Red Hat JBoss Fuse 6.1

Installation Guide

Installing Red Hat JBoss Fuse on a computer

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Installing Red Hat JBoss Fuse on a computer

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Abstract

It is easy to install Red Hat JBoss Fuse and tailor the installation to a particular environment.

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CHAPTER 1. INSTALLATION PREREQUISITES

Abstract

Before attempting to install and use Red Hat JBoss Fuse, make sure your system meets the minimum requirements.

SUPPORTED PLATFORMS

Red Hat tests and supports Fuse products in the configurations listed at Red Hat JBoss Fuse Supported Configurations.

JAVA RUNTIME

For details of the Java runtimes supported by Red Hat JBoss Fuse, see Red Hat JBoss Fuse Supported Configurations.

WARNING

Do *not* install the Java runtime under a directory path that includes whitespace. For example, `C:\Program Files\Java\jde7` is not an acceptable install path and will lead to unpredictable errors in Red Hat JBoss Fuse at run time.

SUPPORTED STANDARDS

Red Hat JBoss Fuse supports the standards and protocols listed at Red Hat JBoss Fuse Supported Standards.

HARDWARE REQUIREMENTS

The minimum hardware requirements for installing Red Hat JBoss Fuse are:

- Full Installation
  - 700 MB of free disk space
  - 2 GB of RAM

In addition to the disk space required for the base installation, a running system will require space for caching, persistent message stores, and other functions.

CHAPTER 2. INSTALLATION TYPES

Red Hat JBoss Fuse allows you to choose between installations that contain different feature sets:

- Minimal—installs Apache Karaf, Apache Camel core, and selected Apache Camel components
- Medium—installs Apache Karaf, Apache Camel, Apache ActiveMQ, Apache CXF, and Fuse Management Console (hawtio)
- Full—installs Apache Karaf, Apache Camel, Apache ActiveMQ, Apache CXF, Fuse Management Console (hawtio), and the JBI components

CHAPTER 3. INSTALLING

Abstract

Red Hat JBoss Fuse is installed by unpacking an archive system on a system. This provides an easy way for a developer to get up and running.

GETTING THE ARCHIVE

You can download the Red Hat JBoss Fuse archive from the Red Hat Customer Portal>Downloads>Red Hat JBoss Middleware>Downloads page, after you register and login to your customer account.

Once logged in:

1. Select **Fuse**, listed under **Integrated Platforms**, in the sidebar menu.
2. Select **6.1.0** from the **Version** drop-down list on the **Software Downloads** page.
3. Click the **Download** button next to the Red Hat JBoss Fuse 6.1.0 distribution file you want to download.

UNPACKING THE ARCHIVE

Red Hat JBoss Fuse is packaged as a **.zip** file. Using a suitable archive tool, such as **Zip**, unpack Red Hat JBoss Fuse into a directory to which you have full access.

WARNING

Do not unpack the archive file into a folder that has spaces in its path name. For example, do not unpack into **C:\Documents and Settings\Greco Roman\Desktop\fusesrc**.

WARNING

Do not unpack the archive file into a folder that has any of the following special characters in its path name: #, %, ^, ".

CHAPTER 4. ADDING A REMOTE CONSOLE USER

Abstract

The server's remote command console is not configured with a default user. Before you can connect to the server's console remotely, you must add a user to the configuration.

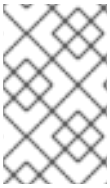
IMPORTANT

The information in this file is unencrypted so it is not suitable for environments that require strict security.

To add a user:

1. Open ***InstallDir*`/etc/users.properties`** in your favorite text editor.
2. Locate the line **`#admin=admin,admin`**.

   This line specifies a user **`admin`** with the password **`admin`** and the role **`admin`**.
3. Remove the leading # to uncomment the line.
4. Replace the first **`admin`** with a name for the user.
5. Replace the second **`admin`** with the password for the user.
6. Leave the last **`admin`** as is, and save the changes.



NOTE

If you want to access the Fuse Management Console to monitor and manage your Camel routes, ActiveMQ brokers, Web applications, and so on, open a browser to **`http://localhost:8181/hawtio`**, after you start up Red Hat JBoss Fuse.

CHAPTER 5. OFFLINE MODE

Abstract

You can run the JBoss Fuse container in offline mode (that is, without an Internet connection). But if you are planning to deploy custom applications to the container, it might be necessary to download additional dependencies (to a local Maven repository) before you can run the container in offline mode with these applications.

If you want to run the JBoss Fuse container in offline mode, it is necessary to distinguish between the following kinds of dependency:

- *Runtime dependencies*—the dependencies required to run the JBoss Fuse container, in its default configuration.
- *Build-time dependencies*—the dependencies required to build a custom application (which might include third-party libraries).

