



Red Hat JBoss Fuse Service Works 6.3

Governance Installation Guide

Install Governance for Red Hat JBoss Fuse on Red Hat JBoss Enterprise Application Platform

Red Hat JBoss Fuse Service Works 6.3 Governance Installation Guide

Install Governance for Red Hat JBoss Fuse on Red Hat JBoss Enterprise Application Platform

JBoss A-MQ Docs Team

Content Services

fuse-docs-support@redhat.com

Legal Notice

Copyright © 2016 Red Hat.

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, 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 Software Collections 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

Use this guide to help you install the Governance packages on Red Hat JBoss Fuse 6.3.

Table of Contents

CHAPTER 1. JBOSS FUSE GOVERNANCE INSTALLATION OVERVIEW	3
GOVERNANCE PACKAGES ON RED HAT JBOSS FUSE 6.3	3
CHAPTER 2. READ ME	4
2.1. BACK UP YOUR DATA	4
2.2. RED HAT DOCUMENTATION SITE	4
2.3. EAP_HOME	4
2.4. MODE	4
CHAPTER 3. RT-GOV	5
PREREQUISITES	5
ACCESSING THE JBOSS FUSE 6.3.0 SOFTWARE DOWNLOAD PAGE	5
ACCESSING THE JBOSS FUSE SERVICE WORKS 6.3.0 SOFTWARE DOWNLOAD PAGE	5
INSTALLING JBOSS FUSE 6.3 ON JBOSS EAP	6
INSTALLING KIE-EAP ON JBOSS EAP	6
INSTALLING THE RT-GOV SERVER COMPONENT	6
INSTALLING THE RT-GOV CLIENT COMPONENT	7
RT-GOV DATABASE	8

CHAPTER 1. JBOSS FUSE GOVERNANCE INSTALLATION OVERVIEW

GOVERNANCE PACKAGES ON RED HAT JBOSS FUSE 6.3

The Governance package for Red Hat JBoss Fuse 6.3 (JBoss Fuse) are available only to existing Red Hat JBoss Fuse Service Works 6.2 (JBoss Fuse Service Works) customers.

The Governance package consists of server and client component packages for RT-Gov. The Governance component packages must be installed on JBoss Fuse 6.3 on JBoss EAP 6.4. They are not available for the JBoss Fuse 6.3 on Karaf instance.

CHAPTER 2. READ ME

2.1. BACK UP YOUR DATA



WARNING

Red Hat recommends that you back up your system settings and data before undertaking any of the configuration tasks mentioned in this book.

2.2. RED HAT DOCUMENTATION SITE

Red Hat's official documentation site is at <https://access.redhat.com/documentation/en/>. There you will find the latest version of every book, including this one.

2.3. EAP_HOME

EAP_HOME refers to the root directory of the Red Hat JBoss Enterprise Application Platform installation on which JBoss Fuse is deployed.

2.4. MODE

MODE refers to the mode that your instance of JBoss EAP is running in. **MODE** will either be **standalone** or **domain**. For more information about **MODE** see [JBoss EAP Operating Modes](#). Substitute either standalone or domain whenever you see **MODE** in a file path in this documentation.

CHAPTER 3. RT-GOV

RT-Gov provides runtime governance functionality. Installation includes both the server and client component packages. The `jboss-rtgov-6.3.0.redhat-2-server-installer.jar` is a bundle of RTGov server and client components together and `jboss-rtgov-6.3.0.redhat-2-client-installer.jar` consists only a client.

If you need to use only the RTGOV server component, you can install `jboss-rtgov-6.3.0.redhat-2-server-installer.jar` on a JBoss EAP instance without switchyard. This configuration does not use incorporated client and only collects information from the `rtgov-client` located on some other remote JBoss EAP instance.

If you need RTGov Client then the RTGov client needs to be installed on the JBoss EAP instance which also has SwitchYard so that it can gather information from SwitchYard.

PREREQUISITES

Before you install the RT-Gov server and client packages, you need to install on an instance of JBoss EAP 6.4:

- The Red Hat JBoss Fuse 6.3.0 on EAP base package, which installs JBoss Fuse 6.3

See [the section called “Installing JBoss Fuse 6.3 on JBoss EAP”](#) for details.

- The `kie-eap-installer-6.4.0.Final-redhat-10.jar`, which installs the required Drools components

See [the section called “Installing kie-eap on JBoss EAP”](#) for details.



