



Red Hat Process Automation Manager 7.12

Release notes for Red Hat Process Automation
Manager 7.12

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Abstract

This document contains release notes for Red Hat Process Automation Manager 7.12.

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PREFACE

These release notes list new features, features in technology preview, known issues, and issues fixed in Red Hat Process Automation Manager 7.12.

MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#)

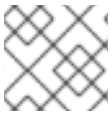
CHAPTER 1. PRODUCT OVERVIEW

Red Hat Process Automation Manager is an open-source business automation platform that combines business process management (BPM), case management, business rules management, and resource planning. It enables business and IT users to create, manage, validate, and deploy business processes, cases, and business rules.

Red Hat Process Automation Manager uses 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.

Red Hat Process Automation Manager 7.12 provides increased stability, several fixed issues, and new features.

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



NOTE

Red Hat Process Automation Manager requires Java 11 or later.

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

CHAPTER 2. KOGITO PRODUCTIZED FEATURES IN RED HAT PROCESS AUTOMATION MANAGER

2.1. SUPPORT FOR BPMN PROCESSES IN RED HAT BUILD OF KOGITO

Red Hat Process Automation Manager now provides support for the straight-through processes in Red Hat build of Kogito to develop process microservices using Business Process Model and Notation (BPMN) 2.0 models. The supported process services include:

- Ability to create projects using Red Hat build of Quarkus and Spring Boot
- Ability to monitor operational metrics of the process microservices
- Example applications containing various types of Red Hat build of Kogito process microservices on [Red Hat build of Quarkus](#) or [Spring Boot](#) to help you develop your own applications

For more information, see [Getting started with Red Hat build of Kogito in Red Hat Process Automation Manager](#).

2.2. ABILITY TO MIGRATE BUSINESS CENTRAL PROJECTS TO RED HAT BUILD OF KOGITO MICROSERVICES PROJECTS

You can now migrate your existing Business Central projects developed using DMN, PMML, or DRL to Red Hat build of Kogito microservices projects. For more information, see [Migrating to Red Hat build of Kogito microservices](#).

2.3. SUPPORT FOR SPRING BOOT STARTERS

You can now add Spring Boot starters to your Red Hat build of Kogito project to get started with Red Hat build of Kogito quickly. For more information, see [Getting started with Red Hat build of Kogito in Red Hat Process Automation Manager](#).

2.4. SUPPORT FOR PROCESSES AND DECISIONS INTEGRATION USING RED HAT BUILD OF KOGITO

Red Hat Process Automation Manager now enables the integration of processes and decisions using Red Hat build of Kogito. You can integrate the processes and decisions using an embedded method or a remote method. For more information, see [Getting started with Red Hat build of Kogito in Red Hat Process Automation Manager](#).

CHAPTER 3. NEW FEATURES

This section highlights new features in Red Hat Process Automation Manager 7.12.

3.1. ABILITY TO SEND COOKIES IN REST WORKITEMHANDLER

You can now send cookies in REST workItemHandler using the `Cookie` header and cookie parameters in a REST API as follows:

- `cookieParam1=cookieParam1_Value;cookieParam2=cookieParam2_Value`

You can also define the path for which the cookie is valid using the `CookiePath` header. By default, the `CookiePath` is set to `/`.

3.2. SUPPORT FOR GENERAL NPM REGISTRY FOR STANDALONE EDITORS

You can now use the general NPM registry to install the standalone editors including BPMN and DMN editors. For more information about standalone editors, see [Designing business processes using BPMN models](#).

3.3. ABILITY TO SEE INSTANCE BADGES IN THE SVG FILE

You can now also see instance badges in the SVG file, which is returned from `GET/server/containers/{containerId}/images/processes/{processId}` endpoint.

3.4. SUPPORT FOR CLAIMING TASKS IN BULK USING A REST ENDPOINT

You can now claim tasks in bulk using a REST endpoint. To claim tasks in bulk, you need to pass the task ID of all tasks as a query parameter. For more information, see [Interacting with Red Hat Process Automation Manager using KIE APIs](#).

