

Red Hat Process Automation Manager 7.0

Release notes for Red Hat Process Automation Manager 7.0

Red Hat Process Automation Manager 7.0 Release notes for Red Hat Process Automation Manager 7.0

Red Hat Customer Content Services brms-docs@redhat.com

Legal Notice

Copyright © 2019 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

http://creativecommons.org/licenses/by-sa/3.0/

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux ® is the registered trademark of Linus Torvalds in the United States and other countries.

Java [®] is a registered trademark of Oracle and/or its affiliates.

XFS [®] is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL [®] is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js ® is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack [®] Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

Abstract

This document contains release notes for Red Hat Process Automation Manager 7.0 and subsequent patch releases.

Table of Contents

PREFACE	. 4
CHAPTER 1. PRODUCT OVERVIEW	. 5
CHAPTER 2. NEW FEATURES	. 6
2.1. BUSINESS CENTRAL	6
2.1.1. Process Designer	6
2.1.2. Page Designer	6
2.1.3. Improved navigation	6
2.1.4. Case management	6
2.1.5. Decision Model and Notation models	6
2.1.6. Guided decision table	6
2.1.7. Projects Metrics dashboard	6
2.1.8. Team Metrics dashboard	7
2.1.9. Form modeler	7
2.1.10. New columns available on process instances, tasks, and jobs	7
2.1.11. Search filter	7
2.1.12. New Task Inbox and Task Administration pages	7
2.1.13. High availability	7
2.1.14. Enabling the Content Management System (CMS) page	7
2.1.15. Error Handling	7
2.1.16. Improved validation in the deployment descriptor designer	8
2.1.17. Job creation	8
2.1.18. Application templates	8
2.2. PROCESS ENGINE	8
2.2.1. Property reactivity	8
2.2.2. Work Item archetype	8
2.2.3. Process API and task administration API	9
2.2.4. Advanced task routing	9
2.2.5. Business rule task fire limit	9
2.2.6. NoSQL integration	10
2.2.7. Quartz improvements	10
2.2.8. SLA due date tracking	10
2.2.9. Task enhancement	10
2.2.10. AsyncMode environment variable	10
2.2.11. Headless Process Automation Manager controller	10
2.3. PROCESS SERVER	10
2.3.1. Separate Business Central from Process Server	10
2.3.2. UserTaskService	11
2.3.3. Smart router	11
2.3.4. Aliases	11
2.3.5. Process Server Maven plugins	11
2.3.6. Support for OOPath	11
2.3.7. Pluggable container locator and policy support 2.3.8. API documentation	11
2.4. RED HAT BUSINESS OPTIMIZER	11 11
2.4.1. @PlanningPin 2.4.2. Conference scheduling	12 12
2.4.2. Conference scheduling 2.4.3. Guided decision tables integration	12
2.4.4. Guided rule designer integration	12
2.4.5. Real-time planning	12
2. 4 .5. Neal-unie planning	IΖ

2.4.6. Multi-threaded partitioned search2.4.7. Score type2.4.8. Enhanced solver configuration designer	12 12 12
2.4.9. Difficulty comparator definition	12
2.4.10. Red Hat Business Optimizer Planner Server	12
2.5. NEW COMPONENT NAMES	13
CHAPTER 3. TECHNOLOGY PREVIEW	14
3.1. TECHNOLOGY PREVIEW FEATURES	14
3.2. TECHNOLOGY PREVIEW EXPERIMENTAL FEATURES	15
3.2.1. Enabling Application Lifecycle Automation and Provisioning User Interface	15
3.2.2. Enabling Predictive Model Markup Language (PMML)	15
CHAPTER 4. KNOWN ISSUES	16
CHAPTER 5. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.0.1	19
5.1. BUSINESS CENTRAL	19
5.2. PROCESS SERVER	20
5.3. RED HAT PROCESS AUTOMATION MANAGER ON OPENSHIFT	20
CHAPTER 6. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.0.2	21
6.1. BUSINESS CENTRAL	21
6.2. PROCESS SERVER	22
6.3. RED HAT PROCESS AUTOMATION MANAGER ON OPENSHIFT	23
6.4. FORM MODELER	24
6.5. PROCESS DESIGNER	24
6.6. CASE MANAGEMENT SHOWCASE APPLICATION	25
6.7. RED HAT BUSINESS OPTIMIZER	25
APPENDIX A. VERSIONING INFORMATION	26

PREFACE

These release notes list new features, features in technical preview, and known issues in Red Hat Process Automation Manager 7.0 and subsequent patch releases.

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 7.0 further expands the product capabilities by providing an enhanced user experience, a simplified process design work flow, case management capabilities, an improved comprehensive dashboard, and optimized task-handling and collaboration features.

