



Red Hat Decision Manager 7.4

Release notes for Red Hat Decision Manager 7.4

Red Hat Decision Manager 7.4 Release notes for Red Hat Decision Manager 7.4

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Abstract

This document contains release notes for Red Hat Decision Manager 7.4.

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PREFACE

These release notes list new features, features in technology preview, known issues, and issues fixed in Red Hat Decision Manager 7.4.

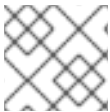
CHAPTER 1. PRODUCT OVERVIEW

Red Hat Decision Manager is an open-source decision management platform that combines business rules management, complex event processing, Decision Model & Notation (DMN) execution, and Business Optimizer for solving planning problems. It automates business decisions and makes that logic available to the entire business.

Business assets such as rules, decision tables, and DMN models are stored in a central repository. This ensures consistency, transparency, and the ability to audit across the business. Business users can modify business logic without requiring assistance from IT personnel.

Red Hat Decision Manager 7.4 provides increased stability, several fixed issues, and new features.

Red Hat Decision Manager is fully supported on Red Hat OpenShift Container Platform and can be installed on various platforms.

**NOTE**

Red Hat Decision Manager requires Java 8 or later.

For information about the support policy for Red Hat Decision Manager, see the [Release maintenance plan for Red Hat Decision Manager 7.x and Red Hat Process Automation Manager 7.x](#).

CHAPTER 2. NEW FEATURES

This section highlights new features in Red Hat Decision Manager 7.4.

2.1. INSTALLATION

2.1.1. Manifest of dependencies for an unconnected deployment

Red Hat Decision Manager now includes a manifest file with all of the Maven artifact dependencies required for operation, including development of services in Business Central. You can download the artifacts and provide them in a mirror repository in order to use Red Hat Decision Manager without an outgoing connection to the public Internet.

2.2. BUSINESS CENTRAL

2.2.1. Git branch cloning

Business Central now supports cloning specific branches from remote repositories.

2.2.2. Role-based access control

Business Central now supports role-based access control for branches. Users can restrict access for a target branch to a specified collaborator. For example, if a user has security permission to update a project and has write permission for that branch based on the specified contributor type, the user can create new assets.

2.2.3. Test Scenarios

You can complete the following tasks in the test scenarios designer:

- Run a single test scenario. You can now run a single test scenario in the test scenarios table.
- Run all test scenarios at the project level. In the project view, you can now concurrently run all of the available test scenarios defined inside a single project.
- View coverage reports for DMN models. The test scenarios designer displays the test coverage statistics in the **Coverage Report** panel on the right side of the test scenarios designer.
- Export and import test scenario spreadsheet data. You can now export and import test scenario spreadsheet data in CSV format.
- View failed test results. If a test fails, the test scenarios designer now displays a pop-up window with a detailed error message and actual values of the test results.
- Test a ruleflow group. You can set a specific ruleflow group or agenda group in the **Settings** panel on the right side of the designer.

2.2.4. Prometheus metrics monitoring in Red Hat Decision Manager

Decision Server now supports Prometheus metrics monitoring for your business assets in Red Hat Decision Manager. Prometheus is an open-source systems monitoring toolkit that you can use with Red Hat Decision Manager to collect and store metrics related to the execution of business rules, processes,

solvers, Decision Model and Notation (DMN) models, and other assets in Red Hat Decision Manager. You can access the stored metrics through a REST API call to the Decision Server, through the Prometheus expression browser, or using a data-graphing tool such as Grafana.

You can configure Prometheus metrics monitoring for an on-premise Decision Server instance, for Decision Server on Spring Boot, or for a Decision Server deployment on Red Hat OpenShift Container Platform.

For information about enabling and using Prometheus metrics monitoring with Red Hat Decision Manager, see [Managing and monitoring Decision Server](#).