3.5. DISTANCE BASED CLUSTERING MODEL IN PMML

Red Hat Process Automation Manager now includes consumer conformance support for the distance based clustering model in PMML. You can now integrate clustering models with your decision services in Red Hat Process Automation Manager. For more information about clustering models, see [Designing a decision service using PMML models](#)

3.6. MIGRATION OF PROCESS INSTANCE MIGRATION SERVICE TO RED HAT BUILD OF QUARKUS

It is now possible to migrate standalone process instance migration service to Red Hat build of Quarkus 2.2.0.

3.7. FILE-BASED USER DATA STORAGE

Red Hat Process Automation Manager can now store user data in sets of files instead sets of properties. File-based storage provides several extra features, such as SSH log in and a user maintenance UI.

3.8. KIE SERVER

3.8.1. Support for adding request identifier to the JMS header

A new KIE Server system property, `org.kie.executor.jms.jobHeader`, was added to Red Hat Process Automation Manager. If this property is set to `true`, the `jobId` JMS header property will contain the request identifier.

For a list of KIE Server system properties, see [Managing and monitoring KIE Server](#).

3.9. PROCESS DESIGNER

3.9.1. Process designer updates

The following list provides a summary of process designer updates:

- Ability to edit the names of the new nodes automatically
- Ability to add orthogonal polylines to connect two nodes
- Ability to reuse data types across other elements of a business process, such as process variables and task input or output data
- Ability to add **Metadata Attributes** to all nodes and events

For more information, see [Designing business processes using BPMN models](#).

3.9.2. Support for automated mapping with DMN result

When a DMN model is invoked from a business rule task in a BPMN workflow, the output is automatically mapped with the DMN model and returns an object of the type that is defined in the DMN model.

3.9.3. Support for line splicing in BPMN editor

In the BPMN editor, if two nodes are connected with a sequence flow and another node is dragged and dropped over the same sequence flow, then a new sequence flow is created to perform the correct connection assignments.

3.10. PROCESS ENGINE

3.10.1. New custom query for human tasks with administration data

The KIE API includes a new custom query named `jbpmHumanTasksWithAdminExtended`. This query provides a list of all human task instances on the KIE Server instance with administration information, including the administrator user responsible for the task, as well as extended information about the task, such as the user that modified the task most recently.

For more information about custom queries in the KIE API, see [Interacting with Red Hat Process Automation Manager using KIE APIs](#).

3.10.2. Configuration file for Smart Router

You can now use a configuration file to configure Smart Router, instead of providing parameters in the command line.

For more information about configuring Smart Router using a configuration file, see [Installing and configuring Red Hat Process Automation Manager in a Red Hat JBoss EAP clustered environment](#).

3.10.3. Sending headers in Web Service custom task

You can now use the Web Service custom task to send a request including custom information in SOAP headers.

For more information about custom tasks, see [Custom tasks and work item handlers](#).

3.10.4. Send Task event handler included by default

Processes developed in Business Central now include the Send Task event handler by default. When creating processes that interact with Red Hat AMQ Streams, you no longer need to add this event handler manually.

For more information about creating processes that interact with Red Hat AMQ Streams, see [Integrating Red Hat Process Automation Manager with Red Hat AMQ Streams](#)

3.11. RED HAT BUILD OF OPTAPLANNER

3.11.1. OptaPlanner quickstarts

The following quickstarts are included in the Red Hat Process Automation Manager 7.12.0 Kogito and OptaPlanner 8 Decision Services Quickstarts download (`rhcam-7.12.0-kogito-and-optaplanner-quickstarts.zip`):

