Oracle® Fusion Middleware

Installation Guide for Oracle Service Bus

11*g* Release 1 (11.1.1.9.0)

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Oracle Fusion Middleware Installation Guide for Oracle Service Bus, 11*g* Release 1 (11.1.1.9.0)

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A Deinstalling and Reinstalling Oracle Service Bus

Preface

The *Oracle Fusion Middleware Installation Guide for Oracle Service Bus Installation Guide* provides information and instructions for installing, configuring, and troubleshooting Oracle Service Bus.

Intended Audience

This guide is intended for users who are installing Oracle Fusion Middleware for the first time and are comfortable running some system administration operations, such as creating users and groups, adding users to groups, and installing operating system patches on the computer where your products will be installed. Users on UNIX operating systems who are installing need `root` access to run some scripts.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

For more information, see the following documents in the Oracle Fusion Middleware Release 7.0 documentation set or in the Oracle Other Product Two Release 6.1 documentation set:

- *Oracle Fusion Middleware Developer's Guide for Oracle Service Bus*

- *Oracle Fusion Middleware Administrator's Guide for Oracle Service Bus*

- *Oracle Fusion Middleware Concepts and Architecture for Oracle Service Bus*

- *Oracle Fusion Middleware Deployment Guide for Oracle Service Bus*

In addition, the following documents in the 11*g* Release 1 (11.1.1.6.0) documentation set contain useful information:

- *Oracle Fusion Middleware Installation Planning Guide*. This book contains useful information you should read before installing any Oracle Fusion Middleware product.

- *Oracle Fusion Middleware Concepts*. This book introduces the common terms and concepts in an Oracle Fusion Middleware environment.

- *Oracle Fusion Middleware Administrator's Guide*. This book contains information for managing your Oracle Fusion Middleware environment after installation and configuration is complete.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Understanding Oracle Service Bus

This chapter provides an overview of Oracle Service Bus and this guide. This chapter includes the following topics:

- Section 1.1, "Oracle Service Bus Overview"
- Section 1.2, "Understanding the Oracle Service Bus Installation Types"
- Section 1.3, "Installing Oracle Service Bus and Creating a Domain in a Development Environment"
- Section 1.4, "Installing Oracle Service Bus and Creating a Domain in a Production Environment"
- Section 1.5, "Installing and Configuring Oracle Service Bus in a High Availability Environment"

1.1 Oracle Service Bus Overview

Oracle Service Bus combines intelligent message brokering with service monitoring and administration to provide a unified software product for implementing and deploying Service-Oriented Architecture (SOA) on your enterprise. 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.

The following topics are covered in this section:

- Section 1.1.1, "Oracle Service Bus Components"
- Section 1.1.2, "Oracle Service Bus Requires Oracle WebLogic Server"
- Section 1.1.3, "Oracle Service Bus IDE Requires Oracle Enterprise Pack for Eclipse"
- Section 1.1.4, "Using Reporting Features or Oracle Web Services Manager Policies"
- Section 1.1.5, "Using Oracle Web Services Manager for Policy Management"
- Section 1.1.6, "Oracle Service Bus Supported Languages"

1.1.1 Oracle Service Bus Components

The installer for Oracle Service Bus features the following components that can be installed on your system:

- **Oracle Service Bus Server:** The full set of components that comprise Oracle Service Bus, excluding Oracle Service Bus examples and the Oracle Service Bus IDE.

- **Oracle Service Bus IDE**: Oracle Service Bus Plug-in is an integrated design environment for Oracle Service Bus. You must install Oracle Enterprise Pack for Eclipse to use Oracle Service Bus IDE.

  > **Note:** Oracle Service Bus IDE cannot be installed on an HP-UX or AIX operating system.

- **Oracle Service Bus Examples:** The Oracle Service Bus examples provide you with a quick and easy way to experience the run-time capability of using proxy services in your design environment; they demonstrate key features and help you get started with designing and configuring resources and services using the Oracle Service Bus Console. These examples are user-driven, pre-configured scenarios that use Oracle Service Bus to communicate with business services. The examples are based on typical business scenarios that benefit from using Oracle Service Bus proxy services to communicate between clients and business processes. You can run the examples to see how Oracle Service Bus operates in the run-time environment, or you can build the examples in the development environment to get more in-depth knowledge of how to configure the proxy service.

  > **Note:** By default, the Oracle Service Bus examples are not installed in a typical installation. To install the examples, select the custom installation option. For more information, see Section 1.2, "Understanding the Oracle Service Bus Installation Types".

1.1.2 Oracle Service Bus Requires Oracle WebLogic Server

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

Oracle WebLogic Server provides the core services that ensure reliability, high availability, scalability, and a high-performing execution environment for your application.

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.

Oracle WebLogic Server also comes with a JRockit JDK which is required to start the installer. If you choose to use a different JDK, you should refer to the *System Requirements and Supported Platforms for Oracle Fusion Middleware 11gR1* document to see which JDKs can be used with this version of Oracle Service Bus. This document is available on the Oracle Fusion Middleware Supported System Configurations page.

1.1.3 Oracle Service Bus IDE Requires Oracle Enterprise Pack for Eclipse

Oracle Enterprise Pack for Eclipse (OEPE) is a certified set of Eclipse plug-ins designed to help develop, deploy and debug applications for Oracle WebLogic Server. Eclipse

plug-ins facilitate development of Java SE, Java EE, Web Service, ORM, and Spring applications on Oracle WebLogic Server.

You must install OEPE to use Oracle Service Bus IDE. The OEPE installer also includes Oracle WebLogic Server, so you do not need to obtain both installers.

For information about obtaining the OEPE (including Oracle WebLogic Server) installer and installation instructions, see Section 2.1, "Obtaining the Software" and Section 2.2, "Installing Oracle Enterprise Pack for Eclipse and Oracle WebLogic Server".

1.1.4 Using Reporting Features or Oracle Web Services Manager Policies

Oracle Service Bus includes a JMS reporting provider for message reporting. The Reporting module in the Oracle Service Bus Administration Console displays the information captured from this reporting provider. If you do not wish to use the JMS Reporting Provider that is provided with your Oracle Service Bus installation, you can untarget it and create your own reporting provider using the Reporting Service Provider Interface (SPI). See "How to Untarget a JMS Reporting Provider" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Service Bus*.

If you want to use the JMS reporting provider, you must have a certified database up and running and run the Repository Creation Utility to install the SOA Infrastructure (SOAINFRA) schema in your database. For more information, see Section 2.1, "Obtaining the Software" and Section 2.4, "Installing the Schemas for Reporting Features and OWSM".

Using the Derby Evaluation Database

If you are using the reporting feature in a development environment, you can choose to use Derby, which is an evaluation database included in your Oracle WebLogic Server installation. In this case, you are not required to use RCU to create and load schemas if the Oracle Web Services Manager functionality for Oracle Service Bus is not required.

Be sure to select Evaluation Database if you are using the Custom installation option to install Oracle WebLogic Server. If you are using the Typical installation option, the Evaluation Database is installed by default.

Reporting tables for Oracle Service Bus are created in the Evaluation Database when the server starts up for the first time. If you are using Oracle Fusion Middleware Configuration Wizard to create the Oracle Service Bus domain, configure the database type reporting as Derby, and set the password appropriately. You can ignore the Test Connections action in the wizard because the Evaluation Database starts only when Oracle WebLogic Server is started.

1.1.5 Using Oracle Web Services Manager for Policy Management

Oracle Service Bus can also be configured with Oracle Web Services Manager (OWSM) for policy management and infrastructure security. If you choose to do so, you must have a certified database up and running and run the Repository Creation Utility to install the Metadata Services (MDS) schema in your database. For more information, see Section 2.1, "Obtaining the Software" and Section 2.4, "Installing the Schemas for Reporting Features and OWSM".

1.1.6 Oracle Service Bus Supported Languages

Oracle Service Bus is supported in the following languages only:

- English

- French

- German

- Italian

- Spanish

- Portuguese (Brazilian)

- Japanese

- Korean

- Chinese (Traditional)

- Chinese (Simplified)

1.2 Understanding the Oracle Service Bus Installation Types

During installation, you have the following options for choosing what components of Oracle Service Bus are installed:

- Typical Installation

- Custom Installation

1.2.1 Typical Installation

When you choose the **Typical** type of installation, the Oracle Service Bus installer installs the Oracle Service Bus Server and the binaries of Oracle Service Bus Integrated Development Environment (IDE) in a new Oracle home directory.

Because Oracle Service Bus IDE is installed, this requires the presence of Oracle Enterprise Pack for Eclipse (OEPE) on your system. For more information about OEPE, see Section 1.1.3, "Oracle Service Bus IDE Requires Oracle Enterprise Pack for Eclipse".

1.2.2 Custom Installation

When you choose the **Custom** type of installation, you can select the following components of Oracle Service Bus to install:

- Oracle Service Bus Server (this is a mandatory component and cannot be de-selected)

- Oracle Service Bus Integrated Development Environment

- Oracle Service Bus Examples

If you choose to install Oracle Service Bus IDE, you must also have OEPE installed on your system. For more information about OEPE, see Section 1.1.3, "Oracle Service Bus IDE Requires Oracle Enterprise Pack for Eclipse".

