
JBoss Enterprise SOA Platform 4.3

4.3.CP05 Release Notes

Important and late-breaking release information



Abstract

These Release Notes contain important information regarding last minute changes to this release of the JBoss Enterprise SOA Platform.

The JBoss Enterprise SOA Platform is a certified, tested, and supported environment for developing Enterprise Application Integration and SOA solutions.

For the latest version of these release notes please refer to the online documentation available at <http://docs.redhat.com/docs/en-US/index.html>.

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1. Overview

Red Hat's JBoss Enterprise Service-Oriented Architecture Platform is a certified, tested, and supported environment for developing Enterprise Application Integration and SOA solutions.

It integrates a number of stable and scalable open source frameworks and solutions (including **Hibernate**, **Seam**, **JBoss Transactions**, **JBoss Clustering**, the **JBoss Application Server**, and the **JBoss Enterprise Service Bus**) to provide an infrastructure for enterprise middleware applications.

These community-developed and enterprise-certified and supported products have been combined and tested to provide a solid, robust, and scalable platform.

This *Release Notes* document has been written for System Administrators and Developers intending to install this version of the SOA Platform in their corporation's environment. Read this document to learn about late-breaking changes and other important information and pertaining to this release.

1.1. Frequently Asked Questions

Q: How many versions of this product are available? What are the differences between them?

A: There are two JBoss Enterprise SOA Platform distributions, namely "Standalone" and "Platform".

The "Platform" distribution, (sometimes also referred to as the "EAP embedded" distribution), is a complete JBoss application deployment environment. In addition to the JBoss ESB components, it also includes the JBoss EAP, which provides the JBoss Application Server, Seam and Hibernate, along with such services as clustering and transactions.

The "Standalone" distribution does not include the JBoss EAP. It only provides the JBoss ESB, JBoss Rules, jBPM and the JBoss Application Server. It is intended for situations in which only a minimal ESB environment is required. (This might be because a complete JBoss EAP stack is not needed or because it is already being provided by another server.)

Q: What requirements must I be able to meet to run this product?

A: Please refer to the JBoss Enterprise SOA Platform *Getting Started Guide*, located at http://www.redhat.com/docs/en-US/JBoss_SOA_Platform/ for details of the software and hardware requirements.

Q: Where is the documentation?

A: The JBoss Enterprise SOA Platform documentation is distributed separately to the software. There are two documentation packages, one for the Stand-Alone distribution and one for the Platform distribution. Both of these packages are available from the JBoss Customer Service Portal at <https://support.redhat.com/jbossnetwork/>

The Stand-Alone documentation package includes only the JBoss SOA documentation. The Platform documentation package also contains the documentation for the version of the JBoss EAP included with the Platform distribution.



Important

The documentation paths to which the EAP documents refer will differ from the actual location of the EAP documents bundled with the SOA Platform documentation.

The JBoss Enterprise SOA Platform documentation is also available to read or download at http://docs.redhat.com/docs/en-US/JBoss_Enterprise_SOA_Platform/.

You can also find many articles about specific usecases at the Red Hat Customer Portal Knowledgebase, <https://access.redhat.com/kb/knowledgebase/en>.

Javadoc packages are available for download with the software at the Red Hat Customer Portal, <https://access.redhat.com/jbossnetwork>.

**Note**

Red Hat recommends reading the *Getting Started Guide* first as it contains instructions for installing and configuring the platform.

Q: Where are the installation instructions?

A: Complete installation instructions for the JBoss Enterprise SOA Platform can be found in the *SOA Getting Started Guide* at http://docs.redhat.com/docs/en-US/JBoss_Enterprise_SOA_Platform/.

Q: What Operating Systems, Java Virtual Machines and Database Servers are supported?

A: For a complete list of the operating systems, Java Virtual Machines (JVMs) and database servers that the JBoss Enterprise SOA Platform is supported on refer to <http://www.jboss.com/products/platforms/soa/supportedconfigurations/>.

Q: Why isn't the included Hypersonic database supported?

A: The default configuration includes the embedded Hypersonic database. This configuration is included only for evaluation and demonstration purposes. It is not supported in a production environment.

You can read about this at <https://access.redhat.com/kb/docs/DOC-41794>.

Q: What components provide the features in this product? And what versions?

