Oracle® Service Bus

Installation Guide 10*g* Release 3 (10.3)

October 2008



Oracle Service Bus Installation Guide, 10g Release 3 (10.3)

Copyright © 2007, 2008, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this software or related documentation is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle USA, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure the safe use of this software. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software in dangerous applications.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

This software and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Preparing for Installation

Installation Overview
Installation Modes
Graphical Mode
Console Mode1-2
Silent-Mode1-2
Product Components
Oracle WebLogic Server
Oracle Workshop for WebLogic
Oracle Service Bus
Product Distribution Methods
Web Distribution
DVD Distribution
Installation Prerequisites
System Requirements
Temporary Disk Space Requirements
Administrator Privileges
Selecting Directories for Your Installation
Choosing a BEA Home Directory1-8
Understanding the Functions of the BEA Home Directory
Choosing Product Installation Directory
Choosing the Type of Installation

Typical	1-14
Custom	1-15
Installing Node Manager as a Windows Service	1-15
Generating a Verbose Installation Log	1-17
Upgrade Information	1-18
Installing Oracle Service Bus	
Starting the Installation Program	2-1
Running the Installation Program in Graphical Mode	2-2
Running the Installation in the Console Mode	2-3
Running the Installation in the Silent-Mode	2-4
Creating a silent.xml File for Silent-Mode Installation	2-4
Sample silent.xml File for Silent-Mode Installation	2-6
Installing Oracle Service Bus With Oracle WebLogic Integration	2-8
Installing Oracle Service Bus Over Oracle WebLogic Integration	2-9
Installing Oracle WebLogic Integration Over Oracle Service Bus	2-9
Uninstalling the Software	2-9
Post-Installation Information	
Using QuickStart	3-1
Using an Alternate Database	3-2
Determining Which JDK Version You are Using	3-2
Understanding the Windows Shortcuts	3-3
Understanding the Product Directory Structure	3-5
Product Directory Structure for Oracle WebLogic Server	
Product Directory Structure for Oracle Service Bus	3-6
Product Directory Structure for Workshop for WebLogic	3-7

Preparing for Installation

Read the following sections before installing your Oracle software:

- Installation Overview
- Product Components
- Product Distribution Methods
- Installation Prerequisites
- Selecting Directories for Your Installation
- Choosing a BEA Home Directory
- Installing Node Manager as a Windows Service
- Generating a Verbose Installation Log
- Upgrade Information

Installation Overview

The Oracle products installation program provides a complete framework for the installation and uninstallation of all the installed products or individual components as desired. You can install Oracle Service Bus completely or customize the installation.

Installation Modes

You can use the Oracle products installation program in one of the following modes:

- Graphical
- Console
- Silent

Graphical Mode

Graphical-mode installation is an interactive, GUI-based method for installing your software. It can be run on both Windows and UNIX systems. For installation procedures, see Running the Installation Program in Graphical Mode.

To run the installation in the graphical-mode, the console attached to the machine on which you are installing the software must support Java-based GUIs. All consoles for Windows systems support Java-based GUIs, but not all consoles for UNIX systems support Java-based GUIs.

Note: If you attempt to start the installation program in graphical-mode on a system that cannot support a graphical display, the installation program automatically starts console-mode installation.

Console Mode

Console-mode installation is an interactive, text-based method for installing Oracle WebLogic Server, Oracle Service Bus, and Workshop for WebLogic from the command line, on UNIX, or on Windows. For information about using this method, see Running the Installation in the Console Mode.

Silent-Mode

Silent-mode installation is a non-interactive method for installing your software that requires use of an XML properties file for selecting installation options. You can run silent-mode installation either as part of a script or from the command line. Silent-mode installation is a way of setting installation configurations once and then using those configurations to duplicate the installation on many machines. For information on running the installation program in the silent-mode, see Sample silent.xml File for Silent-Mode Installation.

Product Components

Using the Oracle products installation program, you can install the following components on your system:

- Oracle WebLogic Server
- Oracle Workshop for WebLogic
- Oracle Service Bus

Note: By default, Oracle Service Bus examples are not installed in a typical installation. To install Oracle Service Bus examples, choose the custom installation option. For more information, see "Choosing the Type of Installation" on page 1-14.

If you are using the Oracle products installation program for WLS, only the WLS components are available for installation.

For additional information about the features and capabilities of these components, see:

- Oracle WebLogic Server: Introduction to Oracle WebLogic Server.
- Oracle Service Bus: Concepts and Architecture.
- Oracle Workshop for WebLogic: Oracle Workshop Product Family

For more information about operating systems and hardware supported by your software, see Supported Configurations.

Oracle WebLogic Server

Oracle WebLogic Server provides the core services that ensure reliability, high availability, scalability, and a high-performing execution environment for your application. It includes Apache Beehive, a cross-container framework that provides a consistent, abstract, and easy to use programming model, allowing developers to build applications more productively.

Oracle WebLogic Server consists of the following sub-components that can be installed on your system:

- Server: Oracle WebLogic Server program files that contain the core Java Enterprise Edition 2 (Java EE 2) features and Apache Beehive.
- Server Examples: Oracle WebLogic Server and MedRec example domain and sample applications. These servers and sample applications demonstrate a variety of Java EE 2 features. Resources are provided to help you build, configure, and run each of the sample

applications. You must install the Server sub-component to install and use the Server Examples.

• Web Server add-ons: Modules used to enable Oracle WebLogic Server to communicate with applications deployed on Apache HTTP Server, Netscape Enterprise Server, or Microsoft Internet Information Server (IIS).

