Abstract

This document contains release notes for Red Hat Process Automation Manager 7.8.
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APPENDIX A. VERSIONING INFORMATION
PREFACE

These release notes list new features, features in technology preview, known issues, and issues fixed in Red Hat Process Automation Manager 7.8.
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 7.8 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 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 7.8.

2.1. BUSINESS CENTRAL

2.1.1. Business Central UI updates

The following list provides a summary of the Business Central UI updates:

- Ability to customize rule name and view Rule Name column in a guided decision table
- Ability to specify default values for the new rows in a guided decision table
- Ability to process multiple worksheet decision tables in a spreadsheet workbook

For more information, see Designing a decision service using guided decision tables and Designing a decision service using spreadsheet decision tables.

2.1.2. Enhancement to export to excel

Support for expressions, multiple BRL columns, and rule order hit policy is now available when a guided decision table is exported to excel. For more information, see Designing a decision service using guided decision tables.

2.1.3. Code completion for FEEL expressions improvement in Decision Model and Notation (DMN) designer

When typing a FEEL expression in the boxed literal expression editor, you can now see node names appear as suggestions that you can apply to complete the expression if required.

2.1.4. Support for metadata attributes in BPMN modeler

You can now use Metadata Attributes property and manage the generic attributes of a business process. For more information, see Process designer Business Process Model and Notation (BPMN2) reference guide.

2.1.5. Support for variable tagging in processes

The Red Hat Process Automation Manager process designer now supports variable tagging for the business processes including required, readonly, restricted, and customTags tags. For more information, see Designing business processes in Business Central.

2.1.6. Business Keys for case management

Red Hat Process Automation Manager 7.8 includes additional support for further customizing the case identifier generation. For more information, see Designing and building cases for case management.

2.1.7. Full support for process instance migration

Users can apply their migration plan to the running process instance in a specific KIE Server. For more information, see Managing and monitoring business processes in Business Central.
2.1.8. View reusable subprocess from the parent process

Red Hat Process Automation Manager 7.8 provides support to view reusable subprocess from the parent process. Reusable subprocesses appear collapsed within the parent process. You can double-click on the reusable subprocess node to open its diagram from the parent process diagram. For more information, see *Managing and monitoring business processes in Business Central*.

2.1.9. Prediction service for task augmentation

The prediction service for task augmentation is integrated with Open Data Hub Artificial intelligence (AI) and Machine learning (ML) services. There is a proof of concept (POC) available for Fraud Detection.

2.1.10. Support for Security Management actions and updating space components using the REST API

You can now perform Security Management actions and update space components using the REST API:

- Update **description**, **owner**, and **defaultGroupId** of a space
  
  `[PUT] /spaces`

- Return all groups in Business Central
  
  `[GET] /groups`

- Create a group in Business Central
  
  `[POST] /groups`

- Delete a specified group from Business Central
  
  `[DELETE] /groups/{groupName}`

- Return all roles in Business Central
  
  `[GET] /roles`

- Return all users in Business Central
  
  `[GET] /users`

- Return all groups assigned to a specified user
  
  `[GET] /users/{userName}/groups`

- Return all roles assigned to a specified user
  
  `[GET] /users/{userName}/roles`

- Create a specified user with specified roles and groups
[POST] /users

- Change the password of a specified user

[POST] /users/{userName}/changePassword

- Delete a specified user from Business Central

[DELETE] /users/{userName}

- Override the existing groups assigned to a specified user with new groups

[POST] /users/{userName}/groups

- Override the existing roles assigned to a specified user with new roles

[POST] /users/{userName}/roles

- Return all permissions granted to a specified group

[GET] /groups/{groupName}/permissions

- Return all permissions granted to a specified role

[GET] /roles/{roleName}/permissions

- Return all permissions granted to a specified user

[GET] /users/{userName}/permissions

- Update the permissions of a specified group

[Post] /groups/{groupName}/permissions

- Update the permissions of a specified role

[Post] /roles/{roleName}/permissions

For more information, see *Interacting with Red Hat Process Automation Manager using KIE APIs*.

### 2.1.11. Test Scenarios

The test scenarios designer in Business Central now supports the enumeration data type in rule-based test scenarios.

### 2.2. DECISION ENGINE

#### 2.2.1. Executable model lambda externalization optimization
The new executable model optimization improves memory consumption at runtime. It rewrites how the lambdas are generated that are used in the executable model. The lambda externalization is enabled by default. To disable the lambda externalization, use the following key:

- Ddrosels.externaliseCanonicalModelLambda=false

For more information, see Decision engine in Red Hat Process Automation Manager.

