

Red Hat Process Automation Manager 7.11

Release notes for Red Hat Process Automation Manager 7.11

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Abstract

This document contains release notes for Red Hat Process Automation Manager 7.11.

Table of Contents

PREFACE	4
MAKING OPEN SOURCE MORE INCLUSIVE	5
CHAPTER 1. PRODUCT OVERVIEW	6
CHAPTER 2. KOGITO PRODUCTIZED FEATURES IN RED HAT PROCESS AUTOMATION MANAGER 2.1. SUPPORT FOR RED HAT BUILD OF KOGITO MICROSERVICES IN RED HAT PROCESS AUTOMATION	
	7
2.2. SUPPORT FOR RED HAT BUILD OF KOGITO JVM QUARKUS RUNTIME	7
2.3. SUPPORT FOR RED HAT BUILD OF KOGITO BUILDER IMAGES FOR RED HAT BUILD OF QUARKUS ANI SPRING BOOT	D 7
CHAPTER 3. NEW FEATURES	8 8
3.1.1. Ability to sort the column values in a guided decision table	8
3.1.2. Time series chart component on a page	8
3.1.3. Dashbuilder Java API for dashboards	8
3.1.4. New RecordsPerTransaction parameter to use with the LogCleanupCommand	8
3.1.5. Standalone BPMN editor now supports read-only mode	8
3.1.6. Support for changing process variable values while updating process variables in Business Central	8
3.1.7. Support for returning the process variables for synchronous use case execution	8
3.1.8. Prometheus and Kafka data set provider	8
3.1.9. Test scenarios	9
3.2. VSCODE EXTENSION AND STANDALONE EDITORS	9
3.2.1. Support for work item definitions in VSCode extension and standalone editors	9
3.3. KIE SERVER	9
3.3.1. New user parameter in KIE REST API endpoint	9
3.3.2. New KIE Server system properties for retrying committing transactions	9
3.3.3. PMML trusty implementation	10
3.3.4. REST endpoints for specific DMN models	10
3.4. DMN DESIGNER	11
3.4.1. Enhanced suggestions for DMN literal boxed expressions	11
3.5. PROCESS DESIGNER	11
3.5.1. Ability to assign user task assignment strategy	11
3.5.2. Support for opening a sub-process in a new editor in Business Central	11
3.6. PROCESS ENGINE	11
3.6.1. Process Instance Migration service migrates sub-processes	11
3.6.2. RuntimeDataService Java API method to retrieve sub-processes	11
3.6.3. Additional indexes in persistence database	11
3.6.4. Support for web service calls that use wrapped parameters 3.7. RED HAT BUILD OF OPTAPLANNER	11 11
3.7.1. OptaPlanner 8	12
3.8. SMART ROUTER	12
3.8.1. Defaults are provided for configuring the Kafka work item handler	12
3.8.2. Support for sending and receiving Kafka messages in a custom format	12
3.9. SPRING BOOT	12
3.9.1. Deployment of Red Hat Process Automation Manager Spring Boot business applications on Red Hat OpenShift Container Platform	12
3.9.2. Integration with Spring Boot version 2.3.4	13
3.10. RED HAT OPENSHIFT CONTAINER PLATFORM	13
3.10.1. Support for AMQ Streams or Apache Kafka on Red Hat OpenShift Container Platform 3.11. THE BATCHEXECUTIONHELPERPROVIDERIMPL.NEWXSTREAMMARSHALLER() METHOD CREATES A	13

SECURE XSTREAM INSTANCE	13
CHAPTER 4. SUPPORT AND COMPATIBILITY	14
4.1. PLATFORMS TRANSITIONING TO MAINTENANCE SUPPORT	14
	1-
CHAPTER 5. DEPRECATED COMPONENTS	15
5.1. OPTAPLANNER 7	15
5.2. OPTAPLANNER TOOLING COMPONENTS IN BUSINESS CENTRAL	15
5.3. SUPPORT FOR JDK 8	15
5.4. LEGACY KIE-PMML DEPENDENCY	15
5.5. SUPPORT FOR OSGI FRAMEWORK INTEGRATION	15
5.6. SUPPORT FOR THE RULEUNIT API	15
5.7. LEGACY TEST SCENARIOS TOOL	15
5.8. SUPPORT FOR RED HAT OPENSHIFT CONTAINER PLATFORM 3.X	16
5.9. LEGACY PROCESS DESIGNER	16
CHAPTER 6. TECHNOLOGY PREVIEW	
6.1. PREDICTION SERVICE API	17
6.2. DEPLOYING A HIGH-AVAILABILITY AUTHORING ENVIRONMENT ON RED HAT OPENSHIFT CONTAIN PLATFORM 4.X	NER 17
6.3. OPENSHIFT OPERATOR INSTALLER WIZARD	17
6.4. AUTHORING PERSPECTIVE CUSTOMIZATION	17
CHAPTER 7. KNOWN ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.11.0	18
7.1. BUSINESS CENTRAL	18
7.2. KIE SERVER	20
7.3. PROCESS DESIGNER	20
7.4. DMN DESIGNER	24
7.5. RED HAT BUILD OF KOGITO	28
CHAPTER 8. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.11.0	29
8.1. BUSINESS CENTRAL	29
8.2. KIE SERVER	29
8.3. DMN DESIGNER	30
8.4. PROCESS ENGINE	30
8.5. PROCESS DESIGNER	30
8.6. OPTAPLANNER	31
8.7. DECISION ENGINE	31
8.8. RED HAT OPENSHIFT CONTAINER PLATFORM	31
CHAPTER 9. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.11.1	32
9.1. BUSINESS CENTRAL	32
9.2. KIE SERVER	32
9.3. DMN DESIGNER	32
9.4. PROCESS ENGINE	32
9.5. PROCESS DESIGNER	33
9.6. RED HAT BUILD OF KOGITO	33
9.7. DECISION ENGINE	33
APPENDIX A. VERSIONING INFORMATION	35
APPENDIX B. CONTACT INFORMATION	36

PREFACE

These release notes list new features, features in technology preview, known issues, and issues fixed in Red Hat Process Automation Manager 7.11.

