



Installation on JBoss Application Server

If you choose JBoss as your application server, you do not need to install the JBoss software as a prerequisite. The Cisco Prime Service Catalog installer will automatically install the Jboss Application Server and deploy the Service Catalog applications. Follow the instructions in the Preinstallation Configuration for JBoss section of this chapter to prepare your machine. Then after you execute the Cisco Prime Service Catalog installer, come back to the Postinstallation Configuration for JBoss section of this chapter to verify your installation.

Preinstallation Configuration for JBoss

This section contains instructions for preparing your computer, prior to installing Prime Service Catalog with JBoss application server.

This release of Prime Service Catalog supports JBoss Application Server on the following operating systems, web servers, and Java Development Kit:

Table 4-1 JBoss Supported Operating System, Web Server, and Java

JBoss Application Server	Operating System	Web Server	Java
JBoss AS 7.1.1.Final	Red Hat Enterprise Linux Server 5.9 (64-bit)	Apache 2.4.7	Oracle JDK 7 Update 55 (or higher update)
JBoss AS 7.1.1.Final	CentOS Linux 6.5 (64-bit)	Apache 2.2.15	Oracle JDK 7 Update 55 (or higher update)
JBoss AS 7.1.1.Final	Windows Server 2008 R2 (64-bit), with SP1	Microsoft Internet Information Services (IIS) 7.5	Oracle JDK 7 Update 55 (or higher update)



