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BEAWebLogic
Platform™

Upgrade Planning Guide

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3. FAQ for Upgrading WebLogic Platform

About This Document

The *BEA WebLogic Platform Upgrade Planning Guide* provides information to help you plan and perform your upgrade to WebLogic Platform 8.1 Service Pack 6 (SP6).

This document covers the following topics:

- Chapter 1, "Introduction," provides an overview of this document and definitions of key terms used throughout the text.

- Chapter 2, "Roadmap for Upgrading WebLogic Platform," provides links to detailed instructions for upgrading individual components of WebLogic Platform to version 8.1 SP6.

- Chapter 3, "FAQ for Upgrading WebLogic Platform," provides answers to frequently asked questions about the upgrade process.

What You Need to Know

This document is intended for customers who want to upgrade to version 8.1 SP6 from an earlier version of WebLogic Platform 8.1.

Product Documentation on the dev2dev Web Site

BEA product documentation, along with other information about BEA software, is available from the BEA dev2dev Web site:

http://dev2dev.bea.com

To view the documentation for a particular product, select that product from the list on the dev2dev page; the home page for the specified product is displayed. From the menu on the left side of the screen, select Documentation for the appropriate release. The home page for the complete documentation set for the product and release you have selected is displayed.

Related Information

For more information in general about WebLogic Platform and its components, see the WebLogic Platform Documentation at
`http://e-docs.bea.com/platform/docs81/index.html`.

Contact Us!

Your feedback on the BEA WebLogic Platform documentation is important to us. Send us e-mail at **docsupport@bea.com** if you have questions or comments. Your comments will be reviewed directly by the BEA professionals who create and update the WebLogic Platform documentation.

In your e-mail message, please indicate which release of the WebLogic Platform documentation you are using.

If you have any questions about this version of BEA WebLogic Platform, or if you have problems installing and running BEA WebLogic Platform, contact BEA Customer Support at `http://support.bea.com`. You can also contact Customer Support by using the contact information provided on the quick reference sheet titled "BEA Customer Support," which is included in the product package.

When contacting Customer Support, be prepared to provide the following information:

- Your name, e-mail address, phone number, and fax number

- Your company name and company address

- Your machine type and authorization codes

- The name and version of the product you are using

- A description of the problem and the content of pertinent error messages

Documentation Conventions

The following documentation conventions are used throughout this document.

Convention	Item
Ctrl+Tab	Indicates that you must press two or more keys simultaneously.
italics	Indicates emphasis or book titles.
`monospace text`	Indicates *user input*, as shown in the following examples: • Filenames: `config.xml` • Pathnames: `BEAHOME/config/examples` • Commands: `java -Dbea.home=BEA_HOME` • Code: `public TextMsg createTextMsg(`
	Indicates *computer output*, such as error messages, as shown in the following example: `Exception occurred during event dispatching:java.lang.ArrayIndexOutOfBoundsException: No such child: 0`
`monospace boldface text`	Identifies significant words in code. *Example*: `void `**`commit`**` ( )`
`monospace italic text`	Identifies variables in code. *Example*: `String expr`
{ }	Indicates a set of choices in a syntax line. The braces themselves should never be typed.
[ ]	Indicates optional items in a syntax line. The brackets themselves should never be typed. *Example*: `java utils.MulticastTest -n name [-p portnumber]`
|	Separates mutually exclusive choices in a syntax line. The symbol itself should never be typed. *Example*: `java weblogic.deploy [list|deploy|update]`

Convention	Item
. . .	Indicates one of the following in a command line: • That an argument can be repeated several times in a command line • That the statement omits additional optional arguments • That you can enter additional parameters, values, or other information The ellipsis itself should never be typed. *Example*: ```buildobjclient [-v] [-o name] [-f "file1.cpp file2.cpp file3.cpp . . ."```
. . .	Indicates the omission of items from a code example or from a syntax line. The vertical ellipsis itself should never be typed.

Introduction

This document provides information designed to help you plan and perform your upgrade to WebLogic Platform 8.1 Service Pack 6 (SP6). Topics include:

- Roadmap for Upgrading WebLogic Platform—Provides links to detailed instructions for upgrading WebLogic Platform component applications to version 8.1 SP6, SP5, SP4, SP3, SP2, or 8.1.

- FAQ for Upgrading WebLogic Platform—Provides answers to frequently asked questions about the upgrade process.

WebLogic Platform Terminology

We recommend that, before proceeding, you familiarize yourself with the following terminology:

- Upgrade—To update BEA WebLogic Platform (and its components) from a previous release or service pack to a more recent release or service pack. This may include updating an existing application or domain configuration to run in a more recent version.

- Migrate—To move an application or domain configuration from a third-party product to a BEA product.

- Interoperability—(1) The capability of an application deployed in one release or service pack to communicate with another application that is deployed in a different release or service pack. (2) The capability of WebLogic Platform components to communicate with third-party software via standard protocols.

- Compatibility—The capability of an application built using one release or service pack to run in another release or service pack, with or without rebuilding the application.

Roadmap for Upgrading WebLogic Platform

This section provides roadmaps for upgrading to all releases of WebLogic Platform 8.1:

- Before You Upgrade Your Systems

- SDKs Bundled with WebLogic Platform 8.1

- Upgrading Silent Configuration Scripts

- Upgrading WebLogic Server Plug-Ins

- Roadmap for Upgrading to WebLogic Platform 8.1 SP6

- Roadmap for Upgrading to WebLogic Platform 8.1 SP5

- Roadmap for Upgrading to WebLogic Platform 8.1 SP4

- Roadmap for Upgrading to WebLogic Platform 8.1 SP3

- Roadmap for Upgrading to WebLogic Platform 8.1 SP2

- Roadmap for Upgrading to WebLogic Platform 8.1

Before You Upgrade Your Systems

Note the following considerations regarding upgrading your installation:

- Backing Up Applications and Domains

- Backing Up Node Manager Files

- Choosing an Upgrade Installation Method

- Choosing an Upgrade Path for Your Applications to the Latest Service Pack

Backing Up Applications and Domains

It is recommended that before installing the service pack you make backup copies of the following:

- All your applications, database schema, and application data.

- All domains you have created. For example, any domain created via the Configuration Wizard in the default `user_projects` directory.

- Any user applications that you have created in the root directory of your WebLogic Platform installation, or in any subdirectories of the root directory (such as any files under `c:\bea\weblogic81`). As part of the upgrade procedure, the installation program overwrites these files.

Note: Both Smart Update and the package upgrade installer create a backup file containing the media state of the current installation and information about files that were added during the upgrade. This backup file is used to restore system state if any errors occur during installation, and when you uninstall or roll back an upgrade installation. However, these tools do not back up any user-written applications, data, or custom domains.

Backing Up Node Manager Files

If you are using Node Manager to manage your servers in a clustered environment, you should back up the Node Manager directory and script before upgrading your installations. The names of the directory and script depend on your operating system:

Windows:
```
WL_HOME\common\nodemanager
WL_HOME\server\bin\startNodeManager.cmd
```

UNIX:
```
WL_HOME/common/nodemanager
WL_HOME/server/bin/startNodeManager.sh
```

Note: In these pathnames, *WL_HOME* represents the root directory of the WebLogic Platform installation, for example, `c:\bea\weblogic81`.

After you complete the upgrade installation, restore the Node Manager directory and script.

For more information about Node Manager, see "Overview of Node Manager" in *Configuring and Managing WebLogic Server* at:

http://e-docs.bea.com/wls/docs81/adminguide/nodemgr.html

Choosing an Upgrade Installation Method

Before upgrading applications, you must upgrade the WebLogic Platform 8.1 software. BEA provides two basic choices for upgrading the WebLogic Platform 8.1 software:

- Using Smart Update or the package upgrade installer

  These tools allow you to install a service pack for the WebLogic Platform 8.1 software currently installed in an existing BEA Home directory. Installing a service pack does not replace an entire installation, but rather updates it with just the changes, additions, and bug fixes for it.

  This method of upgrading an installation is recommended if you plan to upgrade all your applications to the latest service pack, and have no need to retain versions of those applications that are running on the previous release of WebLogic Platform 8.1.

  For information about using Smart Update or the package upgrade installer, see "Installing Service Packs and Rolling Patches" in *Installing BEA WebLogic Platform* at the following URL:

  http://e-docs.bea.com/platform/docs81/install/update.html

  Note: If you are upgrading a WebLogic Platform 8.1 installation on a HP-UX 11i on Itanium system, you must use the package upgrade installer instead of Smart Update. For more information, see the known limitation in the *BEA WebLogic Platform Release Notes* at the following URL:

  http://e-docs.bea.com/platform/docs81/relnotes/relnotes.html#cr21 2708

- Performing a complete, new installation

  As an alternative to installing a service pack, you can perform a complete, new installation of WebLogic Platform 8.1. You can download and install the software from the BEA Web site, or from the software CD-ROM.

  This method of upgrading an installation is recommended when you need to retain versions of your applications that are running on the previous release of WebLogic Platform. When you use this method, you typically install the newer version into a separate BEA home directory to avoid overwriting files in the existing BEA home directory. However, this

approach may require you to manually redefine environment variables in existing domains with which you want to use the new WebLogic Platform 8.1 version.

For information about performing a complete, new installation, see "Preparing to Install WebLogic Platform" in *Installing BEA WebLogic Platform* at the following URL:

http://e-docs.bea.com/platform/docs81/install/prepare.html

Note: If you plan to upgrade an installation of WebLogic Platform 8.1 to SP5 or SP6 on any supported Linux system that is running on a Pentium-based machine, and you are using BEA JRockit 1.4.2 SDK, you must upgrade the patch level of the Linux software before you can start the WebLogic Platform 8.1 upgrade process.

For more information about the specific patch levels required for each Linux system that is supported in WebLogic Platform 8.1, see *Supported Configurations for WebLogic Platform 8.1* at the following URL:

http://e-docs.bea.com/platform/suppconfigs/configs81/81_over/overvi
ew.html

Choosing an Upgrade Path for Your Applications to the Latest Service Pack

WebLogic Platform 8.1 provides two basic upgrade paths for moving your application environment—that is, domains, applications, and database schema—to the latest service pack:

- Upgrading an Existing Domain to the Latest Service Pack

- Creating a New Domain and Deploying Applications Into It

The sections that follow describe each path, and explain when each path may be more appropriate.

Upgrading an Existing Domain to the Latest Service Pack

Using this method, you upgrade the applications and database schema in an existing domain to the latest service pack. If you choose this method, some WebLogic Platform components might require you to run scripts or perform specific tasks to upgrade your domain.

This upgrade path is typically appropriate in the following situations:

- You have a complex, highly customized domain, and you prefer to retain those customizations rather than attempt to replicate them in a new domain.

- In some cases you might be able to avoid having to redeploy your existing applications, which would otherwise be required if you were to create a new domain for them.

Creating a New Domain and Deploying Applications Into It

Using this method, you create a new domain that points to the upgraded WebLogic Platform installation, and deploy your existing applications into that domain. This method may also require additional steps; for example, upgrading your existing applications or database schema. However, using this method, you ensure that your domain is based on the latest domain template.

This upgrade path is typically appropriate in the following situations:

- You are comfortable recreating your domain configuration.

- Redeploying your applications is not an issue.

- You want to take advantage of the latest updates to the template for your domain, which is a best practice for using the Basic WebLogic Platform Domain template.

SDKs Bundled with WebLogic Platform 8.1

The WebLogic Platform 8.1 installation includes the following versions of the Java 2 SDKs:

Table 2-1 SDKs Included in the WebLogic Platform 8.1 Installation

WebLogic Platform 8.1 Version	SDK Included in Installation
Initial GA release	• Sun Java 2 SDK 1.4.1_03 • BEA WebLogic JRockit 8.1 SP1 SDK The WebLogic Platform 8.1 installer for HP-UX 11.0 and 11i on PA-RISC systems includes the HP-UX SDK 1.4.1.02.
Service Pack 2	• Sun Java 2 SDK 1.4.1_05 • BEA WebLogic JRockit SDK 1.4.1_05 The WebLogic Platform 8.1 SP2 installer for HP-UX 11.0 and 11i on PA-RISC systems includes the HP-UX SDK 1.4.1.05.
Service Pack 3	• Sun Java 2 SDK 1.4.2_04 • BEA JRockit 1.4.2_04 SDK The WebLogic Platform 8.1 SP3 installer for HP-UX 11.0 and 11i on PA-RISC systems includes the HP-UX SDK 1.4.2.03.