2.2.5. DMN included models

The Decision Model and Notation (DMN) designer contains a new **Included Models** tab that you can use to include other DMN models from your project in a specified DMN file. When you include a DMN model within another DMN file, you can reuse the DRD nodes and logic of the included model in that DMN file. This enhancement helps you more efficiently integrate DMN logic between different DMN models in your project.

For more information about DMN support in Red Hat Decision Manager 7.4, see the following resources:

- [Designing a decision service using DMN models](#)
- [Getting started with decision services](#)

2.3. RED HAT OPENSIFT CONTAINER PLATFORM

2.3.1. JMS capabilities for Decision Server

JMS capabilities for Decision Server are now available. With JMS capabilities you can interact with the server through the JMS API using an external AMQ message broker.

2.3.2. Business Central extensions for OpenShift and OpenShift Startup Strategy for Decision Server

All deployments of Red Hat Decision Manager on Red Hat OpenShift Container Platform now use OpenShift Startup Strategy for all Decision Servers by default (the **KIE_SERVER_STARTUP_STRATEGY** environment variable) and also have the Business Central extension for OpenShift enabled (the **KIE_WORKBENCH_CONTROLLER_OPENSIFT_ENABLED** environment variable). These features enable Business Central to discover all Decision Servers in the same name space automatically. They eliminate the need to configure a controller.

2.3.3. Full support for Red Hat OpenShift Container Platform 4.x in OpenShift Operator

The OpenShift Operator supplied with Red Hat Decision Manager 7.4 fully supports OpenShift 4.x.

2.3.4. Red Hat OpenShift Container Platform images use Red Hat Enterprise Linux 8 and OpenJDK 11

Red Hat Decision Manager container images for Red Hat OpenShift Container Platform now use a Red Hat Enterprise Linux 8 base layer and OpenJDK 11.

2.4. RED HAT BUSINESS OPTIMIZER

2.4.1. Enhancement to Java API

The Red Hat Business Optimizer Java API supports a more fluent form because of new **with*** methods:

```
solverFactory.getSolverConfig().withTerminationConfig(  
new TerminationConfig().withMinutesSpentLimit(userInput));
```

2.4.2. Contracts supported in Employee Rostering application

In the Employee Rostering starter application for Red Hat Business Optimizer, you can set the work time limitations stipulated by employee contracts to a day, a week, a month, and a year.

CHAPTER 3. SUPPORT AND COMPATIBILITY

This section lists supported version updates. For a complete list of supported configurations, see [Red Hat Decision Manager 7 Supported Configurations](#).

3.1. UPDATED SUPPORTED COMPONENT VERSIONS

The following component versions have been updated in this release:

- Red Hat JBoss Web Server 5.1.0
- Apache Tomcat 9.0
- Red Hat Single Sign-On 7.3

3.2. DEPRECATED COMPONENTS

The components listed in this section have been deprecated in this release or in a recent release.

3.2.1. Supported languages

Starting with the 7.5 release, the Red Hat Decision Manager user interface will be localized in English and Japanese only. Support for other languages that exist in the product will be deprecated.

3.2.2. Legacy Test Scenarios tool

The legacy Test Scenarios tool was deprecated with Red Hat Decision Manager 7.3.0. It will be removed in a future Red Hat Decision Manager release. Use the new Test Scenarios designer instead.

3.2.3. Google Charts

In Red Hat Decision Manager 7.3.0, the [C3 chart library](#) replaced the Google Charts library as the default chart library in Business Central. With Red Hat Decision Manager 7.4.0, Google Charts is no longer available in Business Central.

CHAPTER 4. TECHNOLOGY PREVIEW

This section lists features that are in Technology Preview in Red Hat Decision Manager 7.4. Business Central includes an experimental features administration page that is disabled by default. To enable this page, set the value of the **appformer.experimental.features** property to **true**.



IMPORTANT

These features are for Technology Preview only. Technology Preview features are not supported with Red Hat production service level agreements (SLAs), might not be functionally complete, and Red Hat does not recommend to use them for production. These features provide early access to upcoming product features, enabling customers to test functionality and provide feedback during the development process.