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 7.11 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 RED HAT BUILD OF KOGITO MICROSERVICES IN RED HAT PROCESS AUTOMATION MANAGER

Red Hat Process Automation Manager now provides support for the following Red Hat build of Kogito microservices that you can use to build cloud-native applications that adapt to your business domain and tooling:

- Layering on Red Hat build of Quarkus or Spring Boot to enable developers to run Red Hat build of Kogito microservices on their preferred cloud-native application development stack
- Automated decision-making capabilities based on rule units to run within defined business constraints
- Example applications containing various types of Red Hat build of Kogito decision microservices on Red Hat build of Quarkus or Spring Boot to help you develop your applications

For more information about getting started with Red Hat build of Kogito in Red Hat Process Automation Manager, see *Getting started with Red Hat build of Kogito in Red Hat Process Automation Manager*.

2.2. SUPPORT FOR RED HAT BUILD OF KOGITO JVM QUARKUS RUNTIME

Red Hat Process Automation Manager now supports Red Hat build of Kogito JVM Quarkus runtime images.

For more information, see *Getting started with Red Hat build of Kogito in Red Hat Process Automation Manager*.

2.3. SUPPORT FOR RED HAT BUILD OF KOGITO BUILDER IMAGES FOR RED HAT BUILD OF QUARKUS AND SPRING BOOT

Red Hat Process Automation Manager now includes Red Hat build of Kogito builder images for Red Hat build of Quarkus and Spring Boot.

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 7.11.

3.1. BUSINESS CENTRAL

3.1.1. Ability to sort the column values in a guided decision table

In guided decision tables, you can now double-click a column name to sort the values in ascending order, and if you double-click on the same column, the values are sorted in descending order. For more information, see *Designing a decision service using guided decision tables*.

3.1.2. Time series chart component on a page

It is now possible to use the **Time Series Chart** component to represent any time series data. You can create dashboards that can connect to your time series data sets. You can also create, edit, and build a dashboard using a time series chart component. You can export the time series components to Dashbuilder Runtime and retrieve the information from a KIE Server or any Prometheus data set.

For more information, see Creating custom pages in Business Central.

3.1.3. Dashbuilder Java API for dashboards

It is now possible to define dashboards using the Dashbuilder Java API. You can create rows, columns, internal components, and external components and connect them to data sets.

3.1.4. New RecordsPerTransaction parameter to use with the LogCleanupCommand

You can now use the **RecordsPerTransaction** parameter with the **LogCleanupCommand** executor command that indicates the number of records in a transaction that is removed. For more information about the **RecordsPerTransaction** parameter, see *Designing business processes using BPMN models*.

3.1.5. Standalone BPMN editor now supports read-only mode

You can now use the standalone BPMN editor in read-only mode. For more information about standalone editors, see *Designing business processes using BPMN models* .

3.1.6. Support for changing process variable values while updating process variables in Business Central

Red Hat Process Automation Manager 7.11 includes a new **Edit** action to change variable values while updating process variables in Business Central. You can access the **Edit** action on the **Menu** \rightarrow **Manage** \rightarrow **Process Instances** \rightarrow **Process Variables** page. For more information, see *Designing business* processes using BPMN models.

3.1.7. Support for returning the process variables for synchronous use case execution

Red Hat Process Automation Manager 7.11 includes a new **computeProcessOutcome** API method that returns the process variables for synchronous execution use cases.

3.1.8. Prometheus and Kafka data set provider

In Business Central, it is now possible to use the **Prometheus** and **Kafka** data set provider to create a data set to fetch the data from an external data source and use that data for the reporting and external components.

The following list provides a summary of the two new data set providers in Business Central:

- You can use the **Prometheus** data set provider which generates a data set using the Prometheus query.
- You can use the **Kafka** data set provider which generates a data set using metrics from Kafka broker, consumer, or producer.

For more information, see Configuring Business Central settings and properties .

3.1.9. Test scenarios

The test scenarios designer in Business Central is now available with the new features supported in Red Hat Process Automation Manager 7.11.

- The test scenarios designer in Business Central now supports the nested enumeration data type attributes in rule-based test scenarios.
- In the test scenarios designer, you can now see the actual test results instead of a generic message in a list or a map collection editor. It is now possible to monitor the following information in a collection editor:
 - The wrong value
 - The path to reach out to the wrong value
 - The correct value

For more information, see Testing a decision service using test scenarios .

3.2. VSCODE EXTENSION AND STANDALONE EDITORS

3.2.1. Support for work item definitions in VSCode extension and standalone editors

Red Hat Process Automation Manager now provides support for work item definitions in the VSCode extension and standalone BPMN editor. For more information about work item definitions, see *Custom tasks and work item handlers*.

3.3. KIE SERVER

3.3.1. New user parameter in KIE REST API endpoint

You can now use the new **user** parameter in a KIE REST API endpoint to bypass the enabled authenticated user. Use this parameter to add or remove the users or groups to a task.

3.3.2. New KIE Server system properties for retrying committing transactions

When the process engine commits a transaction, sometimes the committing fails because another transaction is being committed at the same time. In this case, the process engine must retry the transaction.

The following KIE Server system properties now control the retrying process:

- **org.kie.optlock.retries**: How many times the process engine retries a transaction before failing permanently. The default value is 5.
- **org.kie.optlock.delay**: The delay time before the first retry, in milliseconds. The default value is 50.
- **org.kie.optlock.delayFactor**: The multiplier for increasing the delay time for each subsequent retry. The default value is 4. With the default values, the process engine waits 50 milliseconds before the first retry, 200 milliseconds before the second retry, 800 milliseconds before the third retry, and so on.

For more information about transactions in the process engine, see *Process engine in Red Hat Process Automation Manager*.

3.3.3. PMML trusty implementation

You can now use PMML trusty implementation to embed a PMML call in a Java application or to execute a PMML model using KIE Server. For more information about PMML trusty implementation, see *Designing a decision service using PMML models*.