Note: For installing the Oracle Service Bus Server component, you must select the WebLogic Server Add-ons component.

Oracle Workshop for WebLogic

Workshop provides a unified development environment that enables you to develop web applications and web services regardless of your experience in developing applications using Java EE 2. It includes a suite of tools for developing, debugging, and deploying sophisticated enterprise applications including Oracle Service Bus resources.

Oracle Service Bus

Oracle Service Bus combines intelligent message brokering with service monitoring and administration to provide a unified software product for implementing and deploying your Service-Oriented Architecture (SOA). This converged approach adds a scalable, dynamic routing and transformation layer to your enterprise infrastructure, with service lifecycle management capabilities for service registration, service usage, and Service Level Agreement (SLA) compliance.

Oracle Service Bus relies on Oracle WebLogic Server run-time facilities. It leverages Oracle WebLogic Server capabilities to deliver functionality that is highly available, scalable, and reliable.

Oracle Service Bus consists of the following sub-components that can be installed on your system:

- Service Bus Server: The full set of components that comprise Oracle Service Bus, except the examples and the IDE.
- IDE and Service Bus Examples: The Oracle Service Bus Plug-in for WorkShop for WebLogic and the Oracle Service Bus Examples. The examples demonstrate key features of Oracle Service Bus and help you get started with designing and configuring resources and services using the Oracle Service Bus Console.

Note: You must install both sub-components to install Oracle Service Bus.

Note: By default, Oracle Service Bus examples are not installed in a typical installation. To install Oracle Service Bus examples, choose the custom installation option. For more information, see "Choosing the Type of Installation" on page 1-14.

Product Distribution Methods

Oracle software is distributed on both the Oracle Web site and DVD.

Web Distribution

You can download your software from the Oracle Downloads Web site.

DVD Distribution

The product box contains the following items:

- DVDs containing the product software for Windows, Solaris, HP-UX, and Linux
- The following printed documents:
 - Customer Support Quick Reference and Other Important Information
 - A list of URLs for the online documentation for each product

Installation Prerequisites

The following sections specify the installation prerequisites:

System Requirements

The system requirements for your installation are given in the following table:

Table 1-1 System Requirements

Component	Requirement
Platform configuration	A supported configuration of hardware, operating system, JDK, and database is required. For more information on platform documentation, see Supported Configurations.
	The Supported Configurations documentation specifies other prerequisites and recommendations, such as recommended versions of the JDK.
Processor	1-GHz CPU recommended
Hard Disk Drive	A typical installation requires approximately 1.2GB of disk space.
	Note: This does not include the space required to create new domains.
Memory	A minimum of 2 GB RAM.
Color bit depth display and size	For graphical user interface (GUI) mode installation, 8-bit color depth (256 colors) is required.
	For console-mode and silent-mode installation, there is no color bit depth requirement.
JDK	The Oracle product installation program requires Java to run.
	A Java run-time environment (JRE) is bundled in the Windows installation program and in some UNIX installation programs (those with file names ending in .bin).
	A JRE is not bundled in some UNIX installation programs (those with file names ending in .jar). To run such a .jar installation program, you must have the appropriate version of the Java development kit (JDK) installed on your system, and you must include the bin directory of the JDK at the beginning of your PATH environment variable definition. In this case, it is important that you use a JDK (and not a JRE) because the installation process assigns values to JAVA_HOME and related variables to point to the JDK directory.

Temporary Disk Space Requirements

The Oracle installation program uses a temporary directory into which it extracts the files necessary to install the software on the target system. During the installation process, your temporary directory must contain sufficient space to accommodate the compressed Java run-time environment (JRE) bundled with the installation program and an uncompressed copy expanded

JRE. The extracted files are deleted from the temporary directory at the end of the installation process. As a general rule, installation programs require approximately 2.5 times the amount of temporary space that is ultimately required by the installed files.

By default, the installation program uses the following temporary directories:

- Windows platforms: directory referenced by the TMP system variable
- **UNIX platforms**: system-dependent temporary directory

Note: If you do not have enough temporary space to run the installation program, you are prompted to specify an alternate directory or exit the installation program.

To make sure that you have adequate temporary space, allocate an alternate directory for installation. To do so, follow the instructions provided in the following table.

Platform	To allocate more space in the temp folder
Windows	Do one of the following:
	 Set the TMP system variable to a directory of your choice.
	• If starting the installation program from the command line, include the -Djava.io.tmpdir=tmpdirpath option, replacing tmpdirpath with the full path of the directory that you want to designate as a temporary storage area for the Oracle products installation program. For example:
	osb103_wls103_win32 -mode=console -Djava.io.tmpdir=D:\Temp
UNIX	Enter the following option on the command line when you start the installation program:
	-Djava.io.tmpdir=tmpdirpath
	Here, <i>tmpdirpath</i> is the full path of the directory that you want to designate as a temporary storage area for the Oracle products installation program.

Administrator Privileges

On Windows systems, Administrator privileges are required to do the following tasks:

• To install the Node Manager as a Windows service

You must have Administrator privileges to install the Node Manager as a Windows service. When the Node Manager is installed as a Windows service, it starts at the completion of the installation process, and again, automatically, each time you boot your Windows system.

For more information, see Installing Node Manager as a Windows Service.

• To create Start menu shortcuts in the All Users folder

When you are installing the software as a user with Administrator privileges, you are presented with the option to create the Start menu shortcuts in the All Users folder or in the local user's Start menu folder. The following table describes the options available:

If you select	The following occurs
All Users	All users registered on the machine are provided with access to the installed software. Subsequently, if users without Administrator privileges use the Configuration Wizard from this installation to create domains, Start menu shortcuts to the domains are not created. In this case, users can manually create shortcuts in their local Start menu folders, if required.
Local Users	Other users registered on this machine cannot access the Start menu entries for this installation.

