



Red Hat JBoss BPM Suite 6.4

6.4 Release Notes

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Abstract

Release notes for Red Hat JBoss BPM Suite 6.4.

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CHAPTER 1. INTRODUCTION



IMPORTANT

6.4 Update 6 introduces a small change into the database schema. You must apply the **bpms-6.4-to-7.0.sql** script to your database before you run Red Hat JBoss BPM Suite or Red Hat JBoss BRMS 6.4.6. This script is located in the **upgrade-scripts/<database-type>** directory, available from the Red Hat JBOSS BPM Suite 6.4 Update 6 and the Red Hat JBOSS BRMS 6.4 Update 6 zip files which you can download from the Red Hat Customer Portal.

1.1. ABOUT RED HAT JBOSS BPM SUITE

Red Hat JBoss BPM Suite is an open source business process management suite that combines Business Process Management and Business Rules Management and enables business and IT users to create, manage, validate, and deploy Business Processes and Rules.

Red Hat JBoss BRMS and Red Hat JBoss BPM Suite use a centralized repository where all resources are stored. This ensures consistency, transparency, and the ability to audit across the business. Business users can modify business logic and business processes without requiring assistance from IT personnel.

To accommodate Business Rules component, Red Hat JBoss BPM Suite includes integrated Red Hat JBoss BRMS.

The list of supported configurations for Red Hat JBoss BPM Suite is available at the [Red Hat Customer Portal](#).

1.2. WHAT IS NEW IN RED HAT JBOSS BPM SUITE 6.4

Red Hat JBoss BPM Suite 6.4 is a minor release over the previous version 6.3. Noteworthy new features and improvements in this release are described below.

1.2.1. User Interface Improvements

- Enum is now available as a type in Data Modeler in Business Central.
- The Intelligent Process Server now allows filtering the containers based on status and GAV (Maven Group ID, Artifact ID, and version). For more information, see the [Containers](#) and [Unmanaged Intelligent Process Server Environment](#) sections of the *Red Hat JBoss BPM Suite 6.4 Development Guide*.
- The guided rule editor now enables you to use formulas for composite field constraints. When adding constraints to a pattern, the **Multiple Field Constraint** selection (**All of (and)** and **Any of (or)**) supports the use of formulas in addition to expressions. For more information, see the [WHEN Conditions in Guided Rule Templates](#) section of the *Red Hat JBoss BPM Suite 6.4 User Guide*.
- The process designer now allows you to perform copy and paste operations across different processes. For more information, see the [Designing Process](#) section of the *Red Hat JBoss BPM Suite 6.4 User Guide*.
- Business Central can now be used to visualize and work with tasks and process instances running on an Intelligent Process Server instance. For more information, see the [Unified Execution Servers](#) section of the *Red Hat JBoss BPM Suite 6.4 Administration and Configuration*

Guide.

1.2.2. Core

- Red Hat JBoss EAP 7 is supported and can be installed using only the deployable zip installation option. Support for Red Hat JBoss BPM Suite components on Red Hat JBoss EAP 7 is available in the following order:
 - Runtime engines embeddable and fully functional inside a Java EE application deployed on Red Hat JBoss EAP 7.
 - Execution servers running inside Red Hat JBoss EAP 7 container.
 - Business Central deployed and fully functional on Red Hat JBoss EAP 7.
- The REST API of Intelligent Process Server was extended by operations for saving a user task and retrieving the saved content of the user task when needed to complete the user task. For more information, see the [Managing User Tasks](#) section of the *Red Hat JBoss BPM Suite 6.4 Development Guide*.
- Intelligent Process Server Client integration with JMS has been enhanced with the **Fire and forget** interaction option. Previously, the JMS requests were blocking input and output, holding the connection until the server side processing is done. With the **Fire and forget** option, messages get delivered to the server only if the transaction that invoked the server client was committed successfully. For more information, see [Intelligent Process Server Java Client API Overview](#) chapter in the *Red Hat JBoss BPM Suite 6.4 Development Guide* .
- Task variables can now be accessed from within a task event listener. For more information, see the [Accessing Task Variables Using TaskEventListener](#) section of the *Red Hat JBoss BPM Suite 6.4 Development Guide*.
- Business Central now provides automatic installation of the specified services from the service repository for process designer. For more information, see the [Service Repository](#) section of the *Red Hat JBoss BPM Suite 6.4 User Guide* .
- Red Hat JBoss BPM Suite now supports process instance migration from one runtime manager to another. Process instance migration enables you to upgrade an active process instance to a newer version of the process definition. If the active nodes have changed, you can perform node mapping of active node instances within a process instance. For more information, see the [Process Instance Migration](#) section of the *Red Hat JBoss BPM Suite 6.4 Development Guide* .
- The Intelligent Process Server and Business Central can now be run using the same data source so that the work with process instances and tasks on the Intelligent Process Server is visualized in Business Central. You can configure the Intelligent Process Server to run with the same data source as Business Central using the installer. For the deployable package and packages of third-party JavaEE containers, the system properties are pre-configured but commented out. For more information, see the [Unified Execution Servers](#) section of the *Red Hat JBoss BPM Suite 6.4 Administration and Configuration Guide*.