A: The JBoss Enterprise SOA Platform includes the following components:

Table 1. JBoss Enterprise SOA Platform Components

Component	Version
JBoss Enterprise Application Server	4.3 CP09
JBoss Enterprise Service Bus	4.4 CP5
JBoss Transactions	4.2.3_CP09
JBoss Messaging	1.4.0.SP3_CP09
JBoss Rules	4.0.7
JBoss jBPM	3.2.10.SP1
JBoss Web Services	2.0.1.SP2_CP09

Q: What Technology Previews are included in this release?

A: The JBoss Enterprise SOA Platform includes the following *Technology Preview* features:

- the ability to use DB2 as the SOA Platform database.
- the ability to use Microsoft SQL Server as the SOA Platform database.

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Technology Preview features are not fully supported, may not be functionally complete, and are not intended for production use. These features are included to provide customers with early access to upcoming product innovations, enabling them to test functionality and provide feedback during the development process.

Red Hat JBoss support will provide commercially reasonable efforts to resolve any reported issues that customers experience when using these features.

Q: I'm running an earlier version. What problems might I have migrating to this version.

A: To find out about the common problems you may encounter as well as those issues that have been fixed in this release, refer to [Section 2, "Known Issues"](#) and [Section 3, "Resolved Issues"](#)

Q: Where can I find out more details about my support entitlements ?

A: Details of support policies are located at the following URLs:

- *Support Processes* — <http://www.redhat.com/support/process/>
- *Production Support Scope of Coverage* — <http://www.redhat.com/support/policy/soc/production>
- *Production Support Service Level Agreement* — <http://www.redhat.com/support/policy/sla/production/>
- *Developer Support Scope of Coverage* — <http://www.redhat.com/support/policy/soc/developer/>
- *Developer Support Service Level Agreement* — <http://www.redhat.com/support/policy/sla/developer/>
- *Product Update and Support Policy by Product* — http://www.redhat.com/security/updates/jboss_notes/
- *JBoss End User License Agreement* — http://www.redhat.com/licenses/jboss_eula.html

Q: Where do I go to obtain the source code?

A: The source code for this and earlier JBoss Enterprise SOA Platform releases can be downloaded from the Red Hat Customer Portal at <https://access.redhat.com/jbossnetwork/>.

Q: Where do I go to report errors in the documentation?

A: Go to <https://bugzilla.redhat.com> and choose to enter a new bug against the appropriate version of the JBoss SOA Platform.

2. Known Issues

The following issues are known to exist in this release of the JBoss Enterprise SOA Platform and will be fixed in a subsequent release.

2.1. Issues Affecting the JBoss Enterprise SOA Platform

<https://issues.jboss.org/browse/JBDS-1650>

If the user attempts to deploy a jBPM project from JBDS to the SOA Platform server, Hypersonic database artifacts are created. This results in an invalid class as Hypersonic is no longer supported. The user should deploy the process, not the project.

<https://jira.jboss.org/jira/browse/JBESB-2558>

An `org.hibernate.HibernateException` can be thrown due to the fact that the `monitoring.cfg.xml` file is missing. The monitoring services in `jbossesb.esb` and `management.esb` and mutually dependent upon each other, thereby leaving a window in which the management configuration may be required before it has been loaded, triggering this error.

To work around this issue, extract the `management-server.jar` from `management.esb` and place this into the `jbossesb.esb` directory.

<https://jira.jboss.org/jira/browse/JBESB-2846>

Use of the `bpm_orchestration2` quick start can potentially lead to conflicts as the forked actions are all configured to update the same process variable.

To ensure race conditions do not occur, disable jBPM logging, ensure that forked actions do not modify the same variable and ensure that every variable modified within a fork is preassigned.

<https://jira.jboss.org/jira/browse/JBESB-3197>

Currently, there is no service invoker load-balancing policy that prefers local end-point references. This would be of use if users do not want requests to be balanced between different instances, as the latter makes debugging harder in the event of a failure.

This functionality is not supported by the platform.

<https://jira.jboss.org/jira/browse/JBESB-3278>

Currently, the `AbstractFileGateway` only processes ESB service response data of type `byte[]`. It ignores data of type `String`. This is because this functionality has not yet been added.

To work around this limitation, add the `String` to the message as `someString.getBytes()` in an ESB action.

<https://jira.jboss.org/jira/browse/JBPM-2143>

The MySQL schema creation script used by jBPM versions prior to 3.2.9 contains statements that result in the creation of duplicate indices on table columns constrained by a foreign key. Both indices contain the same data but maintaining the redundant copy means the DBMS has to do additional work.