2.3. PROCESS ENGINE

2.3.1. Start a business process from a specific node

You can now start a business process from a specific node after the business process is terminated.

2.3.2. New notification listener properties

Red Hat Process Automation Manager 7.8 includes two new jBPM properties. These org.kie.jbpm.notification_listeners.include and org.kie.jbpm.notification_listeners.exclude properties are used to enable and disable notification listeners.

2.3.3. OR operator for custom queries

Red Hat Process Automation Manager 7.8 includes an OR operator to define query filters.

2.4. RED HAT BUSINESS OPTIMIZER

2.4.1. Red Hat Business Optimizer Constraint Streams API

The Constraint Streams API is now fully supported.

2.4.2. Automatic KIE Server task assigning

KIE Server optimization and business process management capabilities are integrated so human tasks that belong to a process can be automatically assigned to users based on continuous schedule optimization planning.

2.4.3. Vehicle route planning starter application

The vehicle route planning starter application includes user interface improvements, server error reporting, and a new run script.

2.5. RED HAT OPENSSHIFT CONTAINER PLATFORM

2.5.1. Support for deployment on Red Hat OpenShift Container Platform 4.5

You can now deploy Red Hat Process Automation Manager on Red Hat OpenShift Container Platform 4.5.

2.5.2. Custom image creation for KIE Server on Red Hat OpenShift Container Platform
You can now create and use custom KIE Server images with additional JAR or RPM packages. For more information about creating custom images, see Creating custom images for KIE Server in Deploying a Red Hat Process Automation Manager environment on Red Hat OpenShift Container Platform using Operators.

2.5.3. SSH authentication for Git hooks on Red Hat OpenShift Container Platform 4.x

When configuring Git hooks for Business Central on Red Hat OpenShift Container Platform 4.x, you can now configure SSH authentication for access to custom Git repositories. For more information about preparing Git hooks for deployment, see Preparing Git hooks in Deploying a Red Hat Process Automation Manager environment on Red Hat OpenShift Container Platform using Operators.

2.5.4. Metering labels for images in Red Hat OpenShift Container Platform

Red Hat Process Automation Manager images for Red Hat OpenShift Container Platform now have labels that enable the use of OpenShift metering. For more information about using metering, see Metering in Red Hat OpenShift Container Platform documentation.

2.5.5. Support for deploying production environments on Red Hat OpenShift Container Platform 4.x without ReadWriteMany access to a persistent volume

You can now deploy a production environment for Red Hat Process Automation Manager on Red Hat OpenShift Container Platform 4.x with a simplified version of Business Central monitoring that does not require ReadWriteMany access to a persistent volume. For more information about deploying Red Hat Process Automation Manager on Red Hat OpenShift Container Platform 4.x, see Deploying a Red Hat Process Automation Manager environment using the operator in Deploying a Red Hat Process Automation Manager environment on Red Hat OpenShift Container Platform using Operators.

2.5.6. Process instance migration service on Red Hat OpenShift Container Platform 4.x

You can now deploy the Process Instance Migration (PIM) service on Red Hat OpenShift Container Platform 4.x. You can use the PIM service to define the migration between two different process definitions, known as a migration plan. You can then apply the migration plan to the running process instances in a specific KIE Server.

For more information about deploying Red Hat Process Automation Manager on Red Hat OpenShift Container Platform 4.x, see Deploying a Red Hat Process Automation Manager environment using the operator in Deploying a Red Hat Process Automation Manager environment on Red Hat OpenShift Container Platform using Operators.

**NOTE**

Process Instance Migration (PIM) service currently use the limited database support on Red Hat OpenShift Container Platform. The support for external databases will be added in the future release.
CHAPTER 3. SUPPORT AND COMPATIBILITY

This section highlights supported version updates in Red Hat Process Automation Manager 7.8.

3.1. FUSE INTEGRATION

Red Hat Fuse 7.6 is supported on Red Hat JBoss EAP 7.2, whereas Red Hat Process Automation Manager is supported on Red Hat JBoss EAP 7.3. To ensure a stable deployment environment, install Fuse and Red Hat Process Automation Manager on different instances of Red Hat JBoss EAP according to the supported Red Hat JBoss EAP versions.

3.2. SUPPORT FOR RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM 7.3

You can now install Red Hat Process Automation Manager on Red Hat JBoss Enterprise Application Platform 7.3. For more information about installing Red Hat Process Automation Manager on Red Hat JBoss Enterprise Application Platform 7.3, see Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss EAP 7.3.