If a user without Administrator privileges installs the software, the Start menu entries are created in the user's local Start menu folder.

Selecting Directories for Your Installation

During the installation process, you must specify locations for the BEA home directory and the product Installation directories.

Choosing a BEA Home Directory

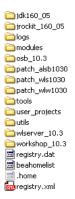
During the installation of the Oracle software, you are prompted to specify a BEA home directory. This directory serves as a repository for common files that are used by various Oracle products installed on the same machine. For this reason, the BEA home directory can be considered a central support directory for all the Oracle products installed on your system.

The files in the BEA home directory are essential to ensuring that Oracle software operates correctly on your system. These files do the following:

- Facilitate checking of cross-product dependencies during installation
- Facilitate Service Pack installation

The following illustration shows the structure of a sample BEA home directory, on a Windows platform, which includes both the Sun and Oracle JRockit JDKs.

Figure 1-1 BEA Home Directory



This illustration depicts all the files and directories that are required in the BEA home directory.

Caution: You must install Oracle Service Bus in the default location directly under BEA_HOME. You must also install Oracle WebLogic Server in the default location directly under BEA_HOME with its default directory name.

Notes:

- The installer includes the installation of Oracle WebLogic Server. However, if you
 have already installed WLS 10.3 you can install Oracle Service Bus into the
 existing BEA home.
- On some UNIX platforms, the installation program does not install the JDK.
 During installation of your Oracle software, you are prompted to choose an
 existing BEA home directory or specify a path to create a new BEA home
 directory. If you choose to create a new directory, the installation program
 automatically creates it for you.
- Oracle recommends that you do not exceed a maximum of 12 characters or include spaces when naming your BEA home directory. If you do so, the CLASSPATH is not resolved properly. You can install only one instance of each version of an Oracle product in a single BEA home directory. For example, you can install only one

- instance of WebLogic Server 10.3 in a BEA home directory, but that BEA home directory could also contain an instance of WebLogic Server 9. 0.
- You must obtain an installer that is compatible with your existing installation or perform maintenance to achieve compatibility. For more information, see "Upgrade Information" on page 1-18.
- User_Projects, which contains the domains that are created by the user, is present in BEA_HOME only after you configure at least one domain.

Understanding the Functions of the BEA Home Directory

The files and directories in the BEA home directory are described in the following table:

Table 1-2 Understanding BEA Home Directory

Folder / File Name	Description
jdk <i>xxx</i>	Contains the software for the Sun JDK if it is installed with your software. The JDK provides the Java run-time environment (JRE) and tools for compiling and debugging Java applications. In this directory name, xxx indicates the version of the Sun JDK installed on your system, for example jdk160_05.
jrockitxxx (Windows and Linux only)	Contains the software for the Oracle JRockit JDK installed with your software. The JDK provides the Java run-time environment (JRE) and tools for compiling and debugging Java applications. In this directory name, <i>xxx</i> indicates the version of the JRockit JDK installed on your system, such as jrockit_160_05.
logs	Contains a history file of installation and uninstallation for the BEA home directory.
modules	Contains additional plug-ins for Workshop.

Table 1-2 Understanding BEA Home Directory

Folder / File Name	Description
osb_10.3	Contains the following directories:
	• 3rd party
	• bin
	• common
	• dbscripts
	• eclipse
	• financial
	• inventory
	• L10N
	• lib
	• samples
	• uninstall
	For more information on this directory, see Product Directory Structure for Oracle Service Bus.
patch_alsb1030	This is the default directory for Oracle Service Bus patch jar files and profiles during the smart update.
patch_wls1030	This is the default directory for Oracle WebLogic Serve patch jar files and profiles during the smart update.
patch_wlw1030	This is the default directory for Workshop for WebLogic patch jar files and profiles during the smart update.
tools	Contains Eclipse 3.3.2
utils	Contains utilities that are used to support the installation of all Oracle products installed in this BEA home directory.

Table 1-2 Understanding BEA Home Directory

Folder / File Name	Description
wlsserver_10.3	This is the product installation directory for Oracle WebLogic Server. This directory contains the following directories:
	• common
	 inventory
	• server
	• LION
	 uninstall
	For more information, see Product Directory Structure for Oracle WebLogic Server.
workshop_10.3	This is the product installation directory for Workshop for WebLogic. This directory contains the following directories:
	• common
	 inventory
	• samples
	 uninstall
	 weblogic-beehive
	• workshop4WP
	• gdiplus.dll
	• license.txt
	• redist.txt
	 workshop.exe
	 workshop.ini
beahomelist	Lists all BEA homes.
.home	Defines location of the BEA home.

Table 1-2 Understanding BEA Home Directory

Folder / File Name	Description
registry.xml	A registry file that contains a persistent record of all Oracle products installed on the target system. This registry contains product-related information, such as version number, service pack number, and location of the installation directory.
	For more information about the Oracle registry file, see Using the BEA Registry API in the <i>ISV Partners' Guide</i> .
registry.dat	Contains meta-data critical to all provisioning operations, enabling operational automation for our customers.
	Note: You must not modify this file.

Creating Multiple BEA Home Directories

Although you can create more than one BEA home directory, Oracle recommends that you avoid doing so. In almost all situations, a single BEA home directory is sufficient. However, you can have multiple BEA home directories if you prefer to maintain separate development and production environments, with a separate product stack for each. With two directories, you can update your development environment (in a BEA home directory) without modifying the production environment until you are ready to do so.