3.3.4. REST endpoints for specific DMN models

Red Hat Process Automation Manager now provides model-specific DMN KIE Server endpoints that you can use to interact with your specific DMN model directly over REST, without using the KIE Server Client (Java) API. The following REST endpoints of the KIE Server are automatically generated based on the content of the DMN model:

- **POST** /server/containers/{containerld}/dmn/models/{modelname}: A business-domain endpoint for evaluating a specified DMN model in a container
- **POST** /server/containers/{containerld}/dmn/models/{modelname}/{decisionServiceName}: A business-domain endpoint for evaluating a specified decision service component in a specific DMN model available in a container
- **POST** /server/containers/{containerld}/dmn/models/{modelname}/dmnresult: An endpoint for evaluating a specified DMN model containing customized body payload and returning a DMNResult response, including business-domain context, helper messages, and helper decision pointers
- POST

/server/containers/{containerld}/dmn/models/{modelname}/{decisionServiceName}/dmnre sult: An endpoint for evaluating a specified decision service component in a specific DMN model and returning a DMN Result response, including the business-domain context, helper messages, and help decision pointers for the decision service

- **GET** /server/containers/{containerld}/dmn/models/{modelname}: An endpoint for returning standard DMN XML without decision logic and containing the inputs and decisions of the specified DMN model
- **GET** /server/containers/{containerld}/dmn/openapi.json (|.yaml): An endpoint for retrieving Swagger or OAS for the DMN models in a specified container

For more information about model-specific DMN KIE Server endpoints, see *Designing a decision service* using DMN models and Interacting with Red Hat Process Automation Manager using KIE APIs .

3.4. DMN DESIGNER

3.4.1. Enhanced suggestions for DMN literal boxed expressions

You can now see more suitable suggestions for literal boxed expressions in Business Central. When you enter a FEEL expression in the editor, the first suggestions that appear are based on the return type of FEEL functions and inferred type of the context.

3.5. PROCESS DESIGNER

3.5.1. Ability to assign user task assignment strategy

You can now assign an assignment strategy to a user task using the **AssignmentStrategy** input variable in the BPMN modeler. For more information, see *Designing business processes using BPMN models*.

3.5.2. Support for opening a sub-process in a new editor in Business Central

Red Hat Process Automation Manager 7.11 includes the option to open a sub-process in a new editor in Business Central from the main business process by clicking the parent and then clicking the **Open Sub-process** icon. For more information, see *Getting started with case management*.

3.6. PROCESS ENGINE

3.6.1. Process Instance Migration service migrates sub-processes

The Process Instance Migration service, when migrating a process, now automatically migrates its subprocesses, sub-processes of its sub-processes, and so on. For more information about Process Instance Migration, see *Managing and monitoring business processes in Business Central*.

3.6.2. RuntimeDataService Java API method to retrieve sub-processes

The RuntimeDataService Java API now provides the

getProcessInstancesWithSubprocessByProcessInstanceId() method. This method retrieves the entire hierarchy of sub-processes for a parent process, that is, its sub-processes, sub-processes of its sub-processes, and so on. If you attempt to migrate a subprocess without migrating the parent process, the migration fails.

For more information about the RuntimeDataService Java API, see *Process engine in Red Hat Process Automation Manager*.

3.6.3. Additional indexes in persistence database

The process engine persistence database now has additional indexes to improve performance. For more information about persistence in the process engine, see *Process engine in Red Hat Process Automation Manager*.

3.6.4. Support for web service calls that use wrapped parameters

You can now define wrapped parameters for web service calls that contain all inputs into single objects.

3.7. RED HAT BUILD OF OPTAPLANNER

3.7.1. OptaPlanner 8

- Red Hat Process Automation Manager includes OptaPlanner 8 as well as OptaPlanner 7. OptaPlanner 7 is now deprecated and might be removed in a future release. For information about migrating your projects from a previous version of OptaPlanner, see *Upgrading your Red Hat build of OptaPlanner projects to OptaPlanner 8*.
- OptaPlanner has added a school timetable and vaccination appointment scheduler quick start for Red Hat build of Quarkus. For more information, see *Red Hat build of OptaPlanner quick start guides*.
- The employee rostering and vehicle route planning starter applications have been migrated to the Red Hat build of Quarkus.
- The dinner party example has been removed.
- The Constraint Streams API is now richer, faster, and more stable and provides better error messages.
- ScoreManager now supports score explanations.
- The SolverManager API now provides the ability to listen to both the best solution events and the solving ended event.
- OptaPlanner is supported on-premise and on Red Hat OpenShift Container Platform 4.x (embedded) with JDK 11 only.

3.8. SMART ROUTER

You can configure Smart Router (KIE Server Router) for Transport Layer Security (TLS) support to allow HTTPS traffic. In addition, you can disable insecure HTTP connections to Smart Router. For more information, see the "Configuring Smart Router for TLS Support" section in *Installing and configuring Red Hat Process Automation Manager in a Red Hat JBoss EAP clustered environment*

3.8.1. Defaults are provided for configuring the Kafka work item handler

When you configure the Kafka work item handler, which sends Kafka messages using a custom task, you can now skip some fields. Red Hat Process Automation Manager provides default values for these fields. For more information about configuring the integration of Red Hat Process Automation Manager with Red Hat AMQ Streams, see *Integrating Red Hat Process Automation Manager with Red Hat AMQ Streams*.

3.8.2. Support for sending and receiving Kafka messages in a custom format

When integrating with Red Hat AMQ Streams, Red Hat Process Automation Manager now supports sending and receiving Kafka messages in a custom format. You can define custom event reader and writer classes to translate between Kafka messages and process engine events. For more information about configuring the integration of Red Hat Process Automation Manager with Red Hat AMQ Streams, see *Integrating Red Hat Process Automation Manager with Red Hat AMQ Streams*.

3.9. SPRING BOOT

3.9.1. Deployment of Red Hat Process Automation Manager Spring Boot business applications on Red Hat OpenShift Container Platform

Documentation about deploying Red Hat Process Automation Manager Spring Boot business applications on Red Hat OpenShift Container Platform is now provided. For more information see, *Creating Red Hat Process Automation Manager business applications with Spring Boot*.

3.9.2. Integration with Spring Boot version 2.3.4

Red Hat Process Automation Manager now integrates with Spring Boot version 2.3.4.

For more information about integrating Red Hat Process Automation Manager with Spring Boot, see *Creating Red Hat Process Automation Manager business applications with Spring Boot*.

3.10. RED HAT OPENSHIFT CONTAINER PLATFORM

3.10.1. Support for AMQ Streams or Apache Kafka on Red Hat OpenShift Container Platform

You can now integrate your business processes that run on Red Hat OpenShift Container Platform with Red Hat AMQ Streams or Apache Kafka. For more information about integration with Red Hat AMQ Streams or Apache Kafka, see *Integrating Red Hat Process Automation Manager with Red Hat AMQ Streams*.

