



Red Hat Decision Manager 7.4

Patching and upgrading Red Hat Decision Manager 7.4

Red Hat Decision Manager 7.4 Patching and upgrading Red Hat Decision Manager 7.4

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

Legal Notice

Copyright © 2020 Red Hat, Inc.

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

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

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

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

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

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

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

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

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

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

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

All other trademarks are the property of their respective owners.

Abstract

This document describes how to apply patch updates and minor release upgrades to Red Hat Decision Manager 7.4.

Table of Contents

PREFACE	3
CHAPTER 1. RED HAT DECISION MANAGER VERSIONING	4
CHAPTER 2. ENABLING RED HAT DECISION MANAGER NOTIFICATIONS IN THE RED HAT CUSTOMER PORTAL	6
CHAPTER 3. APPLYING PATCH UPDATES AND MINOR RELEASE UPGRADES TO RED HAT DECISION MANAGER	7
CHAPTER 4. USING THE MIGRATION TOOL ON A .NIOGIT DIRECTORY	10
CHAPTER 5. ADDITIONAL RESOURCES	15
APPENDIX A. VERSIONING INFORMATION	16

PREFACE

As a Red Hat Decision Manager user, you can apply updates to Red Hat Decision Manager as they become available in the Red Hat Customer Portal to keep your Red Hat Decision Manager distribution current with the latest enhancements and fixes. Red Hat provides update tools and product notifications for new product releases so you can more readily apply helpful updates to Red Hat Decision Manager and Decision Server.

Prerequisites

- You have a Red Hat Customer Portal account.
- Red Hat Decision Manager 7.4 is installed. For installation options, see [Planning a Red Hat Decision Manager installation](#).



NOTE

If you are using Red Hat Decision Manager 7.3 and you want to upgrade to Red Hat Decision Manager 7.4, see [Patching and upgrading Red Hat Decision Manager 7.3](#) or follow the instructions in this document and adjust the example upgrade versions accordingly.

CHAPTER 1. RED HAT DECISION MANAGER VERSIONING

Red Hat Decision Manager versions are designated with a numerical **Major.Minor.Patch** format, such as **7.4.1**. In this example, the major release is **7.x.x**, the minor release is **7.4.x**, and the patch release is **7.4.1**. Major releases often require data migration, while minor release upgrades and patch updates are typically managed with update tools provided with the Red Hat Decision Manager release artifacts.

The following are the general types of releases for Red Hat Decision Manager:

Major release migrations

Major releases of Red Hat Decision Manager include substantial enhancements, security updates, bug fixes, and possibly redesigned features and functions. Data migration is typically required when an application is moved from one major release to another major release, such as from Red Hat JBoss BRMS 6.4.x to Red Hat Decision Manager 7.0. Automated migration tools are often provided with new major versions of Red Hat Decision Manager to facilitate migration, but some manual effort is likely required for certain data and configurations. The supported migration paths are specified in product announcements and documentation.

For example migration instructions, see [Migrating from Red Hat JBoss BRMS 6.4 to Red Hat Decision Manager 7.0](#).

Minor release upgrades

Minor releases of Red Hat Decision Manager include enhancements, security updates, and bug fixes. Data migration may be required when an application is moved from one minor release to another minor release, such as from Red Hat Decision Manager 7.4.x to 7.5. Automated update tools are often provided with both patch updates and new minor versions of Red Hat Decision Manager to facilitate updating certain components of Red Hat Decision Manager, such as Business Central, Decision Server, and the headless Decision Manager controller. Other Red Hat Decision Manager artifacts, such as the decision engine and standalone Business Central, are released as new artifacts with each minor release and you must re-install them to apply the update.

Before you upgrade to a new minor release, apply the latest patch update to your current version of Red Hat Decision Manager to ensure that the minor release upgrade is successful.

Patch updates

Patch updates of Red Hat Decision Manager include the latest security updates and bug fixes. Scheduled patch updates contain all previously released patch updates for that minor version of the product, so you do not need to apply each patch update incrementally in order to apply the latest update. For example, you can update Red Hat Decision Manager 7.4.0 or 7.4.1 to Red Hat Decision Manager 7.4.2. However, for optimal Red Hat Decision Manager performance, apply product updates as they become available. Occasionally, unscheduled patch updates may be released outside the normal update cycle of the existing product. These may include security or other updates provided by Red Hat Global Support Services (GSS) to fix specific issues, and may not be cumulative updates. Automated update tools are often provided with both patch updates and new minor versions of Red Hat Decision Manager to facilitate updating certain components of Red Hat Decision Manager, such as Business Central, Decision Server, and the headless Decision Manager controller. Other Red Hat Decision Manager artifacts, such as the decision engine and standalone Business Central, are released as new artifacts with each minor release and you must re-install them to apply the update.