IMPORTANT

Because The RT-Gov server and RT-Gov client components must be installed on their own instance of JBoss EAP, you need to make sure that port numbers on these JBoss EAP instances do not clash when they are installed on the same host machine. To do so, use the port offset facility, as described in [Configuring Port Offsets](#) in the Red Hat JBoss EAP Administration and Configuration Guide.

ACCESSING THE JBOSS FUSE 6.3.0 SOFTWARE DOWNLOAD PAGE

If you have not already registered an account, you will be prompted to do so before you access the **Software Downloads** page

1. Click [here](#) to access the Red Hat JBoss Fuse **Software Downloads** page.
2. Log in to your account, or register to open an account if you do not have one and then log in.
3. Make sure that **Fuse** appears in the **Product** drop-down menu and **6.3.0** appears in the **Version** drop-down menu.

All of the downloads for the selected **Fuse** version appear in the download files table.

ACCESSING THE JBOSS FUSE SERVICE WORKS 6.3.0 SOFTWARE DOWNLOAD PAGE

If you have not already registered an account, you will be prompted to do so before you access the **Software Downloads** page.

1. Click [here](#) to access the Red Hat JBoss Fuse **Software Downloads** page.
2. Log in to your account, or register to open an account if you do not have one and then log in.
3. Expand the **Product** drop-down menu, and select **Fuse Service Works** from the list of available products.
4. Make sure that **6.3.0** appears in the **Version** drop-down menu.

All of the downloads for the selected **Fuse Service Works** version appear in the download files table.

INSTALLING JBOSS FUSE 6.3 ON JBOSS EAP

1. Access the Fuse Service Works 6.3.0 software download page (see [the section called “Accessing the JBoss Fuse Service Works 6.3.0 software download page”](#) for details).
2. Click the **Download** link for **Red Hat JBoss Fuse Service Works 6.3.0 Components for EAP** to download the `fuse-eap-installer-6.3.0.redhat-187.jar` file.
3. On a fresh instance of JBoss EAP, navigate to `$EAP_Home`.
4. Run the installer using this command:

```
java -jar <tempLocation>/fuse-eap-installer-6.3.0.redhat-187.jar
```

INSTALLING KIE-EAP ON JBOSS EAP

1. Access the Fuse 6.3.0 software download page (see [the section called “Accessing the JBoss Fuse 6.3.0 software download page”](#) for details).
2. Click the **Download** link for **Integration Pack for Red Hat JBoss Fuse 6.3.0 on EAP, BRMS 6.3 Update 3 and BPM Suite 6.3 Update 3 Installer** to download the `fuse-integration-eap-full-1.5.0.redhat-630018-installer.zip` file to a temporary location on your file system and unzip it.

Check that the directory contains the file `kie-eap-installer-6.3.0.redhat-187.jar`.

3. On the same instance of JBoss EAP where JBoss Fuse 6.3 is installed, navigate to `$EAP_Home`.
4. Run the installer using this command:

```
java -jar <tempLocation>/kie-eap-installer-6.3.0.redhat-18.jar
```

INSTALLING THE RT-GOV SERVER COMPONENT

The RT-Gov server component must be installed on an instance of JBoss EAP that has both JBoss Fuse 6.3.0 and kie-eap installed. Before you begin, make sure the JBoss EAP server is stopped.

1. Access the Fuse Service Works 6.3.0 software download page (see [the section called “Accessing the JBoss Fuse Service Works 6.3.0 software download page”](#) for details).

2. Click the **Download** link for **Red Hat JBoss Fuse Service Works 6.3.0 Run-Time Governance Server Installer** to download the `jboss-rtgov-6.3.0.redhat-2-server-installer.jar` file.
3. On an instance of JBoss EAP that has both JBoss Fuse 6.3.0 and kie-eap installed, navigate to `$EAP_Home`.
4. Run the installer using following command:

```
java -jar <tempLocation>/jboss-rtgov-6.3.0.redhat-2-server-installer.jar
```

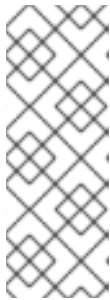
5. Run the post installation script to set up password vaults, using this command:

```
./scripts/overlord/rtgov/install-overlord.sh [--setup-db]
```



NOTE

You are prompted to enter a password for the Overlord **admin** (default) user. This password is for accessing this instance of JBoss EAP, on which the RT-Gov server is installed. You will need this password when you run the client's post install script, if you install the RT-Gov client.



