Abstract

This document contains release notes for Red Hat Process Automation Manager 7.2.
# Table of Contents

PREFACE ................................................................................................................. 4

CHAPTER 1. PRODUCT OVERVIEW ........................................................................... 5

CHAPTER 2. NEW FEATURES ...................................................................................... 6

2.1. CONTAINER SUPPORT .................................................................................. 6

2.2. BUSINESS APPLICATION GENERATOR ...................................................... 6

2.3. BUSINESS CENTRAL .................................................................................... 6

2.3.1. Experimental properties administration page .............................................. 6

2.3.2. Enhanced process instance logs view ......................................................... 6

2.3.3. Support for SSH Keystore ........................................................................... 7

2.4. PROCESS ENGINE .......................................................................................... 7

2.4.1. Narayana transaction manager ................................................................. 7

2.5. DECISION ENGINE ....................................................................................... 7

2.5.1. Rule units ..................................................................................................... 7

2.5.2. Multithreaded evaluation in the decision engine ........................................... 8

2.5.3. Ability to declaratively set calendars in a KIE session ............................... 8

2.6. PROCESS SERVER ......................................................................................... 9

2.6.1. ElasticSearch connector for runtime events ............................................... 9

2.6.2. Swagger interface for Process Automation Manager controller REST API .... 9

2.6.3. Decision Model and Notation (DMN) models ........................................... 9

2.6.4. Executable models in Decision Model and Notation (DMN) projects ..... 10

2.6.5. Deactivation of KIE containers on Process Server .................................... 10

2.6.6. Process Server support for rendering forms ............................................ 10

2.7. RED HAT BUSINESS OPTIMIZER ............................................................. 11

2.7.1. Defining weights for constraints ............................................................... 11

2.8. OPENSHEET ................................................................................................. 11

2.8.1. LDAP role mapping on OpenShift deployments ...................................... 11

2.8.2. KJAR services in immutable OpenShift deployments ............................. 11

2.8.3. CORS support in trial deployment on OpenShift ...................................... 11

2.9. PROCESS DESIGNER ................................................................................... 11

2.9.1. Case management properties ................................................................. 11

2.9.2. Business Central compensation events .................................................... 11

2.9.3. Business Central resolution attribute ...................................................... 12

2.9.4. Labels on sequence flows ....................................................................... 12

CHAPTER 3. TECHNOLOGY PREVIEW ..................................................................... 13

CHAPTER 4. KNOWN ISSUES .................................................................................. 14

4.1. INSTALLER .................................................................................................... 14

4.2. BUSINESS CENTRAL ................................................................................... 15

4.3. PROCESS SERVER ....................................................................................... 17

4.4. MAVEN REPOSITORY .................................................................................. 17

4.5. OPENSHEET ................................................................................................. 18

4.6. PROCESS DESIGNER ................................................................................... 18

CHAPTER 5. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.2.0 19

5.1. INSTALLATION ............................................................................................ 19

5.2. BUSINESS CENTRAL .................................................................................. 19

5.3. PROCESS SERVER ....................................................................................... 19

5.4. OPENSHEET ................................................................................................. 20

5.5. DECISION MODEL AND NOTATION ........................................................... 20
PREFACE

These release notes list new features, features in technology preview, known issues, and issues fixed in Red Hat Process Automation Manager 7.2.
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 7.2 provides increased stability, several fixed issues, and a few new features.

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

**NOTE**

Red Hat Process Automation Manager requires Java 8 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. NEW FEATURES

This section highlights new features in Red Hat Process Automation Manager 7.2.

2.1. CONTAINER SUPPORT

You can install Red Hat Process Automation Manager on Red Hat JBoss Web Server 5.0.1 or later.

You can install Red Hat Process Automation Manager on Red Hat JBoss EAP 7.2.

**NOTE**

Red Hat JBoss EAP 7.1 is not supported with Red Hat Process Automation Manager 7.2.

2.2. BUSINESS APPLICATION GENERATOR

You can use the [http://start.jbpm.org](http://start.jbpm.org) website to generate a Red Hat Process Automation Manager business application based on Spring Boot starters. After you create and configure your business application, you can deploy it to an existing service or to the cloud, through OpenShift.