To ensure optimal transition between releases and to keep your Red Hat Decision Manager distribution current with the latest enhancements and fixes, apply new product releases and updates to Red Hat Decision Manager as they become available in the Red Hat Customer Portal. Consider also enabling product notifications in the Red Hat Customer Portal.

For information about enabling product notifications, see [Chapter 2, *Enabling Red Hat Decision Manager notifications in the Red Hat Customer Portal*](#).

CHAPTER 2. ENABLING RED HAT DECISION MANAGER NOTIFICATIONS IN THE RED HAT CUSTOMER PORTAL

You can enable notifications in the Red Hat Customer Portal to receive Red Hat Decision Manager updates and announcements. These notifications inform you of updated or added documentation, product releases, and patch updates related to Red Hat Decision Manager. With notifications enabled, you can more readily apply product updates to Red Hat Decision Manager as they become available in the Red Hat Customer Portal to keep your Red Hat Decision Manager distribution current with the latest enhancements and fixes.

Prerequisites

- You have a Red Hat Customer Portal account and are logged in.

Procedure

1. In the top-right corner of the Red Hat Customer Portal window, click your profile name and click **Notifications**.
2. Select the **Notifications** tab and click **Manage Notifications**.
3. Next to **Follow**, select **Products** from the drop-down menu, and then select **Red Hat Decision Manager** from the next drop-down menu that appears.
4. Click **Save Notification** to finish.

You can add notifications for any other products as needed in the same way.

CHAPTER 3. APPLYING PATCH UPDATES AND MINOR RELEASE UPGRADES TO RED HAT DECISION MANAGER

Automated update tools are often provided with both patch updates and new minor versions of Red Hat Decision Manager to facilitate updating certain components of Red Hat Decision Manager, such as Business Central, Decision Server, and the headless Decision Manager controller. Other Red Hat Decision Manager artifacts, such as the decision engine and standalone Business Central, are released as new artifacts with each minor release and you must re-install them to apply the update.

You can use the same automated update tool to apply both patch updates and minor release upgrades to Red Hat Decision Manager 7.4. Patch updates of Red Hat Decision Manager, such as an update from version 7.4 to 7.4.1, include the latest security updates and bug fixes. Minor release upgrades of Red Hat Decision Manager, such as an upgrade from version 7.4.x to 7.5, include enhancements, security updates, and bug fixes.



NOTE

Only updates for Red Hat Decision Manager are included in Red Hat Decision Manager update tools. Updates to Red Hat JBoss EAP must be applied using Red Hat JBoss EAP patch distributions. For more information about Red Hat JBoss EAP patching, see the [Red Hat JBoss EAP patching and upgrading guide](#).

Prerequisites

- Your Red Hat Decision Manager and Decision Server instances are not running. Do not apply updates while you are running an instance of Red Hat Decision Manager or Decision Server.

Procedure

1. Navigate to the [Software Downloads](#) page in the Red Hat Customer Portal (login required), and select the product and version from the drop-down options.

Example:

- **Product:** Decision Manager
- **Version:** 7.4.1

If you are upgrading to a new minor release of Red Hat Decision Manager, such as an upgrade from version 7.4.x to 7.5, first apply the latest patch update to your current version of Red Hat Decision Manager and then follow this procedure again to upgrade to the new minor release.



NOTE

If you are upgrading from Red Hat Decision Manager 7.4.1 to Red Hat Decision Manager 7.5.0, you must use the Business Central migration tool on your **.niogit** directory to prepare project data and system configurations for migration to Red Hat Decision Manager 7.5. For instructions on using the migration tool, see [Chapter 4, Using the migration tool on a .niogit directory](#).

2. Click **Patches**, download the **Red Hat Decision Manager [VERSION] Update Tool** and extract the downloaded **rhdm-\$VERSION-update.zip** file to a temporary directory. This update tool automates the update of certain components of Red Hat Decision Manager, such as Business Central, Decision Server, and the headless Decision Manager controller. Use this update tool first to apply updates and then install any other updates or new release artifacts

that are relevant to your Red Hat Decision Manager distribution.