Table 2-1 SDKs Included in the WebLogic Platform 8.1 Installation

WebLogic Platform 8.1 Version	SDK Included in Installation
Service Pack 4	• Sun Java 2 SDK 1.4.2_05 • BEA JRockit 1.4.2_05 SDK The WebLogic Platform 8.1 SP4 installer for HP-UX 11.0 and 11i on PA-RISC systems includes the HP-UX SDK 1.4.2.05.
Service Pack 5	• Sun Java 2 SDK 1.4.2_08 • BEA JRockit 1.4.2_08 SDK The WebLogic Platform 8.1 SP5 installer for HP-UX 11.0 and 11i on PA-RISC systems includes the HP-UX SDK 1.4.2.08.
Service Pack 6	• Sun Java 2 SDK 1.4.2_11 • BEA JRockit 1.4.2_10 R26.3.0-32_CR283061 and all later 1.4.2 releases of JRockit The WebLogic Platform 8.1 SP6 installer for HP-UX 11i and HP-UX 11i V2 on PA-RISC, and HP-UX 11i V2 on Itanium includes the HP JDK 1.4.2.10 with Java HotSpotTM Server VM (32-bit).

After you have upgraded a domain, you must change the value of the JAVA_HOME variable so it points to the location of the newly installed SDK. To do so, complete the following steps:

1. In a text editor, open the script that sets the value of the JAVA_HOME variable. Depending on the type of domain you are upgrading, the script is named either setDomainEnv or startWebLogic, by default. It is located in the domain's root directory.

2. Update the value of the JAVA_HOME variable. For example:

   For BEA JRockit:

   ```
   set JAVA_HOME=C:\bea\jrockit81sp6_142_10
   ```

   For Sun Java 2 SDK:

   ```
   set JAVA_HOME=C:\bea\jdk142_11
   ```

It is also recommended that you update your Workshop applications, application startup scripts, and silent configuration scripts to reference the new Sun or JRockit SDK directory. For information about updating your Workshop applications to use the new SDK, see .

Notes: If you are upgrading a domain that includes WebLogic Integration, the WebLogic Integration domain upgrade script modifies the `setDomainEnv` script automatically. For information about running this script, see the WebLogic Integration *Upgrade Guide* at the following URL:

`http://e-docs.bea.com/wli/docs81/upgrade/index.html`

Upgrading Silent Configuration Scripts

If you have an existing silent configuration script from SP2 or earlier that you wish to use with SP3 or later, and that script configures domains to use a nondefault database—that is, a database other than PointBase—you need to configure the following JDBC connection pools, which were introduced in SP3:

- `cgJMSPool-nonXA`—Provided by WebLogic Workshop and used by WebLogic Workshop, WebLogic Portal, and WebLogic Integration for a WebLogic JMS persistent file or database store. The configuration of this connection pool is required for all domains that include Workshop, WebLogic Portal, or WebLogic Integration.

- `portalPool`—Provided and used by WebLogic Portal for portal framework, services, and content management. The addition of this new pool contributes to the simplification of creating a domain using a database with an XA driver. The configuration of this connection pool is required only for domains that include WebLogic Portal.

For a description of the default JDBC configuration introduced in 8.1 SP3, see "Default JDBC Configurations for WebLogic Platform" in *Managing WebLogic Platform Database Resources* at the following URL:

`http://e-docs.bea.com/platform/docs81/db_mgmt/default_JDBC_configs.html`

Upgrading WebLogic Server Plug-Ins

If you are using a Web server with your WebLogic Platform installation, it is important that you keep your Web server up to date to ensure you have all the latest security patches and support. Updated Web server plug-ins are included when you upgrade your WebLogic Server installation. Although it is not required, you may want to replace the Web server plug-ins installed with your Web server with the updated versions.

For details about installing the Web server plug-ins included with your WebLogic Platform installation, see *Using Web Server Plug-Ins With WebLogic Server* at the following URL:

`http://e-docs.bea.com/wls/docs81/plugins/index.html`

Roadmap for Upgrading to WebLogic Platform 8.1 SP6

This section includes the following topics about upgrading to SP6:

- Summary of Required SP6 Upgrade Procedures for WebLogic Platform 8.1

- Upgrading WebLogic Platform Applications to SP6

Summary of Required SP6 Upgrade Procedures for WebLogic Platform 8.1

This section includes the following information:

- A summary of the required procedures for upgrading each category of WebLogic Platform 8.1 applications to SP6

- Links to documents that provide more details

- Important notes about upgrade-related information

Table 2-2 Upgrading WebLogic Platform 8.1 to SP6

To upgrade applications built using...	From version...	Do the following...
WebLogic Platform	8.1 SP4 or SP5	See "Upgrading WebLogic Platform Applications to SP6" on page 2-9.
WebLogic Server	8.1 SP4 or SP5	Modify the startWebLogic script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). This task is the only one required for upgrading WebLogic Server applications.
WebLogic Workshop	8.1 SP4 or SP5	• Modify the setDomainEnv script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). This task is the only one required for upgrading WebLogic Workshop applications. • See "WebLogic Workshop" on page 3-7 for information about upgrading your Workshop applications to use one of the new Java 2 SDKs that are installed with SP5.

Table 2-2 Upgrading WebLogic Platform 8.1 to SP6 (Continued)

To upgrade applications built using...	From version...	Do the following...
WebLogic Portal	8.1 SP4 or SP5	• Modify the setDomainEnv script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). • See "Upgrading to Service Pack 6" in the WebLogic Portal 8.1 *Upgrade Guide* at http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html
WebLogic Integration	8.1 SP4 or SP5	See "Upgrading WebLogic Integration 8.1 SP4 or SP5 to WebLogic Integration 8.1 SP 6" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html
BEA JRockit	8.1 SP4 or SP5	N/A. There is no required upgrade procedure.

Upgrading WebLogic Platform Applications to SP6

Depending on the upgrade path appropriate for your WebLogic Platform environment—namely, depending on whether you are upgrading an existing domain, or creating a new domain and deploying your applications to it—we recommend the basic steps provided in the following sections to complete the SP6 upgrade process for applications that include WebLogic Integration and WebLogic Portal resources. Such applications typically are deployed in domains based on the Basic WebLogic Platform Domain template.

The following sections include:

- If You Are Upgrading an Existing WebLogic Platform Domain
- If You Are Creating a New Domain and Deploying Your Applications to It

If, after reading these sections, you need more information before starting the upgrade procedure, see Chapter 3, "FAQ for Upgrading WebLogic Platform."

If You Are Upgrading an Existing WebLogic Platform Domain

To upgrade an existing WebLogic Platform domain, complete the following procedure:

1. If necessary, make sure the WebLogic Integration resources in the domain have been upgraded to at least SP4. For more information, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP4" on page 2-31.

2. Back up your applications, database schema, other application data, and domain. See "Backing Up Applications and Domains" on page 2-2 for more information.

3. Choose an upgrade installation method. For example, if you want to upgrade your WebLogic Platform 8.1 software on a Windows system to SP6, you might choose to run Smart Update. For more information, see "Choosing an Upgrade Installation Method" on page 2-3.

4. Make sure that all running instances of WebLogic Server are shut down.

5. Complete the steps described in the following sections:

   – Upgrade the Domain's WebLogic Integration Resources

   – Upgrade the Domain's WebLogic Portal Resources

   – Redeploy the Upgraded Application

Upgrade the Domain's WebLogic Integration Resources

To upgrade the domain's WebLogic Integration resources, complete the following steps:

1. If you are using PointBase as your database, start your PointBase server and follow the procedure described in "Upgrading PointBase" in "Upgrading WebLogic Integration 8.1 SP4 or SP5 to WebLogic Integration 8.1 SP6" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html

   When your PointBase update is complete, go to the next step.

   Note: If your domain is configured with a database other than PointBase, make sure it is stopped before you proceed.

2. Open a UNIX shell or Windows command prompt window, as appropriate.

3. Set the ANT_OPTS environment variable on your machine to -Xmx256m, to ensure that Ant has enough memory available to complete the domain upgrade procedure. To set the ANT_OPTS variable, enter the command appropriate for your operating system:

   Windows:

   ```
   prompt> set ANT_OPTS=-Xmx256m
   ```

   UNIX:

```
prompt> setenv ANT_OPTS -Xmx256m
```

4. Go to the following directory:

   WL_HOME/integration/upgrade

5. Create an `options.properties` file that contains settings for your domain environment. The *WL_HOME*/integration/upgrade directory contains the file `options.properties.sample`, which you can use as a template for creating this file.

   Define the properties shown in Table 2-5.

   Note: Use "/" as a file separator in directory paths.

Table 2-3 Values You Specify in the options.properties File

Set the following property...	To the following values...
current.version=sp*n*	Service pack level of the domain being upgraded: • If you are upgrading from SP4, specify `current.version=sp4`. • If you are upgrading from SP5, specify `current.version=sp5`.
domain.path=*path*	Absolute path of the directory containing the domain to be upgraded. For example: `c:/bea/user_projects/domains/myDomain`
beahome.path=*path*	Absolute path of the BEA Home directory in which the pre-upgraded WebLogic Integration 8.1 software is installed. For example: `c:/bea`
beahome.latest.path=*path*	Absolute path of the BEA Home directory in which the WebLogic Integration 8.1 SP6 software is installed. For example: `c:/bea`

Table 2-3 Values You Specify in the options.properties File (Continued)

Set the following property...	To the following values...
os=both	Default value of **both**.
	Note: If you specify the property os=unix, substitutions may be skipped when executing the upgrade Ant script target, as described in the steps that follow this table. Therefore, we recommend that you use the default property os=**both**; this ensures that all paths are properly upgraded.
	If you choose run the upgrade script using the os=unix property, you should run the update_paths target manually.
weblogic=weblogic81	Name of the directory in which the pre-upgrade WebLogic Integration 8.1 software is installed. The default is weblogic81.
weblogic.latest=weblogic81	Name of the directory in which the WebLogic Integration 8.1 SP6 software is installed. The default is weblogic81.
db_upgrade=true	Value of true for all supported databases, except PointBase. If your domain is configured with PointBase, set this property to false.
platform.hp=false	Value of **false**, which is the default value in the options.properties.sample file. For HP-UX platforms, however, this property must be set to **true**.

6. Go to the root directory of the domain you are upgrading. For example:

   BEA_HOME/user_projects/domains/*your_domain*

7. Open the workshop.properties file in a text editor and change the absolute paths to relative paths in the definitions of the wlsHome.path and jdkHome.path variables.

8. Return to the following directory:

   BEA_HOME/weblogic81/integration/upgrade

9. Run the `domain_upgrade.xml` script to upgrade the WebLogic Integration resources in your domain, using the following syntax:

```
ant -f domain_upgrade.xml upgrade
-Doptions.properties=your_options_file
-Dsingle.node=true|false -Ddb_type=your_db_vendor -Ddb_user=user_name
-Ddb_password=password -Ddb_server=your_server:port
-Ddb_name=database_name
```

In the preceding syntax:

– *your_options_file* represents the `options.properties` file that you created in step 5.

– If you are upgrading a single-node domain, set the `-Dsingle.node` parameter to **true**. If you are upgrading a clustered domain, set this parameter to **false**.

10. If you are using PointBase, complete the following steps:

a. Go to the following directory:

```
BEA_HOME/weblogic81/integration/dbscripts/pointbase
```

b. Run one of the following WebLogic Integration database schema upgrade scripts, as appropriate:

For upgrading SP4 to SP6:

```
upgrade_runtime_sp4_sp6.sql
```

For upgrading SP5 to SP6:

```
upgrade_runtime_sp5_sp6.sql
```

11. Remove the domain server's `.wlnotdelete` subdirectory and all its contents. This subdirectory, which contains the server's cache, is located in the domain's server directory. For example:

```
BEA_HOME/user_projects/domains/mydomain/examplesServer/.wlnotdelete
```

Removing the `.wlnotdelete` subdirectory ensures that all domain upgrade changes become effective when the server is restarted.

For complete details about each of these steps, see "Upgrading WebLogic Integration 8.1 SP4 or SP5 to WebLogic Integration 8.1 SP6" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html.

Upgrade the Domain's WebLogic Portal Resources

To upgrade the domain's WebLogic Portal resources, complete the following steps:

1. If you are doing a complete, new installation as part of your upgrade, update the WebLogic Portal scripts in your domain as necessary, as explained in "WebLogic Portal Full Installer" in "Upgrading to Service Pack 6" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html

2. If you are upgrading from SP5 to SP6, skip to step 3. If you are upgrading from SP4 to SP6, your first step is to upgrade the WebLogic Portal database schema in the domain to SP4. To do so, complete the following procedure:

   a. Go to the following directory:

   BEA_HOME/weblogic81/portal/upgrade/SP5

   b. Complete the steps for your specific database provided in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide*.

   c. Update the db_settings.properties file with your 8.1 database settings. (The instructions at the beginning of the file explain the specific settings that you need to make.)

   d. Run the appropriate WebLogic Portal database schema upgrade script:
   On Windows: upgrade_db_schema_to_81SP6.cmd
   On UNIX: upgrade_db_schema_to_81SP6.sh

   For complete details about each of these steps, see "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 6" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html

3. Upgrade the domain to use the new SP6 libraries and database modules, which may be appropriate if you want to preserve a highly customized domain, including LDAP setup. The following procedure summarizes the steps that are required:

   a. Go to the following directory:

   BEA_HOME/weblogic81/portal/upgrade/SP6

   b. Run the WebLogic Portal database update script, pf_update_system_data.sql.

   c. Make a backup copy of the upgraded database.

