

Red Hat JBoss Enterprise Application Platform 7.0 Installation Guide

For Use with Red Hat JBoss Enterprise Application Platform 7.0

Red Hat Customer Content Services

Red Hat JBoss Enterprise Application Platform 7.0 Installation Guide

For Use with Red Hat JBoss Enterprise Application Platform 7.0

Legal Notice

Copyright © 2017 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, 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

This book is a guide to the installation of Red Hat JBoss Enterprise Application Platform 7.0.

Table of Contents

1.1. ABOUT RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM 7	. 3
1.2. ABOUT THE RED HAT CUSTOMER PORTAL	3
1.3. ABOUT THE USE OF EAP HOME IN THIS DOCUMENT	3
_	
CHAPTER 2. PREPARING FOR INSTALLATION	. 5
2.1. CHOOSING A JBOSS EAP INSTALLATION METHOD	5
2.2. JBOSS EAP INSTALLATION PREREQUISITES	5
CHAPTER 3. INSTALLING JBOSS EAP	. 7
3.1. ZIP INSTALLATION	7
3.1.1. Downloading JBoss EAP (ZIP Installation)	7
3.1.2. Installing JBoss EAP (ZIP Installation)	7
3.2. INSTALLER INSTALLATION	7
3.2.1. Downloading JBoss EAP (Installer Installation)	8
3.2.2. Running the JBoss EAP Installer	8
3.3. RPM INSTALLATION	23
3.3.1. Choosing a Repository	23
3.3.1.1. Subscribing to the Current JBoss EAP 7 Repository	24
3.3.1.2. Subscribing to a Minor JBoss EAP 7 Repository	24
3.3.2. Installing JBoss EAP (RPM Installation)	24
3.3.3. Changing Repositories	25
3.4. AUTOMATED INSTALLER INSTALLATION	25
3.4.1. Unattended Automated Installer Installation	26
CHAPTER 4. CONFIGURING JBOSS EAP TO RUN AS A SERVICE	29
4.1. CONFIGURING JBOSS EAP AS A SERVICE IN RED HAT ENTERPRISE LINUX (ZIP AND INSTALLER	(
INSTALLATIONS)	29
4.2. CONFIGURING JBOSS EAP AS A SERVICE IN RED HAT ENTERPRISE LINUX (RPM INSTALLATION	
4.3. CONFIGURING JBOSS EAP AS A SERVICE IN MICROSOFT WINDOWS SERVER 31	30
4.4. CONFIGURING JBOSS EAP AS A SERVICE USING JSVC	33
CHAPTER 5. UNINSTALLING JBOSS EAP	40
5.1. UNINSTALLING JBOSS EAP (ZIP INSTALLATION)	40
5.2. UNINSTALLING JBOSS EAP (INSTALLER INSTALLATION)	40
5.3. UNINSTALLING JBOSS EAP (RPM INSTALLATION)	41

CHAPTER 1. PRODUCT OVERVIEW

1.1. ABOUT RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM 7

Red Hat JBoss Enterprise Application Platform 7 (JBoss EAP) is a middleware platform built on open standards and compliant with the Java Enterprise Edition 7 specification. It integrates WildFly Application Server 10 with messaging, high-availability clustering, and other technologies.

JBoss EAP includes a modular structure that allows service enabling only when required, improving startup speed.

The management console and management command-line interface (CLI) make editing XML configuration files unnecessary and add the ability to script and automate tasks.

JBoss EAP provides two operating modes for JBoss EAP instances: standalone server or managed domain. The standalone server operating mode represents running JBoss EAP as a single server instance. The managed domain operating mode allows for the management of multiple JBoss EAP instances from a single control point.

In addition, JBoss EAP includes APIs and development frameworks for quickly developing secure and scalable Java EE applications.

1.2. ABOUT THE RED HAT CUSTOMER PORTAL

The Red Hat Customer Portal is the centralized platform for Red Hat knowledge and subscription resources. Use the Red Hat Customer Portal to do the following:

- Manage and maintain Red Hat entitlements and support contracts.
- Download officially-supported software.
- Access product documentation and the Red Hat Knowledgebase.
- Contact Global Support Services.
- File bugs against Red Hat products.

The Customer Portal is available here: https://access.redhat.com.

1.3. ABOUT THE USE OF EAP_HOME IN THIS DOCUMENT

In this document, the variable **EAP_HOME** is used to denote the path to the JBoss EAP installation. Replace this variable with the actual path to your JBoss EAP installation.

- If you installed JBoss EAP using the ZIP install method, the install directory is the
 jboss-eap-7.0 directory where you extracted the ZIP archive.
- If you installed JBoss EAP using the RPM install method, the install directory is /opt/rh/eap7/root/usr/share/wildfly/.
- If you used the installer to install JBoss EAP, the default path for EAP_HOME is \${user.home}/EAP-7.0.0:

- For Red Hat Enterprise Linux, Solaris, and HP-UX: /home/USER_NAME/EAP-7.0.0/
- For Microsoft Windows: C:\Users\USER_NAME\EAP-7.0.0\
- If you used the JBoss Developer Studio installer to install and configure the JBoss EAP server, the default path for EAP_HOME is \${user.home}/jbdevstudio/runtimes/jboss-eap:
 - For Red Hat Enterprise Linux: /home/USER_NAME/jbdevstudio/runtimes/jboss-eap/
 - For Microsoft Windows: C:\Users\USER_NAME\jbdevstudio\runtimes\jboss-eap or C:\Documents and Settings\USER_NAME\jbdevstudio\runtimes\jboss-eap\



Note

EAP_HOME is not an environment variable. **JBOSS_HOME** is the environment variable used in scripts.

CHAPTER 2. PREPARING FOR INSTALLATION

2.1. CHOOSING A JBOSS EAP INSTALLATION METHOD

There are several different ways to install JBoss EAP. Each method is best used in certain situations. The table below provides a brief overview of each type of installation, and links to the sections that cover the relevant installation processes.



Note

If you plan to use JBoss ON to deploy and install JBoss EAP patches, the target JBoss EAP instances must be installed using the ZIP installation method.

Table 2.1. Installation Methods

Method	Description
ZIP Installation	The ZIP archive is suitable for installation on all supported operating systems. This method should be used if you wish to extract the instance manually.
	The ZIP installation installs a default installation of JBoss EAP, and all configuration must be done following installation.
JAR Installer	The JAR installer can be run in a console, or as a graphical wizard. Both options provide step-by-step instructions for installing and configuring the server instance. This is the preferred method to install JBoss EAP on all supported platforms.
	Additional setup, including the Quickstarts and Maven Repository, is also possible with the installer.
RPM Installation	JBoss EAP can be installed using RPM packages on supported installations of Red Hat Enterprise Linux 6 and Red Hat Enterprise Linux 7.

2.2. JBOSS EAP INSTALLATION PREREQUISITES

Each installation method has a number of prerequisites. The table below covers the common requirements, as well as those specific to each installation method.

Table 2.2. JBoss EAP Installation Prerequisites

Installation type	Prerequisites
Common Prerequisites	Set up an account on the Red Hat Customer Portal.
	Review the JBoss EAP 7 supported configurations and ensure your system is supportable.
	Ensure that your system is up to date with Red Hat issued updates and errata.
ZIP/Installer Prerequisites	Ensure that a supported Java Development Kit (JDK) has been installed.
	On Microsoft Windows Server, ensure that the JAVA_HOME and PATH environment variables have been set, otherwise shortcuts will not work.
	On Hewlett-Packard HP-UX, ensure that an unzip utility has been installed.
RPM Prerequisites	Register the Red Hat Enterprise Linux server using Red Hat Subscription Manager.
	Ensure that a supported Java Development Kit (JDK) has been installed.