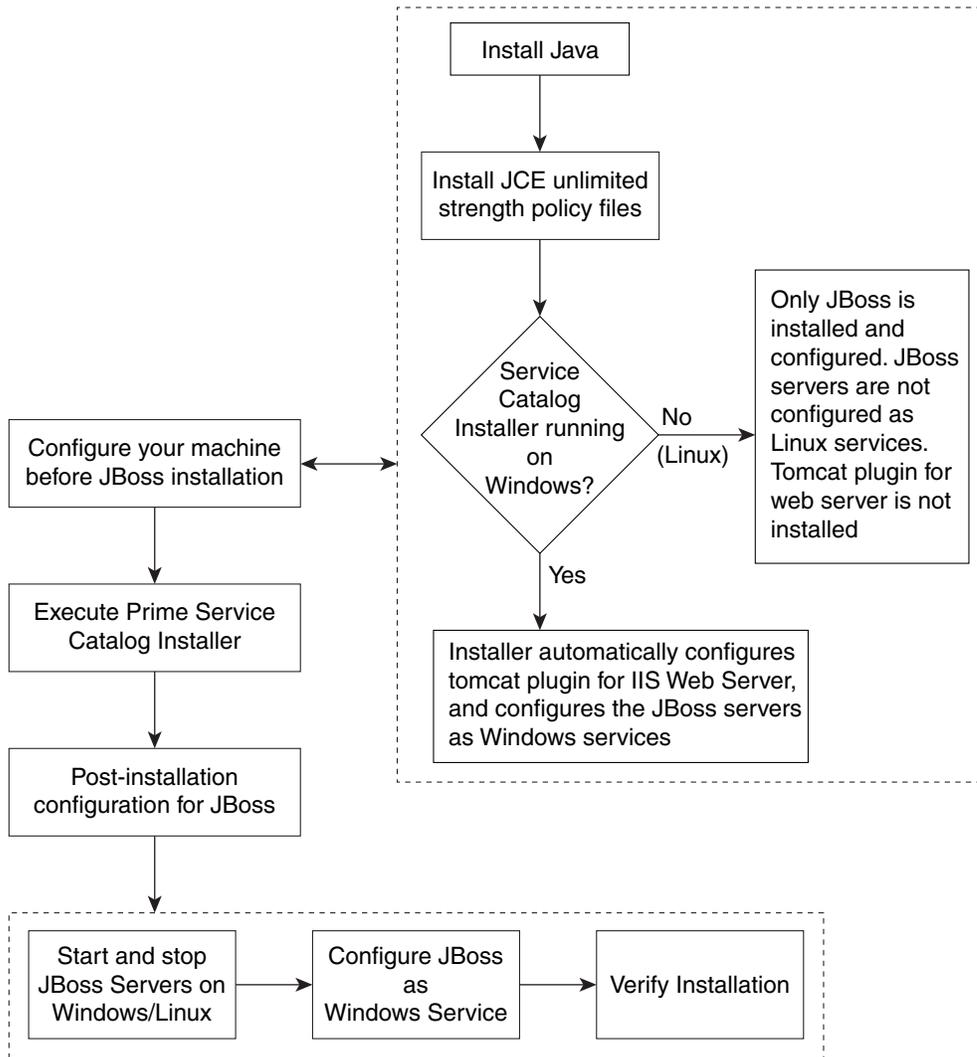
Note

Oracle Java SE 8 (i.e. Java version 1.8.0_x) is not supported.

JBoss Installation Flow

The following figure illustrates steps to install Prime Service Catalog on JBoss Application Server.

Figure 4-1 Installation Flow for JBoss Application Server



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Installing Java

In this section, you will install Oracle Java as a prerequisite, and prepare the environment variables on your computer.

- Step 1** Download Oracle JDK 7 Update 55 (or higher Update) from the Oracle website. Ensure that you download the correct version of JDK 7. Only Update 55 or later is supported.



Note During the installation, the installer prompts for the Java path and this prompt appears only for JBoss, and not for WebLogic. However the installer does not use the JAVA_HOME path that you enter in this screen to launch its own Java process, but uses the Java executable that it finds in the PATH environment variable of the operating system.

Step 2 Copy the unlimited strength JCE policy files to the `$JAVA_HOME/jre/lib/security` directory, overwriting the existing files. The unlimited strength policy files are "local_policy.jar" and "US_export_policy.jar", which can be downloaded from the following link:

<http://www.oracle.com/technetwork/java/javase/downloads/jce-7-download-432124.html>

Step 3 Add the `<path_to_jdk_1.7_java_executable>` to the PATH environment variable. You may have multiple Java installation on your machine. Just make sure that the path to the Java executable for JDK 1.7.0_x is first in the path of the PATH environment variable. This is what the PSC 10.1 Installer will use when it is first launched

For example:

On Windows:

- set JAVA_HOME=C:\jdk1.7.0_55
- set PATH=%JAVA_HOME%\bin;%PATH%

On Linux:

- export JAVA_HOME=/opt/jdk1.7.0_55
 - export PATH=\$JAVA_HOME/bin:\$PATH
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Regarding JBoss Software

Cisco Prime Service Catalog is bundled with the JBoss AS 7.1.1.Final software distribution. If you select JBoss as the application server on the installation wizard, the Service Catalog installer will automatically install and deploy the JBoss software on the same machine where you are running the installer. You do not need to install the JBoss Application Server software as a prerequisite. We recommend that you let the Service Catalog installer install the JBoss software for you.

You can choose to install only the Service Catalog component application on your computer, only the Service Link component application on your computer, or both Service Catalog and Service Link component applications together on the same computer. When you choose to install both component applications together on the same computer, the installer will always create two separate JBoss server instances, one for the Service Catalog component application, and one for the Service Link component application.

The JMS service is configured in the JBoss server where the Service Catalog component application resides.

Preparing IIS Web Server

If you are running the Service Catalog installer on a Windows operating system, the installer can automatically configure the tomcat plugin for the IIS web server, and configure the JBoss servers as Windows services. The options for "Configure IIS" and "Configure windows services" are presented on the installation wizard, and you can select or deselect each option as you desire.