For more information on Red Hat Technology Preview features, see [Technology Preview Features Scope](#).

4.1. HIGH-AVAILABILITY AUTHORIZING ON RED HAT JBOSS EAP (ON PREMISE AND WITH RED HAT OPENSIFT CONTAINER PLATFORM)

Configuration of Business Central for high availability is currently Technology Preview. Search and messaging technology used to enable search feature is considered an implementation detail. That technology may be replaced in Red Hat Decision Manager in the future while the capability offered may be preserved.

4.2. OPENSIFT OPERATOR INSTALLER WIZARD

An installer wizard is provided in the OpenShift Operator for Red Hat Decision Manager. You can use the wizard to deploy a Red Hat Decision Manager environment on Red Hat OpenShift Container Platform with the Operator.

4.3. RED HAT JBOSS DATA GRID REPLACES ELASTICSEARCH

Red Hat JBoss Data Grid replaces Elasticsearch as the distributed highly scaleable full-text search and analytics engine for Red Hat Decision Manager 7.4.0.

Red Hat Data Grid is built from the Infinispan open-source software project and contains indexing capabilities that enable you to store, search, and analyze high volumes of data quickly and in near-real time. In a Red Hat Decision Manager clustered environment, it enables you to perform complex and efficient searches across cluster nodes.

CHAPTER 5. KNOWN ISSUES

This section lists known issues with Red Hat Decision Manager 7.4.

5.1. BUSINESS CENTRAL

Guided rules expose parentheses outside of an expression [[RHDM-1046](#)]

Issue: When you create a guided rule, if you select the field for multiple values and each value is enclosed in parenthesis, for example **(red)**, **(blue)**, an invalid rule is generated.

Steps to reproduce:

1. Open Business Central.
2. Open any project.
3. Create the data object **Car** with the field **color:String**.
4. Create a new guided decision table.
5. Define a new **Condition** column:
 - Pattern: \$c : Car**
 - Calculation Type: Literal value**
 - Field: color**
 - Operator: is contained in the (comma separated) list**
 - Header: Car color is**
6. Select the **Model** tab and enter **(red)**, **(blue)** in the corresponding cell.

Expected result: The **\$c : Car(color in ("(red)", "(blue)"))** rule is generated.

Actual result: The **\$c : Car(color in ("red)", "(blue)")** rule is generated.

Workaround: In the **Model** tab, enter the values as shown in the following example:

```
((red), (blue))
```

A guided scorecard cannot be tested with the Test Scenario (Legacy) asset [[RHPAM-2307](#)]

Issue: If a guided scorecard name begins with a lowercase letter, you cannot test the scorecard with the Test Scenario (Legacy) asset.

Steps to reproduce:

1. Create a guided scorecard with a name that begins with a lowercase letter.
2. Import the guided scorecard into Business Central.
3. Click **Test**.

Expected result: The test completes successfully.

Actual result: The test fails.

Workaround: Make sure that guided scorecard names do not begin with lowercase letters.

You cannot add a new group in Business Central integrated with RH-SSO [[RHPAM-2036](#)]

Issue: The following exception occurs when you try to add a new group in Business Central if Business Central is integrated with RH-SSO 7.3.0:

```
java.lang.NoSuchMethodError:org.keycloak.representations.idm.RoleRepresentation.setScopeParamRequired(Ljava/lang/Boolean;)
```

Steps to reproduce:

1. Open Business Central.
2. Open the **Admin** page.
3. Open **Groups**.
4. Try to create a new group.

Expected result: The new group is created.

Actual result: A dialog box with the listed exception appears.

Workaround: Add the group in RH-SSO instead of adding it in Business Central.

When you create an asset, the package drop-down button does not appear immediately [[RHPAM-2133](#)]

Issue: When you create an asset, the package drop-down button is invisible and an error about package selection appears.