CHAPTER 3. INSTALLING JBOSS EAP

3.1. ZIP INSTALLATION

3.1.1. Downloading JBoss EAP (ZIP Installation)

Prerequisites

JBoss EAP Installation Prerequisites

The JBoss EAP ZIP file is available from the Red Hat Customer Portal. The ZIP file installation is platform-independent.

Downloading the JBoss EAP ZIP File

- 1. Open a browser and log in to the Red Hat Customer Portal at https://access.redhat.com.
- 2. Click Downloads.
- 3. Click Red Hat JBoss Enterprise Application Platform in the Product Downloads list.
- 4. Select the correct JBoss EAP version from the **Version** drop-down menu.
- 5. Find **Red Hat JBoss Enterprise Application Platform 7.** *x.x* in the list and click the **Download** link.

3.1.2. Installing JBoss EAP (ZIP Installation)

Once the JBoss EAP ZIP installation file has been downloaded, it can be installed by extracting the package contents.

- 1. If necessary, move the ZIP file to the server and location where JBoss EAP should be installed.
 - The user who will be running JBoss EAP must have read and write access to this directory.
- 2. Extract the ZIP archive.
 - \$ unzip jboss-eap-7.x.x.zip



Note

For Windows Server, right-click the ZIP file and select **Extract All**.

The directory created by extracting the ZIP archive is the top-level directory for the JBoss EAP installation. This is referred to as **EAP_HOME**.

3.2. INSTALLER INSTALLATION

3.2.1. Downloading JBoss EAP (Installer Installation)

Prerequisites

JBoss EAP Installation Prerequisites

The JBoss EAP JAR installer is available from the Red Hat Customer Portal. The .jar archive can be used to run either the graphical or text-based installers. The installer is the preferred way to install JBoss EAP on all supported platforms.

Downloading the JBoss EAP Installer

- 1. Open a browser and log in to the Red Hat Customer Portal at https://access.redhat.com.
- 2. Click Downloads.
- 3. Click **Red Hat JBoss Enterprise Application** in the **Product Downloads** list.
- 4. Select the correct JBoss EAP version from the **Version** drop-down menu.
- 5. Find **Red Hat JBoss Enterprise Application 7.** x.x **Installer** in the list and click the **Download** link.

3.2.2. Running the JBoss EAP Installer

You can run the JBoss EAP JAR installer in either graphical or text mode.

Running the JBoss EAP Graphical Installer

- 1. Open a terminal and navigate to the directory containing the downloaded JBoss EAP Installer JAR file.
- 2. Run the graphical installer using the following command:



Note

In Hewlett-Packard HP-UX or Solaris environments, you can specify the required architecture by using the **-d32** or **-d64** switch. Launch the installer by executing either of these commands:

or

3. Follow the instructions in the table below.

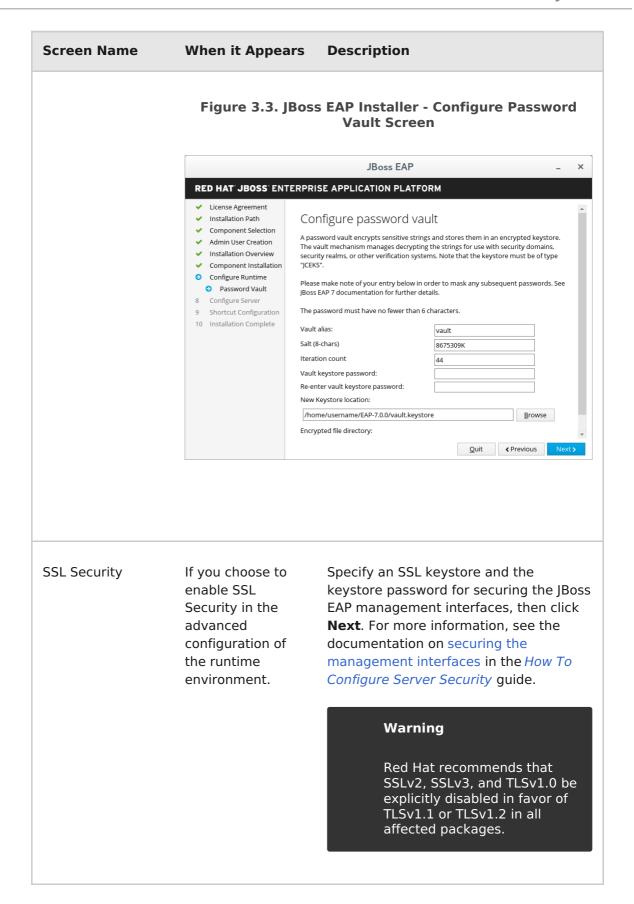
Table 3.1. JBoss EAP Installer Screens

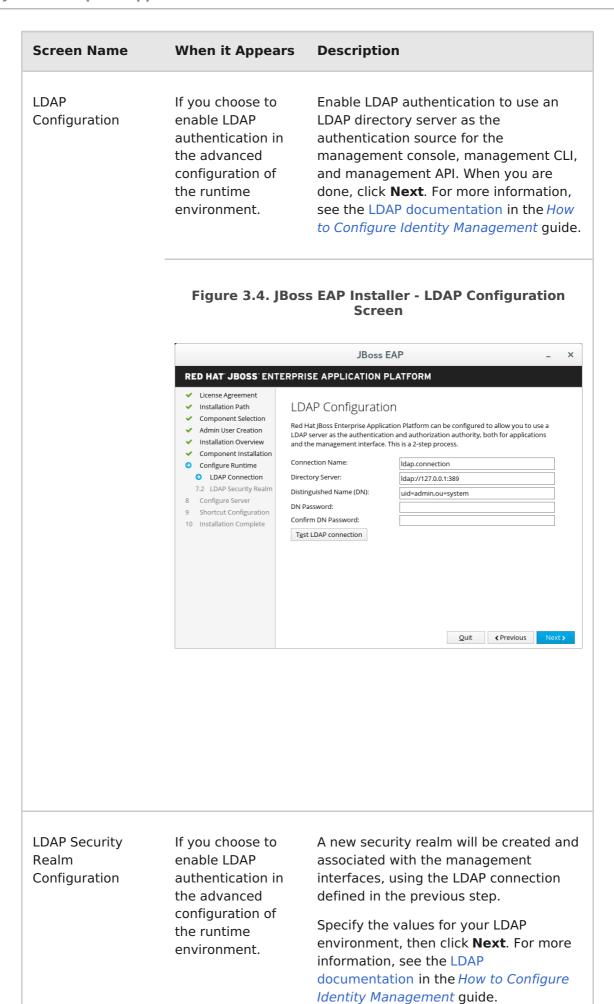
Screen Name	When it Appo	ears Description
Langauge Selection	Always	Choose the desired language for the installer and click OK .
License Agreement	Always	The EULA for RED HAT JBOSS MIDDLEWARE.
		Select "I accept the terms of this license agreement.", and click Next .
Installation Path	Always	Select the installation path for JBoss EAP, and click Next .
Component Selection	Always	Select the components to install. Required components are disabled for deselection.
Figure 3.1. JBoss EAP Installer - Component Se Screen		
	RED HAT JBOSS ENT	ERPRISE APPLICATION PLATFORM
	✓ License Agreement ✓ Installation Path O Component Selection 4 Admin User Creation Installation Overview Component Installation Configure Runtime Configure Server Shortcut Configuration Installation Complete	Component Selection Note: Disabled packs are required. □ → Red Hat JBoss Enterprise Application Platform 183.99 M8 → AppClient 38.94 KB → Docs 8.4 MB → Modules 157.18 MB → Welcome Content 2.11 MB
		Total space required: Available space: 183.99 MB Available space: 99.65 GB Quit Previous Next
Admin User Creation	Always	Create an administrative user and assign a password. Then click Next .
Installation Overview	Always	Review your installation options, then click Next .