3.3. SUPPORT FOR RED HAT JBOSS WEB SERVER 5.3

You can now install Red Hat Process Automation Manager on Red Hat JBoss Web Server 5.3. For more information about installing Red Hat Process Automation Manager on Red Hat JBoss Web Server 5.3, see Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss Web Server.

3.4. SUPPORT FOR MYSQL 8.0

You can now deploy Red Hat Process Automation Manager with a MySQL 8.0 data source. For more information, see Configuring JDBC data sources for KIE Server in the Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss EAP 7.3 guide.

3.5. SUPPORT FOR MICROSOFT SQL SERVER 2017

Red Hat Process Automation Manager deployments now supports Microsoft SQL Server 2017 as an external database server for the KIE Server.

3.6. SUPPORT FOR ORACLE DATABASE 19C

Red Hat Process Automation Manager deployments now supports Oracle Database 19c as an external database server for the KIE Server.

3.7. SUPPORT FOR POSTGRESQL 11 AND ENTERPRISEDB POSTGRES ADVANCED SERVER 11

Red Hat Process Automation Manager deployments now support PostgreSQL 11 and EnterpriseDB Postgres Advanced Server 11 as an external database servers for the KIE Server.
CHAPTER 4. DEPRECATED COMPONENTS

The components listed in this section have been deprecated.

4.1. LEGACY TEST SCENARIOS TOOL

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

4.2. SUPPORT FOR RED HAT OPENSSHIFT 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.

4.3. LEGACY PROCESS DESIGNER

The legacy process designer in Business Central was deprecated in Red Hat Process Automation Manager since 7.6.0. The legacy process designer will 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.

4.4. SUPPORT FOR ENTANDO APPBUILDER

From August 31st, 2020, Red Hat Process Automation Manager 7.8 will no longer include entitlements for Entando AppBuilder. Red Hat will not provide the support for Entando AppBuilder thereafter. The feature references and documentation will not be available from 7.9 release.
CHAPTER 5. TECHNOLOGY PREVIEW

This section lists features that are in Technology Preview in Red Hat Process Automation Manager 7.8. Business Central includes an experimental features administration page that is disabled by default. To enable this page, set the value of the `appformer.experimental.features` property to `true`.

IMPORTANT

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

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

5.1. RED HAT OPENShift CONTAINER PLATFORM 4.X DEPLOYMENT ON RESTRICTED NETWORKS

You can use Operator Lifecycle Management to deploy Red Hat Process Automation Manager on Red Hat OpenShift Container Platform 4.x on restricted networks that do not have a connection to the public Internet.

For more information about deployment in a restricted network, see Deploying a Red Hat Process Automation Manager environment on Red Hat OpenShift Container Platform using Operators.

5.2. 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.

5.3. DASHBUILDER RUNTIME

Dashbuilder runtime is a new add-on standalone web application and it is distributed as a WAR to run the dashboards on Red Hat JBoss EAP. If you have access to dashbuilder runtime, you can explore the dashboards created in Business Central. The following list provides a summary of dashbuilder runtime:

- After creating dashboards using datasets and pages, you can export these dashboards from Business Central using custom export.
- You can import, access, and run the dashboards which are exported from Business Central in a dashbuilder runtime.
- Dashbuilder runtime accesses the KIE Server REST API to run the queries from imported KIE Server datasets.

5.4. CASE MODELER

Case modeler in Business Central now includes the new process designer. It provides the option to model a case as a sequence of stages so it is simple to define a case model at high-level. Case modeling supports three types of tasks: human tasks, sub-processes, and sub-cases.
NOTE

The case modeler in Red Hat Process Automation Manager 7.8 is a Technology Preview feature and is disabled by default in Business Central. To enable the case modeler preview in Business Central, in the upper-right corner of the window click **Settings** → **Roles**, select a role from the left panel, click **Editors** → **(New) Case Modeler** → **Read**, and then click **Save** to save the changes.

5.5. PREDICTION SERVICE API

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

5.6. ENHANCED SEARCH CAPABILITIES

Red Hat Process Automation Manager 7.8 provides enhanced search capabilities, including flexible search criteria for tasks, process instances, and cases. For more information, see *Designing and building cases for case management*.

5.7. 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.
CHAPTER 6. KNOWN ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.8.0

This section lists known issues with Red Hat Process Automation Manager 7.8.

6.1. BUSINESS CENTRAL

An error message about missing KIE Server configuration on dashbuilder runtime must be improved [RHPAM-3058]

Issue: The dashbuilder runtime user interface currently displaying a wrong error message about missing KIE Server configuration.

Steps to reproduce:

2. Try to import the KIE Server dataset on dashbuilder runtime.

Expected result: The dashbuilder runtime displays an error message with missing or wrong KIE Server system property.