Choosing Product Installation Directory

The product-installation directory contains all the software components that you choose to install on your system, including program files and examples. You are prompted during your initial installation to choose a product installation directory. Table 1-3 gives the default location of the product installation directories.

Table 1-3 Default Location of the Product Installation Directory

Product	Directory	
Oracle Service Bus	BEA_HOME\osb_10.3	
	Note: You must use the default location and name for the Oracle Service Bus product directory	
Oracle WebLogic Server	BEA_HOME\wlserver_10.3	
	Note: You must use the default location and name for the Oracle WebLogic Server product directory	
Workshop for WebLogic	BEA_HOME\workshop_10.3	

Caution: You must install Oracle Service Bus and Oracle WebLogic Server in the default location inside the BEA_HOME. You must also retain the default product directory names.

The installation program installs the software components in a product installation directory represented by the BEA_HOME variable. You are not prompted for a product installation directory during the installation if you are adding a component to the existing installation. The installation program detects the BEA_HOME directory and installs the additional products under it.

A description of the Oracle products directory structure is provided in Understanding the Product Directory Structure.

Choosing the Type of Installation

The Oracle products installation program provides Typical and Custom types of installation.

Typical

If you choose a Typical installation type, the following components are installed:

- WLS: This includes the following sub-components:
 - Server
 - Server Examples
 - Server Add-ons

- Oracle Service Bus: This includes the following sub-components:
 - Service Bus Server
- Workshop: This includes the following sub-components:
 - Workshop for WebLogic
 - Workshop Runtime Framework

The following components are not installed if you choose the Typical installation type:

- Oracle WebLogic Server Node Manager as a Windows service
- New Eclipse v 3.3.2
- IDE and Service Bus Examples

Custom

In a Custom installation type, you have the following options:

- You can choose which software components to install on your system. For a description of
 the software components provided with your product distribution, see Product
 Components. Sample domains preconfigured to use the PointBase database are created
 only for the installed components.
- You can install a new Eclipse home or use the existing one.
- You can choose whether to install the WLS Node Manager as a Windows Service. See Installing Node Manager as a Windows Service.
- You can install IDE and Service Bus Examples.

Installing Node Manager as a Windows Service

When installing your software on a Windows platform, you can optionally install WLS Node Manager as a Windows service. The WLS Node Manager is used to do the following:

- Start and stop server instances, both administration servers and managed servers, remotely.
- Monitor the self-reported health of servers and automatically kill server instances whose health state is "failed."
- Migrate servers in a WLS cluster.

• Automatically restart servers that have the "failed" health state or that have shut down unexpectedly due to a system crash or reboot.

In a cluster environment, you must install node manager on each machine that hosts managed server and administration server instances of WLS.

Notes:

- You must have Administrator privileges to install node manager as a Windows service.
 - In a custom installation, you can optionally install node manager as a Windows service. If you select **Yes**, node manager is installed as a Windows service to Listen Port 5556. To avoid port contention, you can specify an alternate Listen Port if desired. If the **Listen Port** number you specify is currently being used by a running application, the installation program prompts you to enter a different node manager **Listen Port** number. At the completion of the installation process, node manager is started using the specified port.
- You are prompted to install node manager as a Windows service only during initial installation. If you install additional product components during a subsequent installation, you are not prompted to install node manager as a Windows service.

To install node manager as a Windows service in silent-mode, you must specify the appropriate values in the silent.xml file. For more information, see Sample silent.xml File for Silent-Mode Installation.

You can also install and uninstall node manager as a Windows service using the following scripts that are provided when you install WLS:

```
BEA_HOME\server\bin\installNodeMgrSvc.cmd
BEA_HOME\server\bin\uninstallNodeMgrSvc.cmd
```

In these path names, BEA_HOME is the product installation directory in which you installed Oracle WebLogic Server, for example C:\bea\wlserver_10.3.

Additional Considerations for Node Manager

The following are some additional considerations for installing the node manager as a Windows service:

When you install node manager as a Windows service, it is registered with the product installation directory in which you are installing the software, for example,
 C:\bea\wlserver_10.3. Node manager can be used to manage communication with all domains associated with that installation directory.

If you install additional instances of Oracle WebLogic Server 10.3 on a machine, in different BEA home directories, you can install a node manager instance as a Windows service for each installation. Each node manager instance manages the domains associated with the relevant installation.

• When you install node manager as a Windows service during the installation process, the node manager listen port is specified in the Oracle registry file, registry.xml, located in the BEA home directory associated with the installation, typically C:\bea.

Note: Do not edit this file manually. Doing so causes operating problems for the currently installed Oracle products or results in installation problems when future Oracle products or maintenance upgrades are installed. Changing the node manager listen port value in the registry.xml does not change the port for the installed service.

 When you uninstall WLS, the node manager service, which is associated with the product that is being uninstalled, is also uninstalled. For more information about the product installation directory, see Choosing Product Installation Directory

For more information about node manager, including instructions for installing it on a UNIX system, see Using Node Manager to Control Servers in the *Node Manager Administrator's Guide*.

Generating a Verbose Installation Log

If you launch the installation from the command line or from a script, you can specify the -log option to generate a verbose installation log. This installation log stores messages about events that occur during the installation process, including informational, warning, error, and fatal status messages. A verbose installation log file can be especially useful for silent installations which do not echo log messages to the command line.

Note: You can see some warning messages in the installation log. Unless a fatal error occurs, the installation program completes the installation successfully. The installation user interface indicates the success or failure of each installation attempt, and the installation log file includes an entry to indicate that the installation was successful.