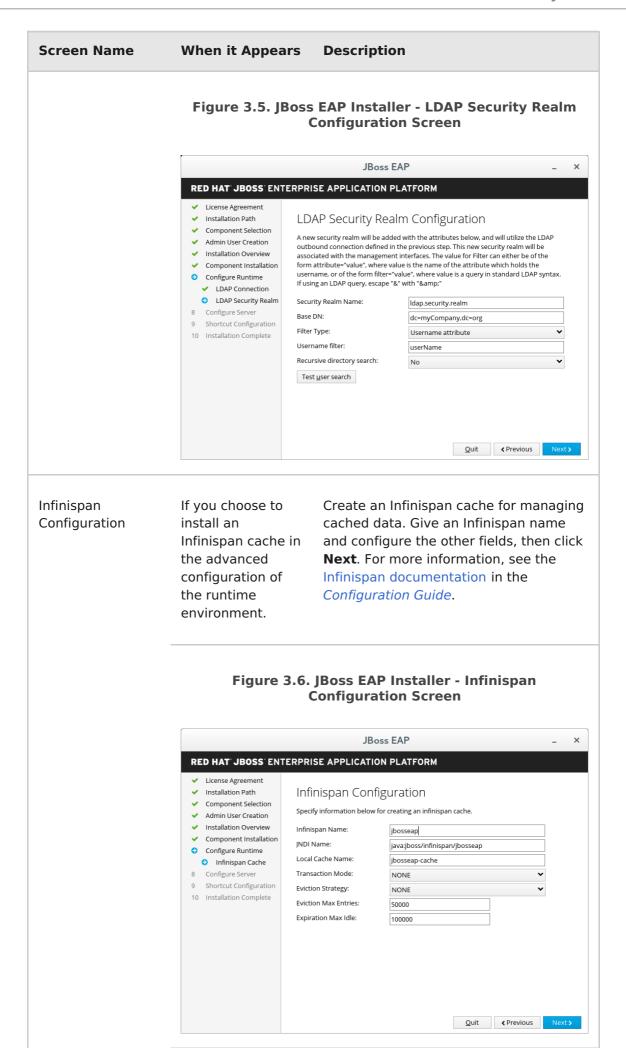
When it Appea	rs Description
Always	When the installation progress completes, click Next .
Always	You can choose a default configuration for your JBoss EAP installation, or choose to perform an advanced configuration with the installer. Note that even if you choose a default configuration, you can still alter your configuration using the JBoss EAP management interfaces at a later time.
	Select Perform default configuration or select Perform advanced configuration and select the items to configure, then click Next .
Figure 3.2. J	Boss EAP Installer - Configure Runtime Environment Screen
RED HAT JBOSS ENT	ERPRISE APPLICATION PLATFORM
License Agreement Installation Path Component Selection Admin User Creation Installation Overview Component Installation Configure Runtime Configure Server Shortcut Configuration Installation Complete	Configure runtime environment There are several additional options for configuring Red Hat JBoss Enterprise Application Platform now that the server has been installed. Each option can be individually chosen, and will be configured in the order displayed upon pressing next. What would you like to do now? Perform default configuration Perform advanced configuration Install password vault Enable SSL security Enable LDAP authentication Install Infinispan Cache Add a security-domain Install quickstarts Configure server port bindings Configure logging levels Install JDBC Driver Install JDBC Driver
	Always Always Figure 3.2. J RED HAT JBOSS ENT: License Agreement Installation Path Component Selection Admin User Creation Installation Overview Configure Server Shortcut Configuration

Configure Password Vault If you choose to install a password vault in the advanced configuration of the runtime environment.

Configure a password vault to store all your sensitive passwords in an encrypted keystore, then click **Next**. For more information, see the password vault documentation in the *How To Configure Server Security* guide.







Screen Name

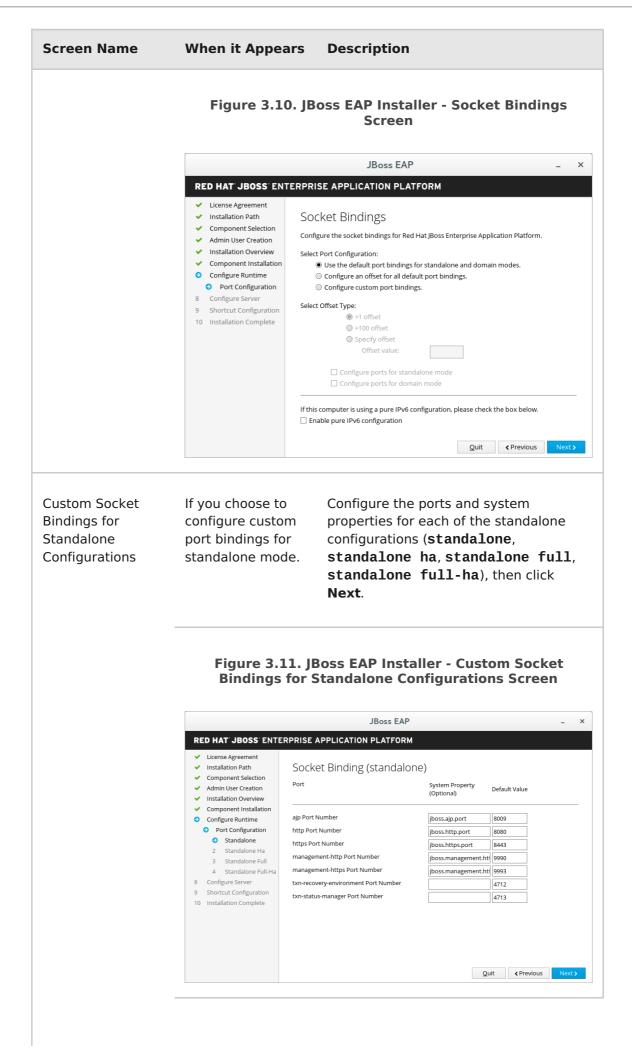
When it Appears **Description** Security Domain If you choose to Configure a security domain for the Configuration add a security JBoss EAP server instance. Most of the domain in the fields are already populated with default values and do not need modification. advanced configuration of When you are done, click **Next**. For more the runtime information, see *Security Domains* in the environment. Security Architecture Guide. Figure 3.7. JBoss EAP Installer - Security Domain **Configuration Screen** JBoss EAP × **RED HAT' JBOSS' ENTERPRISE APPLICATION PLATFORM** License Agreement Installation Path Security Domain Configuration Component Selection ✓ Admin User Creation Configure a security-domain using the fields below. The only required field is the Installation Overview security-domain name. The rest of the fields are optional. Most fields have a predefined list of valid values. ✓ Component Installation Configure Runtime Security-domain name mySecurityDomain Security Domain Security-Domain Cache-type: None 7.2 JSSE Security Add authentication element: 8 Configure Server No Authentication code: Authentication flag: Authentication options: Client Required LestName=testValue 9 Shortcut Configuration 10 Installation Complete Add Module Remove Module Add authorization element: No Authorization flag: Authorization flag: VestName=testValue Authorization code: Authorization flag: DenyAll Required Authorization options: Add Module Remove Module Add mapping element: Mapping code: Mapping type: Mapping options:

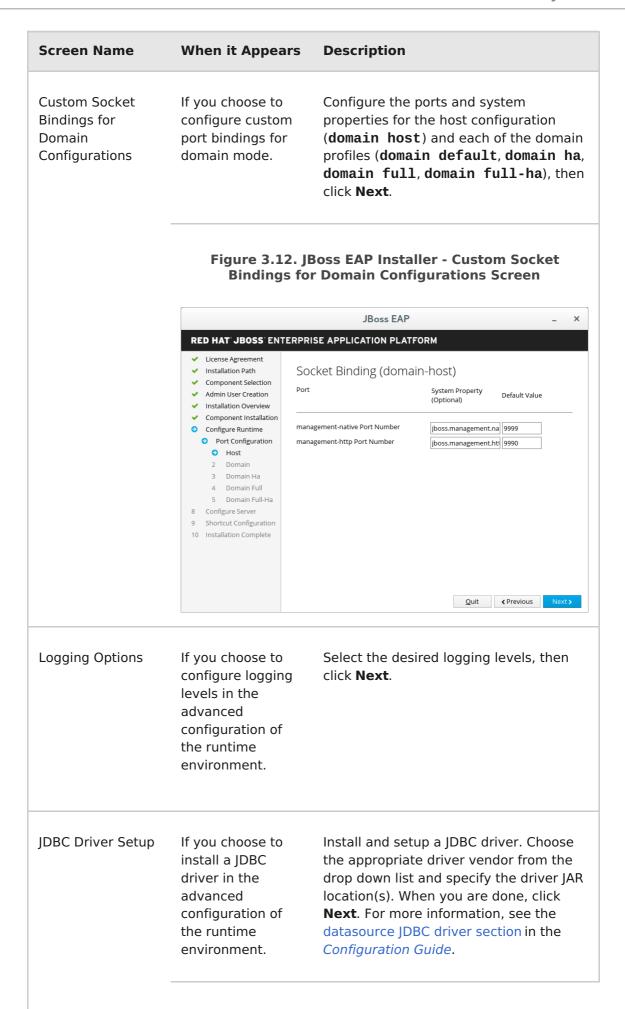
Quit **∢** Previous

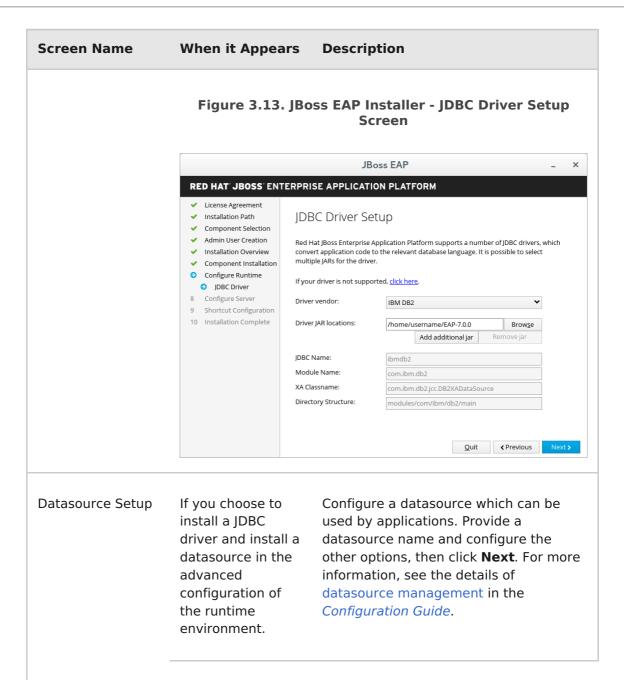


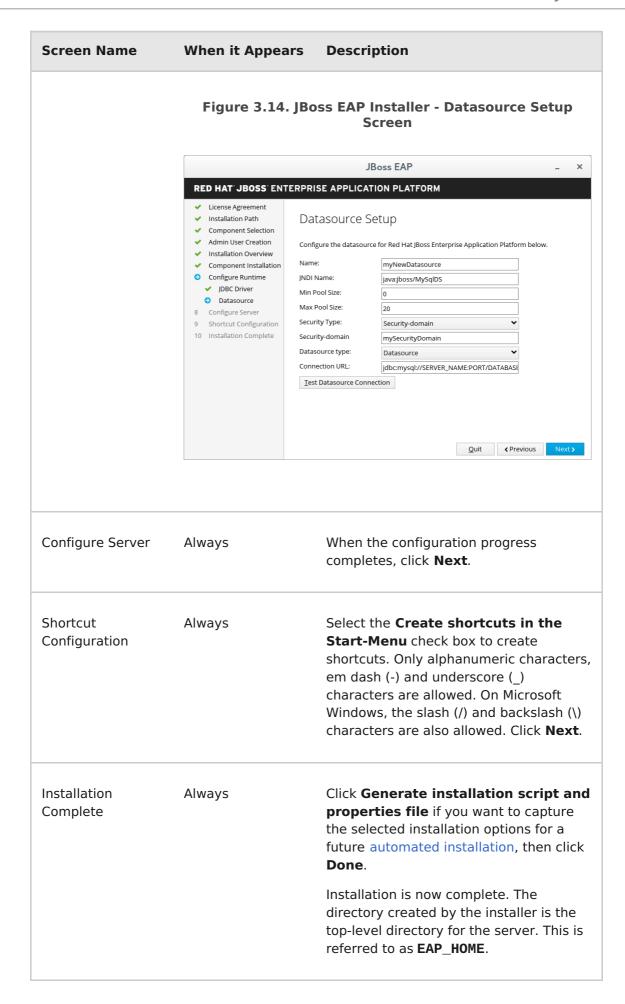
Screen Name	When it Appears	Description
Quickstarts	If you choose to install quickstarts in the advanced configuration of the runtime environment.	Select the quickstart installation path, then click Next .
Maven Repository Setup	If you choose to install quickstarts in the advanced configuration of the runtime environment.	Select your Maven repository and settings file.

Screen Name When it Appears **Description** Figure 3.9. JBoss EAP Installer - Maven Repository **Setup Screen** JBoss EAP RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM ✓ License Agreemen ✓ Installation Path Maven Repository Setup ✓ Component Selection A Maven repository is available that allows you to build the quickstarts using the same artifacts that were used to build JBoss Enterprise Application Platform. This repository can be accessed on a publicly hosted server or you can choose to download and install it on a local server. ✓ Installation Overview ✓ Component Installation The public schema is located O Configure Runtime Choose the location of the Maven repository: Quickstarts Use the publicly hosted Maven repository. Maven Repository Specify the path (or URL) to the locally installed Maven repository. 8 Configure Server 9 Shortcut Configuration 10 Installation Complete Choose the Maven settings.xml file to use the above repository: The default Maven settings.xml located in the /home/user/.m2 directory. Specify an alternate path to the Maven settings.xml file. Br<u>o</u>wse Quit Previous Next> Determine whether the installation will **Socket Bindings** If you choose to configure server use the default port bindings, configure port bindings in port offsets for all default bindings, or the advanced configure custom port bindings. configuration of If you choose to configure port offsets, the runtime choose the offset number. environment. If you choose to configure custom bindings, select whether to configure the ports for standalone mode, domain mode, or both. If the host is configured for IPv6 only, select the Enable pure IPv6 configuration check box and the installer will make the required configuration changes. Click Next.