Steps to reproduce:

1. Create a project in Business Central.
2. Try to create a business process.

Expected result: The package drop-down button is visible and you can create the business process.

Actual result: The package drop-down button is initially invisible and it appears after several seconds.

Workaround: Wait until the package drop-down button is visible or reopen the dialog window for asset creation.

5.2. RED HAT OPENSIFT CONTAINER PLATFORM

Validation sub-element is missing for data sources [[RHPAM-2226](#)]

Issue: If you create a custom template for deploying Decision Server on Red Hat OpenShift Container Platform and the server uses a MySQL or PostgreSQL database, Decision Server data sources do not contain the validation sub-element where connection checkers and exception sorters are defined.

Steps to reproduce:

1. Create a custom template for deploying Decision Server on Red Hat OpenShift Container Platform with a MySQL or PostgreSQL database.
2. View the contents of the template file.

Expected result: The template contains the expected data sources.

Actual result: The template does not contain the expected data sources.

Work around:

Add the following environment variables and values to your templates:

- For MySQL:

```
name: RHPAM_CONNECTION_CHECKER
value: "org.jboss.jca.adapters.jdbc.extensions.mysql.MySQLValidConnectionChecker"
name: RHPAM_EXCEPTION_SORTER
value: "org.jboss.jca.adapters.jdbc.extensions.mysql.MySQLExceptionSorter"
```

- For PostgreSQL:

```
name: RHPAM_CONNECTION_CHECKER
value:
"org.jboss.jca.adapters.jdbc.extensions.postgres.PostgreSQLValidConnectionChecker"
name: RHPAM_EXCEPTION_SORTER
value: "org.jboss.jca.adapters.jdbc.extensions.postgres.PostgreSQLExceptionSorter"
```

5.3. TEST SCENARIOS

Test scenarios designer can not access the parent data object fields [[RHDM-1014](#)]

Issue: Test scenarios designer cannot access a parent data object field, even if the field has public **getter** and **setter** attributes.

Steps to reproduce:

1. Create a scenario with a field that is declared in the parent class.
2. Run the scenario.
3. Click **View Alerts** and review any alerts.

Expected result: The scenario runs successfully.

Actual result: The scenario fails because it cannot access the data object in the parent class.

Workaround: Include the data object in the child class.

Rule-based test scenarios that contain maps of simple types fail [[RHDM-1015](#)]

Issue: All rule-based test scenarios that contain a map of simple types as a cell value, for example **Map<String** or **String**, fail.

Steps to reproduce:

1. Create a scenario.
2. Create a map with a simple type value, for example **Map<String, String>**.
3. Run the scenario.

Expected result: The scenario runs successfully.

Actual result: The scenario fails.

Workaround: None.

CHAPTER 6. FIXED ISSUES IN RED HAT DECISION MANAGER

7.4.0

Red Hat Decision Manager 7.4.0 provides increased stability and fixed issues listed in this section.

6.1. BUSINESS CENTRAL

- Every rule-based test scenario fails with "Impossible to find a KieSession with name default" [[RHDM-981](#)]
- A corrupted test scenario occurs when users accept error suggestions for collection [[RHDM-995](#)]
- Validate all XSD validation only locally [[RHDM-973](#)]
- All line separators in RHS in a spreadsheet are escaped [[RHDM-903](#)]
- Custom data objects are not shown in guided rules [[RHDM-884](#)]
- Drools Test Scenario Audit Log content does not fit in the table view [[RHDM-911](#)]
- Cannot resize a column in a guided rule template [[RHDM-926](#)]
- Localize the **library.properties** file [[RHDM-688](#)]
- Read-only user can delete fields in Data Object [[RHDM-756](#)]

6.2. BUSINESS OPTIMIZER

- Employee Rostering shows an exception message when deleting an entity that is already referenced from some other entity [[RHDM-919](#)]
- Unable to deploy the out-of-the-box Employee Roster starter application WAR file [[RHDM-923](#)]