Actual result: The dashbuilder runtime is not displaying an error message with missing or wrong KIE Server system property.

Workaround: None.

The dodeploy file is not available in the dashbuilder runtime distribution [RHPAM-3031]

Issue: The dashbuilder runtime application comes as a zip folder, containing all the files that are required for the deployment. The zip folder contains a dashbuilder-runtime.war file, but the dashbuilder-runtime.war.dodeploy file is not available in the folder.

Workaround: Update zip folder by adding dashbuilder-runtime.war.dodeploy file as a copy of the folder dashbuilder-runtime.war. Alternatively, the distribution must be a war file and you can directly copy to the deployments folder.

When you export the dashbuilder related data, gradual export displays internal data sources [RHPAM-3021]

Issue: When you export the dashbuilder related data, gradual export displays internal data sources for user selection. It should display the public data sets only.

Workaround: None.

In guided decision table, the verifier feature does not work properly for columns with the Date data type [RHDM-1399]

Issue: In a guided decision table, the verifier feature displays an error when you open a table that contains a specific combination of template keys in the actions column. These template keys are associated with the Date data type.

Workaround: None.

You cannot select the cell of a guided decision table [RHDM-1398]

Issue: You cannot select the data cell of a guided decision table with the help of a mouse.
Steps to reproduce:

1. In Business Central, go to **Menu → Design → Projects** and click **Mortgages**.

2. Open the **Pricing loans** guided decision table.

3. Click the data cell of the guided decision table.

Expected result: You can select the data cell of the guided decision table with the help of a mouse.

Actual result: You cannot select the data cell of the guided decision table with the help of a mouse.

Workaround: You can select the header cell using mouse and then navigate into the data cells with help of keyboard arrow keys.

**You cannot use undo and redo keyboard shortcut keys in the grid editor [RHDM-1397]**

Issue: You cannot perform undo (Ctrl+Z) or redo (Ctrl+Shift+Z) operation in the grid editor with the help of keyboard shortcut keys.

Steps to reproduce:

1. Create a new DMN diagram.

2. Add two decision nodes.


   One decision node is removed.

4. Navigate to the grid editor of the remaining node.

5. Add some context entries.


   The same context is present.

Expected result: You can use undo and redo keyboard shortcut keys in the grid editor.

Actual result: You cannot use undo and redo keyboard shortcut keys in the grid editor.

Workaround: The **Undo** button from toolbar works correctly.

**You cannot convert the rule names from guided decision table into a spreadsheet decision table [RHDM-1396]**

Issue: You cannot convert the rule names from a guided decision table into spreadsheet decision table (XLS).

Steps to reproduce:

1. In Business Central, go to **Menu → Design → Projects** and click **Mortgages**.

2. Open the **Pricing loans** guided decision table.

3. In **Columns** tab, display the rule name column.

4. In **Model** tab, set some custom rule names.
5. Save the guided decision table.

6. Convert the guided decision table into XLS file via toolbar button.

7. Open the generated XLS file, click Source tab, and verify the rule names.

Expected result: Custom rule names are correctly converted from guided decision table into spreadsheet decision table (XLS).

Actual result: Custom rule names are not correctly converted from guided decision table into spreadsheet decision table (XLS).

Workaround: None.

The performance for DMN-based test scenario is degraded when the tested DMN model includes a PMML model [RHDM-1415]

Issue: When you create a test scenario for a DMN model which includes a PMML model, the validation and creation of a test scenario takes time and the performance is degraded.

Steps to reproduce:

1. Import a project in Business Central.

2. Create a DMN-based test scenario including DMN model, which contains PMML model.

3. Click OK.
   Tests run slow and test scenario takes too much time to validate.

Workaround: None.

Assets are not properly indexed for clustered Business Central environment [RHPAM-3089]

Issue: When you install Red Hat Data Grid, AMQ Broker, and Business Central in a clustered environment, you receive warnings and error related to indexing.

Steps to reproduce:

1. Install Red Hat Data Grid and AMQ Broker.

2. Configure Red Hat Data Grid and AMQ Broker.

3. Configure Business Central in a cluster.


5. Select Menu → Design → Projects

6. Open the MySpace space.

7. Add a new project.

8. Click Add Asset.
   The Assets window appears.

9. Add an asset in the project and save.
10. Return back to the project window. Newly added asset disappears.

11. Check Red Hat Data Grid and Business Central logs. You receive an error messages related to indexing.

Workaround: None.

