMENU, VPSSTC, or DRSSSTC keywords specified on the VMCFSEC macro.

Macro VMCFDEF will be source changed to check if the MENUOPT, DRSMENU, VPSSTC and DRSSSTC keywords were specified on the VMCFSEC macro before generating the assembly errors.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.107 (07/22/2002)

- LRS/MVS Server initialization fails with message “SECURITY SYSTEM INITIALIZATION FAILED RC=000000C” after LRS/MVS Server fix 8.0.100.

If internal security is being used (SAF=N) and the internal security table load module (VS80SECT) contains a TYPE=DEFAULT entry, initialization fails.

Module VS80SCI1 is checking to verify that each entry in the security table is valid and links correctly to the next entry. However, it only considers TYPE=USER and TYPE=CRT to be valid.

The source code for module VS80SCI1 will be updated to allow the TYPE=DEFAULT entries.

LRS/MVS Server V1R8.0 fix 104 is a prerequisite.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.111 (08/12/2002)

- Some modules and control blocks need to be updated to add support for DRS printer groups. A new internal security macro will be introduced for DRS printer group support.
- Scrolling problems on DMCF DRS Print Tracking data screen. When displaying all tracking data on the DMCF print Tracking Screen and scrolling down, only the first entry appears in the list.
- ‘PROFILE ID INVALID’ message when doing a SAF REFRESH from the LRS/MVS Server Command Menu if using external security and the user does not have any DCMF authority. Module VS80SCX1 is calling VS80SCX3 to do the VMCF security refresh, and if successful, calls VS80SCX4 to do a DMCF security refresh. If the user is not authorized for DMCF, a non-zero return code is returned, resulting in the profile ID error.
- DMCF does not display the total page count that DRS has spooled. The LRS/MVS Server does not pass the total page count that DRS has spooled.
- DMCF does not display the cell pool usage statistics on the DRS System Statistics screen. The LRS/MVS Server does not pass the cell pool usage statistics for DMCF to display.
- DMCF displays User Exit 00 on the ‘DRS System User Exits’ screen and the ‘DRS System Set Command’ screen. DRS builds a module table entry for DRS User Exit 00 even though User Exit 00 is not used. The LRS/MVS Server is passing the data in this module table entry to DMCF to display.

-
- VMCF does not display the cell pool usage statistics on the Server Statistics screen. The LRS/MVS Server does not pass the cell pool usage statistics for VMCF to display.
 - Source updates in preparation for DMCF Report Browse invocation.

The source code for many modules and macros was updated.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1R8.0 fix 100 is a prerequisite to this fix. VMCF V1R8.1 fix 021 should also be applied.

LRS/MVS Server (VSV) V1 R8.0.112 (08/12/2002)

- Updates are necessary for the DMCF/Web Access product.

Module VS80SCHD will be zapped to add processing for the DMCF/Web Access product. Module VS80VPSX will be source changed to add processing for the DMCF/WEB Access product.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.115 (09/04/2002)

- The LRS/MVS Server needs to be changed to support the DMCF Report Browse capability.

This fix is not available as a zap. Customer who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.124 (10/15/2002)

- Updates to return additional printer information for DMCF/Web access and VMCF/Web access.

Source code for several modules and macros will updated.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

VMCF V1R8.0 fix 066, or VMCF V1R8.1 fix 035, and DMCF V1R1.0 fix 002 should also be applied.

LRS/MVS Server (VSV) V1 R8.0.125 (10/21/2002)

- This fix implements several enhancements to VPS/Report Browse.

1. Support for records up to 32k.
2. Replace trailing blanks removed in JES spool by BLNKTRNC=YES OUTCLASS keyword.
3. Move all buffers above 16m line.
4. Implement 31 bit I/O for print datasets.
5. Increase RBBUFSI keyword default to 32k.
6. Increase RBMLREC keyword default to 32760.
7. Prevent loop if RBMLREC value is greater than or equal to RBBUFSI.
8. Validate RBBUFSI value is greater than RBMLREC+4 and increase buffer size if required.
9. Serialize access to OCB control block.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1R8.0 fix 100 is a prerequisite.

LRS/MVS Server (VSV) V1 R8.0.134 (11/21/2002)

- Performance enhancement for the LRS/MVS Server trace module. Trace module VS80TRCE currently uses the linkage stack instructions BAKR, ESTA and PR to save program status at entry and exit. This causes overhead, as the trace module is called very frequently.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

If PageCenter V1R1.1 is also in use, it must be updated to fix level 138 or higher when this fix is applied to LRS/MVS Server. Failure to update PageCenter will result in an SOC4 abend.

LRS/MVS Server (VSV) V1 R8.0.150 (01/15/2003)

- Enhancement to provide additional subtask recovery capability.

When a subtask abends, the generic subtask recovery routine will take a snap dump and terminate the abending subtask. The recovery routine does not allow the subtask to cleanup/recover from the abend.

Module VS80STAI has been source updated to optionally allow subtasks to regain control from the generic subtask recovery routine when an abend occurs.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.152 (01/28/2003)

- Enhancements to provide data space processing within PageCenter, and to allow the LRS/MVS Server (VSV) to snap the PageCenter data space control blocks during abend and display new PageCenter data space keywords.

Various modules were source updated to perform these functions.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

If PageCenter V1R1.1 is being used, PageCenter fix 153 must also be applied to make this fix work correctly.

LRS/MVS Server (VSV) V1 R8.0.158 (02/25/2003)

- Enhancement to support binary trees in a data space. Currently, the binary tree services module only supports binary trees in the primary address space.
- Enhancement to provide additional SCHA, SCHAT, and SCHX subtask recovery. When a SCHA, SCHAT, or SCHX subtask abends, the subtask will take a snap dump and terminate the request for the abending subtask. The recovery routine does not allow the request to cleanup/recover from the abend.
- The contents of PageCenter keyword parameter PCIMPDSP (size of import data space) is not being displayed.
- If an application subtask abends and a subtask recovery element is in use, the subsystem tracing data space will not be dumped.

Binary trees will now be maintained in either the primary address space or a data space.

Requests in SCHA, SCHAT, and SCHX subtasks will now optionally be able to regain control from the subtask recovery routine when an abend occurs.

The PCIMPDSP keyword will now be displayed.

When an application subtask abends and a subtask recovery element is in use, the subsystem tracing data space will now be dumped correctly.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Customers who upgrade PageCenter V1R1.1 to fix level 164 or higher must have this fix applied to LRS/MVS Server.

LRS/MVS Server (VSV) V1 R8.0.159 (02/27/2003)

- Enhance the dynamic allocation and unallocation request handler in LRS/MVS Server (VSV). The dynamic allocation and unallocation request handler could not be used by PageCenter vault dataset processing. The handler was limited to DASD dataset processing, and PageCenter needed text units for tape allocation.

Module VS80UTIL will be source changed to include several dynamic allocation text units that are required by PageCenter. These changes will also allow VS80UTIL to allocate datasets on tape.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

If PageCenter V1R1.1 is upgraded to level 166 or higher, this fix must be applied to the LRS/MVS Server (VSV).

LRS/MVS Server (VSV) V1 R8.0.168 (04/24/2003)

- The VLS component of the LRS/MVS Server (used by PageCenter) does not allow the system to choose a block size when creating datasets. A zero block size allows the system to choose the block size that it believes is appropriate when creating datasets. However, the VLS component of the Server considers a zero block size to be invalid.

Module VL80CBVL will be zapped to allow a zero block size.

LRS/MVS Server (VSV) V1R8.0 fix 083 is a prerequisite.

LRS/MVS Server (VSV) V1 R8.0.169 (05/02/2003)

- Report Browse enhancements for VMCF Web Access and DMCF Web Access.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1R8.0 fix 101 is a prerequisite.

LRS/Net V1R1.0 fix 043, VMCF Web Access V1R1.0 fix 012, and DMCF Web Access V1R1.0 fix 005 also work in combination with this fix.

LRS/MVS Server (VSV) V1 R8.0.178 (06/23/2003)

- Updates to display new VPS printer keyword values.

VPS V1R8.0 fix 436 introduced new printer keywords to support AFP processing of separators. Some Printer Summary screens needed to be updated to reflect those keywords and their values.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

VMCF V1R8.1 should also be updated to fix level 072 or higher for this fix to work correctly.

LRS/MVS Server (VSV) V1 R8.0.181 (07/10/2003)

- The performance of the DMCF Tracking List display will deteriorate when a large number of tracking records exist for a single print queue. This enhancement will improve performance by reducing the number of I/O requests issued to build the Tracking List display.

Module VS80DRPI will source updated to reduce the number of I/O requests executed to build the Tracking List response.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Users of DMCF Web Access V1R1.0 should upgrade that product to level 007.

LRS/MVS Server (VSV) V1 R8.0.0187 (08/12/2003)

- PageCenter cannot use the VLS component of the LRS/MVS Server during PageCenter bootstrap, because the VLS component is initialized after PageCenter successfully bootstraps.

Module VS80APIN will be source changed to load the VLS component of the Server before PageCenter bootstraps, if the PageCenter key is present.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.0188 (08/27/2003)

- Enhancements to support the new PRTNAME keyword in DRS and VPS and to provide a VIEW command for VMCF.

Support the VPS and DRS PRTNAME= printer keyword. A new PIB tree index has been created to allow sorting entries by printer name, LU name, member name, and started task name.

Support the new VMCF VIEW command

Allow security by the new PRTNAME= keyword.

Allow security by VPS/TCPIP host name or address.

SAF options have been increased to 2 bytes to allow 2 new options (use IP name or PRTNAME as the printer ID).

Numerous server modules have been source updated to support the above items. Also, note that the old security table conversion utility (VM81SCV7) has been renamed to VS80I2XS. VS80I2XS has been updated to support the new security options.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.0190 (09/19/2003)

- The PageCenter security restructure has added new authorization functionality.

Various new external security keywords have been created in PageCenter to limit the individual functions a VPC system administrator may request. Also, new external security keywords have been added in PageCenter to make a distinction when restricting host prints and local prints.

Module VS80SCX1 will be source updated to check the new external security keywords for PageCenter. Macros VSRVSEC and #SECURE will be source updated to designate the new external security keywords.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.0191 (10/07/2003)

- DRS V1R3.4 fix 055 added a new “byte count” field. The LRS/MVS Server (VSV) code needed to be updated to acquire this information from DRS, so it can be displayed on the DMCF Tracking List screen.
- New keywords were added to the \$VMCF member in the LRS/MVS Server control library to allow users to specify default “VIEWS” for certain screens.
- LRS/MVS Server needed to be updated to support the new VIEWLIST command added to VMCF and DMCF.

Source updates were applied to several LRS/MVS Server modules to add these functions.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.0194 (10/29/2003)

- Enhancement to provide the client’s user ID to LRS/MVS Server (VSV) User Exit 06 (JES Queue Scan Exit). Previously, the user ID was not passed to the exit, which prevents the customer from customizing the exit to filter returned information based on the client’s user ID.

Server modules that invoke VSV User Exit 06 were source updated to pass the user ID, and source changes were made to several modules and macros to provide space for the user ID.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

VMCF V1R8.1 fix 087 and DMCF V1R1.0 fix 016 should also be applied.

LRS/MVS Server (VSV) V1 R8.0.0195 (10/29/2003)

- DRS V1R3.4 fix 058 introduced new values for the ERRACTN keyword in a virtual printer definition member.

LRS/MVS Server (VSV) will be updated to retrieve the value and make it available to DMCF.

LRS/MVS Server (VSV) V1R8.0 fix 188 is a prerequisite. DMCF V1R1.0 must be a level 1.0.017 or higher to display the value correctly, and DRS V1R3.4 must be at level 3.4.058 or higher to support the values.

LRS/MVS Server (VSV) V1 R8.0.0200 (11/19/2003)

1. ARM register request fails with R15=08 TSN=X'5B0' following restart on a different CPU within the SYSPLEX. The LRS/MVS Server is incorrectly generating the ARM element name when registering with ARM. Currently, the ARM element name is built as follows:

Element name = LRS/MVS Server STCname + MVS system name

ARM requires that the element name be the same when the application is restarted. The LRS/MVS Server violates this restriction by including the MVS system name as part of the element name.

2. Update for new VPS ARM keyword processing and new LRS/MVS Server SVARM keyword processing. New automatic restart manager (ARM) keywords needs to be processed for display in VMCF.

The LRS/MVS Server will be modified to build the ARM element name as follows:

Element name = LRS/MVS Server STCname

In addition, a new LRS/MVS Server system keyword (SVARM=) will be introduced with this fix that will allow the customer to disable ARM processing within the LRS/MVS Server, if desired.

The format of the new system keyword is as follows:

SVARM=(Y|N) Default is Y. Indicates whether or not the LRS/MVS Server should use the MVS automatic restart manager facility.

Modifications have been made to the LRS/MVS Server to display (message VSV1017R) the new SVARM= system keyword and to display the VPS ARM= keyword.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related fixes:

VPS	V1R8.0.498
VMCF	V1R8.1.091
LRS/Net	V1R1.0.062
VMCF Web Access	V1R1.0.023
DMCF Web Access	V1R1.0.016

LRS/MVS Server (VSV) V1 R8.0.0205 (12/11/2003)

- PageCenter V1R1.1 fix 247 supports new commands to pause, resume, or cancel an active PageCenter vault run.

This fix updates the LRS/MVS Server to process those commands.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.0212 (02/20/2004)

- New keywords were added to VPS as part of VPS V1R8.0 fix 8.0.523.

LRS/MVS/Server (VSV) was updated to display the new printer AFP keywords.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related fixes:

VPS	V1R8.0.523
LRS/OS/API	V1R1.2.018
VMCF	V1R8.1.104
LRS/Net	V1R1.0.066
VMCF Web Access	V1R1.0.027

LRS/MVS Server (VSV) V1 R8.0.0218 (04/23/2004)

- LRS/MVS Server initialization fails when a specified VMCF or DMCF default VIEW cannot be found. LRS/MVS Server validation fails for the corresponding keyword and the LRS/MVS Server terminates. This message is in the LRS/MVS Server log:

VSV0071E VSV80 PARAMETER VALIDATION FAILED FOR MEMBER \$VMCF -- INVALID KEYWORD VALUE: VMVXXXXD=XXXXXXXXXX

LRS/MVS Server processing will be changed to substitute the system default for any specified default view name that is not found. In this situation, this message will be issued:

VSV0104E VIEW NOT FOUND xxxxxxxx SUBSTITUTING xxxxxxxx AS DEFAULT VIEW

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.0223 (0701/2004)

1. Enhancement to create a new LRS/MVS Server (VSV) system subtask to provide email support for PageCenter.

A new system subtask module will be added to allow applications to request TCPIP services. This capability will be used by PageCenter to send email messages to users.

2. Cross memory requests that abend do not free resources or release some RPL requests. As a result, deadlocks may occur after the abend.

Cross memory request ESTAE processing will be changed to free locked resources and release RPL requests.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related fixes:

PageCenter	V1R1.1.273
VMCF	V1R8.1.133
DMCF	V1R1.0.028
LRS/Net	V1R1.0.072
PageCenter Web Access	V1R2.1.054
VMCF Web Access	V1R1.0.032
DMCF Web Access	V1R1.0.021
VPC LAN Client	V1R1.1.020

LRS/MVS Server (VSV) V1 R8.0.0224 (07/20/2004)

- Enhancement to display the new JOG keyword.

Several modules were updated to allow the new JOG keyword added to VPS for printer offset stacking to be displayed in VMCF and VMCF Web Access.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related fixes:

VPS	V1R8.0.583
VMCF	V1R8.1.135
VMCF Web Access	V1R1.0.034
LRS/Net	V1R1.0.074

LRS/MVS Server (VSV) V1 R8.0.226 (07/28/2004)

- An abend S0C4 will occur at low storage location x'000008CE' due to an invalid branch coded in LRS/MVS Server fix VSV 8.0.222.

Module VS80SESS will be zapped to correct the invalid branch statement.

LRS/MVS Server (VSV) V1R8.0 fix 8.0.222 is a prerequisite.

LRS/MVS Server (VSV) V1 R8.0.0231 (09/23/2004)

- Update to allow a valid screen size of 72 X 132.

Modules VS80PRFQ and VS80PRFR will be changed to convert PFIODTAL to a full word value to accommodate a larger profile definition area.

LRS Server fix 8.0.134 is a pre-requisite fix.

Related fixes:

DMCF	V1R1.0.031
PageCenter	V1R1.1.290
VMCF	V1R8.1.144

LRS/MVS Server (VSV) V1 R8.0.0232 (09/24/2004)

- Introduction of a new PageCenter background task status, PAUSE - C. From the console, an operator may enter a server command to list all of the PageCenter's active background tasks along with tasks' current status. PageCenter FIX VC110291 introduced a new TASK status, PAUSE-C, to indicate the background task is completely PAUSED.

Module VS80DPL2 will be source changed to show the new PageCenter background task status of PAUSE-C when appropriate.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.0235 (10/07/2004)

- Enhancement to allow 8 byte selection and requeue form names when using the SAPI interface.

Module VS80VCMP will be zapped to move 8 bytes for the requeue form name.

VSV V1R8.0 fix 8.0.0229 is a prerequisite.

Related fixes:

VPS	V1R8.0.0604
VMCF	V1R8.1.0146
VMCF	Web Access V1R1.0.0039

LRS/MVS Server (VSV) V1 R8.0.0236 (10/20/2004)

- The LRS/MVS server has been updated to pass the new VPSX COMMTYPE value to VMCF.

A number of modules have been zapped and macros have been source fixed to resolve this problem.

LRS MVS/Server V1R8.0 fix 8.0.0229 is a prerequisite.

DRS V1R3.4 fix 3.4.0078 is a co-requisite.

VPS V1R8.0 fix 8.0.0610 is a co-requisite.

VMCF V1R8.1 fix 8.1.0147 is a co-requisite.

VMCF Web Access V1R1.0 fix 1.0.0041 is a co-requisite.

LRS/MVS Server (VSV) V1 R8.0.0243 (11/11/2004)

- The PageCenter restore email notification enhancement has added new external authorization functionality. A new external security keyword (VPC.SSSS.GROUP.GGGG.ACCESS) has been created in PageCenter to limit the individual groups that a user may select for email purposes.

Module VS80SCX1 will be source updated to check for the new external security keyword for PageCenter.

PageCenter V1R1.1 fix 1.1.0312 is a co-requisite.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

LRS/MVS Server (VSV) V1 R8.0.0246 (12/08/2004)

- Enhancement to allow the display of AFP cached resources and AFP cached resource statistics in VMCF.

A number of modules have been source changed to provide for this product enhancement.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

DMCF Web Access V1R1.0 fix 1.0.0028 is a co-requisite.

LRS Net V1R1.0 fix 1.0.0087 is a co-requisite.

PageCenter V1R1.1 fix 1.1.0318 is a co-requisite.

VPS V1R8.0 fix 8.0.0626 is a co-requisite.

VMCF V1R8.1 fix 8.1.0154 is a co-requisite.

VMCF Web Access V1R1.0 fix 1.0.0047 is a co-requisite.

LRS/MVS Server (VSV) V1 R8.0.0251 (02/09/2005)

- Enhancement to allow display of 16 byte system keys and to include the display of new LCDS conversion keys for VPS.
- Enhancement to allow display of LCDS conversion statistics in VMCF.
- Enhancement to allow processing for additional VPS SSTAT and STOP command parameters.

A number of modules have been source fixed to implement this fix.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related Fixes:

DMCF	V1R1.0.0036 is a co-requisite.
DMCF Web Access	V1R1.0.0032 is a co-requisite.
LRS Common	V1R1.2.0020 is a co-requisite.
LRS Net	V1R1.0.0092 is a co-requisite.
VMCF	V1R8.1.0158 is a co-requisite.
VMCF Web Access	V1R1.0.0050 is a co-requisite.
VPS	V1R8.0.0646 is a co-requisite.

LRS/MVS Server (VSV) V1 R8.0.0255 (03/18/2005)

- Newly added PageCenter options keyword needs to be included in the display of PageCenter product parameters. When requesting PageCenter configuration and status information from the console, all PageCenter options keywords and their values should be displayed. With the addition of the PageCenter PCFNDLIM keyword, the message needs to be modified.

VS80DPL2 and VS803MSG will be source corrected to add the PCFNDLIM keyword and parameter to message VSV1043R.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related Fixes:

PageCenter	V1R1.1.0341 is a prerequisite.
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LRS/MVS Server (VSV) V1 R8.0.0256 (03/24/2005)

- Support was added for z/OS JES2 1.7. Modules have been changed to utilize the SSI 71 JES subsystem function in the LRS/MVS server address space. Modules VR22GTJ2, VSRVUE06 and VSRVUE07 have been changed to eliminate assembly errors due to an undefined symbol JQEJNUM_R4.

A number of modules, exits and macros have been source updated to implement the required changes for z/OS 1.7.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related Fixes:

LRS Net	V1R1.0.0093 is a co-requisite.
VMCF	V1R8.1.0160 is a co-requisite.

LRS/MVS Server (VSV) V1 R8.0.0258 (03/30/2005)

- An enhancement to display the following IBM mail output JCL keywords:

MAILBCC
MAILCC
MAILFILE
MAILFROM
MAILTO
REPLYTO

A number of modules have been source changed for this fix.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related Fixes:

DMCF	V1R1.0.0037 is a co-requisite.
DRS	V1R3.4.0083 is a co-requisite.
LRS MVS/Server	V1R8.0.0054 is a prerequisite.
VMCF	V1R8.1.0161 is a co-requisite.

LRS/MVS Server (VSV) V1 R8.0.0260 (04/22/2005)

- Changes have been made to allow for up to a 40 byte user ID in the future.

A number of source changes have been made for this fix.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related Fixes:

DMCF Web Access	V1R1.0.0036 is a co-requisite.
DMCF	V1R1.0.0039 is a co-requisite.
LRS Net	V1R1.0.0095 is a co-requisite.
PageCenter	V1R1.1.0350 is a co-requisite.
PageCenter Web Access	V1R2.1.0065 is a co-requisite.
VMCF	V1R8.1.0163 is a co-requisite.
VMCF Web Access	V1R1.0.0054 is a co-requisite.

LRS/MVS Server (VSV) V1 R8.0.0263 (04/28/2005)

- Server options screens and VPS options screens are not displaying all keywords.

A number of modules have been source fixed to resolve this problem.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related Fixes:

DMCF Web Access	V1R1.0 fix 0037 is a co-requisite.
LRS/Net	V1R1.0 fix 0098 is a co-requisite.
VMCF	V1R8.1 fix 0165 is a co-requisite.
VMCF Web Access	V1R1.0 fix 0056 is a co-requisite.

LRS/MVS Server (VSV) V1 R8.0.0269 (06/16/2005)

- Report Browse FIND in the DMCF and VMCF Web Access clients is not finding all instances of the text string if the report contains machine control characters. Also, Report Browse FIND performance enhancements were added with this fix.

This fix involves changes to a number of source modules and macros along with a zap to modules VS80LMOD and VS80RKWD.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related Fixes:

DMCF Web Access V1R1.0.0040 is a co-requisite.

LRS Net V1R1.0.0100 is a co-requisite.

VMCF Web Access V1R1.0.0062 is a co-requisite.

VMCF V1R8.1.0172 is a co-requisite.

LRS/MVS Server (VSV) V1 R8.0.0276 (10/14/2005)

- The newly added PageCenter options keyword, PCFHDBLN, needs to be included in the display of the PageCenter product parameters.
- The messages VSV1062R and VSV1063R no longer exist in the message resource module.

A number of modules have been source changed for this fix.

This fix is not available as a zap. Customers who need this fix should contact LRS to request updated product distribution materials.

Related Fixes:

PageCenter V1R1.1.0388 is a prerequisite.

Introduction

The LRS/MVS Server component, introduced with VPS R7.0 and licensed as a component of VPS, is used to obtain the information required to format the VMCF and DMCF displays. VMCF and DMCF clients may request the following types of information or actions from the LRS/MVS Server:

- Obtain VPS/DRS System Information.
- Obtain VPS/DRS Printer Information.
- Obtain Server System Information.
- Obtain JES Printer Information (JES or FSS controlled).
- Obtain JES Queue Information.
- Execute VPS/DRS System Command(s).
- Execute VPS/DRS Printer Command(s).
- Execute LRS/MVS Server Command(s).
- Execute MVS Command(s) (START, STOP, and MODIFY).
- Execute JES2 Commands (\$B, \$C, \$E, \$F, \$I, \$N, \$P, \$RALL, \$S, \$T, \$TO, and \$Z).
- Execute JES3 Commands (*F,U,Q=HOLD and *F,U,Q=WTR).

The LRS/MVS Server component, executing as a separate started task, isolates the VMCF and DMCF clients from the internal structure of VPS, DRS and JES. All of the authorized functions which were previously contained in the clients have been removed and transferred to the LRS/MVS Server. This approach provides the following benefits to the customer:

- Elimination of MVS authorization of VMCF and DMCF clients.
- Ability to control an unlimited number of VPS or DRS systems.
- VMCF and DMCF security is isolated to a single component (LRS/MVS Server).
- VPS/Report Browse is isolated to a single component (LRS/MVS Server).
- Simplified administration (security, authorization, etc.).
- VMCF Client for Windows.

The LRS/MVS Server address space is logically divided into functional areas called server applications. Currently defined applications consist of the following:

- VMCF services (common to all VMCF clients)
- VPS/Report Browse
- PageCenter
- DMCF services (common to all DMCF clients)

PageCenter

A PageCenter component must be defined within a LRS/MVS Server to handle the storage and distribution of printed output delivered by VPS to PageCenter.

Each established LRS/MVS Server may contain a PageCenter component and will provide a fully functional environment for the archival, distribution, and retrieval of printed output. There may be multiple LRS/MVS Servers defined, each with its own PageCenter component. VPS will deliver printed output directly to any or all of these PageCenters in a timely and smooth fashion. The simplicity of VPS delivery encourages the use of PageCenter to meet today's requirements for improved access control, storage isolation, data redundancy, and operational integrity while preparing for tomorrow's evolution of the printed document.

The following diagram illustrates the interface between the VMCF and DMCF clients, the LRS/MVS Server, VPS, DRS and JES.

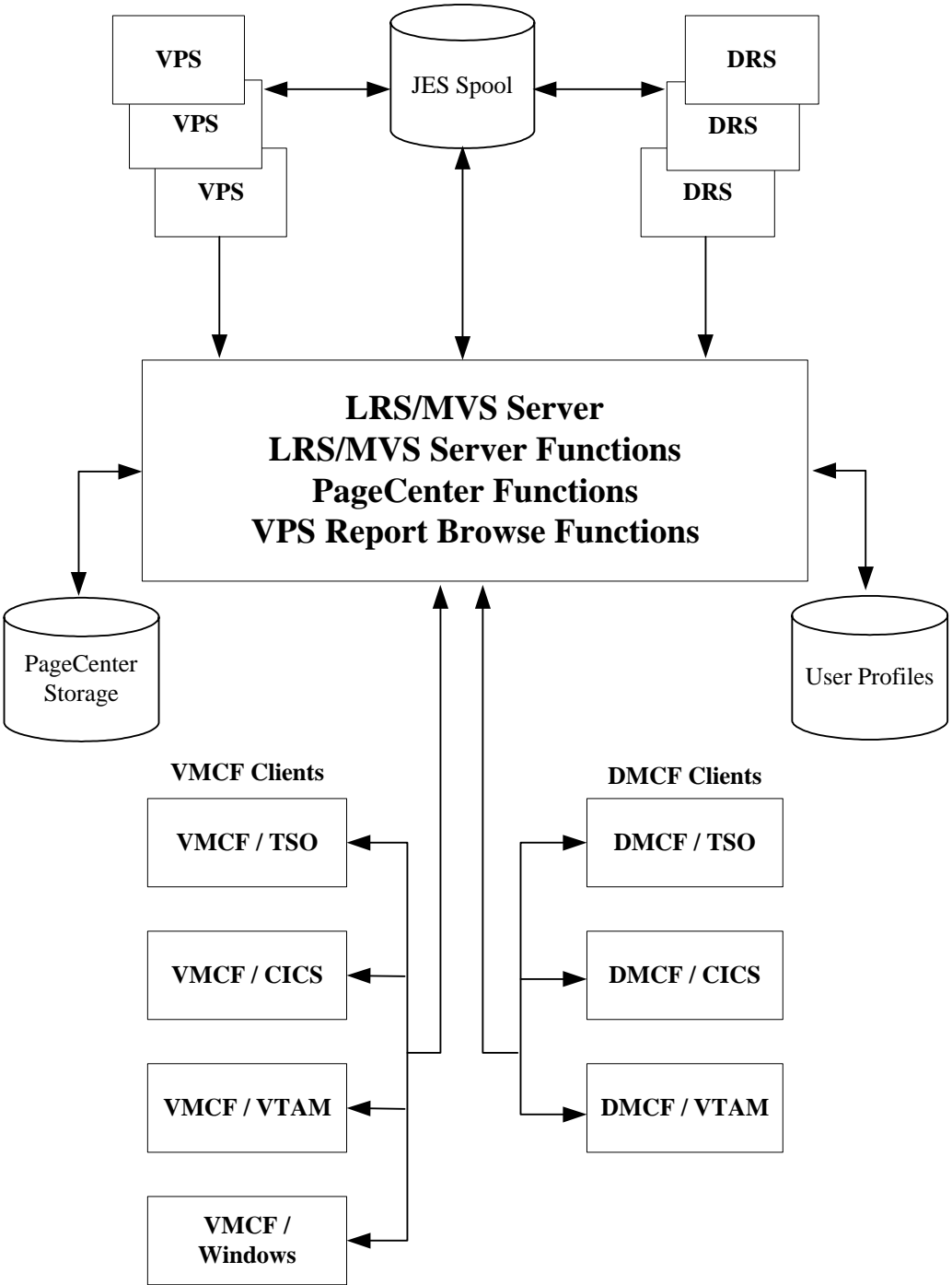


Figure 1: LRS/MVS Server/Client Interface

The functions provided by the VMCF clients are divided into three main categories:

- VPS system functions.
- VPS printer functions.
- LRS/MVS Server functions.

The functions provided by the DMCF clients are divided into three main categories:

- DRS system functions.
- DRS printer functions.
- LRS/MVS Server functions.

The **VPS system functions** allow the user to display and control the status of the entire VPS system. The VPS system functions include the following:

- Entering VPS system commands.
- Displaying VPS system options in full-screen mode.
- Displaying VPS system statistics in full-screen mode.

Access to the VPS system functions can be strictly controlled through the VMCF security interface.

The **DRS system functions** allow the user to display and control the status of the entire DRS system. The DRS system functions include the following:

- Entering DRS system commands.
- Displaying DRS system options in full-screen mode.
- Displaying DRS system statistics in full-screen mode.

Access to the DRS system functions can be strictly controlled through the DMCF security interface.

The **VPS printer functions** allow the user to display and control the status of VPS printers. A full-screen, scrollable “Printer List” is used to provide easy access to the printer functions. The VPS printer functions include the following:

- Entering VPS printer commands.
- Displaying VPS printer options and statistics in full-screen mode.
- Modifying JES queue entries (VMCF user exit required).
- Displaying VPS diagnostic information (VPS control blocks and trace tables).

Access to the VPS printer functions can be strictly controlled through the VMCF security interface.

The **DRS printer functions** allow the user to display and control the status of DRS printers. A full-screen, scrollable “Printer List” is used to provide easy access to the printer functions. The DRS printer functions include the following:

- Entering DRS printer commands.
- Displaying DRS printer options and statistics in full-screen mode.
- Displaying DRS diagnostic information (DRS control blocks and trace tables).

Access to the DRS printer functions can be strictly controlled through the DMCF security interface.

The **LRS/MVS Server functions** allow the user to display and control the status of the LRS/MVS Server component. The LRS/MVS Server functions include the following:

- Entering LRS/MVS Server commands.
- Displaying LRS/MVS Server options in full-screen mode.
- Displaying LRS/MVS Server statistics in full-screen mode.
- Displaying clients connected to the server.

Access to the LRS/MVS Server functions can be strictly controlled through the VMCF and DMCF security interface.

Hardware/Software Requirements

- MVS/ESA 4.2.0 or higher.
- Since the server component primarily uses synchronous cross memory services (e.g. MVCP, SAC, SSAR, etc.) to access the VPS and DRS address space, LRS recommends that VPS and DRS execute as “non-swappable” (SWAPABLE=N in the DRSSTART and VPSSTART members) since MVS does not support cross memory access to a swapped out address space (S0D5 or S058 ABEND).
- CPU Serial Number Verification (see **Note** below)

Note: Beginning with VPS V1 R8.0, LRS has implemented CPU serial number verification into the base product and other VPS extension products (VPS/TCPIP, VPS/PCL, etc.). The keys for VPS and the extension products will be supplied by LRS and will contain the CPU serial number for the machine on which the product is licensed. This means that if you are executing VPS and other VPS extension products on multiple CPUs, then you will receive multiple keys for each licensed product when you receive the distribution cartridge.

The product keys are 60 characters in length and are in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

A grace period has been built into the products that will allow them to function normally on an unauthorized CPU. During the grace period, the product will issue warning messages informing you that you are executing the product on an unauthorized CPU. Warning messages will indicate the number of days remaining in the grace period. After the grace period has expired, the product will automatically terminate and will not restart until a valid product key has been obtained from LRS. Therefore, in order to avoid any unexpected downtime, you should contact LRS administration as soon as possible after receiving the warning messages in order to obtain a valid product key.

Distribution Cartridge Format

The products are distributed on a 3480 or 3490 cartridge in IEBCOPY unloaded format with the following attributes:

- Standard labels
- VOL=SER=VPSR80

The following files are on the distribution cartridge:

1	JCL	LRS.PRODUCT.JCL (Sample JCL to Restore Product Files)
6	VPS	LRS.VPS.V1R80.ASM
7		LRS.VPS.V1R80.MACLIB
8		LRS.VPS.V1R80.CNTL
9		LRS.VPS.V1R80.LOAD
10	LRS_SERVER	LRS.VSV.V1R80.ASM
11		LRS.VSV.V1R80.MACLIB
12		LRS.VSV.V1R80.CNTL
13		LRS.VSV.V1R80.LOAD
14	VMCF	LRS.VMCF.V1R81.ASM
15		LRS.VMCF.V1R81.MACLIB
16		LRS.VMCF.V1R81.CNTL
17		LRS.VMCF.V1R81.LOAD
18	VPSPRINT	LRS.VPSPRINT.R61.ASM
19		LRS.VPSPRINT.R61.MACLIB
20		LRS.VPSPRINT.R61.CNTL
21		LRS.VPSPRINT.R61.LOAD
26	DRS	LRS.DRS.V1R34.ASM
27		LRS.DRS.V1R34.MACLIB
28		LRS.DRS.V1R34.CNTL
29		LRS.DRS.V1R34.LOAD
30	VPS/AFP	LRS.VPS.V1R80.PDEFLIB
31		LRS.VPS.V1R80.FDEFLIB
32		LRS.VPS.V1R80.FONT300
33		LRS.VPS.V1R80.OVLYLIB
34		LRS.VPS.V1R80.PSEGLIB
35	PAGECENTER	LRS.VPC.V1R11.ASM
36		LRS.VPC.V1R11.MACLIB
37		LRS.VPC.V1R11.CNTL
38		LRS.VPC.V1R11.LOAD
39	LRS/Net	LRS.LNT.V1R10.ASM
40		LRS.LNT.V1R10.MACLIB
41		LRS.LNT.V1R10.CNTL
42		LRS.LNT.V1R10.LOAD
43		LRS.LNT.V1R10.HTML
44	LRS/Web Connect	LRS.WCT.V1R0.PAX

46	DMCF	LRS.DMCF.V1R10.ASM
47		LRS.DMCF.V1R10.MACLIB
48		LRS.DMCF.V1R10.CNTL
49		LRS.DMCF.V1R10.LOAD
50	PageCenter Web Access	LRS.PWA.V1R21.PAX
51		LRS.PWA.V1R21.HTML
52		LRS.PWA.V1R21.LOAD
59	VPS	LRS.VPS.V1R80.SAMPLIB

The libraries required to run the LRS/MVS Server are supplied as part of the VPS distribution cartridge. The server libraries are required for communicating with all VMCF and DMCF products (TSO, CICS, and VTAM). They are distributed in files 10, 11, 12, and 13. The following is a description of the information contained on each file:

<u>FILE NUMBER</u>	<u>DSNAME</u>	<u>CONTENTS</u>
10	LRS.VSV.V1R80.ASM	Source for sample exits.
11	LRS.VSV.V1R80.MACLIB	Mapping macros for sample exits.
12	LRS.VSV.V1R80.CNTL	Installation JCL and sample import data.
13	LRS.VSV.V1R80.LOAD	VSV load modules.

The ASM, MACLIB, and CNTL files each include a member named \$\$\$INDEX which lists the names and a short description for each member in that file.

Sample JCL to restore the files on the distribution cartridge is supplied in file 1, which is named "LRS.PRODUCT.JCL". (This is a sequential file of 80-byte records. You may wish to use IEBGENER to restore it to a sequential file or to a member of a PDS). The portion of that JCL which pertains to the LRS/MVS Server is reproduced here.

```

//JOBNAME JOB ACCT,PROGRAMMER,TIME=25,REGION=1024K
/**
//ALLOC PROC PREFIX=, ** HIGH LEVEL QUALIFIER
// VOLSER=XXXXXX, ** DISK VOLUME SERIAL
// ASM=23440, ** ASM BLKSIZE <---- Note 1
// CNTL=23440, ** CNTL BLKSIZE <---- Note 1
// MACLIB=23440, ** MACLIB BLKSIZE <---- Note 2
// LOAD=4096 ** LOAD BLKSIZE <---- Note 3
/**
//ALLOC EXEC PGM=IEFB14
/**
//DIST10 DD DSN=&PREFIX.LRS.VSV.V1R80.ASM,
// DISP=(,CATLG),UNIT=SYSALLDA,VOL=SER=&VOLSER,
// DCB=(BLKSIZE=&ASM,LRECL=80,RECFM=FB),
// SPACE=(&ASM,(00250,00050,00030),RLSE)
/**
//DIST11 DD DSN=&PREFIX.LRS.VSV.V1R80.MACLIB,
// DISP=(,CATLG),UNIT=SYSALLDA,VOL=SER=&VOLSER,
// DCB=(BLKSIZE=&MACLIB,LRECL=80,RECFM=FB),
// SPACE=(&MACLIB,(00300,00050,00025),RLSE)
/**
//DIST12 DD DSN=&PREFIX.LRS.VSV.V1R80.CNTL,
// DISP=(,CATLG),UNIT=SYSALLDA,VOL=SER=&VOLSER,
// DCB=(BLKSIZE=&CNTL,LRECL=80,RECFM=FB),
// SPACE=(&CNTL,(00090,00020,00040),RLSE)
/**
//DIST13 DD DSN=&PREFIX.LRS.VSV.V1R80.LOAD,
// DISP=(,CATLG),UNIT=SYSALLDA,VOL=SER=&VOLSER,
// DCB=(BLKSIZE=&LOAD,RECFM=U),
// SPACE=(&LOAD,(00400,00080,00050),RLSE)
/**
// PEND
/**
//RESTORE PROC PREFIX=, ** HIGH LEVEL QUALIFIER
// TAPE=CART ** TAPE UNIT NAME
/**
//RESTORE EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
/**
//TAPE10 DD DSN=LRS.VSV.V1R80.ASM,DISP=SHR,
// VOL=(,RETAIN,SER=VPSR80),LABEL=(010,SL),UNIT=&TAPE
//DIST10 DD DSN=&PREFIX.LRS.VSV.V1R80.ASM,DISP=SHR
/**
//TAPE11 DD DSN=LRS.VSV.V1R80.MACLIB,DISP=SHR,
// VOL=(,RETAIN,SER=VPSR80),LABEL=(011,SL),UNIT=&TAPE
//DIST11 DD DSN=&PREFIX.LRS.VSV.V1R80.MACLIB,DISP=SHR
/**

```

Continued on next page.

```

//TAPE12 DD DSN=LRS.VSV.V1R80.CNTL,DISP=SHR,
//
//DIST12 DD DSN=&PREFIX.LRS.VSV.V1R80.CNTL,DISP=SHR
//*
//TAPE13 DD DSN=LRS.VSV.V1R80.LOAD,DISP=SHR,
//
//DIST13 DD DSN=&PREFIX.LRS.VSV.V1R80.LOAD,DISP=SHR
//*
//
// PENDING
//
//*
//ALLOC EXEC ALLOC
//*
//RESTORE EXEC RESTORE
//SYSIN DD *
COPY INDD=((TAPE10,R)),OUTDD=DIST10
COPY INDD=((TAPE11,R)),OUTDD=DIST11
COPY INDD=((TAPE12,R)),OUTDD=DIST12
COPY INDD=((TAPE13,R)),OUTDD=DIST13
/*

```

Note 1: BLKSIZE can be any multiple of 80.

Note 2: BLKSIZE should be the same as the BLKSIZE of SYS1.MACLIB.

Note 3: BLKSIZE can be any valid value for the device type.

Section 1

LRS/MVS Server Installation

In this section, we give detailed instructions for installing the LRS/MVS Server component of VMCF. These instructions include everything from restoring the distribution cartridge to customizing the information contained in the LRS/MVS Server control library.

WARNING: If VMCF V1 R8.1 will be running on the same MVS image as VMCF V1 R7.0, then fix 076 must be applied to VMCF V1 R7.0.

Installation Procedure

1. Read the entire installation procedure.
2. Restore the following libraries from the distribution cartridge:
 - LRS/MVS Server libraries (files 10-13)
3. Establish MVS authorization for the LRS/MVS Server address space (see [“Establishing Authorization for the LRS/MVS Server Address Space”](#) on page 1.2).
4. Define the LRS/MVS Server Profile dataset (see [“Defining the LRS/MVS Server Profile Dataset”](#) on page 1.3). Sample JCL is contained in member PROFDEF in dataset LRS.VSV.V1R80.CNTL.
5. Define the LRS/MVS Server execution JCL (see [“Defining the LRS/MVS Server Execution JCL”](#) on page 1.5).
6. Customize the LRS/MVS Server components by modifying information contained in the LRS/MVS Server control library (see [“LRS/MVS Server Customization”](#) on page 1.6).
7. Implement any of the optional LRS/MVS Server user exits (see [“Implementing User Exits”](#) on page 5.1).
8. LRS/MVS Server installation is now complete.

Establishing Authorization for the LRS/MVS Server Address Space

The LRS/MVS Server address space requires MVS authorization due to its use of authorized MVS services (e.g. cross memory services, SVC 34 interface, etc.). MVS authorization may be established by either of the following two methods:

1. APF authorize the following library:

- LRS.VSV.V1R80.LOAD (LRS/MVS Server load library)

APF authorization may be obtained by modifying either member PROGxx or IEAAPFxx in SYS1.PARMLIB.

- or -

2. Copy all of the members from the following library into an authorized user library or an authorized linklist library.

- LRS.VSV.V1R80.LOAD (LRS/MVS Server load library)

Notes: You must add a //STEPLIB DD statement to the LRS/MVS Server execution JCL if the library is not in the LNKLIST concatenation.

If you concatenate other libraries on the //STEPLIB DD, you will need to authorize **all** libraries in the concatenation.

Defining the LRS/MVS Server Profile Dataset

The LRS/MVS Server uses a VSAM KSDS to maintain profile information for each VMCF user. The profile dataset contains the following types of information:

- PF Key definitions
- VMCF panel options

The LRS/MVS Server automatically initializes the profile dataset the first time it is started. Separate records within the profile dataset are maintained for each VMCF user.

Sample JCL to define the LRS/MVS Server Profile dataset is contained in member PROFDEF in dataset LRS.VSV.V1R80.CNTL. That JCL is reproduced here:

```
//JOBCARD
//*
//*-----*
//*
//* SAMPLE JCL TO DEFINE THE LRS/MVS Server PROFILE DATA SET
//*
//* NOTE #1 - YOU MAY OPTIONALLY MODIFY THE CLUSTER, DATA, AND
//*          INDEX COMPONENT NAMES.
//*
//* NOTE #2 - YOU MUST SPECIFY A VALID VOLUME SERIAL FOR THE
//*          ACCESS METHOD SERVICES VOLUMES KEYWORD OF THE
//*          DEFINE CLUSTER STATEMENT.
//*
//* NOTE #3 - THE DIRECT ACCESS SPACE MUST BE ALLOCATED IN
//*          CYLINDERS. THE AMOUNT OF SPACE REQUIRED DEPENDS
//*          PRIMARILY ON THE ESTIMATED NUMBER OF VMCF USERS.
//*          AS A RULE OF THUMB, ALLOCATE ONE 3380 CYLINDER
//*          FOR EVERY 75 VMCF USERS OR ONE 3390 CYLINDER FOR
//*          EVERY 90 VMCF USERS.
//*
//* NOTE #4 - THE SHAREOPTIONS FOR THE DATA SET MAY BE CODED AS
//*          EITHER (1,3), (2,3), OR (3,3).
//*
//*          IF THE SHAREOPTIONS ARE CODED AS (1,3) OR (2,3), THE
//*          PROFILE DATA SET MAY NOT BE SHARED AMONG MULTIPLE
//*          INSTANCES OF THE LRS/MVS Server. THIS IS THE RECOMMENDED
//*          MODE OF ACCESS TO THIS DATA SET AS IT ALLOWS FOR FULL
//*          EXPLOITATION OF I/O BUFFERS AND ELIMINATES THE NEED
//*          FOR MVS ENQUEUES TO SERIALIZE ACCESS TO THE DATA SET.
//*
//*          IF THE SHAREOPTIONS ARE CODED AS (3,3), THE PROFILE
//*          DATA SET MAY BE SHARED AMONG MULTIPLE INSTANCES OF THE
//*          LRS/MVS Server. WITH THIS MODE OF ACCESS, THE LRS/MVS Server
//*          PERFORMS THE NECESSARY SERIALIZATION AND BUFFER MANAGE-
//*          MENT TO ENSURE THE INTEGRITY OF THE PROFILE DATA.
//*
//* NOTE #5 - ALL OTHER KEYWORDS SHOULD BE CODED EXACTLY AS
//*          SHOWN.
//*-----*
```

```

/*
//IDCAMS EXEC PGM=IDCAMS,REGION=1024K
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
DELETE VSV.R80.PROFILE CLUSTER PURGE
IF LASTCC EQ 8 THEN SET MAXCC = 0
DEFINE CLUSTER(
    NAME(VSV.V1R80.PROFILE)          /* <== SEE NOTE #1 */ -
    VOLUMES(ESA005)                 /* <== SEE NOTE #2 */ -
    INDEXED                          -
    KEYS(80 0)                       -
    RECORDSIZE(100 32760)            -
    CYLINDERS(10 0)                 /* <== SEE NOTE #3 */ -
    SHAREOPTIONS(2 3)               /* <== SEE NOTE #4 */ -
)
DATA(
    NAME(VSV.V1R80.PROFILE.DATA)    /* <== SEE NOTE #1 */ -
    CONTROLINTERVALSIZE(4096)       -
)
INDEX(
    NAME(VSV.V1R80.PROFILE.INDEX)   /* <== SEE NOTE #1 */ -
    CONTROLINTERVALSIZE(4096)       -
)
/*
//

```

Note: Users of VSV V1 R7.0 can use IDCAMS REPRO to copy the VSV V1 R7.0 LRS/MVS Server profile dataset into the VSV V1 R8.0 LRS/MVS Server profile dataset, if they wish to retain each user's profile information.

Defining the LRS/MVS Server Execution JCL

The LRS/MVS Server component is usually executed as a started task, although it may be executed as a batch job.

The sample JCL illustrated below can be found in the member named VSV80 in the dataset named LRS.VSV.V1R80.CNTL.

```
/*-----*
/*                LRS/MVS Server - VERSION 1 RELEASE 8.0                *
/*-----*
//VSV80  PROC  START=VSVSTART
//VSV80  EXEC  PGM=VS80DRIV,PARM=&START,REGION=0M,TIME=1440      (see note 1)
//STEPLIB DD  DISP=SHR,DSN=LRS.VSV.V1R80.LOAD                    (see note 2)
//VSVLIB DD  DISP=SHR,DSN=LRS.VSV.V1R80.CNTL                    (see note 3)
//*VSVLOG DD  DISP=SHR,DSN=LRS.VSV.LOG                          (see note 4)
//PROFILE DD  DISP=SHR,DSN=LRS.VSV.V1R80.PROFILE
//SYSUDUMP DD  SYSOUT=D
//*
```

Notes:

1. The optional PARM on the EXEC JCL statement specifies the member name which contains the LRS/MVS Server address space initialization parameters. If PARM is not specified, a member name of VSVSTART is assumed.
2. A STEPLIB DD statement is not required if the LRS/MVS Server load libraries are in the LNKLST concatenation.
3. The VSVLIB DD statement must specify a partitioned dataset (PDS) which contains the LRS/MVS Server system initialization members.
4. The VSVLOG DD statement is optional and should only be used if you want the server log to be written to a pre-allocated dataset. If the VSVLOG statement is not present, the log dataset will be dynamically allocated using the SYSOUT characteristics specified by the keyword SVLGOUTP in the LRS/MVS Server address space initialization member.

LRS/MVS Server Customization

The LRS/MVS Server extracts information from members contained in the LRS/MVS Server control library in order to customize the server component. The dataset name of the LRS/MVS Server control library is specified on the VSVLIB DD statement in the LRS/MVS Server execution JCL (see [“Defining the LRS/MVS Server Execution JCL” on page 1.5](#)). This dataset must be defined as partitioned (PDS) with a logical record length (LRECL) of 80 and a blocksize (BLKSIZE) that is a multiple of 80.

Information entered in the various control library members must use the following syntax:

- Control statements must begin between columns 2-16 inclusive.
- Continuation is signified by ending the last parameter on a control statement with a comma.
- As many parameters as desired can be specified on a given statement as long as they do not extend past column 71.
- Any statement containing an asterisk (*) in column 1 is considered to be a comment statement and is ignored.
- Comments can also be placed on an actual statement by leaving at least one space after the control statement information.

LRS/MVS Server Address Space Initialization Member

The default name of the LRS/MVS Server address space initialization member is VSVSTART, although a different member name may be specified via the PARM= keyword on the EXEC JCL statement (see note 1 in [“Defining the LRS/MVS Server Execution JCL”](#) on page 1.5).

The LRS/MVS Server address space initialization member contains several keyword parameters which apply to the entire LRS/MVS Server component and its applications (e.g. log dataset options, snap dataset options, etc.).

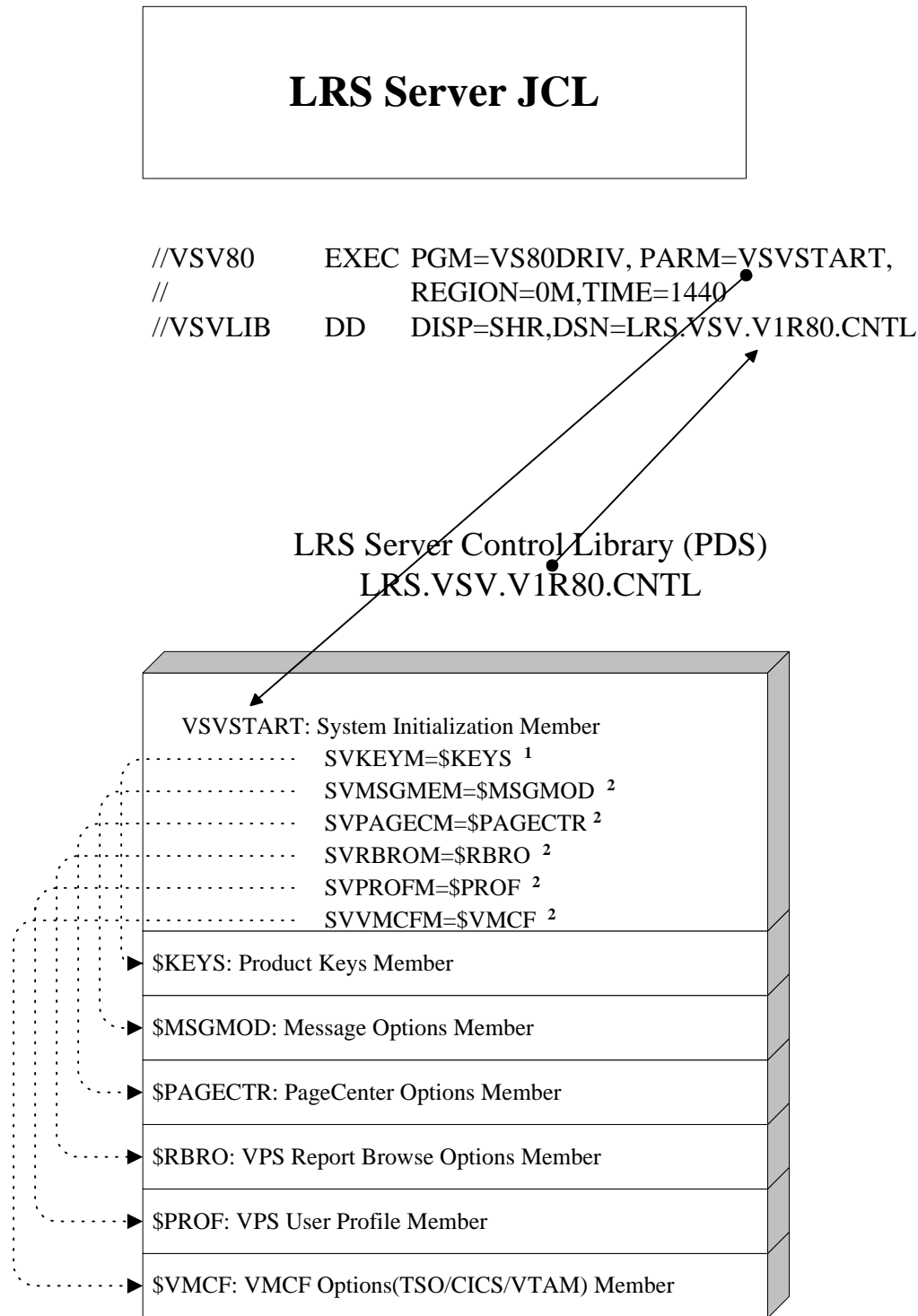
In addition, other control library members are referenced that are used to further define the LRS/MVS Server environment (i.e. LRS/MVS Server definitions, server applications, etc.).

Valid keyword parameters that may be specified in the LRS/MVS Server address space initialization member are as follows:

SVAPPL=	SVPAGECM=
SVDESC=	SVPROFM=
SVDSTVAL=	SVRBROM=
SVEXIT00=	SVRSDISC=
SVEXIT01=	SVRSINTV=
SVEXIT02=	SVSAF=
SVEXIT03=	SVSNAP=
SVEXIT04=	SVSNHOLD=
SVEXIT05=	SVSNOUTP=
SVEXIT06=	SVSSI=
SVEXIT07=	SVTCPID=
SVKEYM=	SVTCPORT=
SVLGHOLD=	SVTCPTYP=
SVLGOUTP=	SVTRACE=
SVLOG=	SVVMCFM=
SVMSGMEM=	SVWTO=
SVOPTS=	

Refer to [“LRS/MVS Server Address Space Initialization Keywords”](#) on page 3.1 for information about these keywords.