If you want the Service Catalog installer to configure the tomcat plugin for the IIS web server, then you need to perform the following prerequisite tasks:

- Install IIS on the same Windows operating system where you plan to execute the installer.
- Add the following role services for IIS: ISAPI Extensions, ISAPI Filters.
- Stop the World Wide Web Publishing Service prior to executing the Service Catalog installer.
- You will be prompted to enter the name of the IIS web site. You can enter either "Default Web Site" or the name of another web site. If you enter the name of another website, then you must create that website as a prerequisite.

If you are running the Service Catalog installer on a Linux operating system, then the installer will install only the JBoss software. It will not configure the tomcat plugin for the Apache web server, and will not configure the JBoss servers to run as Linux services.

Executing Prime Service Catalog Installer

Your JBoss environment is prepared. You can now proceed to the [Installing Prime Service Catalog](#) chapter, and follow the instructions to execute the Prime Service Catalog installer. After you finish executing the Prime Service Catalog installer successfully, come back to this chapter and follow the instructions in the next section "Postinstallation Configuration for JBoss" to complete the rest of the configuration steps.

Postinstallation Configuration for JBoss

The Service Catalog installer installs and configures JBoss for the Service Catalog and Service Link applications on your computer, but it will not automatically start up the JBoss servers. This section contains instructions for starting and stopping the JBoss servers for Service Catalog and Service Link.

Enabling Secure Cookie

The secure cookie is an optional feature. To enable the secure cookie feature, you must first enable SSL for the web server, as you have already done in the "Preparing IIS Web Server" section. Then, after you install Prime Service Catalog, you must manually edit the file "`<PSC_Install_Dir>\jboss-as-7.1.1.Final\ServiceCatalogServer\deployments\RequestCenter.war\WEB-INF\web.xml`" by setting the secure property to true as follows:

```
<session-config>
  <cookie-config>
    <http-only>true</http-only>
    <path>/RequestCenter</path>
    <secure>true</secure>
  </cookie-config>
</session-config>
```

Starting JBoss Server on Windows

If you selected the "Configure windows service" option for Service Catalog and Service Link during the installation, then the "Cisco Prime Service Catalog" service and "Cisco Prime Service Link" service are registered on your Windows operating system.

However, the installer does not automatically start up the windows services for the first time right after the installation. (They will be automatically started the next time you reboot your computer.) You can perform the following steps to start the services for the first time:

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- Step 1** Select "*Start > All Programs > Administrative Tools > Services*" on your computer.
 - Step 2** Select the service named **Cisco Prime Service Catalog**, and click the **Start Service** button
 - Step 3** Wait for a few minutes for the Service Catalog server to be completely up. The JMS service is configured in the same JBoss server with the Service Catalog application; thus, you want to allow enough time for the JMS service to be ready before starting up the Service Link server.
 - Step 4** Select the service named **Cisco Prime Service Link**, and click the **Start Service** button.
 - Step 5** To stop the JBoss servers: It is recommended that you stop the "Cisco Prime Service Link" service first, then stop the "Cisco Prime Service Catalog" service.
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If you did not select the "Configure windows service" option during the installation, then you will need to execute a command script to start up each JBoss server. Perform the following steps to start the JBoss servers:

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- Step 1** It is assumed that your installation directory is "C:\CiscoPrimeServiceCatalog". Open a Command Prompt window, and navigate to the "C:\CiscoPrimeServiceCatalog\bin" directory.
 - Step 2** Execute the script **startServiceCatalog.cmd** to start the JBoss server for Service Catalog.
 - Step 3** Wait for a few minutes for the Service Catalog server to be completely up. The JMS service is configured in the same JBoss server with the Service Catalog application; thus, you want to allow enough time for the JMS service to be ready before starting up the Service Link server.
 - Step 4** Execute the script **startServiceLink.cmd** to start the JBoss server for Service Link.