Running the JBoss EAP Text-based Installer

- 1. Open a terminal and navigate to the directory containing the downloaded JBoss EAP Installer JAR.
- 2. Run the text-based installer using the following command:

```
java -jar jboss-eap-7.x.x-installer.jar -console
```

3. Follow the prompts to install JBoss EAP. The directory created by the installer is the top-level directory for the server. This is referred to as **EAP_HOME**.

3.3. RPM INSTALLATION



For users wanting to manage JBoss EAP installations using Red Hat Satellite: although Red Hat Satellite 6 is recommended for managing JBoss EAP 7 installations, the following Red Hat Network (RHN) channels are also provided specifically for Satellite 5 users:

- For Red Hat Enterprise Linux 6:
 - jbappplatform-7.0-i386-server-6-rpm
 - jbappplatform-7.0-x86_64-server-6-rpm
- For Red Hat Enterprise Linux 7:
 - jbappplatform-7.0-x86 64-server-7-rpm

Red Hat Satellite 6 users can use the repositories shown in Choosing a Repository.



Note

From Red Hat Enterprise Linux 7, the term **channel** was replaced with the term **repository**. In these instructions only the term**repository** is used.

3.3.1. Choosing a Repository

Installing JBoss EAP via RPM requires a subscription to both the **Red Hat Enterprise Linux Server** base software repository, as well as a specific JBoss EAP repository.

For the JBoss EAP repository, you must subscribe to either the **current** JBoss EAP repository, or a **minor** JBoss EAP repository.

Current JBoss EAP Repository

The **current** repository provides the latest JBoss EAP 7 release. When updating your JBoss EAP installation, you will receive all updates for JBoss EAP 7, including minor upgrades.

For example, updating from this repository will include upgrades from JBoss EAP 7.0 to JBoss EAP 7.1, if it is released.

Minor JBoss EAP Repository

A **minor** repository provides a specific minor release of JBoss EAP 7 and all applicable patches. This allows you to maintain the same minor version of JBoss EAP, while staying current with high severity and security patches.

For example, updating from this repository will include patches and security updates for the minor JBoss EAP version, but *will not* include upgrades from JBoss EAP 7.0 to JBoss EAP 7.1, if it is released.



Note

For production environments, we recommend that you use the minor JBoss EAP repository. This reduces the risk of unexpected changes in subsystem modules or necessary configuration changes caused by unexpected JBoss EAP upgrades. You can always change repositories at a later date if you want to receive an upgrade.

3.3.1.1. Subscribing to the Current JBoss EAP 7 Repository

- 1. Ensure that your Red Hat Enterprise Linux system is registered to your account using Red Hat Subscription Manager. For more information, see the Red Hat Subscription Management documentation.
- 2. Using Red Hat Subscription Manager, subscribe to the 'current' JBoss EAP 7 repository using the following command. Replace **RHEL_VERSION** with either 6 or 7 depending on your Red Hat Enterprise Linux version.

subscription-manager repos --enable=jb-eap-7-for-rhel-RHEL_VERSION-server-rpms

3.3.1.2. Subscribing to a Minor JBoss EAP 7 Repository

- 1. Ensure that your Red Hat Enterprise Linux system is registered to your account using Red Hat Subscription Manager. For more information, see the Red Hat Subscription Management documentation.
- 2. Using Red Hat Subscription Manager, subscribe to a minor JBoss EAP 7 repository using the following command. Ensure that you:
 - Replace **EAP_MINOR_VERSION** with your intended JBoss EAP**minor** version. For example, for this release's minor version, enter: **7.0**.
 - Replace RHEL_VERSION with either 6 or 7 depending on your Red Hat Enterprise Linux version.

subscription-manager repos --enable=jb-eap-EAP_MINOR_VERSION-forrhel-RHEL_VERSION-server-rpms

3.3.2. Installing JBoss EAP (RPM Installation)

Prerequisites

- JBoss EAP Installation Prerequisites
- Subscribe to a JBoss EAP repository
 - 1. Install JBoss EAP from your subscribed repository using the following command:

yum groupinstall jboss-eap7

Your installation is complete. The default **EAP_HOME** path for the RPM installation is /opt/rh/eap7/root/usr/share/wildfly.

3.3.3. Changing Repositories

Over the lifespan of a JBoss EAP installation, you may want to change the software subscription from one JBoss EAP repository to another. Changing repositories is supported, but only within the following conditions:

Changing from the 'current' repository to a minor repository

Supported if changing to the *latest* minor repository.

Changing from a minor repository to another minor repository

Supported if changing to the next minor JBoss EAP version. For example, changing from JBoss EAP 7.0 to JBoss EAP 7.1 *is* supported, but changing from JBoss EAP 7.0 to JBoss EAP 7.2 is *not* supported.

Changing from a minor repository to the 'current' repository

Supported if changing from the *latest* minor repository.

Prerequisites

- Install JBoss EAP as an RPM installation.
- Choose a repository to change to, and ensure that you comply with the supported change conditions shown above.

Changing the JBoss EAP Repository

1. Before changing the repository, ensure that the JBoss EAP installation has all applicable updates applied:

yum update

2. Using Red Hat Subscription Manager, unsubscribe from the existing repository and subscribe to the new repository you want to change to. In the command below, replace **EXISTING_REPOSITORY** and **NEW_REPOSITORY** with the respective repository names.

subscription-manager repos --disable=EXISTING_REPOSITORY -enable=NEW_REPOSITORY

3.4. AUTOMATED INSTALLER INSTALLATION

If you use the JAR installer to install JBoss EAP, you can use an installation script generated from a previous install to automate future installations with the same configuration.

Warning

The automated installer is not backwards compatible. You cannot use an installation script generated from a previous version of JBoss EAP with the automated installer. You should only use installation scripts generated by the same minor version of JBoss EAP, for example JBoss EAP 7.0.

Prerequisites

Use the JAR installer to generate an automatic installation script. The automatic installation script is an XML file.

Automated Installer Installation

- 1. Open a terminal and navigate to the directory containing the downloaded JBoss EAP Installer JAR file.
- 2. Run the following command to install JBoss EAP using the automatic installation script XML file:

```
java -jar jboss-eap-7.x.x-installer.jar auto.xml
```

By default, the installer will prompt you to enter any passwords required for the JBoss EAP configuration. You can do an unattended install by pre-setting the passwords for the installation.

Note

You can store the automatic installation script XML file on a network host, and use HTTP or FTP to point the installer to use it for an installation. For example:

```
java -jar jboss-eap-7.x.x-installer.jar http://network-
host.local/auto.xml
```

java -jar jboss-eap-7.x.x-installer.jar ftp://networkhost.local/auto.xml

3.4.1. Unattended Automated Installer Installation

Prerequisites

Use the JAR installer to generate an automatic installation script. The automatic installation script is an XML file.

To do an unattended automated installer installation, you must preset the passwords required for the JBoss EAP installation.