- If you want to preserve any files from being updated by the update tool, navigate to the extracted **rhdm-\$VERSION-update** folder, open the **blacklist.txt** file, and add the relative paths to the files that you do not want to be updated.
When a file is listed in the **blacklist.txt** file, the update script does not replace the file with the new version but instead leaves the file in place and in the same location adds the new version with a **.new** suffix. If you blacklist files that are no longer being distributed, the update tool creates an empty marker file with a **.removed** suffix. You can then choose to retain, merge, or delete these new files manually.

Example files to be excluded in **blacklist.txt** file:

```
WEB-INF/web.xml // Custom file
styles/base.css // Obsolete custom file kept for record
```

The contents of the blacklisted file directories after the update:

```
$ ls WEB-INF
web.xml web.xml.new
```

```
$ ls styles
base.css base.css.removed
```

- In your command terminal, navigate to the temporary directory where you extracted the **rhdm-\$VERSION-update.zip** file and run the **apply-updates** script in the following format:



IMPORTANT

Make sure that your Red Hat Decision Manager and Decision Server instances are not running before you apply updates. Do not apply updates while you are running an instance of Red Hat Decision Manager or Decision Server.

On Linux or Unix-based systems:

```
$ ./apply-updates.sh $DISTRO_PATH $DISTRO_TYPE
```

On Windows:

```
$ .\apply-updates.bat $DISTRO_PATH $DISTRO_TYPE
```

The **\$DISTRO_PATH** portion is the path to the relevant distribution directory and the **\$DISTRO_TYPE** portion is the type of distribution that you are updating with this update.

The following distribution types are supported in Red Hat Decision Manager update tool:

- rhdm-decision-central-eap7-deployable:** Updates Business Central (**decision-central.war**)
- rhdm-kie-server-ee8:** Updates Decision Server (**kie-server.war**)
- rhdm-kie-server-jws:** Updates Decision Server on Red Hat JBoss Web Server (**kie-server.war**)

- **rhdm-controller-ee7**: Updates the headless Decision Manager controller (**controller.war**)
- **rhdm-controller-jws**: Updates the headless Decision Manager controller on Red Hat JBoss Web Server (**controller.war**)

Example update to Business Central and Decision Server for a full Red Hat Decision Manager distribution on Red Hat JBoss EAP:

```
./apply-updates.sh ~EAP_HOME/standalone/deployments/decision-central.war rhdm-
decision-central-eap7-deployable
```

```
./apply-updates.sh ~EAP_HOME/standalone/deployments/kie-server.war rhdm-kie-server-
ee8
```

Example update to headless Decision Manager controller, if used:

```
./apply-updates.sh ~EAP_HOME/standalone/deployments/controller.war rhdm-controller-ee7
```

The update script creates a **backup** folder in the extracted **rhdm-\$VERSION-update** folder with a copy of the specified distribution, and then proceeds with the update.

5. After the update tool completes, return to the **Software Downloads** page of the Red Hat Customer Portal where you downloaded the update tool and install any other updates or new release artifacts that are relevant to your Red Hat Decision Manager distribution. For files that already exist in your Red Hat Decision Manager distribution, such as **.jar** files for the decision engine or other add-ons, replace the existing version of the file with the new version from the Red Hat Customer Portal.

6. If you use the standalone **Red Hat Decision Manager 7.4.0 Maven Repository** artifact (**rhdm-7.4.0-maven-repository.zip**), such as in air-gap environments, download **Red Hat Decision Manager [VERSION] Incremental Maven Repository** and extract the downloaded **rhdm-\$VERSION-incremental-maven-repository.zip** file to your existing **~/maven-repository** directory to update the relevant contents.

Example Maven repository update:

```
$ unzip -o rhdm-7.4.1-incremental-maven-repository.zip -d $REPO_PATH/rhdm-7.4.0-
maven-repository/maven-repository/
```

7. After you finish applying all relevant updates, start Red Hat Decision Manager and Decision Server and log in to Business Central.
8. Verify that all project data is present and accurate in Business Central, and in the top-right corner of the Business Central window, click your profile name and click **About** to verify the updated product version number. If you encounter errors or notice any missing data in Business Central, you can restore the contents in the **backup** folder within the **rhdm-\$VERSION-update** folder to revert the update tool changes. You can also re-install the relevant release artifacts from your previous version of Red Hat Decision Manager in the Red Hat Customer Portal. After restoring your previous distribution, you can try again to run the update.