3.11. THE BATCHEXECUTIONHELPERPROVIDERIMPL.NEWXSTREAMMARSHALLER() METHOD CREATES A SECURE XSTREAM INSTANCE

It is now possible that the the **BatchExecutionHelperProviderImpl.newXStreamMarshaller()** method creates a secure **XStream** instance. The **XStream** instance accepts only pre-defined KIE classes in payloads by default. If you use the **XStream** instance created by the method, you must add allowed classes. For example, add domain model classes in your application code or you receive the **ForbiddenClassException** exception.

Example code to add allowed classes

```
final BatchExecutionHelperProviderImpl batchExecutionHelperProvider = new
BatchExecutionHelperProviderImpl();
XStream xstream = batchExecutionHelperProvider.newXStreamMarshaller();
String[] allowList = new String[]{
    "org.example.model.Person",
    "org.example.model.Company"
};
xstream.addPermission( new WildcardTypePermission( allowList ) );
```

CHAPTER 4. SUPPORT AND COMPATIBILITY

This section highlights supported version updates in Red Hat Process Automation Manager 7.11.

4.1. PLATFORMS TRANSITIONING TO MAINTENANCE SUPPORT

Support for Red Hat Process Automation Manager on IBM WebSphere Application Server, Oracle WebLogic Server, Red Hat JBoss Web Server, and Apache Tomcat is now in the maintenance phase. Red Hat will continue to support Red Hat Process Automation Manager on these platforms with the following limitations:

- Red Hat will not release new certifications or software functionality.
- Red Hat will release only qualified security patches that have a critical impact and missioncritical bug fix patches.

In the future, Red Hat might direct customers to migrate to new platforms and product components that are compatible with Red Hat's hybrid cloud strategy.

CHAPTER 5. DEPRECATED COMPONENTS

The components listed in this section have been deprecated.

5.1. OPTAPLANNER 7

Both OptaPlanner 7 and OptaPlanner 8 are included with Red Hat Process Automation Manager 7.11, 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*.

5.2. 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

5.3. 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.

5.4. 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*.

5.5. 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.

5.6. SUPPORT FOR THE RULEUNIT API

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

5.7. 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.

5.8. SUPPORT FOR RED HAT OPENSHIFT 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.

5.9. 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 7.11. 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 AUTHORING ENVIRONMENT ON RED HAT OPENSHIFT 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. OPENSHIFT 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. AUTHORING 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.

CHAPTER 7. KNOWN ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.11.0

This section lists known issues with Red Hat Process Automation Manager 7.11.

7.1. BUSINESS CENTRAL

The Business Central web application continues to poll in an open browser after the server has stopped [RHPAM-3635]

Issue: When you keep the Business Central web application open in a browser window, after the KIE Server has stopped, it keeps on polling the endpoint of the previously running KIE Server.

Workaround: None.

In standalone editors, the **setContent** method implementation must receive path and content [RHPAM-3629]

Issue: In standalone editors, the setContent implementation must implement the **setContent** method defined in **EditorAPI** along with path and content parameters instead of content only.

Workaround: None.

When an executing model uses an imported inputs and decision nodes, you receive an error message [RHDM-1733]

Issue: The test scenario tool is unable to execute any models that use imported inputs and decisions nodes. The automatically generated decision table columns reflects the incorrect values.

Workaround: None.

Method calls do not support template keys [RHDM-1729]

Issue: If you remove one of the action calls from the Business Rule Language (BRL) action column, the generated DRL file is updated incorrectly.

Steps to reproduce:

- 1. Import the Mortgages sample project.
- 2. Replace the original content of LoanApplication with the [LoanApplication.java].
- 3. Replace the original content of **Pricing Loans** with the **Pricing loans (1).gdst** file. (This file is attached in the [RHDM-1729] issue).
- 4. Validate Pricing loans (1).gdst file.
- 5. Go to the Columns tab and select Action columns.
- 6. For the call functions option, click Edit.
- 7. Remove Call [application.addExplanation] and Call [application.deadline] and click Finish.

Workaround: None.

The Business Rule Language (BRL) columns do not support the conversion of method call data types [RHDM-1696]

Issue: When a guided decision table is converted into an XLS decision table, the method calls with **String** or **Date** data type arguments are not converted correctly.

Steps to reproduce:

- 1. Import the **Mortgages** sample project.
- 2. Replace the original content of LoanApplication with the [LoanApplication.java].
- 3. Replace the original content of **Pricing Loans** with the **Pricing loans (1).gdst** file. (This file is attached in the [RHDM-1696] issue).
- 4. Convert the **Pricing Loans** into an XLS table.
- Open the converted XLS table and switch to the Source tab. The addExplanation method assumes exp is a variable instead of constant. The deadline method assumes 08-Mar-2021 is a date, but it is a string. Some wrapper modules are needed for converting String into Date.

Expected result: Validation of the XLS table succeeds.

Actual result: Validation of the XLS table fails.

Workaround: None.

The guided decision table sorting functionality does not work in the decision table graph [RHDM-1664]

Issue: The guided decision table sorting functionality does not work in the decision table graph. The merged view of the table is not sorted correctly.

Steps to reproduce:

- 1. Import the Mortgages sample project.
- 2. Import the **second small table.gds** file attached in the [RHDM-1664] issue.
- 3. Create a decision table graph that contains the **Pricing Loans** column with the **second small table.gds** file.
- 4. Try to sort the **second small table**

Expected result: The guided decision table sorting functionality works correctly in the decision table graph.

Actual result: The guided decision table sorting functionality does not work correctly.

Workaround: None.

The guided decision table merged view throws an error [RHDM-1663]

Issue: The merged view of the guided decision table is not sorted properly. You receive an unexpected system error.

Workaround: None.

In the guided decision table, sorting functionality does not work for LocalDate attribute [RHDM-1662]

Issue: In the guided decision table, sorting functionality does not work for **LocalDate** attribute.

Workaround: None.

7.2. KIE SERVER

The narayana starter version mismatches when you upgrade your Spring Boot to version 2.4.3 [RHPAM-3749]

Issue: When you upgrade your Spring Boot to version 2.4.3, you receive a mismatch for the narayana starter in productized binaries.