<https://jira.jboss.org/jira/browse/SOA-1072>

jBPM examples cannot be built at present. This is because of problems with the new `pom.xml` file that is being implemented.

<https://jira.jboss.org/jira/browse/SOA-1328>

At present, there is no support for HA-JNDI (High Availability JNDI) when a JMS instance is externalized via the jBPM enterprise configuration.

<https://jira.jboss.org/jira/browse/SOA-1463>

A `java.lang.Exception` exception occurs if the user tries to run `start`, `stop`, `create` or `destroy` deployment operations from within the ESB `Statistics` level.

<https://jira.jboss.org/jira/browse/SOA-1996>

Providing JDBC drivers in the **ZIP** files causes problems as they may be out of date or could cause clashes with drivers installed via RPM. There is a need to removed these from the **ZIP** files to prevent these potential problems from occurring.

<https://issues.jboss.org/browse/SOA-2075>

Red Hat encourages users to make any JBPM configuration changes in the `jbpm.cfg.xml` file. Originally, when `jbpm.cfg.xml` contained any modifications then the configuration found in `default.jbpm.cfg.xml` was ignored. This behaviour has been changed so that, from a maintenance perspective, it is better to put any changes to the default configuration in `jbpm.cfg.xml` only.

<https://issues.jboss.org/browse/SOA-3007>

A major performance degradation was caused by replacing `org.jbpm.job.executor.JobExecutorThread` with `org.jbpm.job.executor.DispatcherThread`. The new `DispatcherThread` "run" method executes constantly, and thereby takes substantially more CPU time.

2.2. Issues Affecting JON for SOA

These issues are related to the JON for SOA product.

<https://jira.jboss.org/jira/browse/SOA-976>

Once an ESB archive has been removed from the JON inventory, redeploying via the JON UI it will not cause it to appear in the list of ESB deployments. The deployment will appear if you repeat the deployment using the JON UI or if you force a discovery using **discovery -f** command with the JON agent.

3. Resolved Issues

The following issues have been fixed in this release of the JBoss Enterprise SOA Platform.

<https://issues.jboss.org/browse/SOA-3085>

The remoting classes in `jbossall-client.jar` have been updated. This is in order to ensure compatibility with the new version of `jboss-remoting.jar`.

<https://issues.jboss.org/browse/SOA-3013>

The `org/jboss/soa/esb/actions/routing/http/HttpRouter.java` `process()` method was logging exceptions in `stderr` but not propagating them back to the action chain. As a result of this, there is no indication that an invalid URL was used. To fix this problem, `printStackTraces` has been modified so that it now throws new exceptions back to the action chain. Therefore, users will now see that an invalid URL was used as they will encounter an error.

<https://issues.jboss.org/browse/JBPM-3151>

The way in which a sub-process is signalled was changed by a patch which altered behaviour so that super processes would resume execution in separate transactions. This change resulted in the system contradicting the synchronous signaling behavior of jBPM as described in Section 6.11 of the jBPM Reference Guide and also lead to a different result in the case of a roll-back. To resolve this problem, a configuration switch has been added to allow both the new asynchronous sub-process signalling, and revert the default signaling mode to be synchronous as before.

<https://issues.jboss.org/browse/SOA-2913>

jBPM has been upgraded to version 3.2.10 in this release.

<https://issues.jboss.org/browse/JBPAPP-6251>

When a call time-out value was set on a client-side web service, this value was inadvertently inserted into the automatically generated URL. A patch has been added to the code which removes this parameter from the URL. As a result, the addresses are automatically corrected once more.

<https://issues.jboss.org/browse/SOA-2208>

The `ContextInstance.deleteVariable(name)` method was not actually deleting variables from the database. Rather, it only removed references to the process execution. This could lead to database records being orphaned records. The method has been fixed so that it now removes the variables from the database if the logging service is disabled. If logging is enabled, the new `VariableDeleteLog` holds a reference to the variable and this reference is removed when the process instance is deleted.

<https://issues.jboss.org/browse/JBESB-3373>

Previously, the JBoss SOA Platform did not know how to handle Websphere MQ connection failures. To remedy this problem, the error handling used by JBoss Messaging for JMS operation errors has been extended to also cover Websphere MQ. As a result, exceptions are now generated when Websphere connections fail.

<https://issues.jboss.org/browse/JBAS-5880>

JBoss experienced a synchronization problem when it was started under load. This was because, in the `TxServerClientInterceptor` class' `getEmptyPropagationContext` method, a static member was initialized without being synchronized. Therefore, a second thread could see the member as being non-null while the first thread was still initialising its data. To fix this issue, a "temp" propagation context, that is only assigned to the member once it is fully initialised, has been constructed. As a result, these synchronisation issues no longer occur.