CHAPTER 4. USING THE MIGRATION TOOL ON A `.NIOGIT` DIRECTORY

The `.niogit` directory of your Business Central distribution contains all Business Central data. You can use the Business Central migration tool on your `.niogit` directory to prepare project data and system configurations for migration to Red Hat Decision Manager 7.5.

Prerequisites

- Red Hat Decision Manager 7.5 is installed.



NOTE

Do not run Red Hat Decision Manager 7.5 Business Central until you have completed the steps in this section.

- Red Hat Decision Manager 7.4 is installed and Business Central is not running on Red Hat Decision Manager 7.4.
- JDK 8 is installed and is available on the path where the project migration tool will be installed.

Procedure

1. Locate the `bin/.niogit` directory in your Red Hat Decision Manager 7.4 installation and locate the same directory in your new Red Hat Decision Manager 7.5 installation.

Example:

```
$ ~/$RHDM_7.4_HOME/bin/.niogit
```

```
$ ~/$RHDM_7.5_HOME/bin/.niogit
```

2. In your command terminal, copy the `.niogit` directory from your current Business Central distribution for Red Hat Decision Manager 7.4 to the `bin` folder of the new Red Hat Decision Manager 7.5 installation directory:

```
cp -r /$RHDM_7.4_HOME/bin/.niogit /$RHDM_7.5_HOME/bin/
```

The copied `.niogit` folder is the directory that the migration tool will prepare for Red Hat Decision Manager 7.5. The original `.niogit` folder remains in your Red Hat Decision Manager 7.4 installation and will not be modified by the migration tool in this procedure.

3. In the Red Hat Decision Manager 7.5. `bin` directory, delete the `.index` directory. You must delete this folder because Red Hat Decision Manager 7.5 comes with certain updates that are not compatible with Red Hat Decision Manager 7.4. The `bin` directory will be re-indexed after the migration when you start Red Hat Decision Manager 7.5.
4. Note the path to the copied `.niogit` directory for Red Hat Decision Manager 7.5. The path will be required when you run the migration tool.
5. If you have specific **dependencies**, **repositories**, or **pluginRepositories** that you want to add, remove, or update as part of the project migration, create a `pom-migration.json` file containing these elements. When you run the migration tool, the tool will prompt you if you want to include this file in the migration.

The **pom-migration.json** file requires the following sections:

- **"dependencies":[]**
- **"repositories-add":[]**
- **"repositories-remove":[]**
- **"repositories-update-urls":[]**
- **"pluginRepositories-add":[]**
- **"pluginRepositories-remove":[]**
- **"pluginRepositories-update-urls":[]**

If any of these elements do not apply to your project, include them as empty sections to prevent parsing errors.

Example **pom-migration.json** file:

```
{
  "dependencies":[

    {"groupId":"junit", "artifactId":"junit", "version":"4.12", "scope":"test"},
    {"groupId":"com.thoughtworks.xstream", "artifactId":"xstream", "version":"4.12",
"scope":"test"}

  ],

  "repositories-add":[
    {
      "id":"jboss-public-repository-group",
      "name":"JBoss Public Repository Group",
      "url":"http://repository.jboss.org/nexus/content/groups/public/",
      "releasesEnabled":true,
      "releasesUpdatePolicy":"never",
      "snapshotEnabled":true,
      "snapshotUpdatePolicy":"never"
    },
    {
      "id":"kie-internal-staging-repository-group",
      "name":"KIE Internal Staging Repositories",
      "url":"https://origin-repository.jboss.org/nexus/content/groups/kie-internal-group",
      "releasesEnabled":true,
      "releasesUpdatePolicy":"never",
      "snapshotEnabled":false,
      "snapshotUpdatePolicy":"never"
    }
  ],

  "repositories-remove":[
    {
      "id":"productization-repository",
      "url":"http://download.lab.bos.redhat.com/brewroot/repos/jb-ip-6.1-build/latest/maven/"
    }
  ]
}
```

```

    ],
    "repositories-update-urls":[
      {
        "id":"guvnor-m2-repo", "url":"http://localhost:8080/decision-central/maven3/"
      }
    ],
    "pluginRepositories-add":[
      {
        "id":"jboss-public-repository-group",
        "name":"JBoss Public Repository Group",
        "url":"http://repository.jboss.org/nexus/content/groups/public/",
        "releasesEnabled":true,
        "releasesUpdatePolicy":"never",
        "snapshotEnabled":true,
        "snapshotUpdatePolicy":"never"
      },
      {
        "id":"kie-internal-staging-repository-group",
        "name":"KIE Internal Staging Repositories",
        "url":"https://origin-repository.jboss.org/nexus/content/groups/kie-internal-group",
        "releasesEnabled":true,
        "releasesUpdatePolicy":"never",
        "snapshotEnabled":false,
        "snapshotUpdatePolicy":"never"
      }
    ],
    "pluginRepositories-remove":[],
    "pluginRepositories-update-urls":[]
  }