Pictured below is the hierarchical structure of the various members within the LRS/MVS Server control library:



- 1 SVKEYM is required
- 2 Not required. The values in the sample are for illustration purposes only.

Figure 1-1: The LRS/MVS Server Control Library Members

The LRS/MVS Server Address Space Initialization keywords used to identify other initialization parameter members within the control library are as follows:

- SVKEYM=** This keyword identifies the member containing the software “keys” that are used to enable the various applications within the LRS/MVS Server component. The “keys” for each application are supplied by LRS.
See [“SVKEYM” on page 3.14](#) for additional information.
- SVMSGMEM=** This keyword identifies the member containing a list of messages which are to have their type modified. See [“SVMSGMEM” on page 3.26](#) for additional information.
- SVPAGECM=** This keyword identifies the member containing the PageCenter keyword parameters. PageCenter is an optional report management system which allows for the viewing, printing, indexing, short-term and long-term archiving and retrieval of printed output. Documents can be imported into the PageCenter system by directing them to PageCenter import printer(s). The system provides full control over document retention periods and storage. Documents are stored with VSAM datasets. Long-term storage may be defined on mountable disk, tape, and optical storage devices, and can be interactively restored. The system includes intelligent handling of AFP documents and resources, preventing the redundant archiving of AFP resources. See [“SVPAGECM” on page 3.28](#) for additional information.
- SVPROFM=** This keyword identifies the member containing the keywords related to individual user profiles, such as PF key definitions. See [“SVPROFM” on page 3.29](#) for additional information.
- SVRBROM=** This keyword identifies the member containing the VPS/Report Browse keyword parameters. The VPS/Report Browse product is an optional feature which allows users to browse output on the JES2 spool.
See [“SVRBROM” on page 3.30](#) for additional information.
- SVVMCFM=** This keyword identifies the member containing the VMCF keyword parameters. The VMCF keyword parameters define the default VMCF parameters such as security options, trace options, etc.
See [“SVVMCFM” on page 3.46](#) for additional information.

LRS LAN clients such as VMCF Client for Windows and PageCenter Client for Windows require the use of the LRS/LAN Server. Communication between the LRS/MVS Server and the LRS/LAN Server may be done via a TCP/IP or VTAM APPC connection. If you choose to use the VTAM APPC connection, you must code SVAPPL= in the VSVSTART member (see [“Defining the LRS/MVS Server Execution JCL” on page 1.5](#)) and point to the APPLID defined for this purpose. A sample APPL definition for the LRS/LAN Server is provided below.

```
* -----*
      VBUILD TYPE=APPL
* -----*
*   SERVER DEFINITIONS   *
* -----*
LRSSRV  APPL  EAS=6,VPACING=6,          X
          ATNLOSS=ALL,                 X
          MODETAB=LRSMODE,              X
          DLOGMOD=LRSAPPC,              X
          APPC=YES,PARSESS=YES,         X
          DMINWNL=1,DMINWNR=1,DSESLIM=10
```

Note: The **DSESLIM** corresponds to the maximum number of concurrent connections LRS/LAN Server will have with the LRS/MVS Server.

Upgrading LRS/MVS Server Releases

Conversions must be run in order. The previous conversion must be applied to the Server profile dataset before the next conversion can be executed. If conversions are not done in order, a conversion error will occur and the conversion will fail.

Converting from LRS/MVS Server V1 R8.0.0000 - 0259 to V1 R8.0.0260

For existing LRS/MVS Server customers who have been using LRS/MVS Server V1 R8.0.0000 - 0259 and want to upgrade to V1 R8.0.0260, do the following:

- Run conversion JCL. The conversion JCL can be found in LRS.VSV.V1R80.CNTL(PROFCNVT). This JCL will execute program VS80PC01 which will convert the PROFILE dataset. This conversion is required for 40 byte user ID's to work properly.
- If the conversion job fails, the original PROFILE dataset can be used to attempt another conversion. This conversion does not modify the original PROFILE dataset, therefore no restore of the PROFILE dataset is required if the conversion fails. However, it is recommended that you back up the PROFILE dataset prior to running the conversion.
- If using LRS/MVS Server internal security, the VS80SECT module will need to be reassembled for upgrading to this fix level.

Section 2 VPS/Report Browse Installation and Customization

This section provides instructions for installing the VPS/Report Browse Facility. The VPS/Report Browse Facility is an optional extension to VMCF that allows users at JES2 installations to browse JES2 output queued to VPS printers. Because this facility is optional and must be purchased as an additional feature, it might not have been shipped to your site.

If you do not have this feature, and wish to get more information about it or request a trial version of it for evaluation purposes, please contact the LRS Marketing Department at Levi, Ray, & Shoup, Inc. See [“LRS Phone and Fax Numbers”](#) on page B.1 which lists addresses and phone numbers for LRS offices and distributors.

VPS/Report Browse Installation Procedure

1. Read the entire installation procedure.
2. Customize VPS/Report Browse (see [“VPS/Report Browse Customization”](#) on page 2.3).
3. Assemble and linkedit the VR22GTJ2 module (see [“Assembling the VR22GTJ2 Module”](#) on page 2.4).
4. Verify that the key for VPS/Report Browse, KEYRBRO=, has been added to the \$KEYS member in the LRS/MVS Server control library.
5. VPS/Report Browse installation is now complete.

VPS/Report Browse Customization

The VPS/Report Browse Facility executes in the LRS/MVS Server address space. During the initialization phase of the LRS/MVS Server, the VPS/Report Browse options member (e.g. \$RBRO) in the LRS/MVS Server control library is read to extract parameters that define the operational environment (buffer size, number of buffers, etc.). The dataset name of the LRS/MVS Server control library is specified on the VSVLIB DD statement in the LRS/MVS Server execution JCL.

Information entered in the VPS/Report Browse member must use the following syntax:

- Control statements must begin between columns 2-16 inclusive.
- Continuation is signified by ending the last parameter on a control statement with a comma.
- As many parameters as desired can be specified on a given statement as long as they do not extend past column 71.
- Any statement containing an asterisk (*) in column 1 is considered to be a comment statement and is ignored.
- Comments can also be placed on an actual statement by leaving at least one space after the control statement information.

Valid keyword parameters that may be specified in the VPS/Report Browse Options Member are:

RBBUFSI
RBFLIM
RBJPOOL
RBMLREC

Refer to [“VPS/Report Browse Options Member Keywords”](#) on page 3.82 for information about these keywords.

Assembling the VR22GTJ2 Module

The VR22GTJ2 module is invoked by the VPS/Report Browse Facility to retrieve information from the JES2 control blocks. Source code for module VR22GTJ2 is located in library LRS.VSV.V1R80.ASM. When assembling this module, be sure to specify the correct JES2 source library on the SYSLIB DD statement. For example,

```
//SYSLIB DD DISP=SHR,DSN=SYS1.SMPMTS
// DD DISP=SHR,DSN=SYS1.SMPSTS
// DD DISP=SHR,DSN=SYS1.SHASMAC
// DD DISP=SHR,DSN=SVS1.AHASMAC
// DD DISP=SHR,DSN=SYS1.MACLIB
// DD DISP=SHR,DSN=SYS1.AMODGEN
// DD DISP=SHR,DSN=LRS.VSV.V1R80.MACLIB
```

The SMP libraries should be placed ahead of the JES2 macro libraries in case you have any JES2 maintenance that has been applied but not accepted.

Sample JCL for assembling and linking this module is provided as member GTJ2ASMH in dataset LRS.VSV.V1R80.CNTL.

VPS/Report Browse Virtual Storage Requirements

Following is a summary of the virtual storage requirements for the VPS/Report Browse Facility.

Total Storage = Fixed portion + Variable portion

Fixed Portion

- JCB control block = 496 bytes
- JESD global control block = 528 bytes
- SDE control block = 272 bytes * number of JES spool datasets (see note 1)
- Buffer pool = (JES2 spool buffer size + 8) * number of buffers (see note 3)

Variable Portion

- WEL control block = 104 bytes * number of active users (see note 4)
- JESD local control block = 528 * number of active users (see note 4)
- OCB control block = 360 * number of active user (see note 4)
- DSB control block = 528 * number of datasets (see note 5)
- SYSOUT buffers = SYSOUT buffer size * number of active users (see notes 4 and 6)

Notes

1. Note that the number of JES spool datasets must be a multiple of 32.
2. The number of buffers in the buffer pool is specified by the RBJPOOL= keyword in the \$RBRO member in the LRS/MVS Server control library.
3. The term “active users” is defined as the number of users browsing JES output on the VPS/Report Browse screen.
4. You will not be able to determine the number of datasets in advance due to the dynamic structure of JES2 output groups. Each JES2 output group represents 1 or more SYSOUT datasets with the same characteristics. LRS recommends a value of 3 in the calculation.
5. The SYSOUT buffer size is specified by the RBBUFSI= keyword in the \$RBRO member in the LRS/MVS Server control library.



Section 3 Customization

LRS/MVS Server Address Space Initialization Keywords

The LRS/MVS Server address space initialization keywords are used to define the operational environment of the LRS/MVS Server address space. The default name of the member containing these keywords is VSVSTART, although a different member name may be specified via the PARM= keyword on the EXEC JCL statement.

SVAPPL

in VSVSTART Member

SVAPPL= Specifies the VTAM application ID (APPLID) that is to be used in communicating with LRS Servers on other platforms. The APPLID must be defined to VTAM before it can be used. This parameter is optional and is only required if communications to other LRS Servers (for example, the LRS/LAN Server to support the VMCF Windows client) is required.

Valid Values: VTAM application ID as defined on the APPL statement in VTAMLST.

Default: None.

Example: SVAPPL=LRSAPPL
This specification indicates that the VTAM application ID for the LRS/MVS Server address space is LRSAPPL.

SVARM in VSVSTART Member

SVARM= Specifies whether LRS/MVS Server should register with the MVS Automatic Restart Manager (ARM). By registering with ARM, the LRS/MVS Server can be automatically restarted in the event of failure of the LRS/MVS Server or the underlying MVS system.

Valid Values: Y or N

Default: Y

Example: SVARM=N

This specification requests that the LRS/MVS Server not register with the automatic restart manager during initialization.

Notes: MVS automatic restart management is available only to those MVS subsystems that register with the automatic restart manager (ARM). LRS/MVS Server will register with ARM during initialization unless SVARM=N is specified. If LRS/MVS Server fails before it has registered with ARM, it will not be restarted. After LRS/MVS Server has registered, it is restarted by ARM according to a predefined policy for the workload.

When LRS/MVS Server registers with ARM, it provides the value "LRSVSV" as the element type and the LRS/MVS Server STCname or jobname as the element name.

SVDESC

in VSVSTART Member

SVDESC= Specifies a 1 to 48 byte optional description of the LRS/MVS Server. This parameter allows an installation to assign a text description to the LRS/MVS Server for identification purposes.

Valid Values: Any combination of alphanumeric and national characters.

Default: None.

Example: SVDESC='LRS/MVS Server - SPFLD OFFICE'

SVDSTVAL in VSVSTART Member

SVDSTVAL= Specifies whether or not JES destinations will be validated on the various VMCF screens.

Valid Values: Y or N

Default: Y

Example: SVDSTVAL=Y

SVEXIT00 (LRS/MVS Server Startup Exit) in VSVSTART Member

SVEXIT00= Specifies, via three positional parameters, the status, recovery option, and exit name of the LRS/MVS Server Startup Exit.

Positional parameter 1 specifies the operational status of the user exit.

Valid Values: ENA for enabled status.
DIS for disabled status.

Default: DIS

Positional parameter 2 specifies the recovery status of the user exit.

Valid Values: RECOV for recovery on.
NORECOV for recovery off.

Default: RECOV

Positional parameter 3 specifies the name of the user exit load module.

Valid Values: The name of a valid user exit load module.

Default: VSRVUE00

Example: VSEXIT00=(ENA,RECOV,VS80UE00)

This keyword specifies that the LRS/MVS Server Startup exit should be enabled, that recovery is on, and the name of the exit is VS80UE00.

SVEXIT01 (LRS/MVS Server Shutdown Exit) in VSVSTART Member

SVEXIT01= Specifies, via three positional parameters, the status, recovery option, and exit name of the LRS/MVS Server Shutdown Exit.

Positional parameter 1 specifies the operational status of the user exit.

Valid Values: ENA for enabled status.
 DIS for disabled status.

Default: DIS

Positional parameter 2 specifies the recovery status of the user exit.

Valid Values: RECOV for recovery on.
 NORECOV for recovery off.

Default: RECOV

Positional parameter 3 specifies the name of the user exit load module.

Valid Values: The name of a valid user exit load module.

Default: VSRVUE01

Example: SVEXIT01=(ENA,RECOV,VS80UE01)

 This keyword specifies that the LRS/MVS Server Shutdown exit should be enabled, that recovery is on, and the name of the exit is VS80UE01.

SVEXIT02 (LRS/MVS Server WTO Exit) in VSVSTART Member

SVEXIT02= Specifies, via three positional parameters, the status, recovery option, and exit name of the LRS/MVS Server WTO user exit.

Positional parameter 1 specifies the operational status of the user exit.

Valid Values: ENA for enabled status.
DIS for disabled status.

Default: DIS

Positional parameter 2 specifies the recovery status of the user exit.

Valid Values: RECOV for recovery on.
NORECOV for recovery off.

Default: RECOV

Positional parameter 3 specifies the name of the user exit load module.

Valid Values: The name of a valid user exit load module.

Default: VSRVUE02

Example: SVEXIT02=(ENA,RECOV,VS80UE02)

This specification indicates that the LRS/MVS Server WTO user exit should be enabled, that recovery is on, and the name of the WTO exit is VS80UE02.

SVEXIT03 (LRS/MVS Server Operator Command Exit) in VSVSTART Member

SVEXIT03= Specifies, via three positional parameters, the status, recovery option, and exit name of the LRS/MVS Server Operator Command Exit.

Positional parameter 1 specifies the operational status of the user exit.

Valid Values: ENA for enabled status.
DIS for disabled status.

Default: DIS

Positional parameter 2 specifies the recovery status of the user exit.

Valid Values: RECOV for recovery on.
NORECOV for recovery off.

Default: RECOV

Positional parameter 3 specifies the name of the user exit load module.

Valid Values: The name of a valid user exit load module.

Default: VSRVUE03

Example: SVEXIT03=(ENA,RECOV,VS80UE03)

This keyword specifies that the LRS/MVS Server Operator Command exit should be enabled, that recovery is on, and the name of the exit is VS80UE03.

SVEXIT04 (LRS/MVS Server Internal Command Exit) in VSVSTART Member

SVEXIT04= Specifies, via 3 positional parameters, the status, recovery option, and exit name of the LRS/MVS Server Internal Command Exit.

Positional parameter 1 specifies the operational status of the user exit.

Valid Values: ENA for enabled status.
DIS for disabled status.

Default: DIS

Positional parameter 2 specifies the recovery status of the user exit.

Valid Values: RECOV for recovery on.
NORECOV for recovery off.

Default: RECOV

Positional parameter 3 specifies the name of the user exit load module.

Valid Values: The name of a valid user exit load module.

Default: VSRVUE04

Example: SVEXIT04=(ENA,RECOV,VS80UE04)

This keyword specifies that the LRS/MVS Server Internal Command exit should be enabled, that recovery is on, and the name of the exit is VS80UE04.

SVEXIT05 (VMCF Queue Selection Exit) in VSVSTART Member

SVEXIT05= Specifies, via three positional parameters, the status, recovery option, and exit name of the VMCF Queue Selection Exit.

Positional parameter 1 specifies the operational status of the user exit.

Valid Values: ENA for enabled status.
DIS for disabled status.

Default: DIS

Positional parameter 2 specifies the recovery status of the user exit.

Valid Values: RECOV for recovery on.
NORECOV for recovery off.

Default: RECOV

Positional parameter 3 specifies the name of the user exit load module.

Valid Values: The name of a valid user exit load module.

Default: VSRVUE05

Example: SVEXIT05=(ENA,RECOV,VS80UE05)

This keyword specifies that the VMCF Queue Selection exit should be enabled, that recovery is on, and the name of the exit is VS80UE05.

SVEXIT06 (VMCF JES Queue Scan Exit) in VSVSTART Member

SVEXIT06= Specifies, via three positional parameters, the status, recovery option, and exit name of the VMCF JES Queue Scan Exit.

Positional parameter 1 specifies the operational status of the user exit.

Valid Values: ENA for enabled status.
DIS for disabled status.

Default: DIS

Positional parameter 2 specifies the recovery status of the user exit.

Valid Values: RECOV for recovery on.
NORECOV for recovery off.

Default: RECOV

Positional parameter 3 specifies the name of the user exit load module.

Valid Values: The name of a valid user exit load module.

Default: VSRVUE06

Example: SVEXIT06=(ENA,RECOV,VS80UE06)

This keyword specifies that the VMCF JES Queue Scan exit should be enabled, that recovery is on, and the name of the exit is VS80UE06.

SVEXIT07 (VMCF JES Printer Scan Exit) in VSVSTART Member

SVEXIT07= Specifies, via three positional parameters, the status, recovery option, and exit name of the VMCF JES Printer Scan Exit.

Positional parameter 1 specifies the operational status of the user exit.

Valid Values: ENA for enabled status.
DIS for disabled status.

Default: DIS

Positional parameter 2 specifies the recovery status of the user exit.

Valid Values: RECOV for recovery on.
NORECOV for recovery off.

Default: RECOV

Positional parameter 3 specifies the name of the user exit load module.

Valid Values: The name of a valid user exit load module.

Default: VSRVUE07

Example: SVEXIT07=(ENA,RECOV,VS80UE07)

This keyword specifies that the VMCF JES Printer Scan exit should be enabled, that recovery is on, and the name of the exit is VS80UE07.

SVKEYM

in VSVSTART Member

SVKEYM= Specifies a member name within the control library which contains the product license and/or trial keys.

Valid Values: Member name that exists in the control library.

Default: \$KEYS

Example: SVKEYM=LRSKEYS

This specification indicates that a member named LRSKEYS exists in the control library and contains the product license and/or trial keys.

SVLGHOLD **in VSVSTART Member**

SVLGHOLD= Specifies whether the log SYSOUT dataset should be allocated as a held SYSOUT dataset. Note that this keyword is ignored for pre-allocated log datasets.

Valid Values: Y or N

Default: Y

Example: SVLGHOLD=Y

This specification indicates that the log SYSOUT dataset should be allocated as held.

This keyword is not used if the log is pre-allocated.

SVLGOUTP

in VSVSTART Member

SVLGOUTP= Specifies, via five positional parameters, the characteristics to be used when allocating the log SYSOUT dataset. Note that this keyword is ignored for pre-allocated log datasets.

Positional parameter 1 specifies the class to be used for the log SYSOUT dataset.

Valid Values: Any valid SYSOUT class (A-Z, 0-9, *, or null).

Default: A

Positional parameter 2 specifies the destination to be used for the log SYSOUT dataset.

Valid Values: Any valid JES destination.

Default: LOCAL for JES2.
ANYLOCAL for JES3.

Positional parameter 3 specifies the form name to be used for the log SYSOUT dataset.

Valid Values: Any 1-4 character alphanumeric form name.

Default: None.

Positional parameter 4 specifies the writer name to be used for the log SYSOUT dataset.

Valid Values: Any 1-8 character alphanumeric writer name.

Default: None.

Positional parameter 5 specifies the name of an OUTPUT JCL statement to be used to determine the characteristics of the log SYSOUT dataset.

Valid Values: The name of an OUTPUT JCL statement that exists in the JCL used to start the LRS/MVS Server.

Default: None.

Note: If you specify the name of an OUTPUT JCL statement that does not exist, message VSV0123E will be issued (LOG ALLOCATION FAILURE) with RC=04 and EC=04CC and the logging facility will be disabled.

Specifying '*' as the SYSOUT class indicates that the MSGCLASS of the job is to be used.

If the SYSOUT class is nullified, then the SYSOUT class specified on the OUTPUT JCL statement will be used. If there is no OUTPUT JCL statement or if CLASS was not specified on the OUTPUT JCL statement, then the MSGCLASS of the job will be used.

SVLGOUTP in VSVSTART Member

- Example 1:** SVLGOUTP=(C,U200,STD)
This specification indicates that the log dataset should be allocated with the following characteristics:
CLASS=C
DEST=U200
FORM=STD
- Example 2:** SVLGOUTP=(,,,LOGOUT)
This specification indicates that the log dataset should be allocated with the characteristics specified in the OUTPUT JCL statement named LOGOUT.

SVLOG

in VSVSTART Member

SVLOG= Specifies whether the logging facility is to be active.

Valid Values: Y or N

Default: Y

Example: SVLOG=Y

This specification indicates that command and message logging should be active.

SVMALHST in VSVSTART Member

SVMALHST= Specifies the name or internet address of the remote TCP/IP host that should be used to forward email messages. If this keyword is not specified, no email notification will be allowed.

Valid Values: One of the following should be specified:

- A 1 to 15 character IP address in 'dotted decimal' format. The IP address of the host is specified as a series of 4 numbers, separated by periods. Each number must be in the range of 0 to 255.
- A 1 to 24 character host name.

Default: None.

Example 1: SVMALHST=199.99.99.99

Example 2: SVMALHST=mailhost@sample.com

Notes: This keyword is required for notification of email users. For more information about email notification, see the description of the MAIL command in [Section 6, "Commands"](#).

This keyword value will be ignored unless TCPTYPE=IBM340 and a non-blank SVTCPID keyword value are both specified.

SVMALOPT in VSVSTART Member

SVMALOPT= A 4-byte hex representation that specifies special user options to be used for email notification. The user option bit specifications are as follows:

80000000	=	Undefined.
40000000	=	Undefined.
20000000	=	Undefined.
10000000	=	Undefined.
08000000	=	Undefined.
04000000	=	Undefined.
02000000	=	Undefined.
01000000	=	Undefined.
00800000	=	Undefined.
00400000	=	Undefined.
00200000	=	Undefined.
00100000	=	Undefined.
00080000	=	Undefined.
00040000	=	Undefined.
00020000	=	Undefined.
00010000	=	Undefined.
00008000	=	Undefined.
00004000	=	Undefined.
00002000	=	Undefined.
00001000	=	Undefined.
00000800	=	Undefined.
00000400	=	Undefined.
00000200	=	Undefined.
00000100	=	Undefined.
00000080	=	Undefined.
00000040	=	Undefined.
00000020	=	Undefined.
00000010	=	Undefined.
00000008	=	Undefined.
00000004	=	Undefined.
00000002	=	Reserved for testing.
00000001	=	Display all returned messages from mail server in the LRS/MVS Server log.

Valid Values: 00000000 to FFFFFFFF

Default: 00000000

Example: SVMALOPT=00000001

This indicates that all messages returned from the mail server should be displayed in the LRS MVS Server log.

SVMALSND in VSVSTART Member

SVMALSND= Specifies the email address of a user who is considered to be the SENDER of an email message generated by the server region. This value is optional. If specified, the email address will be added to the header of outgoing email messages generated by the MAIL command or by requesting applications (such as PageCenter).

Valid Values: Any 1 - 60 character email address.

Default: None.

Example: SVMALSND='admin@sample.com'

This specifies that the SENDER email address to be used on all outgoing email messages should be 'admin@sample.com'.

Note: This keyword value is optional and can be modified by the requesting application (such as PageCenter).

SVMALSTA

in VSVSTART Member

SVMALSTA= Specifies, via 4 positional parameters, whether a request for delivery status notification should be made for the email message which is being sent by the server region.

Positional parameter 1 specifies if the server region should ask for delivery status notification, and if so, whether the full message (RET=FULL) or headers (RET=HDRS) should be returned.

Valid Values: **NONE** Do not request status
 FULL Ask for RET=FULL status
 HDRS Ask for RET=HDRS status

Default: NONE

Positional parameter 2 specifies whether the originator of the message would like to be notified for any delay in delivery of the email message.

Valid Values: **DELAY** Notify originator if there is a delay.
 NDELAY Do not notify originator if there is a delay.

Default: NDELAY

Positional parameter 3 specifies whether the originator of the message would like to be notified for any failure in delivery of the email message.

Valid Values: **FAILURE** Notify originator if delivery fails.
 NFAILURE Do not notify originator if delivery fails.

Default: NFAILURE

Positional parameter 4 specifies whether the originator of the message would like to be notified if delivery of the email message is successful.

Valid Values: **SUCCESS** Notify originator upon delivery.
 NSUCCESS Do not notify originator upon delivery.

Default: NSUCCESS

Example: SVMALSTA=(HDRS,DELAY,FAILURE,NSUCCESS)

This example indicates that the originator of the document would like to be notified using headers only (not the full message) for any delay in delivery and if delivery fails, but does not want to be notified if delivery is successful.

Notes: If the first positional parameter is NONE, the remaining positional parameters are ignored.

Using delivery status notification requires that each server in the path between the LRS/MVS Server and the recipient will provide support for Simple Mail Transfer Protocol Extensions (SMTPE) for Delivery Status Notification (DSN). If any server in the path does not support SMTPE/DSN, the originator of the document may not receive a notification response.

The default mail status request keyword value will be used for the MAIL command and for any mail sent by requesting applications (such as PageCenter) unless modified by the requesting application.

SVMALTRT in VSVSTART Member

SVMALTRT= Specifies, via 2 positional parameters, the default character set names to be used to translate data for email notification. These names will be used to translate EBCDIC data to ASCII for delivery to an email user. They will be used for any message text passed using the MAIL command and for email message text provided by requesting applications if the names are not provided by the requesting application (such as PageCenter).

Positional parameter 1 specifies the name of the character set that should be used for the input for translation.

Valid Values: 1 - 24 character name of the input character set.
See table below.

Default: IBM-1140

Positional parameter 2 specifies the name of the character set that should be used for the output of the translation.

Valid Values: 1 - 24 character name of the output character set.
See table below.

Default: SO-8859-15

Example: SVMALTRT=(IBM-280,US-ASCII)

This specifies that the input data to be translated uses character set IBM-280 and that the output should be translated to US-ASCII.

Notes: The input character set should be the EBCDIC character set used when creating the message text, and the output character set should be the ASCII character set that will be used to view the message text.

SVMALTRT

in VSVSTART Member

Table of valid names for SVMALTRT keyword.

NAME	TYPE	DESCRIPTION
IBM-037	EBCDIC	UNITED STATES
IBM-277	EBCDIC	DENMARK & NORWAY
IBM-278	EBCDIC	SWEDEN & FINLAND
IBM-280	EBCDIC	ITALY
IBM-284	EBCDIC	SPAIN & LATIN AMERICA
IBM-285	EBCDIC	UNITED KINGDOM
IBM-297	EBCDIC	FRANCE
IBM-500	EBCDIC	MULTILINGUAL
IBM-870	EBCDIC	POLAND/BOSNIA/HUNGARY
IBM-871	EBCDIC	ICELAND
IBM-875	EBCDIC	GREECE
IBM-1026	EBCDIC	TURKEY
IBM-1047	EBCDIC	LATIN 1 OPEN SYSTEMS
IBM-1140	EBCDIC	UNITED STATES (EURO)
IBM-1141	EBCDIC	GERMANY & AUSTRIA (EURO)
IBM-1142	EBCDIC	DENMARK & NORWAY (EURO)
IBM-1143	EBCDIC	SWEDEN & FINLAND _m (EURO)
IBM-1144	EBCDIC	ITALY (EURO)
IBM-1145	EBCDIC	SPAIN (EURO)
IBM-1146	EBCDIC	UNITED KINGDOM (EURO)
IBM-1147	EBCDIC	FRANCE (EURO)
IBM-1148	EBCDIC	MULTILINGUAL (EURO)
IBM-1149	EBCDIC	ICELAND (EURO)
ISO-8859-1	ASCII	LATIN 1 WESTERN EUROPEAN
ISO-8859-2	ASCII	LATIN 2 EAST EUROPEAN
ISO-8859-3	ASCII	LATIN 3 SOUTH EUROPEAN
ISO-8859-4	ASCII	LATIN 4 NORTH EUROPEAN
ISO-8859-5	ASCII	CYRILLIC
ISO-8859-6	ASCII	ARABIC
ISO-8859-7	ASCII	GREEK
ISO-8859-8	ASCII	HEBREW
ISO-8859-9	ASCII	LATIN 5 TURKISH
ISO-8859-10	ASCII	LATIN 6 NORDIC
ISO-8859-15	ASCII	LATIN 9 EURO SUPPORT
US-ASCII	ASCII	US-ASCII
WINDOWS-1252	ASCII	WINDOWS-1252 LATIN 1

SVTCPDMN in VSVSTART Member

SVTCPDMN= Specifies the domain name for the TCP/IP host where the server region is executing. This name will be appended to the local host name acquired using a GETHOST call if the name obtained is not already a fully qualified host name. A host name is considered to be fully qualified if it contains a period (.) in the name. This keyword is optional.

Valid Values: 1-32 alphanumeric or special characters with or without periods. If specified, this value should match the value specified for the domain origin in the TCP/IP configuration files.

Default: None.

Example: SVTCPDMN='sample.com'
This specification indicates that the server region should append sample.com to any local host name obtained using the GETHOST call if that name was not already a fully qualified name. If the local host name obtained is 'ABC1', then the resulting fully qualified name would be ABC1.sample.com.

Notes: This keyword is optional.
This keyword value is only used if a TCP/IP connection is established because the SVTCPID keyword was specified.
The value of the local host name is used to communicate with external mail servers if email notification is requested.

SVMSGMEM in VSVSTART Member

SVMSGMEM= Specifies a member name within the control library which contains a list of messages which are to have their type modified.

Valid Values: Member name that exists in the control library.

Default: None.

Example: SVMSGMEM=\$MSGMOD

This specification indicates that a member named \$MSGMOD exists in the control library and contains information used to modify the message types of one or more messages.

Note: In this member, the “type” assigned to a particular LRS/MVS Server message can be changed. The types that can be assigned to messages are:

A - ACTION MESSAGE (AND REGION LOG)

N - NORMAL MESSAGE (AND REGION LOG)

I - INFORMATIONAL MESSAGE (AND REGION LOG)

H - HARDCOPY MESSAGE (AND REGION LOG)

L - REGION LOG ONLY

X - MESSAGE IS NOT ISSUED

For example, to eliminate message VSV0010N completely and to change message VSV0023E from an action message to a normal message, this member would contain:

VSV0010N=X,

VSV0023E=N

SVOPTS in VSVSTART Member

SVOPTS=	Specifies the special user options in effect.
Valid Values:	8 characters, representing 4 hex bytes.
80000000	Hex display of printer Host IP Address in place of printer Luname. See note below.
40000000	Undefined.
20000000	Bypass IAZXJSAB macro.
10000000	Undefined.
08000000	Undefined.
04000000	Undefined.
02000000	Undefined.
01000000	Undefined.
00800000	Undefined.
00400000	Undefined.
00200000	Undefined.
00100000	Undefined.
00080000	Undefined.
00040000	Undefined.
00020000	Undefined.
00010000	Undefined.
00008000	Undefined.
00004000	Undefined.
00002000	Undefined.
00001000	Undefined.
00000800	Undefined.
00000400	Undefined.
00000200	Undefined.
00000100	Undefined.
00000080	Undefined.
00000040	Undefined.
00000020	Undefined.
00000010	Undefined.
00000008	Undefined.
00000004	Undefined.
00000002	Undefined.
00000001	Undefined.
Default:	00000000

Note: For hex display of host IP address to be displayed in printer luname, the TCPHOST= keyword in the printer member must be defined as a valid numeric IP address. If the TCPHOST= keyword is defined as non-numeric, then the member name is substituted for the luname.

SVPAGECM

in VSVSTART Member

SVPAGECM= Specifies a member name within the control library which contains the PageCenter option keywords.

Valid Values: Member name that exists in the control library.

Default: None.

Example: SVPAGECM=\$PAGECTR

This specification indicates that a member named \$PAGECTR exists in the control library and contains the PageCenter option keywords.

SVPROFM in VSVSTART Member

SVPROFM= Specifies a member name within the control library which contains the user profile keywords.

Valid Values: Member name that exists in the control library.

Default: None.

Example: SVPROFM=\$PROF
This specification indicates that a member named \$PROF exists in the control library and contains the user profile keywords.

SVRBROM

in VSVSTART Member

SVRBROM= Specifies a member name within the control library which contains the VPS/Report Browse option keywords.

Valid Values: Member name that exists in the control library.

Default: None.

Example: SVRBROM=\$RBRO

This specification indicates that a member named \$RBRO exists in the control library and contains the VPS/Report Browse option keywords.

SVRSDISC in VSVSTART Member

SVRSDISC= Specifies whether the APPC or TCP/IP connection between this server and the LAN server should be ended when all the user sessions that were using that LAN server are no longer active.

Valid Values: Y or N

Default: Y

Example: SVRSDISC=Y

This specification indicates that when the last user session which was using a specific APPC or TCP/IP connection with a LAN server is terminated, the connection to the LAN server should be automatically ended.

If SVRSDISC=N is specified, the connection between the LRS/MVS server and the LAN server will be continued and will wait for additional user sessions to be established or for the LAN server to request disconnection.

SVRSINTV

in VSVSTART Member

SVRSINTV= Specifies the interval in hours and minutes that a remote client may be idle between requests. When the interval has expired, the LRS/MVS Server will automatically disconnect the user.

Valid Values: 0 - 2459

Default: 30

Example: SVRSINTV=10

SVSAF in VSVSTART Member

SVSAF= Specifies, via five positional parameters, whether or not the LRS/MVS Server should use the System Authorization Facility (SAF) to control access to the various VMCF, DMCF and PageCenter functions and if so, the options related to the SAF interface.

Positional parameter 1 specifies whether or not SAF will be used to control access to the various VMCF, DMCF and PageCenter functions. If this value is specified as N, then the other sub-parameters are ignored.

Valid Values: Y or N

Default: Y

Note: If N is specified and you do not customize the VMCF and/or DMCF security table, the default security table supplied by LRS allows all users access to all of the VMCF and/or DMCF functions. See [“Internal Security” on page 4.24](#) for information on customizing internal security.

Positional parameter 2 specifies the SAF class name.

Valid Values: 1 - 8 character SAF class name.

Default: \$VPS

Positional parameter 3 specifies the application name to be used when SAF invokes the system security package (RACF, etc.).

Valid Values: 1 - 8 character SAF application name.

Default: VMCF

Positional parameter 4 specifies the SAF debugging WTO options. The LRS/MVS Server external security module, VS80SCX2, will issue a WTO for conditions which meet the criteria set by this keyword.

Valid Values: 2 characters, representing 1 hex byte.

Defined options are:

- 80** Issue WTO for RACROUTE LIST (see note 1).
- 40** Issue WTO for RACROUTE VERIFY (see note 1).
- 20** Issue WTO for RACROUTE AUTH/FASTAUTH with RC greater than 0.
- 10** Issue WTO for RACROUTE AUTH/FASTAUTH with RC equal to 0.
- 08** Undefined.
- 04** Undefined.
- 02** Undefined.
- 01** Undefined.

Default: 00

SVSAF

in VSVSTART Member

Note 1: Before specifying any SAF debugging options, call LRS technical support for assistance. Setting all SAF debug options can cause an excessive number of WTOs. SAF GTF tracing provides similar debugging information and is recommended for tracing problems with external security.

Note 2: A WTO will always be issued for the last RACROUTE call made by VS80SCX1 if the module is returning a return code greater than 4 due to a severe error.

Note 3: For multiple options, combine the necessary values. For example, to obtain a WTO for each RACROUTE LIST and VERIFY, specify C0 in the fourth positional parameter.

Positional parameter 5 specifies options used to modify normal VMCF SAF processing.

Valid Values: 4 characters, representing 2 hex byte.

Defined options are:

- 8000** Bypass member name for printer ID for security calls.
- 4000** Bypass LUNAME for printer ID for security calls.
- 2000** Bypass group name for printer ID for security calls.
- 1000** Use JESSPOOL and OPERCMDS classes for JES commands.
- 0800** Disable logging for CA-TopSecret.
- 0400** RACLIST \$VPS class profiles.
- 0200** RACLIST JESSPOOL class profiles.
- 0100** Set SAF message suppression.
- 0080** Use IPNAME for printer ID for security calls.
- 0040** Use PRTNAME for printer ID for security calls.
- 0020** Undefined.
- 0010** Undefined.
- 0008** Undefined.
- 0004** Undefined.
- 0002** Undefined.
- 0001** Undefined.

Default: 0500

Note: For multiple options, combine the necessary values; for example, if you only use member name for printer security, specify 6000 in the fifth positional parameter.

SVSNAP in VSVSTART Member

SVSNAP= Specifies whether a snap SYSOUT dataset should be allocated.

Valid Values: Y or N

Default: Y

Example: SVSNAP=Y

This specification indicates that a snap SYSOUT dataset should be allocated.

SVSNHOLD

in VSVSTART Member

SVSNHOLD= Specifies whether the snap SYSOUT dataset should be allocated as a held SYSOUT dataset.

Valid Values: Y or N

Default: Y

Example: SVSNHOLD=Y

This specification indicates that the snap SYSOUT dataset should be allocated as held.

SVSNOUTP in VSVSTART Member

SVSNOUTP= Specifies, via five positional parameters, the characteristics to be used when allocating the snap SYSOUT dataset.

Positional parameter 1 specifies the class to be used for the snap SYSOUT dataset.

Valid Values: Any valid SYSOUT class (A-Z, 0-9, *, or null).
Default: A

Positional parameter 2 specifies the destination to be used for the snap SYSOUT dataset.

Valid Values: Any valid JES destination.
Default: LOCAL for JES2.
ANYLOCAL for JES3.

Positional parameter 3 specifies the form name to be used for the snap SYSOUT dataset.

Valid Values: Any 1-4 character alphanumeric form name.
Default: None.

Positional parameter 4 specifies the writer name to be used for the snap SYSOUT dataset.

Valid Values: Any 1-8 character alphanumeric writer name.
Default: None.

Positional parameter 5 specifies the name of an OUTPUT JCL statement to be used to determine the characteristics of the snap SYSOUT dataset.

Valid Values: The name of an OUTPUT JCL statement that exists in the JCL used to start the LRS/MVS Server.
Default: None.

Note: If you specify the name of an OUTPUT JCL statement that does not exist, message VSV0063E will be issued (SNAP ALLOCATION FAILURE) with RC=04 and EC=04CC.

Specifying '*' as the SYSOUT class indicates that the MSGCLASS of the job is to be used.

If the SYSOUT class is nullified, then the SYSOUT class specified on the OUTPUT JCL statement will be used. If there is no OUTPUT JCL statement or if CLASS was not specified on the OUTPUT JCL statement, then the MSGCLASS of the job will be used.

SVSNOUTP

in VSVSTART Member

Example 1:

SVSNOUTP=(X,LOCAL,STD)

This specification indicates that the snap dataset should be allocated with the following characteristics:

CLASS=X

DEST=LOCAL

FORM=STD

Example 2:

SVSNOUTP=(,,,SNAPOUT)

This specification indicates that the snap dataset should be allocated with the characteristics specified in the OUTPUT JCL statement named SNAPOUT.

SVSSI in VSVSTART Member

SVSSI= Specifies, via five positional parameters, the attributes used in defining the LRS/MVS Server as an MVS subsystem.

Positional parameter 1 specifies the subsystem name to be used by the LRS/MVS Server.

Valid Values: Any valid 1 to 4 character subsystem name.

This name can be defined to MVS by adding an entry in member IEFSSNxx in SYS1.PARMLIB. The entry should contain only the name of the LRS/MVS Server subsystem. This is the IBM recommended method of defining subsystems to MVS. However, this method does require an IPL. If the LRS/MVS Server detects that the specified name has not been defined, then it will dynamically add the subsystem to MVS.

Note that the following names are NOT allowed because they are names of common MVS subsystems.

APPC	ASCH	CICS	CMD*	CNM*	DSN*
IRL*	JES*	JRL*	MSTR	NET*	RACF
SMS*	STC*	SYS*	TSO*		

Default: VS01 or some increment of VS01, such as VS02, VS03, VS04, etc., if more than one LRS/MVS Server is executing.

Positional parameter 2 specifies the command character for issuing commands to the LRS/MVS Server.

Valid Values: Any of the following characters:

| (% : . & + _ # < ¢
! - > @ “ \$ / ? = ~ *

Default: None.

Positional parameter 3 specifies the number of command buffers to be allocated for commands issued via the SSI command character specified in positional parameter 2. Note that the SSI command buffers are allocated from CSA during LRS/MVS Server initialization. The size of each command buffer is 184 bytes.

Valid Values: 0 - 256

Default: 0

Notes: If you specify a subsystem name, or allow a default subsystem name to be generated, then it CANNOT be the same as the proc name used for the LRS/MVS Server.

Be careful not to specify a command character for the LRS/MVS Server that is being used by another MVS subsystem. For example, the JES2 command character is usually the dollar sign (\$). You should be sure that you do not use that character as the LRS/MVS Server command character.

SVSSI

in VSVSTART Member

Positional parameter 4 specifies the trace options for subsystem tracing.

Valid Values: 00000000 to FFFFFFFF

Default: 00000000

Positional parameter 5 specifies the size of the subsystem trace table in pages.

Valid Values: 0 - 16384

Default: 16

Example: SVSSI=(VS99,¢,10,FFFFFFF,80)

This specification would signify to the LRS/MVS Server to use a subsystem name of VS99, that the cent sign (¢) is the command character, that ten command buffers should be allocated, that all tracing flags should be set and that the subsystem trace table size should be 80 pages.

SVTCPID in VSVSTART Member

SVTCPID= Identifies the address space where MVS TCP/IP is running. This name will be used when the LRS/MVS Server connects to the MVS TCP/IP address space. Note that this keyword is only applicable if you are using TCP/IP for communicating with LRS Servers on other platforms (for example, the LRS/LAN Server to support the VMCF Windows client).

Valid Values: 1 to 8 character name of the MVS TCP/IP system.

Default: None.

Example: SVTCPID=TCPIP

Notes: For IBM's TCP/IP for MVS, specify the job or started task name of the MVS TCP/IP address space. For Interlink Computer Sciences, specify the 4 character subsystem ID; the default subsystem ID for ICS is ACSS.

SVTCPORT

in VSVSTART Member

SVTCPORT= Specifies the port number for the TCP/IP connection. Note that this keyword is only applicable if you are using TCP/IP for communicating with LRS Servers on other platforms (for example, the LRS/LAN Server to support the VMCF Windows client).

Valid Values: 1 to 65535

Default: None.

Example: SVTCPORT=2000

SVTCPTYP in VSVSTART Member

SVTCPTYP= Specifies the type of MVS TCP/IP product that is to be used in communicating with LRS Servers on other platforms (for example, the LRS/LAN Server to support the VMCF Windows client).

Valid Values:

IBM221	Use IBM IUCV interface.
IBM320	Use IBM V3R2 API interface.
IBM340	Use IBM V3R4 API interface.
ICS	Use Interlink Computer Sciences interface.

Default: IBM221

Example: SVTCPTYP=ICS

This specification indicates that the LRS/MVS Server should use the Interlink Computer Sciences interface to connect to the MVS TCP/IP address space.

SVTRACE

in VSVSTART Member

SVTRACE= Specifies, via four positional parameters, the tracing to be performed in the LRS/MVS Server.

Positional parameter 1 specifies the trace options for system level tracing.

Valid Values: 00000000 to FFFFFFFF

- 80000000** - GTF External Tracing
- 40000000** - Virtual Storage Management
- 20000000** - Cell Pool Services
- 10000000** - Lock Management
- 08000000** - Enqueue/Dequeue Serialization
- 04000000** - User Exit Processing
- 02000000** - Detail Tracing

Default: 00000000

Positional parameter 2 specifies the trace options for server level tracing.

Valid Values: 00000000 to FFFFFFFF

- 00800000** - Region Control
- 00400000** - Region Log
- 00200000** - Operator Command Processing
- 00100000** - Subsystem Interface
- 00080000** - XMS Communications
- 00040000** - VTAM Communications
- 00020000** - TCP/IP Communications
- 00010000** - File Control
- 00008000** - Request/Response Dispatching
- 00004000** - Request/Response Scheduling
- 00002000** - Internal/External Security
- 00001000** - Profile API
- 00000800** - Server Info/Command API
- 00000400** - VPS Info/Command API
- 00000200** - XCF Communications
- 00000002** - VPS/Report Browse
- 00000001** - VLS

Default: 00000000

Positional parameter 3 specifies the size of the LRS/MVS Server trace table in pages.

Valid Values: 8 - 99

Default: 8

SVTRACE in VSVSTART Member

Positional parameter 4 specifies the GTF format appendage ID to be used in LRS/MVS Server trace entries in the GTF trace file, when GTF tracing is on.

Valid Values: 0 - 80

Default: 80

Example: SVTRACE=(FFFFFFFF,FFFFFFFF,20,78)

This specification would signify to the LRS/MVS Server that all system and server level trace entries should be written to the internal trace table, that the trace table size should be 20 pages, and that the GTF format appendage ID should be 78 for any trace records written to GTF.

SVVMCFM

in VSVSTART Member

SVVMCFM= Specifies a member name within the control library which contains the VMCF and/or DMCF option keywords.

Valid Values: Member name that exists in the control library.

Default: None.

Example: SVVMCFM=\$VMCF

This specification indicates that a member named \$VMCF exists in the control library and contains the VMCF and/or DMCF option keywords. Note that the keywords in this member affect all of the VMCF and/or DMCF clients (i.e. TSO, CICS, and VTAM).

SVWTO in VSVSTART Member

SVWTO= Specifies, via four positional parameters, how messages directed to the console are to be processed.

Positional parameter 1 specifies whether or not the messages should be prefixed with the started task name.

Valid Values: Y or N

Default: Y

Positional parameter 2 specifies whether or not action messages should be issued with a Descriptor Code of 2 (MVS action).

Valid Values: Y or N

Default: Y

Positional parameter 3 specifies whether or not informational messages (those message ids suffixed with an "I") should be issued.

Valid Values: Y or N

Default: Y

Positional parameter 4 specifies the route code to be used when issuing unsolicited WTOs. This parameter does not apply to WTOs that are issued in response to a command, since those WTOs will be issued to the console from which the command was entered.

Valid Values: 1-16

Default: 1

Example: SVWTO=(Y,Y,N,5)

This specification indicates that messages should be prefixed with the started task name, that action messages should be issued with a Descriptor Code of 2, that informational messages are to be suppressed, and that unsolicited WTOs are to be issued with a route code of 5.

Product Keys Member Keywords

The product keys member contains the software “keys” that are used to enable the various applications within the LRS/MVS Server. Note that the keys for each application are supplied by LRS. Also, note that the keywords in this member may be changed while the LRS/MVS Server is executing. The LRS/MVS Server “REFRESH,KEYS” command can be used to dynamically refresh the product keys without recycling the LRS/MVS Server address space.

KEYAFPV in \$KEYS Member

KEYAFPV=

Specifies the trial/license code to use the AFP Library. This keyword **MUST** be present in order to use the AFP Library.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYDMCF in \$KEYS Member

KEYDMCF= Specifies the trial/license code for the DMCF product. This keyword **MUST** be present in order to use the DMCF product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key.
2-4	Machine manufacturer (e.g. IBM).
5-8	Machine type (e.g. 2003).
9-13	CPU serial number.
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYPAGEC in \$KEYS Member

KEYPAGEC= Specifies the trial/license code to access the PageCenter import and batch clients. This keyword **MUST** be present in order to use the import and batch clients in the PageCenter product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYRBRO

in \$KEYS Member

KEYRBRO= Specifies the trial/license code for the VPS/Report Browse product. This keyword **MUST** be present in order to use the VPS/Report Browse product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVMCFC in \$KEYS Member

KEYVMCFC= Specifies the trial/license code for the VMCF/CICS product. This keyword **MUST** be present in order to use the VMCF/CICS product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVMCFL in \$KEYS Member

KEYVMCFL= Specifies the trial/license code for the VMCF Client for Windows product. This keyword **MUST** be present in order to use the VMCF Client for Windows product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVMCFV in \$KEYS Member

KEYVMCFV= Specifies the trial/license code for the VMCF/VTAM product. This keyword **MUST** be present in order to use the VMCF/VTAM product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVMCFW in \$KEYS Member

KEYVMCFW= Specifies the trial/license code for the VMCF Web Access product. This keyword **MUST** be present in order to use the VMCF Web Access product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVPCC in \$KEYS Member

KEYVPCC= Specifies the trial/license code for the PageCenter Client for CICS product. This keyword **MUST** be present in order to use the PageCenter Client for CICS product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVPCL

in \$KEYS Member

KEYVPCL= Specifies the trial/license code for the PageCenter Client for Windows product. This keyword **MUST** be present in order to use the PageCenter Client for Windows product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVPCT in \$KEYS Member

KEYVPCT= Specifies the trial/license code for the PageCenter Client for TSO product. This keyword **MUST** be present in order to use the PageCenter Client for TSO product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVPCV

in \$KEYS Member

KEYVPCV= Specifies the trial/license code for the PageCenter Client for VTAM product. This keyword **MUST** be present in order to use the PageCenter Client for VTAM product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

KEYVPCW in \$KEYS Member

KEYVPCW= Specifies the trial/license code for the PageCenter Web Access product. This keyword **MUST** be present in order to use the PageCenter Web Access product.

Valid Values: 60 characters. This key is supplied by LRS and identifies the CPU serial number on which the product is licensed. This key is supplied in file 12 of the VPS distribution cartridge (LRS.VSV.V1R80.CNTL). The key is in the following format:

<u>Byte</u>	<u>Description</u>
1	T - trap key or L - license key
2-4	Machine manufacturer (e.g. IBM)
5-8	Machine type (e.g. 2003)
9-13	CPU serial number
14-60	Encrypted customer id, CPU serial number, expiration date, etc.

Note that the product keys must be entered exactly as supplied by LRS. Modified product keys are considered invalid and will prevent the product from being used.

Default: None.

VMCF and/or DMCF Options Member Keywords

The VMCF and/or DMCF options member keywords define the VMCF and/or DMCF operational environment within the LRS/MVS Server address space. These keywords define the VMCF and/or DMCF related options. The name of the member containing these keywords is specified via the SVVMCFM= keyword in the VSVSTART member (see page [3.46](#)).

VMCMDREJ in \$VMCF Member

VMCMDREJ= Specifies whether or not VMCF and/or DMCF should prevent the user from issuing DRS or VPS commands when DRS or VPS is not active. Normally, this option would be coded with or allowed to default to a value of “Y”, meaning that VMCF and/or DMCF should reject issuance of DRS or VPS commands when DRS or VPS is not active. However, this option is provided to allow installations to issue commands to a DRS or VPS system that is executing on another CPU. Note that the installation must have a means of routing the commands to the other CPU.

Valid Values: Y or N

Default: Y

Example: VMCMDREJ=Y

VMCMDRSP

in \$VMCF Member

VMCMDRSP= Specifies whether or not VPS should send command responses back to the TSO user via the TPUT SVC. Specifying a value of “Y” causes the VMCF/TSO user to be interrupted out of full-screen mode after issuing a VPS command. Note that this option does not apply to VMCF/CICS and VMCF/VTAM.

Valid Values: Y or N

Default: N

Example: VMCMDRSP=Y

Note: This keyword provides the value for first time VMCF users. Once a user has entered VMCF, this value is retained in the user’s record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in user’s profile records. Individual users may change this value via the VMCF Parameter Options screen.

VMCONPFX in \$VMCF Member

VMCONPFX=	Specifies the character to prefix conversational commands. Conversational commands are not executed immediately but instead are placed on the VMCF and/or DMCF command line.
Valid Values:	Any of the following characters: (% : . & + _ # < ¢ ! - > @ " \$ / ? = ~ * *
Default:	*
Example:	VMCONPFX=*
Note:	This keyword provides the value for first time VMCF and/or DMCF users. Once a user has entered VMCF and/or DMCF, this value is retained in the user's record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in user's profile records. Individual users may change this value via the VMCF and/or DMCF Parameter Options screen.

VMDOTRFD

in \$VMCF Member

VMDOTRFD= Specifies the default view for the DMCF Output Reference List Screen.

Valid Values: Any valid Global or System DMCF Output Reference List Screen View name (up to 20 characters long).

Default: DRS-DEFAULT

Example: VMDOTRFD='DMCF-OUTREF-DEFAULT'

Note: The View specified must be an existing View. Otherwise, LRS/MVS Server initialization will fail. If the View specified contains blanks, single quotes are required around the entire name.

VMDPLSTD in \$VMCF Member

VMDPLSTD= Specifies the default view for the DMCF Printer List Screen.

Valid Values: Any valid Global or System DMCF Printer List Screen View name (up to 20 characters long).

Default: DRS-DEFAULT

Example: VMDPLSTD='DMCF-PLST-DEFAULT'

Note: The View specified must be an existing View. Otherwise, LRS/MVS Server initialization will fail.

If the View specified contains blanks, single quotes are required around the entire name.

VMDRSSTC in \$VMCF Member

VMDRSSTC= Specifies the name of the DRS started task that DMCF is to initially establish communication with.

Valid Values: Any valid DRS started task name.

Default: DRS

Example: VMDRSSTC=DRS34

VMDTRKLD in \$VMCF Member

VMDTRKLD= Specifies the default view for the DMCF Print Tracking List Screen.

Valid Values: Any valid Global or System DMCF Print Tracking List Screen View name (up to 20 characters long).

Default: DRS-DEFAULT

Example: VMDTRKLD='DMCF-TRACK-DEFAULT'

Note: The View specified must be an existing View. Otherwise, LRS/MVS Server initialization will fail.
If the View specified contains blanks, single quotes are required around the entire name.

VMLANG

in \$VMCF Member

VMLANG= Specifies the language to be used when displaying VMCF screens.

Valid Values: ENG (English display)
 JPN (Japanese display)

Default: ENG

Example: VMLANG=JPN

Note: This keyword provides the value for first time VMCF users. Once a user has entered VMCF, this value is retained in the user's record in the LRS/MVS Server Profile Dataset. Changes made to this value will not affect values saved in user's profile records. Individual users may change this value via the VMCF Parameter Options screen.

VMOPTS in \$VMCF Member

VMOPTS=	Specifies options used to modify normal VMCF and/or DMCF processing.
Valid Values:	4 characters, representing 2 hex bytes.
8000	On JES2 systems, display output groups whose writer name or user ID matches the printer's WRITER=value.
4000	On JES2 systems, display the DESTID rather than the destination on the Output Queue and Held Queue screens.
2000	Process values in PRINTER or GROUP fields on the VMCF and/or DMCF Primary Option Menu when Option 2 is selected.
1000	Hide the secondary selection criteria on the VPS Selection Criteria Command screen, so they cannot be modified.
0800	The VPS Printer Held Queue screen will not be available.
0400	Undefined.
0200	Undefined.
0100	Undefined.
0080	Undefined.
0040	Undefined.
0020	Undefined.
0010	Undefined.
0008	Undefined.
0004	Undefined.
0002	Undefined.
0001	Undefined.
Default:	0000
Example:	VMOPTS=1000 indicates that VMCF should not display the printer's secondary selection criteria on the VPS Selection Criteria Command screen.
Note:	For multiple options, combine the necessary values. For example, to display the DESTID on the Printer Output and Held Queue screens and also hide the secondary selection criteria, specify VMOPTS=5000.

