

# **Red Hat JBoss Enterprise Application Platform 7.1**

## **Installation Guide**

For Use with Red Hat JBoss Enterprise Application Platform 7.1

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## Abstract

This book is a guide to the installation of Red Hat JBoss Enterprise Application Platform 7.1.

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## **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.

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-7.1** 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-7.1.0:
  - For Red Hat Enterprise Linux, Solaris, and HP-UX: /home/USER\_NAME/EAP-7.1.0/

- For Microsoft Windows: C:\Users\USER\_NAME\EAP-7.1.0\
- 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\jbosseap 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.

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 provides a default installation of JBoss EAP, and all configuration must be done following installation.
JAR Installer	The JAR installer can either 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.

#### Table 2.1. Installation Methods

## 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

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

## **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.

- 1. Log in to the Red Hat Customer Portal
- 2. Click **Downloads**.
- 3. Click **Red Hat JBoss Enterprise Application Platform** in the **Product Downloads** list.
- 4. In the **Version** drop-down menu, select **7.1**.
- 5. Find **Red Hat JBoss Enterprise Application Platform 7.1.0** 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.



#### NOTE

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-7.1.0.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. In the **Version** drop-down menu, select **7.1**.
- 5. Find **Red Hat JBoss Enterprise Application 7.1.0 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:

```
$ java -jar jboss-eap-7.1.0-installer.jar
```



#### 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:

```
$ java -jar -d32 jboss-eap-7.1.0-installer.jar
or
$ java -jar -d64 jboss-eap-7.1.0-installer.jar
```

3. Follow the instructions in the table below.

#### Table 3.1. JBoss EAP Installer Screens

Screen Name	When it Appears	Description
Langauge Selection	Always	Choose the desired language for the installer and click <b>OK</b> .
License Agreement	Always	The EULA for RED HAT JBOSS MIDDLEWARE. Select "I accept the terms of this license agreement.", and click <b>Next</b> .
Installation Path	Always	Select the installation path for JBoss EAP, and click <b>Next</b> .
Component Selection	Always	Select the components to install. Required components are disabled for deselection.
	Figure 3.1. JBos         RED HAT JBOSS ENTERPRISE <ul> <li>License Agreement</li> <li>Installation Path</li> <li>Component Selection</li> <li>Admin User Creation</li> <li>Configure Runtime</li> <li>Configure Server</li> <li>Shortcut Configuration</li> <li>Installation Complete</li> </ul> <ul> <li>Installation Complete</li> </ul> <ul> <li>Description</li> <li>Total space</li> <li>Varial base</li> </ul> <ul> <li>Description</li> <li>Total space</li> <li>Varial base</li> </ul> <ul> <li>Description</li> <li>Total space</li> <li>Varial base</li> <li>Varial base</li> </ul> <ul> <li>Description</li> <li>Total space</li> <li>Varial base</li> <li>Varial base</li> <li>Varial base</li> </ul> <ul> <li>Description</li> <li>Description</li> <li>Description</li> <li>Description</li> <li>Description</li> </ul> <ul> <li>Description</li> <li>Description</li> <li>Description</li> <li>Description</li> </ul> <ul> <li>Description</li> <li>Description</li> <li>Description</li> </ul> <ul> <li>Description</li> <li>Description</li> </ul> <ul> <li>Description</li> <li>Description</li> <lidescription< li=""></lidescription<></ul>	APPLICATION PLATFORM  APPLICATION PLATFORM  Abled packs are required.  AppCient 292.9 KB Does 11.03 MB Modules 166.89 MB Welcome Content 2.11 MB
Create an Administrative User	Always	Create an administrative user and assign a password. Then click <b>Next</b> .
Installation Overview	Always	Review your installation options, then click <b>Next</b> .
Component Installation	Always	When the installation progress completes, click <b>Next</b> .