### 6.2. PROCESS DESIGNER

**When you create a text annotation from main palette, you receive a system error message [RHPAM-3052]**

Issue: When you create a text annotation from the main palette, you receive a system error message.

Steps to reproduce:

1. Create a process.

2. Drag and drop a text annotation from main palette without expanding the palette.

Expected result: Text annotation is created without any system error.

Actual result: Text annotation is not created.

Workaround: Create a text annotation from expanded palette only.

**When you morph to an event gateway, you cannot delete the connected nodes and save the process [RHPAM-3036]**

Issue: When you morph to an event gateway, you cannot delete the connected nodes and save the process. Also, you can not delete the sequence flows. Therefore, you see an error message.

Steps to reproduce:

1. Create a process with a parallel gateway.

2. Append any node except Timer and Text Annotation.

3. Morph that gateway to event gateway.

4. Try to delete any connected nodes, sequence flow or the gateway itself.

5. Save the process.

Expected result: You can delete the connected nodes, sequence flow, and save the process. Also, you receive a warning message in case the process is not executable.

Actual result: You can not delete the connected nodes, sequence flow, and save the process.

Workaround: Change a gateway type back to its previous gateway type using morphing toolbox menu. For example, try to change the event gateway back to parallel gateway.

### 6.3. INSTALLER
The Red Hat Process Automation Manager installer contains references to Red Hat JBoss Web Server 5.2 [RHPAM-3077]

Issue: When you run the Red Hat Process Automation Manager installer, the installation path step references to Red Hat JBoss Web Server 5.2 instead of Red Hat JBoss Web Server 5.3.

Workaround: None.

6.4. DMN DESIGNER

When you include a PMML 4.4 model into a DMN model and then save or validate the model, DMN throws an error [RHDM-1400]

Issue: You cannot include a PMML 4.4 model into a DMN model, the DMN model throws an error.

Steps to reproduce:

1. Create a new empty project in Business Central.
2. Create an empty DMN model.
3. Import one PMML asset with the 4.4 version into the project.
4. Open the DMN model.
5. Select the Included Models tab.
6. Click the Include Model and select the PMML 4.4 model.
7. Click Include.

Expected result: You can include a PMML 4.4 model into a DMN model.

Actual result: You cannot include a PMML 4.4 model into a DMN model.

Workaround: None.

When you try to invoke a Business Knowledge Model (BKM) function from included DMN model, the validation fails [RHDM-1395]

Issue: You can not call the BKM function imported from another DMN model, which is aliased with the name containing . characters. If you try to invoke BKM function, the validation fails.

Steps to reproduce:

1. Create an empty Salary.dmn DMN model.
2. Create an another empty WorkingHours.dmn DMN model.
3. Import WorkingHours.dmn DMN model into Salary.dmn DMN model.
4. Set an alias for WorkingHours.dmn model by including . character. For example, working.hours.model.
5. Validate the model.
   You receive an error message.

Workaround: None.
6.5. RED HAT BUSINESS OPTIMIZER

In Constraint Streams API, the performance of incremental score calculations is degraded using `groupBy()` method [RHDM-1385]

Issue: When you use the `groupBy()` method in Constraint Streams API, the performance of incremental score calculations is degraded on a high level.

Workaround: You can use the DRL score calculations.

6.6. RED HAT OPENSSHIFT CONTAINER PLATFORM

You cannot create a custom database image for PostgreSQL using PostgreSQL enterprise instance [RHPAM-3005]

Issue: When you create a custom database for PostgreSQL and push the image using PostgreSQL enterprise instance, KIE Server fails to start.

Steps to reproduce:

1. Create a custom database and make the image build for PostgreSQL.

   `make build postgresql`

2. Push the custom database image using PostgreSQL enterprise instance.

   ```
   db.primary_label=postgresplus116
   db.port=5432
   server_label_primary=postgresplus116
   hibernate.dialect=org.hibernate.dialect.PostgresPlusDialect
   hibernate.connection.url=jdbc:edb://edb-as11.mwqe.upshift.rdu2.redhat.com:5432/dballo06
   hibernate.connection.schema=public
   datasource.class.xa=com.edb.xa.PGXADatasource
   ```

3. Deploy the KIE Server using S2I.

Expected result: You can create custom database image for PostgreSQL using PostgreSQL enterprise instance.

Actual result: You cannot create a custom database image for PostgreSQL using PostgreSQL enterprise instance.

Workaround: None.

Business Central pod fails to start when `known_host` file is missing from the Git hook secret [RHPAM-3056]

Issue: The Business Central pod fails to start and remains stuck at `Container Creating` status if the `known_host` file is missing from the Git hook secret.