Workaround: In your **pom.xml file**, override the narayana version to the following version:

<version.me.snowdrop.narayana>2.4.1.redhat-00001</version.me.snowdrop.narayana>

7.3. PROCESS DESIGNER

An icon used to open a sub-process is identical to the forms icon [RHPAM-3659]

Issue: In a user task, the icon used to open a sub-process in a reusable sub-process is the same icon as the icon used for generating forms.

Steps to reproduce:

- 1. Create a reusable sub-process.
- 2. Check the **Open sub-process** icon.

Expected result: The open sub-process icon is unique and not similar to the forms icon.

Actual result: The open sub-process is the same as the icon used for generating forms.

Workaround: None.

A sub-process linked to itself do not perform any action [RHPAM-3658]

Issue: When a process is linked to itself using the **Called Element** property and you click the **Open subprocess**, nothing happens.

Steps to reproduce:

- 1. Create a **testing-process** business process.
- 2. Drag and drop a reusable sub-process on the canvas.
- 3. Set the value of the Called Element property to the testing-process process.
- 4. Click the **Open sub-process** icon in the reusable sub-process.

Expected result: An alert panel appears with the **A process is already open** message.

Actual result: No action is performed.

Workaround: None.

A process from a different projects opened from the BPMN editor displays an incorrect breadcrumb navigation panel [RHPAM-3657]

Issue: If a process is placed in a different project and it is linked to a reusable sub-process, when you open that project, the breadcrumb navigation panel remains unchanged.

Steps to reproduce:

- 1. Create a **Project A** project.
- 2. Create a **Process-A** business process in **Project A**.
- 3. Create a **Project B** project.
- 4. Create a **Process-B** business process in **Project B**.
- 5. Drag and drop a reusable sub-process on the canvas.
- 6. Set the Called Element property to Process-A business process.
- 7. Click the **Open sub-process** icon in the reusable sub-process.

Expected result: The linked process is opened, and the breadcrumbs displays the correct project.

Actual result: The linked process is opened, but the breadcrumbs displays the wrong project.

Workaround: None.

A process instance Diagram tab does not display the instance count badges when you are navigating between a parent or child process [RHPAM-3634]

Issue: When you navigate between a parent or child process, the instance count badges are not rendered after the navigation. But when you switch between the **Logs** tab and the **Diagram** tab, instance count badges appears again.

Steps to reproduce:

- 1. Create and start a parent and child process pair.
- 2. Keep the child process running by placing a human task.
- 3. Navigate either through the panel or **Diagram** tab to the child sub-process. The instance count badges are missing.
- 4. Navigate to the **Logs** tab and go back to **Diagram** tab. The instance count badges appear again.

Workaround: None.

The BPMN designer fails to parse the work item definition file if the file contains unexpected properties [RHPAM-3619]

Issue: When a work item definition (WID) file contains something other than a valid MVEL expression, the BPMN designer fails to parse it.

Steps to reproduce:

1. Create a KJAR project in the VSCode extension.

- 2. In a global folder, add the WID definitions.
- 3. Add a property called **mavenDependecy** or **dependency**.

Expected result: The properties are parsed and the task from the WID file is present in the palette.

Actual result: The properties are not parsed and the task from the WID file is not present in the palette.

Workaround: Remove the unrecognized properties from the WID file.

In the BPMN designer, the VSCode workspace with multiple folders breaks the WID resolution [RHPAM-3618]

Issue: In the VSCode workspace, when you use the **Add New Folder to workspace** option, the resolution breaks itself. Multiple folders created in the VSCode workspace breaks the work item definitions.

Steps to reproduce:

- 1. Create a KJAR project in VSCode extension.
- 2. Add a WID definition to a global folder located in the root of the workspace or in the directory as a process.
- 3. Check that the process contains custom tasks in the palette.
- 4. Use the Add New Folder to workspace option.
- 5. Open the BPMN editor and check the palette for custom tasks.

Expected result: When there are multiple folders in the VSCode workspace, custom tasks are resolved in the BPMN designer.

Actual result: When there are multiple folders in the VSCode workspace, custom tasks are not present in the BPMN designer.

Workaround: Remove the extra folder from the workspace.

In the BPMN designer, an unknown custom task causes the diagram explorer to be empty [RHPAM-3606]

Issue: In the BPMN designer, when you add an unknown custom task, the diagram explorer fails to display any nodes.

Steps to reproduce:

- 1. Create a case project.
- 2. Navigate to the project settings and install **ServiceTask** and **JMSSendTask** and save the changes.
- 3. Create a case definition in the project with **ServiceTask** and **JMSSendTask** and save the changes.
- 4. Close the case project.
- 5. Navigate to the project settings and uninstall **ServiceTask** and **JMSSendTask** and save the changes.

6. Open a case project and click **Explore Diagram**.

Expected result: The diagram explorer contains all the nodes placed on the canvas.

Actual result: The diagram explorer is empty.

Workaround: If you want to use the **Explore Diagram**, either remove **ServiceTask** and **JMSSendTask** from canvas or install appropriate work item definitions.

In Firefox, the Properties panel expansion shifts the scroll bar [RHPAM-3532]

Issue: If you use the Process Designer with Firefox and you scroll down in the **Properties** panel to check an entire editor, input any strings, or expand the **Properties** panel, the position of the main vertical scroll bar changes.



NOTE

This issue applies only to Firefox.

Steps to reproduce:

- 1. Create a business process.
- 2. Create a general service task.
- 3. Open the **Properties** panel and scroll down to the bottom of the panel and check the **On Exit Action** property.
- 4. Expand the **Properties** panel.

Expected result: The main scroll bar maintains its position when you resize the panel.

Actual result: The main scroll bar of the **Properties** panel changes position. As a result, the position of properties in the **Properties** panel is changed.

Workaround: None.

The generated .bpmn file lacks the structureRef for endMessageType attribute [RHPAM-3437]

Issue: When you create a process in the BPMN editor, the **structureRef** property is not present for a message.

Steps to reproduce:

- 1. Create a business process.
- 2. Create a process variable.
- 3. Create a start, intermediate catching, throwing or end message event.
- 4. Set the message property of the message event to any value.
- 5. Create a **Data Assignment** for this message event with any name, set the data type as **Boolean**, and target it to the newly created process variable.
- 6. Save the changes and check the source code of the process.