**Note**

Because you start the JBoss servers using command scripts, if you log out of the Windows operating system, the JBoss servers will be automatically killed when your login session is ended. So make sure that you don't log off the session where the JBoss servers are running. Follow the instructions in the "Configure JBoss As Windows Service" section below if you want to configure the JBoss servers as windows services after the installation. When the JBoss servers are running as windows services, they will not be killed when you log out of Windows operating system.

- Step 5** To stop the JBoss servers, you can either:
 - Press Control+C in the Command Prompt window where the Service Link server or Service Catalog server is running, or
 - Execute the script "**stopServiceLink.cmd**" or "**stopServiceCatalog.cmd**", located under the C:\CiscoPrimeServiceCatalog\bin directory.
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Starting JBoss Server on Linux

Perform the following steps to start the JBoss Servers on Linux:

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- Step 1** It is assumed that your installation directory is "/opt/CiscoPrimeServiceCatalog". Use SSH to connect to the Linux machine as the "root" user, and navigate to the "/opt/CiscoPrimeServiceCatalog/bin" directory.
- Step 2** Execute the following command to start the JBoss server for Service Catalog in the background:
nohup ./startServiceCatalog.sh > startServiceCatalog.log 2>&1 &
- Step 3** Wait for a few minutes for the Service Catalog server to be completely up. The JMS service is configured in the same JBoss server with the Service Catalog application; thus, you want to allow enough time for the JMS service to be ready before starting up the Service Link server.
- Step 4** Execute the following command to start the JBoss server for Service Link in the background:
nohup ./startServiceLink.sh > startServiceLink.log 2>&1 &
- Step 5** To stop the JBoss servers: It is recommended that you stop the Service Link server first. Execute the following scripts as the "root" user to stop the JBoss servers for Service Link and Service Catalog:
./stopServiceLink.sh
./stopServiceCatalog.sh
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Configure JBoss as Windows Service

Perform the following steps to configure JBoss as Windows service:

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- Step 1** It is assumed that your installation directory is "C:\CiscoPrimeServiceCatalog". Open a Command Prompt window, and navigate to the "C:\CiscoPrimeServiceCatalog\bin" directory. Execute the script "installServiceCatalogService.cmd" to configure the JBoss server for Service Catalog as a Windows service. The service will be named "Cisco Prime Service Catalog".
- Step 2** Execute the script "installServiceLinkService.cmd" to configure the JBoss server for Service Link as a Windows service. The service will be named "Cisco Prime Service Link".
- Step 3** To remove the Windows services: First you need to manually stop the "Cisco Prime Service Catalog" and "Cisco Prime Service Link" services. Then, execute the scripts "uninstallServiceCatalogService.cmd" and "uninstallServiceLinkService.cmd"
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Verifying Your Installation

Verify your installation by performing the following tasks:

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- Step 1** Open a browser, and connect to the following URL: <http://<hostname>:<port>/RequestCenter> where
- <hostname> = The fully qualified domain hostname or the IP address of the computer where you installed the JBoss server for Service Catalog.
 - <port> = The HTTP Port number assigned to the JBoss server for Service Catalog. The default value for HTTP Port number is 8080.



Note

If you are on a Windows operating system, and during the installation you selected the "Configure IIS" option, then the Service Catalog installer automatically configured the tomcat plugin for the IIS web server on your machine to redirect to the JBoss server. Thus, in this case, the URL for Service Catalog should point to the port number used by the IIS web server instead. For example, if your IIS web server is using port 80, then the URL should be <http://<hostname>:80/RequestCenter>, or <http://<hostname>/RequestCenter> since port 80 can be omitted from the URL.

- Step 2** Log in as the Site Administrator. For a new installation of Service Catalog, the username for the Site Administrator is "admin" and the password is the value you entered on the Service Catalog Administration Configuration panel of the installation wizard.

- Step 3** Navigate to the Service Link module.

- Step 4** On the left hand side of the panel, under Service Link Status, verify that the connection has a green status.

You have completed the installation for Cisco Prime Service Catalog on JBoss.
