



Red Hat JBoss Fuse 6.3

Installation on JBoss EAP

Install JBoss Fuse 6.3 on JBoss EAP 6.4

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JBoss A-MQ Docs Team

Content Services

fuse-docs-support@redhat.com

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Abstract

Use this guide to help you install JBoss Fuse on JBoss EAP

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CHAPTER 1. INSTALLATION GUIDE OVERVIEW

STRUCTURE OF RED HAT JBOSS FUSE 6.3

In Red Hat JBoss Fuse 6.3 (JBoss Fuse) you have a choice of installation platforms. JBoss Fuse can be installed on Red Hat JBoss Enterprise Application Platform 6.4 (JBoss EAP) or as a standalone JBoss Fuse on Karaf package.

The product is installed in packages. There are the base packages for JBoss Fuse on JBoss EAP or Karaf, and supplementary packages for additional functionality.

Installation Type	Components	Prerequisite Packages
JBoss Fuse on Karaf	jboss-fuse-karaf-6.3.0.redhat-xxx Optional packages: <ul style="list-style-type: none"> ● Integration Pack ● JBoss ON Pack 	None
JBoss Fuse on JBoss EAP	fuse-eap-installer-6.3.0.redhat-xxx Optional packages: <ul style="list-style-type: none"> ● Integration Pack ● JBoss ON Pack 	JBoss EAP 6.4



NOTE

There is a Governance Pack available for JBoss Fuse on JBoss EAP, but it is only available for existing customers of JBoss Fuse Service Works 6.2.

Contents of JBoss Fuse Packages

The packages for JBoss Fuse contain discrete sets of functionality. The base package for the chosen platform is mandatory but the additional packages are optional.

Package Name	Contents
jboss-fuse-karaf-6.3.0.redhat-xxx	<ul style="list-style-type: none"> ● Apache Camel ● SwitchYard ● Apache CXF ● Apache ActiveMQ

Package Name	Contents
fuse-eap-installer-6.3.0.redhat-xxx	<ul style="list-style-type: none">● Apache Camel● SwitchYard● BPEL/Riftsaw
Integration Pack	Contains integration components and quickstarts to enable integration of JBoss Fuse components with other products that are not part of JBoss Fuse.
JON Pack	Red Hat JBoss Operations Network plug-ins package.

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. INSTALL JBOSS FUSE ON JBOSS EAP

PREREQUISITES

JBoss Fuse must be installed on JBoss EAP 6.4. If you need to install JBoss EAP 6.4, download it from [JBoss EAP 6.4 Installer Download](#). See [JBoss EAP 6.4 Installation Guide](#) for installation instructions.



IMPORTANT

We also recommend that you apply the latest patch to JBoss EAP 6.4. The JBoss EAP patch level should be at least 6.4.10, to avoid known issues. Patches are available from the [JBoss EAP 6.4 Patches](#) tab of the download page.

INSTALL JBOSS FUSE USING INSTALLER

1. Download the Red Hat JBoss Fuse 6.3.0 on EAP Installer:
 1. Browse to the [JBoss Fuse Software Downloads](#) page on the Red Hat Customer Portal and, when prompted, login to your customer account.
 2. Select version **6.3.0** from the **Version** dropdown menu and click the **Download** link for the *Red Hat JBoss Fuse 6.3.0 on EAP Installer* package.
2. Navigate to `$EAP_HOME` of a clean instance of JBoss EAP.
3. Run the downloaded installer with the following command:

```
java -jar TEMP_LOCATION/fuse-eap-installer-6.3.0.redhat-xxx.jar
```



NOTE

Once a datastore has been selected at installation, it can not be changed.

INSTALLING RED HAT JBOSS DEVELOPMENT TOOLS

The JBoss Fuse development environment is included in JBoss Developer Studio starting with Developer Studio 11.0. After you [download Developer Studio](#), see the [Red Hat JBoss Developer Studio 11.0 Installation Guide](#). During installation, in the **Select Additional Features to Install** page, be sure to select **JBoss Fuse Tooling**.

Switchyard is included in JBoss Developer Studio Integration Stack. To install Switchyard tooling, see the [Red Hat JBoss Developer Studio Integration Stack Installation Guide](#).

CHAPTER 4. START AND STOP THE APPLICATION SERVER

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



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 Administration and Configuration Guide](#).

4.1. START JBOSS EAP 6

Summary

This topic covers the steps to start JBoss EAP 6.4.