Expected result: The generated **.bpmn** file contains the **structureRef** for all the defined messages with a value defined in data assignments.

Actual result: The generated .bpmn file lacks the structureRef with id: \$MESSAGE_NAME_Type.

Workaround: None.

The JavaScript language in an On Entry Action property produces an error after changing a node to multiple instances [RHPAM-3409]

Issue: When the language of the **On Entry Action** property is set to JavaScript, and then you change the node to **Multiple Instance**, you receive a system error.

Steps to reproduce:

- 1. Create a business process.
- 2. Create a user task and set it to the **Multiple Instance** property.
- 3. Enter any string to On Entry Action or On Exit Action.
- 4. Select the JavaScript language.
- 5. Select the **Multiple Instance** check box.

Expected result: You do not receive an error either in the UI or in the server log file.

Actual result: You receive a system error.

Workaround: None.

7.4. DMN DESIGNER

Unable to create a new .scesim file in a VSCode instance when a workspace contains multiple folders [RHPAM-3621]

Issue: When there are multiple folders within one workspace, the scenario simulation editor fails when creating a new scenario for a specific DMN model.

Steps to reproduce:

- 1. Create a VSCode workspace with a single folder in it.
- 2. Create a valid DMN file.
- 3. Create a .scesim file for the newly created DMN file.
- 4. Add a new folder in a VSCode workspace.
- 5. Create a different .scesim file for the same DMN file.

Workaround: Keep a single folder inside your workspace. If you want to work on multiple projects, open the projects in separate VSCode instances.

A decision service is missing the **encapsulatedDecisions** element for transitive dependencies in a model with multiple decision requirements diagrams [RHDM-1732]

Issue: When a model contains multiple decision requirements diagrams (DRD) and tries to reuse a decision component by adding it into a decision service node, the resulting decision service node does not contain any **encapsulatedDecisions** definitions for its transitive dependencies.

Steps to reproduce:

- 1. Define multiple DRDs.
- 2. In one DRD, define some decisions with transitive dependency on a decision.
- 3. In another DRD, define decision services and reuse the previously created decision component. Do not duplicate the transitive dependency.
- 4. Build and deploy your project.
- 5. Complete any of the following tasks:
 - Evaluate the decision to verify the error reported in the description.
 - Check the **dmn** source code and determine whether or not the **inputData** attribute from the decision service is missing.
 - Check the decision service details in the **Properties** panel.

Workaround: The transitive decisions must be part of the **encapsulatedDecisions** section of the modeled decision service.

DMN editor removes the edges for duplicate decision nodes on canvas [RHDM-1714]

Issue: An issue occurs with the edges, when you duplicate a decision component in a canvas. The edges that are originally modeled are either shifted or removed.

Steps to reproduce:

- 1. Create two decision nodes, A and B, and link them.
- 2. Drag the decision node A from the **Decision Components** panel on canvas.
- 3. Create an input node and link it to the duplicated decision node A.
- 4. Click Save.
- 5. Reopen the project.

The link from the input node is now connected to the original decision node A, while the duplicated decision node has no links at all.

Workaround: Keep a single occurrence of the decision component for each DRD.

In the DMN editor, the suggestion box does not parse the function arguments [RHDM-1661]

Issue: The the DMN editor does not parse any helpful suggestions when you are writing literal expressions.

Steps to reproduce:

- 1. Open a DMN editor.
- 2. Add a decision node.

- 3. Set the expression as Literal expression.
- 4. Enter the **date(2011 | , ,)** expression and check the suggestion box.

Expected result: The DMN editor provides helpful suggestions when you are writing literal expressions.

Actual result: The DMN editor does not parse any helpful suggestions when you are writing literal expressions.

Workaround: None.

In the DMN editor, the suggestion box parses the results of an addition expression as a list instead of a number [RHDM-1660]

Issue: When you parse an addition expression to a literal expression, the DMN editor suggests functions that return list instead of a number.

Steps to reproduce:

- 1. Open a DMN editor.
- 2. Add a decision node.
- 3. Set the expression as Literal expression.
- 4. Enter the **sum([1]) + sum([2])** expression and check the suggestion box.

Expected result: The DMN editor suggests correct functions for an addition expression.

Actual result: The DMN editor suggests functions that return list instead of a number.

Workaround: None.

In the DMN editor, the suggestion box fails to recognize variables [RHDM-1658]

Issue: When you parse the **number** type to a literal expressions, the DMN editor fails to recognize variables.

Steps to reproduce:

- 1. Open a DMN editor.
- 2. Add a decision node.
- 3. Set the expression as Literal expression.
- 4. Enter the **numeric variable +** expression and check the suggestion box.

Expected result: The DMN editor recognizes variables when you parse the **number** type to a literal expressions.

Actual result: The DMN editor fails to recognize variables.

Workaround: None.

In the DMN editor, the suggestion box fails to recognize the duration expression [RHDM-1656]

Issue: When you try to parse the duration expression, the DMN editor suggests string functions instead of duration functions.

Steps to reproduce:

- 1. Open a DMN editor.
- 2. Add a decision node.
- 3. Set the expression as a Literal expression.
- 4. Enter the date("2012-12-25") date("2012-12-24") expression and check the suggestion box.

Expected result: The DMN editor recognizes the duration expression.

Actual result: The DMN editor fails to recognize the duration expression and suggests string functions.

Workaround: None.

In the DMN editor, the suggestion box fails to recognize date expressions [RHDM-1654]

Issue: When you try to parse a date expression, the DMN editor suggests string functions instead of date functions.

Steps to reproduce:

- 1. Open a DMN editor.
- 2. Add a decision node.
- 3. Set the expression as Literal expression.
- 4. Enter the **date(date and time("2012-12-25T11:00:00Z"))** expression and check the suggestion box.

Expected result: The DMN editor recognizes the date expressions.

Actual result: The DMN editor fails to recognize the date expression and suggests string functions instead of date functions.

Workaround: None.

In the DMN editor, the suggestion box fails to recognize a negated boolean expression [RHDM-1652]

Issue: When you try to parse a negated boolean expression, the DMN editor offers different suggestions which are not related to the expression.

Steps to reproduce:

- 1. Open a DMN editor.
- 2. Add a decision node.
- 3. Set the expression as Literal expression.
- 4. Enter a **false** or **not false** expression and check the suggestion box.