VMPRMENU

in \$VMCF Member

VMPRMENU= Specifies when the VMCF and/or DMCF Printer Selection Menu is to be displayed. The VMCF and/or DMCF Printer Selection Menu can optionally be displayed in the following two cases:

- 1) Option 2 is selected from the VMCF and/or DMCF Primary Option Menu.
- 2) END command is entered from the VMCF and/or DMCF Printer Selection List.

Setting the value of the VMPRMENU keyword controls whether or not the VMCF and/or DMCF Printer Selection Menu will actually be displayed in each case.

Valid Values:

- N** Specifies that VMCF and/or DMCF should NEVER display the VMCF and/or DMCF Printer Selection Menu (“neither”).
- B** Specifies that VMCF and/or DMCF should ALWAYS display the VMCF and/or DMCF Printer Selection Menu (“both”).
- X** Specifies that VMCF and/or DMCF will only display the VMCF Printer Selection Menu when the END command is entered from the VMCF and/or DMCF Printer Selection List (“exit”).

Default: X

Note: This keyword provides the value for first time VMCF and/or DMCF users. Once a user has entered VMCF and/or DMCF, this value is retained in the user’s record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in user’s profile records. Individual users may change this value via the VMCF and/or DMCF Parameter Options screen.

VMVACACD in \$VMCF Member

VMVACACD=	Specifies the default view for the VPS AFPCACHE List screen.
Valid Values:	Any valid Global or System VPS AFPCACHE List Screen View name (up to 20 characters long).
Default:	VPS-DEFAULT
Example:	VMVACACD='VMCF-CACHE-DEFAULT'
Note:	<p>The view specified must be an existing view. Otherwise, LRS/MVS Server initialization will fail.</p> <p>If the view specified contains blanks, single quotes are required around the entire name.</p> <p>This keyword provides the value for first time VMCF and/or DMCF users. Once a user has entered VMCF and/or DMCF, this value is retained in the user's record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in users' profile records.</p>

VMVPLSTD

in \$VMCF Member

VMVPLSTD= Specifies the default view for the VMCF Printer List screen.

Valid Values: Any valid Global or System VMCF Printer List Screen View name (up to 20 characters long).

Default: VPS-DEFAULT

Example: VMVPLSTD='VMCF-PLST-DEFAULT'

Note: The View specified must be an existing View. Otherwise, LRS/MVS Server initialization will fail.

If the View specified contains blanks, single quotes are required around the entire name.

This keyword provides the value for first time VMCF and/or DMCF users. Once a user has entered VMCF and/or DMCF, this value is retained in the user's record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in users' profile records.

VMVQUEUD in \$VMCF Member

VMVQUEUD=	Specifies the default view for the VMCF Queue Screens.
Valid Values:	Any valid Global or System VMCF Queue Screen View name (up to 20 characters long).
Default:	VPS-DEFAULT
Example:	VMVQUEUD='VMCF-QUEUE-DEFAULT'
Note:	<p>The View specified must be an existing View. Otherwise, LRS/MVS Server initialization will fail.</p> <p>If the View specified contains blanks, single quotes are required around the entire name.</p> <p>This keyword provides the value for first time VMCF and/or DMCF users. Once a user has entered VMCF and/or DMCF, this value is retained in the user's record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in users' profile records.</p>

VMVSPFX in \$VMCF Member

VMVSPFX= Specifies the character to prefix VPS and/or DRS commands. This character must prefix all VPS commands entered from either the VMCF and/or DMCF command line or via a program function (PF) key.

Valid Values: Any of the following characters:

| (% : . & + _ # < ¢
! - > @ " \$ / ? = ~ *

Default: /

Example: VMVSPFX=%

Note: This keyword provides the value for first time VMCF and/or DMCF users. Once a user has entered VMCF and/or DMCF, this value is retained in the user's record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in user's profile records. Individual users may change this value via the VMCF and/or DMCF Parameter Options screen.

VMVPSSTC in \$VMCF Member

VMVPSSTC= Specifies the name of the VPS started task that VMCF is to initially establish communication with.

Valid Values: Any valid VPS started task name.

Default: VPS

Example: VMVPSSTC=VPS80

Profile Options Member Keywords

The Profile options member keywords define the keywords related to individual user profiles. These keywords define the default PF key definitions and other user-specific parameters. The name of the member containing these keywords is specified via the SVPROFM= keyword in the VSVSTART member (see page [3.29](#)).

PRJMPPFX in \$PROF Member

PRJMPPFX= Specifies the character to prefix the JUMP command option. The character following the JUMP prefix will be used as the initial option for the VMCF and/or DMCF Primary Option Menu. If that option is printer-related, the option character can be followed by a period (.) and the name of the printer.

Valid Values: Any alphanumeric or national character.

Default: . (period)

Example: PRJMPPFX='='

This specification indicates that the equal sign '=' is to be used as the JUMP prefix character.

Note: This keyword provides the value for first time VMCF and/or DMCF users. Once a user has entered VMCF and/or DMCF, this value is retained in the user's record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in users' profile records. Individual users may change this value via the VMCF and/or DMCF Parameter Options screen.

PRPF1 - PRPF24 in \$PROF Member

PRPF1=, PRPF2=, ... PRPF24= Identifies the DMCF, DRS, PageCenter, VMCF, or VPS command to be assigned to the specified PF key.

Valid Values: Any valid DMCF, DRS, PageCenter, VMCF, or VPS command.

Default:

- PRPF1=HELP
- PRPF2=NOP
- PRPF3=END
- PRPF4=RETURN
- PRPF5=NOP
- PRPF6=NOP
- PRPF7=UP
- PRPF8=DOWN
- PRPF9=NOP
- PRPF10=NOP
- PRPF11=NOP
- PRPF12=RETRIEVE
- PRPF13=HELP
- PRPF14=NOP
- PRPF15=END
- PRPF16=RETURN
- PRPF17=NOP
- PRPF18=NOP
- PRPF19=UP
- PRPF20=DOWN
- PRPF21=NOP
- PRPF22=NOP
- PRPF23=NOP
- PRPF24=RETRIEVE

PRPF1 - PRPF24 in \$PROF Member

Note 1:

A special printer name, &PRINTER, has been defined to VMCF and/or DMCF to allow users to share the same PF key definitions. VMCF and/or DMCF will automatically substitute the current printer name in place of the &PRINTER name prior to the execution or recall of the command. This will eliminate the need of “hard-coding” the printer names within the PF key definitions.

For example, assume PF6 is defined as the VPS STOP command as follows:

PRPF6=‘/STOP,&PRINTER’

Further assume that the user is currently displaying the summary information for printer VPSVRT01. The following command would be issued if the user presses the PF6 key:

COMMAND ==> ‘/STOP,VPSVRT01’

Note 2:

This keyword provides the value for first time VMCF and/or DMCF users. Once a user has entered VMCF and/or DMCF, this value is retained in the user’s record in the LRS/MVS Server Profile dataset. Changes made to this value will not affect values saved in user’s profile records. Individual users may change this value via the VMCF and/or DMCF Parameter Options screen.

VPS/Report Browse Options Member Keywords

The VPS/Report Browse options member keywords define the operational environment for the VPS/Report Browse product within the LRS/MVS Server address space. The name of the member containing these keywords is specified via the SVRBROM= keyword in the VSVSTART member (see page [3.30](#)).

Note that these keywords are only required if the VPS/Report Browse product is installed.

RBBUFSI **in \$RBRO Member**

RBBUFSI= Specifies the size in “K” of the VPS/Report Browse SYSOUT buffer. For example, specifying RBBUFSI=4 would allocate a 4096 byte buffer. Note that a separate SYSOUT buffer is allocated to each active VPS/Report Browse user. The value specified must be at least 4 bytes larger than the maximum record length requested via the RBMLREC keyword.

Valid Values: 1 - 32

Default: 32

Example: RBBUFSI=8

RBFLIM

in \$RBRO Member

RBFLIM= Specifies the default number of lines to be searched by the 'FIND' command.

Valid Values: 1000 - 99999999

Default: 5000

Example: RBFLIM=100000

RBJPOOL **in \$RBRO Member**

RBJPOOL= Specifies the number of buffers in the VPS/Report Browse buffer pool. The size of each buffer is equal to the size of a JES2 spool buffer + 8. The size of a JES2 spool buffer is specified in the JES2 initialization parameters. Specifying a large value will increase virtual storage usage and decrease the amount of spool I/O needed to satisfy a browse request. Specifying a small value will decrease virtual storage usage and increase the amount of spool I/O needed to satisfy a browse request.

Valid Values: 16 - 8192

Default: 256

Example: RBJPOOL=128

RBMLREC

in \$RBRO Member

RBMLREC= Specifies the maximum record size that the VPS/Report Browse product will display. Records that exceed this maximum are truncated.

Valid Values: 132 - 32760

Default: 32760

Example: RBMLREC=1024

Section 4 Security

Introduction

This section describes how to implement VMCF and/or DMCF security using either external security or internal security.

- External security will use your system security package (RACF, CA-ACF2, CA-TOP SECRET, etc.) and the MVS System Authorization Facility (SAF) to determine whether a VMCF and/or DMCF user is allowed to access the various functions within VMCF and/or DMCF¹. VMCF and/or DMCF functions are defined as resources in a special class, and rules are checked by issuing the MVS RACROUTE macro.
- Internal security will use the VMCF and/or DMCF Security Table to determine whether a VMCF and/or DMCF user is authorized to access the various functions within VMCF and/or DMCF.

Both external and internal security are described in detail in this section.

1. RACF is a product of International Business Machines Corporation. CA-ACF2 and CA-TOP SECRET are registered trademarks of Computer Associates, Garden City, NY.

External Security

The VMCF and/or DMCF External Security interface allows system security rules to be written to control access to all VMCF and/or DMCF functions. Commands are described below to define resources and allow user access for three security packages: RACF, CA-ACF2, and CA-TOP SECRET.

System Security Requirements - General

To use the external security interface, your system security package must allow access through the MVS System Authorization Facility, which uses the MVS RACROUTE macro.

The VMCF and/or DMCF External Security Interface (modules VS80SCX1, VS80SCX2, VS80SCX3, VS80SCX4, and VS80SCX5) is provided to check authorization for users. The source of these programs is supplied for users who wish to customize the external security interface for their own environments. For more information on changing this interface, see [“External Security Interface Customization” on page 4.49](#).

The VMCF and/or DMCF External Security Interface requires that all VMCF and/or DMCF resources be defined in a special class. This allows the rules for that class to be brought into storage at VMCF and/or DMCF system initialization to make VMCF and/or DMCF user authorization checking more efficient.

System Security Requirements - RACF

For the VMCF and/or DMCF External Security interface to function properly, RACF should be at release 1.8 or later.²

The resource class for VMCF and/or DMCF must be added to the SAF general resource table (ICHRRCDE) in SYS1.LINKLIB or any other authorized linklist library. An IPL must be done to pick up this change.

The SAF class name is set using the SVSAF keyword of the LRS/MVS Server options member, and defaults to \$VPS. See “SVSAF” on page 3.33.

A sample table entry to create module ICHRRRCDE follows:

1	2	3	4	5	6	7
VPS	ICHERCDE CLASS=\$VPS,		CLASS NAME FOR VPS/VMCF RULES			X
	ID=nnn,		NUMBER 1 - 255 TO IDENTIFY.			X
	MAXLNTH=128,		SET MAXIMUM ENTITY LENGTH TO 128			X
	FIRST=ALPHANUM,		FIRST CHAR CAN BE ALPHA/NUM			X
	OTHER=ANY,		OTHER CHARS CAN BE ANY			X
	POSIT=nn,		INDICATES OPTION FLAGS (SEE NOTE)			X
	OPER=N		IGNORE OPERATIONS ATTRIBUTE			

Note: If you intend to create generic rules for access to VMCF and/or DMCF resources, be sure your POSIT number specified is unique or is used by other classes which allow generic profile access checking. See the RACF MACROS AND INTERFACES manual for more information on the ICHERCDE macro.

In addition, an entry must be made for the VMCF and/or DMCF class to allow using the SAF RACROUTE macro to communicate with the installation system security package. For example:

1	2	3	4	5	6	7
ICHRFR01	CSECT					
VPS	ICHRFR01 CLASS=\$VPS,		CLASS NAME FOR VPS RULES (SEE NOTE)			X
	ACTION=RACF		SEND REQUESTS TO RACF			
ENDTAB	ICHRFR01 TYPE=END		END OF TABLE.			
	END					

Note: The class name must be 4 to 8 characters in length and must consist of the following: A through Z, 0 through 9, # (X'7B'), @ (X'7C'), or \$ (X'5B'). The first character must be A through Z, # (X'7B'), @ (X'7C'), or \$ (X'5B'). Installations must include a # (X'7B'), @ (X'7C'), \$ (X'5B'), or numeric character in the name of any class they define in order to guarantee that installation-defined classes do not conflict with IBM-defined classes.

In order to activate the general resource class, the following command would be issued for RACF:

```
SETROPTS CLASSACT($VPS)
```

To allow generic profile checking, use the GENERIC keyword on the SETROPTS command in RACF:

```
SETROPTS GENERIC($VPS)
```

2. RACF is a product of International Business Machines Corporation.

For extended generic support, EGN can be specified on the SETROPTS command.

Entity names must be defined for each resource to be used for VMCF and/or DMCF access checking. All the resource names used by VMCF and/or DMCF are listed in “VMCF Resource Names” on page 4.10 and “DMCF Resource Names” on page 4.19.

For RACF, the RDEFINE command is used to define each resource. In the following example of the RDEFINE command, the universal access for this resource is set to NONE; rules must be written to allow access for each user or group.

RDEFINE \$VPS VPS.PRIMENU.ALL UACC(NONE)

If there is some resource that all users should have access to (for example, the default VPS STC name from the VMVPSSTC= keyword), universal access can be given with UACC(READ).

RDEFINE \$VPS VPS.STC.VPS80 UACC(READ)

If the RACF site has activated the APPL CLASS then the CLASS is verified by RACF for that USER. The commands required are:

**RDEFINE APPL VMCF
PERMIT VMCF CLASS(APPL) ID(user ID) ACCESS(READ)**

Note that when VMCF and/or DMCF is defined as an APPL CLASS, failure to allow a user READ access to that APPL will prevent the user from entering VMCF and/or DMCF. They will see the “AUTHORIZATION FAILURE” message from VMCF and/or DMCF, and RACF will issue an ICH408I message with RACF RC=34.

If universal access is set to NONE for a particular VMCF and/or DMCF resource, then individual rules must be written to permit users to have READ access. If you are using RACF, the PERMIT command is used to allow user access to a resource. The following command would allow the user named LRS000 to obtain all the options from the VMCF Primary Option Menu.

PERMIT VPS.PRIMENU.ALL CLASS(\$VPS) ID(LRS000) ACCESS(READ)

If you need to permit all RACF users within a group to access a VMCF and/or DMCF resource, the RACF group name can be specified on the PERMIT command. The following example shows allowing all users in group GRP000 to issue any command for a printer named PRT1.

PERMIT VPS.PCMD.ALL.PRT1 CLASS(\$VPS) ID(GRP000) ACCESS(READ)

To delete a resource defined in the class \$VPS, issue the following RACF command:

RDELETE \$VPS VPS.PCMD.SNAP.PRT2

If you would like to list all the resources defined with the general resource class named \$VPS, the following RACF command can be issued:

SEARCH CLASS(\$VPS) MASK(*)

To list all users who can access a specific resource, issue the following RACF command:

RLIST \$VPS VPS.PRIMENU.ALL AUTHUSER

In addition to RACF commands, a batch program is supplied with the LRS/MVS Server which will list all the resources in the \$VPS class and which users can access those resources. This program uses the EXTRACTN function and requires RACF Release 1.8.1 or later. In addition, the program must be executed from an authorized library.

Program source:	LRS.VSV.V1R80.ASM(VS80RACL)
Load module:	LRS.VSV.V1R80.LOAD(VS80RACL)
JCL to assemble/link using ASMA90:	LRS.VSV.V1R80.CNTL(RACLASMH)
JCL to execute:	LRS.VSV.V1R80.CNTL(RACLJCL)

Using Conditional Access

When using the OPERCMDS and JESSPOOL classes to control JES command access, if you use generic profiles to grant the user's access to all JES commands, the profiles not only include protection for generated JES commands within VMCF and/or DMCF, but also for those commands issued outside of VMCF and/or DMCF.

Because of this, you may want to make the user's access conditional and only in effect when he or she is using VMCF and/or DMCF. You can provide this conditional access for the OPERCMDS class. With RACF, this is done with the clause **WHEN(CONSOLE(VMCF))**.

To use this conditional access checking, you must have the CONSOLE class active and the VMCF and/or DMCF console defined in the CONSOLE class. For example, you would issue the following RACF commands:

```
SETROPTS CLASSACT(CONSOLE)  
RDEFINE CONSOLE VMCF UACC(READ)
```

Then, to give conditional access (to permit users to issue JES commands only while running VMCF and/or DMCF):

```
RDEFINE OPERCMDS JES2.** UACC(NONE)  
PERMIT JES2.** CLASS(OPERCMDS) ID(user ID or group ID) ACCESS(CONTROL) WHEN(CONSOLE(VMCF))
```

To permit users unconditionally to issue all JES commands:

```
PERMIT CLASS(OPERCMDS) JES2.** ID(user ID or group ID) ACCESS(CONTROL)
```

System Security Requirements - CA-ACF2

A SAF Interface is provided with the CA-ACF2 product³. To activate the interface, specify the SAF field on the GSO OPTS record. NOSAF is the default and indicates that the interface is not active. Set the field to SAF and perform a GSO REFRESH on the system console to activate the CA-ACF2 SAF interface.

To allow VMCF and/or DMCF to specify the CLASS name on the RACROUTE calls, the VMCF and/or DMCF CLASS name (default \$VPS) should be mapped to a TYPE in CA-ACF2. This is done by using a SAFMAPS record. In addition, SAFPROT records should be created to allow VMCF and/or DMCF to check authorization and to verify the password and/or user ID.

The SAFMAPS record allows all RACROUTE requests specifying the VMCF and/or DMCF CLASS name to be processed by CA-ACF2 as TYPE(tt). Any 1-3 character name can be specified. In the example below, "VPS" is mapped to \$VPS.

```
ACF
SET CONTROL(GSO)
SAFMAPS VPS/$VPS
```

With Release 6 of CA-ACF2, the SAFMAPS records have been replaced by CLASMAP records. The following CLASMAP record should be inserted:

```
CLASMAP.VPS RSRCTYPE(VPS) RESOURCE($VPS)
```

The SAFPROT record allows the VMCF and/or DMCF programs to issue RACROUTE calls which will be handled by CA-ACF2. Multiple SAFPROT records would be created: one type for the authorization calls which specify the CLASS \$VPS and another for the VERIFY calls to check password and/or user ID. These SAFPROT records could be combined by specifying multiple class names and by using standard CA-ACF2 masking techniques for the SUBSYS and CNTLPTS parameters.

A SAFPROT record can be qualified by appending a 1 to 8 character name (including the period, if used) to make the record unique. The record includes the name of the program which is in control when the RACROUTE call is made. This name is placed in the CNTLPTS and SUBSYS parameters. For more information on how this program name is determined, see the CA-ACF2 MVS SYSTEMS PROGRAMMERS GUIDE.

The following SAFPROT records will allow RACROUTE calls to check VMCF and/or DMCF user authorization. ".VMCF1" is an example of a name that might be associated with the SAFPROT record to make it unique. The CNTLPTS and SUBSYS program names will be VS80DRIV, VS80SCHA, VS80SCHT, and VS80SCHX.

```
ACF
SET CONTROL(GSO)
SAFPROT.VMCF1 CLASSES($VPS) CNTLPTS(VS80DRIV) SUBSYS(VS80DRIV)
SAFPROT.VMCF2 CLASSES($VPS) CNTLPTS(VS80SCHA) SUBSYS(VS80SCHA)
SAFPROT.VMCF3 CLASSES($VPS) CNTLPTS(VS80SCHT) SUBSYS(VS80SCHT)
SAFPROT.VMCF4 CLASSES($VPS) CNTLPTS(VS80SCHX) SUBSYS(VS80SCHX)
```

3. CA-ACF2 is a registered trademark of Computer Associates, Garden City, NY.

An additional SAFPROT record is needed to allow RACROUTE calls to verify the password and/or user ID and create the user environment. Since no class is specified on such a call, the CLASS is entered as “VERIFY”. The name appended to the SAFPROT record below is an example of a name that might be associated with the SAFPROT record to make it unique.

```
ACF
SET CONTROL(GSO)
SAFPROT.VMCF4 CLASSES(VERIFY) CNTLPTS(VT81SCHD) SUBSYS(VT81SCHD)
```

SAFPROT records can be combined, if desired. For example:

```
SAFPROT.VMCF1 CLASSES($VPS VERIFY) CNTLPTS(VS80DRIV) SUBSYS(VS80DRIV)
```

With Release 6 of CA-ACF2, the SAFPROT records have been replaced by SAFDEF records. The following SAFDEF records may be inserted to run VMCF and/or DMCF. The suffix on the CLASMAP and SAFDEF keywords may specify any unique qualifier, and the ID keyword provides up to 8 characters to identify the record. Masking techniques can be used for the PROGRAM and RB names, if desired. For some CA-ACF2 environments, SAFDEF statements may not be required.

```
SAFDEF.VMCFT1 ID(VMCFT1) MODE(GLOBAL) RB(VS80SCHA) PROGRAM(VS80SCHA)
SAFDEF.VMCFT2 ID(VMCFT2) MODE(GLOBAL) RB(VS80SCHT) PROGRAM(VS80SCHT)
SAFDEF.VMCFT3 ID(VMCFT3) MODE(GLOBAL) RB(VS80SCHX) PROGRAM(VS80SCHX)
RACROUTE(REQUEST=FASTAUTH,CLASS=$VPS)
```

```
SAFDEF.VMCFT4 ID(VMCFT4) MODE(GLOBAL) RB(VS80SCHA) PROGRAM(VS80SCHA)
SAFDEF.VMCFT5 ID(VMCFT5) MODE(GLOBAL) RB(VS80SCHT) PROGRAM(VS80SCHT)
SAFDEF.VMCFT6 ID(VMCFT6) MODE(GLOBAL) RB(VS80SCHX) PROGRAM(VS80SCHX)
RACROUTE(REQUEST=AUTH,CLASS=$VPS)
```

```
SAFDEF.VMCFT7 ID(VMCFT7) MODE(GLOBAL) RB(VS80DRIV) PROGRAM(VS80DRIV)
RACROUTE(REQUEST=LIST,CLASS=$VPS)
```

```
SAFDEF.VMCFT8 ID(VMCFT8) MODE(GLOBAL) RB(VS80SCHA) PROGRAM(VS80SCHA)
SAFDEF.VMCFT9 ID(VMCFT9) MODE(GLOBAL) RB(VS80SCHT) PROGRAM(VS80SCHT)
SAFDEF.VMCFT10 ID(VMCFT10) MODE(GLOBAL) RB(VS80SCHX) PROGRAM(VS80SCHX)
RACROUTE(REQUEST=VERIFY)
```

To define VMCF and/or DMCF resources and allow users access, resource rule records should be created. The following example shows giving the VMCF and/or DMCF authority associated with the resource name “VPS.ALL” to all users whose UID strings begin with “SYSPG” and to all users whose UID strings begin with “OPER”:

```
ACF
SET RESOURCE(VPS)
$KEY(VPS.ALL) TYPE(VPS)
UID(SYSPG) ALLOW
UID(OPER) ALLOW
```

All resource names used by VMCF and/or DMCF for user authorization checking are listed in [“VMCF Resource Names” on page 4.10](#) and [“DMCF Resource Names” on page 4.19](#).

You can specify LIST or DECOMP commands to list all rules within a resource type. If you mapped the CLASS of \$VPS to a resource type of VPS in a SAFMAPS record, the following would list all VMCF and/or DMCF resource rules for names which begin with "VPS" and are 40 characters or less.

```
ACF
SET RESOURCE(VPS)
LIST LIKE('VPS*****')
```

CA-ACF2 provides a utility named ACFBDCMP to list rules in a rule set. See the CA-ACF2 ADMINISTRATOR GUIDE for more information about listing CA-ACF2 resource rules.

System Security Requirements - CA-TOP Secret

An interface is provided with the CA-TOP SECRET product to handle calls made through the MVS SAF interface, which uses the RACROUTE macro⁴. In order to accept RACROUTE macro calls which specify a CLASS of \$VPS, the class should be defined to CA-TOP SECRET in the Resource Descriptor Table. The following command will add the \$VPS class to the RDT:

```
TSS ADDTO(RDT) RESCLASS($VPS) RESCODE(xx) ATTR(DEFPROT,LONG,GENERIC)
```

RESCLASS specifies the CLASS name to be used on RACROUTE calls.

RESCODE specifies a two-digit hexadecimal code which is used internally by CA-TOP SECRET to identify the resources of this class. Choose a unique number between 01 and 3F for the \$VPS class.

ATTR specifies the attributes for resources in this class. DEFPROT protects this resource class by default; LONG allows resource names up to 44 characters in length; GENERIC supports generic prefixing for this resource class. Depending on your release of CA-TOP SECRET, some ATTR values may not be supported.

Other parameters can be specified when adding the \$VPS class; see CA-TOP SECRET MVS TSS COMMAND FUNCTIONS GUIDE for more information.

When the resource class is defined to CA-TOP SECRET, you may need to associate an owner with the class. To add an owner for the \$VPS class, where CMISDEPT is the owner ID, issue the following command:

```
TSS ADDTO(CMISDEPT) $VPS(VPS)
```

A facility must be defined to CA-TOP SECRET to allow VMCF and/or DMCF to issue a RACROUTE/VERIFY macro to check the password and/or user ID and to create the user environment.

```
FAC(VMCF=NOABEND,NOASUBM,NOAUDIT,AUTHINIT,NOLUMSG)
```

```
FAC(VMCF=MULTIUSER,NONPWR,NORNDPW,RES)
```

```
FAC(VMCF=SIGN(S),SHRPRE,NOTRACE,NOSTMSG,NOTSOC,NOXDEF)
```

- Additional CA-TOP SECRET commands may be needed to allow DMCF/VTAM or VMCF/VTAM to run as an started task or to access datasets.

PERMIT commands must be issued to establish user authorization. For example, to allow a user to access VMCF functions protected by the resource name "VPS.ALL", the following would be issued:

```
TSS PERMIT(LRS000) $VPS(VPS.ALL) ACCESS(READ)
```

All resource names used by VMCF and/or DMCF for user authorization checking are listed in ["VMCF Resource Names" on page 4.10](#) and ["DMCF Resource Names" on page 4.19](#).

The CA-TOP SECRET command WHOHAS allows listing user access to a resource or a set of resources. To list resources in CLASS of \$VPS which begin with "VPS.", the following could be issued:

```
TSS WHOHAS $VPS(VPS.)
```

For users of CA-TOP SECRET who wish to minimize logging for calls made by the VMCF and/or DMCF External Security Interface, specify X'08' in the fifth positional parameter of the SVSAF keyword in the LRS/MVS Server options member.

For more information, see ["SVSAF" on page 3.33](#).

4. CA-TOP SECRET is a registered trademark of Computer Associates, Garden City, NY.

VMCF Resource Names

VMCF builds resource names to check user authorization for each VMCF function. All the names which are used for access checking are listed below.

READ access to the resources listed below will establish the user's authority to perform VMCF functions and commands.

VPS "ALL" AUTHORIZATION

Establishes the VMCF "Global" authority.

VPS.ALL Authorizes the user to access all VMCF functions except JES printers and JES commands. JES printer authorization requires access to VPS.JESPRTR. JES command authorization is checked by JOBNAME.

VPS NAME AUTHORIZATION

Establishes the names of the VPS systems to be controlled by a user.

VPS.STC.ALL Authorizes the user to control any VPS started task.

VPS.STC.stcname Authorizes the user to control a specific VPS started task. (All users must have access to the default VPS STC name)

VPS SYSTEM COMMAND AUTHORIZATION

Establishes the VPS system command authorization for a user.

VPS.SCMD.ABEND	Authorizes the user to abend the VPS system via the ABEND command.
VPS.SCMD.CLOSELOG	Authorizes the user to close the VPS log dataset via the CLOSELOG command.
VPS.SCMD.END	Authorizes the user to terminate the VPS system via the END command.
VPS.SCMD.LOG	Authorizes the user to place messages in the VPS log dataset via the VPS LOG command.
VPS.SCMD.POST	Authorizes the user to post the VPS dispatcher to locate work for idle printers.
VPS.SCMD.REFRESH	Authorizes the user to refresh the news for all VPS printers via the REFRESH,NEWS command.
VPS.SCMD.SNAP	Authorizes the user to SNAP the VPS system control blocks via the SNAP command.
VPS.SCMD.SSET.AFPCACHE	Authorizes the user to issue AFPCACHE commands via the VPS SSET command.
VPS.SCMD.SSET.EXIT	Authorizes the user to enable and disable VPS user exits via the VPS SSET command.
VPS.SCMD.SSET.INTERVAL	Authorizes the user to set the VPS wait interval via the SSET command.
VPS.SCMD.SSET.LOG	Authorizes the user to set logging ON and OFF via the VPS SSET command.
VPS.SCMD.SSET.MAXACT	Authorizes the user to set the maximum number of busy printers via the VPS SSET command.
VPS.SCMD.SSET.TCPIP	Authorizes the user to enable and disable the VPS TCP/IP connection via the VPS SSET command.
VPS.SCMD.SSET.TRYPES	Authorizes the user to set the VPS system trace types via the VPS SSET command.
VPS.SCMD.SSET.ALL	Authorizes the user to set all of the options listed above via the VPS SSET command.
VPS.SCMD.SSET.NONE	Authorizes the user to set none of the options listed above via the VPS SSET command.
VPS.SCMD.SSTAT	Authorizes the user log and reset the VPS system statistics.
VPS.SCMD.ALL	Authorizes the user to issue all of the above VPS system commands.
VPS.SCMD.NONE	Authorizes the user to issue none the above VPS system commands.

MVS COMMAND AUTHORIZATION

Establishes the MVS system command authorization for a user.

VPS.MVSCMD.START	Authorizes the user to start a VPS system via the MVS START command.
VPS.MVSCMD.STOP	Authorizes the user to halt a VPS system immediately via the MVS STOP command.
VPS.MVSCMD.ALL	Authorizes the user to issue all of the above MVS commands.
VPS.MVSCMD.NONE	Authorizes the user to issue none of the above MVS commands.

JES COMMAND AUTHORIZATION

Establishes the JES system command authorization for a user.

VPS.JESCMD.BROWSE.jobname	Authorizes the user to browse output for a specific JOB.
VPS.JESCMD.CANCEL.jobname	Authorizes the user to cancel output for a specific JOB.
VPS.JESCMD.HOLD.jobname	Authorizes the user to hold output for a specific JOB.
VPS.JESCMD.RELEASE.jobname	Authorizes the user to release output for a specific JOB.
VPS.JESCMD.ROUTE	Authorizes the user to route output to another destination.
VPS.JESCMD.SET.jobname	Authorizes the user to modify output characteristics for a specific JOB.

JES PRINTER AUTHORIZATION

Establishes the JES printer access authorization for a user.

VPS.JESPRTR	Authorizes the user to access JES and PSF printers. Additional authorization must be allowed by specific or generic printer name.
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VPS MENU OPTION AUTHORIZATION

Establishes the VMCF Primary Menu option list for a user.

VPS.PRIMENU.DRS	Authorizes the user to access the DMCF Primary Options Menu (Option D).
VPS.PRIMENU.PAGECTR	Authorizes the user to access the PageCenter Primary Options Menu (Option P).
VPS.PRIMENU.PARM	Authorizes the user to access the VMCF Parameter Options screen (Option 0).
VPS.PRIMENU.PCMDS	Authorizes the user to access the VMCF Printer Command Menu (Option 1 or C).
VPS.PRIMENU.PLIST	Authorizes the user to access the VMCF Printer Display screens (Option 2 or S.)

VPS.PRIMENU.PQUEUE	Authorizes the user to access the VMCF Printer Queue Display (Option H or Q).
VPS.PRIMENU.SCMDS	Authorizes the user to access the VPS Started Task List screen (Option 3).
VPS.PRIMENU.SERVER	Authorizes the user to access the Server Options Menu (Option 4).
VPS.PRIMENU.SOPTS	Authorizes the user to access the VPS System Options screens.
VPS.PRIMENU.SSTATS	Authorizes the user to access the VPS System Statistics screens.
VPS.PRIMENU.VMCFVTAM	Authorizes the user to access the VMCF/VTAM menus (Option V).
VPS.PRIMENU.ALL	Authorizes the user to access all the screens listed above.

VPS SYSTEM AUTHORIZATION

Establishes the VPS System authorization for a user.

VPS.SYSAUTH.AFPCACHE.VIEW	Authorizes the user to display VPS AFPCACHE information.
VPS.SYSAUTH.DIAG	Authorizes the user to display VPS diagnostic information (i.e., VPS control blocks and trace tables).
VPS.SYSAUTH.GBLVIEW	Authorizes the user to create and modify VMCF Global Views.
VPS.SYSAUTH.GROUP	Authorizes the user to specify a specific or generic group name when issuing VPS printer commands (i.e., INACTIVATE, START, and STOP).
VPS.SYSAUTH.PROFILE	Authorizes the user to profile to another user ID via the VMCF PROFILE command.
VPS.SYSAUTH.SAF	Authorizes the user to issue the SAF REFRESH command to re-create the in-storage SAF rules.
VPS.SYSAUTH.STATUS	Authorizes the user to specify a printer status (i.e., A-active, D-drained, E-error drained, I-idle, M-missing response, or W-wconnect) when issuing VPS printer commands (i.e., INACTIVATE, START, and STOP). Caution: Distributing STATUS authority to end users will allow them to affect ANY VPS printer in the specified state.
VPS.SYSAUTH.ALL	Authorizes the user to perform all the above system functions.
VPS.SYSAUTH.NONE	Authorizes the user to perform none of the above system functions.

VPS PRINTER COMMAND AUTHORIZATION

Establishes the VPS Printer Command authorization for a user. The “prtrid” can be the member name, network name (LUNAME), VPS group name, IP name|address, or long printer name (PRTNAME). Note that the ACTIVATE command requires the member name be specified.

By default, the external security module will check the “prtrid” names in the following order: member name, LUNAME, and group name. The 5th positional parameter of the SVSAF keyword, in the LRS/MVS Server options member, can be used to control the values used for the “prtrid” as follows:

- X’8000’** Bypass member name for “prtrid” for security calls.
- X’4000’** Bypass LUNAME for “prtrid” for security calls.
- X’2000’** Bypass VPS group name for “prtrid” for security calls.
- X’0080’** Use IP name|address for “prtrid” for security calls.
- X’0040’** Use PRTNAME for “prtrid” for security calls. Note that any blanks with the PRTNAME will be replaced with underscores when building the resource name.

See “SVSAF” on page 3.33 for more information.

VPS.PCMD.ACQUIRE.prtrid	Authorizes the user to issue the VPS ACQUIRE command for a specific printer.
VPS.PCMD.ACTIVATE.prtrid	Authorizes the user to issue the VPS ACTIVATE command for a specific printer.
VPS.PCMD.CANCEL.prtrid	Authorizes the user to issue the VPS CANCEL command for a specific printer.
VPS.PCMD.DISPLAY.prtrid	Authorizes the user to issue the VPS DISPLAY command for a specific printer.
VPS.PCMD.EXPIRE.prtrid	Authorizes the user to issue the VPS EXPIRE command to purge SYSOUT files for a printer or group of printers.
VPS.PCMD.INACTIVATE.prtrid	Authorizes the user to issue the VPS INACTIVATE command for a specific printer.
VPS.PCMD.INTERRUPT.prtrid	Authorizes the user to issue the VPS INTERRUPT command for a specific printer.
VPS.PCMD.REACTIVATE.prtrid	Authorizes the user to issue the VPS REACTIVATE command for a specific printer.
VPS.PCMD.RELEASE.prtrid	Authorizes the user to issue the VPS RELEASE command for a specific printer.
VPS.PCMD.REPEAT.prtrid	Authorizes the user to issue the VPS REPEAT command for a specific printer.
VPS.PCMD.REPOSITION.prtrid	Authorizes the user to issue the VPS REPOSITION command for a specific printer.
VPS.PCMD.RESTART.prtrid	Authorizes the user to issue the VPS RESTART command for a specific printer.

VPS.PCMD.SNAP.prtrid	Authorizes the user to issue the VPS SNAP command for a specific printer.
VPS.PCMD.START.prtrid	Authorizes the user to issue the VPS START command for a specific printer.
VPS.PCMD.STOP.prtrid	Authorizes the user to issue the VPS STOP command for a specific printer.
VPS.PCMD.ALL.prtrid	Authorizes the user to issue any of the VPS commands listed above for a specific printer.
VPS.PCMD.NONE.prtrid	Authorizes the user to issue no VPS commands for a specific printer.
VPS.PCMD.SEL.CLASS.prtrid	Authorizes the user to issue the VPS SEL command to change the class list for a specific printer.
VPS.PCMD.SEL.DEST.prtrid	Authorizes the user to issue the VPS SEL command to change the destination for a specific printer.
VPS.PCMD.SEL.FORM.prtrid	Authorizes the user to issue the VPS SEL command to change the form name for a specific printer.
VPS.PCMD.SEL.WRITER.prtrid	Authorizes the user to issue the VPS SEL command to change the writer name for a specific printer.
VPS.PCMD.SEL.ALL.prtrid	Authorizes the user to change all selection criteria for a specific printer.
VPS.PCMD.SEL.NONE.prtrid	Authorizes the user to change NO selection criteria for a specific printer.
VPS.PCMD.SET.AEJECT.prtrid	Authorizes the user to issue the VPS SET command to change the AUTOEJECT options for a specific printer.
VPS.PCMD.SET.JESLVL1.prtrid	Authorizes the user to issue a JES SET command to change the following options for a JES or PSF printer: BURST, CHARS, COMPACT, COPYMARK, COPYMOD, FCB, FLASH, MARK, PRMODE, SEP, and UCS
VPS.PCMD.SET.JESLVL2.prtrid	Authorizes the user to issue a JES SET command to change the following options for a JES or PSF printer: CKPTLINE, CKPTMODE, CKPTPAGE, CKPTSEC, FSSNAME, JOBNAME, LIM, MODE, NPRO, PAUSE, PLIM, PRESELCT, RANGE, SPACE, SUSPEND, TRACE, and VOLUME
VPS.PCMD.SET.MAXLPG.prtrid	Authorizes the user to issue the VPS SET command to change the MAXLPG option for a specific printer.

VPS.PCMD.SET.RELREQ.prtrid	Authorizes the user to issue the VPS SET command to change the RELREQ option for a specific printer.
VPS.PCMD.SET.RQDELT.prtrid	Authorizes the user to issue the VPS SET command to change the RQDELT option for a specific printer.
VPS.PCMD.SET.RQHOLD.prtrid	Authorizes the user to issue the VPS SET command to change the RQHOLD option for a specific printer.
VPS.PCMD.SET.RQLIMIT.prtrid	Authorizes the user to issue the VPS SET command to change the RQLIMIT option for a specific printer.
VPS.PCMD.SET.RQOUTP.prtrid	Authorizes the user to issue the VPS SET command to change the RQOUTP options for a specific printer.
VPS.PCMD.SET.RQROUTE.prtrid	Authorizes the user to issue the VPS SET command to change the RQROUTE option for a specific printer.
VPS.PCMD.SET.SEPARATOR.prtrid	Authorizes the user to issue the VPS SET command to change the SEPARATOR option for a specific printer.
VPS.PCMD.SET.SNAP.prtrid	Authorizes the user to issue the VPS SET command to change the SNAP option for a specific printer.
VPS.PCMD.SET.TCPHOST.prtrid	Authorizes the user to issue the VPS SET command to change the TCPHOST option for a specific printer.
VPS.PCMD.SET.TPUT.prtrid	Authorizes the user to issue the VPS SET command to change the TPUT option for a specific printer.
VPS.PCMD.SET.TRACE.prtrid	Authorizes the user to issue the VPS SET command to change the TRACE options for a specific printer.
VPS.PCMD.SET.ALL.prtrid	Authorizes the user to issue the VPS SET command to change any of the above options for a specific printer.
VPS.PCMD.SET.NONE.prtrid	Authorizes the user to issue the VPS SET command to change none of the above options for a specific printer.

VPS PRINTER QUEUE AUTHORIZATION

Establishes the VPS Printer Output Queue Display and VPS Printer Held Queue Display authorization list. The “prtrid” can be the member name, network name (LUNAME), VPS group name, IP name|address, or long printer name (PRTNAME).

By default, the external security module will check the “prtrid” names in the following order: member name, LUNAME, and group name. The 5th positional parameter of the SVSAF keyword, in the LRS/MVS Server options member, can be used to control the values used for the “prtrid” as follows:

- X’8000’** Bypass member name for “prtrid” for security calls.
- X’4000’** Bypass LUNAME for “prtrid” for security calls.
- X’2000’** Bypass VPS group name for “prtrid” for security calls.
- X’0080’** Use IP name|address for “prtrid” for security calls.
- X’0040’** Use PRTNAME for “prtrid” for security calls. Note that any blanks with the PRTNAME will be replaced with underscores when building the resource name.

See “SVSAF” on page 3.33 for more information.

VPS.QUEUE.BROWSE.prtrid	Authorizes the user to browse output queued for a specific printer.
VPS.QUEUE.DELETE.prtrid	Authorizes the user to delete output queued for a specific printer.
VPS.QUEUE.DISPLAY.prtrid	Authorizes the user to display output queued for a specific printer.
VPS.QUEUE.HOLD.prtrid	Authorizes the user to hold output queued for a specific printer.
VPS.QUEUE.RELEASE.prtrid	Authorizes the user to release output queued for a specific printer.
VPS.QUEUE.ALL.prtrid	Authorizes the user to perform QUEUE functions BROWSE, DELETE, DISPLAY, HOLD, and RELEASE.
VPS.QUEUE.NONE.prtrid	Authorizes the user to perform none of the above QUEUE functions.
VPS.QUEUE.SEL.CLASS.prtrid	Authorizes the user to modify the class list for selection criteria on the VPS Printer Output Queue and VPS Printer Held Queue screens.
VPS.QUEUE.SEL.DEST.prtrid	Authorizes the user to modify the destination for selection criteria on the VPS Printer Output Queue and VPS Printer Held Queue screens.
VPS.QUEUE.SEL.FORM.prtrid	Authorizes the user to modify the form name for selection criteria on the VPS Printer Output Queue and VPS Printer Held Queue screens.
VPS.QUEUE.SEL.WRITER.prtrid	Authorizes the user to modify the writer name for selection criteria on the VPS Printer Output Queue and VPS Printer Held Queue screens.

VPS.QUEUE.SEL.ALL.prtrid	Authorizes the user to modify all selection criteria on the VPS Printer Output Queue and VPS Printer Held Queue screens.
VPS.QUEUE.SEL.NONE.prtrid	Authorizes the user to modify no selection criteria on the VPS Printer Output Queue and VPS Printer Held Queue screens.
VPS.QUEUE.SET.CLASS.prtrid	Authorizes the user to modify the SYSOUT class of the JES output.
VPS.QUEUE.SET.DEST.prtrid	Authorizes the user to modify the destination of the JES output.
VPS.QUEUE.SET.FCB.prtrid	Authorizes the user to modify the FCB name of the JES output.
VPS.QUEUE.SET.FORM.prtrid	Authorizes the user to modify the form name of the JES output.
VPS.QUEUE.SET.PRI.prtrid	Authorizes the user to modify the priority of the JES output.
VPS.QUEUE.SET.WRITER.prtrid	Authorizes the user to modify the writer name of the JES output.
VPS.QUEUE.SET.ALL.prtrid	Authorizes the user to modify all the above output characteristics for JES output.
VPS.QUEUE.SET.NONE.prtrid	Authorizes the user to modify none of the above output characteristics for JES output.

DMCF Resource Names

DMCF builds resource names to check user authorization for each DMCF function. All the names which are used for access checking are listed below.

READ access to the resources listed below will establish the user's authority to perform DMCF functions and commands.

DRS "ALL" AUTHORIZATION

Establishes the DMCF "Global" authority.

DRS.ALL Authorizes the user to access all DMCF functions.

DRS NAME AUTHORIZATION

Establishes the names of the DRS systems to be controlled by a user.

DRS.STC.ALL Authorizes the user to control any DRS started task.

DRS.STC.stcname Authorizes the user to control a specific DRS started task. (All users must have access to the default DRS STC name)

| **Note:** User must be authorized for VPS.PRIMENU.DRS to access DMCF.

DRS SYSTEM COMMAND AUTHORIZATION

Establishes the DRS system command authorization for a user.

DRS.SCMD.ABEND	Authorizes the user to abend the DRS system via the ABEND command.
DRS.SCMD.CLOSELOG	Authorizes the user to close the DRS log dataset via the CLOSELOG command.
DRS.SCMD.END	Authorizes the user to terminate the DRS system via the END command.
DRS.SCMD.LOG	Authorizes the user to place messages in the DRS log dataset via the DRS LOG command.
DRS.SCMD.SNAP	Authorizes the user to SNAP the DRS system control blocks via the SNAP command.
DRS.SCMD.SSET.EXIT	Authorizes the user to enable and disable DRS user exits via the DRS SSET command.
DRS.SCMD.SSET.LOG	Authorizes the user to set logging ON and OFF via the DRS SSET command.
DRS.SCMD.SSET.MAXTCPIP	Authorizes the user to set the maximum number of TCPIP virtual printers via the DRS SSET command.
DRS.SCMD.SSET.MAXVTAM	Authorizes the user to set the maximum number of VTAM virtual printers via the DRS SSET command.
DRS.SCMD.SSET.TCPIP	Authorizes the user to enable and disable the DRS TCP/IP connection via the DRS SSET command.
DRS.SCMD.SSET.TRYPES	Authorizes the user to set the DRS system trace types via the DRS SSET command.
DRS.SCMD.SSET.ALL	Authorizes the user to set all of the options listed above via the DRS SSET command.
DRS.SCMD.SSET.NONE	Authorizes the user to set none of the options listed above via the DRS SSET command.
DRS.SCMD.ALL	Authorizes the user to issue all of the above DRS system commands.
DRS.SCMD.NONE	Authorizes the user to issue none the above DRS system commands.

MVS COMMAND AUTHORIZATION

Establishes the MVS system command authorization for a user.

DRS.MVSCMD.START	Authorizes the user to start a DRS system via the MVS START command.
DRS.MVSCMD.STOP	Authorizes the user to halt a DRS system immediately via the MVS STOP command.
DRS.MVSCMD.ALL	Authorizes the user to issue all of the above MVS commands.
DRS.MVSCMD.NONE	Authorizes the user to issue none of the above MVS commands.

DRS MENU OPTION AUTHORIZATION

Establishes the DMCF Primary Menu option list for a user.

DRS.PRIMENU.OUTREF	Authorizes the user to access the DMCF Output Reference Display (Option 6).
DRS.PRIMENU.PARM	Authorizes the user to access the DMCF Parameter Options screen (Option 0).
DRS.PRIMENU.PCMDS	Authorizes the user to access the DMCF Printer Command Menu (Option 1 or C).
DRS.PRIMENU.PLIST	Authorizes the user to access the DMCF Printer Display screens (Option 2 or S.)
DRS.PRIMENU.PTRACK	Authorizes the user to access the DMCF Printer Tracking Display (Option 7).
DRS.PRIMENU.SCMLS	Authorizes the user to access the DRS Started Task List screen (Option 3).
DRS.PRIMENU.SERVER	Authorizes the user to access the Server Options Menu (Option 4).
DRS.PRIMENU.SOPTS	Authorizes the user to access the DRS System Options screens.
DRS.PRIMENU.SSTATS	Authorizes the user to access the DRS System Statistics screens.
DRS.PRIMENU.VTAM	Authorizes the user to access the LRS/VTAM menus (Option V).
DRS.PRIMENU.ALL	Authorizes the user to access all the screens listed above.

DRS SYSTEM AUTHORIZATION

Establishes the DRS System authorization for a user.

DRS.SYSAUTH.DIAG	Authorizes the user to display DRS diagnostic information (i.e., DRS control blocks and trace tables).
DRS.SYSAUTH.GBLVIEW	Authorizes the user to create and modify DMCF Global Views.
DRS.SYSAUTH.GROUP	Authorizes the user to specify a specific or generic group name when issuing DRS printer commands (i.e., INACTIVATE, START, and STOP).
DRS.SYSAUTH.STATUS	Authorizes the user to specify a printer status (i.e., A-active, D-drained, E-error drained, or I-idle) when issuing DRS printer commands (i.e., INACTIVATE, START, and STOP). Caution: Distributing STATUS authority to end users will allow them to affect ANY DRS printer in the specified state.
DRS.SYSAUTH.ALL	Authorizes the user to perform all the above system functions.
DRS.SYSAUTH.NONE	Authorizes the user to perform none of the above system functions.

JES COMMAND AUTHORIZATION

Establishes the JES system command authorization for a user.

DRS.JESCMD.BROWSE.jobname Authorizes the user to browse output for a specific JOB.

DRS PRINTER COMMAND AUTHORIZATION

Establishes the DRS Printer Command authorization for a user. The “prtrid” can be the member name, DRS group name, or long printer name (PRTNAME). Note that the ACTIVATE command requires the member name be specified.

DRS.PCMD.ACTIVATE.prtrid	Authorizes the user to issue the DRS ACTIVATE command for a specific printer.
DRS.PCMD.DISPLAY.prtrid	Authorizes the user to issue the DRS DISPLAY command for a specific printer.
DRS.PCMD.INACTIVATE.prtrid	Authorizes the user to issue the DRS INACTIVATE command for a specific printer.
DRS.PCMD.REACTIVATE.prtrid	Authorizes the user to issue the DRS REACTIVATE command for a specific printer.
DRS.PCMD.PURGE.prtrid	Authorizes the user to issue the DRS PURGE command for a specific printer.
DRS.PCMD.SNAP.prtrid	Authorizes the user to issue the DRS SNAP command for a specific printer.
DRS.PCMD.START.prtrid	Authorizes the user to issue the DRS START command for a specific printer.
DRS.PCMD.STOP.prtrid	Authorizes the user to issue the DRS STOP command for a specific printer.
DRS.PCMD.ALL.prtrid	Authorizes the user to issue any of the DRS commands listed above for a specific printer.
DRS.PCMD.NONE.prtrid	Authorizes the user to issue no DRS commands for a specific printer.
DRS.PCMD.SET.TRACE.prtrid	Authorizes the user to issue the DRS SET command to change the TRACE options for a specific printer.
DRS.PCMD.SET.ALL.prtrid	Authorizes the user to issue the DRS SET command to change any of the above options for a specific printer.
DRS.PCMD.SET.NONE.prtrid	Authorizes the user to issue the DRS SET command to change none of the above options for a specific printer.

DRS PRINT TRACKING AUTHORIZATION

Establishes the DRS Print Tracking Display authorization list. The “prtrid” can be the member name, DRS group name, or long printer name (PRTNAME).

By default, the external security module will check the “prtrid” names in the following order: member name, PRTNAME (if requested), and group name. The 5th positional parameter of the SVSAF keyword, in the LRS/MVS Server options member, can be used to control the values used for the “prtrid” as follows:

- X’8000’** Bypass member name for “prtrid” for security calls.
- X’2000’** Bypass DRS group name for “prtrid” for security calls.
- X’0040’** Use PRTNAME for “prtrid” for security calls. Note that any blanks with the PRTNAME will be replaced with underscores when building the resource name.

See “[SVSAF](#)” on page 3.33 for more information.

DRS.QUEUE.BROWSE.prtrid	Authorizes the user to browse output queued by a specific printer.
DRS.QUEUE.ALL.prtrid	Authorizes the user to perform QUEUE function BROWSE.
DRS.QUEUE.NONE.prtrid	Authorizes the user to not perform the above QUEUE function.

Internal Security

Two macro instructions, VMCFDFLT and VMCFSEC, are used in generating the VMCF and/or DMCF security table. The VMCFDFLT macro is optional and can be used to generate default values for the VMCFSEC macro parameters. The VMCFSEC macro is used to control the functions available to each VMCF and/or DMCF user. Following is a detailed description of both the VMCFDFLT and VMCFSEC macro instructions.

VMCFDFLT Macro

The VMCFDFLT macro is used to generate default values for the VMCFSEC macro parameters. Use of this macro relieves the installer from the task of specifying every parameter on each VMCFSEC macro definition. When used properly, this macro can significantly reduce the coding effort needed to generate the VMCF and/or DMCF security table.

Three different types of default parameters, USER, PRINTER, and DRSPRTR can be generated via the VMCFDFLT macro. The TYPE= keyword is used to specify the type of default parameters to be generated. Specifying TYPE=USER allows the user to establish default parameters for the VMCFSEC TYPE=USER, TYPE=CRT, and TYPE=DEFAULT macro instructions. Specifying TYPE=PRINTER allows the user to establish default parameters for the VMCFSEC TYPE=PRINTER and TYPE=GROUP macro instructions. Specifying TYPE=DRSPRTR allows the user to establish default parameters for the VMCFSEC TYPE=DRSPRTR macro instructions.

Once set, the default parameters remain in effect until another VMCFDFLT macro is encountered. This macro can be coded anywhere within the VMCF and/or DMCF security table and as many times as desired. The default parameters can easily be nullified by coding the VMCFDFLT macro with only the TYPE= keyword specified as follows:

VMCFDFLT TYPE=USER

VMCFDFLT TYPE=PRINTER

VMCFDFLT TYPE=DRSPRTR

The default parameters generated via the VMCFDFLT macro are only used if the corresponding parameters on the VMCFSEC macro are omitted.

The VMCFDFLT macro is written as follows:

b	One or more blanks must precede VMCFDFLT.
VMCFDFLT	
b	One or more blanks must follow VMCFDFLT.
TYPE=USER PRINTER DRSPRTR	
{,DRSAUTH=}	Only applicable for TYPE=USER.
{,DRSMENU=}	Only applicable for TYPE=USER.
{,DRSQE=}	Only applicable for TYPE=DRSPRTR.
{,DRSSTC=}	Only applicable for TYPE=USER.
{,MENUOPT=}	Only applicable for TYPE=USER.
{,SYSAUTH=}	Only applicable for TYPE=USER.
{,VPSSTC=}	Only applicable for TYPE=USER.
{,CMDAUTH=}	Only applicable for TYPE=PRINTER or TYPE=DRSPRTR.
{,SELAUTH=}	Only applicable for TYPE=PRINTER.
{,SETAUTH=}	Only applicable for TYPE=PRINTER or TYPE=DRSPRTR.
{,QUEAUTH=}	Only applicable for TYPE=PRINTER.
{,QUESEL=}	Only applicable for TYPE=PRINTER.
{,QUESET=}	Only applicable for TYPE=PRINTER.