Screen Name	When it Appears	Description
Configure Runtime Environment	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 <b>Perform default configuration</b> , or select <b>Perform advanced</b> <b>configuration</b> and select the items to configure, then click <b>Next</b> .
	Figure 3.2. JBo	ss EAP Installer - Configure Runtime Environment Screen
	RED HAT JBOSS ENTERPRISE	APPLICATION PLATFORM
	License Agreement     Installation Path     Component Selection     Admin User Creation     Installation Overview     Component Installation     Configure Burtletter     @ Perform	gure Runtime Environment several additional options for configuring Red Hat JBoss Enterprise Application Platform now rver has been installed. Each option can be individually chosen, and will be configured in the layed upon pressing "Next". What would you like to do now? n default configuration
	Configure Runtime     Configure Server     Shortcut Configuration     Install ation Complete     Install     Configuration     Install     Configuration     Configuration     Install     Configuration     Install     Install	n advanced configuration bassword vault SSL security LDAP authentication nfnispan cache ecurity domain quickstarts re server port bindings re logging levels SF implementation DBC driver BBC driver
		Quit < Previous Next >
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 <b>Next</b> . For more information, see the password vault documentation in the <i>How To Configure</i> <i>Server Security</i> guide.

Screen Name	When it Appea	irs	Description	
	Figure 3.3. JBA	Config A password mechanism verification Please mak documenta The password Vault alias: Salt (8-char Iteration cc Vault keyst Confirm va New keysto (home/us Encrypted f	AP Installer - Screen APPLICATION PLATFOR ULTE PASSWORD VALU I vault encrypts sensitive strings a manages decrypting the strings systems. Note that the keystore e note of your entry below in ord tion for further details. ord should be at least six character sy: bunt: tore password: ult keystore password: ult keystore password: ult keystore password: ult keystore password: itername/EAP-7.1.0/vault.keystore file directory:	A Configure Password Vault
SSL Security	If you choose to enable SSL Security in the advanced configuration of the runtime environment.		Specify an SS password for management For more info documentation <i>Configure Set</i>	SL keystore and the keystore securing the JBoss EAP t interfaces, then click <b>Next</b> . ormation, see the on on securing the t interfaces in the <i>How To</i> <i>rver Security</i> guide. <b>WARNING</b> Red Hat recommends that SSLv2, SSLv3, and TLSv1.0 be explicitly disabled in favor of TLSv1.1 or TLSv1.2 in all affected packages.
LDAP Configuration	If you choose to enable LDAP authentication in the advanced configuration of the runtime environment.		Enable LDAP LDAP directo authenticatio console, mar management click <b>Next</b> . For LDAP docume Identity Mana	authentication to use an ry server as the on source for the management nagement CLI, and t API. When you are done, or more information, see the entation in <i>How to Configure</i> agement.

Screen Name	When it Appea	nrs D	escriptio	on	
	Figure 3.4. JBC RED HAT JBOSS ENTEL 4 License Agreement 4 Installation Path 5 Component Selection 6 Installation Overview 6 Configure Runtime 9 Configure Runtime 9 Shortcut Configuration 10 Installation Complete	RPRISE APPL LDAP CON Red Hat JBoss Ent authentication an a two-step proces Connection name Directory server: Distinguished name Distinguished name	Installer ICATION PLATE Ifiguration dauthorization authorization authorization e: e: me (DN): word: ection	A CONSTRUCTION OF CONSTRUCTION	
LDAP Security Realm Configuration	If you choose to enable LDAP authentication in the advanced configuration of runtime environment.	A a ir d the S e ir ir	A new security realm will be created and associated with the management interfaces, using the LDAP connection defined in the previous step. Specify the values for your LDAP environment, then click <b>Next</b> . For more information, see the LDAP documentation in <i>How to Configure Identity Management</i>		
	Figure 3.5. RED HAT JBOSS ENTER - License Agreement - Installation Path - Component Selection - Admin User Creation - Mania Nuser Creation - Configure Runtime - LDAP Connection - DAP Scourity Realm - Configure Server - Shortcut Configuration 10 Installation Complete	JBoss E. Col RPRISE APPL LDAP Sect A new security re- connection define interfaces. The va- the attribute while LDAP syntax. If us Security realm na Base DN: Filter type: Username filter: Recursive directo Test user search	AP Instal nfigurati ICATION PLATF Urity Realm ( alm will be added with add in the previous step lue for the filter can ei th holds the username sing an LDAP query, es urre: """"""""""""""""""""""""""""""""""""	Image: Security Realm         Some         Configuration         In the attributes below, and will utilize the LDAP outbound         In the attributes below, and will utilize the LDAP outbound         In the attributes below, and will utilize the LDAP outbound         In the attributes below, and will utilize the utilize the utilize the name of e.         In the attributes below, and will utilize the utilize the utilize the name of e.         In or of the form attribute-'value', where value is a query in standards caser 'k' with "& amp.''.         Image: Im	