To create a verbose log file during installation, include the <code>-log=full_path_to_log_file</code> option in the command line. For example:

```
osb103_wls103_win32.exe -log=C:\logs\server_install.log
```

The path must specify a file. You cannot create a folder simply by including a name for it in a pathname; your path should specify only existing folders. If your path includes a nonexistent folder when you execute the command, the installation program does not create the log file.

Upgrade Information

You can upgrade your software from older versions to the latest version. For more information on upgrading your software, see Oracle Service Bus Upgrade Guide.

For information about upgrading your software with maintenance patches and service packs, if available, see Installing Patches and Maintenance Packs.

For information about upgrading your application environments from a previous release, see Upgrade Documentation.

If you are installing WLS 10.3 into an existing BEA home directory that contains an installation of WLS 7.0, 8.1, 9.2, or 10.0, all custom security providers that reside in the default location, <code>BEA_HOME\server\lib\mbeantypes</code>, where <code>BEA_HOME</code> specifies the root directory of the pre-10.3 installation, are upgraded automatically. If all your custom security providers reside in the default location, then the security provider upgrade step is complete, and you do not have to perform any of the additional steps. For more information on upgrading the security provider, see Upgrading a Security Provider in *Upgrading WebLogic Application Environments*.

You can verify that a custom security provider is upgraded by locating the upgraded security provider, security_provider_name, in the

BEA_HOME\wlserver_10.3\server\lib\mbeantypes directory, where BEA_HOME specifies the root directory of the 10.3 installation and security_provider_name specifies the name of the security provider.

Installing Oracle Service Bus

This section provides the information for installing Oracle Service Bus on Windows and UNIX. It contains the following topics:

- Starting the Installation Program
- Running the Installation Program in Graphical Mode
- Running the Installation in the Console Mode
- Running the Installation in the Silent-Mode
- Installing Oracle Service Bus With Oracle WebLogic Integration
- Uninstalling the Software

Starting the Installation Program

The name of the installer program for installing Oracle Service Bus is:

- osb103_wls103_win32.exe for Windows.
- osb103_wls103_xxxx.bin for the installation program that includes JRE for UNIX based systems, where xxxx is name of the UNIX platform.
- osb103_wls103_xxxx.jar for the installation program that does not include JRE for UNIX based systems, where xxxx is name of the UNIX platform.

This section provides information on how to start the installation on Windows and UNIX in:

- Graphical Mode
- Console Mode
- Silent Mode

Before you start the installation, read Before You Start in the Installation Guide.

For more information on how to start the installation in graphical-mode, see:

- Windows: Starting in Graphical Mode in the *Installation Guide*.
- UNIX (.bin installers): Starting Graphical-Mode Installation in the Installation Guide.
- UNIX (.jar installers): Starting the Installation Program in Graphical-Mode in the Installation Guide.

For more information on how to start the installation in console-mode, see:

- Windows: Starting in Console Mode in the *Installation Guide*.
- UNIX (.bin installers): Starting Console-Mode Installation in the Installation Guide.
- UNIX (. jar installers): Starting the Installation Program in Console-Mode in the Installation Guide.

For more information on how to start the installation in silent-mode, see:

- Windows: Starting in Silent Mode in the *Installation Guide*.
- UNIX (.bin installers): Starting Silent-Mode Installation in the Installation Guide.
- UNIX (. jar installers): Starting the Installation Program in Silent-Mode in the Installation Guide.

Running the Installation Program in Graphical Mode

You can install Oracle Service Bus in the graphical-mode on Windows systems and on UNIX systems which support GUI. For information on how to run the installation in the graphical-mode, see Running the Installation Program in Running the Installation Program in Graphical Mode in Installation Guide.

For information about the components available for installation on your system, see Product Components.

Note: When you select or clear components to install, the installation program checks for dependencies between components and automatically modifies the list of selected

components accordingly. For example, if you clear the Oracle WebLogic Server component check box, the boxes for the remaining components are cleared because the other components cannot be run without Oracle WebLogic Server.

After you choose the components for installation, you must install Eclipse in a new Eclipse home or provide the path to the existing Eclipse home. For more information on requirements to use an existing Eclipse home, see Requirements for Using the Existing Eclipse Installation.

Click next to choose the product directory locations.

Caution: You must install Oracle Service Bus and Oracle WebLogic Server in the default location inside the BEA_HOME. You must also retain the default product directory names for Oracle Service Bus (osb_10.3) and Oracle WebLogic Server (wlserver_10.3), and Workshop for WebLogic (workshop_10.3).

Continue the installation as specified in the table in Running the Installation Program in Graphical Mode in the Installation Guide.

Note: The Mercury profiling tools are no longer supported and are not included in the installer.

For more information on how to complete the installation, see Running Graphical-Mode Installation in Running the Installation Program in Graphical Mode in the Installation Guide.

Running the Installation in the Console Mode

You must install Oracle Service Bus in the console-mode if your operating system does not support GUI. For more information on console-mode installation, see Running Console-Mode Installation in Running the Installation Program in Console Mode in Installation Guide.

Notes:

- For information about the components available for installation on your system, see Product Components.
- When you select or clear components to install, the installation program checks for dependencies between components and automatically modifies the list of selected components accordingly. For example, if you clear the Oracle WebLogic Server component check box, the boxes for the remaining components are cleared because the other components cannot be run without Oracle WebLogic Server.

After you choose the components for installation, you must install Eclipse in a new Eclipse home or provide the path to the existing Eclipse home.

For more information on requirements to use an existing Eclipse home, see Requirements for Using the Existing Eclipse Installation.

In the Choose Products Directory prompt, specify the directory in which you want to install the software.