Brackets, {}, are used to enclose optional parameters, which may or may not be coded. If a parameter is not coded, the default for that parameter will be used.

The parameters of the VMCFDFLT macro are explained below:

TYPE=	USER PRINTER DRSPRTR
USER	Establishes default parameters for the VMCFSEC TYPE=USER, TYPE=CRT, and TYPE=DEFAULT macro instructions.
PRINTER	Establishes default parameters for the VMCFSEC TYPE=PRINTER and VMCFSEC TYPE=GROUP macro instructions.
DRSPRTR	Establishes default parameters for the VMCFSEC TYPE=DRSPRTR macro instruction.
DRSMENU=	(DMCF Primary Option Menu options list, separated by commas.) Establishes the default DMCF Primary Option Menu options. This parameter is only applicable if TYPE=USER was specified. Default is NONE. Valid values are:
OUTREF	Authorizes the user to access the DRS Output Reference Display screens from the DMCF Primary Option Menu (Option 6).
PARM	Authorizes the user to access the DMCF Parameter Options screen (Option 0).

PCMDS	Authorizes the user to access the DMCF Printer Command Menu screen (Option 1 or C).
PLIST	Authorizes the user to access the DMCF Printer Display screens (Option 2 or S).
PTRACK	Authorizes the user to access the DMCF Print Tracking Display screens (Option 7).
SCMDS	Authorizes the user to access the DRS Started Task List screen (Option 3).
SERVER	Authorizes the user to access the Server Options menu (Option 4).
SOPTS	Authorizes the user to access the DRS System Options screen.
SSTATS	Authorizes the user to access the DRS System Statistics screen.
VTAM	Authorizes the user to access the DMCF/VTAM menus (Option V).
ALL	Authorizes the user to access all of the above.
NONE	Authorizes the user to access none of the above

MENUOPT= (VMCF Primary Option Menu options list, separated by commas.)

Establishes the default VMCF Primary Option Menu options. This parameter is only applicable if TYPE=USER was specified. Default is NONE. Valid values are:

DRS	Authorizes the user to access the DMCF Primary Options Menu (Option D).
PAGECTR	Authorizes the user to access the PageCenter Primary Options Menu (Option P).
PARM	Authorizes the user to access the VMCF Parameter Options screen (Option 0).
PCMDS	Authorizes the user to access the VMCF Printer Command Menu screen (Option 1 or C).
PLIST	Authorizes the user to access the VMCF Printer Display screens (Option 2 or S).
SCMDS	Authorizes the user to access the VPS Started Task List screen (Option 3).
SERVER	Authorizes the user to access the Server Options menu (Option 4).
SOPTS	Authorizes the user to access the VPS System Options screen.
SSTATS	Authorizes the user to access the VPS System Statistics screen.
PQUEUE	Authorizes the user to access the VPS Printer Queue Display screens directly from the VMCF Primary Option Menu (Option Q or H).
VMCFVTAM	Authorizes the user to access the VMCF/VTAM menus (Option V).

ALL Authorizes the user to access all of the above.
NONE Authorizes the user to access none of the above.

DRSAUTH= (DRS system authorization list, separated by commas.)

Establishes the default DRS system authorization. This parameter is only applicable if **TYPE=USER** was specified. Default is **NONE**. Valid values are:

ABEND Authorizes the user to abend the DRS system via the DRS **ABEND** command.

ANYSTC Authorizes the user to control any DRS started task.

CLOSELOG Authorizes the user to close the DRS log dataset via the DRS **CLOSELOG** command.

DIAG Authorizes the user to display DRS diagnostic information (i.e. DRS control blocks and trace tables).

END Authorizes the user to terminate the DRS system via the DRS **END** command.

GBLVIEW Authorizes the user to create and modify DMCF Global Views.

GROUP Authorizes the user to specify a specific or generic group name when issuing DRS printer commands (i.e., **INACTIVATE**, **START**, and **STOP**). Security for group names can be established by coding the **VMCFSEC TYPE=DRSGROUP** macro.

HALT Authorizes the user to halt the DRS system immediately via the **MVS STOP** command.

LOGMSG Authorizes the user to place messages in the DRS log dataset via the DRS **LOG** command.

SETEXIT Authorizes the user to enable and disable DRS user exits via the DRS **SSET** command.

SETLOG Authorizes the user to set DRS logging **ON** and **OFF** via the DRS **SSET** command.

SETMAXIP Authorizes the user to set the maximum number of TCPIP printers via the DRS **SSET** command.

SETMAXVT Authorizes the user to set the maximum number of VTAM printers via the DRS **SSET** command.

SETTCP Authorizes the user to enable and disable the DRS **TCP/IP** connections via the DRS **SSET** command.

SETTRTYP Authorizes the user to set the DRS system trace types via the DRS **SSET** command.

SNAP Authorizes the user to issue the DRS **SNAP,SYSTEM** command.

START Authorizes the user to start the DRS system via the **MVS START** command.

STATUS Authorizes the user to specify a printer status (i.e. **A**-active, **D**-drained, **E**-error drained, or **I**-idle) when issuing DRS printer commands (i.e. **INACTIVATE**, **START**, and **STOP**).
Caution: Distributing **STATUS** authority to end users will allow them to affect ANY DRS printer in either an Active, Drained, Error drained, or Idle state.

	ALL	User is authorized to perform all of the above.
	NONE	User is authorized to perform none of the above.
DRSSTC=	(DRS STC name list, separated by commas.)	
	Establishes the default list of DRS started task names that the user is authorized to control. A maximum of eight STC names can be specified. This parameter is only applicable if TYPE=USER was specified. Default is NONE.	
SYSAUTH=	(VPS system authorization list, separated by commas.)	
	Establishes the default VPS system authorization. This parameter is only applicable if TYPE=USER was specified. Default is NONE.	
	Valid values are:	
	ABEND	Authorizes the user to abend the VPS system via the VPS ABEND command.
	ANYSTC	Authorizes the user to control any VPS started task.
	CLOSELOG	Authorizes the user to close the VPS log dataset via the VPS CLOSELOG command.
	DIAG	Authorizes the user to display VPS diagnostic information (i.e. VPS control blocks and trace tables).
	END	Authorizes the user to terminate the VPS system via the VPS END command.
	GBLVIEW	Authorizes the user to create and modify VMCF Global Views.
	GROUP	Authorizes the user to specify a specific or generic group name when issuing VPS printer commands (i.e. INACTIVATE, START, and STOP). Security for group names can be established by coding the VMCFSEC TYPE=GROUP macro.
	HALT	Authorizes the user to halt the VPS system immediately via the MVS STOP command.
	JESPRTR	Authorizes the user to access JES and PSF printers. Additional authorization must be allowed by specific or generic printer name.
	LOGMSG	Authorizes the user to place messages in the VPS log dataset via the VPS LOG command.
	POST	Authorizes the user to post the VPS dispatcher to locate work for idle printers.
	PROFILE	Authorizes the user to profile to another user ID/terminal ID via the VMCF PROFILE command.
	REFRESH	Authorizes the user to refresh the news for all VPS printers via the REFRESH,NEWS command.
	ROUTE	Authorizes the user to reroute a printer's output to another location via the VMCF ROUTE command.
	SAF	Authorizes the user to issue the VMCF SAF command.
	SETEXIT	Authorizes the user to enable and disable VPS user exits via the VPS SSET command.
	SETLOG	Authorizes the user to set VPS logging ON and OFF via the VPS SSET command.

SETMAX	Authorizes the user to set the maximum number of busy printers via the VPS SSET command.
SETTCP	Authorizes the user to enable and disable the VPS TCP/IP connections via the VPS SSET command.
SETTRTYP	Authorizes the user to set the VPS system trace types via the VPS SSET command.
SETWAIT	Authorizes the user to set the VPS wait interval via the VPS SSET command.
SNAP	Authorizes the user to issue the VPS SNAP,SYSTEM command.
SSTAT	Authorized the user to log and reset the VPS system statistics.
START	Authorizes the user to start the VPS system via the MVS START command.
STATUS	Authorizes the user to specify a printer status (i.e. A-active, D-drained, E-error drained, I-idle, M-missing response, and W-wconnect) when issuing VPS printer commands (i.e. INACTIVATE, START, and STOP). Caution: Distributing STATUS authority to end users will allow them to affect ANY VPS printer in either an Active, Drained, Error drained, Idle, Missing response, or Wconnect state.
ALL	User is authorized to perform all of the above.
NONE	User is authorized to perform none of the above.
VPSSTC=	(VPS STC name list, separated by commas.) Establishes the default list of VPS started task names that the user is authorized to control. A maximum of eight STC names can be specified. This parameter is only applicable if TYPE=USER was specified above. Default is NONE.
CMDAUTH=	(DRS and/or VPS printer authorization list, separated by commas.) Establishes the default DRS and/or VPS printer authorization. This parameter is only applicable if TYPE=PRINTER or TYPE=DRSPRTR was specified above. Default is NONE. Valid values are:
ACT	Authorizes the user to issue the VPS/DRS ACTIVATE command.
ACQUIRE	Authorizes the user to issue the VPS ACQUIRE command. Only valid if TYPE=PRINTER was specified.
CANCEL	Authorizes the user to issue the VPS CANCEL command. Only valid if TYPE=PRINTER was specified.
DISPLAY	Authorizes the user to access the VPS/DRS Printer Summary screens. If a user does not have DISPLAY authority for a printer, then the printer will not be included in the VPS/DRS Printer Selection List.

EXPIRE	Authorizes the user to issue the VPS EXPIRE command to purge SYSOUT files for a printer or group of printers.
INACT	Authorizes the user to issue the VPS/DRS INACTIVATE command.
INTERUPT	Authorizes the user to issue the VPS INTERRUPT command. Only valid if TYPE=PRINTER was specified.
PURGE	Authorizes the user to issue the DRS PURGE command. Only valid if TYPE=DRSPRTR was specified.
QUEUE	Authorizes the user to access the VPS Printer Output Queue and VPS Printer Held Queue, or browse the DRS Print Tracking data. Only valid if TYPE=PRINTER or TYPE=DRSPRTR was specified.
REACT	Authorizes the user to issue the VPS/DRS REACTIVATE command.
RELEASE	Authorizes the user to issue the VPS RELEASE command. Only valid if TYPE=PRINTER was specified.
REPEAT	Authorizes the user to issue the VPS REPEAT command. Only valid if TYPE=PRINTER was specified.
REPOS	Authorizes the user to issue the VPS REPOSITION command. Only valid if TYPE=PRINTER was specified.
RESTART	Authorizes the user to issue the VPS RESTART command. Only valid if TYPE=PRINTER was specified.
SEL	Authorizes the user to issue the VPS SEL command. Only valid if TYPE=PRINTER was specified.
SET	Authorizes the user to issue the VPS/DRS SET command.
SNAP	Authorizes the user to issue the VPS/DRS SNAP command.
START	Authorizes the user to issue the VPS/DRS START command.
STOP	Authorizes the user to issue the VPS/DRS STOP command.
ALL	User is authorized to perform all of the above.
NONE	User is authorized to perform none of the above.

SELAUTH= (SEL command authorization list, separated by commas.)
Establishes the default VPS SEL command authorization list. This parameter is only applicable if CMDAUTH=SEL was specified. Default is NONE. Valid values are:

CLASS Authorizes the user to modify the Class List.
DEST Authorizes the user to modify the Destination.
FORM Authorizes the user to modify the Form Name.
WRITER Authorizes the user to modify the Writer Name.
ALL Authorizes the user to modify all of the above.
NONE Authorizes the user to modify none of the above.

SETAUTH= (SET command authorization list, separated by commas.)
Establishes the default VPS/DRS SET command authorization list. This parameter is only applicable if CMDAUTH=SET was specified. Default is NONE. Valid values are:

AEJ Authorizes the user to modify the Auto Eject options. The VPS printer parameter AUTOEJECT establishes the initial values for the Auto Eject options. Only valid if TYPE=PRINTER was specified.

JESLVL1 Authorizes the user to issue a JES SET command to change the following options for a JES or PSF printer:
BURST, CHARS, COMPACT, COPYMARK, COPYMOD, FCB, FLASH, MARK, PRMODE, SEP, and UCS
Only valid if TYPE=PRINTER was specified.

JESLVL2 Authorizes the user to issue a JES SET command to change the following options for a JES or PSF printer:
CKPTLINE, CKPTMODE, CKPTPAGE, CKPTSEC, FSSNAME, JOBNAME, LIM, MODE, NPRO, PAUSE, PLIM, PRESELCT, RANGE, SPACE, SUSPEND, TRACE, and VOLUME
Only valid if TYPE=PRINTER was specified.

MLP Authorizes the user to modify the Max Lines/Page option. The VPS printer parameter MAXLPG establishes the initial value for the Max Lines/Page option. Only valid if TYPE=PRINTER was specified.

RLRQ Authorizes the user to modify Release Request option. The VPS printer parameter RELREQ establishes the initial value for the Release Request option. Only valid if TYPE=PRINTER was specified.

RQDEL Authorizes the user to modify the Requeue delete option. The VPS printer parameter RQDEL establishes the initial value for the Requeue delete option. Only valid if TYPE=PRINTER was specified.

RQHLD	Authorizes the user to modify the Requeue hold option. The VPS printer parameter REQHOLD establishes the initial value for the Requeue hold option. Only valid if TYPE=PRINTER was specified.
RQLIM	Authorizes the user to modify the Requeue limit. The VPS printer parameter REQLIMIT establishes the initial value for the Requeue limit. Only valid if TYPE=PRINTER was specified above.
RQOUTP	Authorizes the user to modify the Requeue SYSOUT output characteristics. The VPS printer parameter REQOUTP establishes the initial value for the Requeue SYSOUT output characteristics. Only valid if TYPE=PRINTER was specified.
RQRTE	Authorizes the user to modify the Requeue route option. The VPS printer parameter REQROUTE establishes the initial value for the Requeue route option. Only valid if TYPE=PRINTER was specified.
SEP	Authorizes the user to modify the Separator option. The VPS printer parameter SEPAR establishes the initial value for the Separator option. Only valid if TYPE=PRINTER was specified.
SNAP	Authorizes the user to modify the Snap option. The VPS printer parameter SNAP establishes the initial value for the Snap option. Only valid if TYPE=PRINTER was specified.
TCPHOST	Authorizes the user to modify the TCPHOST option. The VPS printer parameter TCPHOST establishes the initial value for the TCPHOST option. Only valid if TYPE=PRINTER was specified.
TPUT	Authorizes the user to modify the TPUT user ID. The VPS printer parameter TPUTUSER establishes the initial TPUT user ID. Only valid if TYPE=PRINTER was specified.
TRC	Authorizes the user to modify the Trace options. The VPS/DRS printer parameter TRACE establishes the initial values for the Trace options.
ALL	Authorizes the user to modify all of the above.
NONE	Authorizes the user to modify none of the above.

DRSQUE= (Queue display authorization list, separated by commas.)

Establishes the DRS Print Tracking authorization list. This parameter is only applicable if CMDAUTH=QUEUE was specified. Default is NONE. Valid values are:

BROWSE	Authorizes user to browse DRS output.
ALL	Authorizes user to perform all of the above.
NONE	Authorizes user to perform none of the above.

QUEAUTH= (Queue display authorization list, separated by commas.)
Establishes the default VPS Printer Output Queue and VPS Printer Held Queue authorization list. This parameter is only applicable if **CMD-AUTH=QUEUE** was specified. Default is **NONE**. Valid values are:

BROWSE Authorizes the user to browse JES output.
DEL Authorizes the user to delete JES output.
HOLD Authorizes the user to hold JES output.
RELEASE Authorizes the user to release JES output.
SEL Authorizes the user to modify the VPS Printer Output Queue and VPS Printer Held Queue selection criteria.
SET Authorizes the user to modify JES output characteristics (i.e. priority, class, etc.).
ALL Authorizes the user to perform all of the above.
NONE Authorizes the user to perform none of the above.

QUESEL= (Queue display SEL authorization list, separated by commas.)
Establishes the default VPS Printer Output Queue and VPS Printer Held Queue SEL authorization list. This parameter is only applicable if **QUEAUTH=SEL** was specified. Default is **NONE**. Valid values are:

CLASS Authorizes the user to modify the Class List.
DEST Authorizes the user to modify the Destination.
FORM Authorizes the user to modify the Form Name.
WRITER Authorizes the user to modify the Writer Name.
ALL Authorizes the user to modify all of the above.
NONE Authorizes the user to modify none of the above.

Caution: Distributing Queue SEL authority to end users will allow them to display (and possibly modify and delete) JES output that is NOT destined for their VPS printer(s).

QUESET= (Queue display SET authorization list, separated by commas.)
Establishes the default VPS Printer Output Queue and VPS Printer Held Queue SET authorization list. This parameter is only applicable if **QUEAUTH=SET** was specified. Default is **NONE**. Valid values are:

PRI Authorizes the user to modify the Priority of the JES output.
CLASS Authorizes the user to modify the SYSOUT Class of the JES output.
DEST Authorizes the user to modify the Destination of the JES output.
FORM Authorizes the user to modify the Form Name of the JES output.
WRITER Authorizes the user to modify the Writer Name of the JES output.
FCB Authorizes the user to modify the FCB Name of the JES output.

ALL	Authorizes the user to modify all of the above.
NONE	Authorizes the user to modify none of the above.

VMCFSEC Macro

The VMCFSEC macro is used to generate the VMCF security table. This table is used to control the functions available to each VMCF user.

Installations can establish security by either user ID (TYPE=USER) and/or terminal ID (TYPE=CRT). The order in which the TYPE=USER and/or TYPE=CRT macro instructions are coded is important. VMCF scans the security table from top to bottom and uses the first entry that matches the user's ID or terminal ID. Therefore, specific user IDs and/or terminal IDs should be coded before generic IDs. If VMCF is unable to find a matching entry on either user ID or terminal ID, then the default entry will be used, if coded. If the default entry has not been coded, then VMCF will terminate processing.

Each TYPE=USER, TYPE=CRT, and TYPE=DEFAULT (optional) macro instruction should be followed by one or more TYPE=PRINTER and/or TYPE=GROUP macros. These macro instructions define the user's authorization for one or more VPS printers.

The proper sequence for coding the VMCFSEC macro instructions is as follows:

VMCFSEC TYPE=INITIAL	(Must be the first VMCFSEC macro coded)
VMCFSEC TYPE=USER or TYPE=CRT	
VMCFSEC TYPE=PRINTER	(One or more entries)
VMCFSEC TYPE=DRSPRTR	(One or more entries)
VMCFSEC TYPE=GROUP	(One or more entries)
VMCFSEC TYPE=DRSGROUP	
VMCFSEC TYPE=USER or TYPE=CRT	
VMCFSEC TYPE=PRINTER	(One or more entries)
VMCFSEC TYPE=DRSPRTR	(One or more entries)
VMCFSEC TYPE=GROUP	(One or more entries)
VMCFSEC TYPE=DRSGROUP	
VMCFSEC TYPE=DEFAULT	(Optional)
VMCFSEC TYPE=PRINTER	(One or more entries)
VMCFSEC TYPE=DRSPRTR	(One or more entries)
VMCFSEC TYPE=GROUP	(One or more entries)
VMCFSEC TYPE=DRSGROUP	
VMCFSEC TYPE=FINAL	(Must be the last VMCFSEC macro coded)
END	

While the TYPE=INITIAL, TYPE=DEFAULT, and TYPE=FINAL macro instructions can only be coded once in the security table, the TYPE=USER, TYPE=CRT, TYPE=PRINTER, TYPE=DRSPRTR, TYPE=DRSGROUP, and TYPE=GROUP macro instructions can be coded as many times as desired.

A sample security table, providing unlimited access to all users, is provided as member VS80SECT in file LRS.VSV.V1R80.ASM. Sample JCL to assemble and linkedit the VMCF security table is provided as member SECTASMH in file LRS.VSV.V1R80.CNTL.

The VMCFSEC macro is written as follows:

b	One or more blanks must precede VMCFSEC.
VMCFSEC	
b	One or more blanks must follow VMCFSEC.
TYPE=INITIAL DEFAULT USER CRT PRINTER GROUP FINAL DRSPRTR DRSGROUP	
,USER=	Only applicable for TYPE=USER.
,TERM=	Only applicable for TYPE=CRT.
{,DRSAUTH=}	Only applicable for TYPE=USER or TYPE=CRT.
{,DRSMENU=}	Only applicable for TYPE=USER or TYPE=CRT.
{,DRSSTC=}	Only applicable for TYPE=USER or TYPE=CRT.
{,MENUOPT=}	Only applicable for TYPE=USER or TYPE=CRT.
{,SYSAUTH=}	Only applicable for TYPE=USER or TYPE=CRT.
{,VPSSTC=}	Only applicable for TYPE=USER or TYPE=CRT.
,DRSPRTR=	Only applicable for TYPE=DRSPRTR.
,PRINTER=	Only applicable for TYPE=PRINTER.
,GROUP=	Only applicable for TYPE=GROUP.
,DRSGROUP=	Only applicable for TYPE=DRSGROUP.
{,MEMBER=}	Only applicable for TYPE=PRINTER or TYPE=DRSPRTR.
{,CMDAUTH=}	Only applicable for TYPE=PRINTER, TYPE=DRSPRTR, TYPE=GROUP, or TYPE=DRSGROUP.
{,SELAUTH=}	Only applicable for TYPE=PRINTER or TYPE=GROUP.
{,SETAUTH=}	Only applicable for TYPE=PRINTER, TYPE=DRSPRTR, TYPE=GROUP, or TYPE=DRSGROUP.
{,QUEAUTH=}	Only applicable for TYPE=PRINTER or TYPE=GROUP.
{,QUESEL=}	Only applicable for TYPE=PRINTER or TYPE=GROUP.
{,QUESET=}	Only applicable for TYPE=PRINTER or TYPE=GROUP.
{,DRSQUE=}	Only applicable for TYPE=DRSPRTR or TYPE=DRSGROUP.

Brackets, {}, are used to enclose optional parameters, which may or may not be coded. If a parameter is not coded, then the default value established by the VMCFDFLT macro will be used. If a default value has not been established via the VMCFDFLT macro, then the default for the parameter will be used.

The parameters of the VMCFSEC macro are explained on the next page.

TYPE=	INITIAL USER CRT DEFAULT PRINTER GROUP FINAL
INITIAL	Identifies the start of the VMCF and/or DMCF security table. If TYPE=INITIAL is coded, then no other parameters can be specified. This must be the first VMCFSEC macro coded.
USER	Creates an entry in the VMCF and/or DMCF security table defining one or more users. This entry should be followed by one or more TYPE=PRINTER and/or TYPE=GROUP entries.
CRT	Creates an entry in the VMCF and/or DMCF security table defining one or more terminals. This entry should be followed by one or more TYPE=PRINTER and/or TYPE=GROUP entries.
DEFAULT	Creates a default entry in the VMCF and/or DMCF security table. This entry is optional and will be used if VMCF and/or DMCF does not find a matching TYPE=USER or TYPE=CRT entry. This entry should be followed by one or more TYPE=PRINTER and/or TYPE=GROUP entries. Note: This entry, if coded, must follow all TYPE=USER and TYPE=CRT entries.
PRINTER	Creates an entry in the VMCF and/or DMCF security table defining one or more VPS printers.
DRSGROUP	Creates an entry in the VMCF and/or DMCF security table defining one or more groups of DRS printers.
DRSPRTR	Creates an entry in the VMCF and/or DMCF security table defining one or more DRS printers.
GROUP	Creates an entry in the VMCF and/or DMCF security table defining one or more groups of printers.
FINAL	Identifies the end of the VMCF and/or DMCF security table. If TYPE=FINAL is coded, then no other parameters can be specified. This must be the last VMCFSEC macro coded before the assembler END statement.
USER=	Identifies one or more users. Generic user IDs can be specified by coding an asterisk following the partial id. A list of user IDs can be specified by enclosing the list in parentheses. This parameter is only applicable if TYPE=USER was specified above.
TERM=	Identifies one or more terminals. Generic terminal IDs can be specified by coding an asterisk following the partial id. A list of terminal IDs can be specified by enclosing the list in parentheses. This parameter is only applicable if TYPE=CRT was specified above.

DRSMENU= (DMCF Primary Option Menu options list, separated by commas.)

Establishes the DMCF Primary Option Menu options. This parameter is only applicable if **TYPE=USER**, **TYPE=CRT**, or **TYPE=DEFAULT** was specified above. The default is the value established via the **VMCFDFLT** macro. Valid values are:

- OUTREF** Authorizes the user to access the DRS Output Reference screen (Option 6).
- PARM** Authorizes the user to access the DMCF Parameter Options screen (Option 0).
- PCMDS** Authorizes the user to access the DMCF Printer Command Menu screen (Option 1 or C).
- PLIST** Authorizes the user to access the DMCF Printer Display screens (Option 2 or S).
- SCMDS** Authorizes the user to access the DRS Started Task List screen (Option 3).
- SERVER** Authorizes the user to access the Server Options menu (Option 4).
- SOPTS** Authorizes the user to access the DRS System Options screen.
- SSTATS** Authorizes the user to access the DRS System Statistics screen.
- PTRACK** Authorizes the user to access the DRS Print Tracking Display screens (Option 7).
- VTAM** Authorizes the user to access the DMCF/VTAM menus (Option V).
- ALL** Authorizes the user to access all of the above.

DRSAUTH= (DRS system authorization list, separated by commas.)

Establishes the DRS system authorization. This parameter is only applicable if **TYPE=USER**, **TYPE=CRT**, or **TYPE=DEFAULT** was specified above. Default is **NONE**. Valid values are:

- ABEND** Authorizes the user to abend the DRS system via the DRS **ABEND** command.
- ANYSTC** Authorizes the user to control any DRS started task.
- CLOSELOG** Authorizes the user to close the DRS log dataset via the DRS **CLOSELOG** command.
- DIAG** Authorizes the user to display DRS diagnostic information (i.e. DRS control blocks and trace tables).
- END** Authorizes the user to terminate the DRS system via the DRS **END** command.
- GBLVIEW** Authorizes the user to create and modify DMCF Global Views.
- GROUP** Authorizes the user to specify a specific or generic group name when issuing DRS printer commands (i.e., **INACTIVATE**, **START**, and **STOP**). Security for group names can be established by coding the **VMCFSEC TYPE=DRSGROUP** macro.

HALT	Authorizes the user to halt the DRS system immediately via the MVS STOP command.
LOGMSG	Authorizes the user to place messages in the DRS log dataset via the DRS LOG command.
SETEXIT	Authorizes the user to enable and disable DRS user exits via the DRS SSET command.
SETLOG	Authorizes the user to set DRS logging ON and OFF via the DRS SSET command.
SETMAXIP	Authorizes the user to set the maximum number of TCPIP printers via the DRS SSET command.
SETMAXVT	Authorizes the user to set the maximum number of VTAM printers via the DRS SSET command.
SETTCP	Authorizes the user to enable and disable the DRS TCP/IP connection via the DRS SSET command.
SETTRTYP	Authorizes the user to set the VPS system trace types via the VPS SSET command.
SNAP	Authorizes the user to issue the DRS SNAP,SYSTEM command.
START	Authorizes the user to start the DRS system via the MVS START command.
STATUS	Authorizes the user to specify a printer status (i.e. A-active, D-drained, E-error drained, or I-idle) when issuing DRS printer commands (i.e. INACTIVATE, START, and STOP). Caution: Distributing STATUS authority to end users will allow them to affect ANY DRS printer in either an Active, Drained, Error drained, or Idle state.
ALL	User is authorized to perform all of the above.
NONE	User is authorized to perform none of the above.

DRSSTC= (DRS STC name list, separated by commas.)

Establishes the list of DRS started task names that the user is authorized to control. A maximum of eight STC names can be specified. This parameter is only applicable if TYPE=USER, TYPE=CRT, or TYPE=DEFAULT was specified above. The default is the value established via the VMCFDFLT macro.

MENUOPT=(VMCF Primary Option Menu options list, separated by commas.)

Establishes the VMCF Primary Option Menu options. This parameter is only applicable if TYPE=USER, TYPE=CRT, or TYPE=DEFAULT was specified above. The default is the value established via the VMCFDFLT macro. Valid values are:

DRS	Authorizes the user to access the DMCF Primary Options Menu (Option D).
PAGECTR	Authorizes the user to access the PageCenter Primary Options Menu (Option P).
PARM	Authorizes the user to access the VMCF Parameter Options screen (Option 0).

PCMDS	Authorizes the user to access the VMCF Printer Command Menu screen (Option 1 or C).
PLIST	Authorizes the user to access the VMCF Printer Display screens (Option 2 or S).
SCMDS	Authorizes the user to access the VPS Started Task List screen (Option 3).
SERVER	Authorizes the user to access the Server Options menu (Option 4).
SOPTS	Authorizes the user to access the VPS System Options screen.
SSTATS	Authorizes the user to access the VPS System Statistics screen.
PQUEUE	Authorizes the user to access the VPS Printer Queue Display screens directly from the VMCF Primary Option Menu (Option Q or H).
VMCFVTAM	Authorizes the user to access the VMCF/VTAM menus (Option V).
ALL	Authorizes the user to access all of the above.
SYSAUTH=	(VPS system authorization list, separated by commas.)
	Establishes the VPS system authorization. This parameter is only applicable if TYPE=USER, TYPE=CRT, or TYPE=DEFAULT was specified above. Default is NONE. Valid values are:
AFPCACHE	Authorizes the user to display VPS AFPCACHE information.
ABEND	Authorizes the user to abend the VPS system via the VPS ABEND command.
ANYSTC	Authorizes the user to control any VPS started task.
CLOSELOG	Authorizes the user to close the VPS log dataset via the VPS CLOSELOG command.
DIAG	Authorizes the user to display VPS diagnostic information (i.e. VPS control blocks and trace tables).
END	Authorizes the user to terminate the VPS system via the VPS END command.
GBLVIEW	Authorizes the user to create and modify VMCF Global Views.
GROUP	Authorizes the user to specify a specific or generic group name when issuing VPS printer commands (i.e. INACTIVATE, START, and STOP). Security for group names can be established by coding the VMCFSEC TYPE=GROUP macro.
HALT	Authorizes the user to halt the VPS system immediately via the MVS STOP command.
JESPRTR	Authorizes the user to access JES and PSF printers. Additional authorization must be allowed by specific or generic printer name.
LOGMSG	Authorizes the user to place messages in the VPS log dataset via the VPS LOG command.

POST	Authorizes the user to post the VPS dispatcher to locate work for idle printers.
PROFILE	Authorizes the user to profile to another user ID/terminal ID via the VMCF PROFILE command.
REFRESH	Authorizes the user to refresh the news for all VPS printers via the REFRESH,NEWS command.
ROUTE	Authorizes the user to reroute a printer's output to another location via the VMCF ROUTE command.
SAF	Authorizes the user to issue the VMCF SAF command.
SETAFPCA	Authorizes the user to issue AFPCACHE commands via the VPS SSET command.
SETEXIT	Authorizes the user to enable and disable VPS user exits via the VPS SSET command.
SETLOG	Authorizes the user to set VPS logging ON and OFF via the VPS SSET command.
SETMAX	Authorizes the user to set the maximum number of busy printers via the VPS SSET command.
SETTCP	Authorizes the user to enable and disable the VPS TCP/IP connection via the VPS SSET command.
SETTRTYP	Authorizes the user to set the VPS system trace types via the VPS SSET command.
SETWAIT	Authorizes the user to set the VPS wait interval via the VPS SSET command.
SNAP	Authorizes the user to issue the VPS SNAP,SYSTEM command.
SSTAT	Authorizes the user to log and reset the VPS system statistics.
START	Authorizes the user to start the VPS system via the MVS START command.
STATUS	Authorizes the user to specify a printer status (i.e. A-active, D-drained, E-error drained, I-idle, M-missing response, and W-wconnect) when issuing VPS printer commands (i.e. INACTIVATE, START, and STOP). Caution: Distributing STATUS authority to end users will allow them to affect ANY VPS printer in either an Active, Drained, Error drained, Idle, Missing response, or Wconnect state.
ALL	User is authorized to perform all of the above.
NONE	User is authorized to perform none of the above.

VPSSTC= (VPS STC name list, separated by commas.)

Establishes the list of VPS started task names that the user is authorized to control. A maximum of eight STC names can be specified. This parameter is only applicable if TYPE=USER, TYPE=CRT, or TYPE=DEFAULT was specified above. The default is the value established via the VMCFDFLT macro.

PRINTER= Identifies one or more VPS printers. VMCF assumes that the value coded in this field is the printer's network (LUNAME) name. Generic printer ids can be specified by coding an asterisk following the partial id. A list of printer names can be specified by enclosing the list in parentheses. This parameter must be coded if TYPE=PRINTER was specified above.

MEMBER= Specifies the VPSLIB member name(s) for the printers defined on the PRINTER= parameter above. This parameter is optional and if omitted defaults to the values specified for the PRINTER= keyword.

IPNAME= Identifies one or more VPS/TCPIP printers. This parameter must specify either a specific or a generic IP name|address. Generic names can be specified by coding the following within the IP name|address:

‘?’ Matches any single character.

‘*’ Matches any sequence of characters.

Note that IPNAME= may not be specified with the PRINTER=, MEMBER=, or PRTNAME= keywords.

PRTNAME= Identifies one or more VPS printers. This keyword allows you to secure the printers by the descriptive printer name specified in the VPS printer definition. Generic names can be specified by coding the following within the PRTNAME:

‘?’ Matches any single character.

‘*’ Matches any sequence of characters.

Note that PRTNAME= may not be specified with the PRINTER=, MEMBER=, or IPNAME= keywords.

GROUP= Identifies one or more groups of VPS printers. Generic group ids can be specified by coding an asterisk following the partial id. A list of group ids can be specified by enclosing the list in parentheses. This parameter must be coded if TYPE=GROUP was specified above.

Note that the VPS ACTIVATE command cannot be secured for a group of VPS printers. The reason for this restriction is that VMCF cannot pass the printer's group name to the security interface because the printer is not yet defined to VPS.

CMDAUTH= (DRS and/or VPS printer authorization list, separated by commas.)

Establishes the DRS and/or VPS printer authorization. This parameter is only applicable if TYPE=PRINTER or TYPE=GROUP was specified above. Default is NONE. Valid values are:

ACT Authorizes the user to issue the DRS and/or VPS ACTIVATE command.

ACQUIRE Authorizes the user to issue the DRS and/or VPS ACQUIRE command.

CANCEL Authorizes the user to issue the DRS and/or VPS CANCEL command.

DISPLAY Authorizes the user to access the DRS and/or VPS Printer Summary screens. If a user does not have DISPLAY authority for a printer, then the printer will not be included in the DRS and/or VPS Printer Selection List.

EXPIRE Authorizes the user to issue the VPS EXPIRE command to purge SYSOUT files for a printer or group of printers.

INACT	Authorizes the user to issue the DRS and/or VPS INACTIVATE command.
INTERUPT	Authorizes the user to issue the VPS INTERRUPT command.
QUEUE	Authorizes the user to access the VPS Printer Output Queue and VPS Printer Held Queue, or browse the DRS Print Tracking data.
REACT	Authorizes the user to issue the DRS and/or VPS REACTIVATE command.
RELEASE	Authorizes the user to issue the VPS RELEASE command.
REPEAT	Authorizes the user to issue the VPS REPEAT command.
REPOS	Authorizes the user to issue the VPS REPOSITION command.
RESTART	Authorizes the user to issue the VPS RESTART command.
SEL	Authorizes the user to issue the VPS SEL command.
SET	Authorizes the user to issue the DRS and/or VPS SET command.
SNAP	Authorizes the user to issue the DRS and/or VPS SNAP command.
START	Authorizes the user to issue the DRS and/or VPS START command.
STOP	Authorizes the user to issue the DRS and/or VPS STOP command.
ALL	User is authorized to perform all of the above.
NONE	User is authorized to perform none of the above.

SELAUTH= (SEL command authorization list, separated by commas.)

Establishes the VPS SEL command authorization list. This parameter is only applicable if CMDAUTH=SEL was specified above. Default is NONE. Valid values are:

CLASS	Authorizes the user to modify the Class List.
DEST	Authorizes the user to modify the Destination.
FORM	Authorizes the user to modify the Form Name.
WRITER	Authorizes the user to modify the Writer Name.
ALL	Authorizes the user to modify all of the above.
NONE	Authorizes the user to modify none of the above.

SETAUTH=	(SET command authorization list, separated by commas.) Establishes the VPS SET command authorization list. This parameter is only applicable if CMDAUTH=SET was specified above. Default is NONE. Valid values are:
AEJ	Authorizes the user to modify the Auto Eject options. The VPS printer parameter AUTOEJECT establishes the initial values for the Auto Eject options.
JESLVL1	Authorizes the user to issue a JES SET command to change the following options for a JES or PSF printer: BURST, CHARS, COMPACT, COPYMARK, COPY-MOD, FCB, FLASH, MARK, PRMODE, SEP, and UCS
JESLVL2	Authorizes the user to issue a JES SET command to change the following options for a JES or PSF printer: CKPTLINE, CKPTMODE, CKPTPAGE, CKPTSEC, FSSNAME, JOBNAME, LIM, MODE, NPRO, PAUSE, PLIM, PRESELCT, RANGE, SPACE, SUSPEND, TRACE, and VOLUME
MLP	Authorizes the user to modify the Max Lines/Page option. The VPS printer parameter MAXLPG establishes the initial value for the Max Lines/Page option.
RLRQ	Authorizes the user to modify Release Request option. The VPS printer parameter RELREQ establishes the initial value for the Release Request option.
RQDEL	Authorizes the user to modify the Requeue delete option. The VPS printer parameter REQDELT establishes the initial value for the Requeue delete option.
RQHLD	Authorizes the user to modify the Requeue hold option. The VPS printer parameter REQHOLD establishes the initial value for the Requeue hold option.
RQLIM	Authorizes the user to modify the Requeue limit. The VPS printer parameter REQLIMIT establishes the initial value for the Requeue limit.
RQOUTP	Authorizes the user to modify the Requeue SYSOUT output characteristics. The VPS printer parameter REQOUTP establishes the initial value for the Requeue SYSOUT output characteristics.
RQRTE	Authorizes the user to modify the Requeue route option. The VPS printer parameter REQROUTE establishes the initial value for the Requeue route option.
SEP	Authorizes the user to modify the Separator option. The VPS printer parameter SEPAR establishes the initial value for the Separator option.
SNAP	Authorizes the user to modify the Snap option. The VPS printer parameter SNAP establishes the initial value for the Snap option.

TCPHOST Authorizes the user to modify the TCPHOST option. The VPS printer parameter TCPHOST establishes the initial value for the TCPHOST option.

TPUT Authorizes the user to modify the TPUT user ID. The VPS printer parameter TPUTUSER establishes the initial TPUT user ID.

TRC Authorizes the user to modify the Trace options. The DRS and/or VPS printer parameter TRACE establishes the initial values for the Trace options.

ALL Authorizes the user to modify all of the above.

NONE Authorizes the user to modify none of the above.

QUEAUTH= (Queue display authorization list, separated by commas.)

Establishes the VPS Printer Output Queue and VPS Printer Held Queue authorization list. This parameter is only applicable if CMDAUTH=QUEUE was specified above. Default is NONE. Valid values are:

BROWSE Authorizes the user to browse JES output.

DEL Authorizes the user to delete JES output.

HOLD Authorizes the user to hold JES output.

RELEASE Authorizes the user to release JES output.

SEL Authorizes the user to modify the VPS Printer Output Queue and VPS Printer Held Queue selection criteria.

SET Authorizes the user to modify JES output characteristics (i.e. priority, class, etc.).

ALL Authorizes the user to perform all of the above.

NONE Authorizes the user to perform none of the above.

DRSQE= (Queue display authorization list, separated by commas.)

Establishes the DRS Print Tracking authorization list. This parameter is only applicable if CMDAUTH=QUEUE was specified. Default is NONE. Valid values are:

BROWSE Authorizes user to browse DRS output.

ALL Authorizes user to perform all of the above.

NONE Authorizes user to perform none of the above.

QUESEL= (Queue display SEL authorization list, separated by commas.)

Establishes the VPS Printer Output Queue and VPS Printer Held Queue SEL authorization list. This parameter is only applicable if QUEAUTH=SEL was specified above. Default is NONE. Valid values are:

CLASS Authorizes the user to modify the Class List.

DEST Authorizes the user to modify the Destination.

FORM Authorizes the user to modify the Form Name.

WRITER Authorizes the user to modify the Writer Name.

ALL Authorizes the user to modify all of the above.

NONE Authorizes the user to modify none of the above.
Caution: Distributing Queue SEL authority to end users will allow them to display (and possibly modify and delete) JES output that is NOT destined for their VPS printer(s).

QUESET= (Queue display SET authorization list, separated by commas.)

Establishes the VPS Printer Output Queue and VPS Printer Held Queue SET authorization list. This parameter is only applicable if QUEAUTH=SET was specified above. Default is NONE. Valid values are:

PRI Authorizes the user to modify the Priority of the JES output.

CLASS Authorizes the user to modify the SYSOUT Class of the JES output.

DEST Authorizes the user to modify the Destination of the JES output.

FORM Authorizes the user to modify the Form Name of the JES output.

WRITER Authorizes the user to modify the Writer Name of the JES output.

FCB Authorizes the user to modify the FCB Name of the JES output.

ALL Authorizes the user to modify all of the above.

NONE Authorizes the user to modify none of the above.

Internal Security Interface Customization

The VMCF internal security interface consists of a single module, VS80SCI1, that is loaded during initialization of the LRS/MVS Server. The purpose of this interface is to isolate the code that performs the VMCF authorization checks when using VMCF Internal Security.

The supplied interface utilizes a security table, generated by the VMCFSEC macro, to control the functions available to each user. Installations with special security requirements can optionally modify or replace the supplied interface.

Calls made to the VMCF security interface are divided into the following categories:

- VMCF System Initialization
- VMCF System Termination
- VMCF Security Refresh
- VMCF Session Initialization
- VMCF Session Control Verification
- VMCF Session Command Verification
- VMCF Session Termination

Information about the current security request is passed to the interface in a parameter list (VSRVSEC mapping macro). The type of call being made can be determined by examining the SCRQST field. The control block mapped via the VSRVSEC macro consists of a common section and a variable section. The common section consists of information common to most requests (i.e., VMCF user ID, terminal ID, VPS STC name, etc.). The variable section consists of information specific to the current request.

“[Security Interface Functions](#)” on [page 4.51](#) provides an explanation of the functions performed by each request, and is only applicable to those installations planning to modify or replace the supplied interface.

The source to the supplied VMCF internal security interface is distributed as member VS80SCI1 in file LRS.VSV.V1R80.ASM.

Sample JCL to assemble and linkedit the VMCF internal security interface is provided as member SECTASMH in file LRS.VSV.V1R80.CNTL.

Programming Considerations:

1. Register contents on ENTRY to the VMCF internal security interface:
 - R1** Address of parameter list
 - +0 A(security interface control area) mapping macro is VSRVSICA
 - +4 A(security interface information) mapping macro is VSRVSEC
 - R13** Address of caller's register savearea
 - R14** Return address
 - R15** Entry address
2. All registers, except R15, must be restored to ENTRY conditions prior to exiting the VMCF internal security interface. R15 is expected to contain the return code as documented later in this section.
3. The VMCF SESSION CONTROL VERIFICATION routine is invoked numerous times throughout VMCF execution. Therefore, you should be careful NOT to invoke any function that might cause an I/O operation to be initiated as this would severely impact VMCF performance.
4. The VMCF internal security interface must be coded and linkedited as REENTRANT.

External Security Interface Customization

The VMCF and/or DMCF external security interface consists of modules VS80SCX1, VS80SCX2, VS80SCX3, VS80SCX4, and VS80SCX5 that are loaded during initialization of the LRS/MVS Server. The purpose of this interface is to isolate the code that performs the VMCF and/or DMCF authorization checks when using VMCF and/or DMCF External Security.

The supplied interface calls the system security package (RACF, etc.), using the MVS System Authorization Facility (the RACROUTE macro), to determine the user access authority. Program VS80SAFI brings the security rules for the VPS class into storage and does FASTAUTH calls to determine whether the user is allowed access. Installations with special security requirements can optionally modify or replace the supplied interface.

Calls made to the VMCF and/or DMCF security interface are divided into the following categories:

- VMCF and/or DMCF System Initialization
- VMCF and/or DMCF System Termination
- VMCF and/or DMCF Security Refresh
- VMCF and/or DMCF Session Initialization
- VMCF and/or DMCF Session Control Verification
- VMCF and/or DMCF Session Command Verification
- VMCF and/or DMCF Session Termination

Information about the current security request is passed to the interface in a parameter list (VSRVSEC mapping macro). The type of call being made can be determined by examining the SCRQST field. The control block mapped via the VSRVSEC macro consists of a common section and a variable section. The common section consists of information common to most requests (i.e., VMCF and/or DMCF user ID, terminal ID, VPS STC name, etc.). The variable section consists of information specific to the current request.

“[Security Interface Functions](#)” on page 4.51 provides an explanation of the functions performed by each request, and is only applicable to those installations planning to modify or replace the supplied interface.

The source to the supplied VMCF and/or DMCF external security interface is distributed as members VS80SCX1, VS80SCX2, VS80SCX3, VS80SCX4, and VS80SCX5 in file LRS.VSV.V1R80.ASM.

Sample JCL to assemble and linkedit the VMCF and/or DMCF external security interface is provided as members SCX1ASM, SCX2ASM, SCX3ASM, SCX4ASM, and SCX5ASM in file LRS.VSV.V1R80.CNTL.

Programming Considerations:

1. Register contents on ENTRY to the VMCF and/or DMCF external security interface:
 - R1** Address of parameter list
 - +0 A(security interface control area) mapping macro is VSRVSICA
 - +4 A(security interface information) mapping macro is VSRVSEC
 - R13** Address of caller's register savearea
 - R14** Return address
 - R15** Entry address
2. All registers, except R15, must be restored to ENTRY conditions prior to exiting the VMCF and/or DMCF external security interface. R15 is expected to contain the return code as documented later in this section.
3. The VMCF and/or DMCF external security interface will be invoked authorized and must remain authorized.
4. The CONTROL VERIFICATION routine is invoked numerous times throughout VMCF and/or DMCF execution. FASTAUTH calls using the RACROUTE macro are made to the system security package using rules which were brought into storage at system initialization. If you modify the interface, you should be careful NOT to invoke any function which might cause an I/O operation to be initiated, as this would impact VMCF and/or DMCF performance.
5. The VMCF and/or DMCF external security interface must be coded and linkedited as REENTRANT.

Security Interface Functions

VMCF and/or DMCF security functions are similar whether you are using Internal Security and the VMCF and/or DMCF Security Table or External Security and the System Authorization Facility (RACF) interface. The VMCF and/or DMCF security interface request codes are defined as follows:

SCRQST (Request Code)

- 0001** System Initialization
- 0002** System Termination
- 0003** Security Refresh
- 0004** User Authorization Checking (see SCFUNC on the next page)

VMCF and/or DMCF System Initialization

The system initialization function allows the program to create the VMCF and/or DMCF security environment. VS80SCI1 loads the VMCF and/or DMCF security table (VMCF and/or DMCF internal security) and VS80SCX2 performs a RACROUTE call to list all rules in the VPS class in order to allow authorization calls to check user access quickly (VMCF and/or DMCF external security).

The SAFAPPL name is provided and used to make the RACROUTE call for those installations who require identification of the application making the RACROUTE call by a specific application name.

Return Codes:

- 00** - System initialization successful
- 08** - Error occurred loading security table or RACROUTE macro error during system initialization

VMCF and/or DMCF System Termination

The system termination function either releases the storage occupied by the VMCF and/or DMCF security table (VMCF and/or DMCF internal security) or deletes the in-storage rules created at system initialization (VMCF and/or DMCF external security).

The SAFAPPL name is provided and used to make the RACROUTE call for those installations who require identification of the application making the RACROUTE call by a specific application name.

Return Codes:

- 00** - System termination successful
- 08** - RACROUTE macro error during system termination

VMCF and/or DMCF Security Refresh

The security refresh function is invoked whenever a REFRESH,SAF command is issued to dynamically refresh the VMCF and/or DMCF internal security table or VMCF and/or DMCF external security rules.

Return Codes:

- 00** - Security refresh successful
- 08** - Error occurred loading security table or RACROUTE macro error during SAF refresh.

VMCF and/or DMCF User Authorization Checking

The SCFUNC code provides information concerning the type of call. See the following pages for a description of these functions.

SCFUNC (Function Code)

- 0000** User Initialization
- 0004** VMCF and/or DMCF Control Verification
- 0008** VMCF and/or DMCF Command Verification
- 0012** PageCenter Verification
- 0016** User Termination

VMCF and/or DMCF Session Initialization

Function:

The INITIALIZATION routine is given control whenever the security interface is invoked with a function code (SCFUNC) of 0 (only during VMCF and/or DMCF user initialization). The primary purpose of this routine is to determine whether or not the user is authorized to use VMCF and/or DMCF and also to initialize the VMCF and/or DMCF security environment.

The Initialization routine informs VMCF and/or DMCF of the user's authorization by setting flags in the following bytes:

- SCISOPT1 (VMCF Primary Option Menu options)
- SCISOPT2 (VMCF Primary Option Menu options)
- SCISCMD1 (VPS/VMCF System Command options)
- SCISCMD2 (VPS/VMCF System Command options)
- SCISCMD3 (VPS/VMCF System Command options)
- SCISCMD4 (VPS/VMCF System Command options)
- SCISOPT1_DRS (DMCF Primary Option Menu options)
- SCISOPT2_DRS (DMCF Primary Option Menu options)
- SCISCMD1_DRS (DRS/DMCF System Command options)
- SCISCMD2_DRS (DRS/DMCF System Command options)
- SCISCMD3_DRS (DRS/DMCF System Command options)
- SCISCMD4_DRS (DRS/DMCF System Command options)

Note that the above bytes are contained within the VMCF and/or DMCF security parameter list. Also, when establishing a users authorization, always set the authorization based on the profile id and not the user ID or terminal ID.

Two user workarea fields are provided within the VMCF and/or DMCF security parameter list. Installations can use these two fields to save the address and length of a user acquired workarea. The contents of these two fields will be returned on each subsequent call to the security routine.

Return codes:

- 00** - User is authorized to use VMCF and/or DMCF; continue processing.
- 04** - Reserved.
- 08** - Unable to load VMCF and/or DMCF security table, or severe RACROUTE error; terminate processing.
- 12** - User is not authorized to use VMCF and/or DMCF; terminate processing.

VMCF Session Control Verification

Function:

The CONTROL VERIFICATION routine is given control whenever the security interface is invoked with a function code (SCFUNC) of 4. This routine then determines whether or not the user is authorized to perform the requested function. Installations can use the CONTROL VERIFICATION routine to strictly control the functions available to each VMCF user.

The type of control request can be determined by examining the SCMAJOR and SCMINOR fields in the VMCF security parameter list. The SCMAJOR field is used to identify the category of the request (i.e., VPS system function, VPS printer function, etc.). The SCMINOR field is used to identify the specific request within the category (i.e., Diagnostic display, Queue display, etc.).

Following is a summary of each MAJOR/MINOR request that is processed by the CONTROL VERIFICATION routine. Refer to the VMCF security parameter list DSECT (VSRVSEC mapping macro) for a complete description of the information passed on each request.

MAJOR/MINOR	DESCRIPTION
0002/0001	<p>This major/minor code is passed whenever VMCF needs to determine which printers are to be included in the VPS Printer Selection List. A separate call is made to the security routine for every printer currently defined to VPS that matches the user specified selection criteria. If the user is authorized to control the specified printer, then the return code should be set to 00, otherwise, it should be set to 04.</p> <p>Note: The printer's network, member, and group names will be passed in fields SCLUNAME, SCMEMBER, and SCGROUP respectively.</p>
0002/0002	<p>This major/minor code is passed whenever a user attempts to access the VPS Printer Command Menu or whenever the user changes the printer name on the VPS Printer Command Menu. If the user is authorized, then the following actions should be performed:</p> <ul style="list-style-type: none">• set the return code to 00• set the appropriate bits in flag bytes SCCPCFG1, SCCPCFG2, SCCSLFG1, SCCSTFG1, SCCSTFG2, and SCCSTFG3. <p>The above flag bytes are used to indicate to VMCF which VPS printer commands the user can issue and also which operands of the commands are valid. A command is made available to the user by setting the bit that represents that command.</p> <p>If the user is not authorized, then the return code should be set to 04.</p> <p>Note: Denying access to a printer on the VPS Printer Command Menu does not prevent a user from issuing the command from the command line.</p>

0002/0003

This major/minor code is passed whenever a user attempts to access the VPS Printer Command Menu or whenever the user changes the group name on the VPS Printer Command Menu. If the user is authorized, then the following actions should be performed:

- set the return code to 00
- set the appropriate bits in flag bytes SCCPCFG1, SCCPCFG2, SCCSLFG1, SCCSTFG1, SCCSTFG2, and SCCSTFG3.

The above flag bytes are used to indicate to VMCF which VPS printer commands the user can issue and also which operands of the commands are valid. A command is made available to the user by setting the bit that represents that command.

If the user is not authorized, then the return code should be set to 04.

Note: Denying access to a printer on the VPS Printer Command Menu does not prevent a user from issuing the command from the command line.

0002/0004

N/A

0002/0005

This major/minor code is passed whenever a user attempts to access the VPS Printer Output Queue or VPS Printer Held Queue. If the user is authorized to access the VPS Printer Output Queue and VPS Printer Held Queue, then the following actions should be performed:

- set the return code to 00
- set the appropriate bits in flag bytes SCCQFG1 and SCCQFG2

SCCQFG1 is used to indicate to VMCF which queue selection criteria fields, if any, can be modified by the user. Users indicate a field is modifiable by setting the bit that represents that field. SCCQFG1 is also used to indicate whether the user can browse, delete, hold, or release JES output.

For example, by setting SCCQFG1 to a value of X'80' would indicate to VMCF that the user is only allowed to modify the queue selection class list. All other queue selection criteria fields (i.e., destination, form name, and writer name) would be protected.

SCCQFG2 is used to indicate to VMCF which JES output characteristic fields, if any, can be modified by the user. Users indicate a field is modifiable by setting the bit that represents that field.

For example, setting SCCQFG2 to a value of X'88' would indicate to VMCF that the user is allowed to modify the output priority and the output's writer name. All other JES output characteristic fields would be protected.

If the user is not authorized to access the VPS Printer Output Queue and VPS Printer Held Queue, then the return code should be set to 04.

0002/0006

This major/minor code is passed on initial entry to the VPS Printer Output Queue and VPS Printer Held Queue and also whenever the user attempts to modify the queue selection criteria. The requested primary queue selection criteria will be passed in fields SCCQSPC, SCCQSPD, SCCQSPF, and SCCQSPW. The requested secondary queue selection criteria will be passed in fields SCCQSSC, SCCQSSD, SCCQSSF, and SCCQSSW. If the requested queue selection criteria is valid, then the return code should be set to 00, otherwise, it should be set to 04.