<https://issues.jboss.org/browse/JBPAPP-4204>

A race condition could occur if Hibernate was being used under heavy load. This race condition made the `RuntimeSupport.DefaultMethodHandler.invoke()` method throw a run-time exception. To fix this problem, Java Assist 66 has been backported. As a result, users will no longer encounter this exception.

<https://issues.jboss.org/browse/SOA-787>

When users launched the embedded console, they would encounter exceptions. This was because WAR files were being deployed in the wrong order. In order to thix this issue, the `barrier-service.xml` file has been added to the release. This deploys the barrier service which is used by the embedded console to ensure that WARs are deployed after everything else. As a result, users will no longer encounter errors when they start the embedded console.

4. Upgrading

4.1. Upgrading from an Earlier Version

Read the *Getting Started Guide* to learn how to upgrade to the latest version of the JBoss Enterprise SOA Platform. Listed below are the changes that have been made to each release. Be aware of these when upgrading.



Important

Although every effort has been made to ensure a smooth transition, each deployment environment is different. As a matter of best practice, Red Hat strongly recommends that you test all of your corporation's existing applications on this new version of the SOA Platform before deploying it in your production environment.

There are no special configuration steps that must be undertaken to upgrade from 4.3.CP04 to 4.3.CP05.



Important

If you are upgrading from the 4.3.GA release to 4.3.CP05 then you must perform the steps detailed in [Section 4.1.2.4, "JBoss Enterprise SOA Platform 4.3.CP01"](#), [Section 4.1.2, "JBoss Enterprise SOA Platform 4.3.CP02"](#) and [Section 4.1.1, "JBoss Enterprise SOA Platform 4.3.CP04"](#) first.

4.1.1. JBoss Enterprise SOA Platform 4.3.CP04

4.1.1.1. Modified Configuration Files

The following configuration files have changed since the previous release.

If you have made changes to these files in your own configuration you will need to manually apply your changes to the configuration of the upgraded server. If you simply copy your own configuration changes over the new files then you will lose the configuration improvements which have been made in this release.

Configuration files modified in the 4.3.CP04 release

- `/server/all/conf/jbossjta-properties.xml`
- `/server/all/deploy/ejb3.deployer/META-INF/jboss-service.xml`
- `/server/all/deploy/jbossesb.esb/META-INF/jboss-esb.xml`
- `/server/all/deploy/jbossesb.sar/esb.juddi.xml`
- `/server/all/deploy/jbossesb.sar/juddi.war`
- `/server/all/deploy/jboss-messaging.sar/connection-factories-service.xml`
- `/server/all/deploy/jboss-messaging.sar/messaging-service.xml`
- `/server/all/deploy/jboss-messaging.sar/remoting-bisocket-service.xml`
- `/server/all/deploy/jboss-web.deployer/conf/web.xml`
- `/server/all/deploy/jboss-web.deployer/server.xml`
- `/server/all/deploy/jbpm.esb/config/jmsscheduler/jbpm.cfg.xml.config`
- `/server/all/deploy/jbpm.esb/hibernate.cfg.xml`
- `/server/all/deploy/jbpm.esb/META-INF/jboss-esb.xml`