2.3. BUSINESS CENTRAL

2.3.1. Experimental properties administration page

Business Central now includes an experimental features administration page which is disabled and hidden by default. When enabled, this page displays a list of some experimental features that are in technology preview. You can enable or disable individual features from this page. To enable the experimental features administration page, set the value of the `appformer.experimental.features` property to `true`.

**NOTE**

Some experimental features are enabled by default and might not be listed on the experimental properties administration page.

2.3.2. Enhanced process instance logs view

The Business Central process instance logs view has been enhanced. This view enables you to view all of the log events of a process instance based on a timeline of events. On the timeline, node entered events are highlighted in blue whereas node-entered events are greyed out. By default, log events are displayed in groups of ten. You can now view additional human task node details such as ID, state, and owner.

Furthermore, you can now filter process instance logs by the following categories:

- Event type (such as, Node Entered and Node Completed)
- Event node type (such as, All, Human Tasks, Start Nodes, End Nodes, Action Nodes, Milestones, Sub Processes, Rule Sets, and Work Items)

For more information about process instance logs, see [Interacting with processes and tasks](#).
2.3.3. Support for SSH Keystore

Red Hat Process Automation Manager uses the SSH protocol for user authentication. It now has a configurable default SSH keystore (where you can register multiple public keys), extensible APIs (for custom implementations), and support for multiple SSH public keys formats.

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

2.4. PROCESS ENGINE

2.4.1. Narayana transaction manager

Red Hat Process Automation Manager now supports DBCP 2 database connection pooling with Narayana transaction manager.

2.5. DECISION ENGINE

2.5.1. Rule units

Red Hat Process Automation Manager 7.2 now supports rule units that you can use to partition a rule set into smaller units, bind different data sources to those units, and then execute the individual unit. A rule unit consists of data sources, global variables, and rules.

You can define a rule unit by implementing the RuleUnit interface as shown in the following example:

Example rule unit class

```java
package org.mypackage.myunit;

public static class AdultUnit implements RuleUnit {
    private int adultAge;
    private DataSource<Person> persons;

    public AdultUnit() {}

    public AdultUnit( DataSource<Person> persons, int age ) {
        this.persons = persons;
        this.age = age;
    }

    // A DataSource of Persons in this rule unit
    public DataSource<Person> getPersons() {
        return persons;
    }

    // A global variable valid in this rule unit
    public int getAdultAge() {
        return adultAge;
    }

    // --- life cycle methods

    @Override
    public void onStart() {
```
2.5.2. Multithreaded evaluation in the decision engine

In Red Hat Process Automation Manager 7.2, the decision engine can now evaluate more business rules in parallel by dividing the RETE and PHREAK pattern-matching algorithms in independent partitions and evaluating them in parallel.

Multithreaded evaluation is disabled by default in Red Hat Process Automation Manager. To enable multithreaded evaluation for a parallel KIE base, use one of the following options:

- Enable multithreaded evaluation with `KieBaseConfiguration`:

```java
KieServices ks = KieServices.Factory.get();
KieBaseConfiguration kieBaseConf = ks.newKieBaseConfiguration();
kieBaseConf.setOption(MultithreadEvaluationOption.YES);
KieBase kieBase = kieContainer.newKieBase(kieBaseConf);
```

- Enable the multithreaded evaluation system property:

```java
drools.multithreadEvaluation = true
```

**WARNING**

Rules using queries, salience, or agenda groups are currently not supported by the parallel decision engine. If these rule elements are present in the KIE base, the compiler emits a warning and automatically switches back to single-threaded evaluation. However, in some cases, the decision engine might not detect the unsupported rule elements and rules might be evaluated incorrectly. For example, the decision engine might not detect when rules rely on implicit salience given by rule ordering inside the DRL file, resulting in incorrect evaluation due to the unsupported salience attribute.

2.5.3. Ability to declaratively set calendars in a KIE session

In Red Hat Process Automation Manager 7.2, you can now declaratively set one or more calendars on a KIE session through the `kmodule.xml` configuration file, as shown in the following example:

```xml
<ksession name="KSession1">
  <calendars>
    <!-- Calendar definitions go here -->
  </calendars>
</ksession>
```
The type is the name of the class that implements the `org.kie.api.time.Calendar` interface.