When the installation script XML file is generated from a previous installer installation, an incomplete installation script variables file is also generated. It has the same file name as the installation script file, but with a .variables suffix.

This variables file contains a list of key and password parameters needed for an unattended automated installation.

You can provide the required passwords as a completed variables file, or as an argument when running the installer command

Unattended Automated Installer Installation Using a Variables File

1. Open the .variables file in a text editor and provide a password value for each key. For example:

```
adminPassword = password#2
vault.keystorepwd = vaultkeystorepw
ssl.password = user12345
```

2. Run the installer using the automatic installation script XML file. The installer detects the variables file automatically if the completed variables file is in the same directory as the installation script XML file, and you haven't modified its file name.

```
java -jar jboss-eap-7.x.x-installer.jar auto.xml

Checking for corresponding .variables file

Variables file detected: auto.xml.variables

[ Starting automated installation ]
...
```

Alternatively, you can specify the path to the variables file using - variablefile:

```
java -jar jboss-eap-7.x.x-installer.jar auto.xml -variablefile auto.xml.variables
```

Unattended Automated Installer Installation Using the -variables Argument

 Run the installer using the automatic installation script XML file, and specify the required passwords as key/value pairs using the -variables argument. For example:

```
java -jar jboss-eap-7.x.x-installer.jar auto.xml -variables adminPassword=password#2,vault.keystorepwd=vaultkeystorepw,ssl.password=user12345
```



Note

It is important that you do not have any spaces when specifying the **-variables** key/value pairs.

CHAPTER 4. CONFIGURING JBOSS EAP TO RUN AS A SERVICE

4.1. CONFIGURING JBOSS EAP AS A SERVICE IN RED HAT ENTERPRISE LINUX (ZIP AND INSTALLER INSTALLATIONS)

Prerequisites

- Install JBoss EAP as a ZIP or Installer installation.
- Administrator privileges on the server.

Configuring JBoss EAP as a Service in Red Hat Enterprise Linux

1. Customize the start-up options in the **jboss-eap.conf** file.

The startup script and an associated configuration file are located in the **EAP_HOME/bin/init.d/** directory. Open **jboss-eap.conf** in a text editor and set the options for your JBoss EAP installation.

There are several options in **jboss-eap.conf** file, but at the minimum you must provide the correct values for **JBOSS_HOME** and the **JBOSS_USER**.

You can customize the other options provided in the configuration file by uncommenting and editing the respective lines. If you do not, the service will default to starting a standalone JBoss EAP server using the default configuration file, standalone.xml.



Note

If you want the service to start JBoss EAP as a managed domain, add <code>JBOSS_MODE=domain</code> to <code>jboss-eap.conf</code>.

To specify custom domain configuration files, add JBOSS_DOMAIN_CONFIG=DOMAIN_CONFIG_FILE.xml and JBOSS_HOST_CONFIG=HOST_CONFIG_FILE.xml. By default, JBoss EAP uses domain.xml and host.xml as the domain configuration files.

- 2. Copy the service files into the system directories.
 - a. Copy the modified service configuration file to the /etc/default directory.

sudo cp EAP_HOME/bin/init.d/jboss-eap.conf /etc/default

b. Copy the service startup script to the /etc/init.d directory, and give it execute permissions:

sudo cp EAP_HOME/bin/init.d/jboss-eap-rhel.sh /etc/init.d
sudo chmod +x /etc/init.d/jboss-eap-rhel.sh

3. Add the new **jboss-eap-rhel.sh** service to list of automatically started services using the **chkconfig** service management command:

```
sudo chkconfig --add jboss-eap-rhel.sh
```

- 4. Test that the service has been installed correctly by using one of the following commands.
 - a. For Red Hat Enterprise Linux 6:

```
sudo service jboss-eap-rhel.sh start
```

b. For Red Hat Enterprise Linux 7:

```
sudo service jboss-eap-rhel start
```

The service will start. If you get an error, check the error logs and make sure that the options in the configuration file are set correctly.

5. To make the service start automatically when the Red Hat Enterprise Linux server starts, run the following command:

```
sudo chkconfig jboss-eap-rhel.sh on
```

If you want to remove the JBoss EAP service, use the following procedure.

Removing the JBoss EAP Service in Red Hat Enterprise Linux

- 1. If the service is running, open a terminal and stop the service with one of the following commands.
 - a. For Red Hat Enterprise Linux 6:

```
sudo service jboss-eap-rhel.sh stop
```

b. For Red Hat Enterprise Linux 7:

```
sudo service jboss-eap-rhel stop
```

2. Remove JBoss EAP from the list of services:

```
sudo chkconfig --del jboss-eap-rhel.sh
```

3. Delete the service configuration file and startup script:

```
sudo rm /etc/init.d/jboss-eap-rhel.sh
sudo rm /etc/default/jboss-eap.conf
```

4.2. CONFIGURING JBOSS EAP AS A SERVICE IN RED HAT ENTERPRISE LINUX (RPM INSTALLATION)

Prerequisites

- Install JBoss EAP as an RPM installation.
- Administrator privileges on the server.

An RPM installation of JBoss EAP installs everything that is required to run JBoss EAP as a service. Use one of the following commands to activate the JBoss EAP service to start automatically at system boot.

For the commands below, replace **EAP_SERVICE_NAME** with either **eap7-standalone** for a standalone JBoss EAP server, or **eap7-domain** for a managed domain.

For Red Hat Enterprise Linux 6:

chkconfig EAP_SERVICE_NAME on

For Red Hat Enterprise Linux 7:

systemctl enable EAP_SERVICE_NAME.service

To start or stop an RPM installation of JBoss EAP on demand, see the RPM instructions in the JBoss EAP *Configuration Guide*.



Note

See the RPM service configuration files appendix in the JBoss EAP *Configuration Guide* for further details and options.

4.3. CONFIGURING JBOSS EAP AS A SERVICE IN MICROSOFT WINDOWS SERVER

Prerequisites

- Install JBoss EAP as a ZIP or Installer installation.
- Administrator privileges on the server.
- The JAVA_HOME system environment variable must be set.
- The JBoss EAP server instance must not be running.



Important

Using the **set** command to set system environment variables in a Windows Server command prompt will not permanently set the environment variable. You must use either the **setx** command, or the **System** interface in the **Control Panel**.

Configuring JBoss EAP as a Service in Microsoft Windows Server

- 1. Create two system environment variables:
 - **JBOSS HOME** pointing to the IBoss EAP installation directory.

- » NOPAUSE=1
- 2. Install the JBoss Core Services Jsvc Package

If not already configured, download and extract the JBoss Core Services Jsvc package.

- a. Open a browser and log in to the Red Hat Customer Portal JBoss Software Downloads page.
- b. Select **Apache Jsvc** in the **Product** drop-down menu.
- c. Select the latest version from the **Version** drop-down menu.
- d. Find **Red Hat JBoss Core Services Apache Jsvc** in the list, ensuring that you select the correct platform and architecture for your system, and click the **Download** link.
- e. Extract the downloaded ZIP file into the directory containing your JBoss EAP installation directory.

This will result in a **jbcs-jsvc-<VERSION>** directory at the same depth as your JBoss EAP installation directory. For example:

3. Install the Service

Open a terminal, and change directories to **EAP_HOME\bin**.

Below are examples of a basic **service.bat install** command to create a new service for either a standalone server, or a server in a managed domain. For a list of all possible options, run **service.bat** without any arguments.