1.2.3. Integration and Miscellaneous

- The Google Chrome browser version 54.0.2840.7 is now supported.
- Support for Russian and Traditional Chinese is no longer available for Red Hat JBoss BPM Suite 6.4.

- Support for Java Development Kit (JDK) version 6 is no longer available for Red Hat JBoss BPM Suite 6.4.
- Red Hat JBoss Developer Studio Integration Stack 10.0.0.GA supports Red Hat JBoss BPM Suite 6.4.
- Red Hat JBoss Fuse 6.3 integration pack now includes and supports Red Hat JBoss BPM Suite 6.4.
- The Update-04 for JBoss Operations Network (JON) 3.3 plugin is available for use with Red Hat JBoss BPM Suite 6.4.
- Spring integration has been upgraded from Spring 3.x to 4.3.
- KieScanner support is now available in Blueprint integration. For more information, see the [Integration with Aries Blueprint](#) chapter of the *Red Hat JBoss BPM Suite 6.4 Administration and Configuration Guide*.
- Error messages while uploading spreadsheet as multi-bytes name have been improved. Asset names in error messages are now in a human-readable format and are easy to troubleshoot.

CHAPTER 2. KNOWN ISSUES

These are the known issues for Red Hat JBoss BPM Suite 6.4:

[GPS] (6.4.z)Ability to specify priority for Asynchronous Tasks [\[RHBPMS-4778\]](#)

6.4 Update 6 introduces a small change into the database schema. You must apply the **bpms-6.4-to-7.0.sql** script to your database before you run Red Hat JBoss BPM Suite or Red Hat JBoss BRMS 6.4.6. This script is located in the **upgrade-scripts/<database-type>** directory, available from the Red Hat JBOSS BPM Suite 6.4 Update 6 and the Red Hat JBOSS BRMS 6.4 Update 6 zip files which you can download from the Red Hat Customer Portal.

When all next moves are not doable, optaplanner get stuck in step and if termination is not based on time, it cycles forever [\[RHBRMS-1726\]](#)

If the Business Resource Planner is in a state where all the entities are immovable, it gets stuck and only time based termination can terminate it. To workaround this issue, call the **Solver.terminateEarly()** method to break the cycle.

Installer doesn't recognize EAP 7+ [\[RHBPMS-4269\]](#)

Installer cannot be used for installing Red Hat JBoss BPM Suite on Red Hat JBoss EAP 7. To install Red Hat JBoss BPM Suite on Red Hat JBoss EAP 7, use the deployable zip installation option.

Unable to extract update patch file on Windows [\[RHBPMS-1267\]](#)

The Red Hat JBoss BPM Suite patch zip file cannot be opened on Windows 7 with the Windows Explorer application. You can use third-party tools or the **jar.exe -xvf <archived-patch-file>** command to extract the zip file.

java.io.FileNotFoundException is thrown every time jBPM Designer is opened when Business Central is deployed on WebSphere [\[RHBPMS-40\]](#)

Opening a process definition in Business Central deployed on the WebSphere application server results in **FileNotFoundException** errors in the server log. There is currently no workaround for this issue.

Designer new commits doesn't appear in "Latests Version" control [\[RHBPMS-290\]](#)

The **Latest Version** control does not reflect changes committed in processes or forms in Business Central. There is currently no workaround for this issue.