### 2.6. PROCESS SERVER

#### 2.6.1. ElasticSearch connector for runtime events

This connector enables you to easily integrate with ElasticSearch to push data from the Process Server and take advantage of the searching capabilities of the ElasticSearch server.

#### 2.6.2. Swagger interface for Process Automation Manager controller REST API

Red Hat Process Automation Manager 7.2 provides a Swagger web interface for the Process Automation Manager controller REST API. You can use this Swagger interface instead of a standalone REST client or curl utility to interact with your Process Server templates (configurations), Process Server instances (remote servers), and associated KIE containers (deployment units) in Red Hat Process Automation Manager.

To access the Swagger interface for the Process Automation Manager controller REST API, you can either start Business Central, which contains a built-in Process Automation Manager controller, or run the headless Process Automation Manager controller application and navigate to `http://SERVER:PORT/CONTROLLER/docs` in a web browser.

Example Swagger URLs:

- `http://localhost:8080/my-controller/docs` (for a headless Process Automation Manager controller)

For more information about the Process Automation Manager controller REST API, see *Interacting with Red Hat Process Automation Manager using KIE APIs*.

#### 2.6.3. Decision Model and Notation (DMN) models

Red Hat Process Automation Manager 7.2 provides both design and runtime support for DMN 1.2 models at conformance level 3, and includes enhancements and fixes to FEEL and DMN model components to optimize the experience of implementing DMN decision services with Red Hat Process Automation Manager. You can design your DMN models directly in Business Central or import existing DMN models into your Red Hat Process Automation Manager projects for deployment and execution.

**NOTE**

The DMN designer in Red Hat Process Automation Manager 7.2 is a Technology Preview feature and is disabled by default in Business Central. To enable the DMN designer preview in Business Central, in the upper-right corner of the window, click **Settings → Roles**, select a role from the left panel, click **Editors → DMN Designer → Read**, and click **Save** to save the changes.
For more information about DMN support in Red Hat Process Automation Manager 7.2, see *Designing a decision service using DMN models*.

### 2.6.4. Executable models in Decision Model and Notation (DMN) projects

In Red Hat Process Automation Manager 7.2, you can now use the **kie-maven-plugin** build component to generate DMN executable model classes and compile them in a Red Hat Process Automation Manager project (KJAR file). DMN executable model classes are similar to executable rule models used for rule assets. This support enables DMN decision table logic in DMN projects to be evaluated more efficiently.

To enable executable models in DMN projects, add the required **kie-dmn-core** dependency in the *pom.xml* file:

```
<dependency>
    <groupId>org.kie</groupId>
    <artifactId>kie-dmn-core</artifactId>
    <scope>provided</scope>
</dependency>
```

To build a DMN project with DMN model compilation enabled, navigate to your Maven project directory in a command terminal and run the following command:

```
mvn clean install -DgenerateDMNModel=YES
```

Alternatively, you can define the DMN model property directly in the *pom.xml* file:

```
<project>...
    <properties>
        <generateDMNModel=YES></generateDMNModel>
    </properties>
    ...
</project>
```

For more information about configuring executable models for your Maven or Java project, see *Packaging and deploying a Red Hat Process Automation Manager project*.

### 2.6.5. Deactivation of KIE containers on Process Server

You can now deactivate KIE containers on Process Server. This enables you to stop the creation of new process instances from a specified container while enabling you to continue working on existing process instances and tasks. The deactivated container can be activated again. This feature does not require server restarts.

### 2.6.6. Process Server support for rendering forms

New Process Server support for rendering forms enables you to interact with the Process Server to perform the following operations:

- Render process forms: Used to start new instances
- Render case forms: Used to start new case instances, including data and role assignments
- Render user task forms: Used to interact with user tasks, including life cycle operations

Rendered forms include buttons that perform all operations based on context. For example, if a user task is in the progress state, you can use the Stop, Release, Save, and Complete buttons to interact with the process.

2.7. RED HAT BUSINESS OPTIMIZER

2.7.1. Defining weights for constraints

In Red Hat Business Optimizer, you can now define weights for constraints inside a class marked with the @ConstraintsConfiguration annotation. You can assign weights to constraints by their Java or DRL name of the constraint, without needing to modify the code of the constraints.