- `optaplanner-quickstarts-8.11.1.Final-redhat-00005/hello-world`
- `optaplanner-quickstarts-8.11.1.Final-redhat-00005/technology`
 - `java-activemq-quarkus`
 - `java-quarkus`
 - `java-spring-boot`
 - `kotlin-quarkus`
- `optaplanner-quickstarts-8.11.1.Final-redhat-00005/use-cases`
 - `call-center`
 - `facility-location`
 - `maintenance-scheduling`

- school-timetable
- vaccination-scheduling

3.11.2. Micrometer with OptaPlanner

Red Hat build of OptaPlanner exposes metrics through Micrometer, a metrics instrumentation library for Java applications. You can use Micrometer with popular monitoring systems to monitor the OptaPlanner solver. For information about using Micrometer with OptaPlanner, see [Developing Solvers with Red Hat Process Automation Manager](#)

3.12. RED HAT OPENSIFT CONTAINER PLATFORM

3.12.1. Process Instance Migration Service now uses Quarkus

Process Instance Migration Service now uses Quarkus instead of Thorntail.

3.12.2. Configurable startup strategy when using the Operator installer

You can now specify whether to use the Red Hat OpenShift Container Platform or Controller startup strategy during environment creation when using the Operator installer.

3.12.3. Improved SSL configurability

You can now enable or disable SSL in the operator, and expose the SSL route.

3.12.4. Default configuration for CORS

You can now specify whether to use a default or user customized CORS configuration.

CHAPTER 4. SUPPORT AND COMPATIBILITY

This section highlights supported version updates in Red Hat Process Automation Manager 7.12.

4.1. SUPPORT FOR MICROSOFT SQL SERVER 2019

Red Hat Process Automation Manager deployments now support Microsoft SQL Server 2019 as an external database server for the KIE Server.

4.2. SUPPORT FOR MARIADB 10.3

Red Hat Process Automation Manager now supports MariaDB 10.3.

4.3. SUPPORT FOR POSTGRESQL 13.1 AND ENTERPRISEDB POSTGRES ADVANCED SERVER 13.1

Red Hat Process Automation Manager deployments now support PostgreSQL 13.1 and EnterpriseDB Postgres Advanced Server 13.1 as an external database server for the KIE Server.

4.4. SUPPORT FOR RED HAT BUILD OF QUARKUS 2.X

Red Hat Process Automation Manager now supports Red Hat build of Quarkus 2.x.

4.5. SUPPORT FOR RED HAT OPENSIFT CONTAINER PLATFORM VERSION 4.8

Red Hat Process Automation Manager now supports Red Hat OpenShift Container Platform version 4.8.

4.6. SUPPORT FOR RED HAT DATA GRID VERSION 8.2

Red Hat Process Automation Manager now supports Red Hat Data Grid version 8.2.

4.7. SUPPORT FOR RED HAT JBOSS EAP VERSION 7.4.1

Red Hat Process Automation Manager now supports Red Hat JBoss EAP version 7.4.1.

4.8. SUPPORT FOR RED HAT AMQ VERSION 7.8.2

Red Hat Process Automation Manager now supports Red Hat AMQ version 7.8.2.

4.9. SUPPORT FOR RED HAT SINGLE SIGN-ON VERSION 7.5.0

Red Hat Process Automation Manager now supports Red Hat Single Sign-On version 7.5.0.

4.10. SUPPORT FOR AMQ STREAMS VERSION 7.8.2

Red Hat Process Automation Manager now supports AMQ Streams version 7.8.2.

4.11. SUPPORT FOR RED HAT JBOSS WEB SERVER VERSION 5.4

Red Hat Process Automation Manager now supports Red Hat JBoss Web Server version 5.4.

CHAPTER 5. DEPRECATED COMPONENTS

The components listed in this section have been deprecated.

5.1. RHEL 7

Support for Red Hat Enterprise Linux 7 is deprecated in deprecated in Red Hat Process Automation Manager and features and will be removed in a future release.