- /server/all/deploy/jbrules.esb/META-INF/jboss-esb.xml
- /server/all/deploy/slsb.esb/META-INF/jboss-esb.xml
- /server/all/deploy/smooks.esb/META-INF/jboss-esb.xml
- /server/all/deploy/soap.esb/META-INF/jboss-esb.xml
- /server/all/deploy/spring.esb/META-INF/jboss-esb.xml
- /server/default/conf/jbossjta-properties.xml
- /server/default/deploy/ejb3.deployer/META-INF/jboss-service.xml
- /server/default/deploy/jbossesb.esb/META-INF/jboss-esb.xml
- /server/default/deploy/jbossesb.sar/esb.juddi.xml
- /server/default/deploy/jboss-messaging.sar/connection-factories-service.xml
- /server/default/deploy/jboss-messaging.sar/messaging-service.xml
- /server/default/deploy/jboss-messaging.sar/remoting-bisocket-service.xml
- /server/default/deploy/jboss-web.deployer/conf/web.xml
- /server/default/deploy/jboss-web.deployer/server.xml
- /server/default/deploy/jbpm.esb/hibernate.cfg.xml
- /server/default/deploy/jbpm.esb/META-INF/jboss-esb.xml
- /server/default/deploy/jbrules.esb/META-INF/jboss-esb.xml
- /server/default/deploy/slsb.esb/META-INF/jboss-esb.xml
- /server/default/deploy/smooks.esb/META-INF/jboss-esb.xml
- /server/default/deploy/soap.esb/META-INF/jboss-esb.xml
- /server/default/deploy/spring.esb/META-INF/jboss-esb.xml
- /server/production/conf/jbossjta-properties.xml
- /server/production/deploy/ejb3.deployer/META-INF/jboss-service.xml
- /server/production/deploy/jbossesb.esb/META-INF/jboss-esb.xml
- /server/production/deploy/jbossesb.sar/esb.juddi.xml
- /server/production/deploy/jboss-messaging.sar/connection-factories-service.xml
- /server/production/deploy/jboss-messaging.sar/messaging-service.xml
- /server/production/deploy/jboss-messaging.sar/remoting-bisocket-service.xml
- /server/production/deploy/jboss-web.deployer/conf/web.xml

- `/server/production/deploy/jboss-web.deployer/server.xml`
- `/server/production/deploy/jbpm.esb/config/jmsscheduler/jbpm.cfg.xml.config`
- `/server/production/deploy/jbpm.esb/hibernate.cfg.xml`
- `/server/production/deploy/jbpm.esb/META-INF/jboss-esb.xml`
- `/server/production/deploy/jbrules.esb/META-INF/jboss-esb.xml`
- `/server/production/deploy/slsb.esb/META-INF/jboss-esb.xml`
- `/server/production/deploy/smooks.esb/META-INF/jboss-esb.xml`
- `/server/production/deploy/soap.esb/META-INF/jboss-esb.xml`
- `/server/production/deploy/spring.esb/META-INF/jboss-esb.xml`

4.1.2. JBoss Enterprise SOA Platform 4.3.CP02

Read this section to learn the additional steps that have to be performed when upgrading to the 4.3.CP02 release. Unless stated otherwise, any steps detailed here should be performed after server installation but before the new server is started for the first time.



Important

If you are upgrading from the 4.3.GA release to 4.3.CP02 then you must perform the steps detailed in [Section 4.1.2.4, “JBoss Enterprise SOA Platform 4.3.CP01”](#) first.

4.1.2.1. Format of End Point Reference Contents Has Changed

The contents of `message.getHeader().getCall().getTo().getAddr().getAddress()` are now returned in a different format than that in the 4.3GA and 4.3.CP01 releases. Previously, the format was in the form of:

```
jms://soa01:1200/queue/myRequestQueue
```

but now it is:

```
jms:soa01:1200#queue/myRequestQueue
```

Users should not modify End-Point Reference formats directly because they are specific to implementations of the API. There is no guarantee the format will remain the same for them.

4.1.2.2. Modified Configuration Files

The following configuration files have changed since the previous release.

If you have made changes to these files in your own configuration you will need to manually apply your changes to the configuration of the upgraded server. If you simply copy your own configuration changes over the new files then you will lose the configuration improvements which have been made in this release.

Configuration files modified in the 4.3.CP02 release

- `server/all/conf/jbossjta-properties.xml`

- `server/all/conf/login-config.xml`
- `server/default/conf/jbossjta-properties.xml`
- `server/default/conf/login-config.xml`
- `server/production/conf/jbossjta-properties.xml`
- `server/production/conf/login-config.xml`

4.1.2.3. jUDDI database changes from 4.3.CP01 to 4.3.CP02

In 4.3.CP02 the ACCESS_POINT_URL column of the BINDING_TEMPLATE table in the jUDDI database has been extended from 2000 characters to 4000. If you are upgrading an existing SOA Platform installation then you will need to apply this change. There are upgrade scripts for each supported database in the `jboss-as` directory with the name of `upgrade-juddi-DATABASE.txt`.

Each database requires a slightly different SQL syntax for this operation, so you must use the script appropriate for your database, e.g. `upgrade-juddi-postgresql.txt` for PostgreSQL.

Additional information: <https://jira.jboss.org/jira/browse/SOA-919>.

4.1.2.4. JBoss Enterprise SOA Platform 4.3.CP01

Read this section to learn the additional steps that have to be performed when upgrading to the 4.3.CP01 release. Unless stated otherwise, any steps detailed here should be performed after server installation but before the new server is started for the first time.