Steps to reproduce:

1. Create the following post-commit script.

   ```
   cat post-commit
   ```
#!/usr/bin/sh
echo "running post-commit git hook"
git clone git@github.com:Sgitario/kjar-examples.git

2. Upload this post-commit file into the Openshift.

    oc create configmap githook-post-commit --from-file=post-commit=post-commit

3. Create the Git hook secret.

    oc create secret generic githook-ssh-key-secret --from-file=id_rsa=/mypath/.ssh/id_rsa

Expected result: Business Central pod does not fail even after the Git hook secret is missing some configurations.

Actual result: Business Central pod fails to start and remains stuck at **Container Creating** status.

Workaround: Specify the following `known_host` file and create the Git hook secret again.

    oc create secret generic githook-ssh-key-secret --from-file=id_rsa=test_manual/.ssh/id_rsa --from-file=known_hosts=test_manual/.ssh/known_hosts
CHAPTER 7. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.8.0

Red Hat Process Automation Manager 7.8.0 provides increased stability and fixed issues listed in this section.

7.1. BUSINESS CENTRAL

- Dashbuilder data transfer feature does not work on Windows [RHPAM-2751]
- In Business Central, you can not re-enable the clone project using http [RHPAM-2721]
- An unexpected conflicting row error occurs when you try to modify guided decision table [RHPAM-2673]

7.2. PROCESS ENGINE

- Expression in timer is not interpreted correctly when " is used for literal expression [RHPAM-2845]
- Status of an active task is marked as completed when a process instance is aborted. Also, the getProcessInstanceHistoryCompleted API is fixed to return only completed nodes and not the aborted nodes [RHPAM-2796]

NOTE

A new ABORTED (2) node type is added to record such events in the NodeInstanceLog table. Any custom or built-in queries that rely on the node type are impacted by this change. The runtimeDataService.getProcessInstanceHistoryCompleted() method is now returns only the completed nodes and excludes the aborted nodes.

7.3. PROCESS DESIGNER

- In Business Central, if you try to use timer expression components, you receive an error message [RHPAM-2695]
- You cannot remove the case file and global variables [RHPAM-2643]
- In the process designer, if you set an incorrect calledElement attribute, it breaks the process and you receive an error message [RHPAM-2432]

7.4. DECISION ENGINE

- In DMN model, you can generate a strongly typed code for DMNContext and DMNResult with the help of codegen facility [RHDM-1323]

7.5. RED HAT OPENSSHIFT CONTAINER PLATFORM

- You cannot deploy immutable KIE Server environments on Red Hat OpenShift Container Platform using Operators [RHPAM-2942]
• You cannot create a custom extension image for database [RHPAM-2948]

• Product environment fails to deploy on Amazon Web Services (AWS) with AWS Elastic Block Storage (EBS) because of AWS EBS volume plugin lack of support for ReadWriteMany (RWX) persistent volume access mode [RHPAM-2480]

7.6. DMN DESIGNER

• In a decision table, when you create a simple decision node, an unnecessary typerRef error is generated [RHDM-1291]

• When you use a decision table with a ContextEntry value along with Business Knowledge Model (BKM), validation of DMN model fails and you receive an error message [RHDM-1281]

• Boxed list expression type is not supported [RHDM-1271]

• Business Knowledge Model (BKM) does not support the maximum length for description text area [RHDM-1261]

• The Properties panel is not refreshed when you select a top level decision table output header [RHDM-1247]

• DMN decision node does not support the maximum length of the text area used for entering long question [RHDM-1228]

• When you open a DMN diagram that does not contain layout information, nodes are all in the same position [RHDM-1150]
CHAPTER 8. KNOWN ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.8.1

This section lists known issues with Red Hat Process Automation Manager 7.8.1.

8.1. BUSINESS CENTRAL

A system error occurs when you add a deployment unit [RHPAM-3111]

Issue: When you add a deployment unit and manually enter incorrect GAV values, you receive an unexpected system error.

Steps to reproduce:
1. In Business Central, go to Menu → Deploy → Execution Servers
2. Under Deployment Units, click Add Deployment Unit
3. Enter the non existent GAV values manually.
4. Select the Start Deployment Unit? check box to start the service.
5. Click Finish.
   You receive an unexpected system error.

Workaround: None.

The wait spinner is not present when you add a deployment unit, manually enter GAV values, and confirm the alert window [RHPAM-3114]

Issue: The wait spinner is not present after confirming the pop-up. You can modify the GAV values while the deployment is in progress.