Important

If you specify the /jbossuser and /jbosspass parameters, you must ensure that your JBoss EAP user's password does not contain a hash (#) or a semicolon (;).

Execute the following command, adjusting the log level for the service as required:

a. For a standalone server:

service.bat install /loglevel INFO

b. For a server in a managed domain:

Use the /host parameter to specify the name of the JBoss EAP host controller being controlled by the service. You can see valid values for the name by executing 1s /host in the management CLI.

Replace **EAP_HOST_NAME** in the command below with your JBoss EAP host controller name. If you specify the /host parameter without providing a JBoss EAP host controller name, the name defaults to master.

service.bat install /host EAP_HOST_NAME /loglevel INFO

A new Windows service will be created with name JBossEAP7.

4. Verify the New Service in the **Services** console

Open the Windows Services console (**services.msc**) and verify that the service was created.

If the default service name was used, in the list of Windows services the new service will have the display name: **JBossEAP7**. From the Services console you can start and stop the service, as well change its settings of how and when it starts.

5. Starting and Stopping the JBoss EAP Service from a Terminal

To start the service from a terminal, use the following command, changing the service name if necessary:

net start JBossEAP7

To stop the service from a terminal, use the following command, changing the service name if necessary:

net stop JBossEAP7

If you want to remove the JBoss EAP service, use the following procedure.

Removing the JBoss EAP Service in Microsoft Windows Server

1. If the service is running, first open a terminal and stop the service by executing the **net stop** command with the name of the service:

net stop JBossEAP7

2. In a terminal, change directories to **EAP_HOME\bin** and execute the following command:

service.bat uninstall

4.4. CONFIGURING JBOSS EAP AS A SERVICE USING JSVC

The Apache Jsvc component of the JBoss Core Services collection can be used to run JBoss EAP as a background service on Red Hat Enterprise Linux and Solaris.



Note

Jsvc support for JBoss EAP is primarily intended for running JBoss EAP as a service on Microsoft Windows and Solaris. Although Jsvc works on Red Hat Enterprise Linux, we strongly recommend that you use the native methods for running JBoss EAP as a service on Red Hat Enterprise Linux.

Jsvc is a set of libraries and applications which allow Java applications to run on UNIXlike platforms as a background service. It allows an application to perform operations as a privileged user, and then switch identity to a non-privileged user.

Jsvc uses three processes: a launcher process, a controller process, and a controlled process. The controlled process is also the main Java thread. If the JVM crashes, the controller process will restart it within 60 seconds. Jsvc is a daemon process, and for JBoss EAP it must be started by a privileged user.

Install the JBoss Core Services Jsvc Package

- For ZIP or installer installations:
 - 1. Open a browser and log in to the Red Hat Customer Portal JBoss Software Downloads page.
 - 2. Select **Apache Jsvc** in the **Product** drop-down menu.
 - 3. Select the latest version from the **Version** drop-down menu.
 - 4. Find **Red Hat JBoss Core Services Apache Jsvc** in the list, ensuring that you select the correct platform and architecture for your system, and click the **Download** link.
 - 5. Extract the downloaded ZIP file into the directory containing your JBoss EAP installation directory.

This will result in a jbcs-jsvc-<VERSION> directory at the same depth as your JBoss EAP installation directory. For example:

```
/var/opt/
|-- jboss-eap-7.0
|-- bin
|-- ...
|-- jbcs-jsvc-<VERSION>
```

6. The command examples for using Jsvc to start JBoss EAP assume that a **jboss** user has been created. If you have not already created a user for JBoss EAP, run the following commands to create the **jboss** user and group:

```
# groupadd -f -g 185 -r jboss
# useradd -r -u 185 -g jboss -d EAP_HOME -s /sbin/nologin -c
"JBoss" jboss
```

- For RPM installations on Red Hat Enterprise Linux:
 - 1. Log in to Red Hat Subscription Manager.

- 2. Click on **Systems** in the **Subscriber Inventory**.
- 3. Subscribe to the JBoss Core Services CDN repositories for your operating system version and architecture:
 - a. For Red Hat Enterprise Linux 6:
 - jb-coreservices-1-for-rhel-6-server-rpms
 - b. For Red Hat Enterprise Linux 7:
 - jb-coreservices-1-for-rhel-7-server-rpms
- 4. Run the following command as the root user to install Jsvc:
 - # yum groupinstall jbcs-jsvc



Note

Be sure to set the **JAVA_HOME** system environment variable.

Using Jsvc to Start JBoss EAP as a Standalone Server

The following commands are used are to start and stop JBoss EAP in standalone mode using Jsvc. The tables below show the paths that are needed for the commands for a ZIP/installer JBoss EAP installation, or an RPM installation.

Table 4.1. Jsvc File Locations for ZIP/Installer Installations - Standalone Server

File Reference in Instructions	File Location
JSVC_BIN	EAP_HOME//jbcs-jsvc- <version>/sbin/jsvc</version>
JSVC_JAR	EAP_HOME//jbcs-jsvc- <version>/lib/commons-daemon.jar</version>
CONF_DIR	EAP_HOME/standalone/configuration
LOG_DIR	EAP_HOME/standalone/log

Table 4.2. Jsvc File Locations for RPM Installations - Standalone Server

File Reference in Instructions	File Location
JSVC_BIN	/usr/bin/jbcs-jsvc/jsvc
JSVC_JAR	/usr/bin/jbcs-jsvc/commons-daemon.jar
CONF_DIR	/opt/rh/eap7/root/usr/share/wildfly/standalone /configuration
LOG_DIR	/opt/rh/eap7/root/usr/share/wildfly/standalone /log

Start a standalone JBoss EAP server using Jsvc:

```
JSVC BIN \
-outfile LOG_DIR/jsvc.out.log
-errfile LOG_DIR/jsvc.err.log
-pidfile LOG_DIR/jsvc.pid \
-user jboss \
-D[Standalone] -XX:+UseCompressedOops -Xms1303m \
-Xmx1303m -XX:MaxPermSize=256m \
-Djava.net.preferIPv4Stack=true \
-Djboss.modules.system.pkgs=org.jboss.byteman \
-Djava.awt.headless=true \
-Dorg.jboss.boot.log.file=LOG_DIR/server.log \
-Dlogging.configuration=file:CONF_DIR/logging.properties \
-Djboss.modules.policy-permissions \
-cp EAP_HOME/jboss-modules.jar:JSVC_JAR \
-Djboss.home.dir=EAP_HOME ∖
-Djboss.server.base.dir=EAP_HOME/standalone
@org.jboss.modules.Main -start-method main \
-mp EAP_HOME/modules \
-jaxpmodule javax.xml.jaxp-provider \
org.jboss.as.standalone
```

Stop a standalone JBoss EAP server using Jsvc:

```
JSVC_BIN \
-stop \
-outfile LOG_DIR/jsvc.out.log \
-errfile LOG_DIR/jsvc.err.log \
-pidfile LOG_DIR/jsvc.pid \
-user jboss \
-D[Standalone] -XX:+UseCompressedOops -Xms1303m \
-Xmx1303m -XX:MaxPermSize=256m \
-Djava.net.preferIPv4Stack=true \
-Djboss.modules.system.pkgs=org.jboss.byteman \
```

```
-Djava.awt.headless=true \
-Dorg.jboss.boot.log.file=LOG_DIR/server.log \
-Dlogging.configuration=file:CONF_DIR/logging.properties \
-Djboss.modules.policy-permissions \
-cp EAP_HOME/jboss-modules.jar:JSVC_JAR \
-Djboss.home.dir=EAP_HOME \
-Djboss.server.base.dir=EAP_HOME/standalone \
@org.jboss.modules.Main -start-method main \
-mp EAP_HOME/modules \
-jaxpmodule javax.xml.jaxp-provider \
org.jboss.as.standalone
```

Using Jsvc to Start a JBoss EAP Managed Domain

The following commands are used are to start and stop a JBoss EAP managed domain using Jsvc. The tables below show the paths that are needed for the commands for a ZIP/installer JBoss EAP installation, or an RPM installation.