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



NOTE

Red Hat Process Automation Manager now requires Java 8 or higher.

CHAPTER 2. NEW FEATURES

This section highlights new features in Red Hat Process Automation Manager 7.0.

2.1. BUSINESS CENTRAL

2.1.1. Process Designer

An improved Process Designer interface includes the most common BPMN2 nodes as well as form generation and the ability to export to PNG, PDF, SVG, and BPMN2. The legacy Process Designer is still available for full functionality.

2.1.2. Page Designer

The Page Designer provides integrated monitoring and dashboards. You can use it to create pages and manage the navigation tree. It replaces Dashbuilder.

2.1.3. Improved navigation

The Red Hat Process Automation Manager Home page has been redesigned for easier navigation.

2.1.4. Case management

A case project is a type of project in Business Central that is configured for case management. Case management is an extension of business process management (BPM) that enables you to handle dynamic and ad hoc activities. It handles one-off situations where the process cannot be predicted in advance. For more information, see *Getting started with case management*.

2.1.5. Decision Model and Notation models

You can use Decision Model and Notation (DMN) to model a decision service graphically in a decision requirements diagram (DRD). This diagram traces business decisions from start to finish, with each decision node drawing logic from DMN model decision elements such as decision tables.

The Red Hat implementation of DMN meets the standards of the DMN specification Conformance Level 3. Red Hat Process Automation Manager currently supports DMN version 1.1. For more information about DMN 1.1, see the OMG DMN Specification.

2.1.6. Guided decision table

- Guided decision table has a new wizard for creating and editing columns.
- Hit policies are now available. Hit policies determine the order in which rules (rows) in a guided decision table are applied.
- New support to display multiple linked guided decision tables in the guided decision tables designer has been added.

2.1.7. Projects Metrics dashboard

A new dashboard is available for every project listed in the Projects page. The Projects Metrics dashboard displays all of your project contribution metrics in one place. This new dashboard replaces the Contributors page, which was part of the Authoring group.

2.1.8. Team Metrics dashboard

The Team Metrics dashboard shows all of the project metrics for a team in a single page. This new dashboard replaces the older Contributors page, which was part of the Authoring group.

2.1.9. Form modeler

With Form Modeler, you can generate forms for data objects, task forms, and process start forms without writing code. Form Modeler includes a widget library for binding multiple data types and a callback mechanism to send notifications when form values change. Form Modeler uses bean-based validation and supports binding form fields to static or dynamic models.

2.1.10. New columns available on process instances, tasks, and jobs

The following columns have been added to the corresponding pages:

- Process instance list page:Last update and correlation key.
- Task list: Last update, correlation key (of the associated process instance ID), process instance description (of the associated process instance).
- **Jobs page:** Name of the associated process (if any), ID of the associated process instance (if any), Description of the associated process instance (if any).

2.1.11. Search filter

You can now search for specific data by using the **Search** tab on the Jobs, Process Instances, Task Administration, and Execution Errors pages.

2.1.12. New Task Inbox and Task Administration pages

The former Task List page has been divided into the Task Inbox and Task Administration pages. The Task Inbox page is used by task operators to work with their assigned (or potentially assigned) tasks. The Task Administration page is used by administrators to manage tasks assigned to other users. This page is only available for users with **admin** or **process-admin** roles. It is similar to the **Admin filter** tab on the former Task List page.

2.1.13. High availability

High availability and clustering for Business Central is now configured with JMS and NFS storage.

2.1.14. Enabling the Content Management System (CMS) page

Red Hat Process Automation Manager settings allow you to enable the CMS page.

Procedure

- 1. Go to **Settings** → **Roles** → **admin**.
- 2. Expand Pages and click the Read field to enable Page Authoring.

2.1.15. Error Handling

While running a process instance or a job, the system now detects and stores execution errors such as exceptions after the maximum number of retries has been exceeded.

The process instance list includes a new column that displays the number of errors per process instance which are not marked as acknowledged.

The Execution Errors page lists any errors that occur during process instances or executor service jobs on a Process Server. Use this page to help troubleshoot issues. It is visible to users with the **admin** and **process-admin** roles.

2.1.16. Improved validation in the deployment descriptor designer

The deployment descriptor designer in Business Central has been improved to validate data entered for the following components:

- Work item handlers
- Event listeners
- Marshalling strategies
- Globals
- Environment entries
- Configuration

The deployment descriptor designer performs the validation when a build is invoked or manually when a user clicks **Validate**.

2.1.17. Job creation

The Job creation interface has been modified to enable you to start the job immediately or schedule it to be executed later.

2.1.18. Application templates

You can use the Employee Roster and Case Management application templates.