Screen Name	When it Appears	Description
Infinispan Configuration	If you choose to install an Infinispar cache in the advanced configuration of the runtime environment.	Create an Infinispan cache for managing cached data. Give an Infinispan name and configure the other fields, then click <b>Next</b> . For more information, see the Infinispan documentation in the <i>Configuration Guide</i> .
	Figure 3.6. JBos	s EAP Installer - Infinispan Configuration Screen
	RED HAT JBOSS ENTERPR <ul> <li>License Agreement</li> <li>Installation Path</li> <li>Component Selection</li> <li>Admin User Creation</li> <li>Installation Overview</li> <li>Comfigure Runtime             <ul> <li>Installation Overview</li> <li>Configure Runtime</li> <li>Infinispan Cache</li> <li>Configure Server</li> <li>Shortcut Configuration</li> <li>Installation Complete</li> </ul> </li> </ul>	SE APPLICATION PLATFORM   inispan Configuration   ify information below for creating an Infinispan cache.     ispan name:     iposseap     name:     iposseap-cache     ison trategy:     NONE     ion max entries:     50000        iation max idle:     100000     Quit     Quit     Vervious
Security Domain Configuration	If you choose to add a security domain in the advanced configuration of the runtime environment.	Configure a security domain for the JBoss EAP server instance. Most of the fields are already populated with default values and do not need modification. When you are done, click <b>Next</b> . For more information, see Security Domains in the <i>Security</i> <i>Architecture</i> guide.

Figure 3	3.7. JBoss EAP In Configura	staller - S tion Scree	Security Domain en	
RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM				
<ul> <li>License Agreement</li> <li>Installation Path</li> <li>Component Selection</li> </ul>	Security Domain Cor	nfiguration	ŕ	
<ul> <li>Admin User Creation</li> <li>Installation Overview</li> <li>Component Installation</li> <li>Configure Runtime</li> <li>Security Domain</li> <li>7.2 JSSE Security</li> <li>Configure Server</li> <li>Shortcut Configuration</li> <li>Installation Complete</li> </ul>	Configure a security domain using the name. Most fields have a predefined Security domain name: Security domain cache type: Add authentication element: Authentication code: Autorization code: Autorization element: Authorization code: Autorization code: Autoriz	I list of valid values.  I list of valid values.  More No uthentication flag: equired No	required field is the security domain ain  Authentication options:  EestName-testValue  Add Module Remove Module  CestName-testValue  Add Module Remove Module	
	Mapping code: M PropertiesRoles vpp	lapping type: rincipal	Mapping options: testName=testValue Quit Quit (Previous Next)	
advanced configuration o runtime environment.	or a trust	store. Whe	en you are done, click	
Figure 3.8. Jl	Boss EAP Install	er - JSSE (	Configuration Scree	
Figure 3.8. JI RED HAT' JBOSS' ENT	Boss EAP Install	er - JSSE (	Configuration Scree	
Figure 3.8. Ju RED HAT JBOSS'ENT License Agreement License Agreement Component Selection Component Selection Configure Runtime Configure Runtime Security Domain DISE Security Configure Server Shortcut Configuration	BOSS EAP Install TERPRISE APPLICATION PLA JSSE Configuration Configure a JSSE element. The JSSE el Add Jsse element Cipher suites used by SSLContex Protocols used by SSLContext: Alias of client-side keystore: Alias of server-side keystore: Third party validation token:	er - JSSE ( ATFORM lement requires either a et:	Keystore or a truststore to be configured.	
Figure 3.8. Ju RED HAT JBOSS ENT License Agreement Installation Path Component Selection Admin User Creation Installation Overview Comfigure Runtime Security Domain O JSSE Security Sconfigure Server Shotcut Configuration Installation Complete	Boss EAP Install IERPRISE APPLICATION PLA JSSE Configuration Configure a JSSE element. The JSSE el Add jsse element Cipher suites used by SSLContext: Alias of client-side keystore: Alias of server-side keystore: Third party validation token: Add keystore element JSSE keystore password: Confirm JSSE keystore password: Confirm JSSE keystore password: Keystore provider: Provider argument: Keystore type: Keystore URL:	er - JSSE (	keystore or a truststore to be configured.	
Figure 3.8. Ju RED HAT JBOSS' ENT - License Agreement - Installation Path - Component Selection - Admin User Creation - Installation Overview - Component Installation - Configure Runtime - Security Domain - JSSE Security 8 Configure Server 9 Shortcut Configuration 10 Installation Complete	Boss EAP Install IERPRISE APPLICATION PLA JSSE Configuration Configure a JSSE element. The JSSE el Add Jsse element Cipher suites used by SSLContext: Alias of client-side keystore: Third party validation token: Add keystore element JSSE keystore password: Confirm JSSE keystore password: Confirm JSSE keystore password: Keystore provider: Provider argument: Keystore type: Keystore URL:	er - JSSE (	Configuration Screet         keystore or a truststore to be configured.	