5.2. OPTAPLANNER 7

Both OptaPlanner 7 and OptaPlanner 8 are included with Red Hat Process Automation Manager 7.12, but OptaPlanner 7 is deprecated and might be removed in a future release. For information about migrating your OptaPlanner 7 projects to OptaPlanner 8, see [Upgrading your Red Hat build of OptaPlanner projects to OptaPlanner 8](#).

5.3. OPTAPLANNER TOOLING COMPONENTS IN BUSINESS CENTRAL

The following OptaPlanner tooling in Business Central is part of OptaPlanner 7. It is deprecated and might be removed in a future release.

- Data modeler annotations
- Guided rule editor actions for OptaPlanner score modification
- Solver assets

5.4. UNIFIED PRODUCT DELIVERABLE AND DEPRECATION OF RED HAT DECISION MANAGER

From 7.13 release, Red Hat Decision Manager customers will notice that the distribution files for Red Hat Decision Manager are replaced with those for Red Hat Process Automation Manager. Note that there will not be any change to the Red Hat Decision Manager subscription and the support entitlements and fees will remain same. Red Hat Decision Manager is a subset of Red Hat Process Automation Manager, and Red Hat Decision Manager subscribers will continue to receive a full support for the decision management and optimization capabilities. The business process management (BPM) capabilities are exclusive to Red Hat Process Automation Manager and will be available for the use by Red Hat Decision Manager subscribers but with the development support services only. Red Hat Decision Manager subscribers can upgrade to a full Red Hat Process Automation Manager subscription at any time to receive a full support for BPM features.

5.5. SUPPORT FOR JDK 8

Support for JDK 8 is deprecated from Red Hat Process Automation Manager and might be removed in a future release.

For a complete list of supported JDK configurations, see [Red Hat Process Automation Manager 7 Supported Configurations](#).

5.6. LEGACY KIE-PMML DEPENDENCY

The legacy `kie-pmml` dependency was deprecated with Red Hat Process Automation Manager 7.10.0 and will be replaced in a future Red Hat Process Automation Manager release. For more information, see [Designing a decision service using PMML models](#)

5.7. SUPPORT FOR OSGI FRAMEWORK INTEGRATION

Support for integration with the OSGi framework is deprecated in Red Hat Process Automation Manager. It does not receive any new enhancements or features and will be removed in a future release. The decision and process engine integration with the OSGi framework is currently incompatible in Fuse version 7.8. If you intend to use the OSGi framework, continue to use Red Hat Process Automation Manager version 7.9 with Fuse version 7.7 until Fuse version 7.9 is available and certified.

5.8. SUPPORT FOR THE RULEUNIT API

The Red Hat Process Automation Manager RuleUnit API is now deprecated due to incompatibility with the Kogito RuleUnit API.

5.9. LEGACY TEST SCENARIOS TOOL

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

5.10. SUPPORT FOR RED HAT OPENSIFT CONTAINER PLATFORM 3.X

From Red Hat Process Automation Manager version 7.5, images and templates for Red Hat OpenShift Container Platform 3.x are deprecated. The deprecated images and templates are not supported with new features but remain available until the end of Red Hat OpenShift Container Platform version 3.x support. For more information about the full support lifecycle phase for Red Hat OpenShift Container Platform version 3.x, see [Red Hat OpenShift Container Platform Life Cycle Policy \(non-current versions\)](#).

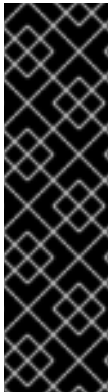
Consider deploying Red Hat Process Automation Manager using the operator on Red Hat OpenShift Container Platform 4.x.

5.11. LEGACY PROCESS DESIGNER

The legacy process designer in Business Central was deprecated in Red Hat Process Automation Manager 7.6.0. The legacy process designer does not receive any new enhancements or features. If you intend to use the new process designer, start migrating your processes to the new designer and create new processes in the new process designer. For information about migrating projects to the new designer, see [Managing projects in Business Central](#)

CHAPTER 6. TECHNOLOGY PREVIEW

This section lists features that are in Technology Preview in Red Hat Process Automation Manager 7.12. 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 using 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](#).