2.8. OPENShift

2.8.1. LDAP role mapping on OpenShift deployments

When deploying Red Hat Process Automation Manager on Red Hat OpenShift Container Platform, you can now configure LDAP role mapping.

2.8.2. KJAR services in immutable OpenShift deployments

When deploying Red Hat Process Automation Manager on Red Hat OpenShift Container Platform in an immutable deployment, you can now create Process Servers that run services from KJAR files, not from source.

2.8.3. CORS support in trial deployment on OpenShift

In a trial deployment on Red Hat OpenShift Container Platform, you can use client-side JavaScript applications, served from a different domain, to access a Process Server.

2.9. PROCESS DESIGNER

2.9.1. Case management properties

The following new properties have been added for case management projects and are related to modeling of case definitions:

- **Ad-hoc**: Supports optional modeling paths that can be recommended to users or automatically triggered by rules. Must be set to true to show the case management properties.

- **Case ID Prefix**: Provides the option to add a prefix for case IDs. If no prefix is provided, the case ID defaults to CASE-XXX where XXX is an automatically generated number.

- **Case File**: Responsible for collecting all data related to a case.

- **Case Roles**: Defines roles and cardinality at the process level.

2.9.2. Business Central compensation events
Process managers use compensation events to roll back the actions that were completed during execution. Exception handling activities associated with the normal activities in a business transaction are triggered by compensation events.

Three types of compensation events are available in Business Central:

- **Intermediate boundary (catch) events**: Events that are attached to activities, such as tasks that may cause an exception. These events are then associated with a task that is executed if the boundary event catches a thrown compensation signal.

- **Start (catch) events**: Events that are used when defining a compensation event subprocess, which requires them in order to be able to catch a (thrown) compensation signal.

- **Intermediate or end (throw) events**: Events that are used to throw compensation events. These events often follow decision nodes that determine whether the workflow execution succeeded up to a specific point in the process. If not, the path including the intermediate or end event is selected to trigger compensation for the activities that failed.

### 2.9.3. Business Central resolution attribute

A new diagram resolution attribute has been added to the Business Central legacy process designer to enable users to successfully import a Business Process Model and Notation (BPMN) file and convert it to a Java Business Process Model (jBPM) file while retaining the correct scale. Note that this feature has not been added to the new process designer.

### 2.9.4. Labels on sequence flows

New support for showing the label name for sequence flows coming to and from gateways, nodes, tasks, and end events. You can now click any sequence flow line to view the label name.
CHAPTER 3. TECHNOLOGY PREVIEW

This section lists features that are in technology preview in Red Hat Process Automation Manager 7.2. Business Central includes an experimental features administration page which is disabled by default. To enable this page, set the value of the appformer.experimental.features property to true.

IMPORTANT

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

For more information on Red Hat Technology Preview features, see Technology Preview Features Scope.

- New Decision Model and Notation (DMN) designer in Business Central. You can use the new DMN designer in Business Central to design DMN decision requirements diagrams (DRDs) and define decision logic for a complete and functional DMN decision model. Red Hat Process Automation Manager 7.2 provides both design and runtime support for DMN 1.2 models at conformance level 3, and includes enhancements and fixes to FEEL and DMN model components to optimize the experience of implementing DMN decision services with Red Hat Process Automation Manager. For more information about DMN support in Red Hat Process Automation Manager 7.2, see Designing a decision service using DMN models.

- Optaweb employee rostering.

- High-availability authoring on Red Hat JBoss EAP (on premise and with OpenShift). Configuration of Business Central for high availability is currently technology preview. Search and messaging technology used to enable search feature is considered an implementation detail. Red Hat Process Automation Manager may choose to replace that technology in the future while preserving the capability offered.

- A new Test Scenario (Preview) editor that enables you to add test scenarios to verify the accuracy of previously created rules, decision tables, and so on.
CHAPTER 4. KNOWN ISSUES

This section lists known issues with Red Hat Process Automation Manager 7.2.

4.1. INSTALLER

When installing Process Server and Business Central using the Red Hat Process Automation Manager installer, the default placeholder for the controller URL should contain business-central [RHPAM-1774]

Issue: If you use the Red Hat Process Automation Manager installer to install both Business Central and Process Server, on the Advanced Configuration page the default value for Process Server is incorrect.