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 <b>Next</b> .
Maven Repository Setup	If you choose to install the quickstarts in the advanced configuration of the runtime environment.	Select your Maven repository and settings file.
	Figure 3.9. JBoss I	EAP Installer - Maven Repository Setup

Screen

<ul> <li>License Agreement</li> </ul>	
<ul> <li>Installation Path</li> </ul>	Maven Repository Setup
<ul> <li>Component Selection</li> <li>Admin User Creation</li> </ul>	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. You can access this repository on a
<ul> <li>Installation Overview</li> <li>Component Installation</li> </ul>	publicly-hosted server or download and install it on a local server.
Configure Runtime	The public schema versions used are 1000 and 1110
<ul> <li>Quickstarts</li> <li>Mayen Repository</li> </ul>	Choose the location of the Maven repository:
8 Configure Server	<ul> <li>Specify the path or URL to the locally-installed Maven repository.</li> </ul>
9 Shortcut Configuration 10 Installation Complete	https://maven.repository.redhat.com/ga/
	Choose the Maven settings.xml file or indicate a path to a new file to use for the above repository:
	The default Maven settings.xml located in the /home/user/.m2 directory. Specify an alternative path to the Maven settings.xml file.
	Choose the Maven settings.xml file or indicate a path to a new file to use for the above repository:
	/home/user/.m2/settings.xml Browse

Screen Name	When it Appears	Description
Socket Bindings	If you choose to configure server port bindings in the advanced	Determine whether the installation will use the default port bindings, configure port offsets for all default bindings, or configure custom port bindings.
	configuration of the runtime environment.	If you choose to configure port offsets, choose the offset number.
		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 <b>Enable pure IPv6</b> <b>configuration</b> check box and the installer will make the required configuration changes.
		Click Next.
	FIGURE 3.LO. JBO RED HAT JBOSS ENTERPRIS	SS EAP INSTAILER - SOCKET BINGINGS SCREEK SEAPPLICATION PLATFORM ALL ADDRESS A
Custom Socket Bindings for Standalone Configurations	If you choose to configure custom port bindings for standalone mode.	Configure the ports and system properties for each of the standalone configurations ( <b>standalone</b> , <b>standalone</b> ha, <b>standalone</b> full, <b>standalone</b> full- ha), then click <b>Next</b> .

Screen Name	When it Appears	Description
	Figure 3.11. JBos for Sta RED HAT JBOSS ENTERPRIS • License Agreement • Installation Path • Component Selection • Component Installation • Configure Runtime • Port Configuration • Standalone full 4 Standalone full 5 Shortcut Configuration 10 Installation Complete	SEAP Installer - Custom Socket Bindings         Carbon configurations Screen         EAPPLICATION PLATFORM         Wet Binding (Standalone)         System Property (Optional)         Default Value         ort number:         jboss.ajp.port         jboss.https.port         gement-http port number:         jboss.management.http         gement-https port number:         jboss.management.http         gauser port number:         jboss.management.http         jdoss.management.http         jdoss.management.http
Custom Socket Bindings for Domain Configurations	If you choose to configure custom port bindings for domain mode.	Quit (Previous Next) Configure the ports and system properties for the host configuration (domain host) and each of the domain profiles (domain default, domain ha, domain full, domain full-ha), then click Next.