0002/0007

This major/minor code is passed whenever a user attempts to browse JES output on the VPS Printer Output Queue or VPS Printer Held Queue screen. If the user is authorized to browse the output, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

The following table summarizes the additional information that is passed on this call.

Class	\$JSOCLAS
Destination	\$JSODEST
FCB Name	\$JSOFCB
Form Name	\$JSOFORM
Job Name	\$JSJNAME
Job Number	\$JSJNMBR
Job Owner	\$JSOWNER
Job Priority	\$JSJPRI
Job Type	\$JSJTYPE (JOB, STC,TSU)
Output Group Name	\$JSOGNAM
Output Priority	\$JSOOPRI
Route Code	\$JSROUTE
Security Label	\$JSSECLB
Total Records	\$JSTRECS
TSO user ID for NOTIFY	\$JSTSUID (available for BROWSE only)
Writer Name	\$JSOWTR

Table 4-1: Security Interface Functions - Information Passed on BROWSE Call

Note that the internal security interface supplied by LRS (VS80SCI1) assumes that if a user has BROWSE authority for a VPS printer, then the user is authorized to browse any output queued to the printer. The external security interface (VS80SCX3) qualifies each BROWSE request with the JOB-NAME to determine if the user is authorized to browse the output.

0003/N/A

This major code is passed whenever a user attempts to modify the default VPS Started Task (STC) name on the VPS Parameter Options screen or via the VMCF DEFLTSTC command. The requested VPS STC name will be passed in field SCCNSTC. If the requested VPS STC name is valid, then the return code should be set to 00, otherwise, it should be set to 04.

Return codes:

- 00** - User is authorized to perform the requested function.
- 04** - User is not authorized to perform the requested function.

VMCF Session Command Verification

Function:

The COMMAND VERIFICATION routine is given control whenever the security interface is invoked with a function code (SCFUNC) of 8. The security interface is driven with a function code of 8 prior to the actual issuance of every DRS, JES, MVS, and VPS command and the VMCF PROFILE and SAF commands. Note that VPS commands entered from the command line as well as VPS commands entered via the various VMCF menus cause the security interface to be driven with a function code of 8. Installations can use the COMMAND VERIFICATION routine to determine whether VMCF should terminate processing for the command or allow normal processing to continue.

The type of command being issued can be determined by examining the SCMAJOR and SCMINOR fields in the VMCF security parameter list. The SCMAJOR field is used to identify the category of the command (i.e., VPS system command, VPS printer command, etc.). The SCMINOR field is used to identify the specific command within the category (i.e., ACTIVATE, START, STOP, etc.).

Following is a summary of each MAJOR/MINOR request that is processed by the COMMAND VERIFICATION routine. Refer to the VMCF security parameter list DSECT (VSRVSEC mapping macro) for a complete description of the information passed on each request.

MAJOR/MINOR	DESCRIPTION
0001/0001	This major/minor code is passed whenever a user attempts to initialize a VPS system via the MVS START command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0001/0002	This major/minor code is passed whenever a user attempts to terminate a VPS system normally via the VPS END command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0001/0003	This major/minor code is passed whenever a user attempts to terminate a VPS system immediately via the MVS STOP command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0001/0004	This major/minor code is passed whenever a user attempts to ABEND a VPS system via the VPS ABEND command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0001/0005	This major/minor code is passed whenever a user attempts to close the VPS log dataset via the VPS CLOSELOG command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

0001/0006

This major/minor code is passed whenever a user attempts to change a VPS system option via the VPS SSET command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The following table summarizes the additional information that is passed on this call.

Option	Current	Requested
Exit Status	SSTOEXIT	SSTNEXIT
Expire	SSTOEXP	SSTNEXP
Interval	SSTOWAIT	SSTNWAIT
Logging	SSTOLOG	SSTNLOG
Max Active	SSTOMACT	SSTNMACT
Trace Types	SSTOTTYP	SSTNTTYP

Table 4-2: Security Interface Functions - Information Passed on SSET Call

Note: Any field within the “Requested” column containing a value of binary zeros indicates that the user is not attempting to modify that particular option.

0001/0007

This major/minor code is passed whenever a user attempts to issue the VPS LOG command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The log message will be passed in field LOGMSG.

0001/0008

This major/minor code is passed whenever a user attempts to issue the VPS POST command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

0001/0009

This major/minor code is passed whenever a user attempts to issue the VPS SSTAT command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The SSTAT options will be passed in fields SSTALOG and SSTARSET.

0001/0010

This major/minor code is passed whenever a user attempts to issue the VPS SNAP,SYSTEM command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

0002/0001

This major/minor code is passed whenever a user attempts to issue the VPS DISPLAY command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

If the command specifies a specific printer id, then the printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

If the command specifies a generic printer id, then the printer id specified will be passed in field SCLUNAME. The SCGROUP, SCMEMBER, and SCSTATUS fields will contain binary zeros.

If the command specifies a group name (i.e., G=grpname), then the group name specified will be passed in field SCGROUP. The SCLUNAME, SCMEMBER, and SCSTATUS fields will contain binary zeros.

If the command specifies a printer status (i.e., S=status), then the status specified (i.e., A, I, E, etc.) will be passed in field SCSTATUS. The SCGROUP, SCLUNAME, and SCMEMBER fields will contain binary zeros.

0002/0002

This major/minor code is passed whenever a user attempts to issue the VPS ACTIVATE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's member name will be passed in field SCMEMBER. The SCGROUP, SCLUNAME, and SCSTATUS fields will contain binary zeros.

0002/0003

This major/minor code is passed whenever a user attempts to issue the VPS INACTIVATE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

Refer to major/minor code 0002/0001 above for a description of the additional information passed on this call.

0002/0004

This major/minor code is passed whenever a user attempts to issue the VPS START command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

Refer to major/minor code 0002/0001 above for a description of the additional information passed on this call.

0002/0005

This major/minor code is passed whenever a user attempts to issue the VPS STOP command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The STOP option, if any, will be passed in field STOPOPT.

Refer to major/minor code 0002/0001 above for a description of the additional information passed on this call.

0002/0006

This major/minor code is passed whenever a user attempts to issue the VPS CANCEL command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The CANCEL option, if any, will be passed in field CANCELLOPT.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

0002/0007

This major/minor code is passed whenever a user attempts to issue the VPS REPEAT command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

0002/0008

This major/minor code is passed whenever a user attempts to issue the VPS REPOSITION command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

0002/0009

This major/minor code is passed whenever a user attempts to issue the VPS RESTART command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

0002/0010

This major/minor code is passed whenever a user attempts to issue the VPS SEL command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

The following table summarizes the additional information that is passed on this call.

Option	Current	Requested
Primary		
Class List	SELOCLAS	SELNCLAS
Destination	SELODEST	SELNDEST
Form Name	SELOFORM	SELNFORM
Writer Name	SELOWTR	SELNWTR
Secondary		
Class List	SELOSCLS	SELNSCLS
Destination	SELOSDST	SELNSDST
Form Name	SELOSFRM	SELNSFRM
Writer Name	SELOSWTR	SELNSWTR

Table 4-3: Security Interface Functions - Information Passed on SEL Call

Note: Any field within the “Requested” column containing a value of binary zeros indicates that the user is not attempting to modify that particular option.

0002/0011

This major/minor code is passed whenever a user attempts to issue the VPS SET command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

The following table summarizes the additional information that is passed if this call is for a VPS printer.

Option	Current	Requested
Auto Eject	SETOAEJ	SETNAEJ
Max Lines/Page	SETOMLP	SETNMLP
Release Request	SETORLRQ	SETNRLRQ
Separator	SETOSEP	SETNSEP
TCP Host	SETOTCPH	SETNTCPH
Trace	SETOTRCE	SETNTRCE
Trace Types	SETOTTYP	SETNTTYP
TPUT User ID	SETOTPUT	SETNTPUT
Requeue Class	SETORQC	SETNRQC
Requeue Dest	SETORQD	SETNRQD
Requeue Form	SETORQF	SETNRQF
Requeue Outref	SETORQO	SETNRQO
Requeue Writer	SETORQW	SETNRQW
Requeue Delete	SETORQDL	SETNRQDL
Requeue Hold	SETORQH	SETNRQH
Requeue Limit	SETORQL	SETNRQL
Requeue Route	SETORQR	SETNRQR

Table 4-4: Security Interface Functions - Information Passed on SET Call

If this call is for a JES or PSF printer, the field SETJPRT will have the address of an area which contains the old and new JES or PSF printer options. These options can be mapped with member VMCFJPRT in the VMCF macro library.

Note: Any field within the "Requested" column containing a value of binary zeros indicates that the user is not attempting to modify that particular option.

0002/0012

This major/minor code is passed whenever a user attempts to issue the VPS SNAP command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

0002/0013	<p>This major/minor code is passed whenever a user attempts to issue the VPS ACQUIRE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.</p> <p>The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.</p>
0002/0014	<p>This major/minor code is passed whenever a user attempts to issue the VPS RELEASE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.</p> <p>The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.</p>
0002/0015	<p>This major/minor code is passed whenever a user attempts to issue the VPS REACTIVATE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.</p> <p>The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.</p>
0002/0016	<p>This major/minor code is passed whenever a user attempts to issue the VPS INTERRUPT command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.</p> <p>The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.</p>
0002/0017	<p>This major/minor code is passed whenever a user attempts to issue the VPS EXPIRE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.</p> <p>The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.</p>

0003/0001

This major/minor code is passed whenever a user attempts to delete a JES output. If the user is authorized to delete the output, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

The following table summarizes the additional information that is passed on this call.

Class	\$JSOCLAS
Destination	\$JSODEST
FCB Name	\$JSOFCB
Form Name	\$JSOFORM
Job Name	\$JSJNAME
Job Number	\$JSJNMBR
Job Owner	\$JSOWNER
Job Priority	\$JSJPRI
Job Type	\$JSJTYPE (JOB, STC, TSU)
Output Group Name	\$JSOGNAM
Output Priority	\$JSOOPRI
Route Code	\$JSROUTE
Security Label	\$JSSECLB
Total Records	\$JSTRECS
Writer Name	\$JSOWTR

Table 4-5: Security Interface Functions - Information Passed on JES Delete Call

0003/0002

This major/minor code is passed whenever a user attempts to modify the characteristics of JES output. If the user is authorized to modify the output characteristics, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

The following tables summarize the additional information that is passed on this call.

Job Name	\$JSJNAME
Job Number	\$JSJNMBR
Job Owner	\$JSOWNER
Job Priority	\$JSJPRI
Job Type	\$JSJTYPE (JOB, STC, TSU)
Output Group Name	\$JSOGNAM
Route Code	\$JSROUTE
Security Label	\$JSSECLB
Total Records	\$JSTRECS

Option	Current	Requested
Output Priority	\$JSOOPRI	\$JSNOPRI
Class	\$JSOCLAS	\$JSNCLAS
Destination	\$JSODEST	\$JSNDEST
Form Name	\$JSOFORM	\$JSNFORM
Writer Name	\$JSOWTR	\$JSNWTR
FCB Name	\$JSOFCB	\$JSNFCB

Table 4-6: Security Interface Functions - Information Passed on JES Modification

Note: Any field within the “Requested” column containing a value of binary zeros indicates that the user is not attempting to modify that particular option.

0003/0003

This major/minor code is passed whenever a user attempts to route a printer's output to another location via the VMCF ROUTE command. If the user is authorized to route the output, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

The following tables summarize the additional information that is passed on this call.

Class List	\$JSRCLSL
Old Destination	\$JSRODST
New Destination	\$JSRNDST

Table 4-7: Security Interface Functions - Information Passed on ROUTE Command

0003/0004

This major/minor code is passed whenever a user attempts to hold JES output. If the user is authorized to hold the output, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

Refer to major/minor code 0003/0001 for a description of the additional information that is passed on this call.

0003/0005

This major/minor code is passed whenever a user attempts to release JES output. If the user is authorized to release the output, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's group, network, and member names will be passed in fields SCGROUP, SCLUNAME, and SCMEMBER respectively. The SCSTATUS field will contain binary zeros.

Refer to major/minor code 0003/0001 for a description of the additional information that is passed on this call.

0004/0001

This major/minor code is passed whenever a user attempts to issue the VMCF PROFILE command. If the user is authorized to issue the command, then the following actions should be performed:

- set the return code to 00
- re-establish the user's authorization based on the new profile id. Refer to the INITIALIZATION function for a description of establishing the user's authorization.

If the user is not authorized, then the return code should be set to 04.

The requested profile user ID or terminal ID will be passed in fields PROFUSER or PROFCRT respectively.

0004/0002

This major/minor code is passed whenever a user attempts to issue the VMCF SAF REFRESH command to re-create the rules for External Security, using the System Authorization Facility.

If the user is authorized to issued the SAF REFRESH command, then the return code should be set to 00; otherwise, it should be set to 04.

Return codes:

- 00** - Continue with normal command processing.
- 04** - Terminate processing for the command.

DMCF Session Control Verification

Function:

The CONTROL VERIFICATION routine is given control whenever the security interface is invoked with a function code (SCFUNC) of 4. This routine then determines whether or not the user is authorized to perform the requested function. Installations can use the CONTROL VERIFICATION routine to strictly control the functions available to each DMCF user.

The type of control request can be determined by examining the SCMAJOR and SCMINOR fields in the DMCF security parameter list. The SCMAJOR field is used to identify the category of the request (i.e., DRS system function, DRS printer function, etc.). The SCMINOR field is used to identify the specific request within the category (i.e., Diagnostic display, etc.).

Following is a summary of each MAJOR/MINOR request that is processed by the CONTROL VERIFICATION routine. Refer to the VMCF and/or DMCF security parameter list DSECT (VSRVSEC mapping macro) for a complete description of the information passed on each request.

MAJOR/ MINOR	DESCRIPTION
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0009/0001	This major/minor code is passed whenever DMCF needs to determine which printers are to be included in the DRS Printer Selection List. A separate call is made to the security routine for every printer currently defined to DRS that matches the user specified selection criteria. If the user is authorized to control the specified printer, then the return code should be set to 00, otherwise, it should be set to 04.
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Note: The printer's member name will be passed in field SCMEMBER.

0009/0002	This major/minor code is passed whenever a user attempts to access the DRS Printer Command Menu or whenever the user changes the printer name on the DRS Printer Command Menu. If the user is authorized, then the following actions should be performed: <ul style="list-style-type: none">• set the return code to 00• set the appropriate bits in flag bytes SCCPCFG1_DRS, SCCPCFG2_DRS, SCCSTFG1_DRS, and SCCSTFG2_DRS.
------------------	--

The above flag bytes are used to indicate to DMCF which DRS printer commands the user can issue and also which operands of the commands are valid. A command is made available to the user by setting the bit that represents that command.

If the user is not authorized, then the return code should be set to 04.

Note: Denying access to a printer on the DRS Printer Command Menu does not prevent a user from issuing the command from the command line.

0011/N/A This major code is passed whenever a user attempts to modify the default DRS Started Task (STC) name on the DRS Parameter Options screen or via the DMCF DEFLTSTC command. The requested DRS STC name will be passed in field SCCNSTC_DRS. If the requested DRS STC name is valid, then the return code should be set to 00, otherwise, it should be set to 04.

Return codes:

- 00** - User is authorized to perform the requested function.
- 04** - User is not authorized to perform the requested function.

DMCF Session Command Verification

Function:

The COMMAND VERIFICATION routine is given control whenever the security interface is invoked with a function code (SCFUNC) of 8. The security interface is driven with a function code of 8 prior to the actual issuance of every DRS and MVS command and the DMCF PROFILE and SAF commands. Note that DRS commands entered from the command line as well as DRS commands entered via the various DMCF menus cause the security interface to be driven with a function code of 8. Installations can use the COMMAND VERIFICATION routine to determine whether DMCF should terminate processing for the command or allow normal processing to continue.

The type of command being issued can be determined by examining the SCMAJOR and SCMINOR fields in the DMCF security parameter list. The SCMAJOR field is used to identify the category of the command (i.e., DRS system command, DRS printer command, etc.). The SCMINOR field is used to identify the specific command within the category (i.e., ACTIVATE, START, STOP, etc.).

Following is a summary of each MAJOR/MINOR request that is processed by the COMMAND VERIFICATION routine. Refer to the DMCF security parameter list DSECT (VSRVSEC mapping macro) for a complete description of the information passed on each request.

MAJOR/MINOR	DESCRIPTION
0005/0001	This major/minor code is passed whenever a user attempts to initialize a DRS system via the MVS START command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0005/0002	This major/minor code is passed whenever a user attempts to terminate a DRS system normally via the DRS END command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0005/0003	This major/minor code is passed whenever a user attempts to terminate a DRS system immediately via the MVS STOP command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0005/0004	This major/minor code is passed whenever a user attempts to ABEND a DRS system via the DRS ABEND command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0005/0005	This major/minor code is passed whenever a user attempts to close the DRS log dataset via the DRS CLOSELOG command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.
0005/0006	This major/minor code is passed whenever a user attempts to change a DRS system option via the DRS SSET command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The following table summarizes the additional information that is passed on this call.

Option	Current	Requested
Exit Status	SSTOEXIT_DRS	SSTNEXIT_DRS
Logging	SSTOLOG_DRS	SSTNLOG_DRS
Max Active TCPIP	SSTOMTCP_DRS	SSTNMTCP_DRS
Max Active VTAM	SSTOMVTM_DRS	SSTNMVTM_DRS
TCPIP Status	SSTOTTCP_DRS	SSTNTTCP_DRS
Trace Types	SSTOTTYP_DRS	SSTNTTYP_DRS

Table 4-8: Security Interface Functions - Information Passed on SSET Call

Note: Any field within the “Requested” column containing a value of binary zeros indicates that the user is not attempting to modify that particular option.

0005/0007 This major/minor code is passed whenever a user attempts to issue the DRS LOG command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The log message will be passed in field LOGMSG.

0005/0008 This major/minor code is passed whenever a user attempts to issue the DRS SNAP,SYSTEM command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

0006/0001 This major/minor code is passed whenever a user attempts to issue the DRS ACTIVATE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's member name will be passed in field SCMEMBER. The SCGROUP, SCLUNAME, and SCSTATUS fields will contain binary zeros.

0006/0002 This major/minor code is passed whenever a user attempts to issue the DRS INACTIVATE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

Refer to major/minor code 0002/0001 above for a description of the additional information passed on this call.

0006/0003 This major/minor code is passed whenever a user attempts to issue the DRS REACTIVATE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's member name will be passed in field SCMEMBER. The SCSTATUS field will contain binary zeros.

0006/0004

This major/minor code is passed whenever a user attempts to issue the DRS START command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

Refer to major/minor code 0002/0001 above for a description of the additional information passed on this call.

0006/0005

This major/minor code is passed whenever a user attempts to issue the DRS STOP command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The STOP option, if any, will be passed in field STOPOPT.

Refer to major/minor code 0002/0001 above for a description of the additional information passed on this call.

0006/0006

This major/minor code is passed whenever a user attempts to issue the DRS SET command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's member name will be passed in field SCMEMBER. The SCSTATUS field will contain binary zeros.

The following table summarizes the additional information that is passed if this call is for a VPS printer.

Option	Current	Requested
Trace	SETOTRCE_DRS	SETNTRCE_DRS
Trace Types	SETOTTYP_DRS	SETNTTYP_DRS

Table 4-9: Security Interface Functions - Information Passed on SET Call

Note: Any field within the "Requested" column containing a value of binary zeros indicates that the user is not attempting to modify that particular option.

0006/0007

This major/minor code is passed whenever a user attempts to issue the DRS SNAP command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's member name will be passed in field SCMEMBER. The SCSTATUS field will contain binary zeros.

0006/0008

This major/minor code is passed whenever a user attempts to issue the DRS DISPLAY command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

If the command specifies a specific printer id, then the printer's member name will be passed in field SCMEMBER. The SCSTATUS field will contain binary zeros.

If the command specifies a generic printer id, then the printer id specified will be passed in field SCLUNAME. The SCGROUP, SCMEMBER, and SCSTATUS fields will contain binary zeros.

If the command specifies a printer status (i.e., S=status), then the status specified (i.e., A, I, E, etc.) will be passed in field SCSTATUS. The SCGROUP, SCLUNAME, and SCMEMBER fields will contain binary zeros.

0006/0009

This major/minor code is passed whenever a user attempts to issue the DRS PURGE command. If the user is authorized to issue the command, then the return code should be set to 00, otherwise, it should be set to 04.

The printer's member name will be passed in field SCMEMBER. The SCSTATUS field will contain binary zeros.

VMCF and/or DMCF Session Termination

Function:

The TERMINATION routine is given control whenever the security interface is invoked with a function code (SCFUNC) of 16 (only during normal or abnormal VMCF and/or DMCF termination). The primary purpose of this routine is to release any resources acquired during VMCF and/or DMCF security processing.

Return codes:

Not applicable.

Converting From Internal Security to External Security

This section is intended to help users convert from the internal security interface, which uses the VMCF and/or DMCF Security Table, to the external security interface.

A program is supplied with VMCF and/or DMCF which will convert the VMCF and/or DMCF Security Table to rules to be used by the System Authorization Facility of VMCF and/or DMCF. Sample JCL to execute the conversion program is contained in member SCV7JCL in file LRS.VSV.V1R80.CNTL.

Input parameters:

CLASS: VPS class name (Default \$VPS)

TABLE: Security table load module name, 1 - 8 characters (Default name is VS80SECT)

SAF: Name of security system. Valid values are:

RACF - Create rules for RACF (Default)

ACF2 - Create rules for CA-ACF2

TOPS - Create rules for CA-TOP SECRET

Notes About The Conversion Program

1. The conversion program will create RACF, CA-ACF2 or CA-TOP SECRET commands to define VMCF and/or DMCF resources and permit user access. These commands are placed in the output file whose DD name is RULES. You may want to modify the commands before executing them.
2. The conversion program will create commands which may contain generic user ID values. If you are using RACF, you may wish to change these generic names to the RACF GROUP name which identifies the group of users you wish to allow to access the VMCF and/or DMCF functions. For CA-ACF2, you can specify a mask of the UID string for a group of users.
3. The conversion program will not create any rules which control access to JES commands. For sample JES command rules, see [“VMCF JES Command Authorization” on page 4.83](#).
4. Generic resource names can be created with your security system, depending on the release of that system and the generic options used at your installation. No VMCF and/or DMCF function requires a generic rule to be created.
5. Rules written for ALL and NONE will improve efficiency when VMCF and/or DMCF is checking for user authorization, but are not required.

Following are tables showing the correlation between the security table macro parameters and the external security resource names.

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
USER	MENUOPT	ALL	VPS.PRIMENU.ALL
USER	MENUOPT	DRS	VPS.PRIMENU.DRS
USER	MENUOPT	PAGECTR	VPS.PRIMENU.PAGECTR
USER	MENUOPT	PARM	VPS.PRIMENU.PARM
USER	MENUOPT	PCMDS	VPS.PRIMENU.PCMDS
USER	MENUOPT	PLIST	VPS.PRIMENU.PLIST
USER	MENUOPT	PQUEUE	VPS.PRIMENU.PQUEUE
USER	MENUOPT	SCMDS	VPS.PRIMENU.SCMDS
USER	MENUOPT	SERVER	VPS.PRIMENU.SERVER
USER	MENUOPT	SOPTS	VPS.PRIMENU.SOPTS
USER	MENUOPT	SSTATS	VPS.PRIMENU.SSTATS
USER	MENUOPT	VMCFVTAM	VPS.PRIMENU.VMCFVTAM

Table 4-10: SAF Resource Names for TYPE = USER: MENUOPT

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
USER	DRSMENU	ALL	DRS.PRIMENU.ALL
USER	DRSMENU	OUTREF	DRS.PRIMENU.OUTREF
USER	DRSMENU	PARM	DRS.PRIMENU.PARM
USER	DRSMENU	PCMDS	DRS.PRIMENU.PCMDS
USER	DRSMENU	PLIST	DRS.PRIMENU.PLIST
USER	DRSMENU	PTRACK	DRS.PRIMENU.PTRACK
USER	DRSMENU	SCMDS	DRS.PRIMENU.SCMDS
USER	DRSMENU	SERVER	DRS.PRIMENU.SERVER
USER	DRSMENU	SOPTS	DRS.PRIMENU.SOPTS
USER	DRSMENU	SSTATS	DRS.PRIMENU.SSTATS
USER	DRSMENU	VTAM	DRS.PRIMENU.VTAM

Table 4-11: SAF Resource Names for TYPE = USER: DRSMENU

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
USER	VPSSTC	stcname	VPS.STC.stcname **

Table 4-12: SAF Resource Names for TYPE = USER: VPSSTC

** For VPSSTC=(stc1,stc2,...), a resource name for each STC name in the list should be created and read access should be given to the user. These rules are unnecessary if user has read access to resource **VPS.STC.ALL**.

VPS.STC.stc1

VPS.STC.stc2 etc...

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
USER	DRSSTC	stcname	DRS.STC.stcname **

Table 4-13: SAF Resource Names for TYPE = USER: DRSSTC

** For DRSSTC=(stc1,stc2,...), a resource name for each STC name in the list should be created and read access should be given to the user. These rules are unnecessary if user has read access to resource **DRS.STC.ALL**.

DRS.STC.stc1

DRS.STC.stc2 etc...

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
USER	SYSAUTH	ALL	VPS.SYSAUTH.ALL
			VPS.SCMD.ALL
			VPS.MVSCMD.ALL
			VPS.JESCMD.ROUTE
			VPS.STC.ALL
USER	SYSAUTH	NONE	VPS.SYSAUTH.NONE
			VPS.SCMD.NONE
			VPS.MVSCMD.NONE
USER	SYSAUTH	ABEND	VPS.SYSAUTH.ABEND
USER	SYSAUTH	ANYSTC	VPS.STC.ALL
USER	SYSAUTH	CLOSELOG	VPS.SCMD.CLOSELOG
USER	SYSAUTH	DIAG	VPS.SYSAUTH.DIAG
USER	SYSAUTH	END	VPS.SCMD.END
USER	SYSAUTH	GBLVIEW	VPS.SYSAUTH.GBLVIEW
USER	SYSAUTH	GROUP	VPS.SYSAUTH.GROUP
USER	SYSAUTH	HALT	VPS.MVSCMD.STOP
USER	SYSAUTH	JESPRTR	VPS.JESPRTR
USER	SYSAUTH	LOGMSG	VPS.SCMD.LOG
USER	SYSAUTH	POST	VPS.SCMD.POST
USER	SYSAUTH	PROFILE	VPS.SYSAUTH.PROFILE
USER	SYSAUTH	ROUTE	VPS.JESCMD.ROUTE
USER	SYSAUTH	SETEXIT & SETLOG & SETMAX & SETTRTYP & SETWAIT	VPS.SCMD.SSET.ALL
USER	SYSAUTH	(No system set options)	VPS.SCMD.SSET.NONE
USER	SYSAUTH	SETEXIT	VPS.SCMD.SSET.EXIT
USER	SYSAUTH	SETLOG	VPS.SCMD.SSET.LOG
USER	SYSAUTH	SETMAX	VPS.SCMD.SSET.MAXACT
USER	SYSAUTH	SETTRTYP	PS.SCMD.SSET.TRYPES
USER	SYSAUTH	SETWAIT	VPS.SCMD.SSET.INTERVAL
USER	SYSAUTH	SNAP	VPS.SCMD.SNAP
USER	SYSAUTH	SSTAT	VPS.SCMD.SSTAT
USER	SYSAUTH	START	VPS.MVSCMD.START
USER	SYSAUTH	STATUS	VPS.SYSAUTH.STATUS

Table 4-14: SAF Resource Names for TYPE = USER: SYSAUTH

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
USER	DRSAUTH	ALL	DRS.DRSAUTH.ALL
			DRS.SCMD.ALL
			DRS.MVSCMD.ALL
			DRS.STC.ALL
USER	DRSAUTH	NONE	DRS.DRSAUTH.NONE
			DRS.SCMD.NONE
			DRS.MVSCMD.NONE
USER	DRSAUTH	ABEND	DRS.DRSAUTH.ABEND
USER	DRSAUTH	ANYSTC	DRS.STC.ALL
USER	DRSAUTH	CLOSELOG	DRS.SCMD.CLOSELOG
USER	DRSAUTH	DIAG	DRS.DRSAUTH.DIAG
USER	DRSAUTH	END	DRS.SCMD.END
USER	DRSAUTH	GBLVIEW	DRS.DRSAUTH.GBLVIEW
USER	DRSAUTH	GROUP	DRS.SYSAUTH.GROUP
USER	DRSAUTH	HALT	DRS.MVSCMD.STOP
USER	DRSAUTH	LOGMSG	DRS.SCMD.LOG
USER	DRSAUTH	SETEXIT & SETLOG & SETMAXIP & SETMAXVT & SETTCPIP & SETTRTYP	DRS.SCMD.SSET.ALL
USER	DRSAUTH	(No system set options)	DRS.SCMD.SSET.NONE
USER	DRSAUTH	SETEXIT	DRS.SCMD.SSET.EXIT
USER	DRSAUTH	SETLOG	DRS.SCMD.SSET.LOG
USER	DRSAUTH	SETMAXIP	DRS.SCMD.SSET.MAXTCPIP
USER	DRSAUTH	SETMAXVT	DRS.SCMD.SSET.MAXVTAM
USER	DRSAUTH	SETTCPIP	DRS.SCMD.SSET.TCPIP
USER	DRSAUTH	SETTRTYP	DRS.SCMD.SSET.TRYPES
USER	DRSAUTH	SNAP	DRS.SCMD.SNAP
USER	DRSAUTH	START	DRS.MVSCMD.START
USER	DRSAUTH	STATUS	DRS.DRSAUTH.STATUS

Table 4-15: SAF Resource Names for TYPE = USER: DRSAUTH

In the following examples, “prtrid” can be the MEMBER name, LUNAME, GROUP name, IP name|address, or long printer name (PRTNAME). Note that the ACTIVATE command requires the member name be specified.

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
PRINTER	CMDAUTH	ALL	VPS.PCMD.ALL.prtrid
PRINTER	CMDAUTH	NONE	VPS.PCMD.NONE.prtrid
PRINTER	CMDAUTH	ACQ	VPS.PCMD.ACQUIRE.prtrid
PRINTER	CMDAUTH	ACT	VPS.PCMD.ACTIVATE.prtrid
PRINTER	CMDAUTH	CANCEL	VPS.PCMD.CANCEL.prtrid
PRINTER	CMDAUTH	DISPLAY	VPS.PCMD.DISPLAY.prtrid
PRINTER	CMDAUTH	INACT	VPS.PCMD.INACTIVATE.prtrid
PRINTER	CMDAUTH	QUEUE	(See QUEAUTH below)
PRINTER	CMDAUTH	INTERUPT	VPS.PCMD.INTERRUPT.prtrid
PRINTER	CMDAUTH	REACT	VPS.PCMD.REACTIVATE.prtrid
PRINTER	CMDAUTH	RELEASE	VPS.PCMD.RELEASE.prtrid
PRINTER	CMDAUTH	REPEAT	VPS.PCMD.REPEAT.prtrid
PRINTER	CMDAUTH	REPOS	VPS.PCMD.REPOSITION.prtrid
PRINTER	CMDAUTH	RESTART	VPS.PCMD.RESTART.prtrid
PRINTER	CMDAUTH	SEL	(See SELAUTH below)
PRINTER	CMDAUTH	SET	(See SETAUTH below)
PRINTER	CMDAUTH	SNAP	VPS.PCMD.SNAP.prtrid
PRINTER	CMDAUTH	START	VPS.PCMD.START.prtrid
PRINTER	CMDAUTH	STOP	VPS.PCMD.STOP.prtrid

Table 4-16: SAF Resource names for TYPE = PRINTER: CMDAUTH

In the following examples, “prtrid” can be the MEMBER name, LUNAME, GROUP name, IP name|address, or long printer name (PRTNAME).

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
PRINTER	SELAUTH	ALL	VPS.PCMD.SEL.ALL.prtrid
PRINTER	SELAUTH	NONE	VPS.PCMD.SEL.NONE.prtrid
PRINTER	SELAUTH	CLASS	VPS.PCMD.SEL.CLASS.prtrid
PRINTER	SELAUTH	DEST	VPS.PCMD.SEL.DEST.prtrid
PRINTER	SELAUTH	FORM	VPS.PCMD.SEL.FORM.prtrid
PRINTER	SELAUTH	WRITER	VPS.PCMD.SEL.WRITER.prtrid

Table 4-17: SAF Resource Names for TYPE = PRINTER: SELAUTH

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
PRINTER	SETAUTH	ALL	VPS.PCMD.SET.ALL.prtrid
PRINTER	SETAUTH	NONE	VPS.PCMD.SET.NONE.prtrid
PRINTER	SETAUTH	AEJ	VPS.PCMD.SET.AEJECT.prtrid
PRINTER	SETAUTH	MLP	VPS.PCMD.SET.MAXLPG.prtrid
PRINTER	SETAUTH	RLRQ	VPS.PCMD.SET.RELREQ.prtrid
PRINTER	SETAUTH	RQDEL	VPS.PCMD.SET.RQDELT.prtrid
PRINTER	SETAUTH	RQHLD	VPS.PCMD.SET.RQHOLD.prtrid
PRINTER	SETAUTH	RQLIM	VPS.PCMD.SET.RQLIMIT.prtrid
PRINTER	SETAUTH	RQOUTP	VPS.PCMD.SET.RQOUTP.prtrid
PRINTER	SETAUTH	RQRTE	VPS.PCMD.SET.RQROUTE.prtrid
PRINTER	SETAUTH	SEP	VPS.PCMD.SET.SEPARATOR.prtrid
PRINTER	SETAUTH	SNAP	VPS.PCMD.SET.SNAP.prtrid
PRINTER	SETAUTH	TCPH	VPS.PCMD.SET.TCPHOST.prtrid
PRINTER	SETAUTH	TPUT	VPS.PCMD.SET.TPUT.prtrid
PRINTER	SETAUTH	TRC	VPS.PCMD.SET.TRACE.prtrid

Table 4-18: SAF Resource Names for TYPE = PRINTER: SETAUTH

In the following examples, “prtrid” can be the MEMBER name, LUNAME, GROUP name, IP name|address, or long printer name (PRTNAME).

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
PRINTER	QUEAUTH	ALL	VPS.QUEUE.ALL.prtrid
PRINTER	QUEAUTH	NONE	VPS.QUEUE.NONE.prtrid
PRINTER	QUEAUTH	BROWSE	VPS.QUEUE.BROWSE.prtrid
PRINTER	QUEAUTH	DELETE	VPS.QUEUE.DELETE.prtrid
PRINTER	QUEAUTH	HOLD	VPS.QUEUE.HOLD.prtrid
PRINTER	QUEAUTH	RELEASE	VPS.QUEUE.RELEASE.prtrid
PRINTER	QUEAUTH	SEL	(SEE QUESEL BELOW)
PRINTER	QUEAUTH	SET	(SEE QUESET BELOW)

Table 4-19: SAF Resource Names for TYPE = PRINTER: QUEAUTH

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
PRINTER	QUESEL	ALL	VPS.QUEUE.SEL.ALL.prtrid
PRINTER	QUESEL	NONE	VPS.QUEUE.SEL.NONE.prtrid
PRINTER	QUESEL	CLASS	VPS.QUEUE.SEL.CLASS.prtrid
PRINTER	QUESEL	DEST	VPS.QUEUE.SEL.DEST.prtrid
PRINTER	QUESEL	FORM	VPS.QUEUE.SEL.FORM.prtrid
PRINTER	QUESEL	WRITER	VPS.QUEUE.SEL.WRITER.prtrid

Table 4-20: SAF Resource Names for TYPE = PRINTER: QUESEL

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
PRINTER	QUESET	ALL	VPS.QUEUE.SET.ALL.prtrid
PRINTER	QUESET	NONE	VPS.QUEUE.SET.NONE.prtrid
PRINTER	QUESET	CLASS	VPS.QUEUE.SET.CLASS.prtrid
PRINTER	QUESET	DEST	VPS.QUEUE.SET.DEST.prtrid
PRINTER	QUESET	FCB	VPS.QUEUE.SET.FCB.prtrid
PRINTER	QUESET	FORM	VPS.QUEUE.SET.FORM.prtrid
PRINTER	QUESET	PRI	VPS.QUEUE.SET.PRI.prtrid
PRINTER	QUESET	WRITER	VPS.QUEUE.SET.WRITER.prtrid

Table 4-21: SAF Resource Names for TYPE = PRINTER: QUESET

In the following examples, “prtrid” can be the MEMBER name, GROUP name, or long printer name (PRTNAME).

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
DRSPRTR	CMDAUTH	ALL	DRS.PCMD.ALL.prtrid
DRSPRTR	CMDAUTH	NONE	DRS.PCMD.NONE.prtrid
DRSPRTR	CMDAUTH	ACT	DRS.PCMD.ACTIVATE.prtrid
DRSPRTR	CMDAUTH	DISPLAY	DRS.PCMD.DISPLAY.prtrid
DRSPRTR	CMDAUTH	INACT	DRS.PCMD.INACTIVATE.prtrid
DRSPRTR	CMDAUTH	PURGE	DRS.PCMD.PURGE.prtrid
DRSPRTR	CMDAUTH	REACT	DRS.PCMD.REACTIVATE.prtrid
DRSPRTR	CMDAUTH	SET	(See SETAUTH below)
DRSPRTR	CMDAUTH	SNAP	DRS.PCMD.SNAP.prtrid
DRSPRTR	CMDAUTH	START	DRS.PCMD.START.prtrid
DRSPRTR	CMDAUTH	STOP	DRS.PCMD.STOP.prtrid

Table 4-22: SAF Resource names for TYPE = DRSPRTR: CMDAUTH

TYPE	KEYWORD	VALUE	SAF RESOURCE NAME
PRINTER	SETAUTH	ALL	DRS.PCMD.SET.ALL.prtrid
PRINTER	SETAUTH	NONE	DRS.PCMD.SET.NONE.prtrid
PRINTER	SETAUTH	TRC	DRS.PCMD.SET.TRACE.prtrid

Table 4-23: SAF Resource Names for TYPE = DRSPRTR: SETAUTH

VMCF JES Command Authorization

Additional authorization checking is provided with VMCF external security in module VS80SCX2 for all JES commands issued to browse, delete, hold or release jobs or to change job output characteristics on the VPS Printer Output Queue screen and the VPS Printer Held Queue screen. All commands will be checked by JOBNAME to determine if the user is authorized to issue the command. Therefore, in addition to the resources defined by the conversion program, you may want to define resources to control JES commands for jobs.

JES command checking will occur only if the user was allowed to modify values on the VPS Printer Output Queue screen or VPS Printer Held Queue screen. No JES command rules need to be written for users unless they have access to one or more of the following VMCF resources:

VPS.QUEUE.ALL.prtrid
VPS.QUEUE.BROWSE.prtrid
VPS.QUEUE.DELETE.prtrid
VPS.QUEUE.HOLD.prtrid
VPS.QUEUE.RELEASE.prtrid

VPS.QUEUE.SET.ALL.prtrid
VPS.QUEUE.SET.CLASS.prtrid
VPS.QUEUE.SET.DEST.prtrid
VPS.QUEUE.SET.FCB.prtrid
VPS.QUEUE.SET.FORM.prtrid
VPS.QUEUE.SET.PRI.prtrid
VPS.QUEUE.SET.WRITER.prtrid

Examples of RACF commands to control access to JES commands are listed below.

To define user access to be the same as the VMCF internal security (VMCF Security Table), allow all users to issue all JES commands for all jobs with the following RACF commands:

```
RDEFINE $VPS VPS.JESCMD.BROWSE.*      UACC(READ)
RDEFINE $VPS VPS.JESCMD.CANCEL.*      UACC(READ)
RDEFINE $VPS VPS.JESCMD.HOLD.*        UACC(READ)
RDEFINE $VPS VPS.JESCMD.RELEASE.*    UACC(READ)
RDEFINE $VPS VPS.JESCMD.SET.*         UACC(READ)
```

If you need to restrict general user access to all commands for all jobs, but allow a specific user to issue JES commands for all jobs, issue the following command, specifying the RACF user ID or RACF group name in the ID field:

```
RDEFINE $VPS VPS.JESCMD.BROWSE.*      UACC(NONE)
RDEFINE $VPS VPS.JESCMD.CANCEL.*      UACC(NONE)
RDEFINE $VPS VPS.JESCMD.HOLD.*        UACC(NONE)
RDEFINE $VPS VPS.JESCMD.RELEASE.*    UACC(NONE)
RDEFINE $VPS VPS.JESCMD.SET.*         UACC(NONE)
PERMIT VPS.JESCMD.BROWSE.*            CLASS($VPS) ID(----)  ACCESS(READ)
PERMIT VPS.JESCMD.CANCEL.*            CLASS($VPS) ID(----)  ACCESS(READ)
PERMIT VPS.JESCMD.HOLD.*              CLASS($VPS) ID(----)  ACCESS(READ)
PERMIT VPS.JESCMD.RELEASE.*          CLASS($VPS) ID(----)  ACCESS(READ)
PERMIT VPS.JESCMD.SET.*               CLASS($VPS) ID(----)  ACCESS(READ)
```

To restrict commands for jobs beginning with ABC to a specific user, issue the following:

```
RDEFINE $VPS VPS.JESCMD.BROWSE.ABC*    UACC(NONE)
RDEFINE $VPS VPS.JESCMD.CANCEL.ABC*    UACC(NONE)
RDEFINE $VPS VPS.JESCMD.HOLD.ABC*      UACC(NONE)
RDEFINE $VPS VPS.JESCMD.RELEASE.ABC*   UACC(NONE)
RDEFINE $VPS VPS.JESCMD.SET.ABC*       UACC(NONE)
PERMIT VPS.JESCMD.BROWSE.ABC*          CLASS($VPS) ID(----)  ACCESS(READ)
PERMIT VPS.JESCMD.CANCEL.ABC*          CLASS($VPS) ID(----)  ACCESS(READ)
PERMIT VPS.JESCMD.HOLD.ABC*            CLASS($VPS) ID(----)  ACCESS(READ)
PERMIT VPS.JESCMD.RELEASE.ABC*         CLASS($VPS) ID(----)  ACCESS(READ)
PERMIT VPS.JESCMD.SET.ABC*              CLASS($VPS) ID(----)  ACCESS(READ)
```

Protecting JES Commands with OPERCMDS and JESSPOOL

By default, VS80SCX2 will use resource names in the \$VPS class to protect JES commands and output on the JES SPOOL as described on the previous pages. By specifying X'10' in the fifth positional parameter of the SVSAF= keyword in the LRS/MVS Server Initialization Member (e.g. VSVSTART), VS80SCX2 will use resource names in the OPERCMDS and JESSPOOL classes as described below to check JES command access. For convenience in definition, these resource names and access levels are intended to be the same for VMCF as for SDSF access.

RACF must be at level 1.9 or later and OPERCMDS and JESSPOOL classes must be active.

The VS80SCX3 module with SVSAF=(Y,,,10) compares the USER ID in VMCF to the OWNER of the job and allows all JES command access to any job owned by the VMCF user. For jobs not owned by the user, resources in the OPERCMDS and JESSPOOL classes and the access levels used to protect the commands and SYSOUT are listed below:

JES COMMAND AUTHORIZATION	CLASS	ACCESS	FUNCTION
VPS.JESCMD.ROUTE	\$VPS	READ	ROUTE
node.user.jobnm.jobid.GROUP.gpid	JESSPOOL	READ	BROWSE
JESx.CANCEL.type	OPERCMDS	UPDATE	DELETE
node.user.jobnm.jobid.GROUP.gpid	JESSPOOL	ALTER	DELETE
JESx.MODIFY.typeOUT	OPERCMDS	CONTROL	HOLD
node.user.jobnm.jobid.GROUP.gpid	JESSPOOL	ALTER	HOLD
JESx.MODIFY.typeOUT	OPERCMDS	CONTROL	RELEASE
node.user.jobnm.jobid.GROUP.gpid	JESSPOOL	ALTER	RELEASE
JESx.MODIFY.typeOUT	OPERCMDS	CONTROL	SET
node.user.jobnm.jobid.GROUP.gpid	JESSPOOL	ALTER	SET

Table 4-24: Protecting JES Commands with OPERCMDS and JESSPOOL Classes

JESx	Name of the target JES subsystem
type	BAT STC TSU
OUT	Character string 'OUT'
node	NJE Node ID
user	Local USER ID of the job owner
jobnm	Job name
jobid	Job ID (includes JOB STC TSU + job number)
GROUP	Character string 'GROUP'
gpid	Output group name

VMCF and/or DMCF CICS User ID Interface

The VMCF and/or DMCF CICS user ID interface provides installations the opportunity of determining and returning to VMCF/CICS and/or DMCF/CICS the current user's CICS user ID and terminal ID. The value returned in the CICS user ID field is used to search for matching USER= parameters in the VMCF and/or DMCF Security Table. The value returned in the CICS terminal ID field is used to search for matching TERM= parameters in the VMCF and/or DMCF Security Table. If the interface does not return a value for the terminal ID, VMCF and/or DMCF uses the terminal ID contained in the CICS EIB control block.

The supplied interface extracts and returns the user's CICS user ID (via an EXEC CICS ASSIGN USER ID command), but does not return a terminal ID. Installations can optionally modify the supplied interface to return a value other than the CICS user ID in the user id field, and/or to supply a value in the terminal ID field. A sixteen (16) byte COMMAREA is used to return the CICS user ID and terminal ID to VMCF and/or DMCF.

Note: If your security table refers to the CICS three-character operator id, you should modify VM81STID to return the OPID.

The source to the supplied interface is distributed as member VM81STID in file LRS.VMCF.V1R81.ASM on the distribution cartridge.

Sample JCL to assemble and linkedit the VMCF and/or DMCF CICS user ID interface is provided as member STIDASM in file LRS.VMCF.V1R81.CNTL.

Programming Considerations:

1. The VMCF and/or DMCF CICS user ID interface **MUST** be written using the CICS COMMAND LEVEL interface (assembler). Control is passed to the interface via an EXEC CICS LINK command.
2. Register contents on ENTRY to the user ID interface:
 - R1** Address of parameter list
 - Word 1 ==> Address of the EXEC Interface Block (EIB)
 - Word 2 ==> Address of the COMMAREA
 - R13** Address of caller's register savearea
 - R14** Return address
 - R15** Entry address
3. The VMCF and/or DMCF CICS user ID interface must be coded and linkedited as REENTRANT.

Section 5

User Exits

Implementing User Exits

This section describes the user exits that are available that allow you to customize the LRS/MVS Server components for your environment.

Although LRS distributes working samples of the exits, you may find it necessary to make modifications according to your needs. However, before you begin, it is important to understand the execution environment in which each user exit is invoked.

The following table identifies each user exit, the component to which it applies, and the valid execution environments.

User Exit Description	Component and Execution Environment	JES Related	Exit Keyword
LRS/MVS Server Startup Exit	LRS/MVS Server	no	SVEXIT00=
LRS/MVS Server Shutdown Exit	LRS/MVS Server	no	SVEXIT01=
LRS/MVS Server WTO Exit	LRS/MVS Server	no	SVEXIT02=
LRS/MVS Server Operator Command Exit	LRS/MVS Server	no	SVEXIT03=
LRS/MVS Server Internal Command Exit	LRS/MVS Server	no	SVEXIT04=
VMCF Queue Selection Exit	LRS/MVS Server	no	SVEXIT05=
VMCF JES Queue Scan Exit	LRS/MVS Server	yes	SVEXIT06=
VMCF JES Printer Scan Exit	LRS/MVS Server	yes	SVEXIT07=

Table 5.1: User Exit Table

User exits are implemented by assembling and linking the user exit into a library accessible by the target component. Sample JCL to assemble and link the user exits is supplied in member EXITASMH in the control library for each component. EXITASMH executes assembler program ASMA90.

Note: If you are using the VMCF Server Exits you must add your VMCF load library to your LNKLIST or STEPLIB for the LRS/MVS Server address space.

Language: All exits must be written in assembler language.

Reentrancy Considerations: All exits must be reentrant.

Execution Environment: All exits are given control in problem state and storage protect key 8. The initial addressing mode (AMODE) is determined by the addressing mode of the user exit load module.

Linkage Conventions: When a user exit receives control, R15 contains the entry point, R14 contains the address to which the exit must return control, and R13 points to a standard os-style 18 word register savearea. The user exit is responsible for saving and restoring registers according to standard MVS linkage conventions.

Note that when a user exit returns control, all registers must be restored to entry conditions, except R15, which should contain the return code. Any exceptions to this convention will be documented in the detailed description of the user exit.

Parameters Passed: When control is passed to a user exit, R0 will normally contain a request code and R1 the address of a parameter list. The request code and parameter list are exit dependent and are documented in the detailed description of each user exit. Note that the parameters passed to the user exits may be allocated either above or below the 16M line regardless of the addressing mode of the user exit.

Return Codes: When a user exit returns control, it must set an appropriate return code in R15. The return codes are exit dependent and are documented in the detailed description of each user exit.

Exit Status: An exit can have a status of ENABled or DISAbled. The initial status is determined by the ENA|DIS option of the keyword (SVEXITnn) used to define the exit. The default status is DISAbled. Note that the status of an exit may change under the following conditions:

- If the user exit abends and recovery is on, then the exit will be DISAbled automatically.
- The LRS/MVS Server SSET command may change the status to ENABled or DISAbled. Which SSET command is issued will depend on the exit's execution environment as described in the detailed description of the exit.

LRS/MVS Server Startup Exit (SVEXIT00)

Function: This exit, if implemented and enabled, is taken after the entire LRS/MVS Server address space has been successfully initialized. This exit may be used to acquire an installation defined system control block. The address, and possibly the length, of the control block may be placed into the two word user workarea (SYATUSWD) of the LRS/MVS Server system attribute control block that is passed as a parameter to all LRS/MVS Server user exits.

Related Exits: LRS/MVS Server Shutdown Exit

Defined: SVEXIT00= keyword in the LRS/MVS Server VSVSTART control library member (see [page 3.6](#)).

Execution Environment: LRS/MVS Server address space.

Recovery:

- If recovery is off and this exit abends, a storage dump will be taken and the LRS/MVS Server address space will be terminated.
- If recovery is on and this exit abends, a storage dump will be taken and the exit will be disabled automatically.

Since the LRS/MVS Server address space will be terminated if this exit abends and recovery is off, LRS recommends that recovery always be on for this exit.

Register Contents on Entry:

R0	Request code (always 00).
R1	Address of parameter list in the following format: Word 0 (+00) - Address of LRS/MVS Server System Attributes (VSRVSYAT). The high order bit of the last parameter will be set to 1.
R2-R12	N/A
R13	Address of os-style register savearea.
R14	Return address.
R15	Entry address.

Register Contents on Exit:

R0-R14	Same as upon entry.
R15	Return code.

Return Codes:

00	All other return codes are ignored.
----	-------------------------------------

Programming Considerations:

None.

Sample Program:

Member VSRVUE00 in dataset LRS.VSV.V1R80.ASM is an example of the LRS/MVS Server Startup Exit. This example displays the following LRS/MVS Server system information:

- LRS/MVS Server started task name.
- LRS/MVS Server VTAM ACB name.
- CPU version, identification number & model.
- SMF system id.
- JES subsystem name.

LRS/MVS Server Shutdown Exit (SVEXIT01)

Function: This exit, if implemented and enabled, is taken prior to normal or fast termination of the LRS/MVS Server address space. This exit may be used to release any resources acquired by previous user exits (e.g. post initialization). Note that this exit does not receive control if the LRS/MVS Server is terminated abnormally (i.e. LRS/MVS Server ABEND command, MVS CANCEL command, or LRS/MVS Server program check).

Related Exits: LRS/MVS Server STARTUP Exit.

Defined: SVEXIT01= keyword in the LRS/MVS Server VSVSTART control library member (see [page 3.7](#)).

Execution Environment: LRS/MVS Server address space.

Recovery:

- If recovery is off and this exit abends, a storage dump will be taken and the LRS/MVS Server address space will be terminated.
- If recovery is on and this exit abends, a storage dump will be taken and the exit will be disabled automatically.

Since the LRS/MVS Server address space will be terminated if this exit abends and recovery is off, LRS recommends that recovery always be on for this exit.

Register Contents on Entry:

R0	Request code (always 00).
R1	Address of parameter list in the following format: Word 0 (+00) - Address of LRS/MVS Server System Attributes (VSRVSYAT). The high order bit of the last parameter will be set to 1.
R2-R12	N/A
R13	Address of os-style register savearea.
R14	Return address.
R15	Entry address.

Register Contents on Exit:

R0-R14	Same as upon entry.
R15	Return code.

Return Codes:

00	All other return codes are ignored.
----	-------------------------------------

Programming Considerations:

1. This exit may be used to release any resources acquired by previous user exits (e.g. LRS/MVS Server Startup Exit).

Sample Program:

Member VSRVUE01 in dataset LRS.VSV.V1R80.ASM is an example of the LRS/MVS Server Shutdown Exit. This example displays the following LRS/MVS Server system statistics:

- LRS/MVS Server started task name.
- Highest number of active clients.
- Maximum virtual storage allocated.

LRS/MVS Server WTO Exit (SVEXIT02)

Function: This exit, if implemented and enabled, is taken prior to the execution of each WTO message. The exit can modify the message type, the message text, and also the console routing. In addition, the exit may cancel the message either by modifying the message type to 'NOP,LOG' or 'NOP,NOLOG'.

Note that this exit is taken for messages issued by various components (i.e., LRS/MVS Server messages, PageCenter messages, etc.). The component to which the message applies can be determined by examining the WTAMSCMP field. The following lists the value of WTAMSCMP for each component:

<u>Component</u>	<u>Message Prefix</u>
------------------	-----------------------

LRS/MVS Server	VSV
----------------	-----

PageCenter	VCP
------------	-----

The message type is changed by modifying the WTATYPE flag. Valid flags are as follows:

WTATACT	- Action message.
WTATINF	- Informational message.
WTATNOR	- Normal message.
WTATHRD	- Hardcopy message (i.e. SYSLOG).
WTATLOG	- Log message text.
WTATCMD	- Log command text.

Note that resetting the action, information, normal, and hardcopy flags will cause the WTO to be bypassed. Resetting the log flag (WTATLOG) will bypass logging the message in the LRS/MVS Server log (VSVLOG).

Related Exits: None.

Defined:

SVEXIT02= keyword in the LRS/MVS Server VSVSTART control library member (see [page 3.8](#)).

Execution Environment: LRS/MVS Server address space.

Recovery:

- If recovery is off and this exit abends, a storage dump will be taken and the execution address space will be terminated (i.e. LRS/MVS Server address space).
- If recovery is on and this exit abends, a storage dump will be taken and the exit will be disabled automatically.

Since the execution address space will be terminated if this exit abends and recovery is off, LRS recommends that recovery always be on for this exit.