Steps to reproduce:

1. Use the installer to install Red Hat Process Automation Manager on Red Hat JBoss EAP.
2. Accept all default selections.


The controller URL is not updated in the standalone.xml file if only Process Server is installed [RHPAM-1781]

Issue: When you run the Red Hat Process Automation Manager installer and you specify a URL for the controller, the URL is not updated in the Red Hat JBoss EAP standalone.xml and standalone-full.xml files.

Steps to reproduce:

1. Run the Red Hat Process Automation Manager installer.
2. Specify an Red Hat JBoss EAP installation for container.
3. Select only Process Server to install.
4. Select Advanced Configuration and update controller URL.
5. Complete the installation.
6. Open the Red Hat JBoss EAP standalone.xml or standalone-full.xml file and find the controller URL.

Expected result: The value of the controller URL property is the URL that you entered during installation.

Actual result: The value of the controller URL property is the default value.

### 4.2. BUSINESS CENTRAL

**Red Hat Decision Central 7.0 and earlier and BRMS 6.4 and earlier repositories are not fully migrated when imported into Business Central** [RHPAM-1768]

Issue: Red Hat Decision Central 7.0 and earlier and BRMS 6.4 and earlier repositories (legacy structure repositories) that contain more than one project can be imported into Business Central even though they are not supported. When these repositories are imported, they are not fully migrated and will not perform as expected.

Steps to reproduce:

1. In Red Hat Process Automation Manager 7.0.0 or earlier, create a repository with two projects.
2. Copy the repository location from the .niogit directory.
3. Open Red Hat Process Automation Manager 7.2.0.
4. Click **Library → Import Project**.
5. Paste the repository location and select both projects.

Actual result: The projects are imported but will not perform as expected.

Workaround: Use the patching and upgrading tool to import Red Hat Decision Central 7.0 and earlier and BRMS 6.4 and earlier repositories, as described in **Patching and upgrading Red Hat Process Automation Manager 7.2**.

**A TimeoutException error occurs when logging in to a clustered Business Central** [RHPAM-1749]

Issue: On a clustered Business Central instance, when logging in to Business Central an exception is thrown.

Steps to reproduce:

1. Create a Business Central cluster configuration that uses ElasticSearch and AMQ Broker, and that has two standalone Business Central nodes.
2. Uncomment the `<distributable/>` tag on both Business Central nodes.
3. Log in to Business Central on one of the nodes.

Actual result: An exception is thrown.

Workaround: See the workaround in the **JBoss EAP 7 does not process requests for a session in parallel** article.

**Red Hat Process Automation Manager integrated with Red Hat Single Sign-On ignores user SSH key when working with Git** [RHPAM-1683]

Issue: With Red Hat Process Automation Manager integrated with Red Hat Single Sign-On, if you try to clone a project created by a user that has an SSH key set, you cannot clone it without the SSH key password. The SSH key is ignored.
Steps to reproduce:

1. Integrate a Red Hat Process Automation Manager installation with Red Hat Single Sign-On, as described in [Integrating Red Hat Process Automation Manager with Red Hat Single Sign-On](#).

2. Use the Red Hat Process Automation Manager Admin → SSH Keys page to add a public SSH key.

3. Enter the following command in a terminal to add a private SSH key to your ssh-agent, where `<SSH-KEY-PATH>` is the path to the SSH private key:

   ```bash
   $ ssh-add <SSH-KEY-PATH>
   ```

4. Use SSH to clone the project, for example:

   ```bash
   git clone ssh://user@localhost:8001/space/project
   ```

Expected result: The project is cloned.

Actual result: You cannot clone the project unless you use the user’s password.

**Several Errai projects contain XSD-invalid pom.xml file** [RHPAM-1742]

Issue: Maven repository validation identified the following pom.xml files in the Errai project, which are invalid according to Maven POM XSD:


Workaround: None.

**kie-soup-dataset-elasticsearch is an XSD-invalid pom.xml file** [RHPAM-1743]

Issue: Maven repository validation identified the kie-soup-dataset-elasticsearch pom.xml file as invalid according to Maven POM XSD.

Workaround: None.