Caution: You must install Oracle Service Bus and Oracle WebLogic Server in the default

location inside the BEA_HOME. You must also retain the default product directory names for Oracle Service Bus (osb_10.3) and Oracle WebLogic Server (wlserver_10.3), and Workshop for WebLogic (workshop_10.3).

Note: The Mercury profiling tools are no longer supported and are not included in the installer.

For more information on how to complete the installation, see Running Console-Mode Installation in Running the Installation Program in Console Mode in Installation Guide.

Running the Installation in the Silent-Mode

You must install Oracle Service Bus in the silent-mode if your operating system does not support GUI or for multiple installations in a cluster environment. For more information on the silent-mode install, see What Is Silent-Mode Installation? and Using Silent-Mode Installation: Main Steps in Running the Installation Program in Silent Mode in the Installation Guide.

Creating a silent.xml File for Silent-Mode Installation

When you install your Oracle software in silent-mode, the installation program uses an XML file (silent.xml) to determine which installation options should be implemented. Therefore, before you can run the installation program in silent-mode, you must first create a silent.xml file in which you specify the installation options that you want to invoke.

Incorrect entries in the silent.xml file can cause installation to fail. To help you determine the cause of a failure, Oracle recommends that you create a log file when you start the installation.

To create a silent.xml file for use in the silent-mode installation process, follow these steps:

- 1. In a supported browser, view the sample silent.xml file for silent-mode installation. The sample file is available at
 - $http://download.oracle.com/docs/cd/E13159_01/osb/docs10gr3/install/scripts/silent.xml.$
 - This sample silent.xml file is also presented in this section. See Sample silent.xml File for Silent-Mode Installation.
- 2. Save the sample XML file, with the name silent.xml, in the same directory that contains the installation program.

Note: The XML definition must be <?xml version="1.0" encoding="ISO-8859-1"?>. It must be at the beginning of the silent.xml file. There should not be any spaces or line breaks before the XML definition.

3. In the silent.xml file edit the values for the keywords shown in Table 2-1 to reflect your configuration.

Note: You must follow XML guidelines for characters when modifying values. For example, do not use characters reserved for use in XML, such as <, >, [, and].

Sample silent.xml File for Silent-Mode Installation

Table 2-1 Parameters for Silent.xml

For this data-value name	Enter the following value
ВЕАНОМЕ	The full path for the BEA home directory of your choice.
	For information about the BEA home directory, see Choosing a BEA Home Directory.
WLS_INSTALL_DIR	The full path for the directory where you want to install the Oracle WebLogic Server.
	You must install inside the BEAHOME and use the following name: wlserver_10.3.
	For more information, see Choosing Product Installation Directory.
ALSB_INSTALL_DIR	The full path for the directory where you want to install the Oracle Service Bus.
	You must install inside the BEAHOME. You may use any name for the subdirectory within BEAHOME. Default name: osb_10.3.
	For more information, see Choosing Product Installation Directory.
COMPONENT_PATHS	Specify the components and sub-components you want to install on your system:
	To install Oracle Service Bus, use the following values:
	<pre><data-value name="COMPONENT_PATHS" value="Oracle Service Bus/Service Bus Examples"></data-value></pre>
	For more information about entering these values, see Guidelines for Component Selection in Running the Installation Program in Silent Mode in Installation Guide.

Table 2-1 Parameters for Silent.xml

INSTALL_NODE_MANAGER _SERVICE (Windows platforms only)	 yes to install the Oracle WebLogic Server Node Manager as a Windows service. For information, see Installing Node Manager as a Windows Service no to skip the installation of the Oracle WebLogic Server Node Manager as a Windows service. The default is no. Note: You must have Administrator privileges to install Node Manager as a Windows service. When you are installing Oracle Service Bus on UNIX-based platforms, this parameter is ignored.
NODEMGR_PORT	The Node Manager Listen Port. If you do not specify a port number, the installer uses the default port 5556. If the port number is in use, the installer scans for the next available port and assigns it to the Node Manager. Note: The INSTALL_NODE_MANAGER_SERVICE option must be set to yes. At the completion of the installation process, the Node Manager is started using the port specified.
INSTALL_SHORTCUT_IN_ ALL_USERS_FOLDER	 true, or yes, to create the shortcuts in the All Users folder. The default is true. false, or no, to create the shortcuts in the local users folder. The user performing the installation must have Administrator privileges to install the Start menu shortcuts in the All Users folder. For more information, see Administrator Privileges.

The sample silent.xml file shown in Listing 2-1 is configured to install the Oracle Service Bus into directory C:\bea\osb_10.3. In this example, Oracle WebLogic Server has already been installed in C:\bea\wlserver_10.3.

Listing 2-1 Sample silent.xml File

For more information on launching the installation in silent-mode, see Starting the Installation in Silent Mode in Starting the Installation Program in the Installation Guide.

You can generate exit codes to indicate the success or failure of the installation program. For more information, see Returning Exit Codes to the Console in Running the Installation Program in Silent Mode in Installation Guide.

Note: If you are using an existing Eclipse home, see Requirements for Using the Existing Eclipse Installation.

Installing Oracle Service Bus With Oracle WebLogic Integration

If you plan to use Oracle Service Bus with Oracle WebLogic Integration, follow these instructions for your installation scenario:

- Installing Oracle Service Bus Over Oracle WebLogic Integration
- Installing Oracle WebLogic Integration Over Oracle Service Bus

For more information on Oracle Service Bus and Oracle WebLogic Integration, see Oracle WebLogic Integration.