NOTE

The `--setup-db` argument is optional and only works on RT-Gov server installations. When used, the scripts set up the required database tables in an H2 database. The H2 database is ideal for getting up and running with the quickstarts (`$EAP_HOME/quickstarts/overlord/rtgov`), but not for production. For production, Red Hat recommends that administrators use the sql found in the `sql/rtgov` directory, for one of the supported databases.

6. Start the JBoss EAP server in standalone-full mode, using this command:

```
./bin/standalone.sh -c standalone-full.xml
```

INSTALLING THE RT-GOV CLIENT COMPONENT

Installing the RT-Gov client is optional. If installed, it must be on an instance of JBoss EAP that has both JBoss Fuse 6.3.0 and kie-eap installed, but on a different instance of JBoss EAP than the RT-Gov server. Before you begin, make sure the JBoss EAP server is stopped.

1. Access the Fuse Service Works 6.3.0 software download page (see [the section called “Accessing the JBoss Fuse Service Works 6.3.0 software download page”](#) for details).
2. Click the **Download** link for **Red Hat JBoss Fuse Service Works 6.3.0 Run-Time Governance Client Installer** to download the `jboss-rtgov-6.3.0.redhat-2-client-installer.jar` file.
3. On an instance of JBoss EAP that has both JBoss Fuse 6.3.0 and kie-eap installed, but not the RT-Gov server, navigate to `$EAP_Home`.
4. Run the installer using the following command:

```
java -jar <tempLocation>/jboss-rtgov-6.3.0.redhat-2-client-  
installer.jar
```

5. Run the post installation script to set up password vaults, using this command:

```
./scripts/overlord/rtgov/install-overlord.sh
```

First the script prompts you to enter a password for the Overlord **admin** (default) user. This password is for accessing this instance of JBoss EAP, on which the RT-Gov client is installed.

Next, the script prompts you to enter the username and then the password used to access the EAP instance on which the RT-Gov server is installed. These credentials are required to log into the graphical user interface and to enable the client to connect with the server. Enter the same username (default = *admin*) and password used when installing the RT-Gov server component.

6. Edit the `$EAP_Home/standalone/configuration/standalone-full.xml` file.

- Set the `RESTActivityServer.serverURL` property's value to the correct URL for the RT-Gov server instance by replacing `rtgov-server-url` with the actual URL:

```
<parent>  
<configuration name="overlord-rtgov">  
    <properties>  
  
    ...  
  
<property name="RESTActivityServer.serverURL" value="rtgov-  
server-url"/>
```

- Set `ActivityCollector.enabled` to true.

7. Start the RT-Gov client EAP server in standalone-full mode, using this command:

```
./bin/standalone.sh -c standalone-full.xml
```

RT-GOV DATABASE

RT-Gov is initially configured to use an H2 database, but the configuration can be changed to use any databases from the following list:

- DB2
- Oracle 10g
- PostgreSQL
- MySQL 5 InnoDB
- SQLServer 2008



NOTE

In H2 database, after you run the installer, execute the following command:

```
> ./scripts/overlord/rtgov/install-overlord.sh --setup-db
```

It creates the schema automatically. However, for all other databases, you need to manually set up the database.

Procedure 3.1. Configure RT-Gov Database

1. Navigate to the `$EAP_HOME` directory of a clean installation of JBoss EAP.
2. The database schema files for each supported database are in `$EAP_HOME/sql/rtgov/`. Use the appropriate file for your database to create the database schema. For example, use `overlord-rtgov.PostgreSQLDialect.sql` for a PostgreSQL database.
3. Install the appropriate JDBC driver by following the instructions in [EAP Datasource Management](#). These instructions show you how to install the JDBC driver onto JBoss EAP using a number of different methods.
4. To define the location of the database and provide login criteria you must update the datasource configuration file. The datasource configuration file is at `$EAP_HOME/modules/system/layers/rtgov/org/overlord/rtgov/eap/deployments/main/rtgov-ds.xml`.

Update the following parameters to reflect the values for your database:

- connection-url - add the connection url for your database
 - driver - add the JDBC driver name for your database
 - user-id - add the admin logon for your database
 - password - add the password for the admin logon
5. To configure hibernate to use the matching dialect for the RT-Gov entities, change the `hibernate.dialect` property. This dialect is defined in `$EAP_HOME/standalone/configuration/standalone-full.xml`. For example:

```
<configuration name="overlord-rtgov">
  <properties>
    ...
    <property name="hibernate.dialect"
      value="org.hibernate.dialect.PostgreSQLDialect"/>
  </properties>
</configuration>
```

Here, `PostgreSQLDialect` is used as an example. Use the correct dialect to match your installation environment needs.