1.3 Installing Oracle Service Bus and Creating a Domain in a Development Environment

Figure 1–1 illustrates the process of installing Oracle Service Bus and creating a domain in a development environment.

Figure 1–1   Oracle Service Bus Install Flow for a Development Environment
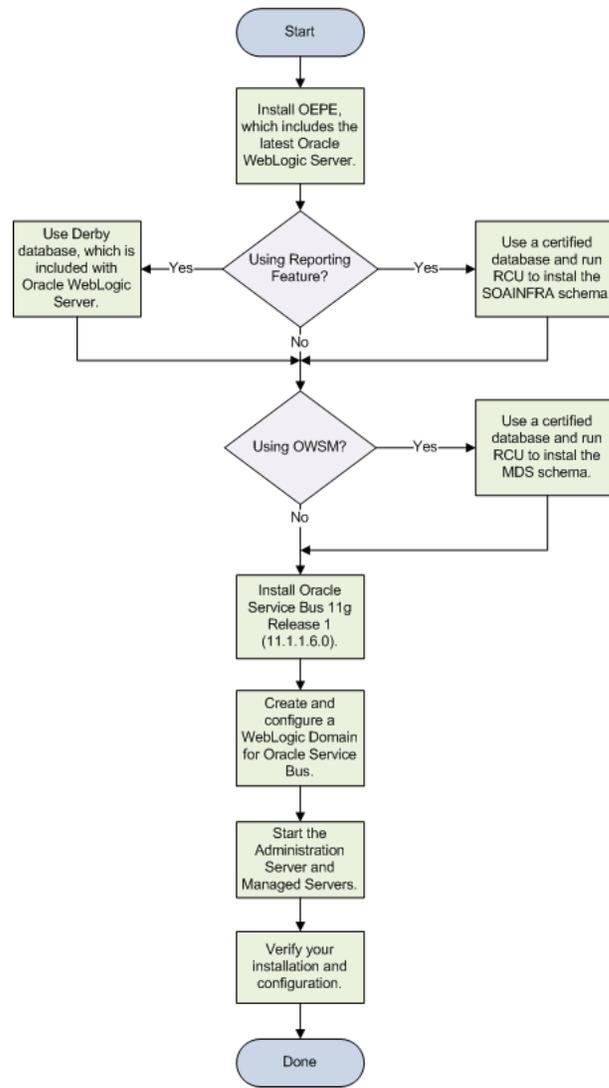
Table 1–1 provides links to documentation and additional information for each item in the flowchart.

Table 1–1   Descriptions for Oracle Service Bus Installation in a Development Environment

Task	Description
Install OEPE, which includes the latest Oracle WebLogic Server.	OEPE is required since Oracle Service Bus IDE will be installed. For more information, see Section 2.1, "Obtaining the Software" and Section 2.2, "Installing Oracle Enterprise Pack for Eclipse and Oracle WebLogic Server".

Table 1–1 (Cont.) Descriptions for Oracle Service Bus Installation in a Development Environment

Task	Description
Using Reporting feature?	If you want to use the reporting feature in a development environment, you can choose one of the following: ■ Use the Derby evaluation database, as described in Using the Derby Evaluation Database. ■ Use another certified database and run RCU to create the SOAINFRA schema, as described in Section 2.1.2, "Obtaining a Database and RCU for Reporting Features and OWSM" and Section 2.4, "Installing the Schemas for Reporting Features and OWSM".
Using OWSM?	If you want to use OWSM, you must use a certified database and run RCU to create the MDS schema, as described in Section 2.1.2, "Obtaining a Database and RCU for Reporting Features and OWSM" and Section 2.4, "Installing the Schemas for Reporting Features and OWSM".
Install Oracle Service Bus.	Be sure to select the Typical installation type to install all Oracle Service Bus components. For more information, see Section 2.5.1, "Starting the Oracle Service Bus Installer" and Section 2.5.2, "Following the Oracle Service Bus Installation Screens and Instructions".
Create and configure WebLogic Server Domain for Oracle Service Bus.	For more information, see Chapter 3, "Configuring Oracle Service Bus".
Start the Administration Server and Managed Servers.	For more information, see Section 3.6, "Starting the Servers".
Verify your installation and configuration.	For more information, see Section 3.7, "Verifying Your Oracle Service Bus Installation and Domain Configuration".

After installation and configuration (assuming Reporting Feature and Oracle Web Services Manager policies are not used), your topology would look similar to Figure 1–2. You can use this illustration to help verify the installation of Oracle WebLogic Server and Oracle Service Bus after installation and configuration.

Figure 1–2 Sample Topology for a Development Environment Installation
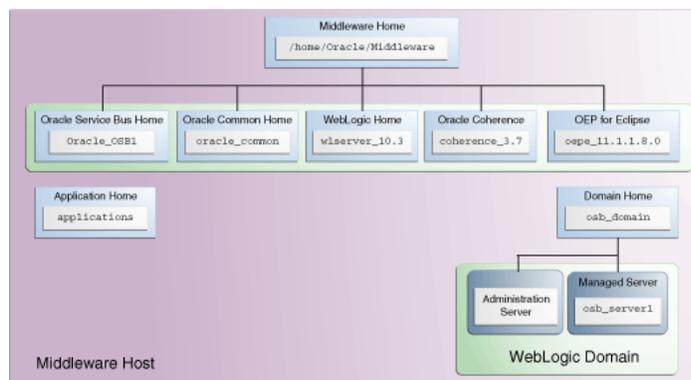
For more information about Fusion Middleware directory structures, refer to "Oracle Fusion Middleware Directory Structure" in *Oracle Fusion Middleware Installation Planning Guide*.

1.4 Installing Oracle Service Bus and Creating a Domain in a Production Environment

Figure 1–3 illustrates the process of installing Oracle Service Bus and creating a domain in a production environment.

Figure 1–3 Oracle Service Bus Install Flow for a Production Environment
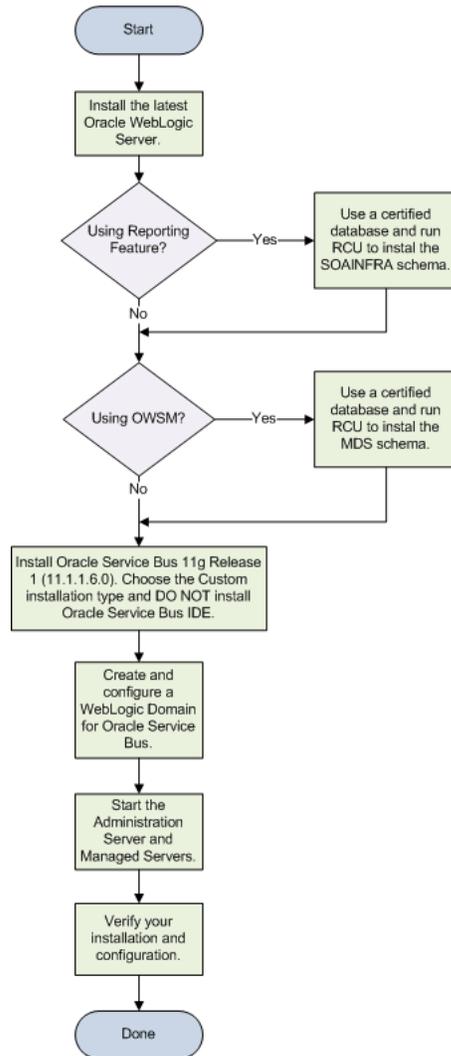
Table 1–2 provides links to documentation and additional information for each item in the flowchart.

Table 1–2 Descriptions for Oracle Service Bus Installation in a Production Environment

Task	Description
Install Oracle WebLogic Server.	Install the latest Oracle WebLogic Server. For more information, see Section 2.1, "Obtaining the Software" and Section 2.3, "Installing Oracle WebLogic Server and Creating the Middleware Home".

Table 1–2   (Cont.) Descriptions for Oracle Service Bus Installation in a Production

Task	Description
Using Reporting feature?	If you want to use the reporting feature in a development environment, you can choose one of the following:
	■ Use the Derby evaluation database, as described in Using the Derby Evaluation Database.
	■ Use another certified database and run RCU to create the SOAINFRA schema, as described in Section 2.1.2, "Obtaining a Database and RCU for Reporting Features and OWSM" and Section 2.4, "Installing the Schemas for Reporting Features and OWSM".
Using OWSM?	If you want to use OWSM, you must use a certified database and run RCU to create the MDS schema, as described in Section 2.1.2, "Obtaining a Database and RCU for Reporting Features and OWSM" and Section 2.4, "Installing the Schemas for Reporting Features and OWSM".
Install Oracle Service Bus.	Be sure to select the Custom installation type and do not select Oracle IDE.
	For more information, see Section 2.5.1, "Starting the Oracle Service Bus Installer" and Section 2.5.2, "Following the Oracle Service Bus Installation Screens and Instructions".
Run RCU to create the database schemas.	If you are going to use the Oracle Service Bus reporting features or Oracle Web Services Manager policies, run RCU to create the necessary database schemas.
Create and configure WebLogic Server Domain for Oracle Service Bus.	For more information, see Chapter 3, "Configuring Oracle Service Bus".
Start the Administration Server and Managed Servers.	For more information, see Section 3.6, "Starting the Servers".
Verify your installation and configuration.	For more information, see Section 3.7, "Verifying Your Oracle Service Bus Installation and Domain Configuration".

