



# **Red Hat Process Automation Manager 7.0**

**Managing assets in Business Central**



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## Abstract

This document explains how to manage, modify, create, and delete assets Business Central.

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# PREFACE

As a process administrator, you can use Business Central in Red Hat Process Automation Manager to manage assets, such as rules, business processes, and decision tables.

## Prerequisites

- Red Hat JBoss Enterprise Application Platform 7.1.0 is installed. For installation information, see the [Red Hat JBoss EAP 7.1.0 Installation Guide](#).
- Red Hat Process Automation Manager is installed and configured with Process Server. For more information see [Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss EAP 7.1](#).
- Red Hat Process Automation Manager is running and you can log in to Business Central with the **process-admin** role. For more information, see [Planning a Red Hat Process Automation Manager installation](#).

## CHAPTER 1. ASSET OVERVIEW

Business rules, process definition files, and other assets and resources created in Business Central are stored in the Artifact Repository (Knowledge Store) that is accessed by the Process Server.

The Knowledge Store is a centralized repository for your business knowledge. It connects multiple GIT repositories so that you can access them from a single environment while storing different kinds of knowledge and artifacts in different locations. GIT is a distributed version control system and it implements revisions as commit objects. Every time you save your changes to a repository this creates a new commit object in the GIT repository. Similarly, the user can also copy an existing repository. This copying process is typically called cloning and the resulting repository can be referred to as clone. Every clone contains the full history of the collection of files and a cloned repository has the same content as the original repository.

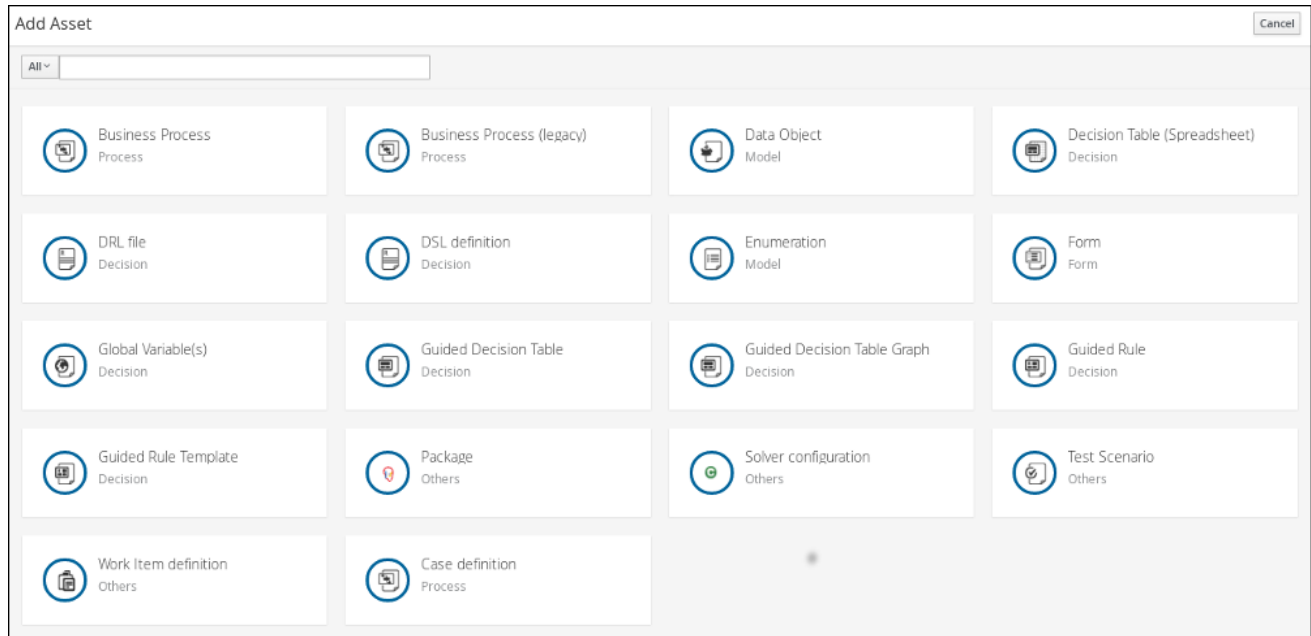
Business Central provides a web front-end that enables you to view and update the stored content. To access Knowledge Store assets, go to **Menu** → **Design** → **Projects** in Business Central and click the project name.