Here is a summary of what can be done in offline mode and what needs to be done in online mode (with an Internet connection):

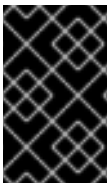
- *Running the JBoss Fuse container in its default configuration*—is supported in offline mode. The default configuration of the JBoss Fuse container is specified by the **`featuresBoot`** property in the **`etc/org.apache.karaf.features.cfg`** file. The requisite dependencies are all provided in the **`system/`** sub-directory of the installation.
- *Installing additional features*—is supported in offline mode, but only for the *Full Install* distribution. That is, you can use the **`features:install`** command to install any of the features from the standard feature repositories (as specified by the **`featuresRepositories`** property in the **`etc/org.apache.karaf.features.cfg`** file) and in the *Full Install*, all of these features are provided in the **`system/`** sub-directory of the installation.
- *Deploying custom applications*—is, in general, *not* supported in offline mode. There may be some cases where an application with a minimal set of build-time dependencies is deployable offline, but in general, custom applications would have third-party dependencies that require an Internet connection (so that JAR files can be downloaded by Apache Maven).

If you do need to deploy an application with dependencies that are not available offline, you can use the Maven dependency plug-in to download the application's dependencies into a Maven offline repository. This customized Maven offline repository can then be distributed internally to any machines that do not have an Internet connection. For more details of this approach, see section "Offline Repository for a Maven Project" in "Fabric Guide".

CHAPTER 6. MONITORING FUSE RESOURCES

Abstract

Using Red Hat JBoss Operations Network (JON), you can discover, import, and monitor Red Hat JBoss Fuse.



IMPORTANT

The Red Hat JBoss ON Plugin Pack for Red Hat JBoss Fuse 6.0 and 6.1 is not installed with the JON base distribution. You must download and install it separately after you have installed the JON base distribution.

To install the **Red Hat JBoss ON Plugin Pack for Red Hat JBoss Fuse 6.0 and 6.1**:

1. Navigate to the Red Hat Customer Portal>Downloads>JBoss Enterprise Middleware>Downloads page.
2. Select JBoss ON for Fuse under **Management** in the sidebar menu.
3. Make sure **3.2.0** appears in the **Version** drop-down list on the Software Downloads page.
4. Click **Download** next to Red Hat JBoss ON Plugin Pack for Red Hat JBoss Fuse 6.0 and 6.1 .
5. Unzip the plugin package (**JON-3.2.0-Fuse/jon-plugin-pack-fuse-3.2.0.GA.zip**) into a temporary directory (for example, ***installDir*/server/**).
6. Install the jar files in one of two ways:
   - Hot Deploy

     Copy the unpacked jar files into the JBoss Operations Network's ***/installDir/<server>*/plugins/** directory. For details, see the JBoss Operations Network Installation Guide.
   - JON Server UI

     For details, see the JBoss Operations Network Installation Guide , or watch the video Installing JBoss Operations Network - Part 4, Installing JON Agent Plugins .

APPENDIX A. INSTALLING THE APACHE COMPONENTS

Abstract

Red Hat JBoss Fuse includes standard distributions of Apache Camel and Apache CXF in the installation's `extras` directory.

If you want to use a standard distribution of Apache Camel or Apache CXF, without the OSGi container or Fuse Fabric, use the archived versions in the installation's `extras` directory.

The following archives are provided for all supported platforms:

- apache-camel-2.12.0.redhat-610<*build#*>.zip
- apache-cxf-2.7.0.redhat-610<*build#*>.zip

You can copy these files to the desired location and decompress them using the appropriate utility for your platform.

WARNING

Do not unpack an archive file into a folder that has spaces in its path name. For example, do not unpack into `C:\Documents and Settings\Greco Roman\Desktop\fusesrc`.

APPENDIX B. RED HAT JBOSS FUSE MAVEN REPOSITORIES

Abstract

Red Hat JBoss Fuse strongly supports Maven, an open source build system available from Apache Maven. To use Maven to build your projects, you need to specify, in a Maven `settings.xml` file, where required artifacts are located.

For details on setting up Maven to work with Red Hat JBoss Fuse, see *Building with Maven* in *Red Hat JBoss Fuse Deploying into the Container* on the Red Hat Customer Portal .

The following repositories contain artifacts your projects may need:

- JBoss Fuse repository

  Provides access to the artifacts in the Red Hat JBoss Fuse Maven repository. This repository is required.

  `https://repo.fusesource.com/nexus/content/groups/public/`

- JBoss Fuse Snapshots repository

  Provides access to the artifacts in the Red Hat JBoss Fuse snapshot kit. This repository is not required, but it is useful if you want to experiment with building your project using different versions of the supplied archetypes.

  `https://repo.fusesource.com/nexus/content/groups/public-snapshots/`

- Apache Public repository

  Provides access to the artifacts in the Apache Maven repository. This repository is not required, but it is useful to include as Red Hat JBoss Fuse depends on various Apache artifacts.

  `https://repository.apache.org/content/groups/public/`