After installation and configuration (assuming Reporting Feature and Oracle Web Services Manager policies are not used), your topology would look similar to Figure 1–2. You can use this illustration to help verify the installation of Oracle WebLogic Server and Oracle Service Bus after installation and configuration.

Figure 1–4   Sample Topology for a Production Environment Installation
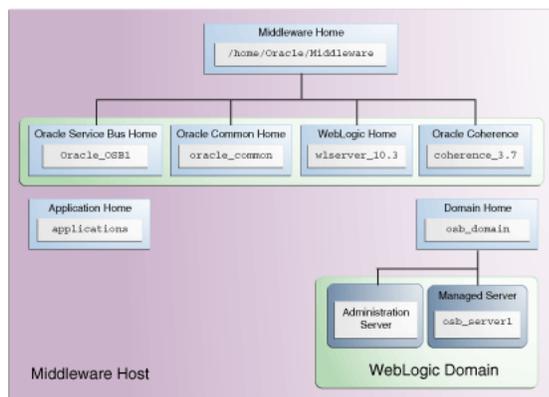
For more information about Fusion Middleware directory structures, refer to "Oracle Fusion Middleware Directory Structure" in *Oracle Fusion Middleware Installation Planning Guide*.

1.5 Installing and Configuring Oracle Service Bus in a High Availability Environment

This guide does not explain how to install and configure Oracle Service Bus in High Availability (HA) configurations. To install Oracle Service Bus in a High Availability configuration, refer to the following documents:

- "Oracle Service Bus and High Availability Concepts" in *Oracle Fusion Middleware High Availability Guide*

- "Understanding Oracle Service Bus High Availability" in *Oracle Fusion Middleware Deployment Guide for Oracle Service Bus*.

2

Installing Oracle Service Bus

This chapter explains how to install Oracle Service Bus. It includes the following topics:

- Section 2.1, "Obtaining the Software"

- Section 2.2, "Installing Oracle Enterprise Pack for Eclipse and Oracle WebLogic Server"

- Section 2.3, "Installing Oracle WebLogic Server and Creating the Middleware Home"

- Section 2.4, "Installing the Schemas for Reporting Features and OWSM"

- Section 2.5, "Installing Oracle Service Bus"

- Section 2.6, "Understanding the State of Oracle Service Bus Components After Installation"

2.1 Obtaining the Software

Depending on your specific needs, there are multiple places where you can obtain Oracle Fusion Middleware software. For details, refer to the Oracle Fusion Middleware Download, Installation, and Configuration ReadMe Files page, where you can find the ReadMe file for your specific release.

Depending on your environment and needs, the following software components may be needed:

- Obtaining OEPE and Oracle WebLogic Server

- Obtaining a Database and RCU for Reporting Features and OWSM

- Obtaining the Oracle Service Bus Installer

2.1.1 Obtaining OEPE and Oracle WebLogic Server

Installation of Oracle Service Bus requires one of the following software components:

- If you are installing Oracle Service Bus with Oracle Service Bus IDE, download the Oracle Enterprise Pack for Eclipse (OEPE) installer, which includes Oracle WebLogic Server.

  This installer can be downloaded from the Oracle Enterprise Pack for Eclipse 11*g*R1 (11.1.1.8) download page on Oracle Technology Network. Look for one of the "Full OEPE Installers" near the bottom of the page.

- If you are installing Oracle Service Bus without Oracle Service Bus IDE, download the Oracle WebLogic Server installer. This installer does not include OEPE.

This installer can be downloaded from the Oracle Fusion Middleware 11*g* Software Downloads page on Oracle Technology Network.

2.1.2 Obtaining a Database and RCU for Reporting Features and OWSM

If you want to use the Oracle Service Bus reporting features or Oracle Web Services Manager, you must also have database that is certified for use with Oracle Fusion Middleware and Repository Creation Utility (RCU), which is the tool used to create the necessary schemas in the database.

The SOA Infrastructure (SOAINFRA) schema must be installed on your database for the reporting feature, and the Metadata Services (MDS) schema must be installed on your database for Oracle Web Services Manager:

- If you do not already have a database, refer to the *System Requirements and Supported Platforms for Oracle Fusion Middleware 11gR1* document on the Oracle Fusion Middleware Supported System Configurations page to see which databases are certified for your environment. Then, download, install, and configure a database. Refer to the "RCU Requirements for Oracle Databases" section in the *Oracle Fusion Middleware System Requirements and Specifications* document for important database configuration information.

- See "Obtaining RCU" in *Oracle Fusion Middleware Repository Creation Utility User's Guide* for instructions on how to obtain RCU.

2.1.3 Obtaining the Oracle Service Bus Installer

In addition, you will also need the Oracle Service Bus installer, which can also be downloaded from the Release Downloads for Oracle Service Bus page. The Oracle Service Bus installer will be saved to your system as a .zip archive file. After you download the archive file, unpack the archive file into a directory of your choice on the machine where you will be performing the installation.

2.2 Installing Oracle Enterprise Pack for Eclipse and Oracle WebLogic Server

Installing OEPE is required if you are installing Oracle Service Bus with Oracle Service Bus IDE. You must use the OEPE installer, which includes Oracle WebLogic Server. Installing Oracle WebLogic Server creates the Middleware home and WebLogic home directories, which are required for an Oracle Service Bus installation. For more information about these directories, see "Middleware Home and WebLogic Home Directories" in *Oracle Fusion Middleware Installation Planning Guide*.

To install OEPE with Oracle WebLogic Server, see the *Oracle Enterprise Pack for Eclipse Installation Guide*.

2.3 Installing Oracle WebLogic Server and Creating the Middleware Home

Installing Oracle WebLogic Server creates the Middleware home and WebLogic home directories, which are required for an Oracle Service Bus installation. For more information about these directories, see "Middleware Home and WebLogic Home Directories" in *Oracle Fusion Middleware Installation Planning Guide*.

To install Oracle WebLogic Server, see "Running the Installation Program in Graphical Mode" in *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*.

Patching Oracle WebLogic Server 10.3.6

After installing the latest version of Oracle WebLogic Server (version 10.3.6), you must install the required patches as described on the "Known Issues for Oracle SOA Products and Oracle AIA Foundation Pack" page on Oracle Technology Network:

http://www.oracle.com/technetwork/middleware/docs/aiasoarelnotesps6-1866030.html

This must be done before you begin the Oracle Service Bus installation.

2.4 Installing the Schemas for Reporting Features and OWSM

See "Starting RCU" and "Creating Schemas" in *Oracle Fusion Middleware Repository Creation Utility User's Guide* for instructions on how to run RCU and create the necessary schemas in your database.

2.5 Installing Oracle Service Bus

This section contains the following topics:

- Section 2.5.1, "Starting the Oracle Service Bus Installer"
- Section 2.5.2, "Following the Oracle Service Bus Installation Screens and Instructions"

2.5.1 Starting the Oracle Service Bus Installer

To start the installer, go to the directory where you unpacked the Oracle Service Bus installer archive file and go to the `Disk1` directory.

On UNIX operating systems:

```
cd unpacked_archive_directory/Disk1
./runInstaller -jreLoc JRE_LOCATION
```

On Windows operating systems:

```
cd unpacked_archive_directory\Disk1
setup.exe -jreLoc JRE_LOCATION
```

The installer requires the full path to the location of a Java Runtime Environment (JRE) on your system, which must be specified using the `-jreLoc` parameter. When you installed Oracle WebLogic Server, a JRE was installed on your system in the `jdk160_version` directory inside the Middleware home. You can use this location as the *JRE_LOCATION* to start the installer.

For information about the log files created by the installer, refer to Section D.2, "Installation and Configuration Log Files" for more information about the log files and their contents.

2.5.2 Following the Oracle Service Bus Installation Screens and Instructions

Follow the instructions in Table 2–1 to install Oracle Service Bus.

If you need additional help with any of the installation screens, refer to Appendix B, "Oracle Service Bus Software Installation Screens" or click **Help** to access the online help.

Table 2–1   Installation Flow for Oracle Service Bus

Screen	When This Screen Appears	Description
Welcome	Always.	This page introduces you to the Oracle Fusion Middleware installer.
Install Software Updates	Always.	Select the method you want to use for obtaining software updates, or select **Skip Software Updates** if you do not want to get updates.
Installation Location	Always.	Specify the Oracle Middleware home and Oracle home locations.
		The Oracle Common home (`oracle_common`) directory will automatically be created inside the Middleware home; do not use `oracle_common` as the name of your Oracle home directory.
Installation Type	Always.	Select **Typical** or **Custom**.
		For more information, see Section 1.2, "Understanding the Oracle Service Bus Installation Types".
Components to Install	If you selected **Custom** on the Installation Type screen.	Select the components you want to install.
		NOTE: If you are installing on an HP-UX or AIX operating system, you must make sure that **Oracle Service Bus IDE** is not selected.
Prerequisite Checks	Always.	Verify that your system meets all necessary prerequisites.
Product Home Location	Always.	Specify the WebLogic Server home location. If you are installing Oracle Service Bus Integrated Development Environment (IDE), you are also asked to enter the path to the Oracle Enterprise Pack for Eclipse installed on your machine. By default, this directory under your Middleware home is named `oepe_11.1.1.8.0`.
Installation Summary	Always.	Review this summary and decide whether to start the installation. If you want to modify any of the configuration settings at this stage, select a topic in the left navigation page and modify your choices.
		To begin installing Oracle Service Bus, click **Install**.
Installation Progress	Always.	This screen shows the progress of the installation.
		When the progress shows 100% complete, click **Next** to continue.
Installation Completed	Always.	Click **Save** to save your configuration information to a file. This information includes port numbers, installation directories, URLs, and component names which you may need to access at a later time.
		After saving your configuration information, click **Finish** to dismiss the installer.