6.1. PREDICTION SERVICE API

You can use the prediction service API to provide a prediction service that assists with user tasks. The prediction service can use artificial intelligence (AI). For example, you can use the Predictive Model Markup Language (PMML) models or Statistical Machine Intelligence and Learning Engine (SMILE) to implement the service.

6.2. DEPLOYING A HIGH-AVAILABILITY AUTHORIZING ENVIRONMENT ON RED HAT OPENSIFT CONTAINER PLATFORM 4.X

You can deploy a high-availability Red Hat Process Automation Manager authoring environment on Red Hat OpenShift Container Platform 4.x using the operator.

6.3. OPENSIFT OPERATOR INSTALLER WIZARD

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

6.4. AUTHORIZING PERSPECTIVE CUSTOMIZATION

You can perform the following tasks to customize the Business Central authoring perspective:

- Open a Business Central project directly using an URL path parameter, without going through a list of spaces and projects.
- Hide or show the project toolbar, **Metrics** tab, and **Change Request** tab according to your requirements.
- Enhance the pagination.
- Customize the number of assets present on the project screen.

6.5. RED HAT BUILD OF OPTAPLANNER NEW CONSTRAINT COLLECTORS

In order to provide a full implementation of some pre-existing OptaPlanner examples using the Constraint Streams API, the standard library of constraint collectors has been extended to include the following constraint collectors:

- One constraint collector takes point values such as dates, orders them on a number line, and makes groups of consecutive values with breaks between the groups available downstream.
- Another constraint collector takes interval values such as shifts, creates clusters of consecutive, possibly overlapping, values with breaks between clusters, and makes the clusters available downstream.

These new collectors are in technology preview. Their interfaces, names, and functionality are subject to change. They have been placed in an experimental package outside of the public API to encourage public feedback before they become an officially supported part of the OptaPlanner public API.

CHAPTER 7. KNOWN ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.12.0

This section lists known issues with Red Hat Process Automation Manager 7.12.

7.1. BUSINESS CENTRAL

In test scenarios table, today() and now() functions are not evaluated correctly [RHDM-1816]

Issue: In test scenarios table, **today()** and **now()** functions are not evaluated correctly. For example, **string(today())** function should be something like **2021-05-11** but instead it is displaying a null value.

Steps to reproduce:

1. Import the **check-today-1.dmn** and **check-today-test-1.scesim** files attached in the [\[RHDM-1816\]](#) issue and check the results.

Workaround: None.

7.2. FORM MODELER

When you create and open form in form modeler, you receive a recursion handling issue [RHPAM-4107]

Issue: In form modeler, when you try to create and open a form, you receive an unexpected error message of a recursion handling issue

Steps to reproduce:

1. Create a DataObject **A1** and input field values **asid:String** and **aField:A1**.
2. Create a custom Form as **Form1** for a **A1** DataObject.
3. Select **aField** and drag it to the canvas and set **Form1** as its nested form.
4. Click **Save**.
5. Reopen the editor.
You receive an unexpected error message.

Workaround: None.

7.3. RED HAT BUILD OF KOGITO

Unable to run the tests for Red Hat build of Kogito examples with scenario simulations [RHPAM-4068]

Issue: It is not possible to run the tests for Red Hat build of Kogito examples which contain scenario simulation dependency. Surefire plugin fails with an exception.

Following two modules in Red Hat build of Kogito examples fail because there is a mismatch of Junit version dependency:

- `dmn-pmml-quarkus-example`
- `dmn-quarkus-example`

These examples are part of `sources.zip` and `kogito-quickstarts.zip` deliverable.

Steps to reproduce:

1. Download the Red Hat build of Kogito examples.
2. Execute the `mvn clean install` command for `dmn-quarkus-example` or `dmn-pmml-quarkus-example`.