## CHAPTER 2. TYPES OF ASSETS

Anything that can be stored as a version in the Business Central artifact repository is an asset. This includes rules, packages, business processes, decision tables, fact models, and domain specific languages (DSLs).

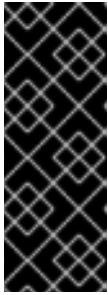
The following image shows the available assets in Red Hat Process Automation Manager 7.0.



The following sections describe each asset type in Red Hat Process Automation Manager 7.0.

- Business Process**  
 Business Processes are diagrams that describe the steps necessary to achieve business goals (see the [Red Hat Process Automation Manager Business Process Management Guide](#) for more details).
- Business Process (legacy)**  
 Starting in Red Hat Process Automation Manager 7.0, there is a new default process designer. As it's still not fully feature complete, Red Hat Process Automation Manager 7.0 also includes support for the *jBPM process designer*. Thus providing two designers for business processes, the *Business Process*, which relies on the new default process designer, and *Business Process (legacy)*, which relies on the legacy process designer.
- Case definition**  
 Cases are designed using the **Case definition** process designer in Business Central. The case design is the basis of case management and sets out the specific goals and tasks for each case. The case flow can be modified dynamically during run time by adding dynamic tasks or processes.
- Data object**  
 Data objects are the building blocks for the rule assets that you create. Data objects are custom data types implemented as Java objects in specified packages of your project. For example, you might create a Person object with data fields Name, Address, and Date of Birth to specify personal details for loan application rules. These custom data types determine what data your assets and your decision service are based on.
- Decision Table (Spreadsheet)**

Decision tables are collections of rules stored in either a spreadsheet or in the Red Hat Decision Manager user interface as guided decision tables. After you define your rules in an external XLS or XLSX file, you can upload the file as a decision table in your project in Business Central.



## IMPORTANT

You should typically upload only one decision table spreadsheet, containing all necessary **RuleTable** definitions, for each rule package in Business Central. You can upload separate decision table spreadsheets for separate packages, but uploading multiple decision table spreadsheets in the same package can cause compilation errors from conflicting **RuleSet** or **RuleTable** attributes and is therefore not recommended.

- **DRL file**  
A rule file is typically a file with a .drl extension. In a DRL file you can have multiple rules, queries and functions, as well as some resource declarations like imports, globals and attributes that are assigned and used by your rules and queries. However, you are also able to spread your rules across multiple rule files (in that case, the extension .rule is suggested, but not required) - spreading rules across files can help with managing large numbers of rules. A DRL file is simply a text file.
- **DSL definition**  
Domain Specific Languages (DSLs) are a way of creating a rule language that is dedicated to your problem domains. A set of DSL definitions consists of transformations from DSL "sentences" to DRL constructs, which lets you use of all the underlying rule language and engine features.
- **Enumeration**  
Data enumerations are an optional asset type that can be configured to provide drop-down lists for the guided designer. They are stored and edited just like any other asset, and apply to the package that they belong to.
- **Form**  
Forms are used for collecting user data for business process. Business Central provides the option to automatically generate forms, which can then be edited to meet specific business process requirements.
- **Global Variables**  
Global variables are used to make application objects available to the rules. Typically, they are used to provide data or services that the rules use, especially application services used in rule consequences, and to return data from the rules, like logs or values added in rule consequences, or for the rules to interact with the application, doing callbacks.
- **Guided Decision Table**  
Decision tables are collections of rules stored in either a spreadsheet or in the Red Hat Decision Manager user interface as guided decision tables.
- **Guided Decision Table Graph**  
A Guided Decision Table Graph is a collection of related guided decision tables that are displayed within a single designer. You can use this designer to better visualize and work with various related decision tables in one location. Additionally, when a condition or an action in one table uses the same data type as a condition or an action in another table, the tables will be physically linked with a line in the table graph designer.

For example, if one decision table determines a loan application rate and another table uses the application rate to determine some other action, then the two decision tables are linked in a guided decision table graph.