Expected result: The DMN editor offers related suggestions when you parse a negated boolean expression.

Actual result: The DMN editor fails to provide related suggestions when you parse a negated boolean expression.

Workaround: None.

7.5. RED HAT BUILD OF KOGITO

From given asset, wrong archetype is used to generate project [RHPAM-3654]

Issue: When you upload an asset as a source for KogitoBuild, the Red Hat build of Kogito S2I image generates the project using **kogito-quarkus-archetype:1.5.1-SNAPSHOT**. It is expected to use the **kogito-quarkus-dm-archetype:1.5.0.redhat-00001**.

Steps to reproduce:

- 1. Install the RHPAM Kogito Operator.
- 2. Create a KogitoBuild as follows:

```
apiVersion: rhpam.kiegroup.org/v1
kind: KogitoBuild
metadata:
name: example-quarkus-local
spec:
buildImage: >-
registry-proxy.engineering.redhat.com/rh-osbs/rhpam-7-rhpam-kogito-builder-rhel8:7.11.0-
1
runtimeImage: >-
registry-proxy.engineering.redhat.com/rh-osbs/rhpam-7-rhpam-kogito-runtime-jvm-
rhel8:7.11.0-3
type: LocalSource
```

3. Upload an asset to the Red Hat OpenShift Container Platform using Red Hat OpenShift Container client as follows:

oc start-build example-quarkus-local-builder --from-file=https://github.com/kiegroup/kogito-examples/blob/stable/dmn-quarkus-example/src/main/resources/Traffic%20Violation.dmn

4. Check the builder log file.

Expected result: When you upload an asset for KogitoBuild, the Red Hat build of Kogito S2I image generates the project using **kogito-quarkus-dm-archetype:1.5.0.redhat-00001**.

Actual result: When you upload an asset for KogitoBuild, the Red Hat build of Kogito S2I image generates the project using **kogito-quarkus-archetype:1.5.1-SNAPSHOT**.

Workaround: None.

CHAPTER 8. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.11.0

Red Hat Process Automation Manager 7.11.0 provides increased stability and fixed issues listed in this section.

8.1. BUSINESS CENTRAL

- When you apply a constraint to a DMN data type, you receive an error in the scenario simulation [RHDM-1435]
- The guided decision tables do not open when you migrate from Red Hat JBoss BPM Suite 6.4 to Red Hat Process Automation Manager 7.7 [RHPAM-3217]
- When you build a project, an alert or error panel must be visible only to the current user [RHPAM-3442]
- The large number of open files are present in Business Central because some file descriptors are not properly closed, and you receive the **java.io.IOException** exception [RHPAM-3309]
- When you use the **contains** operator along with a string literal contains a space, the guided decision table editor generates an incorrect DRL file, and you receive an evaluation error message [RHPAM-3305]
- When you use the **Convert to XLS** functionality, it generates incorrect results [RHPAM-3183]
- When you start Red Hat JBoss EAP with JDK 11, Business Central deployment fails with errors [RHPAM-2994]
- When you build a project, the generated errors are visible to all the users [RHPAM-2647]
- The Heatmap dashboard fails on multi-mode instance [RHPAM-3408]
- Unable to display heatmap internal components [RHPAM-3401]
- When you edit process variables in Business Central, the process variable changes its original datatype [RHPAM-3754]

8.2. KIE SERVER

- The /server/containers/instances/{containerId} REST endpoint returns the HTTP 200 OK response status code even for the failed scenarios [RHPAM-3463]
- When you set the **org.jbpm.ejb.timer.tx=true** system property, you receive multiple human task email notifications [RHPAM-3444]
- The **WebServiceWorkItemHandler** execution on KIE Server, running on Red Hat JBoss EAP 7.3.5 fails with error messages in the console [RHPAM-3440]
- If the rules are fired using the default KieSession, the **PrometheusMetricsDroolsListener** fails to enable [RHDM-1601]
- When you build **dmn-drools-quarkus-metrics** or **dmn-drools-springboot-metrics** projects, the build fails and you receive an error with unavailability of containers used for testing [RHPAM-3690]

8.3. DMN DESIGNER

- Decision service is missing the **inputData** element in the model with multiple DRDs [RHDM-1483]
- The undo and redo operations are lost when you switch between diagrams [RHDM-1458]
- In the DMN designer, the decision table analysis collects First normal form (1NF) as a warning [RHDM-1688]

8.4. PROCESS ENGINE

- Listeners are not ready when a signal is released in a subprocess [RHPAM-3484]
- In an exception handling subprocess, you cannot abort the main process and you receive an **Invalid session was used for this context**error message [RHPAM-3531]
- When you set an **org.kie.executor.interval** system property, the retried jobs are executed immediately instead of waiting for the defined interval, and you receive an error [RHPAM-3503]
- When you pass a non-integer value as an integer in a jaxb marshaller, you do not receive an error [RHPAM-3492]
- The configuration parameters for **OptimisticLockRetryInterceptor** are now present [RHPAM-3490]
- A task instance is marked as completed even though an **OptimisticLockException** error occurs [RHPAM-3487]
- An exception generated on a subprocess is not correctly pass on to a parent process [RHPAM-3474]
- The task inbox fails to display the data due to an inefficient **jbpmHumanTasksWithUser** query [RHPAM-3467]
- Due to bad cleanup, the **PerCaseRuntimeManager** is not executed [RHPAM-3425]
- When you upgrade your project from Red Hat Process Automation Manager 7.8.0 to Red Hat Process Automation Manager 7.9.1, duplicate process instances with time are created [RHPAM-3416]
- For runtime manager locking strategies, different implementations and configuration options are now available [RHPAM-3391]
- In Kafka Producer WIH, if the Kafka broker goes offline, KIE Server hangs and cannot process any new requests [RHPAM-3371]

8.5. PROCESS DESIGNER

- Custom task thumbnails are not consistent [RHPAM-3496]
- Not all illegal characters are removed from data object name [RHPAM-3250]
- Text areas used for script tasks are cropped and shifted [RHPAM-3207]

- You cannot edit the string expression value of a **Data I/O** assignment if the length exceeds **10** characters [RHPAM-3495]
- When a process instance has a long-running task, its corresponding process diagram in Business Central appears as blank until that long-running task is complete [RHPAM-3293]