2.2. PROCESS ENGINE

2.2.1. Property reactivity

Property reactivity is enabled by default in Drools 7.0. If you expect property reactivity to be enabled only for classes annotated with **@PropertyReactive**, add the following configuration to the **kmodule.xml** file:

2.2.2. Work Item archetype

To help users build custom service tasks (work items), Red Hat Process Automation Manager comes with the Work Item archetype that generates the majority of items required to build a custom service task. The archetype includes the following components:

- A Work Item Definition (WID) file
- The Work Item Handler implementation class
- The Work Item Handler test class

The Maven assembly (zip) packages everything at build time so the package can be consumed by the Service Repository and therefore be used from within the Web Designer.

2.2.3. Process API and task administration API

A process administration API and task administration API have been introduced to simplify some of the more complex administrator use cases. You can use the process administration API to perform the following tasks:

- Retrieve all process definition nodes
- Cancel node instances
- Retrigger node instances
- Update the timer (absolute or relative)
- List timer instances
- Trigger nodes

You can use the task administration API to perform the following tasks:

- Add and remove potential owners and excluded owners and business administrators
- Add and remove task inputs and outputs
- List, create, and cancel escalations and notifications

2.2.4. Advanced task routing

When tasks are assigned to a group of users, you can use pluggable task assignment strategies to automatically assign tasks to a suitable individual immediately. This enables more efficient task allocation, based on all properties associated with the task. For example, such as potential owners and task priority but also task data that includes information such as geography, required skills, and so on. You can use business rules to define the assignment logic, making it easy to customize this to your needs.

2.2.5. Business rule task fire limit

The business rule task has been enhanced to limit the number of fired rules. This avoids situations where rules run into an infinite loop and make the server completely unresponsive. The default fire limit is 10000.

Use one of the following methods to configure the fire limit:

- Use the **org.jbpm.rule.task.firelimit** system property to set the fire limit globally for each JVM.
- In Business Central, in your BPMN process definition specify **FireRuleLimit** as a **java.lang.Integer** type data input for your business rule tasks.

If the fire rule limit is reached, the service throws an exception to indicate that the environment might be unstable.

2.2.6. NoSQL integration

Initial integration with NoSQL has been introduced. This is based on additional emitters that can be implemented to receive notifications when the process engine executes processes. This enables users to plug in their own emitters that will be responsible for sending data to external data stores. Note that this is an integration and not a replacement of the persistence layer of jBPM.

2.2.7. Quartz improvements

The Quartz scheduler service has been improved to fetch jobs only for deployments (KIE containers) that are currently available in the running system.

2.2.8. SLA due date tracking

You can now track your processes, the activities in your processes, and cases by service level agreement (SLA) due date.

2.2.9. Task enhancement

You can now forward and reassign a task to groups.

2.2.10. AsyncMode environment variable

You can use the **AsyncMode** environment variable to set all tasks to be asynchronous by default.

2.2.11. Headless Process Automation Manager controller

You can configure Process Server to run in managed or unmanaged mode. If Process Server is unmanaged, you must manually create and maintain containers. If Process Server is managed, the Process Automation Manager controller manages the Process Server configuration and you interact with the controller to create and maintain containers.

The Process Automation Manager controller is integrated with Business Central. If you install Business Central, use the **Execution Server** page to create and maintain containers. However, if you do not install Business Central, you can install the headless Process Automation Manager controller and use the REST API or the Process Server Java Client API to interact with it.

2.3. PROCESS SERVER

The Process Server (also known as the KIE server) has been extended to support core engine features and offers a remote API for these operations. In addition, the following architectural changes were introduced.

2.3.1. Separate Business Central from Process Server

Business Central now delegates all of its requests to the Process Server. The main advantage is that Business Central can now be used to monitor any set of Process Servers. By linking the Process Server to Business Central, the process and task monitoring interfaces in Business Central can now connect to this Process Server and show all relevant information. When multiple independent Process Servers are used, you can either connect to a specific one or use the smart router to aggregate information across multiple servers.

2.3.2. UserTaskService

UserTaskService updates task metadata and variables in a single operation. This feature is available through KIE Server REST and JMS API.

2.3.3. Smart router

Smart router (also known as the KIE server router) includes the following enhancements:

- Smart router can be used as a proxy to help manage multiple independent process execution servers.
- When the controller is not available during smart router start up, a retry mechanism is in place to connect to the controller as soon as it becomes available.
- A retry mechanism is in place for times when the controller is not available and there are updates to be sent to the controller.
- When a Process Server does not respond to a request, it is removed from the list of active servers. Subsequent requests will not target it. The now inactive server is put on a list to be verified. After verification, it is added back to the active servers list.