```

Example **pom-migration.json** file with **dependencies** only:

```

{
  "dependencies":[
    {"groupId":"junit", "artifactId":"junit", "version":"4.12", "scope":"test"},
    {"groupId":"com.thoughtworks.xstream", "artifactId":"xstream", "version":"4.12", "scope":"test"}
  ],
  "repositories-add":[],
  "repositories-remove":[],
  "repositories-update-urls":[],
  "pluginRepositories-add":[],
  "pluginRepositories-remove":[],
  "pluginRepositories-update-urls":[]
}

```

- Navigate to the [Software Downloads](#) page in the Red Hat Customer Portal (login required), and select the product and version from the drop-down options:

- Product:** Decision Manager

- **Version:** 7.5
7. Download **Red Hat Decision Manager 7.5 Add-Ons** and extract the downloaded **rhdm-7.5.0-add-ons.zip** file to a temporary directory.
 8. In the extracted **rhdm-7.4.0-add-ons** folder, extract the **rhdm-7.5-migration-tool.zip** sub-folder. The migration tool is in the **bin** directory.
 9. In your command terminal, navigate to the temporary directory where you extracted the **rhdm-7.5-migration-tool** folder and run the migration tool. The **\$RHDM_NIOGIT_DIR** portion is the path to the **.niogit** directory that you previously copied to the Red Hat Decision Manager 7.5 installation.

On Linux or UNIX-based systems:

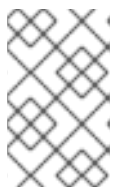
```
$ cd $INSTALL_DIR/rhdm-7.5-migration-tool/bin
$ ./migration-tool.sh -t $RHDM_NIOGIT_DIR
```

On Windows systems:

```
$ cd $INSTALL_DIR\rhdm-7.5-migration-tool\bin
$ migration-tool.bat -t $RHDM_NIOGIT_DIR
```

In the command prompt that appears, the following options are displayed:

- **Project structure migration:** Migrates the Red Hat Decision Manager 7.4 project repository structure to the new project-oriented structure used in Red Hat Decision Manager 7.4.
 - **System configuration directory structure migration:** Migrates the **system.git** repository structure used in Red Hat Decision Manager 7.4 to the new structure used in Red Hat Decision Manager 7.5. This migration option requires the project structure migration to be executed first.
 - **POMs migration:** Updates **pom.xml** files with dependencies required for Red Hat Decision Manager 7.5. This migration option requires the project structure migration and system configuration directory structure migration to be executed first.
 - **All:** Runs all migration options in sequence.
 - **Exit:** Exits the migration tool.
10. Select the option to run **All** migrations in sequence.



NOTE

If you prefer to run one migration option at a time, select and run the first individual migration option. After the tool runs, re-run the Business Central migration tool and select the next individual migration option in the sequence.

11. Enter **yes** each time you are prompted to run a specific migration option. For the POMs migration option, if you want to include a path to an external **pom-migration.json** file that you created previously, enter **yes** when prompted and enter the path.
12. After the tool finishes running, enter the option to **Exit** the migration tool.

The **.niogit** directory structure is now compatible with Business Central in Red Hat Decision Manager 7.5.

13. Project directories are in separate repositories and all other related configurations have been migrated. You can navigate to the new **.niogit** directory to inspect the restructured contents.

CHAPTER 5. ADDITIONAL RESOURCES

- [Planning a Red Hat Decision Manager installation](#)
- [Patching and upgrading Red Hat Decision Manager 7.3](#)
- [Release notes for Red Hat Decision Manager 7.4](#)

APPENDIX A. VERSIONING INFORMATION

Documentation last updated on Monday, August 12, 2019.