Procedure 4.1. Start the Platform Service as a Standalone Server

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

Procedure 4.2. Start the Platform Service as a Domain Server

1. **For Red Hat Enterprise Linux.**
Run the command: **`EAP_HOME/bin/domain.sh`**
2. **For Microsoft Windows Server.**
Run the command: **`EAP_HOME\bin\domain.bat`**
3. **Optional: Specify additional parameters.**
To print a list of additional parameters to pass to the start-up scripts, use the **`-h`** parameter.

4.2. STOP JBOSS EAP 6.4

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

1. **Stop JBoss EAPI using the Management CLI.**
 - Run the **`EAP_HOME/bin/jboss-cli.sh`** command to launch the Management CLI.

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

- Run the **`connect`** command to connect to the server.

```
[disconnected /] connect
```

- Run the **shutdown** command to stop the server.

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

- Run the **quit** command to close the Management CLI.

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

2. **Stop JBoss Enterprise Application Platform in terminal window.**
Navigate to the terminal where JBoss EAP is running. Press **Ctrl+C**.

CHAPTER 5. PATCHING FUSE ON JBOSS EAP

This chapter provides instructions on how to apply patches to the technology stack that belongs to Fuse on JBoss EAP. This does *not* include patches for the underlying JBoss EAP container, which must be patched separately.

5.1. HOW TO APPLY A PATCH TO FUSE ON JBOSS EAP

To patch an existing installation of Fuse on JBoss EAP, perform the following steps:

1. Browse to the [JBoss Fuse Software Downloads](#) page on the Red Hat Customer Portal and, when prompted, log in to your customer account.
2. Select version **6.3** from the **Version** dropdown menu.
3. Search under the **Patches** tab and the **Security Advisories** tab for the *latest* package of the form **Red Hat JBoss Fuse 6.3 Rollup X on EAP**, where **X** is the number of the rollup patch.
4. Download the patch file, **fuse-eap-installer-6.3.0.redhat-XXX.jar**, to **TEMP_LOCATION**.
5. Open a shell prompt and change directory to the **\$JBOSS_HOME** directory of the existing installation of Fuse on JBoss EAP that you want to patch.
6. From the shell prompt, enter the following command to patch the installation of Fuse on JBoss EAP (replacing the file name with the actual file name of the downloaded patch):

```
java -jar TEMP_LOCATION/fuse-eap-installer-6.3.0.redhat-XXX.jar
```



NOTE

The underlying JBoss EAP instance can be patched independently. Recent patches to JBoss EAP require you to apply patch 9 first (it is a prerequisite for later patches). For more details about patching the JBoss EAP container, see the JBoss EAP *Patching and Upgrading Guide*.

5.2. UNINSTALL FUSE ON EAP INTEGRATION PATCH

To uninstall Red Hat Fuse on EAP Integration patch, perform following steps:

1. Navigate to **\$EAP_HOME/bin** directory.
2. Query the server to view the installed patches:

```
[userid@localhost bin] ./fusepatch.sh --query-server
kie-eap-distribution-6.5.0.Final-redhat-15
fuse-patch-distro-wildfly-2.4.0.redhat-1
fuse-integration-eap-distro-1.7.0.redhat-630036
fuse-eap-distro-6.3.0.redhat-377
```

3. Disable the Red Hat Fuse Integration configuration layers as follows:

```
[userid@localhost bin] ./fuseconfig.sh --configs fuse-integration --disable
Processing config for: fuse-integration
Writing 'layers=fuse,bpms,soa' to: $EAP_HOME//modules/layers.conf
```

```
Disable fuse-integration configuration in:
$EAP_HOME/standalone/configuration/standalone.xml
Disable fuse-integration configuration in: $EAP_HOME/standalone/configuration/standalone-
full.xml
Disable fuse-integration configuration in: $EAP_HOME/standalone/configuration/standalone-
full-ha.xml
Disable fuse-integration configuration in: $EAP_HOME/standalone/configuration/standalone-
ha.xml
Disable fuse-integration configuration in: $EAP_HOME/domain/configuration/domain.xml
```