2.3.4. Aliases

You can now use aliases instead of container IDs in the remote REST APIs of the execution server.

2.3.5. Process Server Maven plugins

Process Server has been enhanced with additional Maven plugins that enable interaction with the Process Server and the Process Automation Manager controller REST API directly from within a build. This interaction facilitates easier integration with CI/CD pipelines when building KJars so they can be directly deployed to the execution environment (both managed and unmanaged Process Server).

2.3.6. Support for OOPath

OOPath, which has syntax similar to XPath used for rule constraints, is now supported.

2.3.7. Pluggable container locator and policy support

Support for container locators (sometimes referred to as aliases) and polices is available.

2.3.8. API documentation

API reference documentation is available in Swagger, at localhost:8080/kie-server/docs.

2.4. RED HAT BUSINESS OPTIMIZER

2.4.1. @PlanningPin

To pin down an assignment and force Red Hat Business Optimizer to leave it untouched, add the **@PlanningPin** annotation on a planning entity's boolean property and make it true for those entities that are immovable.

2.4.2. Conference scheduling

You can assign each conference talk to a time slot and a room. Timeslots can overlap. Save data in or extract data from an *.xlsx file that can be edited with LibreOffice or Microsof Excel.

2.4.3. Guided decision tables integration

Red Hat Business Optimizer now integrates with the guided decision tables designer. You can modify the score with built-in Red Hat Business Optimizer actions that can be accessed in the Action BRL fragment column type. The Workbench examples now include the Dinner Party project, which uses a guided decision table to define score constraints.

2.4.4. Guided rule designer integration

Red Hat Business Optimizer now integrates with the guided rule designer. You can modify the score with a built-in Red Hat Business Optimizer action.

2.4.5. Real-time planning

Process Server now has an interface that enables you to update a problem data set while the solver is running. Use the Java client or REST interface to submit your **ProblemFactChange** implementations.

2.4.6. Multi-threaded partitioned search

Red Hat Business Optimizer now has support for solving a single data set by partitioning across multiple threads. This enhancement makes use of multiple CPU cores for a single problem. Partitioned search can implement geo-fencing for Vehicle Routing use cases.

2.4.7. Score type

You no longer need to define the score type in the solver configuration. Red Hat Business Optimizer now determines it automatically from the domain model.

2.4.8. Enhanced solver configuration designer

The Red Hat Business Optimizer designer now supports adding all termination types, including composite termination. The **Phase configuration** section enables you to tweak **Construction Heuristic** settings and select the **Local Search** algorithm to optimize your planning problem.

2.4.9. Difficulty comparator definition

The Red Hat Business Optimizer domain designer can now specify a planning entity difficulty. Navigate through the object hierarchy and define the sorting attributes. Several construction heuristic algorithms use this information to construct a better initial solution.

2.4.10. Red Hat Business Optimizer Planner Server

The Red Hat Business Optimizer Planner Server now supports real-time planning.

2.5. NEW COMPONENT NAMES

The following components have been renamed in Red Hat Process Automation Manager 7.0:

Red Hat JBoss BPM Suite	Red Hat Process Automation Manager (RHPAM)
Red Hat JBoss BPM Suite	Red Hat Process Automation Manager
Business Resource Planner	Red Hat Business Optimizer
asset editor	asset designer (for example, guided rules designer)
KIE Execution Server	Process Server (for Process Automation Manager capabilities), Planner Server (for Business Optimization capabilities), KIE Server (represents both Process Server and Planner servers)
Organizational units	Spaces
Drools engine, Rules engine	Decision engine

CHAPTER 3. TECHNOLOGY PREVIEW

This section lists features that are in technology preview in Red Hat Process Automation Manager 7.0.



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.

3.1. TECHNOLOGY PREVIEW FEATURES

- Aliases: You can use aliases instead of container IDs in the remote REST APIs of the Planner Server.
- Application lifecycle automation: Part of Red Hat Process Automation Manager and disabled by default.
- Embedded jBPM use case with a DBCP datasource.
- High-availability authoring on Red Hat JBoss EAP (on premise). Configuration of Business
 Central for high availability is currently tech preview. Search and messaging technology used to
 enable search feature is considered an implementation detail. Red Hat Process Automation
 Manager may choose to replace that technology in the future while preserving the capability
 offered.
- Clustering for the OpenShift development environment: Enables high-availability while authoring.
- Predictive Model Markup Language (PMML): The PMML feature is fully implementated for the following predictive model types:
 - Decision tree
 - Regression
 - Scorecard
 PMML has a partial implementation of the Mining Model type. The Select All, Select First, and Model Chaining sub-types are available.
- Multi-threaded execution: Solves a single data set by partitioning across multiple threads. It is turned off by default and can be enabled either with a KieBaseConfiguration option or with a system property as explained in Drools Documentation
- Rule Units: Rule Units represent a declarative approach to partitioning a rule set into smaller
 units, binding different data sources to those units, and the execution of the individual unit. A
 Rule Unit consists of data sources, global variables, and rules.
- Executable model: Provides a pure Java-based representation of a rule set, together with a convenient Java DSL to programmatically create such model.
- Elasticsearch is available with this release, however it is currently in technical preview.