After the Oracle Service Bus installation is complete, you are ready to run the Configuration Wizard to configure your domain for Oracle Service Bus. Go to Chapter 3, "Configuring Oracle Service Bus" for instructions.

2.6 Understanding the State of Oracle Service Bus Components After Installation

This topic provides information about the state of Oracle Service Bus components after installation, including:

- Default SSL Configurations

- Administration Server Password

2.6.1 Default SSL Configurations

By default, none of the Oracle Service Bus 11*g* components are installed with SSL configured. You must configure SSL for the Administration Server and Managed Servers by using the Configuration Wizard.

To configure SSL for the Administration Server, run the Configuration Wizard and select **SSL enabled** on the Configure Administration Server screen, as described in *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard*.

To configure SSL for Managed Servers, run the Configuration Wizard and select **SSL enabled** on the Configure Managed Servers screen, as described in *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard*.

2.6.2 Administration Server Password

Password for the Administration Server is configured during domain creation. For security reasons, after installation, you should change the passwords of the various components so they have different values.

For more information, see "Changing the Administrative User Password" in *Oracle Fusion Middleware Administrator's Guide*.

3

Configuring Oracle Service Bus

This chapter describes how to configure Oracle Service Bus after you have installed the software. It includes the following topics:

3.1 Configuration Instructions

After the installation is complete, you must run the Oracle Fusion Middleware Configuration Wizard to create and configure a new WebLogic Server domain and choose the products that you want to configure in that domain. If you have an existing domain, you can use the Configuration Wizard to extend the existing domain to support additional products and features.

Each WebLogic Server domain contains one Administration Server and may contain other Managed Servers depending on the products you choose to configure.

See "Understanding Oracle WebLogic Server Domains" in *Oracle Fusion Middleware Understanding Domain Configuration for Oracle WebLogic Server* for more information about Oracle WebLogic Server domains.

See "Oracle Service Bus Deployment Topology" in *Oracle Fusion Middleware Deployment Guide for Oracle Service Bus* for more information about the templates you can select during the configuration process.

3.1.1 Using Default Settings for Managed Servers

During the configuration, the Oracle Fusion Middleware Configuration Wizard automatically creates Managed Servers in the domain to host the Fusion Middleware system components. Oracle recommends that you use the default configuration settings for these Managed Servers. If you modify the default configuration settings, then you will have to perform some manual configuration steps before the Fusion Middleware environment can be started.

3.1.2 Using Default Setting for Targeting Deployments and Services

On the Select Optional Configuration screen, if you select **Deployments and Services**, you will get the following two screens for additional configuration:

- Target Deployments to Clusters or Servers screen

- Target Services to Clusters or Servers screen

These screens allow you to select deployments, such as applications and libraries, and services to target them to a particular cluster or server. However, you should not change the Oracle Service Bus deployment targets unless specifically instructed in the documentation.

3.1.3 Shutting Down Running Managed Servers When Extending a Domain

If you are extending an existing WebLogic Server domain (Section 3.4, "Extending an Oracle Service Bus WebLogic Domain to Support Oracle SOA Suite" or Section 3.5, "Extending an Oracle SOA Suite WebLogic Domain to Support Oracle Service Bus"), you must shut down any Managed Servers that are currently running in the domain before you start the Configuration Wizard. If you do not, validation of your Managed Servers will fail due to port number conflicts from the managed servers that are currently running.

For more information, see "Starting and Stopping Oracle Fusion Middleware" in *Oracle Fusion Middleware Administrator's Guide*.

3.1.4 Starting the Oracle Fusion Middleware Configuration Wizard

The Configuration Wizard is located in the *OSB_ORACLE_HOME*/common/bin (on UNIX operating systems) or *OSB_ORACLE_HOME*\common\bin (on Windows operating systems) directory. Go to this directory, then run the config.sh (on UNIX operating systems) or config.cmd (on Windows operating systems) script to start the Configuration Wizard:

On UNIX operating systems:

```
./config.sh
```

On Windows operating systems:

```
config.cmd
```

To create a log file for your configuration session, see the instructions in Section D.2, "Installation and Configuration Log Files".

If you are using a 32-bit operating system, Oracle JRockit SDK is installed as part of the Oracle WebLogic installation. This is the JDK that the Configuration Wizard will use by default. If you want to invoke the Configuration Wizard with the Sun JDK, do the following prior to starting the Configuration Wizard:

1. Set the JAVA_HOME environment variable to the location of the Sun JDK. For example, you can set it to the Sun JDK that was installed with Oracle WebLogic

Server in the *MW_HOME*/jdk160_*version* (on UNIX operating systems) or *MW_HOME*\jdk160_*version* (on Windows operating systems) directory.

2. Set the JAVA_VENDOR environment variable to "Sun."

After you have started the Configuration Wizard, find the scenario that best describes your environment, and proceed to that section to configure your domain:

- Section 3.2, "Creating a WebLogic Domain with Only Oracle Service Bus"

- Section 3.3, "Creating a Single WebLogic Domain with Oracle Service Bus and Oracle SOA Suite"

- Section 3.4, "Extending an Oracle Service Bus WebLogic Domain to Support Oracle SOA Suite"

- Section 3.5, "Extending an Oracle SOA Suite WebLogic Domain to Support Oracle Service Bus"

3.2 Creating a WebLogic Domain with Only Oracle Service Bus

This section describes how to create a WebLogic Domain with only Oracle Service Bus. Performing the instructions in this section deploys the following:

- WebLogic Administration Server

- Managed Server for Oracle Service Bus

- Application deployed on the Managed Server

- Oracle Service Bus Administration Console deployed on the Oracle Service Bus Server

Begin by starting the Configuration Wizard, as described in Section 3.1.4, "Starting the Oracle Fusion Middleware Configuration Wizard".

After you have started the Configuration Wizard, follow the instructions in "Creating a WebLogic Domain" in *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard* to create a new WebLogic domain for your Oracle Service Bus components.

The following screens have special instructions for configuring Oracle Service Bus; they are described in the remainder of this section:

- Select Domain Source Screen

- Configure Managed Servers Screen

- Configure JDBC Component Schema Screen

Select Domain Source Screen

On the Select Domain Source screen, select **Generate a domain configured automatically to support the following products:**, then select one of the following options:

- **Oracle Service Bus for Developers - 11.1.1.6 [Oracle_OSB1]**

  Use this option to create a single server to function as WebLogic Administration Server and Managed Server. This deployment option is ideal for development environments.

- **Oracle Service Bus - 11.1.1.6 Oracle_OSB1**

  Use this option to install and configure any of the following:

- A domain with a single server that functions as both Administration Server and Managed Server

- A non-clustered domain with an Administration Server and a single Managed Server

- A domain with an Administration Server and a cluster of one or more Managed Servers

After selecting either option, the following components are also selected by default as dependencies:

- **Oracle JRF - 11.1.1.0 [oracle_common]**

- **WebLogic Advanced Web Services for JAX-RPC Extension - 10.3.6.0 [wlserver_ 10.3]**

In addition, after selecting either **Oracle Service Bus for Developers - 11.1.1.6 [Oracle_ OSB1]** or **Oracle Service Bus - 11.1.1.6 [Oracle_OSB1],** you can also select **Oracle Service Bus OWSM Extension - 11.1.1.6 [Oracle_OSB1]** to create a domain with Oracle Service Bus with runtime support for Oracle Web Services Manager policies. If you select this component, **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]** is also selected as a dependency.

In addition, select **Oracle Enterprise Manager - 11.1.1.0 [oracle_common]** if you want to create or edit Oracle Web Services Manager policies using Oracle Enterprise Manager Fusion Middleware Control 11g R1 (11.1.1.1.0).

Configure Managed Servers Screen

The default Managed Server created for Oracle Service Bus is named osb_server1. This Managed Server should never be deleted; if you want to use a Managed Server with a different name, you should use the Configuration Wizard to do one of the following:

- Rename osb_server1 and give it a different name.

- Create a new Managed Server with the desired name.

Configure JDBC Component Schema Screen

If you choose to use the Derby evaluation database, make sure the following are selected on this screen:

- **Driver** - Derby's Driver (Type 4) Versions:A

- **Vendor** - Derby

- **DBMS/Service** - osbexamples

- **Host Name** - localhost

You can ignore the results of connection testing if you are using the evaluation database.

3.3 Creating a Single WebLogic Domain with Oracle Service Bus and Oracle SOA Suite

This section describes how to create a single WebLogic Domain with both Oracle Service Bus and Oracle SOA Suite components. Performing the instructions in this section deploys the following:

- WebLogic Administration Server

- A single Managed Server for Oracle Service Bus and Oracle SOA Suite, or one Managed Server for Oracle Service Bus and one Managed Server for Oracle SOA Suite

- Applications deployed on the Managed Server

- Oracle SOA Suite Console and Oracle Service Bus Administration Console deployed on the Administration Server

3.3.1 Installing the Latest Version of Oracle SOA Suite

If you do not already have Oracle SOA Suite installed on your system, follow the instructions in *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite and Oracle Business Process Management Suite* to install the latest version of Oracle SOA Suite.