Transaction issues with Timer catch event [\[RHBPMS-4448\]](#)

If your application server is using the EJB executor to handle timer events, processes using singleton strategy may result in exceptions with the container managed transactions. This is caused by the EJB executor completing transaction outside of the KIE Session, which causes a race condition with another thread working with the same KIE Session. To work around this issue, use an executor bundled with Red Hat JBoss BPM Suite, which is aware of the singleton runtime strategy. To activate the bundled executor, set the system property **org.kie.timer.ejb.disabled** to **true**. Alternatively, you can use the per process instance strategy where a new transaction is created for every invocation, or use the Quartz scheduler.

Start timer continue starting process instances after deactivating of deployment [\[RHBPMS-4389\]](#)

When you deactivate a deployment, the start event timers of its processes continue to fire and create new process instances. There is currently no workaround for this issue.

Container is not started when being created [\[RHBPMS-4375\]](#)

A container created using REST API or Business Central shows as **Started** in the **Status** field. However, it is not started until you explicitly stop and start it again in Business Central or make the following REST call:

```
POST http://localhost:8080/business-central/rest/controller/management/servers/default-kieserver/containers/org.jboss.integration:2.0.0-SNAPSHOT/status/started
```

■

The **org.javassist:javassist:jar:3.19.0.GA-redhat-1** artifact used in **optaplanner-core** is missing from the Red Hat JBoss BPM Suite artifact repository. A workaround for this issue is to import the **jboss-integration-platform-bom** BOM.

Use of "contains" operator does not add values from enumeration with quotes in Guided Rules etc. [\[RHRMS-2577\]](#)

When using enumeration for a field in guided rules, guided decision tables, or guided decision templates, the resulting rule does not contain the selected value from the enumeration drop down within quotes (") resulting in validation errors. There is currently no workaround for this issue.

It is not possible to create Business Process on Windows server with I18n Business Process names [\[RHPMS-2000\]](#), dashbuilder: Static data set definitions in WEB-INF/datasets dir not loaded on JWS3 (tomcat 8) [\[RHPMS-850\]](#)

When Business Central is deployed on JBoss Web Server 3, the static data set definitions in **WEB-INF/datasets** are not loaded and no error messages appear in the log. There is currently no workaround for this issue.

Container resolved release id version is not changed after auto updated by scanner [\[RHPMS-4437\]](#)

When a container is set to be auto updated by a scanner, the scanner does not replace the container when a new container version is deployed. There is currently no workaround for this issue.

If you change Business Central localization log out is required [\[RHPMS-4425\]](#)

If you switch localization of Business Central, your language setting is not persistent. Opening the Business Central application in a new browser tab or window results in English settings. There is currently no workaround for this issue.

Jobs: Queued tab displays jobs in status DONE [\[RHPMS-4246\]](#)

The jobs listed under the **Queued** tab in Business Central sometimes display as **DONE** in the **Status** column. This happens when you restore default filters and select the **Queued** tab immediately after that.

Business Central remote JMS client support for EAP7 [\[RHPMS-4198\]](#)

Red Hat JBoss BPM Suite supports Business Central remote JMS clients on EAP 6.4 only.

AccessControlException when accessing Timeline [\[RHPMS-4493\]](#)

Starting Business Central on Red Hat JBoss EAP 7 with the security manager enabled throws the **AccessControlException** error when you access your timeline. A workaround for this issue in a Linux environment is to add the following permissions to your **kie.policy** file:

```
permission java.io.FilePermission "/etc/gitconfig","read";
permission java.io.FilePermission "${user.home}/.gitconfig","read";
```

[GSS](6.4.z)Endpoint /history/clear not responsive [\[RHPMS-4447\]](#)

The Business Central server may stop responding when clearing its history with more than 100 000 records in the log tables. To work around the issue, delete the tables directly in the database or use **LogCleanupCommand** from within a process that can accept different parameters in the Intelligent Process Server. Alternatively, for the Business Central server, register the asynchronous Work Item Handler, use it to call **LogCleanupCommand** and start the process using the KIE runtime API.

Quartz timer retry issue [\[RHPMS-4431\]](#)

Database or network issues may cause the quartz trigger to fail for more than five times. This may result in the process workflow stopping, or the Quartz trigger deletion. There is no workaround for this issue.