3.2. TECHNOLOGY PREVIEW EXPERIMENTAL FEATURES

The following Technology Preview features are experimental and may require additional API changes.

3.2.1. Enabling Application Lifecycle Automation and Provisioning User Interface

Red Hat Process Automation Manager settings allow you to enable the Application Lifecycle Automation and Provisioning User Interface features.

Procedure

- 1. Go to **Settings** → **Roles** → **admin**.
- 2. Expand Pages and click the Read field to enable Deployments.

3.2.2. Enabling Predictive Model Markup Language (PMML)

This feature uses a single configuration option, **org.drools.compiler.compiler.PMMLCompiler** which has the following valid options:

- **org.kie.pmml_pmml_4_2.PMML4Compiler**: This value should be used for the majority of cases where PMML support is desired.
- **org.drools.pmml_pmml_4_2.PMML4Compiler**: This value provides backward compatibility, and should only be used in cases where there is a reliance on the older drools-pmml and drools-scorecards modules.

CHAPTER 4. KNOWN ISSUES

This section lists known issues with Red Hat Process Automation Manager 7.0.

Process Designer morphing issues [RHPAM-430]

- It is possible to morph from a sub-process into a certain task type, but it is not possible to morph back to a sub-process. You should be able to:
 - Morph between task types and re-usable sub-processes
 - Morph between embedded and ad-hoc sub-processes
- After morphing an embedded sub-process to a task, any nodes that were contained inside the sub-process are not removed. This prevents you from saving the diagram. You must delete the task to continue.

Process Designer instances are very slow with Google Chrome on Linux [RHPAM-922]

Step to reproduce: Open three Process Designer instances in Google Chrome on Linux.

Expected result: All instances of Process Designer perform at the same level, regardless of the number of instances open.

Actual result: The first two instances that were opened perform as usual, but the third and all subsequent instances are very slow, even if you will close the first two instances.

Workaround: Set the value of **chrome:**//flags/#force-color-profile to sRGB.

With Process Designer, ensure embedded sub-processes have enough storage [RHPAM-426]

When using the context menu to add nodes to an embedded sub-process, this operation fails if there is not enough space in the embedded sub-process to add the node. You must first make the embedded sub-process bigger.

With Process Designer, a copy of the timer is created when you copy text from a name field to a documentation field [RHPAM-755]

When your mouse is over the canvas, keyboard shorts perform actions related to the canvas, not the forms. A copy of the timer is created on the canvas if you copy text from a name field to a documentation field. In addition, you cannot change the cursor position. If you try to move the cursor using arrow keys, the timer event is moved on the canvas.

Steps to reproduce:

- 1. Add a task to canvas.
- 2. Open the properties form for the task.
- 3. Select the contents of the Name field on the task.
- 4. Move the mouse over the canvas without clicking.
- 5. Click **Delete** to remove the contents of the **Name** field.

Expected result: Only the contents of the **Name** field are deleted.

Actual result: The selected task is deleted from the canvas as well as the contents of the Name field.

With Process Designer, you cannot edit element or event names inline [RHPAM-444]

Step to reproduce: Double-click the task name text.

Expected result: You can change the task name.

Actual result: Nothing happens and no input appears.

Workaround: Resize the node, then edit the element or event name.

Business Central does not deploy if the EAP home contains a space in the name [RHPAM-1099

Steps to reproduce:

- 1. Install Red Hat JBoss EAP in a directory that contains a space.
- 2. Start Business Central.

Expected result: Business Central deploys.

Actual result: Business Central does not deploy and an error is recorded in the server log.

Project-oriented standalone pages are broken [RHPAM-503]

The standalone designers and pages are currently broken.

Newly created persistable data objects are not automatically added to the list of Project Persistable Data Objects [RHPAM-938]

Issue: Newly created persistable data objects are not automatically added to the list of **Project Persistable Data Objects** in the Persistence designer.

Workaround: Click Add all project's persistable data objects to update the list.

Saving a guided rule in standalone mode produces an error [RHPAM-990]

Steps to reproduce:

- 1. Open an example Mortgages project.
- 2. Open the guided rules asset in standalone mode.
- 3. Click Save.

