



Red Hat Fuse 7.3

Installing on JBoss EAP

Install Fuse 7.3 on JBoss EAP 7.2

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Abstract

Use this guide to help you install Red Hat Fuse on JBoss EAP.

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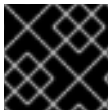
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CHAPTER 1. INSTALL FUSE ON JBOSS EAP

1.1. PREREQUISITES

Before you install Fuse on JBoss EAP:

- You must have installed a supported version of a Java runtime. For details of which Java runtimes are supported on different operating systems, see [Red Hat Fuse Supported Configurations](#).
- *(Optional)* We recommend that you use Maven with Red Hat Fuse projects. For information about preparing to use Maven, see [Appendix A, Preparing to use Maven](#).



IMPORTANT

Fuse on JBoss EAP is not supported with Domain mode.

1.2. INSTALL JBOSS EAP USING THE INSTALLER

1. Download the *Red Hat JBoss Enterprise Application Platform 7.2.0 on EAP Installer* package:
 - a. Browse to the [Enterprise Application Platform Software Downloads](#) page on the Red Hat Customer Portal and, when prompted, log in to your customer account.
 - b. Select version **7.2** from the **Version** dropdown menu and click the **Download** link for the **Red Hat JBoss Enterprise Application Platform 7.2.0 Installer** package.
2. Run the downloaded installer with the following command:

```
java -jar DOWNLOAD_LOCATION/jboss-eap-7.2.0-installer.jar
```
3. During installation:
 - a. Accept the terms and conditions.
 - b. Choose your preferred installation path, **EAP_HOME**, for the JBoss EAP runtime.
 - c. Create an administrative user and make a careful note of these administrative user credentials for later.
 - d. You can accept the default settings on the remaining screens.
4. Check the [Enterprise Application Platform Software Downloads](#) page for any recent patches that might need to be applied to JBoss EAP 7.2. Check also the [Red Hat Fuse Supported Configurations](#) page for any notes or advice on the compatibility of JBoss EAP patches with Red Hat Fuse. If appropriate, install the relevant JBoss EAP patch.



NOTE

For more detailed instructions on installing JBoss EAP, see [JBoss EAP 7.2 Installation Guide](#).

1.3. INSTALL FUSE ON JBOSS EAP USING THE INSTALLER

1. Download the *Red Hat Fuse 7.3 on EAP Installer* package:
 - a. Browse to the [Red Hat Fuse Software Downloads](#) page on the Red Hat Customer Portal and, when prompted, log in to your customer account.
 - b. Select version **7.3.0** from the **Version** dropdown menu and click the **Download** link for the **Red Hat Fuse 7.3.0 on EAP Installer** package.
2. Open a shell prompt (or a command prompt on Windows) and change directory to **EAP_HOME**, the root directory of the fresh Red Hat JBoss Enterprise Application Platform installation.
3. Run the downloaded installer with the following command (this command *must* run in the **EAP_HOME** directory):

```
java -jar DOWNLOAD_LOCATION/fuse-eap-installer-7.3.0.fuse-730055-redhat-00001.jar
```

4. The installer runs without prompting and logs its activity to the screen.

CHAPTER 2. START AND STOP THE APPLICATION SERVER

You need to start the JBoss Enterprise Application Platform instance for Fuse to run. This is because the Fuse components run on the JBoss Enterprise Application Platform container.



IMPORTANT

Fuse on JBoss EAP is not supported with Domain mode.



NOTE

For more information about starting and stopping JBoss Enterprise Application Platform using alternative and more advanced methods, see the [Red Hat JBoss Enterprise Application Platform Configuration Guide](#).

2.1. START JBOSS EAP 7.2

Start JBoss EAP 7.2 as a standalone server.

Start the Platform Service as a Standalone Server

- For Red Hat Enterprise Linux:
Run the command: **EAP_HOME/bin/standalone.sh**
- For Microsoft Windows Server:
Run the command: **EAP_HOME\bin\standalone.bat**
- Optionally specify additional parameters:
To print a list of additional parameters to pass to the start-up scripts, use the **-h** parameter.