Forms new commits doesn't appear in "Latests Version" control [\[RHPMS-4239\]](#)

The **Latest Version** control does not reflect changes committed in Business Central. There is currently no workaround for this issue.

Remove Russian and Chinese (Traditional) from language dropdown [\[RHBPMS-4430\]](#)

The Dashbuilder does not list **Simplified Chinese** in the language drop down list. To work around this issue, set the following system property into the application server:

```
LocaleManager.installedLocaleIds=en,es,de,fr,pt,ja,zh
```

Alternatively, you can start your server and set this property as a command line parameter.

Null Pointer exception occurs for Business Process with empty Embedded SubProcess [\[RHBPMS-4514\]](#)

Simulating processes with empty embedded subprocess throw NullPointerException. There is currently no workaround for this issue.

Backward-incompatible change in ModifyCommand [\[RHBRMS-2703\]](#)

The JAXB marshalled form of **org.drools.core.command.runtime.rule.ModifyCommand** has changed and is backward incompatible. If you are creating an XML for marshalled command manually, you need to modify the attributes annotated by JAXB for marshalling in the XML. For more information, see the [Migrating from 6.X to 6.4](#) section of the *Red Hat JBoss BPM Suite 6.4 Migration Guide*.

Dashbuilder must use the same datasource as Business Central [\[RHBPMS-4517\]](#)

Configuring different datasources for Business Central and Dashbuilder may lead to Dashbuilder having no visibility to default tables, processes and tasks started on Business Central. There is currently no workaround for these issues arising due to configuring separate datasources for Business Central and Dashbuilder.

Managed KIE Servers do not work with latest Red Hat JBoss EAP security patch for Jackson [\[RHBPMS-5192\]](#)

When using Red Hat JBoss EAP 6.4.20 with Red Hat JBoss BPM Suite 6.4.10, enabling the Intelligent Process Server by uncommenting the block of system properties in **standalone.xml** results in Jackson deserialization failures, and the Intelligent Process Server fails to deploy in Business Central. This is caused by a Jackson fix introduced in the Red Hat JBoss EAP 6.4.20 patch. For more information, see the [JBoss Enterprise Application Platform 6.4 Update 20 Release Notes](#) . To protect Red Hat JBoss EAP 6.4.20 from Jackson databind deserialization vulnerabilities, you must start the server with the following system properties:

```
-Djackson.deserialization.whitelist.packages=
```

Using an empty string allows all classes for serialization. This setting is insecure and not recommended in production.

```
-Djackson.deserialization.whitelist.packages=org.kie,org.drools,other.custom.package
```

For a secure configuration, add all of the packages in a comma separated list to the property which needs to be serialized. The **org.kie** and **org.drools** packages are mandatory.

CHAPTER 3. FIXED ISSUES

These are the high priority issues fixed in version 6.4 of Red Hat JBoss BPM Suite, sorted by components.

3.1. USER INTERFACE

Table 3.1. BAM, Business Central, and Designer Issues Resolved in Version 6.4

Issue	Description
RHPMS-4403	Dependency validation issues after upgrading from BxMS 6.1 to 6.3.3.
RHPMS-4415	Dashbuilder should allow PARENT_LAST classloader setup for WAS.
RHBRMS-2626	Compilation of spreadsheet fails with specific condition.
RHPMS-4207	Unable to get log tables precision up to milliseconds when using MariaDB/MySQL.
RHBRMS-1265	Rules validation in business-central is very slow.
RHPMS-4022	Screens on "Authoring → Project Authoring" of business-central are opened by default.
RHPMS-4006	Simulation on a process with a parallel gateway loop results in StackOverflowError.
RHPMS-4265	business-central fails to clone repositories for proxy authentication.
RHPMS-4185	Not able to download process image through business-central REST end point if we use LATEST in deploymentID.
RHPMS-4116	SAXParseException; Premature end of file. by kie-remote-client access with multibyte data.
RHPMS-4165	BRMS 6.3 generates wrong source code for Guided Rules if using "Formula".
RHPMS-4186	ProcessInstanceID not validated while downloading process instance image from business-central REST API.
RHPMS-3973	A ClassNotFoundException exception is shown while a "Service task" is being executed.
RHBRMS-2476	Allow users to edit project's GAV information in business central Project Editor when it has a parent.
RHPMS-4360	JGitUtil.checkPath() returns a "NOT_FOUND" Pair for an existing path with concurrent accesses in Windows.
RHPMS-4378	Process instance doesn't exit an Embedded SubProcess in an AdHoc process.