- **Guided Rule**  
Rules provide the logic for the rule engine to execute against. A rule includes a name, attributes, a **when** statement on the left hand side of the rule, and a **then** statement on the right hand side of the rule.
- **Guided Rule Template**  
Guided rule templates provide a reusable rule structure for multiple rules that are compiled into Drools Rule Language (DRL) and form the core of the decision service for your project.
- **Package**  
All assets are contained in packages in Business Central. A package is a folder for rules and also serves as a "namespace".
- **Solver configuration**  
A Solver configuration is created by the Solver designer and can be run in the Execution Solver or plain Java code after the KJAR is deployed. You can edit and create Solver configurations in Business Central.
- **Test Scenario**  
Test scenarios in Red Hat Process Automation Manager enable you to validate the functionality of rules, models, and events before deploying them into production. A test scenario uses data for conditions that resemble an instance of your fact or project model. This data is matched against a given set of rules and if the expected results match the actual results, the test is successful. If the expected results do not match the actual results, then the test fails.
- **Work Item definition**  
A work item definition defines how a custom task is presented. For example, the task name, icon, parameters, and similar attributes.

## CHAPTER 3. CREATING ASSETS

You can create business processes, rules, DRL files, and other assets in your Business Central projects.



### NOTE

Migrating business processes is an irreversible process.

### Procedure

1. In Business Central, go to **Menu** → **Design** → **Projects** and click the project name. For example, **Evaluation**.
2. Click **Add Asset** and select the asset type.
3. In the **Create new asset\_type** window, add the required information and click **Ok**.

**Figure 3.1. Define Asset**

### NOTE

If you have not created a project, you can either add a project or use a sample project.

### Add a new project

Click **Add Project** and input the new project name.


### Use a sample project

- a. Click the three vertical dots in the upper-right corner of the screen and select **Try Samples**.
- b. Select **project\_name** and click **Ok**.

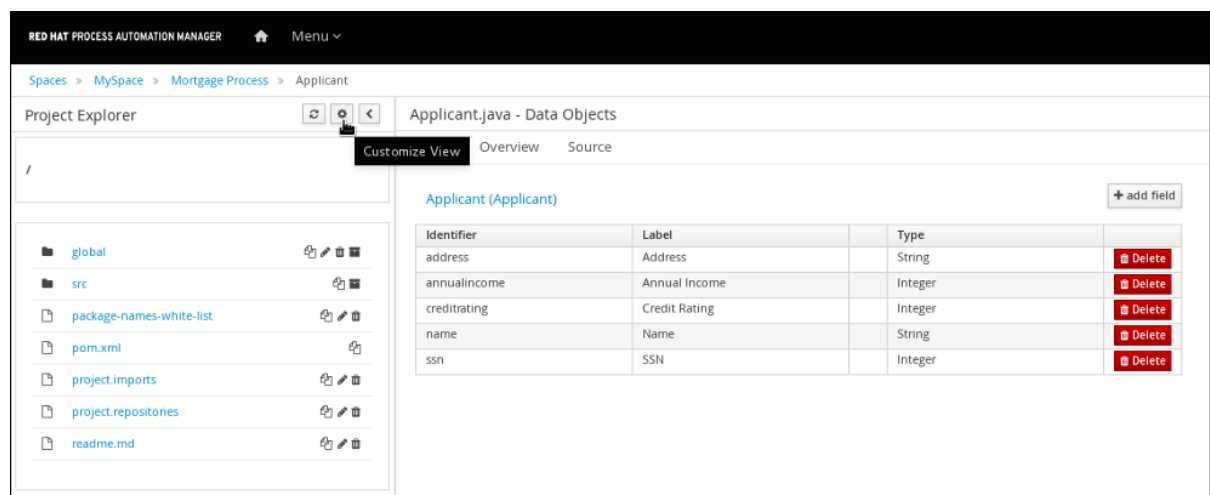
## CHAPTER 4. RENAMING, COPYING, OR DELETING ASSETS

After an asset has been created and defined, you can use the **Repository View** of the **Project Explorer** to copy, rename, delete, or archive assets as needed.