2.2. STOP JBOSS EAP 7.2

Stop JBoss EAP using the Management CLI or by pressing **CTRL+C** in the terminal.

To stop JBoss EAP using the Management CLI:

1. Launch the Management CLI by running the **EAP_HOME/bin/jboss-cli.sh** command:

```
$ EAP_HOME/bin/jboss-cli.sh
```

2. Connect to the server by running the **connect** command:

```
[disconnected /] connect
```

3. Stop the server by running the **shutdown** command:

```
[standalone@localhost:9999 /] shutdown
```

4. Close the Management CLI by running the **quit** command:

```
[standalone@localhost:9999 /] quit
```

To stop JBoss EAP by pressing **CTRL+C**:

1. Navigate to the terminal where JBoss EAP is running.
2. Press **Ctrl+C** to stop JBoss Enterprise Application Platform.

CHAPTER 3. VERIFY YOUR RED HAT FUSE INSTALLATION

After completing the Fuse installation, you can verify the installation by performing the following steps:

1. Start the JBoss EAP server:

```
█ ./bin/standalone.sh
```

2. Open the **standalone/log/server.log** file to check if any error messages have been logged.
3. Open the Fuse Management Console (<http://localhost:8080/hawtio>) in a browser.
 - a. Sign in using the administrative user that you set up on the JBoss EAP installer.
 - b. If the Fuse Management Console runs and you can log in then the installation has been successful.

CHAPTER 4. ADDING USERS

To add new users to Fuse on JBoss EAP, use the **add-user** utility script provided with JBoss EAP.

1. Navigate to **EAP_HOME/bin**.
2. Run the **add-user** utility script.
3. Follow the on-screen instructions to create a new user, noting that:
 - **Management User** is an administrative user of Fuse on JBoss EAP.
 - **Application User** is a regular user of Fuse on JBoss EAP.

APPENDIX A. PREPARING TO USE MAVEN

A.1. OVERVIEW

This section gives a brief overview of how to prepare Maven for building Red Hat Fuse projects and introduces the concept of Maven coordinates, which are used to locate Maven artifacts.

A.2. PREREQUISITES

In order to build a project using Maven, you must have the following prerequisites:

- **Maven installation** – Maven is a free, open source build tool from Apache. You can download the latest version from the [Maven download page](#).
- **Network connection** – whilst performing a build, Maven dynamically searches external repositories and downloads the required artifacts on the fly. By default, Maven looks for repositories that are accessed over the Internet. You can change this behavior so that Maven will prefer searching repositories that are on a local network.



NOTE

Maven can run in an offline mode. In offline mode Maven only looks for artifacts in its local repository.

A.3. ADDING THE RED HAT MAVEN REPOSITORIES

In order to access artifacts from the Red Hat Maven repositories, you need to add them to Maven's **settings.xml** file. Maven looks for your **settings.xml** file in the **.m2** directory of the user's home directory. If there is not a user specified **settings.xml** file, Maven will use the system-level **settings.xml** file at **M2_HOME/conf/settings.xml**.

To add the Red Hat repositories to Maven's list of repositories, you can either create a new **.m2/settings.xml** file or modify the system-level settings. In the **settings.xml** file, add **repository** elements for the Red Hat repositories as shown in [Adding the Red Hat Fuse Repositories to Maven](#).