Table 4.3. Jsvc File Locations for ZIP/Installer Installations - Managed Domain

File Reference in Instructions	File Location
JSVC_BIN	EAP_HOME//jbcs-jsvc- <version>/sbin/jsvc</version>
JSVC_JAR	EAP_HOME//jbcs-jsvc- <version>/lib/commons-daemon.jar</version>
CONF_DIR	EAP_HOME/domain/configuration
LOG_DIR	EAP_HOME/domain/log

Table 4.4. Jsvc File Locations for RPM Installations - Managed Domain

File Reference in Instructions	File Location
JSVC_BIN	/usr/bin/jbcs-jsvc/jsvc
JSVC_JAR	/usr/bin/jbcs-jsvc/commons-daemon.jar

File Reference in Instructions	File Location
CONF_DIR	/opt/rh/eap7/root/usr/share/wildfly/domain/con figuration
LOG_DIR	/opt/rh/eap7/root/usr/share/wildfly/domain/log

Before you issue the following command, be sure to set the **JAVA_HOME** system environment variable.

Start a JBoss EAP managed domain using Jsvc:

```
JSVC BIN \
-outfile LOG_DIR/jsvc.out.log
-errfile LOG_DIR/jsvc.err.log
-pidfile LOG_DIR/jsvc.pid \
-user jboss \
-nodetach -D"[Process Controller]" -server -Xms64m \
-Xmx512m -XX:MaxPermSize=256m \
-Djava.net.preferIPv4Stack=true \
-Djboss.modules.system.pkgs=org.jboss.byteman \
-Djava.awt.headless=true \
-Dorg.jboss.boot.log.file=LOG_DIR/process-controller.log \
-Dlogging.configuration=file:CONF_DIR/logging.properties \
-Djboss.modules.policy-permissions \
-cp "EAP_HOME/jboss-modules.jar:JSVC_JAR" \
org.apache.commons.daemon.support.DaemonWrapper \
-start org.jboss.modules.Main -start-method main \
-mp EAP_HOME/modules org.jboss.as.process-controller \
-jboss-home EAP_HOME -jvm "${JAVA_HOME}"/bin/java \
-mp EAP_HOME/modules -- \
-Dorg.jboss.boot.log.file=LOG_DIR/host-controller.log \
-Dlogging.configuration=file:CONF_DIR/logging.properties \
-Djboss.modules.policy-permissions \
-server -Xms64m -Xmx512m -XX:MaxPermSize=256m \
-Djava.net.preferIPv4Stack=true \
-Djboss.modules.system.pkgs=org.jboss.byteman \
-Djava.awt.headless=true -- -default-jvm "${JAVA_HOME}"/bin/java \
```

Stop a JBoss EAP managed domain using Jsvc:

```
JSVC_BIN \
  -stop \
  -outfile LOG_DIR/jsvc.out.log \
  -errfile LOG_DIR/jsvc.err.log \
  -pidfile LOG_DIR/jsvc.pid \
  -user jboss \
  -nodetach -D"[Process Controller]" -server -Xms64m \
  -Xmx512m -XX:MaxPermSize=256m \
```

```
-Djava.net.preferIPv4Stack=true \
-Djboss.modules.system.pkgs=org.jboss.byteman \
-Djava.awt.headless=true \
-Dorg.jboss.boot.log.file=LOG_DIR/process-controller.log \
-Dlogging.configuration=file:CONF_DIR/logging.properties \
-Djboss.modules.policy-permissions \
-cp "EAP_HOME/jboss-modules.jar:JSVC_JAR" \
org.apache.commons.daemon.support.DaemonWrapper \
-start org.jboss.modules.Main -start-method main \
-mp EAP_HOME/modules org.jboss.as.process-controller \
-jboss-home EAP_HOME -jvm $JAVA_HOME/bin/java \
-mp EAP_HOME/modules -- \
-Dorg.jboss.boot.log.file=LOG_DIR/host-controller.log \
-Dlogging.configuration=file:CONF_DIR/logging.properties \
-Djboss.modules.policy-permissions \
-server -Xms64m -Xmx512m -XX:MaxPermSize=256m \
-Djava.net.preferIPv4Stack=true ∖
-Djboss.modules.system.pkgs=org.jboss.byteman \
-Djava.awt.headless=true -- -default-jvm $JAVA_HOME/bin/java
```

CHAPTER 5. UNINSTALLING JBOSS EAP

5.1. UNINSTALLING JBOSS EAP (ZIP INSTALLATION)

- 1. Ensure that you back up any modified configuration files and deployments that may be reused.
- 2. The ZIP installation method installs JBoss EAP in a single directory. Delete the installation directory to uninstall JBoss EAP.
- 3. Also delete any other scripts that depended on JBoss EAP being installed on your machine.

5.2. UNINSTALLING JBOSS EAP (INSTALLER INSTALLATION)

If you installed JBoss EAP using the installer, you can uninstall JBoss EAP using the uninstaller in either graphical or text mode.

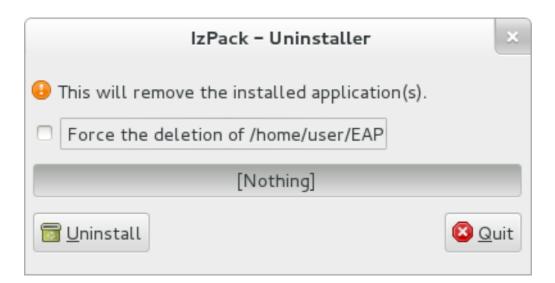
Running the JBoss EAP Graphical Uninstaller

- 1. Open a terminal and navigate to **EAP_HOME/Uninstaller**.
- 2. Run the graphical uninstaller using the following command:

java -jar uninstaller.jar

The graphical uninstaller is similar to following figure. Select the check box if you want to delete the JBoss EAP installation directory.

Figure 5.1. JBoss EAP Graphical Uninstaller



- 3. Click **Uninstall** to start the uninstall process.
- 4. When the uninstall process is finished, click **Quit** to exit the uninstaller.

Running the JBoss EAP Text-based Uninstaller

- 1. Open a terminal and navigate to **EAP_HOME/Uninstaller**.
- 2. Run the text-based uninstaller using the following command:

java -jar uninstaller.jar -console

3. Follow the prompts to uninstall JBoss EAP.

5.3. UNINSTALLING JBOSS EAP (RPM INSTALLATION)

Warning

Uninstalling a JBoss EAP installation that was installed using the RPM method is not recommended.

Because of the nature of RPM package management, it cannot be guaranteed that all installed packages and dependencies will be completely removed, or that the system will not be left in an inconsistent state caused by missing package dependencies.

Revised on 2017-06-27 14:28:05 EDT