Expected result: The project is saved.

Actual result: An error occurs.

Serialization of KieBase/package is not supported [RHPAM-2574]

Serialization of KieBase/package is not supported in Red Hat Process Automation Manager 7.0. For more information, see Is serialization of kbase/package supported in BRMS 6/BPM Suite 6/RHDM 7? .

Smart Router Servers view error [RHPAM-1029]

If a Smart Router is registered in the controller and you select one of the deployment units on the Smart Router in the **Servers** view, an error occurs. Do not manage deployment units on the Smart Router. Instead, manage the server configurations of the connected Process Servers directly.

Cannot use spaces in passwords [RHPAM-1135]

Do not use passwords containing spaces if the password will be used as a parameter in the startup script, for example do not use **test space!**.

CHAPTER 5. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.0.1

Red Hat Process Automation Manager 7.0.1 provides increased stability and fixed issues listed in this section.

5.1. BUSINESS CENTRAL

- Support up to 12 arguments in RHS of executable model [RHPAM-1190]
- Duplicated or imported project should use the suffix "-2" instead of " [2]" [RHPAM-1176]
- Library content is not visible when Projects link is clicked [RHPAM-1110]
- Manage list views to do not apply default filters [RHPAM-1109]
- Process Designer task name is for internal use and must not be editable for ServiceTasks [RHPAM-1104]
- Space screen is sometimes shown after an asset is closed [RHPAM-1091]
- EJB Timer data source works only for MySQL and only on the default port [RHPAM-1178]
- DRL integration tests fail with the executable model [RHPAM-1162]
- Executable model tests from the **org.drools.compiler.integrationtests.operators** package fail when run with the executable model [RHPAM-1161]
- Include Japanese translation for RHPAM [RHPAM-1138]
- Cannot use spaces in passwords [RHPAM-1135]
- Translation issue on Task Inbox screen [RHPAM-1127]
- Clicking the **Refresh** button on the Master Details panel makes the first tab the active tab [RHPAM-1126]
- Indexing storage can be very slow and might time out [RHPAM-1083]
- Some Process Designer properties are not disabled in View mode [RHPAM-1051]
- Manually-added dependencies do not show up in the Dependencies list [RHPAM-1039]
- Business Central and Business Central Monitoring do not apply the correct style to the navigation bar [RHPAM-985]
- The change from server "template" and "container" to "configuration" and "deployment unit" is not consistent across UI [RHPAM-955]
- Newly created persistable data objects are not automatically added to the list of Project Persistable Data Objects [RHPAM-938]
- Milestones: Tooltip with sort order hangs after sorting [RHPAM-912]
- Tasks: First Due Date update writes null to task log [RHPAM-609]

- Switching to Project view redirects to the list of assets [RHPAM-556]
- Error appears after using the Contributors tab [RHPAM-535]
- It is possible to create two project with the same name when using Duplicate [RHPAM-533]
- In Process Designer, open an XML editor instead of a 'sorry' screen when a process cannot be opened [RHPAM-447]
- Process Designer Toolbox icons are cut-off and animations are slow [RHPAM-431]

5.2. PROCESS SERVER

- KieScanner does not load new rules [RHPAM-1124]
- Execution Servers: ContainerNotFound error thrown when removing the container [RHPAM-899]
- KieServices.Factory.get() returns null [RHPAM-1150]

5.3. RED HAT PROCESS AUTOMATION MANAGER ON OPENSHIFT

- Broken link to rhpam70-businesscentral-indexing-openshift in image stream file [RHPAM-1163]
- Maven repo parameter issues in OpenShift templates [RHPAM-1166]
- Remove the duplicated KIE_SERVER_BYPASS_AUTH_USER required parameter from KIE server template [RHPAM-1152]
- AMQ readiness check fails on the rhpam70-authoring-ha OpenShift template [RHPAM-1141]
- Templates: Remove Smart Router port/protocol configuration [RHPAM-1119]
- Templates: Set as non-bindable [RHPAM-1117]
- Smart Router Servers view error [RHPAM-1029]
- Case audit: Duplicated entries for sub-process [RHPAM-877]

CHAPTER 6. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.0.2

Red Hat Process Automation Manager 7.0.2 provides increased stability and fixed issues listed in this section.

In addition, this is the first release that includes the patch distribution which enables you to patch your existing installation. For information about patching, see *Patching Red Hat Process Automation Manager 7.0*.