For complete details about each of these steps, see "Step 2: Upgrade Existing Portal Framework Data" in in "Upgrading to Service Pack 6" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html

4. Upgrade your WebLogic Portal applications in the domain by completing the following steps:

   a. When upgrading applications that are stored as EAR files, you must manually update the encryption.

   b. Start WebLogic Workshop 8.1 SP6. If the server is running, shut it down in Workshop by choosing Tools→ WebLogic Server→ Stop WebLogic Server.

   c. In WebLogic Workshop, open the portal application you want to update.

   d. In the Application window, right-click the application directory and choose Install→ Update Portal Libraries. In the Application window, right-click the application directory and choose Install→ Update Portal Libraries. Workshop prompts you to indicate whether you want to overwrite files with SP6 versions. Click OK.

      After the portal application libraries are updated, a dialog box prompts you to select Web projects in the application that you want to have updated.

   e. Select the Web projects for which you want to have the libraries updated, and click OK.

For complete details about upgrading WebLogic Portal resources and applications in an existing domain, see "Upgrading to Service Pack 6" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html

Redeploy the Upgraded Application

The final upgrade step is to redeploy the application on your server.

For deployment instructions, see the following documents:

- *WebLogic Portal Production Operations User Guide* at
  http://e-docs.bea.com/wlp/docs81/prodOps/index.html
- *Deploying WebLogic Integration Solutions* at
  http://e-docs.bea.com/wli/docs81/deploy/index.html
- *Deploying WebLogic Platform Applications* at
  http://e-docs.bea.com/platform/docs81/deploy/index.html

Congratulations! You have completed the SP6 domain upgrade procedure.

If You Are Creating a New Domain and Deploying Your Applications to It

To create a new WebLogic Platform domain and deploy your existing applications to it, complete the following procedure:

1. If you are upgrading from SP4, make sure that all existing WebLogic Integration resources have been fully upgraded to SP4. For more information, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP4" on page 2-31.

2. Back up your applications, database schema, other application data, and domain. For more information, see "Backing Up Applications and Domains" on page 2-2.

3. Choose an upgrade installation method, such as Smart Update, and upgrade your WebLogic Platform 8.1 software to SP6. For more information, see "Choosing an Upgrade Installation Method" on page 2-3.

4. Use the Configuration Wizard and the Basic WebLogic Platform Domain template to create a new domain.

5. Make sure that all running instances of WebLogic Server are shut down.

6. Complete the steps described in the following sections:

   – Upgrade the WebLogic Integration Resources for Your New Domain

   – Upgrading the WebLogic Portal Resources for Your New Domain

   – Redeploy the Upgraded Application

Upgrade the WebLogic Integration Resources for Your New Domain

To upgrade the WebLogic Integration resources used by your application in the new domain, complete the following steps:

1. If you are using PointBase as your database, start the PointBase server and follow the procedure provided in "Upgrading PointBase" in "Upgrading WebLogic Integration 8.1 SP4 or SP5 to WebLogic Integration 8.1 SP6" in the WebLogic Integration *Upgrade Guide* at `http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html`.

2. If your domain is configured with a database other than PointBase, make sure it is stopped before you proceed.

3. Go to the following directory:

   BEA_HOME/weblogic81/integration/dbscripts/*db_directory*

Here `db_directory` represents the name of the database directory configured for your domain, such as `sybase`.

4. Run the appropriate WebLogic Integration database schema upgrade scripts, as appropriate:

   For upgrading SP4 to SP6:

   `upgrade_runtime_sp4_sp6.sql`

   For upgrading SP5 to SP6:

   `upgrade_runtime_sp5_sp6.sql`

For complete details, see "Upgrading WebLogic Integration 8.1 SP4 or SP5 to WebLogic Integration 8.1 SP6" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html.

Upgrading the WebLogic Portal Resources for Your New Domain

To upgrade the WebLogic Portal resources used by your application in the new domain, complete the following steps:

1. If you are doing a complete, new installation as part of your upgrade, update the WebLogic Portal scripts as necessary, as explained in "WebLogic Portal Full Installer" in "Upgrading to Service Pack 6" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html

2. If you are upgrading from SP5 to SP6, skip to step 3. If you are upgrading from SP4 to SP6, your first step is to upgrade the WebLogic Portal database schema in the domain to SP5. To do so, complete the following procedure:

   a. Go to the following directory:

      BEA_HOME/weblogic81/portal/upgrade/SP5

   b. Complete the steps for your specific database as provided in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide*.

   c. Update the `db_settings.properties` file with your 8.1 database settings. (The instructions at the beginning of the file explain the specific settings that you need to make.)

   d. Run the appropriate WebLogic Portal database schema upgrade script:
      On Windows: `upgrade_db_schema_to_81SP5.cmd`
      On UNIX: `upgrade_db_schema_to_81SP5.sh`

For complete details about each of these steps, see "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html

3. Upgrade the domain to use the new SP6 libraries and database modules, which may be appropriate if you want to preserve a highly customized domain, including LDAP setup. The following procedure summarizes the steps that are required:

   a. Go to the following directory:

      BEA_HOME/weblogic81/portal/upgrade/SP6

   b. Run the WebLogic Portal database update script, pf_update_system_data.sql.

   c. Make a backup copy of the upgraded database.

4. Upgrade your WebLogic Portal applications in the domain by completing the following steps:

   a. If you are using a third-party content management system, re-configure that repository before deploying it. This allows the passwords to be re-encrypted for the new domain.

   b. Re-encrypt any passwords that are used to access WSRP portlets. Encryption is domain-specific so it needs to be updated when switching domains. Also, when upgrading applications that are stored as EAR files, you must manually update the encryption.

   c. Start WebLogic Workshop 8.1 SP6. If the server is running, shut it down in Workshop by choosing Tools→ WebLogic Server→ Stop WebLogic Server.

   d. In WebLogic Workshop, open the portal application you want to update.

   e. In the Application window, right-click the name of the application directory and choose Install→ Update Portal Libraries. Workshop prompts you to indicate whether you want to overwrite the existing files with SP6 versions. Click OK.)

      After the portal application libraries are updated, a dialog box prompts you to select Web projects in the application that you want to have updated.

   f. Select the Web projects for which you want to have libraries updated, and click OK.

   g. Restart the server.

For complete details about upgrading WebLogic Portal resources and applications in an existing domain, see "Upgrading to Service Pack 6" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html

Redeploy the Upgraded Application

The final upgrade step is to redeploy the application on your server.

For deployment instructions, see the following documents:

- *WebLogic Portal Production Operations User Guide* at
  http://e-docs.bea.com/wlp/docs81/prodOps/index.html

- *Deploying WebLogic Integration Solutions* at
  http://e-docs.bea.com/wli/docs81/deploy/index.html

- *Deploying WebLogic Platform Applications* at
  http://e-docs.bea.com/platform/docs81/deploy/index.html

Congratulations! You have completed the SP6 upgrade procedure.

Roadmap for Upgrading to WebLogic Platform 8.1 SP5

This section includes the following topics about upgrading to SP5:

- Summary of Required SP5 Upgrade Procedures for WebLogic Platform 8.1

- Upgrading WebLogic Platform Applications to SP5

Summary of Required SP5 Upgrade Procedures for WebLogic Platform 8.1

This section includes the following information:

- A summary of the required procedures for upgrading each category of WebLogic Platform 8.1 applications to SP5.

- Links to documents that provide more details

- Important notes about upgrade-related information

Table 2-4 Upgrading WebLogic Platform 8.1 to SP5

To upgrade applications built using...	From version...	Do the following...
WebLogic Platform	8.1 SP3 or SP4	See "Upgrading WebLogic Platform Applications to SP5" on page 2-20.
WebLogic Server	8.1 SP3 or SP4	Modify the `startWebLogic` script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). This task is the only one required for upgrading WebLogic Server applications.
WebLogic Workshop	8.1 SP3 or SP4	• Modify the `setDomainEnv` script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). This task is the only one required for upgrading WebLogic Workshop applications. • See "WebLogic Workshop" on page 3-7 for information about upgrading your Workshop applications to use one of the new Java 2 SDKs that are installed with SP5.
WebLogic Portal	8.1 SP3 or SP4	• Modify the `setDomainEnv` script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). • See "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide* at http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html
WebLogic Integration	8.1 SP3 or SP4	See "Upgrading WebLogic Integration 8.1 SP3 or SP4 to WebLogic Integration 8.1 SP5" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html
BEA JRockit	8.1 SP3 or SP4	N/A. There is no required upgrade procedure.

Upgrading WebLogic Platform Applications to SP5

Depending on the upgrade path appropriate for your WebLogic Platform environment—namely, depending on whether you are upgrading an existing domain, or creating a new domain and deploying your applications to it—we recommend the basic steps provided in the following

sections to complete the SP5 upgrade process for applications that include WebLogic Integration and WebLogic Portal resources. Such applications typically are deployed in domains based on the Basic WebLogic Platform Domain template.

The following sections include:

- If You Are Upgrading an Existing WebLogic Platform Domain

- If You Are Creating a New Domain and Deploying Your Applications to It

If, after reading these sections, you need more information before starting the upgrade procedure, see Chapter 3, "FAQ for Upgrading WebLogic Platform."

If You Are Upgrading an Existing WebLogic Platform Domain

To upgrade an existing WebLogic Platform domain, complete the following procedure:

1. If necessary, make sure the WebLogic Integration resources in the domain have been upgraded to at least SP3. For more information, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP3" on page 2-40.

2. Back up your applications, database schema, other application data, and domain. See "Backing Up Applications and Domains" on page 2-2 for more information.

3. Choose an upgrade installation method. For example, if you want to upgrade your WebLogic Platform 8.1 software on a Windows system to SP5, you might choose to run Smart Update. For more information, see "Choosing an Upgrade Installation Method" on page 2-3.

4. Make sure that all running instances of WebLogic Server are shut down.

5. Complete the steps described in the following sections:

   – Upgrade the Domain's WebLogic Integration Resources

   – Upgrade the Domain's WebLogic Portal Resources

   – Redeploy the Upgraded Application

Upgrade the Domain's WebLogic Integration Resources

To upgrade the domain's WebLogic Integration resources, complete the following steps:

1. If you are using PointBase as your database, start your PointBase server and follow the procedure described in "Upgrading PointBase" in "Upgrading WebLogic Integration 8.1 SP3

or SP4 to WebLogic Integration 8.1 SP5" in the WebLogic Integration *Upgrade Guide* at
http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html

When your PointBase update is complete, go to the next step.

Note: If your domain is configured with a database other than PointBase, make sure it is stopped before you proceed.

2. Open a UNIX shell or Windows command prompt window, as appropriate.

3. Set the `ANT_OPTS` environment variable on your machine to `-Xmx256m`, to ensure that Ant has enough memory available to complete the domain upgrade procedure. To set the `ANT_OPTS` variable, enter the command appropriate for your operating system:

   Windows:

   ```
   prompt> set ANT_OPTS=-Xmx256m
   ```

   UNIX:

   ```
   prompt> setenv ANT_OPTS -Xmx256m
   ```

4. Go to the following directory:

   `WL_HOME/integration/upgrade`

5. Create an `options.properties` file that contains settings for your domain environment. The `WL_HOME/integration/upgrade` directory contains the file `options.properties.sample`, which you can use as a template for creating this file.

   Define the properties shown in Table 2-5.

   Note: Use "/" as a file separator in directory paths.

Table 2-5 Values You Specify in the options.properties File

Set the following property...	To the following values...
`current.version=spn`	Service pack level of the domain being upgraded: • If you are upgrading from SP3, specify `current.version=sp3`. • If you are upgrading from SP4, specify `current.version=sp4`.
`domain.path=path`	Absolute path of the directory containing the domain to be upgraded. For example: `c:/bea/user_projects/domains/myDomain`

Table 2-5 Values You Specify in the options.properties File (Continued)

Set the following property...	To the following values...
`beahome.path=`*path*	Absolute path of the BEA Home directory in which the pre-upgraded WebLogic Integration 8.1 software is installed. For example: `c:/bea`
`beahome.latest.path=`*path*	Absolute path of the BEA Home directory in which the WebLogic Integration 8.1 SP5 software is installed. For example: `c:/bea`
`os=both`	Default value of **both**. **Note:** If you specify the property `os=unix`, substitutions may be skipped when executing the upgrade Ant script target, as described in the steps that follow this table. Therefore, we recommend that you use the default property `os=`**both**; this ensures that all paths are properly upgraded. If you choose run the upgrade script using the `os=unix` property, you should run the `update_paths` target manually.
`weblogic=weblogic81`	Name of the directory in which the pre-upgrade WebLogic Integration 8.1 software is installed. The default is `weblogic81`.
`weblogic.latest=weblogic81`	Name of the directory in which the WebLogic Integration 8.1 SP5 software is installed. The default is `weblogic81`.
`db_upgrade=true`	Value of `true` for all supported databases, except PointBase. If your domain is configured with PointBase, set this property to `false`.
`platform.hp=false`	Value of **false**, which is the default value in the `options.properties.sample` file. For HP-UX platforms, however, this property must be set to **true**.