Adding the Red Hat Fuse Repositories to Maven

```
<?xml version="1.0"?>
<settings>

<profiles>
<profile>
<id>extra-repos</id>
<activation>
<activeByDefault>true</activeByDefault>
</activation>
<repositories>
<repository>
<id>redhat-ga-repository</id>
<url>https://maven.repository.redhat.com/ga</url>
<releases>
<enabled>true</enabled>
</releases>

```

```
<snapshots>
  <enabled>false</enabled>
</snapshots>
</repository>
<repository>
  <id>redhat-ea-repository</id>
  <url>https://maven.repository.redhat.com/earlyaccess/all</url>
  <releases>
    <enabled>true</enabled>
  </releases>
  <snapshots>
    <enabled>false</enabled>
  </snapshots>
</repository>
<repository>
  <id>jboss-public</id>
  <name>JBoss Public Repository Group</name>
  <url>https://repository.jboss.org/nexus/content/groups/public/</url>
</repository>
</repositories>
<pluginRepositories>
<pluginRepository>
  <id>redhat-ga-repository</id>
  <url>https://maven.repository.redhat.com/ga</url>
  <releases>
    <enabled>true</enabled>
  </releases>
  <snapshots>
    <enabled>false</enabled>
  </snapshots>
</pluginRepository>
<pluginRepository>
  <id>redhat-ea-repository</id>
  <url>https://maven.repository.redhat.com/earlyaccess/all</url>
  <releases>
    <enabled>true</enabled>
  </releases>
  <snapshots>
    <enabled>false</enabled>
  </snapshots>
</pluginRepository>
<pluginRepository>
  <id>jboss-public</id>
  <name>JBoss Public Repository Group</name>
  <url>https://repository.jboss.org/nexus/content/groups/public</url>
</pluginRepository>
</pluginRepositories>
</profile>
</profiles>

<activeProfiles>
  <activeProfile>extra-repos</activeProfile>
</activeProfiles>

</settings>
```

A.4. ARTIFACTS

The basic building block in the Maven build system is an *artifact*. The output of an artifact, after performing a Maven build, is typically an archive, such as a JAR or a WAR.

A.5. MAVEN COORDINATES

A key aspect of Maven functionality is the ability to locate artifacts and manage the dependencies between them. Maven defines the location of an artifact using the system of *Maven coordinates*, which uniquely define the location of a particular artifact. A basic coordinate tuple has the form, **{*groupId*, *artifactId*, *version*}**. Sometimes Maven augments the basic set of coordinates with the additional coordinates, *packaging* and *classifier*. A tuple can be written with the basic coordinates, or with the additional *packaging* coordinate, or with the addition of both the *packaging* and *classifier* coordinates, as follows:

```
groupId:artifactId:version
groupId:artifactId:packaging:version
groupId:artifactId:packaging:classifier:version
```

Each coordinate can be explained as follows:

groupId

Defines a scope for the name of the artifact. You would typically use all or part of a package name as a group ID – for example, **org.fusesource.example**.

artifactId

Defines the artifact name (relative to the group ID).

version

Specifies the artifact's version. A version number can have up to four parts: **n.n.n.n**, where the last part of the version number can contain non-numeric characters (for example, the last part of **1.0-SNAPSHOT** is the alphanumeric substring, **0-SNAPSHOT**).

packaging

Defines the packaged entity that is produced when you build the project. For OSGi projects, the packaging is **bundle**. The default value is **jar**.

classifier

Enables you to distinguish between artifacts that were built from the same POM, but have different content.

The group ID, artifact ID, packaging, and version are defined by the corresponding elements in an artifact's POM file. For example:

```
<project ... >
...
<groupId>org.fusesource.example</groupId>
<artifactId>bundle-demo</artifactId>
<packaging>bundle</packaging>
<version>1.0-SNAPSHOT</version>
...
</project>
```

For example, to define a dependency on the preceding artifact, you could add the following **dependency** element to a POM:

-

```
<project ... >
...
<dependencies>
  <dependency>
    <groupId>org.fusesource.example</groupId>
    <artifactId>bundle-demo</artifactId>
    <version>1.0-SNAPSHOT</version>
  </dependency>
</dependencies>
...
</project>
```



NOTE

It is **not** necessary to specify the **bundle** package type in the preceding dependency, because a bundle is just a particular kind of JAR file and **jar** is the default Maven package type. If you do need to specify the packaging type explicitly in a dependency, however, you can use the **type** element.