Register Contents on Entry:

R0	Request code (always 00).
R1	Address of parameter list in the following format: Word 0 (+00) - Address of LRS/MVS Server System Attributes (VSRVSYAT). Word 1 (+04) - Address of WTO Attributes (VSRVWTAT). The high order bit of the last parameter will be set to 1.
R2-R12	N/A
R13	Address of os-style register savearea.
R14	Return address.
R15	Entry address.

Register Contents on Exit:

R0-R14	Same as upon entry.
R15	Return code.

Return Codes:

00	All other return codes are ignored.
----	-------------------------------------

Programming Considerations:

None.

Sample Program:

Member VSRVUE02 in member LRS.VSV.V1R80.ASM is an example of the LRS/MVS Server WTO Exit. This example modifies the message type of the following message to 'ACTION':

```
VSV000N INITIALIZATION SUCCESSFUL
```

LRS/MVS Server Operator Command Exit (SVEXIT03)

Function: This exit, if implemented and enabled, allows an installation to receive control whenever the LRS/MVS Server receives a command. This exit may be used to perform installation specific command validation and, based on the results of the validation, decide whether the LRS/MVS Server should allow normal command processing to continue or terminate processing for the command.

This exit is invoked prior to any LRS/MVS Server command validation. The exit has the capability of modifying the command text prior to returning to the LRS/MVS Server. If the exit requests that the command be ignored (RC=04), LRS/MVS Server processing will consist only of logging (LRS/MVS Server log) and tracing the command.

Related Exits: None.

Defined: SVEXIT03= keyword in the LRS/MVS Server VSVSTART control library member (see [page 3.9](#)).

Execution Environment: LRS/MVS Server address space.

Recovery:

- If recovery is off and this exit abends, a storage dump will be taken and the LRS/MVS Server address space will be terminated.
- If recovery is on and this exit abends, a storage dump will be taken and the exit will be disabled automatically.

Since the LRS/MVS Server address space will be terminated if this exit abends and recovery is off, LRS recommends that recovery always be on for this exit.

Register Contents on Entry:

R0	Request code (always 00).
R1	Address of parameter list in the following format: Word 0 (+00) - Address of LRS/MVS Server System Attributes (VSRVSYAT). Word 1 (+04) - Address of Command Buffer (see Programming Considerations for the format of the buffer). The high order bit of the last parameter will be set to 1.
R2-R12	N/A
R13	Address of OS-Style register savearea.
R14	Return address.
R15	Entry address.

Register Contents on Exit:

R0-R14	Same as upon entry.
R15	Return code.

Return Codes:

00	Process the command.
04	Ignore the command.

Programming Considerations:

1. The second word of the input parameter list will contain the address of the command buffer for all commands except "P VSVLRS", where VSVLRS is the name of the LRS/MVS Server started task. If the command is "P VSVLRS", the second word will contain binary zeroes, except that the high order (X'80') bit will be set.
2. The command buffer format is:
 - command length (2 bytes - does not include the command length field).
 - command text (120 byte maximum).
3. Both the command buffer length and data fields can be altered.

Sample Program:

Member VSRVUE03 in dataset LRS.VSV.V1R80.ASM is an example of the LRS/MVS Server Command Exit. This example requests that the LRS/MVS Server ignore the ABEND command.

LRS/MVS Server Internal Command Exit (SVEXIT04)

Note: In previous releases of VMCF, this was VMCF User Exit 01.

Function: This exit, if implemented and enabled, is taken prior to the execution of each DRS, JES, MVS, and VPS command. The exit may modify the command text and optionally request that the command be ignored.

Note that the VMCF security interface has already successfully validated the command prior to invoking this exit.

Related Exits: None.

Defined: SVEXIT04= keyword in the LRS/MVS Server VSVSTART control library member (see [page 3.10](#)).

Execution Environment: LRS/MVS Server address space.

Recovery:

- If recovery is off and this exit abends, a storage dump will be taken and the exit will NOT be disabled. Note that multiple storage dumps may be taken since the exit was not disabled.
- If recovery is on and this exit abends, a storage dump will be taken and the exit will be disabled. Note that multiple storage dumps will NOT be taken since the exit was disabled.

LRS recommends that you specify RECOV when defining this exit on the SVEXIT04= keyword.

Register Contents on Entry:

R0	Request code: 00 VPS command. 04 MVS command. 08 JES command.
R1	Address of parameter list in the following format: Word 0 (+00) - Address of LRS/MVS Server System Attributes (VSRVSYAT). Word 1 (+04) - Address of Command Attributes (VSRVSCMD). Word 2 (+08) - Address of 256 byte workarea. The high order bit of the last parameter will be set to 1.
R2-R12	N/A
R13	Address of os-style register savearea.
R14	Return address.
R15	Entry address.

Register Contents on Exit:

R0-R14	Same as upon entry.
R15	Return code.

Return Codes:

00	Execute the command.
04	Reject the command.
08	Command was executed by the exit.

Programming Considerations:

None.

Sample Program:

The JES2 version of this exit is distributed as member VSRVUE04. The JES3 version of this exit is distributed as member VSRVU304. Both members are contained in dataset LRS.VSV.V1R80.ASM. This is an example of the VMCF Command Exit that rejects all JES commands if the VMCF user ID does not match the JES jobname.

VMCF Queue Selection Exit (SVEXIT05)

Note: Prior to VMCF V1 R8.0, this was VMCF User Exit 02.

Function: This exit, if implemented and enabled, is taken prior to the initial display of the VPS Printer Output Queue. This exit may be used to modify the default primary and secondary queue selection criteria associated with the printer.

Note that you may NOT reset all of the queue selection criteria fields. This would result in all of the output on the JES spool being displayed.

Related Exits: None.

Defined: SVEXIT05= keyword in the LRS/MVS Server VSVSTART control library member (see [page 3.11](#)).

Execution Environment: LRS/MVS Server address space.

Recovery:

- If recovery is off and this exit abends, a storage dump will be taken and the exit will NOT be disabled. Note that multiple storage dumps may be taken since the exit was not disabled.
- If recovery is on and this exit abends, a storage dump will be taken and the exit will be disabled. Note that multiple storage dumps will NOT be taken since the exit was disabled.

LRS recommends that you specify RECOV when defining this exit on the SVEXIT05= keyword.

Register Contents on Entry:

R0	Request code (always 00).
R1	Address of parameter list in the following format: Word 0 (+00) - Address of LRS/MVS Server System Attributes (VSRVSYAT). Word 1 (+04) - Address of Queue Attributes (VSRVQUE). Word 2 (+08) - Address of 256 byte workarea. The high order bit of the last parameter will be set to 1.
R2-R12	N/A
R13	Address of os-style register savearea.
R14	Return address.
R15	Entry address.

Register Contents on Exit:

R0-R14	Same as upon entry.
R15	Return code.

Return Codes:

00	All other return codes are ignored.
----	-------------------------------------

Programming Considerations:

None.

Sample Program:

Member VSRVUE05 in dataset LRS.VSV.V1R80.ASM is an example of the VMCF Queue Selection Exit that removes the SYSOUT class list, if any, from the supplied selection criteria.

VMCF JES Queue Scan Exit (SVEXIT06)

Note: Prior to VMCF V1 R8.0, this was VMCF User Exit 03.

Function: This exit, if implemented and enabled, is used to determine the number of elements queued to a VPS or JES printer. In a JES2 environment, each element returned represents a JES2 Job Output Element (JOE), representing either held and non-held output. In a JES3 environment, each element returned represents a JES3 Output Service Element (OSE). This exit, if implemented and enabled, is also used to obtain a DRS tracking dataset's Job Output Element (JOE) offset for DMCF Report Browse.

Note that the exit is invoked with either request code 00, 04, or 08. Request code 00 is the "scan" request code and is used to return the number of elements that match the supplied selection criteria. Request code 04 is the "copy" request code and is used to return detail information (Jobname, Jobid, Class, Dest, etc.) about each element that matches the supplied selection criteria. Request code 08 is the "retrieve offset" request code and is used to return the JOE offset for the output.

This exit is used by VMCF as follows:

Request code 00 invoked by the VPS Printer Selection List and VPS Printer Output Queue to determine the value displayed in the WAITING column. Valid values consist of either **UNKNOWN**, **UNAVAIL**, **NONE**, or **1-99,999**.

- **UNKNOWN** indicates that the exit has not been installed.
- **UNAVAIL** indicates that the exit has either ABENDED or exited with a non-zero return code.
- **NONE** indicates that there are no elements queued.
- **1-99,999** indicates the number of elements queued.

Request code 04 invoked by the VPS Printer Output Queue to display the elements queued to the selected printer.

Request code 08 invoked by the DRS Print Tracking Data screen to obtain the output's JOE offset for DMCF Report Browse.

Related Exits: None.

Defined: SVEXIT06= keyword in the LRS/MVS Server VSVSTART control library member (see [page 3.12](#)).

Execution Environment: LRS/MVS Server address space.

Recovery:

- If recovery is off and this exit abends, a storage dump will be taken and the exit will NOT be disabled. The WAITING column on VMCF screens listed above will display a value of UNAVAIL. Note that multiple storage dumps may be taken since the exit was not disabled.
- If recovery is on and this exit abends, a storage dump will be taken and the exit will be disabled. The WAITING column on VMCF screens listed above will display a value of UNAVAIL. Note that multiple storage dumps will NOT be taken since the exit was disabled.

LRS recommends that you specify RECOV when defining this exit on the SVEXIT06= keyword.

Register Contents on Entry:

R0	Request code: 00 Queue scan request. 04 Queue copy request. 08 Obtain JOE offset request.
R1	Address of parameter list in the following format: Word 0 (+00) - Address of LRS/MVS Server System Attributes (VSRVSYAT). Word 1 (+04) - Address of Queue Attributes (VSRVQUE). Word 2 (+08) - Address of 1024 byte workarea. Word 3 (+12) - Address of client's profile user ID. The high order bit of the last parameter will be set to 1.
R2-R12	N/A
R13	Address of os-style register savearea.
R14	Return address.
R15	Entry address.

Register Contents on Exit:

R0-R14	Same as upon entry.
R15	Return code.

Return Codes:

00	Successful completion.
04	An error occurred. Field QERROR, in macro VSRVQUE, will be set indicating the exact cause of the failure. Error codes are documented in VPS macro VPSSGBL.

Programming Considerations:

This exit MUST be assembled and linked after each application of JES maintenance.

Sample Program:

The JES2 version of this exit is distributed as member VSRVUE06. The JES3 version of this exit is distributed as member VSRVU306. Both members are contained in dataset LRS.VSV.V1R80.ASM. Note that LRS enhances and supports both versions of this exit for all current releases of JES2 and JES3.

VMCF JES Printer Scan Exit (SVEXIT07)

Note: Prior to VMCF V1 R8.0, this was VMCF User Exit 00.

Function: This exit, if implemented and enabled, is called to return information concerning JES and FSS printers. The defined request codes provide for the following:

- Request code 00 - return a count of the JES and FSS printers.
- Request code 04 - return a table of the JES and FSS printers.
- Request code 08 - return printer characteristics for a specific JES or FSS printer.

Implementing this exit allows an installation to control all host based printers from a single control point (VMCF). Note that the VMCF security interface can be used to restrict access to the JES and FSS printers.

Related Exits: None.

Defined: SVEXIT07= keyword in the LRS/MVS Server VSVSTART control library member (see [page 3.13](#)).

Execution Environment: LRS/MVS Server address space.

Recovery:

- If recovery is off and this exit abends, a storage dump will be taken and the exit will NOT be disabled. JES and FSS printers will NOT appear in the VPS Printer Selection List. Note that multiple storage dumps may be taken since the exit was not disabled.
- If recovery is on and this exit abends, a storage dump will be taken and the exit will be disabled. JES and FSS printers will NOT appear in the VPS Printer Selection List. Note that multiple storage dumps will NOT be taken since the exit was disabled.

LRS recommends that you specify RECOV when defining this exit on the SVEXIT07= keyword.

Register Contents on Entry:

R0	Request code: 00 Return a count of JES and FSS printers. 04 Return a table of JES and FSS printers. 08 Return information for a specific JES FSS printer.
R1	Address of parameter list in the following format: Word 0 (+00) - Address of LRS/MVS Server System Attributes (VSRVSYAT). Word 1 (+04) - Address of 1024 byte workarea. Word 2 (+08) - Address of JES FSS printer name. Word 3 (+12) - Address of printer table (VSRVSPRT). Word 4 (+16) - Address of printer table count. The high order bit of the last parameter will be set to 1.
R2-R12	N/A
R13	Address of os-style register savearea.
R14	Return address.
R15	Entry address.

Register Contents on Exit:

R0-R14	Same as upon entry.
R15	Return code.

Return Codes:

- | | |
|----|--|
| 00 | Successful completion. |
| 04 | An error occurred. R0, on exit, will contain an error code indicating the exact cause of the failure. Error codes are documented in VPS macro VPSSGBL. |

Programming Considerations:

This exit MUST be assembled and linked after each application of JES maintenance.

Sample Program:

Member VSRVUE07 in dataset LRS.VSV.V1R80.ASM is the JES2 version of this exit. Note that LRS enhances and supports this exit for all current releases of JES2. LRS does not distribute a JES3 version of this exit.

Section 6 Commands

LRS/MVS Server Commands

All LRS/MVS Server commands listed on the following pages can be issued from the MVS console by using the MVS MODIFY (F) command and the name of the LRS/MVS Server start task or jobname. The examples here assume the LRS/MVS Server task is named VSV01. For example, to display the system options:

```
F VSV01,DISPLAY,SYSTEM
```

In addition, the MVS START (S) command would be used to start the LRS/MVS Server, and the MVS STOP (P) command would be used to terminate the LRS/MVS Server.

Following are descriptions of the function and format of each LRS/MVS Server command.

<u>ABEND</u>	Function:	The ABEND command is used to abnormally terminate the LRS/MVS Server address space, with a U002 completion code, to obtain diagnostic information. This command should only be issued at the request of LRS technical support personnel.
	Format:	F VSV01,ABEND
<u>CLOSELOG</u>	Function:	The CLOSELOG command closes and reopens the LRS/MVS Server region log dataset. If the LRS/MVS Server log dataset is a pre-allocated DASD dataset, the CLOSELOG command will be rejected. If the LRS/MVS Server log is a SYSOUT dataset, the log dataset will be available for printing, and a new SYSOUT dataset will be allocated and opened for continued logging.
	Format:	F VSV01,CLOSELOG
<u>DISPLAY</u>	Function:	The DISPLAY command displays system and user-related LRS/MVS Server information. The DISPLAY command uses the following keywords:
	SYSTEM,COMMUNICATIONS	Displays the values for SVAPPL, SVTCPID, SVTCPORT, SVTCPTYP, SVRSDISC and SVRSINTV keywords.
	SYSTEM,EXITnn, SYSTEM,EXITnn-nn	nn represents a one or two digit number. Displays the enabled/disabled status of user exits related to the LRS/MVS Server. You may specify a single exit or a range of exits.
	SYSTEM,EXITS	Displays the enabled/disabled status of all the user exits in the LRS/MVS Server. This display will include exits related specifically to the LRS/MVS Server as well as exits related to VMCF.

	SYSTEM,KEYS	Displays the values of the installed product keys.
	SYSTEM,MODULE	Displays LDPT, EPA, LENGTH, COUNT, and address contents for MODULE and offset specified. Parameter must be specified as module name + offset.
Examples:	F VSV01,D,SYSTEM,MODULE,VSRVUE06+0	
	F VSV01,D,SYSTEM,MODULE,VSRVUE06+64	
	SYSTEM,PAGECENTER	Displays PageCenter configuration and status information.
	SYSTEM,STATUS	Displays current system parameters, including release level, storage usage, LOG and SNAP options, and trace options.
	SYSTEM,VMCF	Displays the value of the VMCF and/or DMCF parameters VMCM DREJ, VMCM DRSP, VMCONPFX, VMOPTS, VMPRMENU, VMVPS PFX, VM DR S STC, and VMVPS STC, as well as the VPS/Report Browse parameters RBBUFSI, RBFLIM, RBJPOOL, RBMLREC.
	SYSTEM,*	Displays all system information.
	UserID,LICENSE	Displays the session licensed key status.
	UserID,STATUS	Displays user information including LUNAME and connection type (CICS, TSO, VTAM) for matching user IDs. Note that you can specify a range of user IDs by using the asterisk to specify generic characters; * would match all user IDs, and LR* would match all user IDs starting with LR . The STATUS keyword is the default second parameter when the first keyword is a user ID or range of user IDs.
	UserID,TRACE	Displays the trace flags for a specified user or range of users. Note that you can specify a range of user IDs by using the asterisk to specify generic characters; * would match all user IDs, and LR* would match all user IDs starting with LR .
	UserID,*	Displays all session information.
Format:	F VSV01,DISPLAY,disopt1{,disopt2...,disoptn}	

END **Function:** The END command is used to initiate normal termination of the LRS/MVS Server address space.

Format: **F VSV01,END**

FORCE **Function:** The FORCE command is used to terminate one or more sessions for a specific user.

Format: **F VSV01,FORCE,userid{,SESSID=ssid|ALL}**

Comments: This command may be used to terminate user sessions. The user ID must be specified to identify the unique user ID. Generics are not allowed for the user ID field.

The session identifier is a number that is associated with a specific session and can be obtained by using the DISPLAY command. If no session identifier is specified, all sessions for the user will be terminated. If SESSID=ALL is specified, all sessions for the user will be terminated.

Example: **F VSV01,FORCE,LRS000**

This command would terminate all sessions for the user ID LRS000.

F VSV01,FORCE,LRS000,SESSID=ALL

This command would terminate all sessions for the user ID LRS000.

F VSV01,FORCE,LRS000,SESSID=1

This command would terminate one session (with session ID=1) for the user ID LRS000.

LOG **Function:** The LOG command writes an operator-specified character string to the server region log dataset. The length of the character string should not exceed 50 characters.

Format: **F VSV01,LOG,character string**

MAIL **Function:** The MAIL command sends an email message to the email address specified.

Format: **F VSV01,MAIL,email user,text**

Comments: The mail command is intended to be used to test the definition of the mail keywords specified in the LRS/MVS Server initialization. It allows sending a short text string (the second parameter) to an email user (the first parameter). If the email capability is not enabled, a message will be issued and the command will be ignored.

Example 1: **F VSV01,MAIL,USER@SAMPLE.COM,HELLO**

The command above will send the text 'HELLO' to the email user named 'USER@SAMPLE.COM'. In addition, a file will be attached with the alphabet, numbers, and other text for testing encoding.

Example 2: **F VSV01,MAIL,USER@SAMPLE.COM,THIS IS A TEST!**

The second parameter of the MAIL command should not include any commas, but may contain blanks and other punctuation characters.

<u>REFRESH</u>	Function:	The REFRESH command refreshes the SAF in-storage profiles and the product keys for the various LRS/MVS Server applications. It requires one of these keywords:
		KEYS Refreshes the product keys. This command should be issued only if the keys have been changed.
		PRINTERS Refreshes the VPS printer list.
		SAF Refreshes the SAF information in-storage profiles or internal security. This command should be issued only if the system security rules have been changed.
	Format:	F VSV01,REFRESH,KEYS
		or
		F VSV01,REFRESH,SAF
<u>SDUMP</u>	Function:	Capture an SVC dump.
	Format:	F VSV01,SDUMP
<u>SET</u>	Function:	The SET command modifies user-related LRS/MVS Server parameters and LRS/MVS Server application parameters. The following options can be changed:
		UserID,PCTRACE PageCenter trace flags. Valid values consist of X'00000000' - X'FFFFFFFF'.
		UserID,SVSAFOPT Session SAF options trace flags. Valid values consist of X'0000' - X'FFFF'.
		UserID,SYSTRACE System trace flags. Valid values consist of X'00000000' - X'FFFFFFFF'.
	Format:	F VSV01,SET,userid,sopt1=value{,sopt2=value...,soptn=value}
<u>SNAP</u>	Function:	The SNAP command captures a snap dump of the LRS/MVS Server address space.
	Format:	F VSV01,SNAP
<u>SSET</u>	Function:	The SSET command modifies system-related LRS/MVS Server parameters. The following system options can be changed:
		LOG Valid values consist of "Y" and "N"
		PCBDPRT Valid value of 'A' for Auto.
		PCMODE Valid values consist of "R" and "N" to request Read-only and Normal mode respectively.
		PCTRACE PageCenter trace flags. Valid values consist of X'00000000' - X'FFFFFFFF'.
		PCVAULT Valid value of "I" for Immediate.
		SNAP Valid values consist of "Y" and "N" determine whether error snap dumps are enabled or disabled.
		SSITRACE Server subsystem trace flags. Valid values consist of X'00000000' - X'FFFFFFFF'.
		SVEXITnn Valid values consist of "E" and "D". (This parameter can be coded SVEXITS to set the status of all the LRS/MVS Server user exits, as SVEXITnn to set the status of an individual exit, or SVEXITnn-nn to set the status of a range of exits.)

SVRSINTV The interval in hours (hh) and minutes (mm) that a remote client may be idle between requests. Valid values consist of hhmm where hh is 00 - 24 and mm is 00-59.

SVSAFOPT System SAF options. Valid values consist of X'0000' - X'FFFF'.

SVTRACE Server trace flags. Valid values consist of X'00000000' - X'FFFFFFFF'.

SYSTRACE System trace flags. Valid values consist of X'00000000' - X'FFFFFFFF'.

TCPIP Activate/Inactivate TCPIP. Valid values consist of any portion of Activate/Inactivate keywords.

VTAM Activate/Inactivate VTAM. Valid values consist of any portion of Activate/Inactivate keywords.

VPC

Format: **F VSV01,SSET,ssopt1=value{,ssopt2=value...,ssoptn=value}**

Function: The VPC command executes PageCenter related requests. The following requests can be issued:

CANCEL,TASK (C,TASK) Request a specific PageCenter background task (tttt) to be canceled, where tttt is the PageCenter assigned task id number (00000-99999).

Format: **F VSV01,VPC,CANCEL,TASK=taskid**

PAUSE,TASK (P,TASK) Request a specific PageCenter background task (tttt) to be paused where tttt is the PageCenter assigned task id number (00000-99999).

Format: **F VSV01,VPC,PAUSE,TASK=taskid**

RESUME,TASK (R,TASK) Request a specific PageCenter background task (tttt) to resume processing, where tttt is the PageCenter assigned task id number (00000-99999).

Format: **F VSV01,VPC,RESUME,TASK=taskid**



Section 7 Messages

LRS/MVS Server Messages

LRS/MVS Server messages are issued via OS/MVS WTO with the routing code specified in the fourth positional parameter value of the SVWTO keyword in the VSVSTART Address Space Initialization member. If the message is in response to a command, the message will be issued to the console from which the command was issued.

Error or Action messages will be displayed with a WTO Descriptor Code of 2 (MVS Action), unless “N” is specified in the second positional parameter value of the SVWTO keyword in the VSVSTART Address Space Initialization member.

Informational messages will be bypassed if “N” is specified in the third positional parameter value of the SVWTO keyword in the VSVSTART Address Space Initialization member.

Message Format

All LRS/MVS Server messages will begin with a seven character message identifier formatted as follows:

- Characters 1-3** - VSV
- Characters 4-6** - Message number uniquely identifying the message
- Character 7** - One character identifying the message importance level

The possible message importance levels (the last character of the message identifier) are as follows:

- I** - Informational Message
- N** - Normal Message
- E** - Error or Action Message
- R** - Responding Message (responses to commands)

The LRS/MVS Server started task name will follow the message identifier, unless “N” is specified in the first positional parameter value of the SVWTO keyword in the VSVSTART Address Space Initialization member.

VSV0001N SERVER REGION INITIALIZATION IN PROGRESS
VERSION=version CUST ID=custid

version: LRS/MVS Server version.
custid: LRS Customer ID.

Message Meaning: The server region is beginning the initialization process.

System Action: None.

Required Action: None.

VSV0002N SERVER REGION STORAGE REQUESTED(aaaa,bbbb)
AVAILABLE(cccc,dddd)

aaaa: Region limit (below 16M)
bbbb: Region limit (above 16M)
cccc: Private area (below 16M)
dddd: Private area (below 16M)

Message Meaning: The server region is beginning the initialization process with the requested and available virtual storage sizes shown in the message. The message text provides both below 16mb sizes and above 16mb sizes.

System Action: None.

Required Action: None.

VSV0003N SERVER REGION OPERATOR INTERFACE ENABLED

Message Meaning: The server region operator interface has been enabled. Operator communications are now available.

System Action: None.

Required Action: None.

VSV0004E PROFILE name FAILED FOR USER userid SESSID=sessionid
RC=retcode

name: Profile name.
userid: User ID.
session id: Session ID.
retcode: Return Code.

Message Meaning: The server region attempted to save or retrieve the profile value(s) for the user session shown in the message, but the attempt failed with the return code shown in the message.

System Action: Processing continues.

Required Action: Review the JES message log and the server region log for other messages regarding the cause of the failure. If unable to resolve the problem, contact LRS Technical Support.

VSV0005E BLDL FOR RESOURCE MODULE name FAILED RC=retcode
RSN=rsncode
name: Resource module name.
retcode: Return code.
rsncode: Reason code.
Message Meaning The server region attempted to locate the resource module shown in the message, but the attempt failed with the return code and reason code shown in the message.
System Action: If the attempt to locate the resource module was made as part of the server region initialization process and the module is required for the successful initialization of the region, the server region terminates. Otherwise, processing continues.
Required Action: Review the JES message log for other messages regarding the cause of the load failure. Ensure that the module is available in either the server region STEPLIB dataset(s), system linklist dataset(s), or system LPA dataset(s). If unable to resolve the problem, contact LRS Technical Support.

VSV0006E LOAD FOR REQUIRED MODULE name FAILED R1=retcode
R15=rsncode TYPE=type
name: Module name.
retcode: Return code.
rsncode: Reason code.
type: Type of module being loaded.
Message Meaning: The server region attempted to load the resource module shown in the message, but the attempt failed with the system completion code and reason code shown in the message.
System Action: If the attempt to load the resource module was made as part of the server region initialization process and the module is required for the successful initialization of the region, the server region terminates. Otherwise, processing continues.
Required Action: Review the JES message log for other messages regarding the cause of the load failure. Ensure that the module is available in either the server region STEPLIB dataset(s), system linklist dataset(s), or system LPA dataset(s). If unable to resolve the problem, contact LRS Technical Support.

VSV0007N	SERVER REGION TERMINATION IN PROGRESS Message Meaning: Server region termination processing has begun, either as the result of an operator stop command or the failure of the server region to successfully complete initialization processing. System Action: The server region terminates all active user sessions and posts all active server region subtasks for termination. Required Action: None.
VSV0008N	SERVER REGION TERMINATION COMPLETE Message Meaning: Server region termination processing has completed normally. System Action: The server region terminates. Required Action: None.
VSV0009E	SERVER REGION INITIALIZATION FAILED Message Meaning: The server region initialization process was unable to successfully complete. System Action: The server region terminates. Required Action: Review the JES message log and the server region log for other messages regarding the cause of the initialization failure. If unable to resolve the problem, contact LRS Technical Support.
VSV0010N	SERVER REGION INITIALIZATION COMPLETE VERSION=version CUSTID=custid version: LRS/MVS Server version. custid: LRS Customer ID. Message Meaning: The server region has completed the initialization process. System Action: None. Required Action: None.
VSV0011N	USER SVEXITxx LOADED NAME=module LENGTH=length EP=address ENABLED DISABLED RECOVERY=ON OFF xx: Exit identifier. module: Exit module name. length: Exit module length. address: Exit module address. Message Meaning: The server region has successfully loaded the user exit program module shown in the message. The message text also provides the virtual storage address and length of the module, the exit status (enabled or disabled), and the exit recovery option (on or off). System Action: None. Required Action: None.

VSV0012E	<p>USER SVEXIT_{xx} LOAD FAILED NAME=module RC=retcode RSN=rsncode</p> <p>xx: Exit identifier. module: Exit module name. retcode: Return code. rsncode: Reason code.</p> <p>Message Meaning: The server region attempted to load the user exit program module shown in the message, but the attempt failed with the system completion code and reason code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the load failure. Ensure that the module is available in either the server region STEPLIB dataset(s), system linklist dataset(s), or system LPA dataset(s). If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0013N	<p>aaaaaaaaaaaaaaaa KEY - CUSTID (bbbbbb,cccccc) COPY(d) CPUCHK(DISABLED ENABLED) aaaaaaaaaaaaaaaa KEY - CPUID(eeeee) STATUS(ffftfff) ggg...ggg</p> <p>aaa..aaa: Name of product from the key. bbbbbb: Customer ID from the product. cccccc: Customer ID from the key. d: Number of copies from the key (if any). eeeeee: CPU serial number from the key or "ANY" if CPU checking is disabled in the key. ffftfff: Status of the key (TRAP, LICENSE, INVALID). ggg...ggg: Any error or warning message pertaining to the key.</p> <p>Message Meaning: A product key was processed by the LRS/MVS Server at initialization.</p> <p>System Action: None.</p> <p>Required Action: If the message indicates an invalid or expired key, correct the key and restart the Server.</p>
VSV0014E	<p>PRODUCT KEY product (key) HAS EXPIRED</p> <p>product: Product keyword. key: Product key value.</p> <p>Message Meaning: The product key shown in the message has expired.</p> <p>System Action: Processing continues, but the function(s) the product provides will not be available to the installation.</p> <p>Required Action: Contact LRS Marketing Support.</p>

VSV0015E	<p>PRODUCT KEY product (key) WILL EXPIRE IN nn DAY(S) on dd</p> <p>product: Product keyword.</p> <p>key: Product key value.</p> <p>nn: Number of days in which the product will expire.</p> <p>dd: Month, day, and year the product will expire.</p> <p>Message Meaning: The product key shown in the message will expire in the number of days shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Contact LRS Marketing Support.</p>
VSV0016N	<p>CPUID (sssss)</p> <p>sssss: CPU serial number.</p> <p>Message Meaning: Identifies the CPU serial number of the machine where VPS is executing.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0017E	<p>SECURITY SYSTEM INITIALIZATION FAILED RC=rc</p> <p>rc: Return Code.</p> <p>Message Meaning: The server region invoked the internal (VSRVISEC) or external (VSRVXSEC) security program to perform the system initialization function. However, the program completed the function with the non-zero return code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the security failure. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0018E	<p>SECURITY SYSTEM TERMINATION FAILED RC=rc</p> <p>rc: Return code.</p> <p>Message Meaning: The server region invoked the internal (VSRVISEC) or external (VSRVXSEC) security program to perform the system termination function. However, the program completed the function with the non-zero return code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the security failure. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0019E	<p>INVALID KEY ENTRY DETECTED FOR PRODUCT prdname prdname: Name of product with invalid key information.</p> <p>Message Meaning: An invalid key information table entry was detected for the product named in the message.</p> <p>System Action: The server will attempt to continue processing the product keys and the server checkpoint dataset.</p> <p>Required Action: Contact LRS technical support.</p>
VSV0020E	<p>prdname PRODUCT WILL EXPIRE IN nn DAY(S) DUE TO UNAUTHORIZED CPUID prdname: Name of the product with unauthorized CPUID in key.</p> <p>nn Number of days before the product will expire.</p> <p>Message Meaning: The copy of the product which is being executed will reach its expiration date in “nn” days. At that time, the product will terminate, and attempts to start the product will fail.</p> <p>System Action: Processing continues.</p> <p>Required Action: Contact LRS technical support.</p>
VSV0021E	<p>prdname HAS EXPIRED DUE TO UNAUTHORIZED CPUID prdname: Name of product with unauthorized CPUID in key.</p> <p>Message Meaning: The copy of the product which is being executed has reached its expiration date.</p> <p>System Action: The product will terminate, and attempts to start the product will fail.</p> <p>Required Action: Contact LRS technical support.</p>
VSV0022I	<p>SUBTASK name IS BEING ATTACHED name: Subtask name.</p> <p>Message Meaning: The server region is in the process of attaching the subtask shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0023E	<p>SUBTASK name ATTACH FAILED RC=rc name: Subtask name.</p> <p>rc: Return code.</p> <p>Message Meaning: The server region attempted to attach the subtask shown in the message, but the attempt failed with the return code shown in the message. In the message, the return code shown is the return code from the MVS ATTACHX macro.</p> <p>System Action: The server region abnormally terminates.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the attach failure. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0024I	<p>SUBTASK name SUCCESSFULLY ATTACHED</p> <p>name: Subtask name.</p> <p>Message Meaning: The server region successfully attached the subtask shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0025I	<p>SUBTASK name ENDED AS EXPECTED RC=rc</p> <p>name: Subtask name.</p> <p>rc: Return Code.</p> <p>Message Meaning: The server region subtask shown in the message has ended as expected with the return code shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0026E	<p>SUBTASK name ENDED UNEXPECTEDLY RC=rc</p> <p>name: Subtask name.</p> <p>rc: Return code.</p> <p>Message Meaning: The server region subtask shown in the message has ended unexpectedly with the return code shown in the message.</p> <p>System Action: If the subtask is restartable, the subtask is reattached. If the subtask is not required for the operation of the server region, processing continues. Otherwise, the server region abnormally terminates.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the subtask termination. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0027E	<p>SUBTASK name INACTIVATED</p> <p>name: Subtask name.</p> <p>Message Meaning: The server region subtask shown in the message has terminated unexpectedly. The subtask is not restartable, but is not required for the operation of the server region.</p> <p>System Action: The subtask is inactivated and processing continues.</p> <p>Required Action: None.</p>

VSV0028E	<p>REQUIRED NON-RESTARTABLE SUBTASK name ENDED UNEXPECTEDLY</p> <p>name: Subtask name.</p> <p>Message Meaning: The server region subtask shown in the message has terminated unexpectedly. The subtask is not restartable and is required for the operation of the server region.</p> <p>System Action: The server region abnormally terminates.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the subtask termination. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0029E	<p>SUBTASK name RECOVERY/TERMINATION PROCESSING FAILED</p> <p>name: Subtask name.</p> <p>Message Meaning: The server region subtask shown in the message has abnormally terminated, and the recovery/termination processing for the subtask failed.</p> <p>System Action: The server region abnormally terminates.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0030E	<p>SUBTASK name RECURSIVE TERMINATION FAILURE</p> <p>name: Subtask name.</p> <p>Message Meaning: The server region subtask shown in the message has experienced a recursive termination failure from which it has been unable to recover.</p> <p>System Action: The subtask is inactivated and will not be reattached. If the subtask is not required for the continued operation of the server region, processing continues. Otherwise, the server region abnormally terminates.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the subtask termination. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0031I	<p>SUBTASK name INITIALIZATION IN PROGRESS</p> <p>name: Subtask name.</p> <p>Message Meaning: The server region subtask shown in the message is beginning its initialization process.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0032E	<p>SUBTASK name INITIALIZATION FAILED</p> <p>name: Subtask name.</p> <p>Message Meaning: The initialization process for the server region subtask shown in the message was unable to successfully complete.</p> <p>System Action: If the subtask is not required for the operation of the server region, processing continues. Otherwise, the server region abnormally terminates.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the initialization failure. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0033I	<p>SUBTASK name INITIALIZATION COMPLETE</p> <p>name: Subtask name.</p> <p>Message Meaning: The server region subtask shown in the message has completed the initialization process.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0034I	<p>SUBTASK name POSTED FOR TERMINATION</p> <p>name: Subtask name.</p> <p>Message Meaning: The server region subtask shown in the message has been posted for termination by the server region main task.</p> <p>System Action: The subtask initiates termination processing.</p> <p>Required Action: None.</p>
VSV0035I	<p>APPLICATION name INITIALIZATION IN PROGRESS</p> <p>name: Application name.</p> <p>Message Meaning: The server region application shown in the message is beginning the initialization process.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0036E	<p>APPLICATION name INITIALIZATION FAILED RC=rc</p> <p>name: Application name.</p> <p>rc: Return code.</p> <p>Message Meaning: The initialization process for the server region application shown in the message was unable to successfully complete.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the initialization failure. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0037I	<p>APPLICATION name INITIALIZATION COMPLETE</p> <p>name: Application name.</p> <p>Message Meaning: The server region application shown in the message has completed the initialization process.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0038I	<p>APPLICATION name DISABLED</p> <p>name: Application name.</p> <p>Message Meaning: The server region application shown in the message has been disabled for the current execution of the server region.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0039E	<p>BLDL FOR MODULE module FAILED FOR APPLICATION=name RC=rc RSN=rsncode - APPLICATION WILL BE DISABLED</p> <p>module: Module name.</p> <p>name: Application name.</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: The server region attempted to locate the module shown in the message. However, the attempt failed with the return code and reason code shown in the message. The application will be disabled.</p> <p>System Action: If the error occurred as part of the server region initialization process, the server region terminates. Otherwise, processing continues.</p> <p>Required Action: Correct the name of the member or module.</p>
VSV0040N	<p>REGISTERED WITH AUTOMATIC RESTART MANAGER ELEMENT=elem ELEMTYPE=type</p> <p>elem: Element name.</p> <p>type: Element type.</p> <p>Message Meaning: The server region has successfully registered with the MVS Automatic Restart Manager. The registration was completed using the element name and type shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0041I	<p>WAITING FOR AUTOMATIC RESTART MANAGER PREDECESSOR ELEMENTS</p> <p>Message Meaning: The server region has been restarted by the MVS Automatic Restart Manager and is about to make a request to the MVS Automatic Restart Manager to wait for all predecessor elements (as defined in the active ARM policy) to become ready for work.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0042I	<p>AUTOMATIC RESTART MANAGER PREDECESSOR ELEMENTS READY FOR WORK</p> <p>Message Meaning: The server region has been restarted by the MVS Automatic Restart Manager and has successfully made a request to the MVS Automatic Restart Manager to wait for all predecessor elements (as defined in the active ARM policy) to become ready for work. All predecessor elements are either ready for work or the wait time limit for the element(s) has expired.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0043I	<p>AUTOMATIC RESTART MANAGER ELEMENT IS READY FOR WORK</p> <p>Message Meaning: The server region has successfully informed the MVS Automatic Restart Manager that the server region is ready for work.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0044N	<p>DEREGISTERED WITH AUTOMATIC RESTART MANAGER</p> <p>Message Meaning: The server region has successfully deregistered with the MVS Automatic Restart Manager.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0045N	<p>INTERNALLY DEREGISTERED WITH AUTOMATIC RESTART MANAGER</p> <p>Message Meaning: The MVS Automatic Restart Manager has deregistered the server region because of an error internal to the MVS Automatic Restart Manager.</p> <p>System Action: Processing continues, but if the server region terminates unexpectedly, it may not be restarted automatically.</p> <p>Required Action: Review the system log for other messages regarding the MVS Automatic Restart Manager internal error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0046E	<p>AUTOMATIC RESTART MANAGER name REQUEST FAILED RC=rc RSN=rsncode rsn</p> <p>name: Automatic Restart Manager name. rc: Return code. rsncode: Reason code. rsn: Reason text.</p> <p>Message Meaning: The server region made a request to the MVS Automatic Restart Manager (using the IXCARM macro interface), but the request failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues, but if the server region terminates unexpectedly, it may not be restarted automatically.</p> <p>Required Action: Determine the cause of the IXCARM macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0047E	<p>IXCJOIN MACRO FAILURE GRPNAME=grpname RC=rc RSN=rsncode</p> <p>grpname: Group name. rc: Return code. rsncode: Reason code.</p> <p>Message Meaning: The server region attempted to join the XCF group shown in the message but the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: The server region terminated.</p> <p>Required Action: Determine the cause of the IXCJOIN macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0048I	<p>SYMPTOM DUMP OUTPUT FOR SUBTASK name</p> <p>name: Subtask name.</p> <p>Message Meaning: As the result of a subtask abnormal termination, a symptom dump is being captured for the subtask shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None required.</p>
VSV0049I	<p>COMPLETION CODE=rc REASON CODE=rsncode</p> <p>rc: Return code. rsncode: Reason code.</p> <p>Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and identifies the type of abnormal termination (System or User), the abend completion code, and the abend reason code (or NONE if none was provided).</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0050I	<p>TIME=time SEQ=seq CPU=cpu ASID=asid</p> <p>time: Time of failure.</p> <p>seq: Sequence number of failure.</p> <p>cpu: CPU ID.</p> <p>asid: Address space ID.</p> <p>Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and identifies the time that the failure occurred, the sequence number assigned to the failure, the CPU identifier of the central processor on which the failure occurred, and the address space identifier of the failing task. A CPU identifier of 0000 indicates that the operating system was unable to determine on which processor the failure occurred.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0051I	<p>PSW AT TIME OF ERROR=PSW ILC=ilc INTC=inter</p> <p>psw: PSW at time of error.</p> <p>ilc: Instruction length code.</p> <p>inter: Interrupt code.</p> <p>Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and identifies the contents of the program status word at the time of the failure, the instruction length code of the failing instruction, and the interrupt code for the failing instruction.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0052I	<p>ACTIVE LOAD MODULE NAME=name ADDRESS=addr OFFSET=offset</p> <p>name: Module name.</p> <p>addr: Address.</p> <p>offset: Offset.</p> <p>Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and identifies the active load module name, entry point address, and offset within the load module of the failing instruction.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0053I	<p>NO ACTIVE LOAD MODULE FOUND</p> <p>Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and indicates that the PSW next sequential instruction address is not within an active load module.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0054I	DATA AT PSW psw - data psw: PSW data: Data at PSW address. Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and identifies the PSW next sequential instruction address minus 6 and the contents of the three full words beginning at that address. System Action: None. Required Action: None.
VSV0055E	SYMPTOM DUMP ESTAE FAILED RC=rc RSN=rsncode rc: Return code. rsncode: Reason code. Message Meaning: As part of symptom dump capture processing, an attempt was made to establish an ESTAE type recovery environment, but the attempt failed with the return code and reason code shown in the message. System Action: Processing continues, but the data addressed by the PSW next sequential address at the time of the failure is not included in the symptom dump. Required Action: Determine the cause of the ESTAEX macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.
VSV0056I	DATA AT PSW IS UNAVAILABLE AT THIS TIME IS INACCESSIBLE BY USER Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and indicates that the virtual storage at the PSW next sequential instruction address is either unavailable at this time (unallocated) or is inaccessible by the failing task. System Action: None. Required Action: None.
VSV0057I	GPR r1- r2 v1 v2 v3 v4 r1: First register. r2: Last register. v1: Value in first register. v2: Value in second register. v3: Value in third register. v4: Value in fourth register. Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and identifies the contents of the general purpose registers shown in the message at the time of the failure. System Action: None. Required Action: None.

VSV0058I	AR r1- r2 v1 v2 v3 v4 r1: First register. r2: Last register. v1: Value in first register. v2: Value in second register. v3: Value in third register. v4: Value in fourth register. Message Meaning: This message is part of the symptom dump resulting from a subtask abnormal termination and identifies the contents of the access registers shown in the message at the time of the failure. This message is only included in the symptom dump if the PSW at the time of the failure is in AR ASC mode. System Action: None. Required Action: None.
VSV0059I	END OF SYMPTOM DUMP FOR SUBTASK name name: Subtask name. Message Meaning: As the result of a subtask abnormal termination, a symptom dump has been captured for the subtask shown in the message. System Action: None. Required Action: None.
VSV0060E	SYMPTOM DUMP FOR SUBTASK name FAILED RC=rc name: Subtask name. rc: Return code. Message Meaning: As the result of a subtask abnormal termination, an attempt was made to capture a symptom dump. However, the attempt failed with the return code shown in the message. System Action: A SYSUDUMP is requested. Required Action: Review the JES message log and the server region log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.
VSV0061N	SNAP DUMP FOR SUBTASK name CAPTURED TO FILE filename name: Subtask name. filename: File name. Message Meaning: Either as the result of an operator SNAP command, a subtask abnormal termination, or a server region processing error, a SNAP dump was captured for the subtask shown in the message to the file shown in the message. System Action: None. Required Action: None.

VSV0062E SNAP DUMP FOR SUBTASK name FAILED RC=rc
name: Subtask name.
rc: Return code.
Message Meaning: Either as the result of an operator SNAP command, a subtask abnormal termination, or a server region processing error, an attempt was made to capture a SNAP dump. However, the attempt failed with the return code shown in the message.
System Action: If the SNAP dump was being captured as the result of an operator SNAP command, the request is canceled. If the SNAP dump was being captured as the result of a subtask abnormal termination, a SYSUDUMP is requested.
Required Action: Review the JES message log and the server region log for other messages regarding the cause of the SNAP failure. Correct the problem and retry the operator SNAP command or restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV0063E SNAP DATASET ALLOCATION|UNALLOCATION FAILED
RC=rc EC=ec IC=ic error
rc: Return code.
ec: Error code.
ic: Information code.
error: Additional error information, if available.
Message Meaning: The server region attempted to allocate or unallocate a SNAP dump SYSOUT dataset but the attempt failed with the return code, error code, and information code shown in the message.
System Action: If the SNAP dump was being captured as the result of an operator SNAP command, the request is canceled. If the SNAP dump was being captured as the result of a subtask abnormal termination, a SYSUDUMP is requested.
Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and retry the operator SNAP command or restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV0064E TUKEY=key TUNUM=nnbr TUFLD=field
key: Text unit key.
nbr: Number of parameters.
field: Text unit field.
Message Meaning: The server region attempted to allocate or unallocate a SNAP dump SYSOUT dataset but the attempt failed because an invalid SVC 99 text unit was specified. This message provides the key of the text unit in error, the number of parameters specified, and, if applicable, the length and data for each parameter.
System Action: If the SNAP dump was being captured as the result of an operator SNAP command, the request is canceled. If the SNAP dump was being captured as the result of a subtask abnormal termination, a SYSUDUMP is requested.
Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and retry the operator SNAP command or restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV0065E SNAP DATASET OPEN FAILED
Message Meaning: The server region attempted to open a SNAP dump SYSOUT dataset but the attempt failed.
System Action: If the SNAP dump was being captured as the result of an operator SNAP command, the request is canceled. If the SNAP dump was being captured as the result of a subtask abnormal termination, a SYSUDUMP is requested.
Required Action: Review the JES message log for other messages regarding the cause of the open failure. Correct the problem and retry the operator SNAP command or restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV0066E	<p>INSUFFICIENT STORAGE AVAILABLE FOR SNAP DUMP PROCESSING RC=rc</p> <p>rc: Return code.</p> <p>Message Meaning: The server region attempted to obtain virtual storage for SNAP dump processing, but the attempt failed with the return code shown in the message.</p> <p>System Action: If the SNAP dump was being captured as the result of an operator SNAP command, the request is canceled. If the SNAP dump was being captured as the result of a subtask abnormal termination, a SYSUDUMP is requested.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the storage obtain failure. Correct the problem and retry the operator SNAP command or restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0067E	<p>UNEXPECTED VSMLIST FAILURE RC=rc</p> <p>rc: Return code.</p> <p>Message Meaning: As part of SNAP dump processing, a VSMLIST macro request was made to determine the allocated virtual storage areas. However, the request failed unexpectedly with the return code shown in the message.</p> <p>System Action: If the SNAP dump was being captured as the result of an operator SNAP command, the request is canceled. If the SNAP dump was being captured as the result of a subtask abnormal termination, a SYSUDUMP is requested.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the VSMLIST failure. Correct the problem and retry the operator SNAP command or restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0068E	<p>SNAP DUMP STORAGE LIST SIZE EXCEEDED</p> <p>Message Meaning: As part of SNAP dump processing, a virtual storage area was obtained in order to build a list of virtual storage areas to include in the SNAP dump. However, the size of the list area obtained was insufficient.</p> <p>System Action: If the SNAP dump was being captured as the result of an operator SNAP command, the request is canceled. If the SNAP dump was being captured as the result of a subtask abnormal termination, a SYSUDUMP is requested.</p> <p>Required Action: Contact LRS Technical Support.</p>

VSV0069E	<p>UNEXPECTED SNAP FAILURE RC=rc</p> <p>rc: Return code.</p> <p>Message Meaning: As part of SNAP dump processing, a SNAPX macro request was made to capture a SNAP dump. However, the request failed unexpectedly with the return code shown in the message.</p> <p>System Action: If the SNAP dump was being captured as the result of an operator SNAP command, the request is canceled. If the SNAP dump was being captured as the result of a subtask abnormal termination, a SYSUDUMP is requested.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the SNAP failure. Correct the problem and retry the operator SNAP command or restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0070E	<p>UNEXPECTED DATA SPACE SNAP FAILURE RC=rc</p> <p>rc: Return code.</p> <p>Message Meaning: As part of SNAP dump processing, a SNAPX macro request was made to capture a SNAP dump of server region related data space storage. However, the request failed unexpectedly with the return code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the SNAP failure. Correct the problem and retry the operator SNAP command or restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0071E PARAMETER VALIDATION FAILED FOR MEMBER name - rsn
name: Member name.
rsn: Reason for error.

- INSUFFICIENT VIRTUAL STORAGE
- EXPECTED CONTINUATION NOT RECEIVED
- MISSING COMMA AFTER KEYWORD
- CONTROL STATEMENT BEGINS AFTER COLUMN 16
- ENDING QUOTE MISSING FOR KEYWORD
- QUOTE NOT FOLLOWED BY COMMA OR SPACE FOR KEYWORD
- UNBALANCED PARENTHESIS FOR KEYWORD
- INVALID KEYWORD VALUE:
- UNKNOWN KEYWORD:
- DUPLICATE KEYWORD:
- SVTCPIP LENGTH EXCEEDS 4 BYTES
- VMCONPFX EQUALS VMVSPFX

Message Meaning: The server region attempted to process the startup parameters specified in the parameter library (DDNAME=VSVLIB) member shown in the message. However, one or more of the statements specified in the member was in error.

System Action: If the error occurred as part of the server region initialization process, the server region terminates. Otherwise, processing continues.

Required Action: Correct the parameter statement(s) in error and restart the server region.

VSV0072E	<p>BLDL FOR SERVER REGION PARAMETER MEMBER name FAILED RC=rc RSN=rsncode</p> <p>name: Member name. rc: Return code. rsncode: Reason code.</p> <p>Message Meaning: The server region attempted to locate the parameter library (DDNAME=VSVLIB) member shown in the message. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: If the error occurred as part of the server region initialization process, the server region terminates. Otherwise, processing continues.</p> <p>Required Action: This error is most likely the result of an erroneous specification for the START keyword EXEC statement parameter, or an error in the startup parameter member statement(s). Review the server region EXEC statement parameters and the server region startup member statement(s). Correct the parameter statement in error and restart the server region.</p>
VSV0073E	<p>SWAREQ FOR SERVER REGION PARAMETER MEMBER name FAILED RC=rc</p> <p>name: Member name. rc: Return code.</p> <p>Message Meaning: The server region attempted to resolve the JFCB address for the parameter library (DDNAME=VSVLIB) member shown in the message in order to determine the dataset name and volume serial of the dataset containing the member. However, the attempt failed with the return code shown in the message.</p> <p>System Action: Processing continues, but message VSV0074I showing the parameter member dataset name and volume serial will not be displayed.</p> <p>Required Action: Determine the cause of the SWAREQ macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0074I	<p>PARAMETER MEMBER name LOCATED IN DATASET dataset ON VOLUME vol</p> <p>name: Member name. dataset: Dataset name. vol: Volume.</p> <p>Message Meaning: The server region has successfully located the parameter library (DDNAME=VSVLIB) member shown in the message. The message text also provides the dataset name in which the member was located and the primary volume serial of that dataset.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0075E	<p>FIND FOR SERVER REGION PARAMETER MEMBER name FAILED RC=rc RSN=rsncode</p> <p>name: Member name. rc: Return code. rsncode: Reason code.</p> <p>Message Meaning: The server region attempted to position to the parameter library (DDNAME=VSVLIB) member shown in the message. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: If the error occurred as part of the server region initialization process, the server region terminates. Otherwise, processing continues.</p> <p>Required Action: Determine the cause of the FIND macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0076E	<p>BLDL FOR MEMBER name FAILED FOR KEYWORD=keyword RC=rc RSN=rsncode</p> <p>name: Member name. keyword: Keyword name. rc: Return code. rsncode: Reason code.</p> <p>Message Meaning: The server region attempted to locate the module or member shown in the message. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: If the error occurred as part of the server region initialization process, the server region terminates. Otherwise, processing continues.</p> <p>Required Action: Correct the name of the member or module.</p>
VSV0077N	<p>SVC DUMP FOR PROGRAM name CAPTURED</p> <p>name: Program name.</p> <p>Message Meaning: As a result of a server region program call routine abnormal termination, an SVC dump was captured for the program call routine shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0078N	<p>SVC DUMP FOR PROGRAM name SUPPRESSED BY CHNGDUMP SLIP NODUMP DAE</p> <p>name: Program name.</p> <p>Message Meaning: As a result of a server region program call routine abnormal termination, an attempt was made to capture an SVC dump for the program call routine shown in the message. However, the SVC dump was suppressed by the MVS component shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: None.</p>

VSV0079E	<p>SVC DUMP FOR PROGRAM name FAILED RC=rc RSN=rsncode</p> <p>name: Program name.</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: As a result of a server region program call routine abnormal termination, an attempt was made to capture an SVC dump for the program call routine shown in the message. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log and server region log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0080E	<p>SYMPTOM DUMP FOR PROGRAM name FAILED RC=rc</p> <p>name: Program name.</p> <p>rc: Return code.</p> <p>Message Meaning: As a result of a server region program call routine abnormal termination, an attempt was made to capture a symptom dump for the program call routine shown in the message. However, the attempt failed with the return code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log and server region log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0081E	<p>PROGRAM CALL ROUTINE name RECEIVED UNSUPPORTED REQUEST indx reqcode</p> <p>name: Program name.</p> <p>indx: Index.</p> <p>reqcode: Request code.</p> <p>Message Meaning: The server region program call routine shown in the message was called with the request code shown in the message. However, the request code is not supported by the program call routine.</p> <p>System Action: The program call request is failed.</p> <p>Required Action: Contact LRS Technical Support.</p>

VSV0082E PROGRAM CALL ROUTINE name ALESERV EXTRACTH
 FAILED RC=rc
 name: Routine name.
 rc: Return code.
Message Meaning: The server region program call routine shown in the message attempted to obtain the STOKEN of a client address space as a result of a session establishment request. However, the attempt failed with the return code shown in the message.
System Action: The program call request is failed.
Required Action: Determine the cause of the ALESERV macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0083I USER userid SESSION ESTABLISHED SESSID=ssid CLIENT
 TYPE=client TERMID=termid
 userid: User ID.
 ssid: Session ID.
 client: Session client type.
 termid: User terminal ID.
Message Meaning: The server region has established a session with the user shown in the message.
System Action: None.
Required Action: None.

VSV0084I USER userid SESSION TERMINATED SESSID=ssid CLIENT
 TYPE=client TERMID=termid
 userid: User ID.
 ssid: Session ID.
 client: Session client type.
 termid: User terminal ID.
Message Meaning: The server region has terminated a session with the user shown in the message.
System Action: None.
Required Action: None.