6. Go to the root directory of the domain you are upgrading. For example:

BEA_HOME/user_projects/domains/*your_domain*

7. Open the `workshop.properties` file in a text editor and change the absolute paths to relative paths in the definitions of the `wlsHome.path` and `jdkHome.path` variables.

8. Return to the following directory:

   BEA_HOME/weblogic81/integration/upgrade

9. Run the `domain_upgrade.xml` script to upgrade the WebLogic Integration resources in your domain, using the following syntax:

   ```
   ant -f domain_upgrade.xml upgrade
   -Doptions.properties=your_options_file
   -Dsingle.node=true|false -Ddb_type=your_db_vendor -Ddb_user=user_name
   -Ddb_password=password -Ddb_server=your_server:port
   -Ddb_name=database_name
   ```

   In the preceding syntax:

   – *your_options_file* represents the `options.properties` file that you created in step 5.

   – If you are upgrading a single-node domain, set the `-Dsingle.node` parameter to **true**. If you are upgrading a clustered domain, set this parameter to **false**.

10. If you are using PointBase, complete the following steps:

    a. Go to the following directory:

       BEA_HOME/weblogic81/integration/dbscripts/pointbase

    b. Run one of the following WebLogic Integration database schema upgrade scripts, as appropriate:

       For upgrading SP3 to SP5:

       `upgrade_runtime_sp3_sp5.sql`

       For upgrading SP4 to SP5:

       `upgrade_runtime_sp4_sp5.sql`

11. Remove the domain server's `.wlnotdelete` subdirectory and all its contents. This subdirectory, which contains the server's cache, is located in the domain's server directory. For example:

    BEA_HOME/user_projects/domains/mydomain/examplesServer/.wlnotdelete

Removing the `.wlnotdelete` subdirectory ensures that all domain upgrade changes become effective when the server is restarted.

For complete details about each of these steps, see "Upgrading WebLogic Integration 8.1 SP3 or SP4 to WebLogic Integration 8.1 SP5" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html.

Upgrade the Domain's WebLogic Portal Resources

To upgrade the domain's WebLogic Portal resources, complete the following steps:

1. If you are doing a complete, new installation as part of your upgrade, update the WebLogic Portal scripts in your domain as necessary, as explained in "WebLogic Portal Full Installer" in "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html

2. If you are upgrading from SP4 to SP5, skip to step 3. If you are upgrading from SP3 to SP5, your first step is to upgrade the WebLogic Portal database schema in the domain to SP4. To do so, complete the following procedure:

   a. Go to the following directory:

      BEA_HOME/weblogic81/portal/upgrade/SP4

   b. Complete the steps for your specific database provided in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide*.

   c. Update the db_settings.properties file with your 8.1 database settings. (The instructions at the beginning of the file explain the specific settings that you need to make.)

   d. Run the appropriate WebLogic Portal database schema upgrade script:
      On Windows: upgrade_db_schema_to_81SP4.cmd
      On UNIX: upgrade_db_schema_to_81SP4.sh

   For complete details about each of these steps, see "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

3. Upgrade the domain to use the new SP5 libraries and database modules, which may be appropriate if you want to preserve a highly customized domain, including LDAP setup. The following procedure summarizes the steps that are required:

   a. Go to the following directory:

      BEA_HOME/weblogic81/portal/upgrade/SP5

   b. Run the WebLogic Portal database update script, pf_update_system_data.sql.

   c. Make a backup copy of the upgraded database.

For complete details about each of these steps, see "Step 2: Upgrade Existing Portal Framework Data" in in "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html

4. Upgrade your WebLogic Portal applications in the domain by completing the following steps:

   a. When upgrading applications that are stored as EAR files, you must manually update the encryption.

   b. Start WebLogic Workshop 8.1 SP5. If the server is running, shut it down in Workshop by choosing Tools→ WebLogic Server→ Stop WebLogic Server.

   c. In WebLogic Workshop, open the portal application you want to update.

   d. In the Application window, right-click the application directory and choose Install→ Update Portal Libraries. In the Application window, right-click the application directory and choose Install→ Update Portal Libraries. Workshop prompts you to indicate whether you want to overwrite files with SP5 versions. Click OK.

   After the portal application libraries are updated, a dialog box prompts you to select Web projects in the application that you want to have updated.

   e. Select the Web projects for which you want to have the libraries updated, and click OK.

For complete details about upgrading WebLogic Portal resources and applications in an existing domain, see "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html

Redeploy the Upgraded Application

The final upgrade step is to redeploy the application on your server.

For deployment instructions, see the following documents:

- *WebLogic Portal Production Operations User Guide* at
  http://e-docs.bea.com/wlp/docs81/prodOps/index.html
- *Deploying WebLogic Integration Solutions* at
  http://e-docs.bea.com/wli/docs81/deploy/index.html
- *Deploying WebLogic Platform Applications* at
  http://e-docs.bea.com/platform/docs81/deploy/index.html

Congratulations! You have completed the SP5 domain upgrade procedure.

If You Are Creating a New Domain and Deploying Your Applications to It

To create a new WebLogic Platform domain and deploy your existing applications to it, complete the following procedure:

1. If you are upgrading from SP3, make sure that all existing WebLogic Integration resources have been fully upgraded to SP3. For more information, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP3" on page 2-40.

2. Back up your applications, database schema, other application data, and domain. For more information, see "Backing Up Applications and Domains" on page 2-2.

3. Choose an upgrade installation method, such as Smart Update, and upgrade your WebLogic Platform 8.1 software to SP5. For more information, see "Choosing an Upgrade Installation Method" on page 2-3.

4. Use the Configuration Wizard and the Basic WebLogic Platform Domain template to create a new domain.

5. Make sure that all running instances of WebLogic Server are shut down.

6. Complete the steps described in the following sections:

    – Upgrade the WebLogic Integration Resources for Your New Domain

    – Upgrading the WebLogic Portal Resources for Your New Domain

    – Redeploy the Upgraded Application

Upgrade the WebLogic Integration Resources for Your New Domain

To upgrade the WebLogic Integration resources used by your application in the new domain, complete the following steps:

1. If you are using PointBase as your database, start the PointBase server and follow the procedure provided in "Upgrading PointBase" in "Upgrading WebLogic Integration 8.1 SP3 or SP4 to WebLogic Integration 8.1 SP5" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html.

2. If your domain is configured with a database other than PointBase, make sure it is stopped before you proceed.

3. Go to the following directory:

    BEA_HOME/weblogic81/integration/dbscripts/*db_directory*

Here `db_directory` represents the name of the database directory configured for your domain, such as `sybase`.

4. Run the appropriate WebLogic Integration database schema upgrade scripts, as appropriate:

   For upgrading SP3 to SP5:

   `upgrade_runtime_sp3_sp5.sql`

   For upgrading SP4 to SP5:

   `upgrade_runtime_sp4_sp5.sql`

For complete details, see "Upgrading WebLogic Integration 8.1 SP3 or SP4 to WebLogic Integration 8.1 SP5" in the WebLogic Integration *Upgrade Guide* at
`http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html`.

Upgrading the WebLogic Portal Resources for Your New Domain

To upgrade the WebLogic Portal resources used by your application in the new domain, complete the following steps:

1. If you are doing a complete, new installation as part of your upgrade, update the WebLogic Portal scripts as necessary, as explained in "WebLogic Portal Full Installer" in "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   `http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html`

2. If you are upgrading from SP4 to SP5, skip to step 3. If you are upgrading from SP3 to SP5, your first step is to upgrade the WebLogic Portal database schema in the domain to SP4. To do so, complete the following procedure:

   a. Go to the following directory:

      `BEA_HOME/weblogic81/portal/upgrade/SP4`

   b. Complete the steps for your specific database as provided in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide*.

   c. Update the `db_settings.properties` file with your 8.1 database settings. (The instructions at the beginning of the file explain the specific settings that you need to make.)

   d. Run the appropriate WebLogic Portal database schema upgrade script:
      On Windows: `upgrade_db_schema_to_81SP4.cmd`
      On UNIX: `upgrade_db_schema_to_81SP4.sh`

For complete details about each of these steps, see "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

3. Upgrade the domain to use the new SP5 libraries and database modules, which may be appropriate if you want to preserve a highly customized domain, including LDAP setup. The following procedure summarizes the steps that are required:

   a. Go to the following directory:

      BEA_HOME/weblogic81/portal/upgrade/SP5

   b. Run the WebLogic Portal database update script, pf_update_system_data.sql.

   c. Make a backup copy of the upgraded database.

4. Upgrade your WebLogic Portal applications in the domain by completing the following steps:

   a. If you are using a third-party content management system, re-configure that repository before deploying it. This allows the passwords to be re-encrypted for the new domain.

   b. Re-encrypt any passwords that are used to access WSRP portlets. Encryption is domain-specific so it needs to be updated when switching domains. Also, when upgrading applications that are stored as EAR files, you must manually update the encryption.

   c. Start WebLogic Workshop 8.1 SP5. If the server is running, shut it down in Workshop by choosing Tools→ WebLogic Server→ Stop WebLogic Server.

   d. In WebLogic Workshop, open the portal application you want to update.

   e. In the Application window, right-click the name of the application directory and choose Install→ Update Portal Libraries. Workshop prompts you to indicate whether you want to overwrite the existing files with SP5 versions. Click OK.)

      After the portal application libraries are updated, a dialog box prompts you to select Web projects in the application that you want to have updated.

   f. Select the Web projects for which you want to have libraries updated, and click OK.

   g. Restart the server.

For complete details about upgrading WebLogic Portal resources and applications in an existing domain, see "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html

Redeploy the Upgraded Application

The final upgrade step is to redeploy the application on your server.

For deployment instructions, see the following documents:

- *WebLogic Portal Production Operations User Guide* at
  http://e-docs.bea.com/wlp/docs81/prodOps/index.html

- *Deploying WebLogic Integration Solutions* at
  http://e-docs.bea.com/wli/docs81/deploy/index.html

- *Deploying WebLogic Platform Applications* at
  http://e-docs.bea.com/platform/docs81/deploy/index.html

Congratulations! You have completed the SP5 upgrade procedure.

Roadmap for Upgrading to WebLogic Platform 8.1 SP4

This section includes the following topics about upgrading to SP4:

- Summary of Required SP4 Upgrade Procedures for WebLogic Platform 8.1

- Upgrading WebLogic Platform Applications to SP4

Summary of Required SP4 Upgrade Procedures for WebLogic Platform 8.1

This section includes the following information:

- A summary of the required procedures for upgrading each category of WebLogic Platform 8.1 applications to SP4

- Links to documents that provide more details

- Important notes about upgrade-related information.

Table 2-6 Upgrading WebLogic Platform 8.1 to SP4

To upgrade applications built using...	From version...	Do the following...
WebLogic Platform	8.1 SP2 or SP3	See the following: • "Upgrading WebLogic Platform Applications to SP4" on page 2-33. • "Default JDBC Configurations for WebLogic Platform" in *Managing WebLogic Platform Database Resources* at the following URL: http://e-docs.bea.com/platform/docs81/db_mgmt/default_JDBC_configs.html The default JDBC configuration for the prepackaged WebLogic Platform configuration templates has changed. Existing silent configuration scripts that use the prepackaged templates may need to be revised to accommodate the new default JDBC configuration. Otherwise, the only upgrade procedures required for WebLogic Platform applications are at the component level.
WebLogic Server	8.1 SP2 or SP3	Modify the startWebLogic script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). Otherwise, there is no required upgrade procedure for WebLogic Server applications.
WebLogic Workshop	8.1 SP2 or SP3	• Modify the setDomainEnv script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). Otherwise, there is no required upgrade procedure for Workshop applications. • See "WebLogic Workshop" on page 3-7 for information about upgrading your Workshop applications to use one of the new Java 2 SDKs that are installed with SP3.
WebLogic Portal	8.1 SP2 or SP3	• Modify the setDomainEnv script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). • See "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

Table 2-6 Upgrading WebLogic Platform 8.1 to SP4 (Continued)

To upgrade applications built using...	From version...	Do the following...
WebLogic Integration	8.1 SP2 or SP3	See "Upgrading WebLogic Integration 8.1 SP2 and SP3 to WebLogic Integration 8.1 SP4" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/upgradetosp4.html
		Note: WebLogic Platform 8.1 SP2 requires you to install the SDK1.4.2/Oracle10gdriver/Database patch if you are using the 1.4.2 SDK or Oracle 10g driver, or the SQL Server, Sybase, or DB2 databases. If you are upgrading from SP2, the SP4 upgrade procedure assumes that you have installed this patch if your domain is configured with that database. For more information about this patch, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP2" on page 2-48.
WebLogic JRockit	8.1 SP2 or SP3	N/A. There is no required upgrade procedure.

Upgrading WebLogic Platform Applications to SP4

Depending on the upgrade path appropriate for your WebLogic Platform environment—namely, upgrading an existing domain, or creating a new domain and deploying your applications to it—we recommend the basic steps provided in the following subsections to complete the SP4 upgrade process for applications that include WebLogic Integration and WebLogic Portal resources. Such applications typically are deployed in domains that have been created based on the Basic WebLogic Platform Domain template.