### Procedure

1. Go to **Menu** → **Design** → **Projects** and click the project name.
2. Select an asset to open the **Project Explorer**, and click the gear icon  in the **Project Explorer** toolbar.
3. Select **Repository View** to display the folders and files that make up the asset.
4. Use the icons next to each listed asset to copy, rename, delete, or archive the asset as needed. Some of these options may not be available for all assets.

**Figure 4.1. Copy, rename, delete, or archive assets**



You can also use the following toolbar buttons to copy, rename, or delete assets.

**Figure 4.2. Toolbar options**

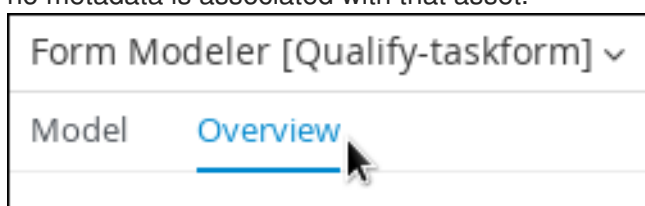


## CHAPTER 5. MANAGING ASSET METADATA AND VERSION HISTORY

Most assets within Business Central have metadata and version information associated with them to help you identify and organize them within your projects. You can manage asset metadata and version history from the asset designer in Business Central.

### Procedure

1. Go to **Menu** → **Design** → **Projects** and click the project name.
2. Select the asset from the list to open the asset designer in the **Project Explorer**.
3. In the asset designer window, select **Overview**. If an asset doesn't have an **Overview** tab, then no metadata is associated with that asset.

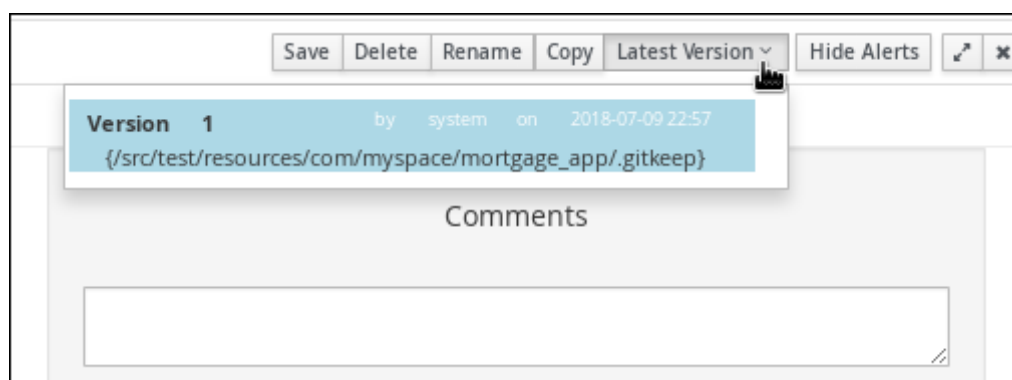


4. Select the **Version History** or **Metadata** tab to edit and update version and metadata details.

### NOTE

Another way to update the working version of an asset is by clicking **Latest Version** in the top-right corner of the asset designer.

**Figure 5.1. Latest version of an asset**



5. Click **Save** to save changes.

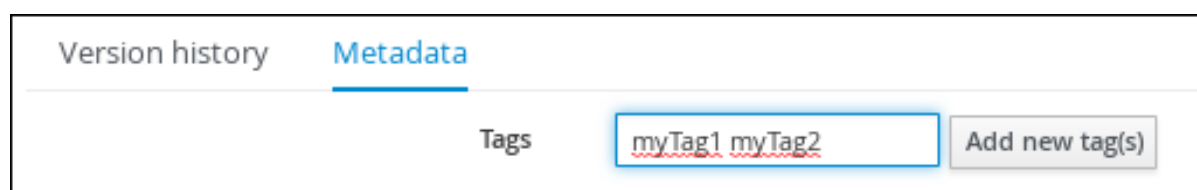
## CHAPTER 6. FILTERING ASSETS BY TAGS

You can apply tags in the metadata of each asset and then group assets by tags in the Project Explorer. This feature helps you quickly search through assets of a specific category.