4.1.2.4.1. Modified Configuration Files

The following configuration files have changed since the previous release.

If you have made changes to these files in your own configuration you will need to manually apply your changes to the configuration of the upgraded server. If you simply copy your own configuration changes over the new files then you will lose the configuration improvements which have been made in this release.

Configuration files modified in the 4.3.CP01 release

- `server/all/conf/action-templates.xml`
- `server/all/conf/jboss-log4j.xml`
- `server/all/conf/jboss-service.xml`
- `server/all/conf/standardjboss.xml`
- `server/default/conf/action-templates.xml`
- `server/default/conf/jboss-log4j.xml`
- `server/default/conf/jboss-service.xml`
- `server/default/conf/standardjboss.xml`
- `server/production/conf/action-templates.xml`
- `server/production/conf/jboss-log4j.xml`
- `server/production/conf/jboss-service.xml`

- `server/production/conf/standardjboss.xml`
- `server/production/run.conf`

4.1.2.4.2. jUDDI Changes


`juddi-service.sar` is no longer included in the standard deployments. If you were using this jUDDI implementation previously you must now use the jUDDI implementation contained in `jbosseb.sar`.

Refer to <https://jira.jboss.org/jira/browse/SOA-1217> for additional details.

4.1.2.4.3. jBPM Changes

Additionally when upgrading to 4.3.CP01 you must also manually create several indexes in your jBPM database. This is detailed in [Section 2.1, "Issues Affecting the JBoss Enterprise SOA Platform"](#).

4.1.2.5. jBPM Database Incompatibilite with DB2

**Important**

DB2 integration with the JBoss Enterprise SOA Platform is provided as a Technology Preview only. (Refer to the Frequently Asked Question section for more information.)

The jBPM database schema used by JBoss Enterprise SOA Platform 4.3 CP02 introduces several table changes. If you are using DB2 as your database then these changes will not be automatically applied.

To upgrade your DB2 hosted jBPM database you need to drop several tables from your database. You must do this before restarting your server when you upgrade to the CP02 release. These tables will be automatically recreated with the new schema when the server starts for the first time after the upgrade.

The 32 tables that need to be dropped are listed below.

JBPM_ACTION	JBPM_BYTEARRAY	JBPM_BYTEBLOCK
JBPM_COMMENT	JBPM_DECISIONCONDITIONS	JBPM_DELEGATION
JBPM_EVENT	JBPM_EXCEPTIONHANDLER	JBPM_ID_GROUP
JBPM_ID_MEMBERSHIP	JBPM_ID_PERMISSIONS	JBPM_ID_USER
JBPM_JOB	JBPM_LOG	JBPM_MODULEDEFINITION
JBPM_MODULEINSTANCE	JBPM_NODE	JBPM_POOLEDACTOR
JBPM_PROCESSDEFINITION	JBPM_PROCESSINSTANCE	JBPM_RUNTIMEACTION
JBPM_SWIMLANE	JBPM_SWIMLANEINSTANCE	JBPM_TASK
JBPM_TASKACTORPOOL	JBPM_TASKCONTROLLER	JBPM_TASKINSTANCE
JBPM_TOKEN	JBPM_TOKENVARIABLEMAP	JBPM_TRANSITION
JBPM_VARIABLEACCESS	JBPM_VARIABLEINSTANCE	

Additional information regarding DB2 changes: <https://jira.jboss.org/jira/browse/JPBM-2116> and <https://jira.jboss.org/jira/browse/JPBM-2369>.

A. Revision History

Revision 15 Thu May 5 2011

David Le Sage dlesage@redhat.com

Updated for 4.3.CP05

Revision 1.4 **Tue Apr 27 2010**

Updated for 4.3.CP04

David Le Sage dlesage@redhat.com

Revision 1.3 **Tue Apr 20 2010**

Updated for SOA 4.3.CP03

David Le Sage dlesage@redhat.com

Revision 1.2.1 **Fri Oct 9 2009**

SOA-1502 - Added as known issue.

Darrin Mison dmison@redhat.com

Revision 1.2 **Wed Sep 18 2009**

Updated for 4.3.CP02

The content of the "Important Notes" section has been separated into more appropriate sections.

Darrin Mison dmison@redhat.com

Revision 1.1 **Thu Mar 19 2009**

Updated for 4.3.CP01

Expanded upgrades section

Darrin Mison dmison@redhat.com

Revision 1.0 **Mon Dec 15 2008**

Created

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