These subsections include:

- If You Are Upgrading an Existing WebLogic Platform Domain
- If You Are Creating a New Domain and Deploying Your Applications to It

After you finish reading these subsections, we recommend that you see Chapter 3, "FAQ for Upgrading WebLogic Platform," for more information before beginning the upgrade process.

If You Are Upgrading an Existing WebLogic Platform Domain

If you have chosen to upgrade an existing WebLogic Platform domain, perform the following steps to complete the update process:

1. If necessary, make sure the WebLogic Integration resources in the domain have been upgraded to SP2. For more information, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP4" on page 2-31.

2. Back up your applications, database schema, other application data, and domain. See "Backing Up Applications and Domains" on page 2-2 for more information.

3. Choose an upgrade installation method. For example, if you are using Smart Update on Windows systems, and upgrade your WebLogic Platform 8.1 software to SP4. See "Choosing an Upgrade Installation Method" on page 2-3 for more information.

4. Upgrade the WebLogic Integration resources in the domain. The following procedure summarizes the steps that are required:

   a. If you are using PointBase as your database, follow the procedure described in "Upgrading PointBase" in "See "Upgrading WebLogic Integration 8.1 SP2 and SP3 to WebLogic Integration 8.1 SP4" in the WebLogic Integration *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/upgradetosp4.html

      After you have upgraded your PointBase database, proceed with the following steps.

   b. Go to the following directory:

      BEA_HOME/weblogic81/integration/upgrade

   c. Create an options.properties file, which sets your domain environment. The preceding directory contains the file options.properties.sample, which you can use as a template for creating this file.

      If you are upgrading from SP2, open the options.properties file in a text editor and make the following edits:

      First, change the line current.version=sp3 to current.version=sp2.

      Second, if you are using PointBase, change the line db_upgrade=true to db_upgrade=false.

   d. Go to the root directory of the domain you are upgrading; for example:

      BEA_HOME/user_projects/domains/*your_domain*

e. Edit the `workshop.properties` file to change the paths of the `wlsHome.path` and `jdkHome.path` variables from relative paths to absolute paths.

f. Return to the following directory:

   `BEA_HOME/weblogic81/integration/upgrade`

g. Run the `domain_upgrade.xml` script to upgrade the WebLogic Integration resources in your domain, using the following syntax:

```
ant -f domain_upgrade.xml upgrade
-Doptions.properties=your_options_file
-Dsingle.node=true -Ddb_type=your_db_vendor -Ddb_user=user_name
-Ddb_password=password -Ddb_server=your_server:port
-Ddb_name=database_name
```

h. If you are using PointBase, complete the following steps:

   Go to the following directory:

   `BEA_HOME/weblogic81/integration/dbscripts/pointbase`

   Run one of the following WebLogic Integration database schema upgrade scripts, as appropriate:

   For upgrading SP2 to SP4:

   `upgrade_runtime_sp2_sp4.sql`

   For upgrading SP3 to SP4:

   `upgrade_runtime_sp3_sp4.sql`

   For complete details about each of these steps, see "See "Upgrading WebLogic Integration 8.1 SP2 and SP3 to WebLogic Integration 8.1 SP4" in the WebLogic Integration *Upgrade Guide* at
   http://e-docs.bea.com/wli/docs81/upgrade/upgradetosp4.html

5. If you are doing a complete, new installation as part of your upgrade, update the WebLogic Portal scripts as necessary, as explained in "WebLogic Portal Full Installer" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

6. If you are upgrading from SP2 to SP4, complete the following steps to first upgrade the WebLogic Portal database schema in the domain to SP3. Otherwise go to step 7.

   a. Change to the following directory:

   `BEA_HOME/weblogic81/portal/upgrade/SP3`

b. Complete the procedures explained in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

c. Update the file db_settings.properties with your 8.1 database settings. (The instructions at the beginning of db_settings.properties explain the specific settings that you need to make.)

d. Run the WebLogic Portal database schema upgrade script upgrade_db_schema_to_81SP3.cmd (for Windows) or upgrade_db_schema_to_81SP3.sh (for UNIX).

7. Upgrade the WebLogic Portal database schema in the domain to SP4. The following procedure summarizes the steps that are required:

a. Change to the following directory:

   BEA_HOME/weblogic81/portal/upgrade/SP4

b. Complete the procedures explained in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

c. Update the file db_settings.properties with your 8.1 database settings. (The instructions at the beginning of db_settings.properties explain the specific settings that you need to make.)

d. Run the WebLogic Portal database schema upgrade script upgrade_db_schema_to_81SP4.cmd (for Windows) or upgrade_db_schema_to_81SP4.sh (for UNIX).

8. Upgrade your WebLogic Portal applications in the domain by completing the following steps:

a. Start WebLogic Workshop 8.1 SP4. If the server is running, shut it down in Workshop by selecting Tools→ WebLogic Server→ Stop WebLogic Server.

b. From WebLogic Workshop, open the portal application you want to update.

c. In the Application window, right-click the application directory and choose Install→ Update Portal Libraries. (Upon execution, Workshop prompts you whether you want to overwrite these files with their new SP4 versions. Click OK.)

After the portal application libraries are updated, a dialog box appears that lets you select Web projects in the application to update.

d. Select the Web projects whose libraries you want to update, and click OK.

e. Restart the server.

f. Redeploy the upgraded applications.

For complete details about upgrading WebLogic Portal resources and applications in an existing domain, see "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

Congratulations! You have completed the SP4 domain upgrade procedure.

Note: BEA Liquid Data for WebLogic is not yet available for use with WebLogic Platform 8.1 SP4. For Platform domains that include Liquid Data, BEA recommends that you continue to use WebLogic Platform 8.1 SP3 until Liquid Data for WebLogic is available for use with WebLogic Platform 8.1 SP4.

If You Are Creating a New Domain and Deploying Your Applications to It

If you have chosen to create a new WebLogic Platform domain, perform the following steps to complete the update process:

1. If you are upgrading from SP2, make sure existing WebLogic Integration resources have been fully upgraded to SP2. For more information, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP2" on page 2-48.

2. Back up your applications, database schema, other application data, and domain. See "Backing Up Applications and Domains" on page 2-2 for more information.

3. Choose an upgrade installation method, such as using Smart Update, and upgrade your WebLogic Platform 8.1 software to SP4. See "Choosing an Upgrade Installation Method" on page 2-3 for more information.

4. Use the Configuration Wizard to create a new domain using the Basic WebLogic Platform Domain template.

5. Upgrade the existing WebLogic Integration resources for your new domain. The following procedure summarizes the steps that are required:

    a. If you are using PointBase as your database, follow the procedure described in "Upgrading PointBase" in "Upgrading WebLogic Integration 8.1 SP2 and SP3 to

WebLogic Integration 8.1 SP4" in the WebLogic Integration *Upgrade Guide* at
`http://e-docs.bea.com/wli/docs81/upgrade/upgradetosp4.html`

b. Go to the following directory, where `db_directory` represents the name of the database directory configured for your domain, such as `sybase`.

`BEA_HOME`/weblogic81/integration/dbscripts/`db_directory`

c. Run one of the following WebLogic Integration database schema upgrade scripts, as appropriate:

For upgrading SP2 to SP4:

`upgrade_runtime_sp2_sp4.sql`

For upgrading SP3 to SP4:

`upgrade_runtime_sp3_sp4.sql`

d. From WebLogic Workshop, redeploy your existing WebLogic Integration application into the new domain.

For complete details, see "Upgrading WebLogic Integration 8.1 SP2 and SP3 to WebLogic Integration 8.1 SP4" in the WebLogic Integration *Upgrade Guide* at
`http://e-docs.bea.com/wli/docs81/upgrade/upgradetosp4.html`

6. If you are doing a complete, new installation as part of your upgrade, update the WebLogic Portal scripts as necessary, as explained in "WebLogic Portal Full Installer" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

`http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html`

7. If you are upgrading from SP2 to SP4, complete the following steps to first upgrade the existing WebLogic Portal database schema to SP3. Otherwise go to step 8.

a. Change to the following directory:

`BEA_HOME`/weblogic81/portal/upgrade/SP3

b. Complete the procedures explained in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

`http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html`

c. Update the file `db_settings.properties` with your 8.1 database settings. (The instructions at the beginning of `db_settings.properties` explain the specific settings that you need to make.)

    d. Run the WebLogic Portal database schema upgrade script
`upgrade_db_schema_to_81SP3.cmd` (for Windows) or
`upgrade_db_schema_to_81SP3.sh` (for UNIX).

8. Upgrade the existing WebLogic Portal database schema for your new domain to SP4. The following procedure summarizes the steps that are required:

    a. Change to the following directory:

       `BEA_HOME/weblogic81/portal/upgrade/SP4`

    b. Complete the procedures explained in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

       http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

    c. Update the file `db_settings.properties` with your 8.1 database settings. (The instructions at the beginning of `db_settings.properties` explain the specific settings that you need to make.)

    d. Run the WebLogic Portal database schema upgrade script,
`upgrade_db_schema_to_81SP4.cmd` (for Windows) or
`upgrade_db_schema_to_81SP4.sh` (for UNIX).

9. Upgrade your WebLogic Portal applications in the domain by completing the following steps:

    a. Start WebLogic Workshop 8.1 SP4. If the server is running, shut it down in Workshop by selecting Tools→ WebLogic Server→ Stop WebLogic Server.

    b. From WebLogic Workshop, open the portal application you want to update.

    c. In the Application window, right-click the application directory and choose Install→ Update Portal Libraries. (Upon execution, Workshop prompts you to overwrite these files with their new SP4 versions. Click OK.)

       After the portal application libraries are updated, a dialog box appears that lets you select Web projects in the application to update.

    d. Select the Web projects for which you want libraries updated, and click OK.

    e. Restart the server.

    f. Redeploy the upgraded applications.

For complete details about upgrading WebLogic Portal resources and applications in an existing domain, see "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

`http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html`

Congratulations! You have completed the SP4 upgrade procedure.

Roadmap for Upgrading to WebLogic Platform 8.1 SP3

This section includes the following topics about upgrading to SP3:

- Summary of Required SP3 Upgrade Procedures for WebLogic Platform 8.1
- Upgrading WebLogic Platform Applications to SP3

Summary of Required SP3 Upgrade Procedures for WebLogic Platform 8.1

This section includes the following information:

- A summary of the required procedures for upgrading each category of WebLogic Platform 8.1 applications to SP3
- Links to documents that provide more details
- Important notes about upgrade-related information.

Table 2-7 Upgrading WebLogic Platform 8.1 to SP3

To upgrade applications built using...	From version...	Do the following...
WebLogic Platform	8.1 SP2	See the following:
		• "Upgrading WebLogic Platform Applications to SP3" on page 2-42.
		• "Default JDBC Configurations for WebLogic Platform" in *Managing WebLogic Platform Database Resources* at the following URL:
		http://e-docs.bea.com/platform/docs81/db_mgmt/default_JDBC_configs.html
		The default JDBC configuration for the prepackaged WebLogic Platform configuration templates has changed. Existing silent configuration scripts that use the prepackaged templates may need to be revised to accommodate the new default JDBC configuration.
		Otherwise, the only upgrade procedures required for WebLogic Platform applications are at the component level.
WebLogic Server	8.1 SP2	Modify the startWebLogic script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). Otherwise, there is no required upgrade procedure for WebLogic Server applications.
WebLogic Workshop	8.1 SP2	• Modify the setDomainEnv script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5). Otherwise, there is no required upgrade procedure for Workshop applications.
		• See "WebLogic Workshop" on page 3-7 for information about upgrading your Workshop applications to use one of the new Java 2 SDKs that are installed with SP3.
WebLogic Portal	8.1 SP2	• Modify the setDomainEnv script in each domain to point to the new 1.4.2 SDK (see "SDKs Bundled with WebLogic Platform 8.1" on page 2-5).
		• See "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

Table 2-7 Upgrading WebLogic Platform 8.1 to SP3 (Continued)

To upgrade applications built using...	From version...	Do the following...
WebLogic Integration	8.1 SP2	See "Upgrading to WebLogic Integration 8.1 SP3" in the WebLogic Integration *Release Notes* for version 8.1, Service Pack 3. This document is available in PDF format in a ZIP file. To obtain this document:
		1. Locate the "Download PDF Documentation for Previous Releases of WebLogic Integration 8.1" page, available at http://e-docs.bea.com/wli/docs81/interm/prevreleases.html.
		2. Click "All WebLogic Integration 8.1 SP3 Documents."
		This downloads a ZIP file containing PDF files for all the WebLogic Integration 8.1 SP3 documentation. Open the file relnotes.pdf.
		Note: WebLogic Platform 8.1 SP2 requires you to install the SDK1.4.2/Oracle10gdriver/Database patch if you are using the 1.4.2 SDK or Oracle 10g driver, or the SQL Server, Sybase, or DB2 databases. The SP3 upgrade procedure assumes that you have installed this patch if your domain is configured with that database. For more information about this patch, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP2" on page 2-48.
WebLogic JRockit	8.1 SP2	N/A. There is no required upgrade procedure.