Screen Name	When it Appear	s Descriptio	n
	Figure 3.12. JB	oss EAP Installe Domain Config	er - Custom Socket Bindings urations Screen
	RED HAT JBOSS ENTER	PRISE APPLICATION PLATE	DRM
	<ul> <li>License Agreement</li> <li>Installation Path</li> </ul>	Socket Binding (Domai	n Host)
	<ul> <li>Component Selection</li> <li>Admin User Creation</li> <li>Installation Overview</li> </ul>	Port	System Property Default Value (Optional)
	<ul> <li>Configure Runtime</li> <li>Configure Runtime</li> <li>Port Configuration</li> <li>Domain Host</li> <li>Domain default</li> <li>Domain ha</li> <li>Domain full</li> <li>Domain full</li> <li>Domain full</li> <li>Shortcut Configuration</li> <li>Installation Complete</li> </ul>	nanagement-native port number: nanagement-http port number:	boss.management.nt       9999         jboss.management.ht       9990
Logging Options	If you choose to configure logging levels in the advanced configuration of t runtime environment.	Select the c <b>Next</b> .	desired logging levels, then click
JSF Setup	If you choose to install a JSF implementation in the advanced configuration of t runtime environment.	Configure to your JSF JAF n information Implementa	he JSF options and paths to Rs, then click <b>Next</b> . For more a, see Installing a JSF ation in the <i>Configuration Guide</i> .

Screen Name	When it Appears Description			
	Figure 3.13. JBoss EAP Installer - JSF Setup Screen RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM			
	<ul> <li>License Agreement</li> <li>Installation Path</li> <li>Component Selection</li> <li>Admin User Creation</li> <li>Installation Overview</li> <li>Component Installation</li> <li>Configure Runtime</li> <li>Install JSF</li> <li>Configure Server</li> <li>Shortcut Configuration</li> <li>Installation Complete</li> </ul>	JSF Set	tup	
		Red Hat JBoss Enterprise Application Platform ships with Mojarra 2.2.13 but also supports installing a custom JSF implementation. Supported versions: MyFaces 2.1.x/2.2.x, Mojarra 2.1.x/2.2.x.		
		Cocal or ren	ustom JSF implemen note path to a JSF AF	Itation as default
		Local or ren	ername note path to a JSF in	Browse
		JSF project:	ername	Auto-Detect
		JSF version	(Leave blank to auto	o-detect):
				Quit <previous next=""></previous>
JDBC Driver Setup	If you choose to install a JDBC of in the advance configuration of runtime environment.	o driver d of the	Install a approp down li location <b>Next</b> . F datasou <i>Configu</i>	and setup a JDBC driver. Choose the riate driver vendor from the drop st and specify the driver JAR n(s). When you are done, click For more information, see the urce JDBC driver section in the uration Guide.
	Figure 3.14. RED HAT JBOSS ENT Clicense Agreement License Agreement Component Selection Admin User Creation Admin User Creation Configure Runtime Component Installation Configure Runtime DBC Driver	JBOSS FERPRISE A JDBC E Red Hat JBC application For the list Driver vence	EAP Inst APPLICATION Driver Setup code to the relevan of supported drivers dor:	aller - JDBC Driver Setup Screen
7.2 Datasource 7.2 Datasource 8 Configure Server 9 Shortcut Configuration 10 Installation Complete	Driver JAR l	ocations:	/home/username Browse Add additional IAR Remove IAR	
	10 Installation Complete	JDBC name Module na XA class na Directory si	: me: me: tructure:	ibmdb2 com.ibm.db2 com.ibm.db2.jcc.DB2XADataSource modules/com/ibm/db2/main
				Quit ∢Previous Next>