Steps to reproduce:
1. In Business Central, go to Menu → Deploy → Execution Servers
2. Under Deployment Units, click Add Deployment Unit
3. Enter the non existent GAV values manually.
4. Select the Start Deployment Unit? check box to start the service.
5. Click Finish.
6. In the Save Container Spec pop-up, click OK.
   The alert window disappears and you can modify the GAV values while the deployment is in progress.

Expected result: The wait spinner is present after confirming the alert window.

Actual result: The wait spinner is not present after confirming the alert window.

Workaround: None.
When you apply constraint to a DMN data type, you receive an error in the scenario simulation [RHDM-1435]

Issue: When you apply a constraint to a DMN data type, you receive Wrong column mapping error pop-up in the scenario simulation.

Steps to reproduce:

1. In Business Central, go to Menu → Design → Projects
2. Click Try samples.
3. Open Traffic_Violation project.
4. Open Traffic Violation DMN file and select Data Types tab.
5. To modify the tViolation data type, click tViolation.
6. To add the constraints to the tViolation data type, click the edit icon, click Add Constraints.
7. Select Enumeration from the Select constraint type pull-down menu and add 50, 90, and 130 in the fields.
8. Click OK, then click the check mark to the right of the tViolation data type to save your changes.
9. Click Save and close the DMN editor.
10. Open Violation Scenarios test scenario.

You receive Wrong column mapping error pop-up.

Workaround:

1. From the Test Scenario designer toolbar on the upper-right, click Export and export the .CSV file.
2. Click the affected property column header.
3. Select the property from the Test Tools panel again.
4. Confirm the pop-up to delete the values.
5. Import the originally exported .CSV file.

You cannot save a file when you try to rename the package from the source code [RHPAM-3119]

Issue: When you try to rename a package from the source code and close the editor before the reload is complete, you see an Unsaved changes error even when the data object is already saved in the new package.

Steps to reproduce:

1. Open Business Central.
2. Open any project.
3. Create a data object.
4. In the **Source** tab of a data object, change the package name.

5. Click **Save**.

6. In the **Information** alert window, click **+ Yes, Move** and confirm the changes. You see **Item successfully renamed** notification.

7. Close the editor. You receive **Unsaved changes** error.

Workaround: None.

**8.2. PROCESS DESIGNER**

**Case management properties are missing in a case definition [RHPAM-3131]**

Issue: In **Properties** panel, case management properties are missing in a case definition.

Steps to reproduce:

1. Create a case project.

2. Create a case definition.

3. Open **Properties** panel and add any case management property.

Expected result: Case management section is present in **Properties** panel.

Actual result: Case management section is not present in **Properties** panel.

Workaround: Set the Adhoc property to **true**. To reflect the changes, save your changes, close the case and reopen the **Properties** panel.

**8.3. INSTALLER**

**On Red Hat JBoss EAP, the Red Hat Process Automation Manager installer adds an additional $ sign in the vaulted password of database user [RHPAM-3148]**

Issue: When you use graphical user interface, installer adds an additional $ sign in the vaulted password for KIE Server data source and connection to the database fails.

Steps to reproduce:

1. Install KIE Server on Red Hat JBoss EAP using graphical user interface.

2. Configure data source properties for KIE Server.

3. Complete the installation and run the container. You receive an error regarding incorrect login credentials on start up in logs.

Expected result: No additional $ sign in the vaulted password and KIE Server is connecting to the database.

Actual result: There is an additional $ sign in the vaulted password and KIE Server is not connecting properly to the database.
Workaround:

1. Open the standalone-full.xml file in your Red Hat JBoss EAP directory.

2. Search the following element in your data source definition:
   
   ```xml
   <subsystem xmlns="urn:jboss:domain:datasources:5.0">
   ```


   ```xml
   <password> $$\{VAULT::datasource.NAME::password::1\}</password>
   ```

4. Remove an additional $ sign in the vaulted password and the datasource element in the standalone-full.xml file should look similar to the following:

   ```xml
   <password> $\{VAULT::datasource.NAME::password::1\}</password>
   ```

When you are auto installing Red Hat Process Automation Manager on Red Hat JBoss EAP, Red Hat Process Automation Manager installer tries to configure properties for Red Hat JBoss Web Server [RHPAM-3150]

Issue: Red Hat Process Automation Manager installer tries to configure properties for Red Hat JBoss Web Server when you are auto installing on Red Hat JBoss EAP. Automated installer is not checking the conditions and executing Red Hat JBoss Web Server related steps even though the users are using installation script with Red Hat JBoss EAP.