8.6. OPTAPLANNER

• In the Constraint Streams API, the performance of incremental score calculations is degraded when you use the **groupBy()** method [RHDM-1385]

8.7. DECISION ENGINE

- When an **accumulate** function returns a **null** value, you receive inconsistent results [RHDM-1643]
- In an executable model, an **int** to **short** casting fails with **functionCall** method [RHDM-1644]
- In MVEL dialect mode, when you update a fact with a method that is not associated with a property, it fails to disable the property reactivity [RHDM-1639]
- In an executable model, complex constraint containing **BigDecimal** values with % operation fails with jitting warning messages [RHDM-1636]
- In an executable model, complex constraint containing **BigDecimal** values with % operation display incorrect results [RHDM-1635]
- In MVEL dialect mode, when you call a **fireAllRules** function simultaneously from multiple threads in a plain DRL file, you receive a MVEL syntax error [RHDM-1629]
- In an executable model, when you build and execute a rule which contains a statement ending with a new line character and not a semi-colon in an action part, you receive a compilation error [RHDM-1622]
- When you use expressions consisting of the **BigDecimal** type values of arithmetic operations in an executable model, written in MVEL dialect mode, you receive compilation errors [RHDM-1621]
- In an executable model, when you use a statement that consists of parenthesized expressions written in the MVEL dialect mode, you receive a compilation error [RHDM-1620]
- When you call a function in an expression, you receive **int** to **short** casting issue [RHDM-1598]
- You receive a NullPointerException when you update a container [RHDM-1591]

8.8. RED HAT OPENSHIFT CONTAINER PLATFORM

- The S2I build fails with an java.lang.ClassNotFoundException: org.apache.maven.model.io.xpp3.MavenXpp3WriterEx error [RHPAM-3517]
- When you execute Red Hat Process Automation Manager images, the start-up logs displays the /opt/eap/bin/launch/messaging.sh : No such file or directorymessages [RHPAM-3506]

CHAPTER 9. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.11.1

Red Hat Process Automation Manager 7.11.1 provides increased stability and fixed issues listed in this section.

9.1. BUSINESS CENTRAL

- Business Central stops indexing without logging any exception [RHPAM-3600]
- When the following configuration settings are applied, space creation using Business Central REST API fails [RHPAM-3739]

<property name="org.appformer.concurrent.managed.thread.limit" value="9"/> <property name="org.appformer.concurrent.unmanaged.thread.limit" value="9"/> <property name="org.appformer.concurrent.indexing.thread.limit" value="9"/> <property name="org.appformer.concurrent.fs.watch.thread.limit" value="9"/>

- In Business Central, the opening of assets takes a long time with large commit history, which results in slow performance in projects [RHPAM-3557]
- Data Object editor removes imports when saving [RHPAM-3544]
- In the guided decision rules, the options fail to display [RHPAM-2829]
- When a field name of a data object is in uppercase, then after deploying the project, a part of the field name is changed automatically to lowercase [RHDM-1725]
- When you convert a guided decision table into XLS decision table, the BRL columns invoking method calls containing **String** and **Date** arguments are converted incorrectly [RHDM-1696]
- In guided rule editor, the formula content is reloaded incorrectly [RHDM-1600]

9.2. KIE SERVER

- Narayana starter version mismatches when you upgrade Spring Boot to version 2.4.3 [RHPAM-3749]
- The **DroolsKieSessionLookupHandler** parameter repeatedly adds the **PrometheusMetricsDroolsListener** instance to the same **ksession** instance [RHPAM-3737]

9.3. DMN DESIGNER

- DMN editor removes the edges for duplicate decision nodes on canvas [RHDM-1714]
- Connectors appear in a different way in read-only mode [RHDM-1667]

9.4. PROCESS ENGINE

• When you try to abort a parent process instance, you receive a locking issue [RHPAM-3766]

- You can now operate database to execute functions or SQL queries and store them in the execution results using the **org.jbpm.executor.commands.ExecuteSQLQueryCommand** command [RHPAM-3728]
- The timer instance is removed incorrectly in a received process execution error [RHPAM-3639]
- The dynamic boundary signal fails to trigger without a process instance ID [RHPAM-3603]
- In multi-node setup, task deadline timers are not removed and fired repeatedly [RHPAM-3574]
- When the EJB timers services fail during the loading timer from the database, you receive a **NullPointerException** error [RHPAM-3404]

9.5. PROCESS DESIGNER

- You can navigate from a parent process instance to a child process instance using process diagram [RHPAM-3655]
- A process instance **Diagram** tab does not display the instance count badges when you are navigating between a parent or child process [RHPAM-3634]

9.6. RED HAT BUILD OF KOGITO

• From given asset, an incorrect archetype is used to generate a project [RHPAM-3654]

9.7. DECISION ENGINE

- When you set a **BigDecimal** variable to a **String** type value in an executable model, you receive a compilation error [RHDM-1730]
- When you add a rule descriptor to a **CompositePackageDescr**, projects take several hours to build and fail to complete the compilation [RHDM-1738]
- You receive a range index issue when the constraints are on the same value but are lexicographically different [RHDM-1722]
- In an executable model, when you compare the **BigDecimal** type property with the results of **accumulate max** function of **BigDecimal** variable, you receive a compilation error [RHDM-1716]
- When you set a **BigDecimal** variable to a **String** literal value in an executable model, you receive a compilation error [RHDM-1715]
- In an executable model, when a rule contains a null assignment to a property in the MVEL dialect mode, you receive a model generation error [RHDM-1713]
- In an executable model, when a **BigDecimal** variable is passed as **int** type argument to a function, you receive a compilation error [RHDM-1712]
- In an executable model, when a rule contains the enhanced **for** (foreach) statement for the property of the fact in the MVEL dialect mode, you receive a compilation error [RHDM-1709]
- The **updateToVersion** parameter unexpectedly overwrites the **ObjectTypeNode.expirationOffset** object of super type [RHDM-1708]

• In an executable model, when you use arithmetic operations with a **BigDecimal** variable, you receive a compilation error [RHDM-1706]

APPENDIX A. VERSIONING INFORMATION

Documentation last updated on Tuesday, March 8, 2022.

APPENDIX B. CONTACT INFORMATION

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