Installing Oracle Service Bus Over Oracle WebLogic Integration

To install Oracle Service Bus over a previously installed version of Oracle WebLogic Integration, follow these steps:

- Confirm that you have Oracle WebLogic Integration 10.2 installed on your machine. If you
 have an older Oracle WebLogic Integration version installed, upgrade to Oracle WebLogic
 Integration 10.2. For more information, see Oracle WebLogic Integration.
- Install Oracle Service Bus in the same BEA_HOME directory which already has Oracle WebLogic Integration 10.2 installed. For more information, see Starting the Installation Program.
- 3. Before extending the Oracle Service Bus domain to include Oracle WebLogic Integration, start the Oracle WebLogic Server on which you installed the Oracle Service Bus.

Installing Oracle WebLogic Integration Over Oracle Service Bus

To install Oracle WebLogic Integration over a previously installed version of Oracle Service Bus, follow these steps:

- Confirm that you have Oracle Service Bus 10.3 installed on your machine. If you have an
 older Oracle Service Bus version installed, upgrade to Oracle Service Bus10.3. For more
 information, see "Upgrade Information" on page 1-18
- Install Oracle WebLogic Integration in the same BEA_HOME directory which already has Oracle Service Bus10.3 installed. For more information, see Oracle WebLogic Integration.

Uninstalling the Software

You can uninstall the software in:

Graphical-mode

- Console-mode
- Silent-mode

For information about uninstalling and reinstalling the software, see Uninstalling the Software in Installation Guide.

You cannot reinstall the same version of any Oracle product on top of a previously installed version of the same product whether it is in the same BEA home directory or in the same file location. You can, however, add products and product components to an existing installation. For example, you can install Oracle WebLogic Server during one installation, and Oracle Service Bus during a separate installation.

To reinstall the same version of one of the product components or the entire Oracle products distribution in the same location, you must first uninstall the previous installation.

If you try to install a complete copy of the Oracle products in a BEA home directory that already contains a complete installation, an error message is displayed. Click or type OK to return to the Choose BEA home directory prompt.

At the prompt, choose one of the following options:

- To continue installing the software using a different BEA home directory, select an existing BEA home directory that does not contain a previous installation, or create a new BEA home directory.
- Exit the installation program. If you want to reinstall your Oracle products in the same BEA_HOME, you must uninstall the previous installation. For more information on uninstalling the software, see Uninstalling the Software in Installation Guide.

Then start the installation of the software as described in Starting the Installation Program.

Post-Installation Information

This section covers the following topics:

- Using QuickStart
- Using an Alternate Database
- Determining Which JDK Version You are Using
- Understanding the Windows Shortcuts
- Understanding the Product Directory Structure

Using QuickStart

When the product installation is completed in graphical-mode, the QuickStart application is launched if you select the **Run QuickStart** check box. If you do not want to run QuickStart at the completion of the installation process, you can clear the Run QuickStart check box in the Install Complete window. QuickStart is not invoked from the installation program after you complete the console-mode or silent-mode installations.

QuickStart is designed to help first-time users evaluate, learn, and use Oracle products. If you installed your software using a complete installation, or if you used a custom installation to install the examples, the sample domains that are installed are automatically configured to run with the PointBase database, a database that is installed with Oracle WebLogic Server. QuickStart provides quick access to start sample domains, create SOA components using Workshop for WebLogic, and online documentation.

After installation, you can launch QuickStart as follows:

- On Window systems, choose **Start** > **Programs** > **Oracle WebLogic** > **QuickStart**.
- On UNIX systems, complete the following steps:
 - a. Log in to the target UNIX system.
 - b. Go to the /common/bin subdirectory of your BEA_HOME. For example:

```
cd /home/bea/wlserver 10.3/common/bin
```

c. Enter the following command:

```
sh quickstart.sh
```

Using an Alternate Database

When you install WebLogic Platform, all sample domains are preconfigured to use the PointBase database. However, to use another supported database, such as Oracle, you must configure a new domain and initialize the new database. For information about configuring a domain with a different database, see How Do I: Create an Oracle Service Bus Domain Using an Enterprise-Quality Database? in Creating WebLogic Domains Using the Configuration Wizard.

For information about databases supported on your platform and any associated restrictions or limitations, see Supported Configurations.

Determining Which JDK Version You are Using

You can determine which version of the JDK you are using by issuing a command, as follows:

- 1. Go to the appropriate directory:
 - On Windows in command prompt:

```
BEA_HOME\wlserver_10.3\server\bin
```

– In the UNIX terminal:

```
BEA HOME/wlserver 10.3/server/bin
```

In both path names, BEA_HOME represents the directory in which you installed your Oracle software.

2. Verify that your environment is set up properly, by entering the following command at the prompt:

- On Windows, execute the following command:

```
setWLSenv.cmd
```

- On UNIX execute the following command:

```
setWLSenv.sh
```

3. Enter the following command at the prompt:

```
java -version
```

The version of the JDK on your system is displayed.

If you are using Oracle JRockit, the following is displayed in the output:

```
java version "1.6.0_05"

Java(TM) SE Runtime Environment (build 1.6.0_05-b13)

BEA JRockit(R) (build
R27.6.0-50_o-100423-1.6.0_05-20080626-2105-windows-ia32, compiled mode)

If you are using the Sun JDK, the following is displayed in the output:
java version "1.6.0_05"

Java(TM) SE Runtime Environment (build 1.6.0_05-b13)
```

Understanding the Windows Shortcuts

Java HotSpot(TM) Client VM (build 10.0-b19, mixed mode)

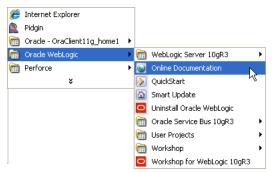
When you install Oracle products on a Windows system, the installation program automatically creates shortcut entries on the Start Menu.