6.3. DECISION ENGINE

- A build error occurs with executable-model [[RHDM-899](#)]
- **MVELConcequenceBuilder** treats the second occurrence of the '#' character within a string incorrectly as a comment [[RHDM-855](#)]
- Missing node sharing in executable model when model sources are generated in multiple stages [[RHDM-955](#)]
- A **NullPointerException** occurs while creating a KIE container with a guided decision table and not having **drools-workbench-models-guided-dtable** on classpath [[RHDM-57](#)]
- An inaccurate warning appears while building a KJAR [[RHDM-962](#)]
- Parser error with an executable model on map literal expression in constraint [[RHDM-897](#)]
- A **SAXNotRecognizedException** error occurs when using Kie Builder on IBM Java [[RHDM-851](#)]
- ServiceDiscovery does not work with Fuse [[RHDM-915](#)]

- Rules in a spreadsheet do not behave the same way with DRL [[RHDM-924](#)]

6.4. DMN

- DMN large memory allocation bug [[RHDM-907](#)]
- Laptop arrow keys do not move selection through all of the options in a drop-down menu [[RHDM-912](#)]

6.5. MIGRATION TOOL

- Error upgrading from Red Hat Decision Manager 7.2.1 to 7.3.0 using the migration tool **rdm-7.3.0-update** [[RHDM-944](#)]

6.6. OPENSIFT

- User password is exposed in the Readiness probe and Liveness probe [[RHDM-848](#)]

6.7. PMML

- Creation of a KIE container with PMML fails in Decision Server [[RHDM-863](#)]
- Creation of a KIE container with PMML fails in SpringBoot [[RHDM-852](#)]

6.8. DECISION SERVER

- Need an **slf4j** adapter for Decision Server with Red Hat Decision Manager 7 [[RHDM-866](#)]
- Remove unnecessary listener from RHDM Decision Server server distribution for JWS [[RHDM-859](#)]

CHAPTER 7. FIXED ISSUES IN RED HAT DECISION MANAGER

7.4.1

Red Hat Decision Manager 7.4.1 provides increased stability and fixed issues listed in this section.

7.1. INSTALLATION

- Disable the check for the **Install Git** dialog box displayed when starting the Red Hat Decision Manager installer [[RHDM-990](#)]
- Decision Server SpringBoot artifacts missing from the BOM [[RHDM-742](#)]

7.2. BUSINESS CENTRAL

- In the DMN designer, you can reference custom data type entries to themselves [[RHDM-967](#)]
- The method defined in a parent data object class is not visible when editing a guided decision table [[RHDM-988](#)]
- A slow build occurs due to an inefficient **EnumServiceImpl.doValidation()** call [[RHDM-1004](#)]
- The guided rule template removes quotation marks in a concatenated string [[RHDM-1003](#)]
- Unable to use a CSV file in a rule template [[RHDM-964](#)]
- The guided rule template omits one parenthesis from the generated DRL source on the left-hand side of the rule [[RHDM-966](#)]
- The **java.lang.IllegalStateException: Unknown PartType** error occurs when adding options to the guided rule template [[RHDM-992](#)]

7.3. DECISION ENGINE

- A **NullPointerException** error occurs in the left-hand side of a rule despite a preceding null-check [[RHDM-1009](#)]
- Multiple session serialization cycles can cause an overflow in the **FactHandle** ID [[RHDM-1018](#)]
- An error occurs when beta-joining short and integer fields [[RHDM-1020](#)]
- An error occurs when compiling BigLiteral binding as literal [[RHDM-985](#)]

7.4. PMML

- PMML marshalling using XSTREAM does not work with Java 11 [[RHDM-867](#)]

APPENDIX A. VERSIONING INFORMATION

Documentation last updated on Monday, August 12, 2019.