3.3.2 Instructions for Creating the Domain

After you have Oracle Service Bus and Oracle SOA Suite installed on your system, begin domain creation by starting the Configuration Wizard, as described in Section 3.1.4, "Starting the Oracle Fusion Middleware Configuration Wizard".

After you have started the Configuration Wizard, follow the instructions in "Creating a WebLogic Domain" in *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard* to create a new WebLogic domain for your Oracle Service Bus and Oracle SOA Suite components.

The following screens have special instructions for this configuration; they are described in the remainder of this section:

- Select Domain Source Screen

- Configure Managed Servers Screen

Select Domain Source Screen

On the Select Domain Source screen, select **Generate a domain configured automatically to support the following products:** and then select the following:

- **Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]**

  Both **Oracle JRF - 11.1.1.0 [oracle_common]** and **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]** are automatically selected as dependencies.

- **Oracle Service Bus - 11.1.1.6 [Oracle_OSB1]**

  WebLogic Advanced Web Services for JAX-RPC Extension - 10.3.6.0 [wlserver_ 10.3] is also automatically selected as a dependency.

Configure Managed Servers Screen

If you want to configure a single Managed Server for Oracle Service Bus and Oracle SOA Suite, do the following:

On the Configure Managed Servers screen, delete `soa_server1` by selecting `soa_ server1` and clicking **Delete**.

> **Note:** This optional step is required only if you want to have Oracle SOA Suite and Oracle Service Bus running in the same virtual machine. If you skip this step, you will configure a Managed Server each for Oracle SOA Suite and Oracle Service Bus.

3.4 Extending an Oracle Service Bus WebLogic Domain to Support Oracle SOA Suite

This section describes how to extend an existing Oracle Service Bus domain to support Oracle SOA Suite. Performing the instructions in this section deploys the following:

- Oracle SOA Suite and Oracle Service Bus on the same Managed Server, or one Managed Server each for Oracle Service Bus and Oracle SOA Suite

- Applications deployed on the Managed Server

- Oracle Service Bus Administration Console deployed on the Administration Server

3.4.1 Installing the Latest Version of Oracle SOA Suite

If you do not already have Oracle SOA Suite installed on your system, follow the instructions in *Oracle Fusion Middleware Installation Guide for Oracle SOA Suite and Oracle Business Process Management Suite* to install the latest version of Oracle SOA Suite.

3.4.2 Instructions for Extending the Domain

Begin by starting the Configuration Wizard, as described in Section 3.1.4, "Starting the Oracle Fusion Middleware Configuration Wizard".

After you have started the Configuration Wizard, follow the instructions in "Extending WebLogic Domains" in *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard* to extend your existing Oracle Service Bus domain for Oracle SOA Suite.

The following screens have special instructions for this configuration; they are described in the remainder of this section:

- Select Extension Source Screen

- Configure Managed Servers Screen

Select Extension Source Screen

On the Select Extension Source screen, select the **Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]** domain configuration option. The **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]** option is also automatically selected.

Configure Managed Servers Screen

If you want to configure a single Managed Server for Oracle Service Bus and Oracle SOA Suite, do the following:

On the Configure Managed Servers screen, delete the default osb_server1 by selecting osb_server1 and clicking **Delete**. Then modify the name of soa_server1 as osb_server1 by manually editing the name in the **Name** column. Alternatively, you may delete soa_server1 and rename osb_server1 to soa_server1.

> **Note:**   This optional step is required only if you want to have Oracle SOA Suite and Oracle Service Bus running in the same virtual machine. If you skip this step, you will configure a Managed Server each for Oracle SOA Suite and Oracle Service Bus.

3.5 Extending an Oracle SOA Suite WebLogic Domain to Support Oracle Service Bus

This section describes how to extend an existing Oracle SOA Suite domain to support Oracle Service Bus. Performing the instructions in this section deploys the following:

- Oracle Service Bus and Oracle SOA Suite on the same Managed Server, or one Managed Server each for Oracle Service Bus and Oracle SOA Suite

- Applications deployed on the Managed Server

- Oracle Service Bus Administration Console deployed on the Administration Server

3.5.1 Selecting the "Refresh Replica at Startup" Option

This scenario requires that the following procedure be performed prior to configuring the domain and components:

1. Go to the WebLogic Server Administration console.

2. Select Domain (top of the tree in the navigation panel on the left side).

3. Select the **Security** tab.

4. Select the **Embedded** tab.

5. Select the **Refresh Replica At Startup** option.

6. Save and apply your changes.

3.5.2 Configuring Your Domain

Begin by starting the Configuration Wizard, as described in Section 3.1.4, "Starting the Oracle Fusion Middleware Configuration Wizard".

After you have started the Configuration Wizard, follow the instructions in "Extending WebLogic Domains" in *Oracle Fusion Middleware Creating Domains Using the Configuration Wizard* to extend your Oracle SOA Suite domain for Oracle Service Bus.

The following screens have special instructions for this configuration; they are described in the remainder of this section:

- Select Extension Source Screen

- Configure Managed Servers Screen

Select Extension Source Screen

On the Select Extension Source screen, select the **Oracle Service Bus - 11.1.1.6 [Oracle_OSB1]** domain configuration option. The **WebLogic Advanced Web Services for JAX-RPC Extension - 10.3.6.0 [wlserver_10.3]** option is also automatically selected.

Configure Managed Servers Screen

If you want to configure a single Managed Server for Oracle Service Bus and Oracle SOA Suite, do the following:

On the Configure Managed Servers screen, delete the default `osb_server1` by selecting `osb_server1` and clicking **Delete**. Then modify the name of `soa_server1` as `osb_server1` by manually editing the name in the **Name** column. Alternatively, you may delete `soa_server1` and rename `osb_server1` to `soa_server1`.

> **Note:** This optional step is required only if you want to have Oracle SOA Suite and Oracle Service Bus running in the same virtual machine. If you skip this step, you will configure a Managed Server each for Oracle SOA Suite and Oracle Service Bus.

3.6 Starting the Servers

To get your deployments up and running, you must start the Administration Server and various Managed Servers:

- Section 3.6.1, "Starting the Administration Server"
- Section 3.6.2, "Starting the Administration Server as a Windows Service"
- Section 3.6.3, "Starting the Managed Servers"
- Section 3.6.4, "Starting the Servers Using Non-Default Port Numbers and Remote Hosts"
- Section 3.6.5, "Verifying That the Servers Have Started"

3.6.1 Starting the Administration Server

To start the Administration Server, run the `startWebLogic.sh` (on UNIX operating systems) or `startWebLogic.cmd` (on Windows operating systems) script in the directory where you created your new domain.

On UNIX systems:

DOMAIN_HOME/startWebLogic.sh

On Windows systems:

DOMAIN_HOME\startWebLogic.cmd

The *DOMAIN_HOME* consists of your domain location and domain name, which was specified on the Specify Domain Name and Location Screen in the Configuration Wizard.

3.6.2 Starting the Administration Server as a Windows Service

On Microsoft Windows systems, you can also start the Administration Server as a Windows service. For instructions, see "Starting the Administration Server as a Windows Service" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Service Bus*.

3.6.3 Starting the Managed Servers

To start the Managed Servers, run the *DOMAIN_HOME*/bin/startManagedWebLogic.sh (on UNIX operating systems) or *DOMAIN_HOME*\bin\startManagedWebLogic.cmd (on Windows operating systems) script. These Managed Servers must be started from the command line.

This command also requires that you specify a server name. The servers that need to be started (depending on your configuration) are:

- `soa_server1` (Oracle SOA Server)
- `osb_server1` (Oracle Service Bus Server)

For example, to start Oracle SOA Server on a UNIX system:

```
DOMAIN_HOME/bin/startManagedWebLogic.sh soa_server1
```

On Windows systems:

```
DOMAIN_HOME\bin\startManagedWebLogic.cmd soa_server1
```

Before the managed server is started, you will be prompted for the WebLogic Server user name and password. These were provided on the Configure Administrator Username and Password Screen in the Configuration Wizard.

If you do not know the names of the Managed Servers that need to be started, you can view the contents of the following file on UNIX systems:

```
DOMAIN_HOME/startManagedWebLogic_readme.txt
```

On Windows systems:

```
DOMAIN_HOME\startManagedWebLogic_readme.txt
```

Or, you can access the Administration Server console at the following URL:

```
http://host:admin_server_port/console
```

Supply the user name and password that you specified on the Configure Administrator Username and Password Screen of the Configuration Wizard. Then, navigate to **Environment > Servers** to see the names of your managed servers.

3.6.4 Starting the Servers Using Non-Default Port Numbers and Remote Hosts

If your Administration Server is using a non-default port, or resides on a different host than your managed servers (in a distributed environment), you must also specify the URL to access your Administration Server.

On UNIX systems:

```
DOMAIN_HOME/bin/startManagedWebLogic.sh soa_server1 http://administration_server_
host:administration_server_port
```

On Windows systems:

```
DOMAIN_HOME\bin\startManagedWebLogic.cmd soa_server1 http://administration_server_
host:administration_server_port
```

Instead of being prompted for the Administration Server user name and password, you can also specify them directly from the command lime.