Upgrading WebLogic Platform Applications to SP3

Depending on the upgrade path appropriate for your WebLogic Platform environment—namely, upgrading an existing domain, or creating a new domain and deploying your applications to it— we recommend the basic steps provided in the following subsections to complete the SP3 upgrade process for applications that include WebLogic Integration and WebLogic Portal resources. Such applications typically are deployed in domains that have been created based on the Basic WebLogic Platform Domain template.

These subsections include:

- If You Are Upgrading an Existing WebLogic Platform Domain

- If You Are Creating a New Domain and Deploying Your Applications to It

After you finish reading these subsections, we recommend that you see Chapter 3, "FAQ for Upgrading WebLogic Platform," for more information before beginning the upgrade process.

If You Are Upgrading an Existing WebLogic Platform Domain

If you have chosen to upgrade an existing WebLogic Platform domain, perform the following steps to complete the update process:

1. Make sure the WebLogic Integration resources in the domain have been upgraded to SP2. For more information, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP2" on page 2-48.

2. Back up your applications, database schema, other application data, and domain. See "Backing Up Applications and Domains" on page 2-2 for more information.

3. Choose an upgrade installation method. For example, if you are using Smart Update on Windows systems, and upgrade your WebLogic Platform 8.1 software to SP3. See "Choosing an Upgrade Installation Method" on page 2-3 for more information.

4. Upgrade the WebLogic Integration resources in the domain. The following procedure summarizes the steps that are required:

   a. Obtain the WebLogic Integration *Release Notes* for version 8.1, Service Pack 3. This document is available in PDF format in a ZIP file. To download this document, locate the "Download PDF Documentation for Previous Releases of WebLogic Integration 8.1" page, available at the following URL:

      http://e-docs.bea.com/wli/docs81/interm/prevreleases.html.

      Click "All WebLogic Integration 8.1 SP3 Documents." This downloads a ZIP file containing PDF files for all the WebLogic Integration 8.1 SP3 documentation. Open the file relnotes.pdf. Refer to the section "Upgrading to WebLogic Integration 8.1 SP3" for details on the instructions that follow for upgrading WebLogic Integration.

   b. If you are using PointBase as your database, follow the procedure described in "Upgrading PointBase" in "Upgrading to WebLogic Integration 8.1 SP3" in the preceding document.

   c. Change to the following directory:

      BEA_HOME/weblogic81/integration/upgrade

   d. Create an options.properties file, which sets your domain environment. The preceding directory contains the file options.properties.sample, which you can use as a template for creating this file.

e. If you are using PointBase, open the `options.properties` file in a text editor, and change the line **db_upgrade=true** to **db_upgrade=false**.

f. Change to the root directory of the domain you are upgrading; for example:

    `BEA_HOME/user_projects/domains/your_domain`

g. Edit the `workshop.properties` file to change the paths of the `wlsHome.path` and `jdkHome.path` variables from relative paths to absolute paths.

h. Change back to the following directory:

    `BEA_HOME/weblogic81/integration/upgrade`

i. Run the `domain_upgrade.xml` script to upgrade the WebLogic Integration resources in your domain, using the following syntax:

    ```
    ant -f domain_upgrade.xml upgrade
    -Doptions.properties=your_options_file
    -Dsingle.node=true -Ddb_type=your_db_vendor -Ddb_user=user_name
    -Ddb_password=password -Ddb_server=your_server:port
    -Ddb_name=database_name
    ```

j. If you are using PointBase, complete the following steps:

    Change to the following directory:

    `BEA_HOME/weblogic81/integration/dbscripts/pointbase`

    Run the following WebLogic Integration database schema upgrade script:

    `upgrade_runtime_sp2_sp3.sql`

5. Upgrade the WebLogic Portal resources in the domain. The following procedure summarizes the steps that are required:

    a. Update scripts if necessary as explained in "WebLogic Portal Full Installer" in "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

        http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

    b. Change to the following directory:

        `BEA_HOME/weblogic81/portal/upgrade/SP3`

    c. Complete the procedures explained in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

        http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

d. Update the file `db_settings.properties` with your 8.1 database settings. (The instructions at the beginning of `db_settings.properties` explain the specific settings that you need to make.)

e. Run the WebLogic Portal database schema upgrade script, `upgrade_db_schema_to_81SP3.cmd` (for Windows) or `upgrade_db_schema_to_81SP3.sh` (for UNIX).

f. Start WebLogic Workshop 8.1 SP3. If the server is running, shut it down in Workshop by selecting Tools→ WebLogic Server→ Stop WebLogic Server.

g. From WebLogic Workshop, upgrade any existing WebLogic Portal applications. To do this, open the portal application you want to update. Then, in the Application window, right-click the application directory and choose Install→ Update Portal Libraries. (Upon execution, Workshop prompts you whether you want to overwrite these files with their new SP3 versions. Click OK.)

h. After the portal application libraries are updated, a dialog box appears that lets you select Web projects in the application to update. Select the Web projects whose libraries you want to update, and click OK.

i. Restart the server.

j. Redeploy the upgraded applications.

For complete details about upgrading WebLogic Portal resources and applications in an existing domain, see "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

Congratulations! You have completed the SP3 domain upgrade procedure.

Note: To upgrade a platform domain to SP3 that includes BEA Liquid Data for WebLogic, you must first uninstall Liquid Data, upgrade the domain to SP3, then re-install Liquid Data. (Note that platform SP3 domains support only Liquid Data for WebLogic 8.1 SP3.)

If You Are Creating a New Domain and Deploying Your Applications to It

If you have chosen to create a new WebLogic Platform domain, perform the following steps to complete the update process:

1. Make sure existing WebLogic Integration resources have been upgraded to SP2. For more information, see "Roadmap for Upgrading to WebLogic Platform 8.1 SP2" on page 2-48.

2. Back up your applications, database schema, other application data, and domain. See "Backing Up Applications and Domains" on page 2-2 for more information.

3. Choose an upgrade installation method, such as using Smart Update, and upgrade your WebLogic Platform 8.1 software to SP3. See "Choosing an Upgrade Installation Method" on page 2-3 for more information.

4. Use the Configuration Wizard to create a new domain using the Basic WebLogic Platform Domain template.

5. Upgrade the existing WebLogic Integration resources for your new domain. The following procedure summarizes the steps that are required:

   a. Obtain the document WebLogic Integration *Release Notes* for version 8.1, Service Pack 3. This document is available in PDF format in a ZIP file. To download this document, locate the "Download PDF Documentation for Previous Releases of WebLogic Integration 8.1" page, available at the following URL:

      http://e-docs.bea.com/wli/docs81/interm/prevreleases.html.

      Click "All WebLogic Integration 8.1 SP3 Documents." This downloads a ZIP file containing PDF files for all the WebLogic Integration 8.1 SP3 documentation. Open the file relnotes.pdf. Refer to the section "Upgrading to WebLogic Integration 8.1 SP3" for details on the instructions that follow for upgrading WebLogic Integration.

   b. If you are using PointBase as your database, follow the procedure described in "Upgrading PointBase" in "Upgrading to WebLogic Integration 8.1 SP3" in the preceding document.

   c. Change to the following directory, where *db_directory* represents the name of your database directory configured for your domain; for example, sybase.

      BEA_HOME/weblogic81/integration/dbscripts/*db_directory*

   d. Run the WebLogic Integration database schema upgrade script upgrade_runtime_sp2_sp3.sql.

   e. From WebLogic Workshop, redeploy your existing WebLogic Integration application into the new domain.

6. Upgrade the existing WebLogic Portal resources for your new domain. The following procedure summarizes the steps that are required:

a. Update scripts if necessary as explained in "WebLogic Portal Full Installer" in "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

b. Change to the following directory:

   BEA_HOME/weblogic81/weblogic81/portal/upgrade/SP3

c. Complete the procedures explained in "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

   http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

d. Update the file db_settings.properties with your 8.1 database settings. (The instructions at the beginning of db_settings.properties explain the specific settings that you need to make.)

e. Run the WebLogic Portal database schema upgrade script, upgrade_db_schema_to_81SP3.cmd (for Windows) or upgrade_db_schema_to_81SP3.sh (for UNIX).

f. Start WebLogic Workshop 8.1 SP3. If the server is running, shut it down in Workshop by selecting Tools→ WebLogic Server→ Stop WebLogic Server.

g. From WebLogic Workshop, upgrade any existing WebLogic Portal applications. To do this, open the portal application you want to update. Then, in the Application window, right-click the application directory and choose Install→ Update Portal Libraries. (Upon execution, Workshop prompts you whether you want to overwrite these files with their new SP3 versions. Click OK.)

h. After the portal application libraries are updated, a dialog box appears that lets you select Web projects in the application to update. Select the Web projects whose libraries you want to update, and click OK.

i. Restart the server.

j. Redeploy the upgraded applications.

For complete details about upgrading WebLogic Portal resources and applications in an existing domain, see "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

Congratulations! You have completed the SP3 upgrade procedure.

Roadmap for Upgrading to WebLogic Platform 8.1 SP2

The following table provides a roadmap for upgrading WebLogic Platform component-based applications to version 8.1 SP2. When upgrading to SP2, note the following:

- It is recommended that you update your application startup scripts to reference the new SDK or JRockit directory, as described in "SDKs Bundled with WebLogic Platform 8.1" on page 2-5. However, this type of update is not mandatory because existing Java 2 SDKs are preserved during an upgrade.

- If you are using WebLogic Platform 8.1 SP2 with the Sun Java 2 1.4.2 SDK, the Oracle 10g driver, or SQL Server, Sybase, or DB2 databases, you may need to install the WebLogic Platform 8.1 SP2 SDK1.4.2/Oracle10gdriver/Database patch. This patch, and a description of the specific configurations that require it, are available at the following dev2dev Web site:

  http://dev2dev.bea.com/products/wlplatform81/patch/wlplat81sp2_patch.jsp

Table 2-8 Roadmap for Upgrading to WebLogic Platform 8.1 SP2

To upgrade applications built using...	From version...	See...
WebLogic Platform	8.1	N/A **Note:** The only upgrade procedures required for WebLogic Platform applications are at the component level. See the appropriate component-level information elsewhere in this table.
WebLogic Server	8.1 or 8.1 SP1	N/A. There is no required upgrade procedure.
WebLogic Workshop	8.1	N/A. There is no required upgrade procedure.
WebLogic Portal	8.1	"Upgrading 8.1 to Service Pack 2" in the WebLogic Portal 8.1 *Upgrade Guide* at http://e-docs.bea.com/wlp/docs81/upgrade/servicepacks.html

Table 2-8 Roadmap for Upgrading to WebLogic Platform 8.1 SP2 (Continued)

To upgrade applications built using...	From version...	See...
WebLogic Integration	8.1	See "Upgrading from WebLogic Integration 8.1 to SP2" in the WebLogic Integration *Release Notes* for version 8.1, Service Pack 2. This document is available in PDF format in a ZIP file. To obtain this document: 1. Display the page "Download PDF Documentation for Previous Releases of WebLogic Integration 8.1," available at http://e-docs.bea.com/wli/docs81/interm/pr evreleases.html. 2. Click "All WebLogic Integration 8.1 SP2 Documents." This downloads a ZIP file containing all the WebLogic Integration 8.1 SP2 documentation. Open the file relnotes.pdf.
WebLogic JRockit	8.1	N/A. There is no required upgrade procedure.

Roadmap for Upgrading to WebLogic Platform 8.1

The following table provides a roadmap for upgrading WebLogic Platform component-based applications to version 8.1.

Table 2-9 Roadmap for Upgrading to WebLogic Platform 8.1

To upgrade applications built using...	From version...	See...
WebLogic Platform	7.0	N/A **Note:** The only upgrade procedures required for WebLogic Platform applications are at the component level. See the appropriate component-level information elsewhere in this table.

Table 2-9 Roadmap for Upgrading to WebLogic Platform 8.1 (Continued)

To upgrade applications built using...	From version...	See...
WebLogic Server	5.1, 6.*x*, or 7.0	*BEA WebLogic Server 8.1 Upgrade Guide* at `http://e-docs.bea.com/wls/docs81/upgrade/index.html` Also learn about: • Common Upgrade Issues • Upgrading WebLogic Server 7.0 to Version 8.1 • Upgrading WebLogic Server 6.x to Version 8.1 • Upgrading WebLogic Server 5.1 to Version 8.1 • Mapping weblogic.properties to 6.x config.xml Configuration Attributes
WebLogic Workshop	7.0	"Upgrading Workshop Applications: in the *WebLogic Workshop Help* at `http://e-docs.bea.com/workshop/docs81/doc/en/workshop/guide/migration/conMigratingWorkshopApplications.html` Also learn about: • New Features in WebLogic Workshop • Migrating Your Existing Application
WebLogic Portal	7.0 SP2	WebLogic Portal 8.1 *Upgrade Guide* at `http://e-docs.bea.com/wlp/docs81/upgrade/index.html` Learn about: • Overview of the Upgrade Process from WebLogic Portal 7.0 SP2 to 8.1 • Version 8.1 Compatibility Domain • Upgrading to WebLogic Portal 8.1 • Framework Reference for Portal Upgrades from 7.0 to 8.1

Table 2-9 Roadmap for Upgrading to WebLogic Platform 8.1 (Continued)

To upgrade applications built using...	From version...	See...
WebLogic Integration	2.1 SP2, 7.0 SP2	WebLogic Integration 8.1 *Upgrade Guide* at http://e-docs.bea.com/wli/docs81/upgrade/index.html
		Note: The Upgrade Utility for WebLogic Integration 8.1 is available on dev2dev at http://dev2dev.bea.com/resourcelibrary/utilitiestools/upgrade.jsp#wliupgrade
WebLogic JRockit	7.0	N/A. There is no required upgrade procedure.