**Two ClassNotfoundExceptions errors are thrown the first time you open the Business Central Data Sources perspective** [RHPAM-1741]

Issue: When you access the Business Central Data Sources perspective for the first time after a clean installation, the following ClassNotfoundExceptions errors appear in the server.log file:

- `org.guvnor.structure.repositories.NewBranchEvent`
- `org.guvnor.structure.repositories.RepositoryUpdatedEvent`

Steps to reproduce:

1. Log in to Business Central with the admin role.
2. Go to Admin → Datasources.

Actual result: As soon as you click the Data Sources perspective, two errors appear in Red Hat JBoss EAP console.

Expected result: No errors appear.

Workaround: Restart Business Central and go to Admin → Datasources. These errors only appear the first time you click the perspective after installation.

4.3. PROCESS SERVER

A container is removed from the UI even though it was not possible to stop it [RHPAM-1698]

Issue: A container cannot be stopped if it is blocked by an active process instance. However if you attempt to stop a blocked container from the UI, the action throws an exception and the container disappears.

Steps to reproduce:

1. Create a project with a process.
2. Deploy the project and start the process.
3. Go to Menu → Deploy → Execution Servers and stop the container.

Actual result: The container is removed from the UI even though it is still running.

4.4. MAVEN REPOSITORY

Missing JWS dependencies in the offline Maven repositories distribution [RHPAM-1715]

Issue: The following key dependencies required to install Process Server on Red Hat JBoss Web Server are missing from the offline Maven repository.

```
org.jboss.integration:narayana-tomcat
org.jboss:jboss-transaction-spi
```

If you are performing a manual installation, you must copy the files described in the workaround.

Workaround:

1. Use the installer to install Red Hat Process Automation Manager on Red Hat JBoss Web Server.
2. In a terminal, change directory to the `<JWS-HOME>/jws-5.0/tomcat/lib` directory where the installer installed Red Hat Process Automation Manager.
3. Copy the following files from the `<JWS-HOME>/jws-5.0/tomcat/lib` directory to the `<JWS-HOME>/jws-5.0/tomcat/lib` directory of the target Red Hat JBoss Web Server location.

```
narayana-tomcat-1.0.0.Final-redhat-1.jar
jboss-transaction-spi-7.6.0.Final-redhat-1.jar
```
4.5. OPENSIFT

Various errors occur when starting clustered Business Central on OpenShift [RHPAM-1747]

Issue: When clustered Business Central is started on OpenShift using the rhpam72-authoring-ha.yaml template, Business Central sometimes throws various exceptions that cause the pod to restart or the deployment to fail.

Steps to reproduce:

1. Use the rhpam72-authoring-ha.yaml template to deploy Red Hat Process Automation Manager 7.2 images on OpenShift.
2. Check the Business Central log files.

Expected result: No errors appear in the log files.

Actual result: Errors appear in the log files, the pod restarts, or the deployment fails.

Workaround: None.

4.6. PROCESS DESIGNER

In the new process designer, when a process containing another event subprocess is created and saved, the process validation fails [RHPAM-1732]

Issue: In the new process designer, when a subprocess containing another event subprocess is created and saved, the process validation fails.

NOTE

As a result of this issue, you cannot add an event subprocess into another (embedded) subprocess in the new process designer.

Steps to reproduce:

1. Create a process with at least one subprocess.
2. Click Save.

Expected result: The process and subprocesses are saved.

Actual result: The following validation error appears even though all sequence flows have their source and target within the process:

Sequence flow connectors cannot exceed the embedded subprocess' bounds. Both source and target nodes must be in same parent process.
CHAPTER 5. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.2.0

Red Hat Process Automation Manager 7.2.0 provides increased stability and fixed issues listed in this section.

5.1. INSTALLATION

- The Red Hat Process Automation Manager installer fails to parse the `jboss-cli.xml` file with Red Hat JBoss EAP 7.2 and the installation fails [RHPAM-1658]