On UNIX systems:

```
DOMAIN_HOME/bin/startManagedWebLogic.sh soa_server1 http://administration_server_
host:administration_server_port -Dweblogic.management.username=user_name
-Dweblogic.management.password=password
```

On Windows systems:

```
DOMAIN_HOME\bin\startManagedWebLogic.cmd soa_server1 http://administration_server_
host:administration_server_port -Dweblogic.management.username=user_name
-Dweblogic.management.password=password
```

3.6.5 Verifying That the Servers Have Started

When the servers are started, at the end of the console, you will see lines similar to the following:

```
<Apr 16, 2009 5:10:59 PM PDT> <Notice> <WebLogicServer> <BEA-000332> <Started
WebLogic Managed Server "osb_server1" for domain "base_domain" running in
Development Mode>
<Apr 16, 2009 5:10:59 PM PDT> <Notice> <WebLogicServer> <BEA-000365> <Server state
changed to RUNNING>
<Apr 16, 2009 5:10:59 PM PDT> <Notice> <WebLogicServer> <BEA-000360> <Server
started in RUNNING mode>
```

3.7 Verifying Your Oracle Service Bus Installation and Domain Configuration

After completing the installation and configuration of Oracle Service Bus, you can verify the installation as follows:

- Verify whether you can access the Oracle Service Bus Administration Console.

    The URL for the console is:

    ```
    http://hostname:osb_port_number/sbconsole
    ```

    If the Oracle Service Bus Console starts working, your installation of Oracle Service Bus was successful.

- If you installed Oracle Enterprise Pack for Eclipse with Oracle WebLogic Server, you can try to start the Oracle Service Bus Integrated Development Environment (IDE) to verify the installation.

    To launch the Oracle Service Bus IDE:

    - On Windows operating systems, go to the **Start** menu and select **Programs > Oracle Service Bus 11g - Home 1 > Oracle Enterprise Pack for Eclipse**.

    - On UNIX operating systems, go to the *MW_HOME*/oepe_11gR1PS3 directory and run the following command:

        ```
        ./eclipse
        ```

- Verify your Oracle Service Bus directory structure.

    Use Figure 1–2, "Sample Topology for a Development Environment Installation" and Figure 1–4, "Sample Topology for a Production Environment Installation" as guides.

3.8 Start Menu Commands on Windows Operating Systems

If you are installing Oracle WebLogic Server and Oracle Service Bus on the Windows operating system, a set of commands are added to the Start menu. You can use them to launch product components and tools, such as Configuration Wizard. You can also use them to perform some basic administrative tasks, such as starting or stopping servers. The Start menu commands are shown as follows:

Oracle WebLogic Server
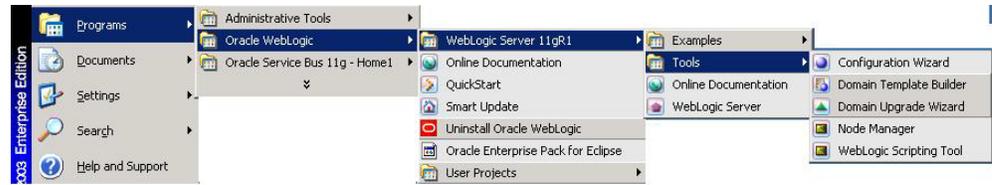
Oracle Service Bus

3.9 Getting Started with Oracle Service Bus After Installation and Configuration

After successful installing and configuration of Oracle Service Bus, refer to the "Introduction" chapter in the *Oracle Fusion Middleware Deployment Guide for Oracle Service Bus*.

4

Silent Installation and Deinstallation

This appendix contains information you need to know to perform a silent installation or deinstallation of Oracle Service Bus.

- Section 4.1, "Understanding Silent Installation and Deinstallation"
- Section 4.2, "Using the Oracle Service Bus Response Files"

4.1 Understanding Silent Installation and Deinstallation

You can use the Oracle Universal Installer's silent installation mode to bypass the graphical user interface and supply the necessary information in a response file. This method is most useful when installing the same product multiple times on multiple hosts. By using a response file, you can automate the installation of a product for which you know the installation parameters.

For information about silent installation and deinstallation and response files, refer to "Silent Installation and Deinstallation" in *Oracle Fusion Middleware Installation Planning Guide*.

4.2 Using the Oracle Service Bus Response Files

Before doing a silent installation or deinstallation, you must provide information specific to your installation or deinstallation in a response file. The installer will fail if you attempt an installation using a response file that is not configured correctly. Response files are text files that you can create or edit in a text editor.

Oracle recommends creating your response file by first running the install GUI, then clicking **Save** on the Installation Summary screen. You will be prompted for a name and location where you want to create this response file. After it is created, you can use it exactly as-is to replicate the installation on other systems, or modify it as needed.

To create a response file for silent deinstallation, repeat the same procedure by clicking **Save** on the Deinstall Oracle Home screen.

Response file templates for Oracle Service Bus are provided in the `Disk1/stage/Response` (on UNIX operating systems) or `Disk1\stage\Response` (on Windows operating systems) directory where you unpacked the archive file (Section 2.1, "Obtaining the Software"):

- For more information about the template response files that can be used for silent installation, see Section 4.2.1, "Using the Installation Response Files for Oracle Service Bus".
- For more information about the template response files that can be used for silent deinstallation, see Section 4.2.2, "Using the Deinstallation Response File for Oracle

Service Bus".

4.2.1 Using the Installation Response Files for Oracle Service Bus

Table 4–1 lists the installation response files provided for Oracle Service Bus:

Table 4–1   Oracle Service Bus Installation Response File Templates

Template	Description
custom_installtype.rsp	This is the template response file that should be used if you want to customize the products installed on your system. For example, if you want to perform a silent installation and exclude OEPE (thereby not installing Oracle Service Bus IDE) then you would use this template.
	The equivalent using the GUI would be to run the installer and select **Custom** on the Installation Type screen. In the response file, you must specify which products you want to install.
	See Section 4.2.1.1, "Using the custom_installtype.rsp Response File Template" for more information.
typical_installtype.rsp	This is the template response file that should be used if you want to install all Oracle Service Bus products on your system. You will not have the option to exclude any products from being installed.
	The equivalent using the GUI would be to run the installer and select **Typical** on the Installation Type screen. All Oracle Service Bus products will be installed.
	See Section 4.2.1.2, "Using the typical_installtype.rsp Response File Template" for more information.

In addition to these pre-existing response files, you can create your own response file by running the deinstaller GUI, then clicking **Save** on the Installation Summary screen. You will be prompted for a name and location where you want to create this response file. After it is created, you can use it exactly as-is to replicate the installation on other systems, or modify it as needed.

4.2.1.1 Using the custom_installtype.rsp Response File Template

Table 4–2 describes the parameters found in the custom_installtype.rsp response file template. The parameters are listed in the order in which they appear in the response file; note that they do not necessarily follow the order of the installation screens as seen in graphical mode.

Table 4–2   Parameters in the custom_installtype.rsp Response File

Corresponding SCreen	Parameter	Description
Install Software Updates	SPECIFY_DOWNLOAD_ LOCATION SOFTWARE_UPDATES_ DOWNLOAD_LOCATION	Set the SPECIFY_DOWNLOAD_LOCATION parameter to true if you want to specify the location where software updates can be downloaded. Then, specify the directory on your local system that contains the updates using the SOFTWARE_UPDATES_ DOWNLOAD_LOCATION parameter.
	SKIP_SOFTWARE_UPDATES	Set this parameter to true if you do not want the installer to check for software updates.
Installation Location	ORACLE_HOME	Specify the full path to the location of your Oracle home directory.
	MIDDLEWARE_HOME	Specify the full path to the location of your Middleware home directory.
Installation Type	TYPICAL TYPE CUSTOM TYPE	Set CUSTOM TYPE=true and TYPICAL TYPE=false to perform a silent custom installation.
Components to Install	Oracle Service Bus Examples Oracle Service Bus IDE	Set Oracle Service Bus Examples=true if you want to install the Oracle Service Bus examples. If not, set this parameter to false. Set Oracle Service Bus IDE=true if you want to install the Oracle Service Bus IDE. If not, set this parameter to false.
Product Home Location	WL_HOME	Specify the full path to your WebLogic Server home directory. The default is the wlserver_10.3 directory inside the Middleware home.
	OEPE_HOME	If you are installing Oracle Service Bus IDE, you must specify the full path to the directory where OEPE is installed. By default, this directory under your Middleware home is named oepe_11.1.1.8.0

4.2.1.2 Using the typical_installtype.rsp Response File Template

Table 4–3 describes the parameters found in the typical_installtype.rsp response file template. The parameters are listed in the order in which they appear in the response file; note that they do not necessarily follow the order of the installation screens as seen in graphical mode.

Table 4–3   Parameters in the typical_installtype.rsp Response File

Corresponding SCreen	Parameter	Description
Install Software Updates	SPECIFY_DOWNLOAD_ LOCATION SOFTWARE_UPDATES_ DOWNLOAD_LOCATION	Set the SPECIFY_DOWNLOAD_LOCATION parameter to true if you want to specify the location where software updates can be downloaded. Then, specify the directory on your local system that contains the updates using the SOFTWARE_UPDATES_ DOWNLOAD_LOCATION parameter.
	SKIP_SOFTWARE_UPDATES	Set this parameter to true if you do not want the installer to check for software updates.
Installation Location	ORACLE_HOME	Specify the full path to the location of your Oracle home directory.
	MIDDLEWARE_HOME	Specify the full path to the location of your Middleware home directory.