Issue	Description
RHBRMS-2572	Guided Rule Templates: Generates incorrect DRL when literal constraint follows templated constraints.
RHBRMS-2638	missing filesystem unlock on Exception in JGitFileSystemProvider.commit().
RHBRMS-2620	Errors in Phreak under heavy and multi threaded load.
RHBPMS-4275	[6.4.0][Guided Decision Table] xls can not be validated.

3.2. CORE

Table 3.2. BRE and Core Issues Resolved in Version 6.4

Issue	Description
RHBPMS-3962	"InvalidClassException" error after upgrading from BPMS 6.0.3 to 6.1.0.
RHBRMS-2538	LHS NullPointerException at PhreakJoinNode.updateChildLeftTuple.
RHBRMS-2534	Support for custom HTTP headers in Decision Server java client configuration.
RHBRMS-2627	Drools Timer initiate with milesecond truncated.
RHBPMS-4252	Signal not getting invoked externally through rest API when it is in Error Scenario.
RHBRMS-2619	Rules compilation failure depending on condition ordering.
RHBPMS-4152	"Process Not Found" when deploying more than one DeploymentUnit in BPM Suite 6.3.
RHBPMS-4148	Exception in JBPM Executor Command leads to loss of original error.
RHBPMS-4093	Not able to download process image through kie-server REST API if its not in defaultPackage.
RHBPMS-4071	Not able to update kie-server container version using REST API.
RHBRMS-2451	DialectUtil.normalizeRuleName() doesn't normalize multibyte rule names.
RHBRMS-2481	Multibyte bind variable name fails with java dialect.
RHBRMS-2484	Memory leak in KieScanner.
RHBPMS-4107	NPE when retrieving a task by work item id in BPM Suite 6.3.

Issue	Description
RHPMS-4259	ServiceTaskHandler logs error messages for web service namespace/servicename attempts.
RHBRMS-2682	Unwanted firing modifying an event over a window:time.
RHBRMS-2641	InternalFactHandle.isValid returns false but still evaluated when audit log is enabled.
RHPMS-4086	Kie-scanner status not retained after server restart.

3.3. MISCELLANEOUS

Table 3.3. Configuration, Installer, and Eclipse Tooling Issues Resolved in Version 6.4

Issue	Description
RHPMS-2620	Errors in Phreak under heavy and multi-threaded load.
RHPMS-4024	BPM Suite 6 - Database Queries Performing Poorly (Adding INDEXES).

CHAPTER 4. ENHANCEMENTS AND FEATURE REQUESTS

These are the customer-reported enhancements and feature requests implemented in version 6.4 of Red Hat JBoss BPM Suite.

Table 4.1. Red Hat JBoss BPM Suite Enhancements and Feature Requests Implemented in Version 6.4

Issue	Description
RHRMS-2642	KieContainer.newKieSession((String) null) should return the default ksession to be consistent with getKieSessionModel(null).
RHRMS-2610	Guided Decision Table Editor: Add support for caching enumeration lookups.
RHRMS-2599	MemoryUtil should not fail on Google App Engine with NoClassDefFoundError.
RHRMS-2596	(6.5.x) GDT editor: unable to specify Literal value or Template key for domain objects as Condition BRL fragment.
RHRMS-2534	Support for custom HTTP headers in Decision Server java client configuration.
RHRMS-2476	Allow users to edit project's GAV information in business central Project Editor when it has a parent.
RHRMS-2449	XStream marshaller can't be configured with NameCoder.
RHBPMS-4362	Configure KIE Server to be managed by Business Central.
RHBPMS-4271	jBPM should avoid registering a new listener on the KieBase every time a new process is created.
RHBPMS-4179	getTasksAssignedAsPotentialOwner doesn't allow groups searching, only actorid.
RHBPMS-856	Condition column headers are not getting reflected when a XLS Decision Table is converted to Guided Decision Table.

APPENDIX A. VERSIONING INFORMATION

Documentation last updated on: Monday, May 13, 2019.