6.1. BUSINESS CENTRAL

- Projects are visible even if they are disabled for that user. [RHPAM-1139]
- The execution server URLs in Business Central are not functional. [RHPAM-1309]
- In the Manage Process Definitions window, if you sort the Name column, initial upper case letters preceder lower case letters. [RHPAM-1182]
- The following error randomly appears in Business Central: **Unable to complete your request. The following exception occurred: Error during Query!** [RHPAM-828]
- When importing projects from remote Git repositories, hooks are not added. [RHPAM-1296]
- When you maximize the editor of an asset to fit the full screen, alerts (messages) are closed, but the Project Explorer does not collapse. [RHPAM-563]
- If you open a guided rules asset in standalone mode, an error appears. [RHPAM-990]
- Business Central does not deploy if the Red Hat JBoss EAP home contains a space in the name.
 [RHPAM-1099]
- On Windows Internet Explorer 11, in the standalone editor, an error occurs when the **Validate** button is clicked. [RHPAM-1133]
- On Windows Internet Explorer 11, in the standalone editor, an error occurs when DRL is saved. [RHPAM-1136]
- Complex enumerations are not selected in a BRL multi-value constraint. [RHPAM-555]
- The names of built-in sample projects are invalid. [RHPAM-1221]
- The **New Project** screen does not block the **Create Project** button while it is loading, making it possible to create multiple projects at one time. [RHPAM-1331]
- Clicking the icon on the upper left corner does not take users to the Home page. [RHPAM-1142]
- Disable the Process Server links in the Execution Servers view when a Process Server is not available. [RHPAM-1125]
- Assets cannot be created in the default package. [RHPAM-1389]
- It is not possible to import a Git repository created in Red Hat Process Automation Manager 7.0.0 into Red Hat Process Automation Manager 7.0.1. [RHPAM-1413]

- In Internet Explorer, when you click a package in the new **Asset** menu, the menu does not display all of the packages. [RHPAM-567]
- Users cannot download text files from Business Central. [RHPAM-1248]
- Processes and Task dashboards do not show data from undeployed KIE containers. [RHPAM-131]
- Project and Deployment process definitions name coupled. [RHPAM-1257]
- AsyncMode does not wait on inclusive converging gateway. [RHPAM-1346]
- It is not possible to migrate processes with a recurring timer. [RHPAM-1122]
- Task assignment fails if an actor contains a variable with an empty string. [RHPAM-1209]
- The **IllegalArgumentException: Unknown node id** error occurs when migrating MultiInstance. [RHPAM-1096]
- The KIE WB REST **getJob** randomly returns error code **410** with the status **Gone**. [RHPAM-863]

6.2. PROCESS SERVER

- If the row count exceeds 60,000 in the **variableinstancelog** table, the server will not start. [RHPAM-1132]
- After the project is successfully deployed to Process Server, the value for Project Name and Deployment is the same in the Process Definitions perspective. [RHPAM-1157]
- Sybase 16.0 data cannot be loaded into the Process Instances perspective. [RHPAM-1043]
- Beta node indexes do not support type coercion. [RHPAM-1327]
- A **NullPointerException** occurs if you use a **forall** after an **or** that has another existential operator. [RHPAM-1352]
- Duplicated variable names in different scopes breaks the executable model generation. The **accumulateTest** and other tests fail with the executable model. [RHPAM-1305]
- When generating the executable model, the pattern type of the accumulated result is overwritten by the accumulate function type. [RHPAM-1251]
- The **from accumulate** expression causes a validation error in the guided decision table editor. [RHPAM-1288]
- The executable model does not support parsing of a constraint containing a ternary operator. [RHPAM-1256]
- The GuidedScoreCardIntegrationJavaClassesOnClassPathTest.testIncrementalCompilation test fails on Microsoft Windows or Apple MacIntosh. [RHPAM-1121]
- In the executable model, type coercion does not work for the numeric boxed type. [RHPAM-1239]

- When two or more rules have the same from clause that triggers node sharing of the from clause, and use fact classes that do not have hashCode() and equals() methods implemented, a rule can fire unexpectedly. [RHPAM-1077]
- The executable model does not generate **getter** and **setter** methods for declared types with more than 64 fields. [RHPAM-1273]
- Support constraints with up to 12 arguments in executable model. [RHPAM-1317]
- The **WorkflowRuntimeException** wraps only the bottom root cause exception in **RuleSetNodeInstance**. [RHPAM-1189]
- In a Smart Router cluster, if you have more than one Process Server with the same URL, the **ConcurrentModificationException** error occurs when you stop one of the Process Servers. [RHPAM-1384]
- If file watcher is enabled and the file to be watched is not yet available, an exception is thrown and the watcher thread is interrupted. [RHPAM-1382]
- When a JPA entity is used as a case file variable, it is stored correctly but each retrieval of the
 case file fails at loading because it is missing the entity manager in
 JPAPlaceholderResolverStrategy. [RHPAM-1424]