5.2. BUSINESS CENTRAL

- You cannot edit an existing deployment descriptor configuration [RHPAM-1318]
- Process Instances pages that have a vertical scroll bar flicker after changing window width [RHPAM-1475]
- Opening the legacy case modeler throws a JSON exception [RHPAM-1431]
- Incorrect correlation key is shown in the Red Hat Process Automation Manager Task list [RHPAM-1656]
- You cannot open a task form from the Task inbox in Business Central [RHPAM-1565]
- The data set editor displays the `supports expression reference $null` message as a hint [RHPAM-1581]
- The Asset search button is not positioned properly [RHPAM-1538]
- The input fields in the form for uploading files into Business Central are not aligned [RHDM-4]
- In a test scenario, you cannot select a rule defined in xlsx in EXPECTATION settings [RHDM-728]
- Provide configuration options for paginated views [RHPAM-1339]
- Provide CORS configuration support for Process Server in Red Hat Process Automation Manager [RHPAM-1434]

5.3. PROCESS SERVER

- Marshaller in Process Server retains old classes when KieScanner is updated [RHDM-733]
- Resolve the datasource name for query definitions at run time [RHPAM-1350]
- The REST endpoint for getting errors in a KIE container does not filter the result by container ID [RHPAM-1599]
- An error message appears at the bottom of the Process Server Swagger docs page [RHPAM-1487]
- `vacuumlo` deletes active large objects of jBPM CLOB data [RHPAM-174]
The wrong message appears when a required parameter is not set for DBUserGroupCallbackImpl [RHPAM-1496]

ExecutorServiceImpl.requeue(Long olderThan) doesn’t calculate a correct value [RHPAM-1605]

You can lock without "nowait" for jBPM pessimistic locking [RHPAM-1573]

If you execute a migration service while an asynchronous job of the process instance is running, the migration service successfully finishes but the job fails at AsyncWorkItemHandlerCmdCallback.onCommandDone() [RHPAM-1510]

java.lang.ClassCastException: java.lang.Class cannot be cast to org.kie.api.event.rule.RuleRuntimeEventListener [RHPAM-1626]

5.4. OPENSSHIFT

S2I build fails for a multi-module Maven project [RHDM-747]

Provide support for org.jboss.security.auth.spi.RoleMappingLoginModule in the Red Hat Process Automation Manager Openshift templates [RHPAM-1515]

Make Business Central distributable for high availability [RHPAM-1522]

5.5. DECISION MODEL AND NOTATION

Importing DMN v1.2 model fails with com.thoughtworks.xstream.mapper.CannotResolveClassException [RHDM-618] [RHPAM-1198]
CHAPTER 6. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.2.1

Red Hat Process Automation Manager 7.2.1 provides increased stability and fixed issues listed in this section.

6.1. BUSINESS CENTRAL

- The BRL condition is contained in the (comma separated) list does not produce a multi-select drop-down in the guided decision table or guided rule template [RHPAM-510]
- There are errors in the server log when importing sample projects [RHPAM-1729]
- Cannot turn off SSL verification when cloning a git project [RHPAM-1754]
- A NullPointerException is thrown while creating multiple projects through the curl command [RHPAM-1713]
- Incorrect log order for events occurring within 1 second [RHPAM-1784]
- Incorrect association between ProcessInstanceLog and task data on jbpmHumanTasks and the jbpmHumanTasksWithAdmin data sets [RHPAM-1666]
- Garbled message in the start process form when the OS locale is Japanese [RHPAM-1750]

6.2. DECISION ENGINE

- An error occurs when using the 7.1.x version of the kie-maven-plugin in JBDS [RHDM-802]
- Incremental compilation fails when calling a static method in RHS [RHPAM-1453]

6.3. PROCESS DESIGNER

- Cannot set a sub-process from different project as reusable [RHPAM-1667]
- Cannot attach boundary events to service tasks in the new process designer [RHPAM-1773]
- Issues related to boundary events in the new process designer [RHPAM-1809]

6.4. PROCESS SERVER

- Process Server loses connection to Business Central [RHPAM-1718]
- Variables in the task description are no longer resolved after migration [RHPAM-1688]
- A process does not stop after an exception occurs when the AsyncMode environment entry value is true [RHPAM-1760]

6.5. MAVEN REPOSITORY

- Missing JWS dependencies in offline Maven repository distribution [RHPAM-1715]
6.6. OPENSpraF

- Add HTTPS support to Smart Router OpenShift images [RHPAM-1814]

6.7. UPDATE TOOl

- Add support for Process Server and the Process Automation Manager controller in the update tool [RHPAM-1824]
APPENDIX A. VERSIONING INFORMATION

Documentation last updated on Tuesday, May 28, 2019.