Workaround: Override transitive Junit dependency of `kogito-scenario-simulation` and use version `4.13.1.redhat-00001`.

7.4. KIE SERVER

When you initialize Swagger on WebSphere, you receive an `IllegalArgumentException` error [RHPAM-3949]

Issue: When you use KIE Server Swagger extension on WebSphere, KIE Server is unavailable and it returns the HTTP 500 error with an `IllegalArgumentException` exception.

Steps to reproduce:

1. Start the KIE Server with basic configuration on WebSphere.
2. Try to access the <http://localhost:9080/kie-server/services/rest/server> URL.
You receive the HTTP 500 error.

Workaround: Disable Swagger UI using `org.kie.swagger.server.ext.disabled` system property.

7.5. DMN DESIGNER

Elbow lines for object connections does not work [RHDM-1856]

Issue: You can adjust the DMN connections shape by adding control point on it. However this feature does not work for connections with the text annotation nodes.

Steps to reproduce for Red Hat build of Kogito:

1. Navigate to the <https://sandbox.kie.org/#/> URL.
2. Import the `association.dmn` file attached in the [RHDM-1856] issue.
3. In the **Import** field, upload the `association.dmn` file.
4. Run the project.

Steps to reproduce for Business Central:

1. Open an existing project or create a new one.
2. Import the `association.dmn` file attached in the [RHDM-1856] issue.

3. Build the project and observe the results.

Workaround: None.

CHAPTER 8. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.12.0

Red Hat Process Automation Manager 7.12.0 provides increased stability and fixed issues listed in this section.

8.1. BUSINESS CENTRAL

- Business Central fails to start when a wildcard host is set to **nonProxyHosts** in **settings.xml** file [[RHPAM-3856](#)]
- In standalone editors, the **setContent** method implementation must receive path and content [[RHPAM-3629](#)]
- The Controller periodically pings the list of registered KIE Server. However if this ping fails, the KIE Server template is automatically removed [[RHPAM-3627](#)]
- When you are executing business-central REST API through Swagger, the pop-up window for user name and password fails to open [[RHPAM-3560](#)]
- When you are creating a project using REST API, it must include project name in the response of the REST API [[RHPAM-3519](#)]
- When you set the **org.jbpm.wb.forms.renderer.ext** system property to true and try to attach the document, the upload button fails to display [[RHPAM-3515](#)]
- When you perform Git clone from outside of Business Central, you can clone the project even though it is not shown in Business Central due to lack of permissions [[RHPAM-3375](#)]
- When you migrate a Git project from version 6.4 to version 7.8.1, you receive an error message [[RHPAM-3232](#)]
- Editing a data object in the guided decision table fails with the null response [[RHDM-1781](#)]
- Test scenario tool is unable to execute models using imported inputs and/or decisions nodes and you receive an error message [[RHDM-1645](#)]

8.2. BUILD AND ASSEMBLY

- When a system logs contains an attacker controlled string value, remote code execution happens in the Java logging library of Log4j 2.x [[RHPAM-4077](#)]
- Jboss Java EE 8 with Red Hat Business Automation now references Jakarta EE 8 dependencies instead of Java EE 8 dependencies [[RHPAM-3858](#)]
- **EJBTimerScheduler** fails to perform further action when the active timer is rolled back caused by **javax.persistence.OptimisticLock** exception [[RHPAM-3854](#)]
- In an XStream security framework, by manipulating the processed input stream, a remote attacker can obtain the sufficient rights to execute commands. The highest threat from this vulnerability is to data confidentiality, integrity as well as system availability [[RHPAM-3733](#)]
- App Fomer maven integration is not honoring the **nonProxyHosts** property [[RHPAM-3638](#)]