If the user performing the installation has Administrator privileges, the shortcut entries can be created in the All Users Start menu folder or in the user's local Start menu folder. For more information, see Administrator Privileges.

Options on the Start Menu vary, according to the components you choose to install.

The Oracle WebLogic Products folder (**Start** > **Programs** > **Oracle WebLogic**) contains the shortcut files shown in the following figure.

Figure 3-1 Oracle Products Start Menu



- WebLogic Server 10.3: contains a shortcut for launching the default Oracle WebLogic
 Server domain. This domain allows you to run the built-in Oracle WebLogic Server code
 samples, deploy Java EE applications, and quickly serve JSPs or HTML pages. You can
 also use this domain as a place to test your applications during development.
- Online Documentation: provides a link to the online documentation.
- *QuickStart*: starts the QuickStart application designed to assist first-time users in evaluating, learning, and using Oracle products.
- Smart Update: launches the Smart Update program, which checks for any updates available for the Oracle products already installed, and installs the updates as required.
- *Uninstall Oracle WebLogic*: launches the uninstallation program. For more information, see Uninstalling the Software
- Oracle Service Bus 10gR3: contains a shortcut for launching the default Oracle Service
 Bus domain. This domain allows you to run pre-built Oracle Service Bus samples. You can
 also use this domain to get started creating and configuring Oracle Service Bus proxy
 services.
- User Projects: contains a shortcut to the Default Domain and any user-defined domains.
- *Workshop*: contains examples for PointBase Console, starting and stopping the Oracle WebLogic Server, and WebLogic Server Admin Console.
- Workshop for WebLogic: contains the shortcut for launching Workshop for WebLogic
- *Examples*: contains a folder for each component installed on your system that contains shortcuts for launching the examples and associated tools for the component.

• *Tools*: contains shortcuts for launching the Configuration Wizard, Domain Template Builder, Domain Upgrade Wizard, Node Manager, and WebLogic Scripting Tool.

Understanding the Product Directory Structure

During the product installation, you are prompted to select or create a BEA home directory and a product installation directory. For information about the BEA home directory, see Choosing a BEA Home Directory. For a complete installation, the installation program creates a dedicated directory structure for Oracle products.

Product Directory Structure for Oracle WebLogic Server

The product directory for Oracle WebLogic Server can reside inside or outside the BEA home directory. Figure 3-2 shows the directory tree structure for an Oracle WebLogic Server.

Figure 3-2 Product Directory Structure for Oracle WebLogic Server



The installation program does not create directories for components that are not installed. Table 3-1 describes the contents of each directory.

Table 3-1 Product Directory Structure for Oracle WebLogic Server

Contains
Files shared by product components, including scripts used for setting environment attributes common to all WebLogic domains running on the machine, template JAR files used by the Configuration Wizard and Oracle WebLogic Scripting Tool offline when creating domains, and evaluation software from third-party vendors.
List of all installed Oracle products.
Localization files and localized messages.

Table 3-1 Product Directory Structure for Oracle WebLogic Server

Directories	Contains
samples	Sample code, resources, and preconfigured sample domains designed to help you learn how to develop your own applications using the product software. Sample domains are organized by components installed on the system. For example, the server folder contains the source code for examples and a sample application called MedRec.
server	Oracle WebLogic Server program files.
uninstall	Code required to uninstall Oracle WebLogic products.

Product Directory Structure for Oracle Service Bus

The product directory for Oracle Service Bus can reside inside or outside the BEA home directory. Figure 3-3 shows the directory tree structure for an Oracle Service Bus

Figure 3-3 Product Directory Structure for Oracle Service Bus

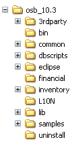


Table 3-2 describes the product directory structure for Oracle Service Bus.

Table 3-2 Product Directory Structure for ALSB

Sub-Directory	Contains
3rd party	Library for Secure File Transfer Protocol (SFTP).
bin	Icons and shortcuts.
common	Compiled SOAP and Web Service Definition Language (WSDL) schemas.

Table 3-2 Product Directory Structure for ALSB

Sub-Directory	Contains
dbscripts	Database scripts that are necessary to create database tables for the reporting subsystem.
eclipse	The Eclipse plug-ins that are required for Eclipse-based Oracle Service Bus IDE.
financial	The plug-ins for Financial Message Designer.
inventory	List of all installed Oracle products.
L10N	Localization files and localized messages.
lib	The jar files required for Oracle Service Bus.
samples	Oracle Service Bus sample domains and client web applications.
uninstall	Code required to uninstall Oracle WebLogic products.

Product Directory Structure for Workshop for WebLogic

The product directory for Workshop for WebLogic can reside inside or outside the BEA home directory. Figure 3-4 shows the directory tree structure for Workshop for WebLogic.

Figure 3-4 Product Directory Structure for Workshop for WebLogic



Table 3-3 describes the product directory structure for Workshop for WebLogic.

Table 3-3 Product Directory Structure for Workshop for WebLogic

Sub-Directory	Contains
common	Common files for Workshop for WebLogic.
inventory	List of all installed Oracle products.
samples	Workshop for WebLogic sample domains and client web applications.

Table 3-3 Product Directory Structure for Workshop for WebLogic

Sub-Directory	Contains
uninstall	Code required to uninstall Oracle WebLogic products.
weblogic-beehive	Library for NETUI and controls, ant modules, and samples for beehive framework
workshop4WP	The executable for Workshop for WebLogic.