6.3. RED HAT PROCESS AUTOMATION MANAGER ON OPENSHIFT

- Specify the **KIE_SERVER_PORT** parameter in all templates where the **KIE_SERVER_HOST** parameter can be set. [RHPAM-1357]
- If Process Server is connected to the PostgreSQL database and that database is restarted, Process Server cannot reconnect to the restarted database. [RHPAM-1252]
- In the Process Server templates, users can configure the connection to the controller with the **KIE_SERVER_CONTROLLER_SERVICE** property, but the Maven repository from Business Central cannot be connected to the Process Server with the service name. [RHPAM-1236]
- Databases in the Red Hat Process Automation Manager templates do not have any probes defined. [RHPAM-1235]
- A container that one user selects is changed if another users logs in to a different window and selects a different container. [RHPAM-1107]
- Include high-availability environments in the Business Central image descriptor. [RHPAM-1243]
- Add the JDBC driver extensions to the OpenShift templates zip file. [RHPAM-1286]
- Update the Red Hat JBoss EAP base image for Red Hat Process Automation Manager from 7.1.2 to 7.1.3. [RHPAM-1398]
- Align the value of the **RHPAM_TX_ISOLATION** environment variable on all templates. [RHPAM-1140]
- If concurrent requests to several Smart Routers to register KIE servers for container occur, some Process Servers do not receive the config file after synchronization. [RHPAM-1149]
- Provide LDAP authentication support in Red Hat Process Automation Manager. [RHPAM-1210]
- Roles are not configured when using LDAP in OpenShift. [RHPAM-1422]

6.4. FORM MODELER

- Add standalone perspectives for process and task forms. [RHPAM-1299]
- When you create a form and then close it or delete it, instead of returning to the **Asset** list, you are returned to the **Asset Creation** perspective. [RHPAM-1222]
- It is possible to add an empty label or value to new **RadioGroups**, **ListBoxes**, and **MultipleSubform** instances. [RHPAM-462]
- When you make changes to options in RadioGroups, ListBoxes, and MultipleSubform instances and click Cancel, the changes persist in the Field Properties dialog box when it reopens. [RHPAM-457]
- In **MultipleSubform** instances, some values are not transfered to the next task. [RHPAM-453]

6.5. PROCESS DESIGNER

- After processes are imported, an out of bounds error message appears and the keyboard no longer listens for events. [RHPAM-994]
- Process name values are not set as the name for the new process. [RHPAM-470]
- It is possible to morph from a sub-process into a task type, but it is not possible to morph back to a sub-process. [RHPAM-430]
- With Process Designer, a copy of the timer is created when you copy text from the **Name** field to a **Documentation** field. [RHPAM-755]
- Authoring shows a false warning about unsaved changes when saving a reusable sub-process. [RHPAM-1019]
- When moving or changing an existing element of a process diagram, the An error has occurred while trying to lock this asset message appears. [RHPAM-1250]
- Provide support for image strips. [RHPAM-1281]
- When you try to clear a diagram, an error occurs. [RHPAM-1268]
- In an ad-hoc process, if you append an event using the quick menu, an error occurs. [RHPAM-886]
- KIE playground examples do not display correctly and the process SVG files must be replaced. [RHPAM-1174]
- Users cannot import the mortgages process. [RHPAM-1246]
- Users cannot enable or disable HiDPI from the Business Central settings menu. [RHPAM-1343] [RHPAM-1216]
- Users cannot permanently set the **Cancel Activity** property. [RHPAM-790]
- When using the context menu to add nodes to an embedded sub-process, this operation fails if there is not enough space in the embedded sub-process to add the node. [RHPAM-426]
- In Internet Explorer, when you select any node from the palette and immediately move it with mouse pointer, the event is placed under the palette window. [RHPAM-1040]

- The **CompletionCondition** of the MI subprocess is not stored. [RHPAM-1010]
- When you create a Process Server container, it does not load the lastest SNAPSHOT. [RHPAM-282]
- An unexpected error occurs after a second Process Designer is closed. [RHPAM-1400]
- Performance improvements. [RHPAM-1158][RHPAM-1159]
- Process Designer settings should not be available on the KIE Worbench Runtime distribution.
 [RHPAM-1129]

6.6. CASE MANAGEMENT SHOWCASE APPLICATION

The case list in the Case Management Showcase application is missing the refresh option. [RHPAM-1183]

6.7. RED HAT BUSINESS OPTIMIZER

Backport the **optaplanner-persistence-jpa** dependency bloat fix. [RHPAM-1242]

APPENDIX A. VERSIONING INFORMATION

Documentation last updated on: Monday, October 1, 2018.