Table 4–3   (Cont.) Parameters in the typical_installtype.rsp Response File

Corresponding SCreen	Parameter	Description
Installation Type	TYPICAL TYPE CUSTOM TYPE	Set CUSTOM TYPE=false and TYPICAL TYPE=true to perform a silent typical installation.
Product Home Location	WL_HOME	Specify the full path to your WebLogic Server home directory. The default is the wlserver_10.3 directory inside the Middleware home.
	OEPE_HOME	Specify the full path to the directory where OEPE is installed. By default, this directory under your Middleware home is named oepe_11.1.1.8.0

4.2.2 Using the Deinstallation Response File for Oracle Service Bus

The deinstall_oh.rsp response file contains only a single parameter: DEINSTALL_IN_ASINSTANCE_MODE=false. This causes the deinstaller to not look for any Oracle instances to remove; instead, the deinstaller will remove the Oracle home from where it is started.

A

Deinstalling and Reinstalling Oracle Service Bus

This appendix provides information about deinstalling and reinstalling Oracle Service Bus on your system.

Always use the instructions provided in this appendix for removing the software. If you try to remove the software manually, you may experience problems when you try to reinstall the software. Following the procedures in this appendix ensures that the software is properly removed.

The following topics are covered:

- Deinstallation Instructions
- Reinstalling Oracle Service Bus

A.1 Deinstallation Instructions

The deinstaller attempts to remove the Oracle home directory from which it was started. Before you choose to remove your Oracle Service Bus Oracle home directory, make sure that it is not in use by an existing domain and that you stop all running processes that use this Oracle home.

Deinstalling Oracle Service Bus will not remove any WebLogic domains that you have created—it only removes the software in the Oracle Service Bus Oracle home directory.

Properly removing Oracle Service Bus from your system involves the following tasks:

- Stopping Oracle Fusion Middleware
- Removing Database Schemas
- Removing Oracle Service Bus
- Removing Oracle WebLogic Server
- Removing the Program Groups (Windows Only)
- Rebooting Your System (Windows Only)

A.1.1 Stopping Oracle Fusion Middleware

Before deinstalling Oracle Fusion Middleware software components, you should stop all servers and processes.

For instructions, refer to "Starting and Stopping Oracle Fusion Middleware" in *Oracle Fusion Middleware Administrator's Guide*.

To stop Node Manager, see the instructions in "Stopping Node Manager" in *Oracle Fusion Middleware Node Manager Administrator's Guide for Oracle WebLogic Server*.

A.1.2 Removing Database Schemas

If you are using the Reporting feature or Oracle Web Services Manager policies and you have installed database schemas, run Repository Creation Utility (RCU) to drop the schemas from your database.

For instructions, refer to "Dropping Schemas" in *Oracle Fusion Middleware Repository Creation Utility User's Guide*.

A.1.3 Removing Oracle Service Bus

Deinstalling Oracle Service Bus involves removing the Oracle Service Bus Oracle home and also the Oracle Common home directories.

The deinstaller will attempt to remove the Oracle home from which it was started. This procedure will not remove any WebLogic domains that you have created - it only removes the software in the Oracle home.

Before you choose to remove your Oracle Service Bus Oracle home, make sure that it is not in use by an existing domain, and also make sure you stop all running processes that use this Oracle home. After you remove the software, you will no longer be able to use your WebLogic domain.

A.1.3.1 Removing the Oracle Service Bus Oracle Home

To start the deinstaller, navigate to the *OSB_ORACLE_HOME*/oui/bin (on UNIX operating systems) or *OSB_ORACLE_HOME*\oui\bin (on Windows operating systems) directory and start the deinstaller.

On UNIX operating systems:

```
./runInstaller.sh -deinstall
```

On Windows operating systems:

```
setup.exe -deinstall
```

On Windows operating systems, you can also start the deinstaller from the Start menu by selecting **Programs > Oracle Service Bus 11g - Home1 > Uninstall**.

Follow the instructions in Table A–1 to deinstall your software.

If you need additional help with any of the deinstallation screens, refer to Appendix C, "Oracle Service Bus Deinstallation Screens" or click **Help** to access the online help.

Table A–1   Deinstallation Flow

Screen	Description and Action Required
Welcome	The installer displays this screen when you are about to deinstall one or more Oracle Fusion Middleware software components.

Table A–1   (Cont.) Deinstallation Flow

Screen	Description and Action Required
Deinstall Oracle Home	Verify the Oracle home you are about to deinstall.
	Click **Deinstall** to continue.
	On the Warning screen, select whether or not you want the deinstaller to remove the Oracle home directory in addition to removing the software.
	Click **Yes** to have the deinstaller remove the software and Oracle home, **No** to remove only the software, or **Cancel** to return to the previous screen.
	If you select **No**, go to Section A.1.3.3, "Manually Removing Your Oracle Home Directories" for instructions on how to manually remove your Oracle home directory.
Deinstallation Progress	This screen shows the progress and status of the deinstallation.
Deinstallation Completed	This screen summarizes the deinstallation that was just completed.
	Click **Finish** to dismiss the screen.

A.1.3.2 Removing the Oracle Common Home

This section describes how to remove the oracle_common directory. This directory contains its own deinstaller in oui/bin (on UNIX operating systems) or oui\bin (on Windows operating systems), just like any other Oracle home directory.

To start the deinstaller, navigate to the *MW_HOME*/oracle_common/oui/bin (on UNIX operating systems) or *MW_HOME*\oracle_common\oui\bin (on Windows operating systems) directory and start the deinstaller.

On UNIX operating systems:

```
./runInstaller -deinstall -jreLoc JRE_LOCATION
```

On Windows operating systems:

```
setup.exe -deinstall -jreLoc JRE_LOCATION
```

> **Note:**   Specify the absolute path to your *JRE_LOCATION*; relative paths are not supported.

After the deinstaller is started, follow the instructions in Table A–1 to remove the Oracle Common home directory.

A.1.3.3 Manually Removing Your Oracle Home Directories

If you selected **No** on the warning screen during deinstallation, you must manually remove your Oracle home directories and all sub-directories. For example, if your Oracle Service Bus Oracle home directory was /home/Oracle/Middleware/Oracle_OSB1 on a UNIX operating system:

```
> cd /home/Oracle/Middleware
> rm -rf Oracle_OSB1
```

On a Windows operating system, if your Oracle Service Bus Oracle home directory was C:\Oracle\Middleware\Oracle_OSB1, use a file manager window and navigate to

the `C:\Oracle\Middleware` directory, then right-click on the `Oracle_OSB1` folder and select **Delete**.

The same procedure can be used to manually remove the Oracle Common home (`oracle_common`) directory.

A.1.4 Removing Oracle WebLogic Server

Instructions for removing Oracle WebLogic Server are provided in "Uninstalling the Software" in *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server*.

After the software is removed, you must manually remove the Middleware home directory and all sub-directories. For example, if your Middleware home directory was `/home/Oracle/Middleware` on a UNIX operating system:

```
> cd /home/Oracle
> rm -rf Middleware
```

On a Windows operating system, if your Middleware home directory was `C:\Oracle\Middleware`, use a file manager window and navigate to the `C:\Oracle` directory, then right-click on the `Middleware` folder and select **Delete**.

A.1.5 Removing the Program Groups (Windows Only)

On Windows systems, you must also manually remove the program groups from the `Start Menu\Programs` folder. As an example (the folder names and program group names on your system may be different), you might remove the following from `C:\Documents and Settings\All Users\Start Menu\Programs`:

- Oracle Fusion Middleware 11.1.1.6.0
- Oracle Service Bus 11g - Home1
- Oracle WebLogic

A.1.6 Rebooting Your System (Windows Only)

On Windows operating systems, you should reboot your computer after you have finished removing all your programs to ensure proper cleanup.

A.2 Reinstalling Oracle Service Bus

The installer does not allow reinstallation of Oracle Service Bus in a directory that already contains an Oracle product. To reinstall Oracle Service Bus in the same directory as before, you must follow the instructions in this chapter to deinstall the software, then follow the instructions in Chapter 2, "Installing Oracle Service Bus" to reinstall the software.

B

Oracle Service Bus Software Installation Screens

This appendix contains screenshots and descriptions for screens in the Oracle Service Bus installer.