8.3. KIE SERVER

- JSON marshalling is slow due to inefficient `com.fasterxml.jackson.databind.type.TypeFactory.findClass` call methods [RHPAM-3855]
- Due to Oracle 19c, the time out occurs while the KIE Server is registering queries and some queries take a long time to respond [RHPAM-3782]
- Synchronize the system properties from `standalone-*.xml` file with the `default-kieserver.xml` file [RHPAM-3738]

8.4. CASE MANAGEMENT

- Running the endpoint to receive tasks of potential owner from a specific case is not returning any information [RHPAM-3778]

8.5. PROCESS ENGINE

- In multi-node setup, task deadline timers leave stale entries in the database and they are fired repeatedly [RHPAM-3826]
- Spring Boot jar containing kjar and commons-beanutils files throws **Could not read pom in jar** error message [RHPAM-3797]
- SQL server scripts use identities instead of sequences for Spring Boot [RHPAM-3791]
- When you try to create a process instance with a duplicate correlation key, the REST API returns the http 500 error message [RHPAM-3641]
- It is now required to include a `datasource.properties` file for extending the `JbpmJUnitBaseTestCase` if the `setupDataSource` parameter is set to true [RHPAM-3610]
- You can send cookies in REST workItemHandler using `cookieParam1=cookieParam1_Value;cookieParam2=cookieParam2_Value` format [RHPAM-3538]

8.6. PROCESS DESIGNER

- When you set the **Process Instance Description** with any value, a duplicate row is added in the **Metadata Attributes** [RHPAM-3848]
- When you are using the singleton runtime strategy initialize listener, Kafka server fails to publish events to broker [RHPAM-3818]
- Sub-process navigation link is not clickable when the boundary event aborts the child process [RHPAM-3806]
- When you use the KIE Server image navigation diagram / (+) button, it must display the last active active sub-process instance [3780]
- Navigation link / (+) button is not working when a sub-process contains boundary event [RHPAM-3779]
- The BPMN designer fails to parse the work item definition file if the file contains unexpected properties [RHPAM-3619]

- In the BPMN designer, an unknown custom task causes the diagram explorer to be empty [[RHPAM-3606](#)]
- When the reusable sub-process has some dataInput mapping but no dataOutput mapping, you receive an error message in the `server.log` file [[RHPAM-3480](#)]

8.7. INSTALLER

- When you use a Jar installer on Red Hat JBoss EAP 7.3.8, installation fails with **Cannot start embedded Host Controller** error message [[RHPAM-3803](#)]
- Red Hat Process Automation Manager now supports Red Hat JBoss EAP 7.4.0 [[RHPAM-3510](#)]

8.8. OPTAPLANNER

- OptaPlanner requires an immutable class for a `@PlanningId` such as Long, long, String or UUID. As of now for version 8.4.0, `ConstraintVerifier` throws an exception if it's not a Long [[RHDM-1771](#)]

8.9. DECISION ENGINE

- When you are upgrading Red Hat Process Automation Manager from 7.8 to 7.10, there is a change to the `FactHandleId` values when disposing a `KieSession` instance [[RHDM-1796](#)]
- When we build a rule written in MVEL dialect with executable model disabled and run the rule, MVEL optimization concurrency issue occurs [[RHDM-1790](#)]
- When a bind variable produced by accumulate function is used in the condition of subsequent accumulate, you receive a compilation error [[RHDM-1772](#)]
- When you call `fireAllRules` simultaneously from multiple threads, you receive an exception inside the `MVELConsequence#evaluate` class [[RHDM-1764](#)]
- When you are executing `mvn clean compile -DgenerateModel=YES` on a project which contains a rule using custom accumulate function, the build fails and you receive an error message [[RHDM-1754](#)]
- There is performance difference while using JDK 8 and JDK 11 [[RHDM-1735](#)]
- Reduce an unnecessary classloading by parent classloader [[RHDM-1728](#)]

APPENDIX A. VERSIONING INFORMATION

Documentation last updated on Wednesday, January 12, 2022.

APPENDIX B. CONTACT INFORMATION

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