### Procedure

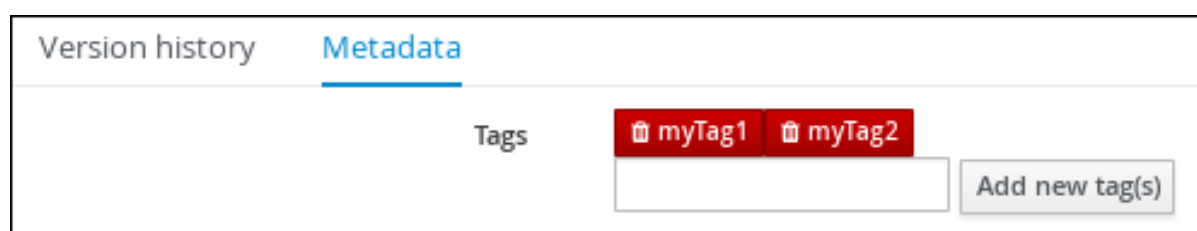
1. Go to **Menu** → **Design** → **Projects** and click the project name.
2. Select the asset from the list to open the asset editor in the **Project Explorer**.
3. In the asset editor window, go to **Overview** → **Metadata**.
4. In the **Tags** field, enter a name of your new tag and click **Add new tag(s)**. You can assign multiple tags to an asset at once by separating tag names by a space.

**Figure 6.1. Creating tags**



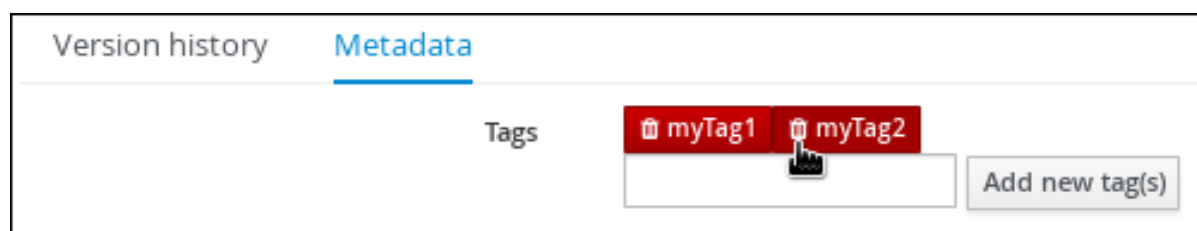
The assigned tags are displayed as buttons next to the **Tags** field.

**Figure 6.2. Tags in metadata view**



To delete a tag, click the tag button with the trash icon.