Steps to reproduce:

1. Run Red Hat Process Automation Manager installer with the default options.

2. Use Red Hat JBoss EAP as an installation container.

3. Complete the installation, generate an installation script, and name it as auto.xml.

4. Clean the used Red Hat JBoss EAP container and run the installation again using the generated installation script:

   ```
   java -jar rhpam-installer-7.8.x.jar auto.xml -variables
   rhpam.username=rhbaUser,rhpam.password=bpmsAdmin123$
   ```

5. Run the installed Red Hat Process Automation Manager.

Expected result: Red Hat Process Automation Manager installer is not trying setup any Red Hat JBoss Web Server related properties and installation on Red Hat JBoss EAP using automated script succeeds.

Actual result: Red Hat Process Automation Manager installer tries to setup Red Hat JBoss Web Server related properties and installation on Red Hat JBoss EAP using automated script fails.

Workaround: Install manually. Do not use the generated script for Red Hat JBoss EAP.

8.4. FORM MODELER

Document upload feature does not work on Windows [RHPAM-3117]
Issue: In Windows, with the **Document** form field, you cannot upload documents that are required as part of a form or process.

Steps to reproduce:

1. Set the document marshalling strategy.
2. Create a document variable in a business process.
3. Map the task inputs and outputs to the document variable.

Expected result: Document upload feature is working on Windows.

Actual result: Document upload feature is not working on Windows.

Workaround: None.

### 8.5. RED HAT OPENShift Container Platform

**S2I build ignores Java virtual machine (JVM) properties** [RhDM-1419]

Issue: S2I build fails because the KJAR files and its dependencies are uploaded in Nexus which are accessible via HTTPS and they are signed by a self-signed certificate.

Workaround: None.
CHAPTER 9. FIXED ISSUES IN RED HAT PROCESS AUTOMATION MANAGER 7.8.1

Red Hat Process Automation Manager 7.8.1 provides increased stability and fixed issues listed in this section.

9.1. BUSINESS CENTRAL

- The `dodeploy` file is not available in the dashbuilder runtime distribution [RHPAM-3031]
- When you export the dashbuilder related data, gradual export displays internal data sources [RHPAM-3021]
- The performance of a DMN-based test scenario is degrades when the tested DMN model includes a PMML model [RHDM-1415]
- In scenario simulation, the Test Tools panel on the right side displays the name of a field instead of the type [RHDM-1153]
- KIE Server uses comma instead of semicolon as a separator for HTTP media type parameters [RHPAM-3086]
- When you create a deployment unit and manually enter GAV values, you receive "GAV not found in the Maven repository" error message [RHPAM-3046]
- When you save a BPMN file, Git commit history shows invalid username for SVG file [RHPAM-3007]
- You cannot access Business Central when you change the settings of the role with the user containing a dot (.) character [RHPAM-2981]
- When you convert an XLS spreadsheet decision table to a guided decision table, an exception error occurs [RHPAM-2939]
- In Business Central, you cannot upload WorkItemHandler archetype [RHPAM-2889]
- When a project displays an incorrect number of assets, then create another project with the same name [RHDM-1413]
- Keyboard navigation fails in guided decision table [RHDM-1394]
- In a guided rule template, Date field in the Data tab displays incorrect date [RHDM-1368]
- You cannot save a file when you try to change the package in the source code of a data object [RHDM-1336]

9.2. PROCESS DESIGNER

- When you select a rule flow group from the Properties panel, you cannot see the associated project name [RHPAM-2910]

9.3. PROCESS ENGINE
• In Red Hat Process Automation Manager 7.7.0, process upgrade fails if a process instance contains an active timer and it is migrated from Red Hat JBoss BPM Suite 6.4 release. Process migration fails with NullPointerException error [RHPAM-3078]

• When you use Microsoft SQL Server 2016 with Red Hat Process Automation Manager 7.7.1, you receive an error message regarding invalid process_inst_id or activity_id column names [RHPAM-2993]

9.4. DECISION ENGINE

• An accumulate with more than one binding is generated incorrectly in the executable model [RHDM-1423]

• When you use binding variables for properties in constraints, the rules are evaluated in class reactive [RHDM-1387]

9.5. INSTALLER

• The Red Hat Process Automation Manager installer contains references to Red Hat JBoss Web Server 5.2 [RHPAM-3077]

9.6. OFFLINE MAVEN REPOSITORY

• Maven build using offline repository fails in offline environment and displays dependency error message [RHDM-1283]

9.7. RED HAT OPENSSHIFT CONTAINER PLATFORM

• When you deploy multiple KIE applications using Red Hat OpenShift Container Platform, duplicate Business Central links are generated [RHPAM-3055]
APPENDIX A. VERSIONING INFORMATION

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