FAQ for Upgrading WebLogic Platform

This section provides answers to frequently asked questions (FAQ) about upgrading WebLogic Platform applications. Questions and answers are provided for the following product components:

- General SP6 Upgrade
- General SP5 Upgrade
- General SP4 Upgrade
- General SP3 Upgrade
- WebLogic Server
- WebLogic Workshop
- WebLogic Portal
- WebLogic Integration
- BEA JRockit

The questions and answers within this section apply to systems on which the latest service pack for WebLogic Platform 8.1 is installed. If you have not yet installed the latest service pack on your system, see "Choosing an Upgrade Installation Method" on page 2-3.

General SP6 Upgrade

Q. Are there any database changes between SP5 and SP6?

A. Yes. Both WebLogic Integration and WebLogic Portal have updates to their respective databases. Both components provide upgrade scripts to implement these changes. See the following topics for more information:

- "Upgrading WebLogic Integration 8.1 SP4 and SP5 to WebLogic Integration 8.1 SP6" in the WebLogic Integration *Upgrade Guide* at the following URL:

  `http://e-docs.bea.com/wli/docs81/upgrade/upgradetosp6.html`

- "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

`http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html`

General SP5 Upgrade

Q. Are there any database changes between SP4 and SP5?

A. Yes. Both WebLogic Integration and WebLogic Portal have updates to their respective databases. Both components provide upgrade scripts to implement these changes. See the following topics for more information:

- "Upgrading WebLogic Integration 8.1 SP3 or SP4 to WebLogic Integration 8.1 SP5" in the WebLogic Integration *Upgrade Guide* at the following URL:

  `http://e-docs.bea.com/wli/docs81/upgrade/roadmap.html`

- "Step 2: Upgrade Existing Portal Framework Data" in "Upgrading to Service Pack 5" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

  `http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html`

General SP4 Upgrade

Q. Is there anything I need to do prior to installing SP4 on Red Hat Enterprise Linux 2.1 or 3.0 on Pentium?

A: If you are using JRockit, you need to make sure that you have the latest patches installed on your Linux operating system before you begin the upgrade process. For information, see the following topics:

- *8.1 Supported Configurations: Red Hat Enterprise Linux 3.0 AS, ES on x86* at the following URL:
  `http://e-docs.bea.com/platform/suppconfigs/configs81/rhelinux30as_es_pe`
  `ntium/81sp4.html`

- *8.1 Supported Configurations: Red Hat Enterprise Linux 2.1 AS, ES on x86* at the following URL:
  http://e-docs.bea.com/platform/suppconfigs/configs81/rhelinux21as_es_pentium/81sp4.html

Q. Are there any database schema changes between SP3 and SP4?

A. Yes. Both WebLogic Integration and WebLogic Portal have changes to their respective database schemas. Both components provide upgrade scripts to implement these changes. See the following topics for more information:

- "Upgrading WebLogic Integration 8.1 SP2 and SP3 to WebLogic Integration 8.1 SP4" in the WebLogic Integration *Upgrade Guide* at the following URL:

  http://e-docs.bea.com/wli/docs81/upgrade/upgradetosp4.html

- "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 4" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

  http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

General SP3 Upgrade

Q. Are there any domain configuration template changes between SP2 and SP3?

A. Yes. There are changes in the default JDBC configuration settings in the following templates:

- Basic WebLogic Workshop Domain

- Basic WebLogic Integration Domain

- Basic WebLogic Portal Domain

- Basic WebLogic Platform Domain

For detailed information, see "JDBC Changes in Configuration Templates" in "What's New in SP3" at the following URL:

http://e-docs.bea.com/platform/docs81/interm/whatsnew.html

Q. Are there any database schema changes between SP2 and SP3?

A. Yes. Both WebLogic Integration and WebLogic Portal have changes to their respective database schemas. Both components provide upgrade scripts to implement these changes. See the following topics for more information:

- For WebLogic Integration, see "Upgrading Databases" in "Upgrading to WebLogic Integration 8.1 SP3" in the WebLogic Integration *Release Notes* for Version 8.1 SP3. This document is available in PDF format in a ZIP file. To obtain this document:

  a. Locate the "Download PDF Documentation for Previous Releases of WebLogic Integration 8.1" page, available at
     http://e-docs.bea.com/wli/docs81/interm/prevreleases.html.

  b. Click "All WebLogic Integration 8.1 SP3 Documents."

  This downloads a ZIP file containing PDF files for all the WebLogic Integration 8.1 SP3 documentation. Open the file relnotes.pdf.

- For WebLogic Portal, see "Step 2: Upgrade Existing Database Schema" in "Upgrading to Service Pack 3" in the WebLogic Portal 8.1 *Upgrade Guide* at the following URL:

  http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

Q. Are there any limitations on upgrading from SP2 to SP3 on AIX?

A. Yes. Before you can upgrade your WebLogic Platform system from 8.1 SP2 to 8.1 SP3 on AIX, you must clean out any unused libraries manually. For instructions, see the *Release Notes* for WebLogic Platform 8.1 at the following URL:

http://e-docs.bea.com/platform/docs81/relnotes/relnotes.html#cr206782

WebLogic Server

Q. What issues and tasks are commonly encountered during an upgrade to WebLogic Server 8.1?

A. For a summary of such issues and tasks, see "Common Upgrade Issues" in the *BEA WebLogic Server 8.1 Upgrade Guide* at
http://e-docs.bea.com/wls/docs81/upgrade/quickupgrade.html.

Q. How do I upgrade WebLogic Server applications to 8.1 from a previous version?

A. The procedure varies, based on the version of WebLogic Server from which you are upgrading. The following table provides links to version-specific upgrade procedures.

Table 3-1 Upgrading WebLogic Server 8.1 from a Previous Version

If you are upgrading from...	See...
Version 7.0	"Upgrading WebLogic Server 7.0 to Version 8.1" in the *BEA WebLogic Server 8.1 Upgrade Guide* at `http://e-docs.bea.com/wls/docs81/upgrade/upgrade70to81.html`
Version 6.x	"Upgrading WebLogic Server 6.x to Version 8.1" in the *BEA WebLogic Server 8.1 Upgrade Guide* at `http://e-docs.bea.com/wls/docs81/upgrade/upgrade6xto81.html`
Version 5.1	"Upgrading WebLogic Server 5.1 to Version 8.1" in the *BEA WebLogic Server 8.1 Upgrade Guide* at `http://e-docs.bea.com/wls/docs81/upgrade/upgrade51to81.html`

For more information about upgrading your applications to WebLogic Server 8.1, see:

- *BEA WebLogic Server 8.1 Upgrade Guide* at
  `http://e-docs.bea.com/wls/docs81/upgrade/index.html`

- "FAQs: Upgrading" in *BEA WebLogic Server Frequently Asked Questions* at
  `http://e-docs.bea.com/wls/docs81/faq/upgrade.html`

Q. What changes have been made to the security features in WebLogic Server 8.1?

A. Changes to the set of available security features vary, based on the version of WebLogic Server from which you are upgrading. The following table provides references to version-specific security documentation.

Table 3-2 Changes to Security Features in WebLogic Server 8.1

If you are upgrading from...	See...
Version 7.0	"Security" in "Additional Upgrade Procedures and Information" in "Upgrading WebLogic Server 7.0 to Version 8.1" in the *BEA WebLogic Server 8.1 Upgrade Guide* at `http://e-docs.bea.com/wls/docs81/upgrade/upgrade70to81.html`

Table 3-2 Changes to Security Features in WebLogic Server 8.1 (Continued)

If you are upgrading from...	See...
Version 6.x	• See "Upgrading WebLogic Server 6.x Security to Version 8.1" in "Upgrading WebLogic Server 6.x to Version 8.1" in the *BEA WebLogic Server 8.1 Upgrade Guide* at `http://e-docs.bea.com/wls/docs81/upgrade/upgrade6xto81.html` • "Using Compatibility Security" in *Managing WebLogic Security* at `http://e-docs.bea.com/wls/docs81/secmanage/security6.html`
Version 5.1	"Security" in "Additional Upgrade and Deployment Considerations" in "Upgrading WebLogic Server 5.1 to Version 8.1" in the *BEA WebLogic Server 8.1 Upgrade Guide* at `http://e-docs.bea.com/wls/docs81/upgrade/upgrade51to81.html`

WebLogic Workshop

Q. How do I upgrade my Workshop applications to use one of the new Java 2 SDKs that are installed with the latest service pack?

A. You have a choice of two methods.

Note: To ensure that your Workshop applications have access to the latest updates and bug fixes for the basic Workshop domain, we recommend the second approach.

1. If you want to continue working in an existing Workshop domain—that is, a domain created with a pre-SP5 version of WebLogic Platform 8.1—update the definition of the `JAVA_HOME` environment variable in your domain's `setDomainEnv` script (`setDomainEnv.cmd` or `setDomainEnv.sh`) so it points to the root directory of the SDK installed with the current service pack. For example:

   ```
   set JAVA_HOME=C:\bea\jrockit81sp4_142_08
   ```

2. You can create a new Workshop domain for your application using the Configuration Wizard, configuring all the resources required for your application as appropriate, such as JDBC connection pools, data sources, JMS queues, and so on.

   After you have created the domain, complete the following steps:

   a. Start Workshop and open your application.

   b. Choose Tools→ Application Properties... to display the Application Properties dialog box.

   c. Select WebLogic Server in the left pane, and modify the path for the Server Home Directory to specify the directory containing the `config.xml` file that was created in the new domain.

Q. Which feature changes in WebLogic Workshop 8.1 affect the upgrade process?

A. For a list of feature changes that affect the upgrade process, see "New Features in WebLogic Workshop" in "Upgrading Workshop Applications" in the *WebLogic Workshop Help* at http://e-docs.bea.com/workshop/docs81/doc/en/workshop/guide/migration/conMigratingWorkshopApplications.html.

Q. How do I upgrade WebLogic Workshop applications to 8.1 from 7.0?

A. To upgrade your applications to WebLogic Workshop 8.1:

1. Make a backup copy of the full application.

2. Run the `jwsUpgrade` command to launch the following tasks:

- Back up the original files.

- Verify that each Web service (JWS) class definition ensures that the service implements the `com.bea.jws.WebService` interface.

- Verify that all static inner classes implement the `java.io.Serializable` interface.

- If there are any external XML map files, display the following: a warning that external XML map files are no longer supported, and a recommendation to incorporate the map information directly into the JWS file.

- If there are JAR files in the `WEB-INF/lib` directory for your project, consider moving them to the `APP-INF/lib` directory in your upgraded application.

- If there are `.java` files or Java classes in the `WEB-INF/classes` directory for your project, consider moving them to the `APP-INF/classes` directory in your upgraded application.

For more information about using the `jwsUpgrade` command, see "jwsUpgrade Command" in the *WebLogic Workshop Help* at
http://e-docs.bea.com/workshop/docs81/doc/en/workshop/reference/commands/cmdJwsUpgrade.html.

3. Create a new Workshop application and import your project files.

4. Import EJBs or deployable modules into the Modules folder.

5. Import local library JAR files into the Libraries folder.

6. Manually upgrade all control files.

7. Move inner classes into separate class files.

8. Incorporate external map files into JWS files.

9. Build the project.

For more detailed instructions on upgrading to WebLogic Workshop 8.1, see "Upgrading Workshop Applications" in the *WebLogic Workshop Help* at
http://e-docs.bea.com/workshop/docs81/doc/en/workshop/guide/migration/conMigratingWorkshopApplications.html.

Q. How has the control model changed for WebLogic Workshop 8.1?

A. WebLogic Workshop 8.1 introduces a new, extensible model for controls. As in WebLogic Workshop 7.0, you can connect to enterprise resources using the *built-in* controls provided. In

addition, with WebLogic Workshop 8.1, you can create your own reusable *custom* controls, making it easy to encapsulate business logic within your application.

When you create a control in WebLogic Workshop 8.1, the filename for your new control includes a JCX extension. The filename for a control created in WebLogic Workshop 7.0 includes a CTRL extension.

Q. What is the upgrade method for controls for WebLogic Workshop 8.1?

A. WebLogic Workshop 8.1 continues to support controls built using WebLogic Workshop 7.0. However, we recommend that you upgrade your existing controls to the new control model to take advantage of its greater flexibility.