4. Disable the JBoss BPMS configuration layers as follows:

```
[userid@localhost bin] ./fuseconfig.sh --configs bpms --disable
Processing config for: bpms
Writing 'layers=fuse,soa' to: $EAP_HOME/modules/layers.conf
Disable bpms configuration in: $EAP_HOME/configuration/standalone.xml
Disable bpms configuration in: $EAP_HOME/standalone/configuration/standalone-full.xml
Disable bpms configuration in: $EAP_HOME/standalone/configuration/standalone-full-
ha.xml
Disable bpms configuration in: $EAP_HOME/standalone/configuration/standalone-ha.xml
Disable bpms configuration in: $EAP_HOME/domain/configuration/domain.xml
```

5. Uninstall **integration-eap** and **kie-eap** packages as follows:

```
[userid@localhost bin] ./fusepatch.sh --uninstall fuse-integration-eap-distro-1.7.0.redhat-
630036
Uninstall fuse-integration-eap-distro-1.7.0.redhat-630036

[userid@localhost bin] ./fusepatch.sh --uninstall kie-eap-distribution-6.5.0.Final-redhat-15
Uninstall kie-eap-distribution-6.5.0.Final-redhat-15
```

6. Verify that the patches are uninstalled and then restart JBoss EAP server to verify that it's working.

```
[userid@localhost bin] ./fusepatch.sh --query-server
fuse-patch-distro-wildfly-2.4.0.redhat-1
fuse-eap-distro-6.3.0.redhat-377

[userid@localhost bin] ./jboss-cli.sh -c "shutdown --restart=true"
```

APPENDIX A. 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 [chapter "Building with Maven" in "Deploying into Apache Karaf"](#).

A.1. MAVEN REPOSITORIES

The following repositories contain artifacts your projects may need:

- JBoss Fuse repository

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

<https://maven.repository.redhat.com/ga>

- JBoss Fuse early access repository

Provides access to the artifacts in the Red Hat Maven repository for early access releases. This repository is optional:

<https://maven.repository.redhat.com/earlyaccess/all>

APPENDIX B. VERIFY YOUR RED HAT JBOSS FUSE INSTALLATION

After you complete the **JBoss Fuse** installation, you can verify if the product has been installed successfully.

If no error was reported, you can verify the installation by performing the following steps:

1. Start the JBoss EAP server by running **standalone.sh** command
2. Open the **server.log** file to check if any error messages have been logged and that SwitchYard (and other component subsystems) have loaded correctly
3. Open the Fuse Management Console (<http://localhost:8080/hawtio>) in a browser. Sign in using the administrative user that you set up on the JBoss EAP installer. If the Fuse Management Console runs and you can log in then the installation has been successful.

ADD A USER ID TO FUSE ON JBOSS FUSE ON JBOSS EAP

To add further administrative userids to 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. Press ENTER to select the default option a to add a management user. All the defaults can be selected by pressing ENTER.
4. Enter a User ID and password. Repeat the password.
5. Enter *yes* to indicate that you want to add the new userid to the Management Realm.
6. Enter *no* to indicate that the new userid is not for a remote connection of any kind.

```
[userid@localhost bin] $ ./add-user.sh
```

```
What type of user do you wish to add?
```

- ```
a) Management User (mgmt-users.properties)
b) Application User (application-users.properties)
```

```
(a):
```

```
Enter the details of the new user to add.
```

```
Realm (ManagementRealm) :
```

```
Username : manageuser
```

```
Password requirements are listed below. To modify these restrictions edit the add-user.properties configuration file.
```

- ```
- The password must not be one of the following restricted values {root, admin, administrator}
- The password must contain at least 8 characters, 1 alphabetic character(s), 1 digit(s), 1 non-alphanumeric symbol(s)
- The password must be different from the username
```

```
Password :
```

```
Re-enter Password :
```

```
What groups do you want this user to belong to? (Please enter a comma separated list, or leave blank for none)[ ]:
```


About to add user 'manageuser' for realm 'ManagementRealm'

Is this correct yes/no? yes

Added user 'manageuser' to file '\$EAP_HOME/standalone/configuration/mgmt-users.properties'

Added user 'manageuser' to file '\$EAP_HOME/domain/configuration/mgmt-users.properties'

Added user 'manageuser' with groups to file '\$EAP_HOME/standalone/configuration/mgmt-groups.properties'

Added user 'manageuser' with groups to file '\$EAP_HOME/domain/configuration/mgmt-groups.properties'

Is this new user going to be used for one AS process to connect to another AS process?

e.g. for a slave host controller connecting to the master or for a Remoting connection for server to server EJB calls.

yes/no? no

For more information about creating users on JBoss EAP see [Adding a Management User](#) in the JBoss EAP Administration and Configuration Guide.