VSV0085E USER userid LOGON AUTHORIZATION FAILURE RC=rc
 userid: User ID name.
 rc: Return code.
Message Meaning: The server region attempted to establish a session with the user shown in the message. However, the authorization check failed with the return code shown in the message.
System Action: Processing continues.
Required Action: Follow your installation's security procedures in response to this message.

VSV0086I	USER userid SESSION TIMED-OUT AND TERMINATED SESSID=sessid userid: User ID name. sessid: Session ID. Message Meaning: The user session shown in the message has been inactive for a period in excess of the defined remote session interval and was terminated. System Action: None. Required Action: None.
VSV0087I	STC stcname SESSION ESTABLISHED stcname: Started task name. Message Meaning: The server region has established a session with the VPS started task shown in the message. System Action: None. Required Action: None.
VSV0088I	STC stcname SESSION TERMINATED stcname: Started task name. Message Meaning: The server region has terminated a session with the VPS started task shown in the message. System Action: None. Required Action: None.
VSV0089E	STC stcname SESSION ESTABLISHMENT FAILURE RC=rc stcname: Started task name. rc: Return code. Message Meaning: The server region attempted to establish a session with the VPS started task shown in the message. However, the attempt failed with the return code shown in the message. System Action: Processing continues. Required Action: Contact LRS Technical Support.
VSV0090I	STC stcname PRINTER prtname SESSION ESTABLISHED stcname: Started task name. prtname: Printer name. Message Meaning: The server region has established a session with the VPS printer shown in the message. System Action: None. Required Action: None.
VSV0091I	STC stcname PRINTER prtname SESSION TERMINATED stcname: Started task name. prtname: Printer name. Message Meaning: The server region has terminated a session with the VPS printer shown in the message. System Action: None. Required Action: None.

VSV0092E	<p>STC stcname PRINTER prtname SESSION ESTABLISHMENT FAILURE RC=rc</p> <p>stcname: Started task name. prtname: Printer name. rc: Return code.</p> <p>Message Meaning: The server region attempted to establish a session with the VPS printer shown in the message. However, the attempt failed with the return code shown in the message.</p> <p>System Action: Processing continues. Required Action: Contact LRS Technical Support.</p>
VSV0094E	<p>SERVER AUTHORIZATION FAILURE -- MODULES LOADED FROM name</p> <p>name: Library name.</p> <p>Message Meaning: The server region was initiated under a job step task that is not APF authorized.</p> <p>System Action: The server region terminates. Required Action: Ensure that the server region job step program (VS80DRIV) is linked with an authorization code of 1. If the startup JCL for the server region includes a STEPLIB DD statement, ensure that each dataset in the STEPLIB concatenation is an APF authorized dataset. If the server programs reside in a link list dataset, ensure that the dataset is an APF authorized dataset.</p>
VSV0095E	<p>MAIN TASK ESTAEX FAILED RC=rc1 RC=rc2</p> <p>rc1: Reason code. rc2: Reason code.</p> <p>Message Meaning: The server region main task attempted to establish an ESTAE type recovery environment, but the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: The server region terminates. Required Action: Determine the cause of the ESTAEX macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0096E	<p>UNEXPECTED FAILURE IN THE MSTR SUBSYSTEM RC=rc SSOBRETN=ssrc</p> <p>rc: Return code. ssrc: SSOB return code.</p> <p>Message Meaning: A request was made to the MVS MSTR subsystem, and the request failed unexpectedly with the return code (register 15 value) and SSOB return code shown in the message.</p> <p>System Action: The server region terminates. Required Action: Contact LRS Technical Support.</p>

VSV0097E	<p>ERROR IN EXEC STATEMENT PARAMETER - rsn</p> <p>rsn: Reason for error.</p> <ul style="list-style-type: none"> • ENDING QUOTE MISSING FOR KEYWORD • QUOTE NOT FOLLOWED BY COMMA OR SPACE FOR KEYWORD • UNBALANCED PARENTHESIS FOR KEYWORD • INVALID KEYWORD VALUE: • UNKNOWN KEYWORD: • DUPLICATE KEYWORD: <p>Message Meaning: The server region EXEC statement parameter shown in the message is not a recognized parameter, or is incorrectly specified.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Correct the parameter in error and restart the server region.</p>
VSV0098E	<p>SERVER REGION ALESERV EXTRACTH FAILED RC=rc</p> <p>rc: Return code.</p> <p>Message Meaning: The server region attempted to obtain the space token of the home address space. However, the attempt failed with the return code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Determine the cause of the ALESERV macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0099E	<p>SERVER REGION PARAMETER FILE DD STATEMENT MISSING</p> <p>Message Meaning: The DD statement for the server region parameter file (DDNAME=VSVLIB) was not included in the startup JCL for the server region.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0100E	<p>SERVER REGION PARAMETER FILE OPEN FAILED</p> <p>Message Meaning: The server region was unable to successfully open the server region parameter file (DDNAME=VSVLIB).</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the open failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0101E	<p>SERVER REGION PARAMETER FILE RDJFCB FAILED RC=rc rc:</p> <p>Message Meaning: The server region attempted to read the job file control block for the server region parameter file (DDNAME=VSVLIB), but the attempt failed with the return code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0102E	<p>SERVER REGION PARAMETER FILE ATTRIBUTES ARE INVALID -rsn rsn:</p> <p>Message Meaning: The server region successfully opened the server region parameter file (DDNAME=VSVLIB). However, the attributes of the dataset(s) allocated to the parameter file are invalid. The server region parameter file must be a partitioned dataset(s) with fixed length 80-byte records.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated to DDNAME VSVLIB. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0103E	<p>SERVER REGION PARAMETER FILE CLOSE FAILED</p> <p>Message Meaning: The server region was unable to successfully close the server region parameter file (DDNAME=VSVLIB).</p> <p>System Action: The server region terminates.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the open failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0104E	VIEW NOT FOUND aaaa=bbbb, SUBSTITUTING cccc AS DEFAULT VIEW. aaaa: Default View keyword. bbbb: Default View name specified. cccc: System default View name that substitutes specified view name. Message Meaning: The specified default View was not found, therefore, was substituted with the system default View name. System Action: Processing continues. Required Action: None.
VSV0105E	VSVLIB I/O ERROR text text: I/O error text. Message Meaning: The server region encountered an I/O error while attempting to read a record from the server region parameter dataset (DDNAME=VSVLIB). System Action: If the error occurred as part of the server region initialization process, the server region terminates. Otherwise, processing continues. Required Action: Review the JES message log for other messages regarding the cause of the I/O error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.
VSV0106E	MVS EVENT NOTIFICATION FACILITY REQUEST FAILED ACTION=action CODE=code RC=rc action: ENFREQ action. code: System event code. rc: Return code. Message Meaning: The server region made a request to the MVS Event Notification Facility (using the ENFREQ macro interface), but the request failed with the return code shown in the message. The message text also provides the ENFREQ action (LISTEN or DELETE) and the system event code. System Action: For ENFREQ ACTION=LISTEN failures, the server region terminates. Otherwise, processing continues. Required Action: Determine the cause of the ENFREQ macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0107E	<p>MVS CSRCMPSC REQUEST FAILED REQUEST=COMPRESSION EXPANSION RC=rc rc: Return code.</p> <p>Message Meaning: The server region made a request to the MVS Data Compression and Expansion Services (using the CSRCMPSC macro interface), but the request failed with the return code shown in the message. The message text also provides the request type (Compression or Expansion).</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the CSRCMPSC macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0108E	<p>MVS/ESA VERSION 4.2.0 OR ABOVE IS REQUIRED</p> <p>Message Meaning: The server region was initiated under a version and release of the operating system that is not supported by LRS.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Initiate the server region under a LRS supported version and release of the operating system.</p>
VSV0109E	<p>STIMERM FAILURE RC=rc REASON=PRODUCT KEY INTERVAL</p> <p>rc: Return code.</p> <p>Message Meaning: An error occurred while processing a STIMERM macro.</p> <p>System Action: The server region will terminate.</p> <p>Required Action: Contact LRS technical support.</p>
VSV0110E	<p>SSI 71 func ERROR - RC=rc SSOBRETN=ssrc SSJIRETN=sjrc</p> <p>func: SSI 71 function.</p> <p>rc: IEFSSREQ return code.</p> <p>ssrc: SSOB return code.</p> <p>sjrc: SSJI return code.</p> <p>Message Meaning: An SSI 71 request was made to the JES subsystem, and the request failed unexpectedly with the return codes shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Contact LRS technical support.</p>
VSV0111I	<p>xxxxxxx PROFILED TO zzzzzzzz</p> <p>xxxxxxx User ID of user issuing PROFILE command.</p> <p>zzzzzzzz Profile ID requested.</p> <p>Message Meaning: A user has issued the PROFILE command.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0120N	<p>REGION LOG SUCCESSFULLY OPENED</p> <p>Message Meaning: The server region has been successfully opened.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0121N	<p>REGION LOG SUCCESSFULLY CLOSED</p> <p>Message Meaning: The server region has been successfully closed.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0122N	<p>REGION LOG OUT OF SPACE -- LOGGING CONTINUES AT THE START OF THE DATASET</p> <p>Message Meaning: The DASD dataset being used for the server region log is out of space.</p> <p>System Action: The server will begin writing log data at the beginning of the dataset and any old data will be lost.</p> <p>Required Action: None.</p>
VSV0123E	<p>REGION LOG ALLOCATION UNALLOCATION FAILED RC=rc EC=ec IC=ic text</p> <p>rc: Return code.</p> <p>ec: Error code.</p> <p>ic: Information code.</p> <p>text: Additional error information, if available.</p> <p>Message Meaning: The server region attempted to allocate or unallocate a region log SYSOUT dataset but the attempt failed with the return code, error code, and information code shown in the message.</p> <p>System Action: Processing continues, but the region log is disabled.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0124E	<p>TUKEY=key TUNUM=nnbr TUFLD=field</p> <p>key: Text unit key.</p> <p>nbr: Number of parameters.</p> <p>field: Text unit field.</p> <p>Message Meaning: The server region attempted to allocate a region log SYSOUT dataset but the attempt failed because an invalid SVC 99 text unit was specified. This message provides the key of the text unit in error, the number of parameters specified, and, if applicable, the length and data for each parameter.</p> <p>System Action: Processing continues, but the region log is disabled.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0125E	<p>REGION LOG RDJFCB FAILED RC=rc rc: Return code. Message Meaning: The server region attempted to read the job file control block for the server region log dataset (DDNAME=VSVLOG), but the attempt failed with the return code shown in the message. System Action: Processing continues, but the region log is disabled. Required Action: Review the JES message log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0126E	<p>REGION LOG OPEN FAILED Message Meaning: The server region was unable to successfully open the server region log dataset (DDNAME=VSVLOG). System Action: Processing continues, but the region log is disabled. Required Action: Review the JES message log for other messages regarding the cause of the open failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0127E	<p>REGION LOG CLOSE FAILED Message Meaning: The server region was unable to successfully close the server region log dataset (DDNAME=VSVLOG). System Action: Processing continues, but the region log is disabled. Required Action: Review the JES message log for other messages regarding the cause of the close failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0128E	<p>REGION LOG I/O ERROR error error: I/O Error. Message Meaning: The server region encountered an I/O error while attempting to write a record to the region log dataset (DDNAME=VSVLOG). System Action: Processing continues, but the region log is disabled. Required Action: Review the JES message log for other messages regarding the cause of the I/O error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0140E	<p>VSAM name FAILED RC=rc RSN=rsncode</p> <p>name: VSAM macro.</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: The server region file control component was attempting to initialize and issued the VSAM control block manipulation macro shown in the message but the macro failed with the return code and reason code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Determine the cause of the VSAM control block manipulation macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0141E	<p>FILE name DDNAME=ddname DD STATEMENT MISSING</p> <p>name: File name.</p> <p>ddname: DDNAME.</p> <p>Message Meaning: The server region file control component attempted to initialize the application file shown in the message, but the DD statement for the file was not specified in the server region startup JCL.</p> <p>System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.</p> <p>Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0142E	<p>FILE name DDNAME=ddname SWAREQ FAILED CB=cb RC=rc</p> <p>name: File name.</p> <p>ddname: DDNAME.</p> <p>cb: Control block.</p> <p>rc: Return code.</p> <p>Message Meaning: The server region file control component attempted to resolve the address of an MVS SWA control block for the application file shown in the message, but the attempt failed with the return code shown in the message. The message text also provides the name of the MVS SWA control block.</p> <p>System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.</p> <p>Required Action: Determine the cause of the SWAREQ macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0143E FILE name DDNAME=ddname OBTAIN FAILED VOLSER=volser
RC=rc
name: File name.
ddname: DDNAME.
volser: Volser:
rc: Return code.
Message Meaning: The server region file control component attempted to read the format-1 DSCB for the application file shown in the message, but the attempt failed with the return code shown in the message.
System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.
Required Action: Determine the cause of the OBTAIN macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0144E FILE file DDNAME=ddname SHOWCAT FAILED RC=rc
file: File name.
ddname: DDNAME.
rc: Return code.
Message Meaning: The server region file control component attempted to obtain the entry type and associations for the application file shown in the message, but the attempt failed with the return code shown in the message.
System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.
Required Action: Determine the cause of the SHOWCAT macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0145E	FILE file DDNAME=ddname IS NOT A VSAM CLUSTER ENTYPE=entype
	file: File name.
	ddname: DDNAME.
	entype: Entry type.
	Message Meaning: The server region file control component attempted to initialize the application file shown in the message, but the DD statement for the file does not reference a VSAM cluster. The message text also provides the entry type of the VSAM component referred to by the DD statement.
	System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.
	Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated. Review the product installation and customization procedures to ensure that the file is defined correctly. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.
 VSV0146E	 FILE name DDNAME=ddname CATALOG FAILED RC=rc
	name: File name.
	ddname: DDNAME.
	rc: Return code.
	Message Meaning: The server region file control component attempted to obtain the VSAM component attributes for the application file shown in the message, but the attempt failed with the return code shown in the message.
	System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.
	Required Action: Determine the cause of the CATALOG macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0147E	<p>FILE name DDNAME=ddname SHAREOPTIONS ARE NOT SUPPORTED -- DATA SHROPTS(a,b) INDEX SHROPTS(c,d)</p> <p>name: File name.</p> <p>ddname: DDNAME.</p> <p>a,b,c,d: Share option values.</p> <p>Message Meaning: The server region file control component attempted to initialize the application file shown in the message, but the shareoptions for the file are not supported by the server region file control component. The message text also provides the defined shareoptions for the data and index (if applicable) components of the file.</p> <p>The server region file control component only supports VSAM files defined with share options (1,3), (2,3), and (3,3). In addition, if the file is a VSAM key-sequenced dataset (KSDS), the data and index components must be defined with identical share options.</p> <p>System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.</p> <p>Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated. Review the product installation and customization procedures to ensure that the file is defined correctly. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0148E	<p>FILE name DDNAME=ddname FILE TYPE IS INCORRECT</p> <p>name: File name.</p> <p>ddname: DDNAME.</p> <p>Message Meaning: The server region file control component attempted to initialize the application file shown in the message, but the type of the file allocated is incorrect.</p> <p>System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.</p> <p>Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated. Review the product installation and customization procedures to ensure that the file is defined correctly. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0149E FILE name DDNAME=ddname KEY LENGTH IS INCORRECT
KEYLEN=keylen
name: File name.
ddname: DDNAME.
keylen: Key length.
Message Meaning: The server region file control component attempted to initialize the application file shown in the message, but the key length of the file allocated is incorrect. The message text also provides the key length of the file as it is presently defined.
System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.
Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated. Review the product installation and customization procedures to ensure that the file is defined correctly. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV0150E FILE name DDNAME=ddname DATA LENGTH IS INCORRECT
LRECL=datalen
name: File name.
ddname: DDNAME.
datalen: Data length.
Message Meaning: The server region file control component attempted to initialize the application file shown in the message, but the data length of the file allocated is incorrect. The message text also provides the data length of the file as it is presently defined.
System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.
Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated. Review the product installation and customization procedures to ensure that the file is defined correctly. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV0151E	<p>FILE name DDNAME=ddname MAY NOT BE CROSS-REGION AND CROSS-SYSTEM SHARED</p> <p>name: File name.</p> <p>ddname: DDNAME.</p> <p>Message Meaning: The server region file control component attempted to initialize the application file shown in the message, but the shareoptions for the file allow the file to be cross-region and cross-system shared. However, this mode of sharing is not supported for the file shown in the message.</p> <p>System Action: If the application file shown in the message is a required file, the server region terminates. Otherwise, processing continues but the file is disabled.</p> <p>Required Action: Review the server region startup JCL to ensure that the correct dataset(s) are allocated. Review the product installation and customization procedures to ensure that the file is defined correctly. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0152E	<p>FILE name DDNAME=ddname OPEN FAILED RC=rc ACBERFLG=errcode</p> <p>name: File name.</p> <p>ddname: DDNAME.</p> <p>rc: Return code.</p> <p>errcode: Error code.</p> <p>Message Meaning: The server region file control component attempted to open the file shown in the message, but the attempt failed with the return code and error code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Determine the cause of the OPEN macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0153E	<p>FILE name DDNAME=ddname CLOSE FAILED RC=rc ACBERFLG=errcode</p> <p>name: File name.</p> <p>ddname: DDNAME.</p> <p>rc: Return code.</p> <p>errcode: Error code.</p> <p>Message Meaning: As part of server region termination, the file control component attempted to close the file shown in the message, but the attempt failed with the return code and error code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the CLOSE macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0154E	<p>VSAM LSR POOL pool APID=apid APOOL=apool BLDVRP FAILED RC=rc</p> <p>pool: Pool name. apid: Application ID. apool: Application pool ID. rc: Return code.</p> <p>Message Meaning: As part of server region initialization, the file control component attempted to build the shared resource pool shown in the message, but the attempt failed with the return code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Determine the cause of the DLVRP macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0155E	<p>VSAM LSR POOL pool APID=apid APOOL=apool DLVRP FAILED RC=rc</p> <p>pool: Pool name. apid: Application ID. apool: Application pool ID. rc: Return code.</p> <p>Message Meaning: As part of server region termination, the file control component attempted to delete the shared resource pool shown in the message, but the attempt failed with the return code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the DLVRP macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0156E	<p>VSAM request FAILED FOR FILE name DDNAME=ddname RC=rc</p> <p>request: VSAM request type. name: File name. ddname: DDNAME. rc: Return code.</p> <p>Message Meaning: The server region file control component attempted to issue the VSAM record management request shown in the message for the application file shown in the message, but the attempt failed with the return code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the VSAM request failure. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0157E	<p>VSAM CONTROL RECORD request FAILED FOR FILE name DDNAME=ddname RC=rc</p> <p>request: Record Management Request type. name: File name. ddname: DDNAME. rc: Return code.</p> <p>Message Meaning: The server region file control component attempted to issue the VSAM record management request against the control record of the application file shown in the message, but the attempt failed with the return code shown in the message.</p> <p>System Action: Processing continues, but the file is disabled.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the VSAM request failure. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0158E	<p>VSAM CLOSE FAILED FOR FILE name DDNAME=ddname RC=rc ACBERFLG=errcode</p> <p>name: File name. ddname: DDNAME. rc: Return code. errcode: Error code.</p> <p>Message Meaning: The server region file control component attempted to CLOSE (TYPE=T) the application file shown in the message in order to update the catalog information for the VSAM dataset, but the attempt failed with the return code and error code shown in the message.</p> <p>System Action: Processing continues but the file is disabled.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the VSAM request failure. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0159E	<p>VSAM OPEN FAILED FOR FILE name DDNAME=ddname RC=rc ACBERFLG=errcode</p> <p>name: File name. ddname: DDNAME. rc: Return code. errcode: Error code.</p> <p>Message Meaning: The server region file control component attempted to OPEN the application file shown in the message in order to update the VSAM control block structure for the VSAM dataset, but the attempt failed with the return code and error code shown in the message.</p> <p>System Action: Processing continues but the file is disabled.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the VSAM request failure. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0160E	<p>VSAM request FAILED FOR FILE name DDNAME=ddname RC=rc RSN=rsncode</p> <p>request: VSAM request type. name: File name. ddname: DDNAME. rc: Return code. rsncode: Reason code.</p> <p>Message Meaning: The server region file control component attempted to issue the VSAM control block manipulation macro shown in the message for the file shown in the message but the macro failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues but the file is disabled.</p> <p>Required Action: Determine the cause of the VSAM control block manipulation macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0161E	<p>DYNAMIC ALLOCATION FOR type DSNAME RETRIEVAL FAILED R15=rc EC=ec IC=ic</p> <p>type: Type of request. rc: Return code. ec: Error code. ic: Info code.</p> <p>Message Meaning: Dynamic allocation failed when the server region was attempting to locate the DD names for allocated files during system initialization.</p> <p>System Action: Initialization will fail.</p> <p>Required Action: If unable to resolve the problem, contact LRS technical support.</p>

VSV0400N SERVER SUBSYSTEM INITIALIZATION COMPLETE
NAME=name SSCVT=sscvT SSVT=ssvt USR1=usr1 USR2=usr2
name: Subsystem ID.
sscvT: Address of SSCVT.
ssvt: Address of SSVT.
usr1: First user word.
usr2: Second user word.
Message Meaning: The server region has completed the initialization of the server subsystem interface. The message text also provide the subsystem name, subsystem SSCVT address, subsystem SSVT address, and the contents of the two subsystem user words.
System Action: None.
Required Action: None.

VSV0401N SERVER SUBSYSTEM INTERFACE ENABLED
Message Meaning: The server region subsystem interface has been enabled.
System Action: None.
Required Action: None.

VSV0402N SERVER SUBSYSTEM INTERFACE DISABLED
Message Meaning: The server region subsystem interface has been disabled.
System Action: None.
Required Action: None.

VSV0403N SERVER SUBSYSTEM TERMINATION COMPLETE NAME=name
SSCVT=sscvT SSVT=ssvt USR1=usr1 USR2=usr2
name: Subsystem ID.
sscvT: Address of SSCVT.
ssvt: Address of SSVT.
usr1: First user word.
usr2: Second user word.
Message Meaning: The server region has completed the termination of the server subsystem interface. The message text also provide the subsystem name, subsystem SSCVT address, subsystem SSVT address, and the contents of the two subsystem user words.
System Action: None.
Required Action: None.

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- VSV0404E** SERVER SUBSYSTEM INITIALIZATION FAILURE -- SERVER name IS ALREADY ACTIVE
name: Server name.
Message Meaning: The server region attempted to initialize the subsystem interface but a VPS server with the same STC/JOB/TSU name is already active in the system.
System Action: The server region terminates.
Required Action: Modify the server STC/JOB/TSU name and restart the server region.
- VSV0405E** SERVER SUBSYSTEM INITIALIZATION FAILURE -- COMMAND CHARACTER 'xx' IS IN USE BY SUBSYSTEM name STCNAME=stcname
xx: Subsystem command character.
name: Subsystem name.
stcname: Server name.
Message Meaning: The server region attempted to initialize the subsystem interface but a VPS server is already active using the subsystem command character shown in the message. The message text also provides the subsystem name and STC/JOB/TSU name of the VPS server using the command character.
System Action: The server region terminates.
Required Action: Modify the server subsystem command character and restart the server region.
- VSV0406E** SERVER SUBSYSTEM INITIALIZATION FAILURE -- SUBSYSTEM name IS ALREADY ACTIVE
name: Subsystem name.
Message Meaning: The server region attempted to initialize the subsystem interface but the named subsystem is already active in the system.
System Action: The server region terminates.
Required Action: Modify the server subsystem name and restart the server region.

VSV0407E	<p>SERVER SUBSYSTEM INITIALIZATION FAILURE -- GETMAIN FAILED FOR CB=cb SP=sp LOC=loc LENGTH=len</p> <p>cb: Control block.</p> <p>sp: Subpool number.</p> <p>loc: Location.</p> <p>len: Length.</p> <p>Message Meaning: The server region attempted to initialize the subsystem interface but was unable to obtain common storage for the control block shown in the message. The message text also provides the virtual storage subpool number for which the GETMAIN failed and the length of the storage required.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Determine the cause of the GETMAIN macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0410E	<p>SUBSYSTEM TRACE DATA SPACE DSPSERV CREATE FAILED RC=rc RSN=rsncode</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: The server region attempted to create a data space to support the subsystem internal trace facility. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues, but the subsystem internal trace facility will be disabled.</p> <p>Required Action: Determine the cause of the DSPSERV macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0411E	<p>SUBSYSTEM TRACE DATA SPACE DSPSERV DELETE FAILED RC=rc RSN=rsncode</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: The server region attempted to delete the data space created to support the subsystem internal trace facility. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the DSPSERV macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0412E	SUBSYSTEM TRACE DATA SPACE ALESERV ADD FAILED RC=rc rc: Return code. Message Meaning: The server region attempted to establish addressability to the data space created to support the subsystem internal trace facility. However, the attempt failed with the return code shown in the message. System Action: Processing continues, but the subsystem internal trace facility will be disabled. Required Action: Determine the cause of the ALESERV macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.
VSV0413E	SUBSYSTEM TRACE DATA SPACE ALESERV DELETE FAILED RC=rc rc: Return code. Message Meaning: The server region attempted to delete the access list entry for the data space created to support the subsystem internal trace facility. However, the attempt failed with the return code shown in the message. System Action: Processing continues. Required Action: Determine the cause of the ALESERV macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.
VSV0420N	SVC DUMP FOR PROGRAM name CAPTURED name: Program name. Message Meaning: As a result of a server subsystem abnormal termination, an SVC dump was captured for the program shown in the message. System Action: None. Required Action: None.
VSV0421N	SVC DUMP FOR PROGRAM name SUPPRESSED BY CHNGDUMP SLIP NODUMP DAE name: Program name. Message Meaning: As a result of a server subsystem abnormal termination, an attempt was made to capture an SVC dump for the program shown in the message. However, the SVC dump was suppressed by the MVS component shown in the message. System Action: Processing continues. Required Action: None.

VSV0422E	<p>SVC DUMP FOR PROGRAM name FAILED RC=rc RSN=rsncode</p> <p>name: Program name.</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: As a result of a server subsystem abnormal termination, an attempt was made to capture an SVC dump for the program shown in the message. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the system log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0423E	<p>SYMPTOM DUMP FOR PROGRAM name FAILED RC=rc</p> <p>name: Program name.</p> <p>rc: Return code.</p> <p>Message Meaning: As a result of a server subsystem abnormal termination, an attempt was made to capture a symptom dump for the program shown in the message. However, the attempt failed with the return code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the system log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0425I	<p>SYMPTOM DUMP OUTPUT FOR PROGRAM name</p> <p>name: Program name.</p> <p>Message Meaning: As the result of a server subsystem abnormal termination, a symptom dump is being captured for the program shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None required.</p>
VSV0426I	<p>USER SYSTEM COMPLETION CODE=cmpcode REASON CODE=rsncode</p> <p>cmpcode: Completion code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: This message is part of the symptom dump resulting from a server subsystem abnormal termination and identifies the type of abnormal termination (System or User), the abend completion code, and the abend reason code (or NONE if none was provided).</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0427I	<p>TIME=time SEQ=seq CPU=cpu ASID=asid</p> <p>time: The time the failure occurred.</p> <p>seq: Sequence number assigned to the failure.</p> <p>cpu: CPU identifier.</p> <p>asid: Address space identifier.</p> <p>Message Meaning: This message is part of the symptom dump resulting from a server subsystem abnormal termination and identifies the time that the failure occurred, the sequence number assigned to the failure, the CPU identifier of the central processor on which the failure occurred, and the address space identifier of the failing task. A CPU identifier of 0000 indicates that the operating system was unable to determine on which processor the failure occurred.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0428I	<p>PSW AT TIME OF ERROR=psw ILC=ilc INTC=intc</p> <p>psw: PSW.</p> <p>ilc: Instruction Length Code.</p> <p>intc: Interrupt code.</p> <p>Message Meaning: This message is part of the symptom dump resulting from a server subsystem abnormal termination and identifies the contents of the program status word at the time of the failure, the instruction length code of the failing instruction, and the interrupt code for the failing instruction.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0429I	<p>ACTIVE LOAD MODULE NAME=module ADDRESS=addr OFFSET=offset</p> <p>module: Module name.</p> <p>addr: The entry point address.</p> <p>offset: The offset within the load module.</p> <p>Message Meaning: This message is part of the symptom dump resulting from a server subsystem abnormal termination and identifies the active load module name, entry point address, and offset within the load module of the failing instruction.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0430I	NO ACTIVE LOAD MODULE FOUND
	Message Meaning: This message is part of the symptom dump resulting from a server subsystem abnormal termination and indicates that the PSW next sequential instruction address is not within an active load module.
	System Action: None.
	Required Action: None.
VSV0431I	DATA AT PSW psw - data
	psw: PSW.
	data: Data at PSW address.
	Message Meaning: This message is part of the symptom dump resulting from a server subsystem abnormal termination and identifies the PSW next sequential instruction address minus 6 and the contents of the three full words beginning at that address.
	System Action: None.
	Required Action: None.
VSV0432E	SYMPTOM DUMP ESTAE FAILED RC=rc RSN=rsn
	rc: Return code.
	rsn: Reason code.
	Message Meaning: As part of symptom dump capture processing, an attempt was made to establish an ESTAE type recovery environment, but the attempt failed with the return code and reason code shown in the message.
	System Action: Processing continues, but the data addressed by the PSW next sequential address at the time of the failure is not included in the symptom dump.
	Required Action: Determine the cause of the ESTAE macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.
VSV0433I	DATA AT PSW IS UNAVAILABLE AT THIS TIME IS INACCESSIBLE BY USER
	Message Meaning: This message is part of the symptom dump resulting from a server subsystem abnormal termination and indicates that the virtual storage at the PSW next sequential instruction address is either unavailable at this time (unallocated) or is inaccessible by the failing task.
	System Action: None.
	Required Action: None.

VSV0434I	GPR r1-r2 v1 v2 v3 v4	
	r1	First register.
	r2	Last register
	v1	Value in first register.
	v2	Value in second register.
	v3	Value in third register.
	v4	Value in fourth register.
	Message Meaning:	This message is part of the symptom dump resulting from a server subsystem abnormal termination and identifies the contents of the general purpose registers at the time of the failure.
	System Action:	None.
	Required Action:	None.
VSV0435I	AR r1- r2 v1 v2 v3 v4	
	r1:	First register.
	r2:	Last register.
	v1:	Value in first register.
	v2:	Value in second register.
	v3:	Value in third register.
	v4:	Value in fourth register.
	Message Meaning:	This message is part of the symptom dump resulting from a server subsystem abnormal termination and identifies the contents of the access registers shown in the message at the time of the failure. This message is only included in the symptom dump if the PSW at the time of the failure is in AR ASC mode.
	System Action:	None.
	Required Action:	None.
VSV0436I	END OF SYMPTOM DUMP FOR PROGRAM name	
	name:	Program name.
	Message Meaning:	As the result of a server subsystem abnormal termination, a symptom dump has been captured for the program shown in the message.
	System Action:	None.
	Required Action:	None.

VSV0437E	<p>SUBSYSTEM ESTAEX FAILED PROGRAM=name RC=rc RSN=rsncode</p> <p>name: Program name. rc: Return code. rsncode: Reason code.</p> <p>Message Meaning: The server subsystem program shown in the message attempted to establish an ESTAE type recovery environment, but the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: The server subsystem request is canceled.</p> <p>Required Action: Determine the cause of the ESTAEX macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0438E	<p>SUBSYSTEM ALESERV EXTRACTH FAILED PROGRAM=name RC=rc</p> <p>name: Program name. rc: Return code.</p> <p>Message Meaning: The server subsystem program shown in the message attempted to obtain the STOKEN of the home address space, but the attempt failed with the return code shown in the message.</p> <p>System Action: The server subsystem request is canceled.</p> <p>Required Action: Determine the cause of the ALESERV macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0439E	<p>SUBSYSTEM ATSET FAILED PROGRAM=name RC=rc</p> <p>name: Program name. rc: Return code.</p> <p>Message Meaning: The server subsystem program shown in the message attempted to establish the cross-memory linkage to the server address space, but the attempt failed with the return code shown in the message.</p> <p>System Action: The server subsystem request is canceled.</p> <p>Required Action: Determine the cause of the ATSET macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0440E	<p>SUBSYSTEM ETCON FAILED PROGRAM=name RC=rc</p> <p>name: Program name. rc: Return code.</p> <p>Message Meaning: The server subsystem program shown in the message attempted to establish the cross-memory linkage to the server address space, but the attempt failed with the return code shown in the message.</p> <p>System Action: The server subsystem request is canceled.</p> <p>Required Action: Determine the cause of the ETCON macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0441E SUBSYSTEM COMMAND BUFFER IS NOT AVAILABLE
Message Meaning: An operator command was issued that was directed to the server subsystem (using the one character subsystem command character or the one to four character subsystem name) but the subsystem command buffer(s) are either not allocated or are all in use.
System Action: The server subsystem command is ignored.
Required Action: Increase the number of subsystem command buffers using the SVSSCMD keyword of the server region system initialization parameter member.

VSV0500I SERVER REGION TCP/IP QUEUE REQUEST PROCESSING
ENABLED FOR TYPE=type
type: Type of queue requests which are enabled; currently only EMAIL type requests are supported.
Message Meaning: The TCP/IP queue request capability is enabled.
System Action: None.
Required Action: None.

VSV0501N SERVER REGION TCP/IP QUEUE REQUEST PROCESSING
DISABLED FOR TYPE=type REASON=reason
type: Type of queue requests which are disabled; currently only EMAIL type requests are supported.
reason: Reason for disabling the request processing, for example:
 • SVMALHST KWD NOT SPECIFIED
 • SVTCPTYP KWD NOT IBM340
 • EMAIL TASK ABENDED
Message Meaning: The TCP/IP queue request capability is disabled.
System Action: Queue requests of this type will be ignored.
Required Action: Verify that the related keywords are specified correctly in the LRS/MVS Server initialization member.

 This message should be ignored unless intending to use email support for the PageCenter product.

VSV0502I TCP/IP QUEUE REQUEST MOVED TO ERROR QUEUE - TYPE=type
WAIT INTERVAL=mm MINUTES
type: Type of queue request being processed; currently only EMAIL type requests are supported.
mm: Number of minutes to wait before retry.
Message Meaning: Email capability has been enabled.
System Action: None.
Required Action: None.

VSV0503N	<p>TCP/IP QUEUE REQUEST DISCARDED - TYPE=type REASON=reason</p> <p>type: Type of queue request being processed; currently only EMAIL type requests are supported.</p> <p>reason: Reason for discarding the queued request, for example:</p> <p style="padding-left: 40px;">MAX DELIVERY ATTEMPTS REACHED</p> <p>Message Meaning: The queued request could not be processed.</p> <p>System Action: The request will be ignored.</p> <p>Required Action: If unable to resolve the problem, contact LRS technical support.</p>
VSV0504E	<p>TCP/IP QUEUE REQUEST PROCESSING LOGIC ERROR - TYPE=type MODULE=modname REASON=reason</p> <p>type: Type of queue request being processed; currently only EMAIL type requests are supported.</p> <p>modname: The name of the module that encountered the error.</p> <p>reason: Reason for the error.</p> <p>Message Meaning: An error has occurred while trying to process the queued request.</p> <p>System Action: The request will be ignored.</p> <p>Required Action: If unable to resolve the problem, contact LRS technical support.</p>
VSV0509I	<p>EMAIL RESPONSE=text</p> <p>text: Text returned from the mail server.</p> <p>Message Meaning: The text shown here was received from the mail server and is written to the LRS/MVS Server log.</p> <p style="padding-left: 40px;">This capability is activated by specifying SVMALOPT=00000001 in the LRS/MVS Server initialization member.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0510E	<p>CHARACTER TRANSLATION FAILED - INPUT CHARACTER SET=in OUTPUT CHARACTER SET=out ERROR=error</p> <p>in: Name of the input character set.</p> <p>out: Name of the output character set.</p> <p>error: Reason for the error.</p> <p>Message Meaning: An error has occurred while trying to translate from the input character set to the output character set.</p> <p>System Action: The request will be ignored.</p> <p>Required Action: If unable to resolve the problem, contact LRS technical support.</p>

VSV0600N TCP/IP CONNECTION SUCCESSFUL HOST=host PORT=port
TCPTYPE=type
host: TCP/IP host name.
port: TCP/IP port name.
type: TCP/IP application type.
Message Meaning: The server region has successfully established a connection to the local TCP/IP host shown in the message using the port shown in the message.
System Action: None.
Required Action: None.

VSV0601N TCP/IP REMOTE CONNECTION ESTABLISHED HOST=nn.nn.nn.n
PORT=port
nn.nn.nn.n: TCP/IP host.
port: TCP/IP port.
Message Meaning: The server region has successfully established a connection with the remote TCP/IP host shown in the message using the port shown in the message.
System Action: None.
Required Action: None.

VSV0602N TCP/IP REMOTE CONNECTION LOST HOST=nn.nn.nn.n
PORT=port
nn.nn.nn.n: TCP/IP host.
port: TCP/IP port.
Message Meaning: The server region TCP/IP connection with the remote host shown in the message has ended.
System Action: None.
Required Action: None.

VSV0603N	<p>TCP/IP REMOTE CONNECTION TIMED-OUT HOST=nn.nn.nn.n PORT=port nn.nn.nn.n: TCP/IP host. port: TCP/IP port. Message Meaning: The server region TCP/IP connection with the remote host shown in the message has timed-out. System Action: None. Required Action: None.</p>
VSV0604E	<p>TCP/IP LOGIC ERROR - REQUEST CANNOT BE PROCESSED - TCP/IP TYPE type text type: TCP/IP type as specified using the SVTCPTYP keyword in the LRS/MVS Server Initialization member. text: Additional text to describe the error. Message Meaning: An error has occurred while attempting to process a TCP/IP request. System Action: The request will be ignored. Required Action: Verify the value of the SVTCPTYP keyword is correct. If unable to resolve the problem, contact LRS technical support.</p>
VSV0605E	<p>TCP/IP IUCV REQUEST FAILED TYPE=type RC=rc SOCKET=socket FUNCTION=func type: Type of call. rc: Return code. socket: Socket number. func: Function requested. Message Meaning: The server region attempted to issue the IBM TCP/IP IUCV request shown in the message, but the request failed with the return code shown in the message. System Action: The connection for which the request was made is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0606E	<p>TCP/IP IUCV PROCESSING ERROR ERROR=error TYPE=type FUNCTION=func ANS1=ans1 ANS2=ans2 error: Error text. type: Type of call. func: Function requested. ans1: Error information. ans2: Error information. Message Meaning: The server region attempted to perform the IBM TCP/IP IUCV function shown in the message, but the function failed with the error shown in the message. System Action: The connection for which the request was made is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0607E	TCP/IP IUCV CONNECTION SEVERED REASON=rsncode DESCRIPTION=desc rsncode: Reason code. desc: Description. Message Meaning: The IBM TCP/IP for MVS address space has severed the connection with the VPS server. System Action: The connection which was severed is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.
VSV0608E	TCP/IP IUCV EXIT SCHEDULED WITH UNSUPPORTED INTERRUPT int UWORD=uword EXTB=ext int: Interrupt type. uword: Value of user word. ext: Value external interrupt buffer. Message Meaning: The IBM TCP/IP for MVS address space scheduled the server region external interrupt exit with an interrupt code that was not recognized by the exit routine. System Action: The interrupt is ignored. Required Action: Contact LRS Technical Support.
VSV0609E	TCP/IP SNS/API PROCESSING ERROR ERROR=error TYPE=type RC=rc RSN=rsncode DPLRTNCD=errcode error: Error text. type: Type of request. rc: Return code. rsncode: Reason code. errcode: Error code. Message Meaning: The server region attempted to perform the Interlink SNS/API function shown in the message, but the function failed with the error shown in the message. System Action: The connection for which the request was made is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.

VSV0610E	TCP/IP SNS/API PROCESSING ERROR ERROR=error TYPE=type RC=rc RSN=rsncode TPLRTNCD=errcode error: Error text. type: Type of request. rc: Return code. rsncode: Reason code. errcode: Error code. Message Meaning: The server region attempted to perform the Interlink SNS/API function shown in the message, but the function failed with the error shown in the message. System Action: The connection for which the request was made is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.
VSV0611E	TCP/IP SNS/API PROCESSING ERROR ERROR=error TYPE=type RC=rc RSN=rsncode APCBDGNC=errcode error: Error text. type: Type of request. rc: Return code. rsncode: Reason code. errcode: Error code. Message Meaning: The server region attempted to perform the Interlink SNS/API function shown in the message, but the function failed with the error shown in the message. System Action: The connection for which the request was made is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.
VSV0612E	TCP/IP SNS/API PROCESSING ERROR: desc desc: Description of error. Message Meaning: The server region attempted to perform an Interlink SNS/API function and the function failed. This message provides the Interlink SNS/API description of the failure. System Action: The connection for which the request was made is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.
VSV0613E	TCP/IP SNS/API CONNECTION SEVERED REASON=reason DESCRIPTION= desc reason: Reason. desc: Description of error. Message Meaning: The Interlink TCP/IP address space has severed the connection with the VPS server. System Action: The connection which was severed is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.

VSV0614E	TCP/IP HPNS REQUEST FAILED TYPE=type R15=r15 RC=rc ERRNO=errno SOCKET=socket type: Type of request. r15: Value in Register 15. rc: Return code. errno: Error number returned. socket: Socket number. Message Meaning: The server region attempted to issue the IBM TCP/IP HPNS request shown in the message, but the request failed with the return code shown in the message. System Action: The connection for which the request was made is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.
VSV0615E	TCP/IP HPNS PROCESSING ERROR ERROR=error TYPE=type RC=rc ERRNO=errno SOCKET=socket error: Error text. type: Type of request. rc: Return code. errno: Error number returned. socket: Socket number. Message Meaning: The server region attempted to perform the IBM TCP/IP HPNS function shown in the message, but the function failed with the error shown in the message. System Action: The connection for which the request was made is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.
VSV0616E	TCP/IP HPNS CONNECTION SEVERED REASON=reason reason: Reason for error. Message Meaning: The IBM TCP/IP for MVS address space has severed the connection with the VPS server. System Action: The connection which was severed is ended. Required Action: If unable to resolve the problem, contact LRS Technical Support.
VSV0620I	VTAM ACB acb SUCCESSFULLY OPENED APPLID=applid NETID=netid acb: ACB name. applid: APPLID name. netid: Net ID name. Message Meaning: The server region VTAM communications component has successfully opened the ACB shown in the message. System Action: None. Required Action: None.

VSV0621E	<p>VTAM ACB OPEN FAILED ACBNAME=name RC=rc ACBERFLG=err</p> <p>name: ACB Name rc: Return code. err: Error code.</p> <p>Message Meaning: The server region VTAM communications component attempted to open the ACB shown in the message but the attempt failed with the return code and error code shown in the message.</p> <p>System Action: Processing continues and the ACB OPEN request is retried on a periodic interval.</p> <p>Required Action: Determine the cause of the OPEN macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0622I	<p>VTAM ACB name SUCCESSFULLY CLOSED</p> <p>name: ACB name.</p> <p>Message Meaning: The server region VTAM communications component has successfully closed the ACB shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV0623E	<p>VTAM ACB CLOSE FAILED ACBNAME=name RC=rc ACBERFLG=err</p> <p>name: ACB Name. rc: Return code. err: Error code.</p> <p>Message Meaning: The server region VTAM communications component attempted to close the ACB shown in the message but the attempt failed with the return code and error code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the CLOSE macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0624E	<p>VTAM SETLOGON START FAILED ACBNAME=name RC=rc F2=f2</p> <p>name: ACB Name rc: Return code. f2: Feedback value.</p> <p>Message Meaning: The server region VTAM communications component attempted to enable VTAM logons for the ACB shown in the message but the attempt failed with the return code and feedback code shown in the message.</p> <p>System Action: Processing continues but the VTAM ACB is closed and the ACB OPEN request is retried on a periodic interval.</p> <p>Required Action: Determine the cause of the SETLOGON macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0625E	<p>VTAM SETLOGON QUIESCE FAILED ACBNAME=name RC=rc F2=f2</p> <p>name: ACB name. rc: Return code: f2: Feedback value.</p> <p>Message Meaning: The server region VTAM communications component attempted to disable VTAM logons for the ACB shown in the message but the attempt failed with the return code and feedback code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the SETLOGON macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0626I	<p>GENERIC RESOURCE REGISTRATION COMPLETE ACBNAME=name APPLID =applid GRNAME=grname</p> <p>name: ACB Name. applid: APPL ID. grname: Group Name.</p> <p>Message Meaning: The server region VTAM communications component has successfully registered as a VTAM generic resource in the group name shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV0627E VTAM SETLOGON GNAMEADD FAILED ACBNAME=name
 APPLID=applid GRNAME=grname RC=rc F2=f2
 name: ACB Name.
 applid: APPL ID.
 grname: Group name.
 rc: Return code.
 f2: Feedback value.
Message Meaning: The server region VTAM communications component attempted to register as a VTAM generic resource in the group name shown in the message but the attempt failed with the return code and feedback code shown in the message.
System Action: Processing continues but it will not be possible to establish a session with the server region using the generic resource name.
Required Action: Determine the cause of the SETLOGON macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0628E VTAM SETLOGON GNAMEDEL FAILED ACBNAME=name
 APPLID=applid GRNAME=grname RC=rc F2=f2
 name: ACB Name.
 applid: APPL ID.
 grname: Group name.
 rc: Return code.
 f2: Feedback value.
Message Meaning: The server region VTAM communications component attempted to de-register as a VTAM generic resource in the group name shown in the message but the attempt failed with the return code and feedback code shown in the message.
System Action: Processing continues.
Required Action: Determine the cause of the SETLOGON macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0629N VTAM ACB name TPEND EXIT ENTERED RSN=rsncode
 name: ACB Name.
 rsn: Reason code.
Message Meaning: The VTAM TPEND exit routine for the server region VTAM communications component has been entered with the reason code shown in the message. This exit routine will be entered either because VTAM is terminating or the application identified by the ACBNAME shown in the message has been varied inactive.
System Action: The server region VTAM component quiesces.
Required Action: None.

VSV0630E VTAM ATTN EXIT ENTERED FOR UNRECOGNIZED EVENT
event
event: Exit event type.
Message Meaning: The VTAM ATTN exit routine for the server region VTAM communications component has been entered with the event identifier shown in the message. However, the event is not a recognized LU6.2 event.
System Action: Processing continues.
Required Action: Contact LRS Technical Support.

VSV0631I VTAM ATTN EXIT FMH-5 RECEIVED NETID=netid
PLUNAME=pluname LOGMODE=logmode
netid: Net ID.
pluname: VTAM partner LU name.
logmode: VTAM log mode.
Message Meaning: The VTAM ATTN exit routine for the server region VTAM communications component has been entered with an indication that an FMH-5 has been received from the partner LU name shown in the message for the mode name shown in the message.
System Action: The server region VTAM component initiates a request to receive the FMH-5.
Required Action: None.

VSV0632I VTAM ATTN EXIT CNOS RECEIVED NETID=netid
PLUNAME=pluname LOGMODE=logmode SESSLIM=sesslim
CWLIM=cwlim CLLIM=cllim
netid: Net ID.
pluname: VTAM partner LU name.
logmode: VTAM Log Mode name.
sesslim: Session Limit.
cwlim: Contention winner limit.
cllim: Contention loser limit.
Message Meaning: The VTAM ATTN exit routine for the server region VTAM communications component has been entered with an indication that a CNOS request was received for the application program and VTAM has negotiated the session limits for the partner LU name and mode name shown in the message. The message text also provides the negotiated session limits.
System Action: None.
Required Action: None.

VSV0633I VTAM LOGON EXIT ACCEPTING SESSION WITH LUNAME=luname
CID=cid

luname: VTAM LU name.

cid: Communication ID.

Message Meaning: The VTAM LOGON exit routine for the server region VTAM communications component has been entered to establish a session with the LU shown in the message.

System Action: The session is accepted.

Required Action: None.

VSV0634I VTAM LOGON EXIT REJECTING SESSION WITH LUNAME=luname
CID=cid SNS=sns

luname: VTAM LU name.

cid: Communication ID.

sns: Sense code.

Message Meaning: The VTAM LOGON exit routine for the server region VTAM communications component has been entered to establish a session with the LU shown in the message. However, either the state of the server region is such that it cannot currently accept sessions or the session parameters are incompatible with the server region.

The sense code shown in the message indicates the specific reason for which the session is being rejected. The possible values are as follows:

- 08010009 - The server region is not yet fully active.
- 0801000A - The server region VTAM communications component is inactive.
- 08210000 - The secondary LU type is not supported.

System Action: The session is rejected.

Required Action: None.

VSV0635E VTAM SCIP EXIT ENTERED FOR UNRECOGNIZED EVENT -
RPLCNTRL =event

event: Event code.

Message Meaning: The VTAM SCIP exit routine for the server region VTAM communications component has been entered with the event identifier shown in the message. However, the event is not a recognized session control event.

System Action: Processing continues.

Required Action: Contact LRS Technical Support.

VSV0636E	<p>VTAM SCIP EXIT ENTERED FOR UNSUPPORTED EVENT - REQUEST=req RPLCNTRL=event</p> <p>req: Request. event: Event code.</p> <p>Message Meaning: The VTAM SCIP exit routine for the server region VTAM communications component has been entered with the event identifier shown in the message. However, the event is not a supported session control event.</p> <p>System Action: Processing continues. Required Action: Contact LRS Technical Support.</p>
VSV0637I	<p>VTAM SCIP EXIT ACCEPTING SESSION WITH LUNAME=luname CID=cid</p> <p>luname: VTAM LU name. cid: Communication ID.</p> <p>Message Meaning: The VTAM SCIP exit routine for the server region VTAM communications component has been entered to establish a session with the LU shown in the message.</p> <p>System Action: The session is accepted. Required Action: None.</p>
VSV0638I	<p>VTAM SCIP EXIT REJECTING SESSION WITH LUNAME=luname CID=cid SNS=sns</p> <p>luname: VTAM LU name. cid: Communication ID. sns: Sense code.</p> <p>Message Meaning: The VTAM SCIP exit routine for the server region VTAM communications component has been entered to establish a session with the LU shown in the message. However, either the state of the server region is such that it cannot currently accept sessions or the session parameters are incompatible with the server region.</p> <p>The sense code shown in the message indicates the specific reason for which the session is being rejected. The possible values are as follows:</p> <ul style="list-style-type: none"> • 08010009 - The server region is not yet fully active. • 0801000A - The server region VTAM communications component is inactive. • 08210000 - The secondary LU type is not supported. <p>System Action: The session is rejected. Required Action: None.</p>

VSV0639E	<p>VTAM RPL EXIT REJECTING CONVERSATION WITH NETID=netid LUNAME=luname LOGMODE=logmode SNS=sns</p> <p>netid: Net ID. luname: VTAM LU name. logmode: VTAM log mode. sns: Sense code.</p> <p>Message Meaning: The server region VTAM communications component has successfully received an FMH-5 from the partner LU shown in the message. However, the FMH-5 is incompatible with the server region.</p> <p>The sense code shown in the message indicates the specific reason for which the conversation is being rejected. The possible values are as follows:</p> <ul style="list-style-type: none"> • 10086021 - The transaction program name is not recognized. • 10086031 - TCPIP data is not allowed. • 10086034 - Conversation type mismatch. • 10086041 - Synchronization level not supported. • 10086042 - Reconnection not supported. <p>System Action: The conversation is rejected.</p> <p>Required Action: None.</p>
VSV0640E	<p>APPCCMD CONTROL=RCVFMH5 FAILED, R15=r15 R0=r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec SNS=sns</p> <p>r15: Value in Register 15. r0: Value in Register 0. rc: Return code. f2: Feedback Value. rcpri: Primary return code. rcsec: Secondary return code. sns: Sense code.</p> <p>Message Meaning: The server region VTAM communications component attempted to receive an FMH-5 from a partner LU but the attempt failed with the return codes shown in the message.</p> <p>System Action: Processing continues but the conversation with the partner LU will not be established.</p> <p>Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0641E APPCCMD CONTROL=OPRCNTL QUALIFY=ACTSESS FAILED
R15=r15 R0 =r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec SNS=sns
r15: Value in Register 15.
r0: Value in Register 0.
rc: Return code.
f2: Feedback Value.
rcpri: Primary return code.
rcsec: Secondary return code.
sns: Sense code.
Message Meaning: The server region VTAM communications component attempted to respond positively to a session establishment request for a LU6.2 session but the attempt failed with the return codes shown in the message.
System Action: Processing continues.
Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0642E APPCCMD CONTROL=OPRCNTL QUALIFY=DACTSESS
FAILED R15=r15 R0 =r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec
SNS=sns
r15: Value in Register 15.
r0: Value in Register 0.
rc: Return code.
f2: Feedback Value.
rcpri: Primary return code.
rcsec: Secondary return code.
sns: Sense code.
Message Meaning: The server region VTAM communications component attempted to respond negatively to a session establishment request for a LU6.2 session but the attempt failed with the return codes shown in the message.
System Action: Processing continues.
Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0643E	<p>APPCCMD CONTROL=RECEIVE QUALIFY=SPEC FAILED R15=r15 R0 =r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec SNS=sns</p> <p>r15: Value in Register 15. r0: Value in Register 0. rc: Return code. f2: Feedback Value. rcpri: Primary return code. rcsec: Secondary return code. sns: Sense code.</p> <p>Message Meaning: The server region VTAM communications component attempted to receive data on a conversation but the attempt failed with the return codes shown in the message.</p> <p>System Action: The conversation is deallocated.</p> <p>Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0644E	<p>APPCCMD CONTROL=DEALLOC QUALIFY=ABNDUSER FAILED R15=r15 R0 =r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec SNS=sns</p> <p>r15: Value in Register 15. r0: Value in Register 0. rc: Return code. f2: Feedback Value. rcpri: Primary return code. rcsec: Secondary return code. sns: Sense code.</p> <p>Message Meaning: The server region VTAM communications component attempted to deallocate a conversation but the attempt failed with the return codes shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0645E APPCCMD CONTROL=DEALLOC QUALIFY=ABNDPROG
FAILED R15=r15 R0 =r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec
SNS=sns

r15: Value in Register 15.
r0: Value in Register 0.
rc: Return code.
f2: Feedback Value.
rcpri: Primary return code.
rcsec: Secondary return code.
sns: Sense code.

Message Meaning: The server region VTAM communications component attempted to deallocate a conversation but the attempt failed with the return codes shown in the message.

System Action: Processing continues.

Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0646E APPCCMD CONTROL=SEND QUALIFY=CONFRMD FAILED
R15=r15 R0 =r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec SNS=sns

r15: Value in Register 15.
r0: Value in Register 0.
rc: Return code.
f2: Feedback Value.
rcpri: Primary return code.
rcsec: Secondary return code.
sns: Sense code.

Message Meaning: The server region VTAM communications component attempted to send a positive confirmation reply to a partner LU but the attempt failed with the return codes shown in the message.

System Action: The conversation is deallocated.

Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0647E APPCCMD CONTROL=SEND QUALIFY=DATA FAILED R15=r15
R0=r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec SNS=sns
r15: Value in Register 15.
r0: Value in Register 0.
rc: Return code.
f2: Feedback Value.
rcpri: Primary return code.
rcsec: Secondary return code.
sns: Sense code.
Message Meaning: The server region VTAM communications component attempted to send data to a partner LU but the attempt failed with the return codes shown in the message.
System Action: The conversation is deallocated.
Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0648E APPCCMD CONTROL=PREPRCV QUALIFY=DATA CON FAILED
R15=r15 R0=r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec SNS=sns
r15: Value in Register 15.
r0: Value in Register 0.
rc: Return code.
f2: Feedback Value.
rcpri: Primary return code.
rcsec: Secondary return code.
sns: Sense code.
Message Meaning: The server region VTAM communications component attempted to send data to a partner LU but the attempt failed with the return codes shown in the message.
System Action: The conversation is deallocated.
Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.

VSV0649E	<p>APPCCMD CONTROL=REJECT QUALIFY=CONV FAILED R15=r15 R0 =r0 RC=rc F2=f2 RCPRI=rcpri RCSEC=rcsec SNS=sns</p> <p>r15: Value in Register 15. r0: Value in Register 0. rc: Return code. f2: Feedback Value. rcpri: Primary return code. rcsec: Secondary return code. sns: Sense code.</p> <p>Message Meaning: The server region VTAM communications component attempted to deallocate a conversation but the attempt failed with the return codes shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the APPCCMD macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0650E	<p>VTAM CLSDST REQUEST FAILED CID=cid RC=rc F2=f2</p> <p>cid: Communication ID. rc: Return code. f2: Feedback value.</p> <p>Message Meaning: The server region VTAM communications component attempted to reject a CINIT for the session shown in the message but the attempt failed with the return code and feedback code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the CLSDST macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0651E	<p>VTAM CLSDST COMPLETION FAILED CID=cid RC=rc F2=f2 SNS=sns</p> <p>cid: Communication ID. rc: Return code. f2: Feedback value. sns: Sense code.</p> <p>Message Meaning: The server region VTAM communications component attempted to reject a CINIT for the session shown in the message but the attempt failed with the return code and feedback code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the CLSDST macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0652E	<p>VTAM SESSIONC BIND REQUEST FAILED CID=cid RC=rc F2=f2</p> <p>cid: Communication ID.</p> <p>rc: Return code.</p> <p>f2: Feedback value.</p> <p>Message Meaning: The server region VTAM communications component attempted to reject a BIND for the session shown in the message but the attempt failed with the return code and feedback code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the SESSIONC macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0653E	<p>VTAM SESSIONC BIND COMPLETION FAILED CID=cid RC=rc F2=f2 SNS=sns</p> <p>cid: Communication ID.</p> <p>rc: Return code.</p> <p>f2: Feedback value.</p> <p>sns: Sense code.</p> <p>Message Meaning: The server region VTAM communications component attempted to reject a BIND for the session shown in the message but the attempt failed with the return code and feedback code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Determine the cause of the SESSIONC macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0654E	<p>VTAM macro FAILED RC=rc RSN=rsncode</p> <p>macro: VTAM macro issued.</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: The server region VTAM communications component was attempting to initialize and issued the VTAM control block manipulation macro shown in the message but the macro failed with the return code and reason code shown in the message.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Determine the cause of the VTAM control block manipulation macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0655N	VTAM APPC CONVERSATION ENDED NETID=netid LUNAME=luname netid: Net ID. luname: VTAM LU name. Message Meaning: The server region VTAM APPC conversation with the LU shown in the message has ended. System Action: None. Required Action: None.
VSV0656E	VTAM APPC CONVERSATION PROTOCOL ERROR NETID=netid LUNAME=luname netid: Net ID. luname: VTAM LU name. Message Meaning: The server region VTAM APPC conversation with the LU shown in the message has encountered a protocol error. System Action: The conversation is deallocated. Required Action: Contact LRS Technical Support.
VSV0657N	SVC DUMP FOR PROGRAM name CAPTURED name: Program name. Message Meaning: As a result of a server region VTAM exit routine abnormal termination, an SVC dump was captured for the program (exit name) shown in the message. System Action: None. Required Action: None.
VSV0658N	SVC DUMP FOR PROGRAM name SUPPRESSED BY compname CHNGDUMP SLIP NODUMP DAE name: Program name. compname: MVS component name. Message Meaning: As a result of a server region VTAM exit routine abnormal termination, an attempt was made to capture an SVC dump for the program (exit name) shown in the message. However, the SVC dump was suppressed by the MVS component shown in the message. System Action: Processing continues. Required Action: None.

VSV0659E	<p>SVC DUMP FOR PROGRAM name FAILED RC=rc RSN=rsncode</p> <p>name: Program name.</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: As a result of a server region VTAM exit routine abnormal termination, an attempt was made to capture an SVC dump for the program (exit name) shown in the message. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0660E	<p>SYMPTOM DUMP FOR PROGRAM name FAILED RC=rc</p> <p>name: Program name.</p> <p>rc: Return code.</p> <p>Message Meaning: As a result of a server region VTAM exit routine abnormal termination, an attempt was made to capture a symptom dump for the program (exit name) shown in the message. However, the attempt failed with the return code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0800E	<p>USER SVEXITxx ABENDED NAME=module CMPCODE=cmrcode</p> <p>xx: Exit identifier.</p> <p>module: Exit module name.</p> <p>cmrcode: Completion code.</p> <p>Message Meaning: The server region user exit program module shown in the message failed with the abend completion code shown in the message.</p> <p>System Action: The user exit is disabled and processing continues.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0801E	<p>SECURITY REQUEST ABENDED FUNCTION=func CMPCODE=cmpcode</p> <p>func: Requested functions:</p> <ul style="list-style-type: none"> • SYSTEM INITIALIZATION • SYSTEM TERMINATION • SYSTEM REFRESH • USER AUTHORIZATION <p>cmpcode: Completion code.</p> <p>Message Meaning: The server region invoked the internal (VSRVISEC) or external (VSRVXSEC) security program to perform the function shown in the message. However, an abnormal termination occurred in the security program(s) while performing the function.</p> <p>System Action: If the function being performed was system initialization or termination, the server region terminates. If the function being performed was system refresh or user authorization, processing continues but the request is failed.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0803E	<p>SUBTASK name ABENDED CMPCODE=cmpcode</p> <p>name: Subtask name.</p> <p>cmpcode: Completion code.</p> <p>Message Meaning: The server region subtask shown in the message has terminated with the abend completion code shown in the message.</p> <p>System Action: If the subtask is restartable, the subtask is reattached. If the subtask is not required for the operation of the server region, processing continues. Otherwise, the server region abnormally terminates.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0804E	<p>PROGRAM CALL ROUTINE name ABENDED CMPCODE=cmpcode</p> <p>name: Routine name.</p> <p>cmpcode: Completion code.</p> <p>Message Meaning: The server region program call routine shown in the message failed with the abend completion code shown in the message.</p> <p>System Action: The program call request is canceled.</p> <p>Required Action: Review the JES message log and server region log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0810E	<p>SUBSYSTEM PROGRAM name ABENDED CMPCODE=cmrcode name: Program name. cmrcode: Completion code. Message Meaning: The server subsystem program shown in the message failed with the abend completion code shown in the message.</p> <p>System Action: The subsystem request is canceled. Required Action: Review the system log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0811E	<p>VSVLIB OPEN/CLOSE/EOV ABEND RC=rc RSN=rsncode rc: Return code. rsncode: Reason code. Message Meaning: An error occurred during OPEN/CLOSE/EOV processing for the server region parameter dataset (DDNAME=VSVLIB). The message text also provides the abend completion code and reason code.</p> <p>System Action: If the error occurred as part of the server region initialization process, the server region terminates. Otherwise, processing continues. Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV0812E	<p>REGION LOG OPEN/CLOSE/EOV ABEND RC=rc RSN=rsncode rc: Return code. rsncode: Reason code. Message Meaning: An error occurred during OPEN/CLOSE/EOV processing for the server region log dataset (DDNAME=VSVLOG). The message text also provides the abend completion code and reason code.</p> <p>System Action: Processing continues, but the region log is disabled. Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV0813E	<p>SERVER SUBSYSTEM INITIALIZATION ABEND CMPCODE=cmrcode cmrcode: Completion code.</p> <p>Message Meaning: The server region was in the process of initializing the subsystem interface and while doing so encountered the recoverable abend shown in the message. This error is most likely the result of a previous instance of the server subsystem not terminating normally.</p> <p>System Action: The server subsystem initialization routine(s) capture a symptom dump and snap dump of the error and processing continues.</p> <p>Required Action: None.</p>
VSV0814E	<p>SERVER SUBSYSTEM TERMINATION ABEND CMPCODE=cmrcode cmrcode: Completion code.</p> <p>Message Meaning: The server region was in the process of terminating the subsystem interface and while doing so encountered the recoverable abend shown in the message.</p> <p>System Action: The server subsystem termination routine(s) capture a symptom dump and snap dump of the error and processing continues.</p> <p>Required Action: None.</p>
VSV1000R	<p>OPERATOR COMMAND cmd ACKNOWLEDGED cmd: Operator command.</p> <p>Message Meaning: An operator command was issued for the server region.</p> <p>System Action: Processing for the command is initiated.</p> <p>Required Action: None.</p>
VSV1001R	<p>MESSAGE SUCCESSFULLY LOGGED</p> <p>Message Meaning: An operator LOG command was issued and the message was successfully written to the region log dataset.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV1002E	<p>MESSAGE NOT LOGGED -- REGION LOG IS INACTIVE DISABLED</p> <p>Message Meaning: An operator LOG command was issued but the server region log is either inactive or disabled.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: If the region log is inactive, activate the region log and retry the request.</p>

VSV1003E	<p>OPERATOR COMMAND LOG FAILED RC=rc rc: Return code. Message Meaning: An operator LOG command was issued but the attempt to write the message to the region log dataset failed with the return code shown in the message. System Action: The operator command is ignored. Required Action: Retry the request. If the problem persists, contact LRS Technical Support.</p>
VSV1004E	<p>OPERATOR COMMAND CLOSELOG REJECTED -- REGION LOG IS PREALLOCATED DISABLED Message Meaning: An operator CLOSELOG command was issued but either the server region log dataset is preallocated or the server region log is disabled. System Action: The operator command is ignored. Required Action: None.</p>
VSV1005E	<p>OPERATOR COMMAND CLOSELOG FAILED RC=rc rc: Return code. Message Meaning: An operator CLOSELOG command was issued but the attempt to initiate the closing and reopening of the server region log dataset failed with the return code shown in the message. System Action: The operator command is ignored. Required Action: Retry the request. If the problem persists, contact LRS Technical Support.</p>
VSV1006R	<p>PRODUCT KEY(S) SUCCESSFULLY REFRESHED Message Meaning: An operator REFRESH command was issued with the KEYS parameter and the server region product keys were successfully refreshed. System Action: None. Required Action: None.</p>
VSV1007E	<p>PRODUCT KEY(S) REFRESH FAILED RC=rc rc: Return code. Message Meaning: An operator REFRESH command was issued with the KEYS parameter but the attempt to refresh the server region product keys failed with the return code shown in the message. System Action: Processing continues. Required Action: This error is most likely the result of an error in the product key parameter member statement(s). Review the JES message log and the server region log for other messages regarding the cause of the refresh failure. Correct the parameter statement(s) in error and retry the request.</p>

VSV1008E	<p>SAF IN-STORAGE PROFILES ARE NOT ENABLED</p> <p>Message Meaning: An operator REFRESH command was issued with the SAF parameter indicating that the SAF in-storage profiles are to be refreshed. External security is being used in the server region but the in-storage profiles are not enabled.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: None.</p>
VSV1009R	<p>SAF IN-STORAGE PROFILES SUCCESSFULLY REFRESHED</p> <p>Message Meaning: An operator REFRESH command was issued with the SAF parameter and the SAF in-storage profiles were successfully refreshed.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV1010E	<p>SAF IN-STORAGE PROFILE REFRESH FAILED RC=rc</p> <p>rc: Return code.</p> <p>Message Meaning: An operator REFRESH command was issued with the SAF parameter but the attempt to refresh the SAF in-storage profiles failed with the return code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the refresh failure. Correct the parameter statement(s) in error and retry the request.</p>
VSV1011E	<p>TCP/IP STATUS UPDATE REJECTED -- COMPONENT IS DISABLED</p> <p>Message Meaning: An operator SSET command was issued to alter the status of the TCP/IP communications component of the server region but the component is disabled.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: None.</p>
VSV1012R	<p>ACTIVATION INACTIVATION OF TCP/IP COMMUNICATIONS COMPONENT SCHEDULED</p> <p>Message Meaning: An operator SSET command was issued to alter the status of the TCP/IP communications component of the server region.</p> <p>System Action: The TCP/IP communications component of the server region is either activated or inactivated.</p> <p>Required Action: None.</p>

VSV1013E	<p>VTAM STATUS UPDATE REJECTED -- COMPONENT IS DISABLED</p> <p>Message Meaning: An operator SSET command was issued to alter the status of the VTAM communications component of the server region but the component is disabled.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: None.</p>
VSV1014R	<p>ACTIVATION INACTIVATION OF VTAM COMMUNICATIONS COMPONENT SCHEDULED</p> <p>Message Meaning: An operator SSET command was issued to alter the status of the VTAM communications component of the server region.</p> <p>System Action: The VTAM communications component of the server region is either activated or inactivated.</p> <p>Required Action: None.</p>
VSV1015R	<p>SVC DUMP CAPTURED</p> <p>Message Meaning: As a result of an operator SDUMP command, a SVC dump was captured for the server address space.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV1016E	<p>SVC DUMP FAILED RC=rc RSN=rsncode</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: As a result of an operator SDUMP command, an attempt was made to capture a SVC dump for the server address space. However, the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log and the server region log for other messages regarding the cause of the failure. Correct the problem and retry the request. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV1017R	<p>*SYSTEM VERSION=ver CUSTID=custid INIT(init) SVDSTVAL=Y N SVOPTS=opts</p> <p>ver: Version.</p> <p>custid: Customer ID.</p> <p>init: Initialization date and time.</p> <p>opts: Value of SYSOPTS keyword.</p> <p>Message Meaning: In response to an operator command, provides the server release, customer identifier, initialization date and time, JES destination validation option, and user options.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV1018R *SYSTEM SVDESC='desc'
desc: Server description.
Message Meaning: In response to an operator command, provides the server description.
System Action: None.
Required Action: None.

VSV1019R *SYSTEM VSVLIB(START=mbrnam1,SVMSGMEM=mbrnam2,SVKEYM=mbrnam3,SVPROFM=mbrnam4,SVRBROM=mbrnam5,SVVMCFM=mbrnam6,SVPAGECM=mbrnam7)
mbrnam1: Member name for startup.
mbrnam2: Member name for message modification.
mbrnam3: Member name for product keys.
mbrnam4: Member name for profile information.
mbrnam5: Member name for VPS/Report Browse.
mbrnam6: Member name for VMCF.
mbrnam7: Member name for PageCenter.
Message Meaning: In response to an operator command, provides the server parameter dataset (DDNAME=VSVLIB) member names.
System Action: None.
Required Action: None.

VSV1020R *SYSTEM LOG(cls,dest,form,writer,outref)HOLD|NOHOLD|DISABLED|INACTIVE|ACTIVE
cls: Log SYSOUT class.
dest: Log destination.
form: Log form name.
writer: Log writer name.
outref: Log output reference.
Message Meaning: In response to an operator command, provides the region log status and dataset attributes. Note that the dataset attributes are only relevant if the region log dataset (DDNAME=VSVLOG) was not preallocated.
System Action: None.
Required Action: None.

VSV1021R *SYSTEM SNAP(YES|NO,cls,dest,form,writer,outref,HOLD|NOHOLD)
cls: SNAP SYSOUT class.
dest: SNAP destination.
form: SNAP form.
writer: SNAP writer name.
outref: SNAP OUTPUT reference.
Message Meaning: In response to an operator command, provides the snap dump dataset attributes.
System Action: None.
Required Action: None.

VSV1022R	<p>*SYSTEM STORAGE(REQUESTED(aaaa,bbbb) AVAILABLE(cccc,dddd) CURRENT(eeee,ffff) MAXIMUM=(gggg,hhhh))</p> <p>aaaa: Region limit (below 16M). bbbb: Region limit (above 16M). cccc: Private area (below 16M). dddd: Private area (above 16M). eeee: Currently allocated storage (below 16M). ffff: Currently allocated storage (above 16M). gggg: Maximum allocated storage (below 16M). hhhh: Maximum allocated storage (above 16M).</p> <p>Message Meaning: In response to an operator command, provides the virtual storage statistics.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV1023R	<p>*SYSTEM TRACE(SYSTEM=aaaaaaaa,SERVER=bbbbbbbb, SIZE=ccc, FMID=dd,PAGECENTER=eeeeeee)</p> <p>aaaaaaaa: System trace value from SVTRACE keyword. bbbbbbbb: Server trace value from SVTRACE keyword. cccc: Trace table size. dd: GTF format appendage ID. eeeeeee: PageCenter trace value from PCTRACE keyword in PageCenter member.</p> <p>Message Meaning: In response to an operator command, provides the trace settings and attributes.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV1024R	<p>*SYSTEM WTO(STCPFX=Y N,ACTION=Y N,INFO=Y N, ROUTCDE=rtcd)</p> <p>rtcd: Route code to be used for WTOs.</p> <p>Message Meaning: In response to an operator command, provides the WTO settings attributes.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV1025R	<p>*SYSTEM SSI(NAME=ssnm,CMD=cmd,BUFNO=bnbr, TRCEMSK=aaaaaaaa, TRCEPAGE=tnbr)</p> <p>ssnm: Subsystem name. cmd: Subsystem command character. bnbr: Number of command buffers. aaaaaaaa: Subsystem trace value. tnbr: Number of subsystem trace pages.</p> <p>Message Meaning: In response to an operator command, provides the attributes of the server subsystem.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV1026R *SYSTEM SVSAF(Y|N,cls,appl,opt1,opt2,opt3)
 cls: SAF class.
 appl: SAF application.
 opt1: Security options from SVSAF keyword.
 opt2: Security options from SVSAF keyword.
 opt3: Security options set by operator command.

Message Meaning: In response to an operator command, provides the SAF attributes.
System Action: None.
Required Action: None.

VSV1027R *SYSTEM USER SVEXITnn NAME=name LENGTH=len EP=addr
 ENABLED|DISABLED RECOVERY=ON|OFF
 nn: Exit ID.
 name: Exit module name.
 len: Exit module length.
Message Meaning: In response to an operator command, provides the user exit status and attributes.
System Action: None.
Required Action: None.

VSV1028R *SYSTEM aaaaaaaaaaaaaaaaa KEY - CUSTID (bbbbbb,cccccc)
 COPY(d) CPUCHK(DISABLED|ENABLED)
 *SYSTEM aaaaaaaaaaaaaaaaa KEY - CPUID(eeeee) STATUS(fffffff)
 ggg...ggg
 aaa..aaa: Name of product from the key.
 bbbbbbb: Customer ID from the product.
 ccccccc: Customer ID from the key.
 d: Number of copies from the key (if any).
 eeeeeee: CPU serial number from the key or "ANY" if CPU checking is disabled in the key.
 ffffffff: Status of the key (TRAP, LICENSE, INVALID).
 ggg...ggg: Any error or warning message pertaining to the key.
Message Meaning: Response to a command to display or refresh the keys.
System Action: None.
Required Action: None.

VSV1029R NO PRODUCT KEYS DEFINED
Message Meaning: An operator command was issued to display the server product keys, but there are no product keys defined.
System Action: None.
Required Action: None.

VSV1030R *SYSTEM VMCMDDREJ=Y|N VMCMDRSP=Y|N VMCONPFX=a
 VMOPTS=opts VMPRMENU=N|B|X VMVPSPFX=b
 VMVPSSTC=name VMLANG=lng VMDRSSTC=drsname
 a: VMCF conversational command prefix.
 opts: VMCF options prefix.
 b: VPS command prefix.
 name: VPS STC name.
 lng: VMCF language.
 drsname: DRS STC name.
Message Meaning: In response to an operator command, provides the VMCF options.
System Action: None.
Required Action: None.

VSV1031R *SYSTEM VPS/REPORT BROWSE(DISABLED|ENABLED)
 VERSION=ver RBBUFSI=aaa RBFLIM=bbb RBJPOOL=ccc
 RBMLREC=ddd
 ver: VPS/Report Browse version.
 aaa: VPS/Report Browse SYSOUT buffer size.
 bbb: VPS/Report Browse default find limit.
 ccc: VPS/Report Browse buffer pool count.
 ddd: VPS/Report Browse maximum lrecl.
Message Meaning: In response to an operator command, provides the VPS/Report Browse options.
System Action: None.
Required Action: None.

VSV1032R *SYSTEM VTAM(ABENDED|DISABLED|ACTIVE|INACTIVE,
 SVAPPL=applid)
 applid: VTAM application ID.
Message Meaning: In response to an operator command, provides the VTAM communications status and attributes.
System Action: None.
Required Action: None.

VSV1033R *SYSTEM TCPIP(ABENDED|CONNECTED|DISABLED|INACTIVE|
 SEVERED,HOST=host,SVTCPDMN=domain,SVTCPID=name,
 SVTCPOR=port,SVTCPTYP=IBM320|IBM340|ICS
 host: TCP/IP local host name.
 domain: The domain name specified by SVTCPDMN.
 name: Name for connection to the TCP/IP address space.
 port: Port for connection to the TCP/IP address space.
Message Meaning: In response to an operator command, this message provides TCP/IP communications status and attributes.
System Action: None.
Required Action: None.

VSV1034R	<p>*SYSTEM SVRSDISC=Y N SVRSINTV=aaa aaa: Interval to wait for remote disconnection. Message Meaning: In response to an operator command, provides the remote session options. System Action: None. Required Action: None.</p>
VSV1035R	<p>END OF DISPLAY Message Meaning: Indicates the completion of a sequence of messages issued in response to an operator command. System Action: None. Required Action: None.</p>
VSV1036E	<p>NO ACTIVE SESSIONS FOR USER userid userid: User ID. Message Meaning: An operator DISPLAY, SET, or FORCE command was issued for the user shown in the message, but the user does not have any active server sessions. System Action: None. Required Action: None.</p>
VSV1037E	<p>USER userid SESSID=ssid IS NOT ACTIVE userid: User ID. ssid: Session ID. Message Meaning: An operator FORCE command was issued to force terminate the user session shown in the message, but the user session is not active. System Action: None. Required Action: None.</p>
VSV1038R	<p>USER userid SESSID=ssid FORCE TERMINATED userid: User ID. ssid: Session ID. Message Meaning: An operator FORCE command was issued to force terminate the user session shown in the message. System Action: The user session is terminated. Required Action: None.</p>
VSV1039R	<p>USER userid SESSID=ssid SCHEDULED FOR TERMINATION userid: User ID. ssid: Session ID. Message Meaning: An operator FORCE command was issued to force terminate the user session shown in the message. System Action: The user session is terminated. Required Action: None.</p>

VSV1040R USERID=userid SESSID=sessid LUNAME/IPADDR=aaaaaaa,
TYPE=TSO|IPSF|ROSCOE|VTAM|CICS|REMOTE, STATUS=stat,
CONNECT(date,time)

userid: User ID.
sessid: Session ID.
aaaaaaa: LU name for VTAM; IP address for TCP/IP.
stat: Session status.
date: Date connection established.
time: Time connection established.

Message Meaning: In response to an operator command, provides
the user session attributes.

System Action: None.
Required Action: None.

VSV1041R USERID=userid SESSID=sessid SYSTRACE=systrace
SVTRACE=svtrace PCTRACE=pctrace SVSAFOPT=svsafopt

userid: User ID.
sessid: Session ID.
systrace: System trace setting.
svtrace: Server trace setting.
pctrace: PageCenter trace setting.
svsafopt: SAF options as set by command.

Message Meaning: In response to an operator command, provides
the user session trace status.

System Action: None.
Required Action: None.

VSV1042R USERID=userid SESSID=sessid LICENSE=(stat)

userid: User ID.
sessid: Session ID.
stat: Status.

Message Meaning: In response to an operator command, provides
the user session product licensing status.

System Action: None.
Required Action: None.

VSV1043R *SYSTEM PCMXCLU=aaaa PCOPTS=bb PCSECID=cc
PCRREST=Y|N PCVREST=Y|N PCBPREST=Y|N PCEREST=Y|N
PCMODE=dd|PCFNDLIM=(ee,ff)

aaaa: Maximum AFP cluster size for PageCenter.
bb: PageCenter options.
cc: PageCenter security user ID.
dd: R=Read Only; N=Normal
ee: Default find limit (3270 client).
ff: Maximum find limit (3270 client).

Message Meaning: In response to an operator command, provides
the first set of PageCenter product parameters.

System Action: None.
Required Action: None.

VSV1044R	<p>*SYSTEM TASK NUMBER=number TYPE=type STATUS=(stat) REQUESTOR=req number: PageCenter assigned task number. type: Task type. stat: Task status. req: User. Message Meaning: In response to an operator command, provides the PageCenter background task(s) status. System Action: None. Required Action: None.</p>
VSV1045R	<p>PAGECENTER IS NOT ACTIVE Message Meaning: An operator DISPLAY command was issued to display the PageCenter options and attributes, but the PageCenter is not active in the server region. System Action: None. Required Action: None.</p>
VSV1046E	<p>OPERATOR MODIFY COMMAND PARAMETERS MISSING Message Meaning: An operator modify command was issued for the server region but the command did not include any parameters. System Action: The operator modify command is ignored. Required Action: Correct the operator modify command and retry the request.</p>
VSV1047E	<p>OPERATOR MODIFY COMMAND PARAMETER LENGTH ERROR Message Meaning: An operator modify command was issued for the server region but the command contained in excess of 30 arguments or a single argument that exceeded 50 characters in length. System Action: The operator modify command is ignored. Required Action: Correct the operator modify command and retry the request.</p>
VSV1048E	<p>OPERATOR COMMAND cmd IS NOT RECOGNIZED cmd: Operator command. Message Meaning: An operator command was issued for the server region but the command is not recognized. System Action: The operator command is ignored. Required Action: Correct the operator command and retry the request.</p>
VSV1049E	<p>OPERATOR COMMAND cmd IS AMBIGUOUS cmd: Operator command. Message Meaning: An operator command was issued for the server region but insufficient characters were entered to make the command unique to the server. System Action: The operator command is ignored. Required Action: Correct the operator command and retry the request.</p>

VSV1050E	<p>OPERATOR COMMAND cmd HAS TOO MANY PARAMETERS</p> <p>cmd: Operator command.</p> <p>Message Meaning: An operator command was issued for the server region but too many command parameters were specified as part of the command text.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: Correct the operator command and retry the request.</p>
VSV1051E	<p>REQUIRED USERID FOR OPERATOR COMMAND cmd WAS NOT SPECIFIED</p> <p>cmd: Operator command.</p> <p>Message Meaning: An operator command was issued for the server region but the command parameter identifying the target user of the command was not specified.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: Correct the operator command and retry the request.</p>
VSV1052E	<p>GENERIC USERID FOR OPERATOR COMMAND cmd IS NOT ALLOWED</p> <p>cmd: Operator command.</p> <p>Message Meaning: An operator command was issued for the server region but the command parameter identifying the target user of the command specifies a generic user ID. The command shown in the message does not allow generic user IDs.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: Correct the operator command and retry the request.</p>
VSV1053E	<p>OPERATOR COMMAND cmd PARAMETER INVALID -- parm</p> <p>cmd: Operator command.</p> <p>parm: Parameter specified.</p> <p>Message Meaning: An operator command was issued for the server region but the command parameter shown in the message is invalid.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: Correct the operator command and retry the request.</p>
VSV1054E	<p>OPERATOR COMMAND cmd REJECTED -- SERVER IS NOT YET FULLY ACTIVE</p> <p>cmd: Operator command.</p> <p>Message Meaning: An operator command was issued for the server region but the command was rejected because the server region has not yet completed initialization.</p> <p>System Action: The operator command is ignored.</p> <p>Required Action: Wait for the server region to complete initialization and retry the request.</p>

VSV1055E OPERATOR COMMAND cmd REQUIRED PARAMETER(S)
MISSING
cmd: Operator command.
Message Meaning: An operator command was issued for the server region but the required command parameter(s) were not specified.
System Action: The operator command is ignored.
Required Action: Correct the operator command and retry the request.

VSV1056E OPERATOR COMMAND cmd PARAMETER parm IS AMBIGUOUS
cmd: Operator command.
parm: Parameter specified.
Message Meaning: An operator command was issued for the server region but insufficient characters were entered to make the parameter shown in the message unique to the command.
System Action: The operator command is ignored.
Required Action: Correct the operator command and retry the request.

VSV1057R *SYSTEM MODULE=name LDPT=ldpt EPA=epa LENGTH=lnth
COUNT=cnt status
name: Name of load module.
ldpt: Load point of module.
epa: Entry point address of module.
lnth: Length of module.
cnt: Use count of module.
status: MODULE LOADED or
MODULE NOT FOUND or
MODULE NOT LOADED or
MODULE WAS DELETED
Message Meaning: In response to an operator command, provides details of the requested module.
System Action: None.
Required Action: None.

VSV1058R *SYSTEM MODULE=name addr - data
name: Name of load module.
addr: Address for display.
data: 24 bytes of data beginning at specified address.
Message Meaning: In response to an operator command, provides details of the requested module.
System Action: None.
Required Action: None.

VSV1059R *SYSTEM CPOOL(ID(aaaa-b) CURRENT(cccc) MAX(dddd)
 ALLOC((PRI(eeee) SEC(ffff)))

aaaa: Common cell pool id - format 'CP' Storage size
 (i.e. CP1K).

b: Storage location A=Above 16MB B=Below 16MB.

cccc: Current number of cells in-use.

dddd: Maximum cells used.

eeee: Cell pool primary allocation (cells).

ffff: Cell pool secondary allocation (cells).

Message Meaning: In response to an operator command, provides
 details of the Server common storage cell pools.

System Action: None.

Required Action: None.

VSV1060R *SYSTEM PCSTAT=Y|N PCSTFILE=Y|N PCSTSMF=(Y|N,VS01aaaa)
 PCVLTDSP=bbbb PCIMPDSP=cccc PCUNQID=ddddddd

aaaa: SMF exit name if coded.

bbbb: Size of Vault data space.

cccc: Size of Import data space.

ddddddd: PageCenter unique identifier.

Message Meaning: In response to an operator command, provides the
 second set of PageCenter product parameters.

System Action: None.

Required Action: None.

VSV1061R *SYSTEM VMVPLSTD=vmcfplst VMVQUEUD=vmcfqueue
 VMDPLSTD=dmcflst VMDTRKLD=dmcfrack
 VMDOTRFD=dmcfoutref

vmcfplst: VMCF Default Printer List View.

vmcfqueue: VMCF Default Queue Screen View.

dmcflst: DMCF Default Printer List View.

dmcfrack: DMCF Default Tracking List View.

dmcfoutref: DMCF Default Output Reference List View.

Message Meaning: In response to an operator command, provides the
 VMCF default Views.

System Action: None.

Required Action: None.

VSV1062E OPERATOR COMMAND cmd REJECTED - PAGECENTER IS NOT
 ACTIVE

cmd: Operator command.

Message Meaning: An operator command was issued for PageCenter
 but the command was rejected because either
 PageCenter has not fully bootstrapped or is not
 available.

System Action: The operator command is ignored.

Required Action: Either wait for PageCenter bootstrap to complete
 or ensure PageCenter initialization is to occur.

VSV1063E PAGECENTER OPERATOR COMMAND cmd PARAMETER parm
 FAILED - RC=rc, RSN=rsn, RED=red

cmd: Operator command.
 parm: Parameter specified.
 rc: Return code.
 rsn: Reason code.
 red: Reason error data.

Message Meaning: An operator command was successfully issued for PageCenter but the request failed internally within PageCenter.

System Action: The operator command is ignored.

Required Action: Check the PageCenter return and reason codes for further information, correct the operator command problem, and retry the request. PageCenter return and reason codes can be found in the PageCenter manual.

VSV1064R *SYSTEM PCFHDBLN:'desc'

desc: Description to be used on Line 3 of VPCFHDB screen.

Message Meaning: In response to an operator command, provides the third set of PageCenter product parameters.

System Action: None.

Required Action: None.

VSV1070R *SYSTEM EMAIL(ABENDED|DISABLED|ENABLED,
 SVMALHST=mailhost,SVMALOPT=nnnnnnnn,SVMALSND=sender,
 SVMALSTA=(NONE|FULL|HDRS,NDELAY|DELAY,NFAILURE|
 FAILURE,NSUCCESS,SUCCESS),SVMALTRT=(inchar,outchar))

mailhost: Name or IP address of the local mail server to be used for email connections as specified in the SVMALHST keyword.

nnnnnnnn: Email options as specified in the SVMALOPT keyword.

sender: Email address to use as sender as specified in the SVMALSND keyword.

inchar: Name of input character set for email translation.

outchar: Name of output character set for email translation.

Message Meaning: In response to an operator command, this message provides TCP/IP EMAIL communications status and attributes.

System Action: None.

Required Action: None.

VSV1090R OPERATOR COMMAND MAIL REJECTED - EMAIL FUNCTION IS DISABLED

Message Meaning: An operator command was used to send an email message, but the email request processor is not enabled

System Action: The operator command is ignored.

Required Action: If email requests are required, specify the SVMALHST and other related email keywords in the LRS/MVS Server initialization member.

VSV2099N	<p>VPS/REPORT BROWSE INITIALIZATION COMPLETE VERSION=ver</p> <p>ver: Version.</p> <p>Message Meaning: The VPS/Report Browse component of the server region has completed the initialization process.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV2100I	<p>RBBUFSI KEYWORD VALUE INCREASED TO nnK DUE TO RBMLREC VALUE</p> <p>nn: New RBBUFSI value in K bytes.</p> <p>Message Meaning: During initialization, VPS/Report Browse has detected that the SYSOUT buffer size specified via the RBBUFSI keyword is insufficient to handle the maximum record length requested via the RBMLREC keyword. The SYSOUT buffer size must be at least 4 bytes larger than the maximum record length requested via the RBMLREC keyword.</p> <p>System Action: The SYSOUT buffer size will be increased to handle the maximum record length requested.</p> <p>Required Action: Review the values specified for the RBBUFSI and RBMLREC keywords.</p>
VSV2101E	<p>ALLOCATE DEALLOCATE FAILED FOR SPOOL DATASET name ON VOLUME vol EXTENT ext RC=rc EC=ec IC=ic</p> <p>name: Dataset name.</p> <p>vol: Volume.</p> <p>ext: Extent.</p> <p>rc: Return code.</p> <p>ec: Error code.</p> <p>ic: Information code.</p> <p>Message Meaning: The VPS/Report Browse facility attempted to allocate or unallocate the spool dataset shown in the message but the attempt failed with the return code, error code, and information code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV2103E	<p>TUKEY=tukey TUNUM=tunum TUFLD=tufld</p> <p>tukey: Text unit key.</p> <p>tunum: Text unit parameters.</p> <p>tufld: Text unit length and data.</p> <p>Message Meaning: The VPS/Report Browse facility attempted to allocate or unallocate a spool dataset but the attempt failed because an invalid SVC 99 text unit was specified. This message provides the key of the text unit in error, the number of parameters specified, and, if applicable, the length and data for each parameter.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV2105E	<p>DEVTYPE FAILED FOR SPOOL DATASET dataset ON VOLUME vol EXTENT ext RC=rc RSN=rsncode</p> <p>dataset: Dataset name.</p> <p>vol: Volume.</p> <p>ext: Extent.</p> <p>rc: Return code.</p> <p>rsncode: Reason code.</p> <p>Message Meaning: The VPS/Report Browse facility attempted to determine the device characteristics for the spool dataset shown in the message but the attempt failed with the return code and reason code shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV2107E	<p>OPEN FAILED FOR SPOOL DATASET dataset ON VOLUME vol EXTENT ext</p> <p>dataset: Dataset name.</p> <p>vol: Volume.</p> <p>ext: Extent.</p> <p>Message Meaning: The VPS/Report Browse facility attempted to open the spool dataset shown in the message, but the attempt failed.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the open failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV2109E	<p>CLOSE FAILED FOR SPOOL DATASET dataset ON VOLUME vol EXTENT ext</p> <p>dataset: Dataset name. vol: Volume. ext: Extent.</p> <p>Message Meaning: The VPS/Report Browse facility attempted to close the spool dataset shown in the message, but the attempt failed.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the close failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV2111E	<p>SPOOL OPEN/CLOSE/EOV ABEND DSNAME=name VOLSER=volser EXTENT=ext RC=rc RSN=rsncode</p> <p>name: Dataset name. volser: Volume. ext: Extent. rc: Return code. rsncode: Reason code.</p> <p>Message Meaning: An error occurred during OPEN/CLOSE/EOV processing for the spool dataset shown in the message. The message text also provides the abend completion code and reason code.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV2113E	<p>SPOOL I/O ERROR DSNAME=name VOLSER=vol EXTENT=ext text</p> <p>name: Dataset name. vol: Volume. ext: Extent. text: I/O error text.</p> <p>Message Meaning: The VPS/Report Browse facility encountered an I/O error while attempting to read a record from the spool dataset shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV2115I	<p>SPOOL DATASET name ON VOLUME vol EXTENT ext SUCCESSFULLY ALLOCATED OPENED CLOSED UNALLOCATED</p> <p>name: Dataset name. vol: Volume. ext: Extent.</p> <p>Message Meaning: The VPS/Report Browse facility has successfully allocated, opened, close, or unallocated the spool dataset shown in the message.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV2121E	<p>PRINT DATASET ALLOCATION UNALLOCATION FOR USER userid SESSID=ssid FAILED RC=rc, EC =ec IC=ic</p> <p>userid: User ID. ssid: Session ID. rc: Return code. ec: Error code. ic: Information code.</p> <p>Message Meaning: The VPS/Report Browse facility attempted to allocate or unallocate a print dataset for the user session shown in the message but the attempt failed with the return code, error code, and information code shown in the message.</p> <p>System Action: The VPS/Report Browse print request is canceled.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV2123E	<p>TUKEY=tukey TUNUM=tunum TUFLD=tufld</p> <p>tukey: Text unit key. tunum: Text unit number. tufld: Text unit length and data.</p> <p>Message Meaning: The VPS/Report Browse facility attempted to allocate or unallocate a print dataset but the attempt failed because an invalid SVC 99 text unit was specified. This message provides the key of the text unit in error, the number of parameters specified, and, if applicable, the length and data for each parameter.</p> <p>System Action: The VPS/Report Browse print request is canceled.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV2125E	<p>PRINT DATASET OPEN FAILED FOR USER userid SESSID=ssid userid: User ID. ssid: Session ID. Message Meaning: The VPS/Report Browse facility attempted to open the print dataset for the user session shown in the message, but the attempt failed. System Action: The VPS/Report Browse print request is canceled. Required Action: Review the JES message log for other messages regarding the cause of the open failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV2127E	<p>PRINT DATASET CLOSE FAILED FOR USER userid SESSID=ssid userid: User ID. ssid: Session ID. Message Meaning: The VPS/Report Browse facility attempted to close the print dataset for the user session shown in the message, but the attempt failed. System Action: Processing continues. Required Action: Review the JES message log for other messages regarding the cause of the close failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV2131E	<p>PRINT OPEN/CLOSE/EOV ABEND FOR USER userid SESSID=ssid RC=rc RSN=rsnocode userid: User ID. ssid: Session ID. rc: Return code. rsnocode: Reason code. Message Meaning: An error occurred during OPEN/CLOSE/EOV processing for the print dataset for the user session shown in the message. The message text also provides the abend completion code and reason code. System Action: Processing continues. Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV2133E	<p>PRINT I/O ERROR FOR USER userid SESSID=ssid</p> <p>userid: User ID.</p> <p>ssid: Session ID.</p> <p>Message Meaning: The VPS/Report Browse facility encountered an I/O error while attempting to write a record to the print dataset for the user session shown in the message.</p> <p>System Action: Processing continues.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV2901E	<p>VPS/REPORT BROWSE INITIALIZATION FAILED -- reason</p> <p>reason: Reason for failure</p> <p>Message Meaning: The VPS/Report Browse facility initialization process was unable to successfully complete either because the JES under which the server region was started is not active or one or more of the JES control blocks failed validation.</p> <p>System Action: The server region terminates.</p> <p>Required Action: Ensure that the VPS/Report Browse customization process has been completed successfully. If JES maintenance has recently been applied, assemble and link the VPS/Report Browse JES dependent routine(s). Review the JES message log and the server region log for other messages regarding the cause of the initialization failure. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV3000N	<p>VLS INITIALIZATION COMPLETE VERSION=ver</p> <p>ver: Version.</p> <p>Message Meaning: The VLS component of the server region has completed the initialization process.</p> <p>System Action: None.</p> <p>Required Action: None.</p>
VSV3100I	<p>report-id ALLOCATION SUCCESSFUL - I=nnnn DD=ddname SYSOUT=(class,dest,form,writer)</p> <p>report-id: The report ID.</p> <p>nnnn: The attribute group number assigned to this dataset.</p> <p>ddname: DDNAME assigned to this dataset.</p> <p>class: Class assigned to this dataset.</p> <p>dest: Dest assigned to this dataset.</p> <p>form: Form assigned to this dataset.</p> <p>writer: Writer assigned to this dataset.</p> <p>Message Meaning: The VLS component of the server region has successfully allocated a SYSOUT dataset. The message text provides the attribute group index, DDNAME, and attributes of the allocated dataset.</p> <p>System Action: None.</p> <p>Required Action: None.</p>

VSV3101I	<p>report-id UNALLOCATION SUCCESSFUL - I=nnnn DD=ddname SYSOUT=(class,dest,form,writer)</p> <p>report-id: The report ID. nnnn: The attribute group assigned to this dataset. ddname: The DDNAME of this dataset. class: The SYSOUT class. dest: The SYSOUT destination. form: The SYSOUT form name. writer: The SYSOUT writer name.</p> <p>Message Meaning: The VLS component of the server region has successfully unallocated a SYSOUT dataset. The message text provides the attribute group index, DDNAME, and attributes of the unallocated dataset.</p> <p>System Action: None. Required Action: None.</p>
VSV3102I	<p>OUTADD SUCCESSFUL - NAME=outname SYSOUT=(class,dest,form,writer,pagedef,formdef)</p> <p>outname: The OUTPUT name. class: The SYSOUT class of this dataset. dest: The SYSOUT destination of this dataset. form: The SYSOUT formname of this dataset. writer: The SYSOUT writer name of this dataset. pagedef: The PAGEDEF name. formdef: The FORMDEF name.</p> <p>Message Meaning: The VLS component of the server region has successfully added the OUTPUT JCL statement with the name shown in the message. The message text also provides the sysout class, destination, form name, writer name, pagedef name, and formdef name for the OUTPUT JCL statement.</p> <p>System Action: None. Required Action: None.</p>
VSV3103I	<p>OUTDEL SUCCESSFUL - NAME=xxxxxxx SYSOUT=(class,dest,form,writer,pagedef,formdef)</p> <p>outname: The OUTPUT name. class: The SYSOUT class of this dataset. dest: The SYSOUT destination of this dataset. form: The SYSOUT formname of this dataset. writer: The SYSOUT writer name of this dataset. pagedef: The PAGEDEF name. formdef: The FORMDEF name.</p> <p>Message Meaning: The VLS component of the server region has successfully deleted the OUTPUT JCL statement with the name shown in the message. The message text also provides the sysout class, destination, form name, writer name, pagedef name, and formdef name for the OUTPUT JCL statement.</p> <p>System Action: None. Required Action: None.</p>

VSV3104I	report-id ALLOC SUCCESSFUL - I=nnnn DD=ddname DS=dsname report-id: The report ID. nnnn: The attribute group number assigned to this dataset. ddname: The DDNAME assigned to this dataset. dsname: The dataset name assigned to this dataset. Message Meaning: The VLS component of the server region has successfully allocated a DASD dataset. The message text provides the attribute group index, DDNAME, and dataset name of the allocated dataset. System Action: None. Required Action: None.
VSV3105I	report-id UNALLOC SUCCESSFUL - I=nnnn DD=ddname DS=dsname DISP=disp report-id: The report ID. nnnn: The attribute group number assigned to this dataset. ddname: The DDNAME assigned to this dataset. dsname: The dataset name assigned to this dataset. disp: The dataset disposition. Message Meaning: The VLS component of the server region has successfully unallocated a DASD dataset. The message text provides the attribute group index, DDNAME, dataset name, and disposition of the unallocated dataset. System Action: None. Required Action: None.
VSV3106I	report-id NON-TERMINATING DYNAMIC ALLOCATION ERROR ENCOUNTERED, I=nnnn EC=eeee IC=iiii report-id: The report ID. nnnn: The attribute group number assigned to this dataset. eeee: The error code from dynamic allocation. iiii: The info code form dynamic allocation. Message Meaning: The VLS component of the server region has successfully allocated or unallocated a dataset but a non-terminating error occurred as part of the allocation or unallocation. System Action: Processing continues. Required Action: None.

VSV3110E xxxxxxxx xxxxxxxxxxxxxx ERROR - I=nnnn R15=nn EC=eeee IC=iiii
text
nnnn: The attribute group number assigned to this dataset.
mn, eeee, iiii: Return code and error codes from dynamic allocation
text: Description of error, if available
Message Meaning: The VLS component of the server region attempted to allocate or unallocate a dataset but the attempt failed with the return code, error code, and information code shown in the message.
System Action: If the error occurred during allocation, all datasets associated with the report are deleted and an error is returned to the requestor. If the error occurred during unallocation, an error is returned to the requestor and all further activity is suspended for datasets associated with the report.
Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV3111E xxxxxxxx K=#### N=#### xx
Message Meaning: The VLS component of the server region attempted to allocate or unallocate a dataset but the attempt failed because an invalid SVC 99 text unit was specified. This message provides the key of the text unit in error, the number of parameters specified, and, if applicable, the length and data for each parameter.
System Action: If the error occurred during allocation, all datasets associated with the report are deleted and an error is returned to the requestor. If the error occurred during unallocation, an error is returned to the requestor and all further activity is suspended for datasets associated with the report.
Required Action: Review the JES message log for other messages regarding the cause of the allocation failure. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV3112E OUTADD ERROR - R15=aa R0=bbbbbbb R1=ccccccc
aa: OUTADD return code.
bbbbbbb: OUTADD reason code.
ccccccc: Text unit key causing the failure (or zero, if no
text unit involved).

Message Meaning: The VLS component of the server region
attempted to add an OUTPUT JCL statement
but the attempt failed with the return code and
reason code shown in the message. The
message text also provides the key of the
failing text unit, if it is available.

System Action: Processing continues.

Required Action: Review the JES message log for other
messages regarding the cause of the failure.
Correct the problem and restart the server
region. If unable to resolve the problem,
contact LRS Technical Support.

VSV3113E aaaaa K=bbbb N=ccc dddd
aaaaa: OUTPUT ID.
bbbb: Text unit key.
ccc: Text unit number.
ddd: Length and value of parameter(s).

Message Meaning: The VLS component of the server region attempted
to add an output JCL statement but the attempt
failed because an invalid text unit was specified.
This message provides the key of the text unit in
error, the number of parameters specified, and, if
applicable, the length and data for each parameter.

System Action: Processing continues.

Required Action: Review the JES message log for other messages
regarding the cause of the failure. Correct the
problem and restart the server region. If unable to
resolve the problem, contact LRS Technical
Support.

VSV3114E aaaa OUTDEL ERROR - R15=rc R0=rsncode
aaaa: OUTPUT ID.
rc: OUTDEL return code.
rsncode: OUTDEL reason code.

Message Meaning: The VLS component of the server region
attempted to delete the OUTPUT JCL
statement with the name shown in the message.
However, the attempt failed with the return
code and reason code shown in the message.

System Action: Processing continues.

Required Action: Review the JES message log for other
messages regarding the cause of the failure.
Correct the problem and restart the server
region. If unable to resolve the problem,
contact LRS Technical Support.

VSV3115E	report-id OBTAIN ERROR - I=nnnn R15=rc DSNAME=dsname VOLSER=volser
report-id:	The report ID.
nnnn:	The attribute group number assigned to the dataset.
rc:	The CAMLST OBTAIN return code.
dsname:	The dataset name assigned to the dataset.
volser:	The primary volume serial number assigned to the dataset.
Message Meaning:	The VLS component of the server region attempted to read the format-1 DSCB for the dataset shown in the message, but the attempt failed with the return code shown in the message.
System Action:	All datasets associated with the report are deleted and an error is returned to the requestor.
Required Action:	Determine the cause of the OBTAIN macro failure and correct it. If unable to resolve the problem, contact LRS Technical Support.
VSV3116E	report-id DUPLICATE DS EXISTS - I=nnnn DSNAME=dsname VOLSER=volser
report-id:	The report ID.
nnnn:	The attribute group number assigned to the dataset.
dsname:	The dataset name assigned to the dataset.
volser:	The primary volume serial number assigned to the dataset.
Message Meaning:	The VLS component of the server region was requested to allocate a DASD dataset. However, the request specified a status of NEW and a normal disposition of CATLG, and an existing dataset with the same name is already cataloged.
System Action:	All datasets associated with the report are deleted and an error is returned to the requestor.
Required Action:	Specify a dataset name for a dataset that does not exist or change the status to overwrite or extend the existing dataset.

VSV3117E	report-id INCOMPAT DS ATTRS - I=nnnn DSNAME=dsname VOLSER=volser
report-id:	The report ID.
nnnn:	The attribute group number assigned to the dataset.
dsname:	The dataset name assigned to the dataset.
volser:	The primary volume serial number assigned to the dataset.
Message Meaning:	The VLS component of the server region was requested to allocate a DASD dataset. However, the attributes of the specified dataset are incompatible with the report attributes. This can be caused by any of the following situations: <ul style="list-style-type: none"> • Same name is already cataloged. • Specifying a partitioned dataset without providing a member name. • Specifying a sequential dataset and providing a member name. • Specifying a logical record length that is not identical to that of the dataset. • Specifying a block size that is not identical to that of the dataset. • Specifying a record format (fixed, variable, or undefined) that is not identical to that of the dataset. • Specifying a carriage control (ANSI, machine, or none) that is not identical to that of the dataset.
System Action:	All datasets associated with the report are deleted and an error is returned to the requestor.
Required Action:	Specify compatible report and dataset allocation attributes.
VSV3650E	report-id SNAP ALLOCATION FAILURE - R15=rc EC=eeee IC=iiii
report-id:	The report ID.
rc, eeee, iiii:	The return code and error codes from dynamic allocation.
Message Meaning:	The VLS component of the server region attempted to allocate a SNAP dump SYSOUT dataset but the attempt failed with the return code, error code, and information code shown in the message.
System Action:	The SNAP dump is not captured.
Required Action:	Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV3651E	<p>report-id SNAP DCB ABEND - CODE=aaa-rc OPT=oo</p> <p>report-id: The report ID.</p> <p>aaa: The abend code.</p> <p>rc: The return code.</p> <p>oo: The DCB recovery options.</p> <p>Message Meaning: An error occurred during OPEN/CLOSE/EOV processing for the VLS SNAP dump dataset for the report identifier shown in the message. The message text also provides the abend completion code, reason code, and recovery options.</p> <p>System Action: The SNAP dump is not captured.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV3652E	<p>report-id SNAP OPEN FAILURE</p> <p>report-id: The report ID.</p> <p>Message Meaning: The VLS component of the server region attempted to open a SNAP dump SYSOUT dataset but the attempt failed.</p> <p>System Action: The SNAP dump is not captured.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>
VSV3653E	<p>report-id SNAP CLOSE FAILURE</p> <p>report-id: The report ID.</p> <p>Message Meaning: The VLS component of the server region attempted to close a SNAP dump SYSOUT dataset but the attempt failed.</p> <p>System Action: The SNAP dump dataset remains allocated.</p> <p>Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.</p>

VSV3654E	report-id I/O ERROR ISSUING SNAP report-id: The report ID. Message Meaning: An I/O error occurred while attempting to write to the SNAP dump dataset for the report identifier shown in the message. The message text also provides the SYNAD error text returned by the access method. System Action: The SNAP dump is not captured. Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.
VSV3659N	report-id SNAP DUMP COMPLETE DDNAME=ddname report-id: The report ID. ddname: DDNAME snap dump was written to. Message Meaning: The VLS component of the server region has captured a SNAP dump for the report identifier shown in the message to the file shown in the message. System Action: None. Required Action: None.
VSV3800E	VLSSMAIN SUBTASK ABEND - SYS=sss USR=uuu sss: System abend code. uuu: User abend code. Message Meaning: A request to the VLS component of the server region failed with the abend completion code shown in the message. System Action: Processing continues. Required Action: Review the JES message log and the server region log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.
VSV3809E	PSW=psw psw: PSW at abend. Message Meaning: A request to the VLS component of the server region has terminated abnormally. This message provides the contents of the program status word at the time of the failure. System Action: Processing continues. Required Action: Review the JES message log and the server region log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.

VSV3810E R0-R7 rrrrrrr rrrrrrr
Message Meaning: A request to the VLS component of the server region has terminated abnormally. This message provides the contents of the general purpose registers at the time of the failure.
System Action: Processing continues.
Required Action: Review the JES message log and the server region log for other messages regarding the cause of the abnormal termination. If unable to resolve the problem, contact LRS Technical Support.

VSV3820E report-id SYSOUT DATASET ABEND - I=nnnn CODE=aaa-rc OPT=oo
report-id: The report ID.
nnnn: The attribute group assigned to this dataset.
aaa: The abend code.
rc: The return code.
oo: The DCB recovery options.
Message Meaning: An error occurred during OPEN/CLOSE/EOV processing for the report dataset for the report identifier shown in the message. The message text also provides the attribute group assigned to the dataset and the abend completion code, reason code, and recovery options.
System Action: An error is returned to the requestor and all further activity is suspended for datasets associated with the report.
Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.

VSV3821E report-id I/O ERROR PROCESSING DATASET - I=nnnn
RECNUM=rrr,rrr,rrr
report-id: The report ID.
nnnn: The attribute group assigned to this dataset.
rrr,rrr,rrr: The number of records processed successfully before the I/O error was encountered.
Message Meaning: An I/O error occurred while attempting to write to the report dataset for the report identifier shown in the message. The message text also provides the attribute group assigned to the dataset, the number of records processed successfully before the I/O error was encountered, and the SYNAD error text returned by the access method.
System Action: An error is returned to the requestor and all further activity is suspended for datasets associated with the report.
Required Action: Review the JES message log for other messages regarding the cause of the error. Correct the problem and restart the server region. If unable to resolve the problem, contact LRS Technical Support.



Appendix A Documentation

The most recent version of this manual can be downloaded from the LRS Web site (www.lrs.com).

As a licensed user of this product, you may print the PDF file on the *Enterprise Output Management Product Documentation* CD for use within your company as allowed by your license.



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