Screen Name	When it Appea	ars	Description	
Datasource Setup	etup If you choose to install a JDBC driver and install a datasource in the advanced configuration of the runtime environment.		Configure a datasource which can be used by applications. Provide a datasource name and configure the other options, then click <b>Next</b> . For more information, see the details of datasource management in the <i>Configuration Guide</i> .	
	Figure 3.15. J RED HAT JBOSS ENT - License Agreement - Installation Path - Component Selection - Andmin User Creation - Installation Overview - Comfgure Runtime - JBC Driver - Datasource - Shortcut Configuration 10 Installation Complete	Boss ERPRISE / Datase Configure t Name: JNDI name Min pool si Max pool si Security by Security de Datasource Connection	EAP Installer - Datasource Setup Screen         APPLICATION PLATFORM         Durce Setup         he datasource for Red Hat JBoss Enterprise Application Platform below.         myNewDatasource         iavajboss/MySqlDS         ze:       0         ize:       20         pe:       Security domain         mySecurityDomain       •         etype:       Datasource         nURL:       idbcmysql//SERVER_NAME:PORT/DATABASi	
		Iest data	source connection Quit <previous next=""></previous>	
Configure Server	Always		When the configuration progress completes, click <b>Next</b> .	
Shortcut Configuration	Always		Select the <b>Create shortcuts in the</b> <b>Start-Menu</b> check box to create shortcuts. Only alphanumeric characters, dash (-) and underscore (_) characters are allowed. On Microsoft Windows, the slash (/) and backslash (\) characters are also allowed. Click <b>Next</b> .	
Installation Complete	Always		Click <b>Generate installation script and</b> <b>properties file</b> if you want to capture the selected installation options for a future automated installation, then click <b>Done</b> . Installation is now complete. The directory created by the installer is the top-level directory for the server. This is referred to as <b>EAP_HOME</b> .	

## 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-7.1.0-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**

#### NOTE

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-7.1-i386-server-6-rpm
  - jbappplatform-7.1-x86\_64-server-6-rpm
- For Red Hat Enterprise Linux 7:
  - jbappplatform-7.1-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 7.1 to JBoss EAP 7.2, 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 7.1 to JBoss EAP 7.2, 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.
- 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-forrhel-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: **7.1**.
  - 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-for-
rhel-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**.



#### IMPORTANT

It is not supported to configure multiple domain or host controllers on the same machine when using the RPM installation method to install JBoss EAP.

#### 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:



 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 7.1.

#### 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-7.1.0-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-7.1.0-installer.jar http://networkhost.local/auto.xml

\$ java -jar jboss-eap-7.1.0-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-7.1.0-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-7.1.0-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-7.1.0-installer.jar auto.xml -variables
adminPassword=password#2,vault.keystorepwd=vaultkeystorepw,ssl.passw
ord=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

 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 **JBOSS\_MODE=domain** to **jboss-eap.conf**.

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:



- 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.



#### IMPORTANT

It is not supported to configure more than one JBoss EAP instance as a system service on a single machine.

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 JBoss EAP installation directory.
- NOPAUSE=1
- 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:

C:\Program Files - jboss-eap-7.1 – bin . . . jbcs-jsvc-<VERSION>

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 **ls /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**.

 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 UNIX-like 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:



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	<pre>EAP_HOME//jbcs-jsvc-<version>/sbin/jsvc</version></pre>
JSVC_JAR	<i>EAP_HOME/</i> /jbcs-jsvc-< <i>VERSION</i> >/lib/commons- daemon.jar
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/c onfiguration
LOG_DIR	/opt/rh/eap7/root/usr/share/wildfly/standalone/l og

Start a standalone JBoss EAP server using Jsvc:

 $SJSVC_BIN \setminus$ 

```
-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:

```
SJSVC BIN 
 -stop ∖
 -outfile LOG_DIR/jsvc.out.log
 -errfile LOG_DIR/jsvc.err.log
                                  \mathbf{X}
 -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
                                                \backslash
@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	<pre>EAP_HOME//jbcs-jsvc-<version>/sbin/jsvc</version></pre>
JSVC_JAR	<i>EAP_HOME/</i> /jbcs-jsvc-< <i>VERSION</i> >/lib/commons- daemon.jar
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
CONF_DIR	/opt/rh/eap7/root/usr/share/wildfly/domain/confi guration
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
                                  \mathbf{1}
 -errfile LOG_DIR/jsvc.err.log
                                  \mathbf{X}
 -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
                                 \backslash
 -errfile LOG_DIR/jsvc.err.log
                                 \mathbf{1}
 -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.

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