**Figure 6.3. Deleting tags in metadata view**




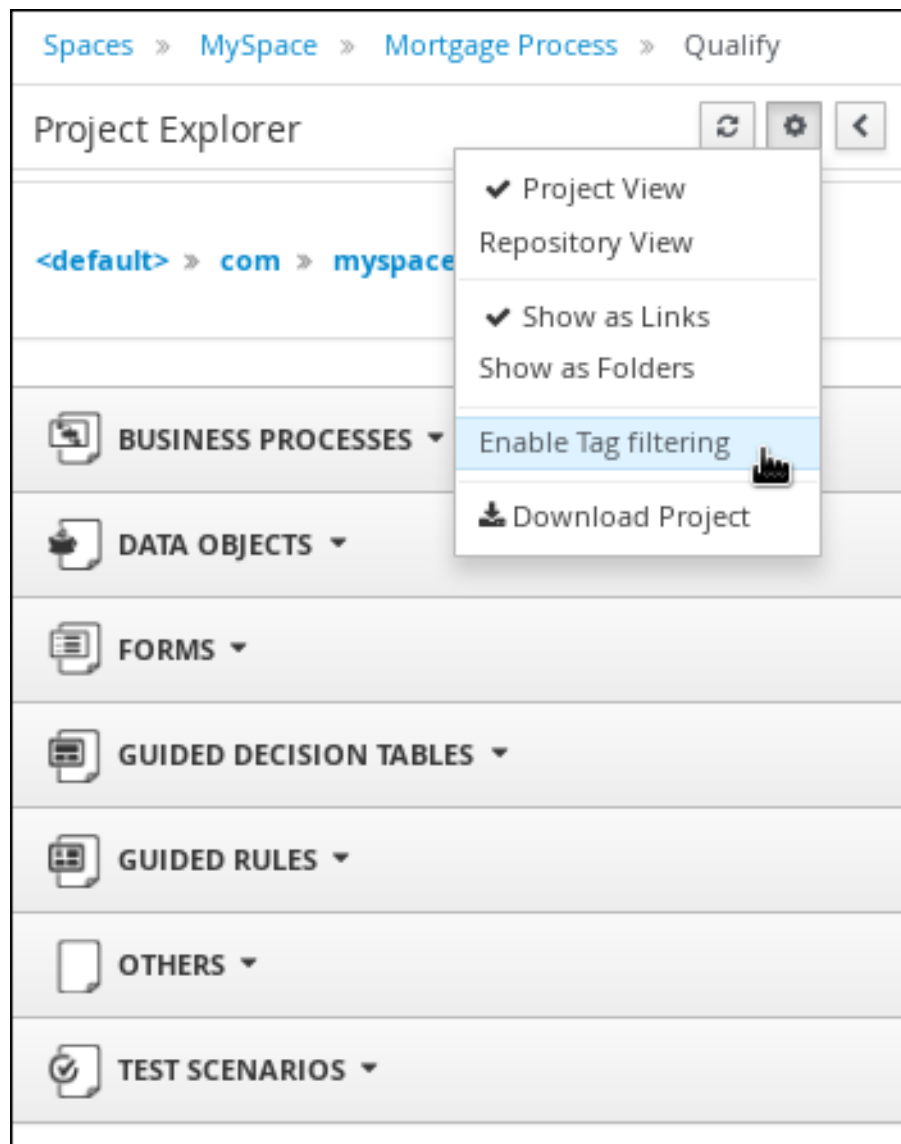
5. Click **Save** to save your metadata changes.
6. Once you are done assigning tags to your assets, click the gear icon  in the **Project Explorer** toolbar and select **Enable Tag filtering**.



Figure 6.4. Enable tag filtering



This displays a **Filter by Tag** drop-down menu in the Project Explorer.

Figure 6.5. Filter by tag



You can sort your assets through this filter to display all service tasks that include the selected metadata tag.

## CHAPTER 7. UNLOCKING ASSETS

By default, whenever you open and modify an asset in Business Central, that asset is automatically locked for your exclusive use in order to avoid conflicts in a multiuser setup. This lock is automatically released when your session ends or when you save or close the asset. This lock feature ensures that users do not overwrite each other's changes.

However, you can force unlock an asset if you need to edit a file that is locked by another user.

### Procedure

1. Go to **Menu** → **Design** → **Projects** and click the project name.
2. Select the asset from the list to open the asset designer in the **Project Explorer**.
3. Go to **Overview** → **Metadata** and view the **Lock Status**.

**Figure 7.1. Unlock metadata view**

The screenshot shows the 'Form Modeler [Applicant]' interface with the 'Overview' tab selected. The 'Metadata' sub-tab is active, displaying a list of metadata fields. The 'Lock status' field at the bottom indicates 'Not locked' with a mouse cursor hovering over it.

Type	Forms
Description	No description yet - what does this rule do?
Used in projects	Mortgage Process
Last modified	By system on 2018-07-09 22:57
Created on	By system on 2018-07-09 22:57

Version history	Metadata
Tags	<input type="text"/> <button>Add new tag(s)</button>
Note	{/src/test/resources/com/myspace/mortgage_app/.gitkeep}
URI	git://master@MySpace/Mortgage-Process/src/main/resources/com/myspace/mortgage_app/Applicant.frm
Subject	<input type="text"/>
Type	<input type="text"/>
External link	<input type="text"/>
Source	<input type="text"/>
Lock status	Not locked

If the asset is already being edited by another user, the following will be displayed in the **Lock status** field:

**Locked by <user\_name>**

4. Click **Force unlock asset** to unlock.  
The following confirmation pop-up message is displayed:

**Are you sure you want to release the lock of this asset? This might cause <user\_name> to lose unsaved changes!**

5. Click **Yes** to confirm.  
The asset returns to an unlocked state and the lock icon option will appear next to the asset.

## APPENDIX A. VERSIONING INFORMATION

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