Please note the following:

- Control files must be included in the package for a project. That is, a control file can no longer reside in the root directory for a project within your application; it must reside within a folder.

- A control file must extend the `com.bea.Control.ControlExtension` interface. You may need to modify the control file in Source View in WebLogic Workshop to extend the interface.

- If you upgrade your existing controls to the new model, you may need to manually edit some annotations in both the control file and the JWS file that calls it. For example:

    - Some annotations within a control file begin with the `@jc` prefix, rather than `@jws`, which is supported for 7.0.

    - The annotation used to designate a control variable is `@common:control`, rather than `@jws:control`, which is supported for 7.0.

    The following table summarizes the differences between the annotation style used in version 7.0 and that used in version 8.1 of WebLogic Workshop.

Table 3-3 Differences Between Annotation Styles in WebLogic Workshop 7.0 and 8.1

Version 7.0	Version 8.1
`@jws:av-identity`	`@jc:av-identity`
`@jws:av-service`	`@jc:av-service`
`@jws:connection`	`@jc:connection`
`@jws:ejb`	`@jc:ejb`

Table 3-3 Differences Between Annotation Styles in WebLogic Workshop 7.0 and 8.1 (Continued)

Version 7.0	Version 8.1
`@jws:jms`	`@jc:jms`
`@jws:jms-header`	`@jc:jms-header`
`@jws:jms-message`	`@jc:jms-message`
`@jws:jms-property`	`@jc:jms-property`
`@jws:sql`	`@jc:sql`
`@jws:timer`	`@jc:timer`
`@jws:control`	`@common:control`
`@jws:context`	`@common:context`
`@jws_message-buffer`	`@common:message-buffer`
`@jws:define`	`@common:define`
`@jws:operation`	`@common:operation`
`@jws:schema`	`@common:schema`
`@jws:target-namespace`	`@common:target-namespace`
`@jws:xmlns`	`@common:xmlns`

To find out more about specific annotation changes, open WebLogic Workshop, put the cursor on the annotation currently displayed in Source view, and press F1. Context-sensitive help for the designated annotation will be displayed.

For more information about upgrading databases, Web services, and JMS controls, see "Upgrade Controls" in "Migrating Your Existing Application" in "Upgrading Workshop Applications" in the *WebLogic Workshop Help* at
http://e-docs.bea.com/workshop/docs81/doc/en/workshop/guide/migration/conM igratingWorkshopApplications.html#migrating.

WebLogic Portal

Q. How do I upgrade WebLogic Portal applications to 8.1 SP5 from pre-SP5 releases of 8.1?

A. For complete details about upgrading your WebLogic Portal applications, see the following topics in the WebLogic Portal 8.1 *Upgrade Guide*:

- "Upgrading 8.1 to Service Pack 2" at the following URL:

  http://e-docs.bea.com/wlp/docs81/upgrade/servicepacks.html

- "Upgrading to Service Pack 3" at the following URL:

  http://e-docs.bea.com/wlp/docs81/upgrade/servicepack2to3.html

- "Upgrading to Service Pack 4" at the following URL:

  http://e-docs.bea.com/wlp/docs81/upgrade/servicepack3to4.html

- "Upgrading to Service Pack 5" at the following URL:

  http://e-docs.bea.com/wlp/docs81/upgrade/servicepack4to5.html

- ""Upgrading to Service Pack 6" at the following URL:
  http://e-docs.bea.com/wlp/docs81/upgrade/servicepack5to6.html

Q. How do I upgrade WebLogic Portal applications to 8.1 from 7.0 SP2?

A. Choose either of the following methods to upgrade your portal Web application created with WebLogic Portal from 7.0 SP2 to 8.1:

- **Compatibility**: Allows you to configure an existing portal Web application created with WebLogic Portal 7.0 SP2 to run on versions of WebLogic Portal 8.1 through SP2.

- **Upgrade**: Allows you to upgrade portal applications and resources created with WebLogic Portal 7.0 SP2 to 8.1.

For details, see the WebLogic Portal 8.1 *Upgrade Guide* at
http://e-docs.bea.com/wlp/docs81/upgrade/index.html.

Q. Which WebLogic Portal 7.0 SP2 features work in the new 8.1 framework?

A. Which features work in the 8.1 framework depends on which method you choose for your upgrade.

- **Compatibility**: Support for all WebLogic Portal 7.0 SP2 run-time features is provided except Payment Management in the Portal Administration Tools. In addition, several system-level security restrictions have been introduced. For details, see "Runtime and

Administrative Issues" in "Version 8.1 Compatibility Domain" in the WebLogic Portal 8.1 *Upgrade Guide* at `http://e-docs.bea.com/wlp/docs81/upgrade/chapter2.html`.

- **Upgrade**: The WebLogic Portal platform now provides next-generation services, while maintaining backward compatibility where possible. With certain limitations, most core WebLogic Portal features are supported. The new platform introduces changes to the Look and Feel architecture, group portals, portal WebFlows, security, interaction management, and certain JSP tags and classes. For details, see "Overview of the Upgrade Process from WebLogic Portal 7.0 SP2 to 8.1" in the WebLogic Portal 8.1 *Upgrade Guide* at `http://e-docs.bea.com/wlp/docs81/upgrade/chapter1.html`.

Q. How do I use the Compatibility method to upgrade WebLogic Portal applications to 8.1 from 7.0 SP2?

A. WebLogic Portal 8.1 supports a Compatibility Domain to enable you to host upgraded WebLogic Portal 7.0 SP2 portal applications on versions of WebLogic Portal 8.1 through SP2. For more information about creating a Compatibility Domain and the steps required to upgrade an existing portal application to run in the domain, see "Version 8.1 Compatibility Domain" in the WebLogic Portal 8.1 *Upgrade Guide* at
`http://e-docs.bea.com/wlp/docs81/upgrade/chapter2.html`.

Q. How do I use the Upgrade method to upgrade WebLogic Portal applications to 8.1 from 7.0 SP2?

A. To run a portal Web application developed on WebLogic Portal 7.0 SP2 in a WebLogic Portal 8.1 domain, perform the following steps:

1. Follow the instructions for hosting a portal application in the Compatibility Domain. For more information, see "Version 8.1 Compatibility Domain" in the WebLogic Portal 8.1 *Upgrade Guide* at `http://e-docs.bea.com/wlp/docs81/upgrade/chapter2.html`.

2. Follow the instructions for upgrading a portal application to run in an out-of-the-box WebLogic Portal 8.1 domain. For more information, see "Upgrading to WebLogic Portal 8.1" in the WebLogic Portal 8.1 *Upgrade Guide* at `http://e-docs.bea.com/wlp/docs81/upgrade/chapter3.html`.

Q. How do I upgrade portal and portal XML definitions from WebLogic Portal 7.0 SP2 to 8.1?

A. For instructions, see "Upgrading Database and Metadata Files from 7.0 to 8.1" in "Upgrading to WebLogic Portal 8.1" in the WebLogic Portal 8.1 *Upgrade Guide* at
`http://e-docs.bea.com/wlp/docs81/upgrade/chapter3.html`.

See the following sections:

- Upgrade Application-Sync Files

- Upgrade Portal and Portlet Files

Q. How do I upgrade portlets created in WebLogic Portal 7.0 SP2 to 8.1?

A. Depending on the complexity of the portlet, you may decide to copy the portlet resources (content JSPs and backing files) into the new application and re-create the .portlet file. Review the following topics for information on upgrading JSP, WebFlow, and Web Service portlets:

- **How do I upgrade a simple JSP portlet?**

   Drag the JSP file into a placeholder in a portal; the portlet is generated automatically. WebLogic Workshop identifies the JSP tags defined in the file that need to be replaced. For a summary of changes to the JSP tags, see "Framework Reference for Portal Upgrades from 7.0 to 8.1" in the WebLogic Portal 8.1 *Upgrade Guide* at
   http://e-docs.bea.com/wlp/docs81/upgrade/appendix.html.

- **How do I upgrade a WebFlow portlet?**

   Perform one of the following steps:

   – Add WebFlow functionality to a WebLogic Portal 8.1 portal by right-clicking the name of the appropriate project and selecting Add WebFlow Jars.

   – Recreate the WebFlow using page flows, replacing the Input Processors and Pipeline Components with controls.

- **How do I upgrade a Web Service portlet?**

   For the 8.1 release, Web services are accessed using a Web Service control that you create using WebLogic Workshop. Once you create a page flow containing a control of this type, drag the .jpf file into a placeholder in a portal. Your Web service portlet will be created automatically.

   Note:　The Portlet Wizard no longer automates the creation of portlets that call Web services directly.

Q: How do I upgrade portal data from a WebLogic Portal 7.0 SP2 application to an 8.1 application?

A: For instructions, see "Upgrading Database and Metadata Files from 7.0 to 8.1" in "Upgrading to WebLogic Portal 8.1" in the WebLogic Portal 8.1 *Upgrade Guide* at
http://e-docs.bea.com/wlp/docs81/upgrade/chapter3.html.

See the following sections:

- Upgrade PointBase Triggers

- Upgrade WebLogic Portal 7.0 Schema

- Upgrade ENTITLEMENT_RULESET Records

- Upgrade Existing Behavior Tracking Data

Q: How do I upgrade WebLogic Portal 7.0 SP2 skins to Look and Feels?

A: WebLogic Portal 7.0 SP2 skins and user interface (UI) components can be re-hosted to Look and Feels and the appropriate components in the 8.1 release. To find out how the presentation framework is used, and how you can create skins, layouts, and look and feels for use in the new framework, see "Creating Look & Feels" in the *WebLogic Workshop Help* at the following URL:

http://e-docs.bea.com/workshop/docs81/doc/en/portal/buildportals/ifLF.html

Q: How has anonymous user tracking changed?

A: When you create anonymous user profiles with WebLogic Portal 7.0 SP2, the data about an unregistered user that is collected during a single session is persisted only if the user registers. With WebLogic Portal 8.1, you can track unregistered users over multiple visits, which means you can present personalized content to anonymous users.

WebLogic Integration

Q. How do I upgrade WebLogic Integration applications to 8.1 SP5 from an earlier release of 8.1?

A. Before you start upgrading your WebLogic Integration applications to SP5, make sure you have already upgraded them to SP4. For information, see "Upgrading from WebLogic Integration 8.1 SP2 and SP3 to WebLogic Integration 8.1 SP4" in the WebLogic Integration *Upgrade Guide*, available at the following URL:

http://e-docs.bea.com/wli/docs81/upgrade/upgradetosp4.html

Q. Which feature changes in WebLogic Integration 8.1 affect the upgrade process?

A. See the WebLogic Integration 8.1 *Upgrade Guide* at
http://e-docs.bea.com/wli/docs81/upgrade/index.html.

Q. How do I upgrade WebLogic Integration applications to 8.1 from a previous version?

A. For information about upgrading your WebLogic Integration applications from pre-8.1 versions, see "Upgrading WebLogic Integration 2.1 SP2 and WebLogic Integration 7.0 SP2 to WebLogic Integration 8.1 SP2" in the WebLogic Integration *Upgrade Guide*, available at the following URL:

`http://e-docs.bea.com/wli/docs81/upgrade/install.html`

The Upgrade Utility for WebLogic Integration 8.1 is available on dev2dev at `http://dev2dev.bea.com/resourcelibrary/utilitiestools/upgrade.jsp#wliupgrade`.

BEA JRockit

Q. Which feature changes in BEA JRockit 1.4.2 affect the upgrade process?

A. None.

Q. How do I upgrade BEA JRockit applications to 1.4.2 from a previous version?

A. There are no steps required to upgrade your BEA JRockit applications.

You should, however, make sure that you are using valid command-line options when starting JRockit. If you use an invalid option, JRockit exits. (In previous versions, invalid options were ignored.) For a list of valid command-line options, see "BEA JRockit 1.4.2 SDK Command Line Options by Name" at the following URL:

`http://e-docs.bea.com/wljrockit/docs142/options.html`.

Q. What are the advantages of migrating from a third-party JVM to JRockit?

A. BEA JRockit is a JVM designed for running server-side applications on Windows and Linux platforms that are running on Intel architectures. For server-side applications, JRockit has the following advantages over other Java virtual machines:

- JRockit employs adaptive optimization, a feature that detects and removes bottlenecks in a deployed application.

- JRockit is designed specifically to meet the special requirements of server-side applications, many of which are parallel and thread-intensive, run for longer than usual periods of time, and do not employ graphical interfaces.

- You can monitor JRockit using the WebLogic Server Administration Console.

For detailed information about migrating to BEA JRockit 1.4.2, see:

- "Migrating to BEA JRockit" in *Developing Applications* at `http://e-docs.bea.com/wljrockit/docs142/devapp/migrate.html`.

- "Upgrading Your JVM to JRockit" in "Additional Upgrade Procedures and Information" in "Upgrading WebLogic Server 7.0 to Version 8.1" in *BEA WebLogic Server 8.1 Upgrade Guide* at `http://e-docs.bea.com/wls/docs81/upgrade/upgrade70to81.html`.