It contains the following topics:

- Welcome
- Install Software Updates
- Installation Location
- Installation Type
- Components to Install
- Prerequisite Checks
- Product Home Location
- Installation Summary
- Installation Progress
- Installation Completed

B.1 Welcome
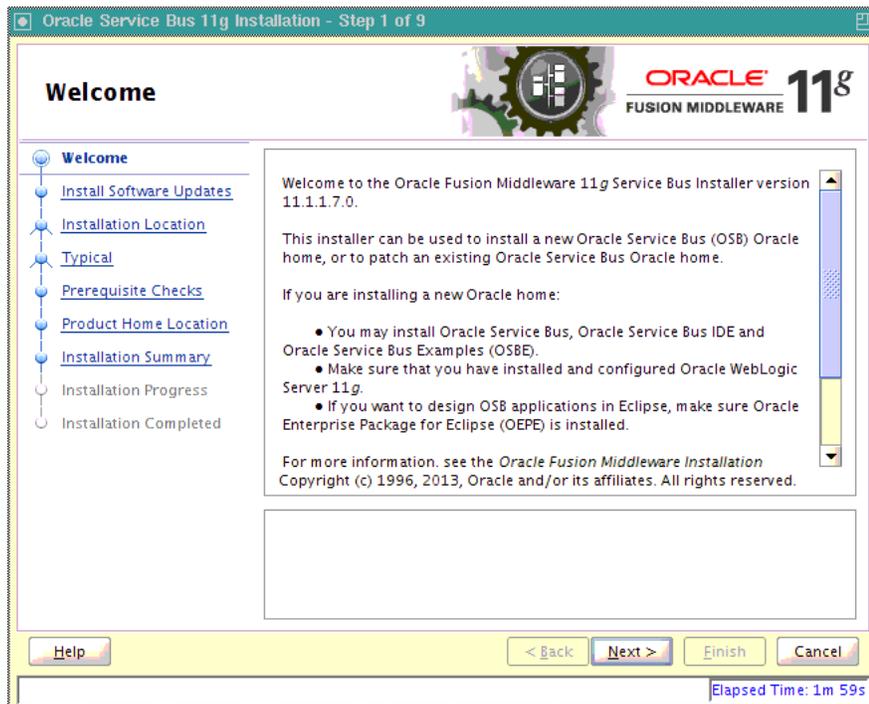
This page introduces you to the Oracle Fusion Middleware installer and provides two important pieces of information:

- A navigation pane on the left that summarizes the tasks the installer will help you complete. Each item in the navigation pane represents a specific installer screen that will prompt you for information required to install the software.

- Information about any prerequisites you might need to perform before continuing with the installation.

Review the information on this screen carefully to be sure you have performed all the necessary prerequisites.

If you are not sure about any of the prerequisite tasks, refer to the *Oracle Fusion Middleware Installation Planning Guide*, as well as the installation guide for the specific Oracle Fusion Middleware software you are about to install.

B.2 Install Software Updates

Use this screen to quickly and easily search for the latest software updates, including important security updates, via your My Oracle Support account.

The following table describes the fields on this screen.

Element	Description
Skip Software Updates	Select this option to skip this screen. The installer will not check for updates that might be applicable to the current product installation.
Search My Oracle Support for Updates	If you have a My Oracle Support account, then select this option to have the installer automatically search My Oracle Support for software updates that apply to the software products are about to install.
	Enter your My Oracle Support account name and password, and then click **Search for Updates**.
	The installer automatically downloads applicable software updates from My Oracle Support.
	Before you search for update, you can test your login credentials and the connection to My Oracle Support by clicking **Test Connection**. Click **Proxy Settings** to configure a proxy server if one is required.
Search Local Directory for Updates	Select this option if you already downloaded the latest software updates and you want the installer to search a local directory for updates applicable to the products you are about to install.
	When you select this option, the installer displays an additional field and **Browse** button that you can use to identify the local directory where your updates are located.

B.3 Installation Location
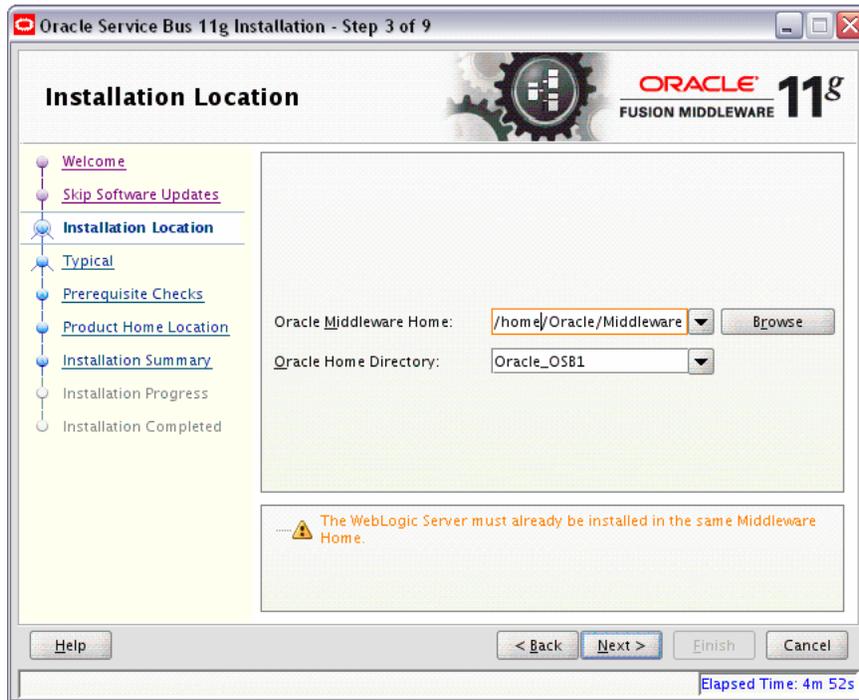
Use this screen to identify where you want to install your Oracle Fusion Middleware software.

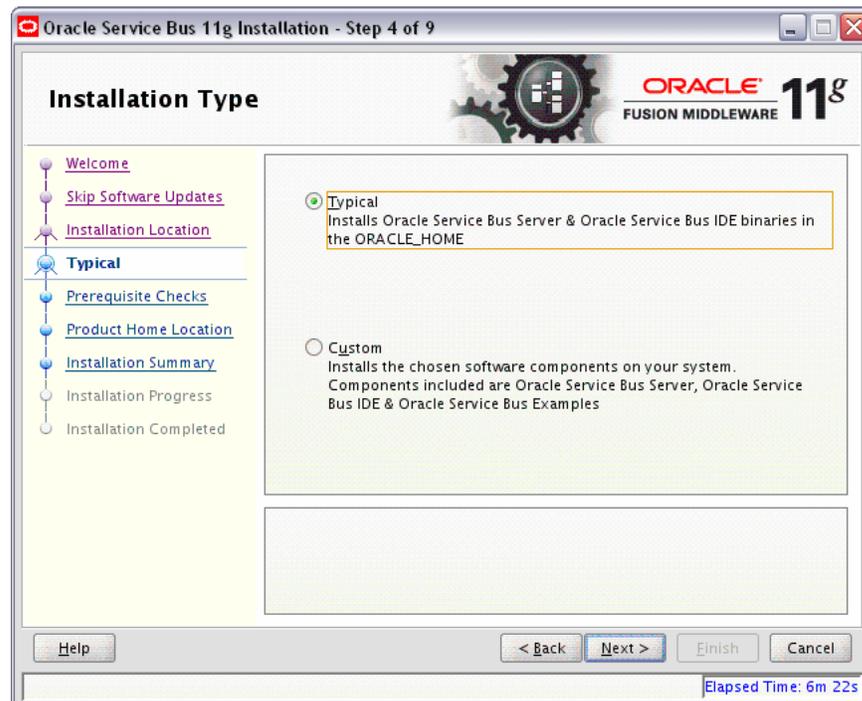The following table describes the fields that appear on this page.

Field	Description
Oracle Middleware Home	Use this field to specify the location of your Oracle Middleware home directory:
	■ **If you are using Oracle WebLogic Server as your application server:**
	In the Oracle Middleware Home field, specify the absolute path to your existing Oracle Middleware home directory; this is the directory that was created when you installed Oracle WebLogic Server. If you do not know the full path to your Middleware home, you can click **Browse** to select an existing directory in your system.
	■ **If you are using IBM WebSphere as your application server:**
	In the Oracle Middleware Home field, specify the absolute path to the directory you want to use as the Middleware home. This directory has no relation to the location of your WebSphere installation. If you specify a directory location that does not already exist, the installer will create the directory for you.

Field	Description
Oracle Home Directory	Use this field to specify the directory inside the Middleware home where you want to install your products.
	If you specify a directory that already exists, it must be either:
	■ An empty directory inside the Middleware home (for example, you have created an empty directory inside the Middleware home in advance of this installation and should specify this directory here).
	■ An existing Oracle home directory (for example, you are reinstalling Oracle Service Bus to an existing Oracle home because of an incomplete previous installation).
	If you specify a new directory, it will be created inside the Middleware home.

Refer to "Oracle Fusion Middleware Directory Structure and Concepts" in *Oracle Fusion Middleware Installation Planning Guide* for more information about these directories.

If you are performing an installation on a Windows operating system, be sure that your directory paths are valid and do not contain double backslashes (\\).

B.4 Installation Type

Use this screen to select the type of installation you want to perform.

The following table describes the options:

| Installation Type	Description
Typical	This installation type installs Oracle Service Bus and Oracle Service Bus binaries in the Oracle home.
Custom	This installation type allows you to choose which Oracle Service Bus component you want to install on your system. The components to select from include the Oracle Service Bus server, Oracle Service Bus IDE, and Oracle Service Bus examples.

B.5 Components to Install

Use this screen to select the components you want to install. Note that this screen is displayed only when you choose the **Custom** type of installation on the Installation Type screen.

The following components can be selected:

Element	Description
Oracle Service Bus	This option installs the base Oracle Service Bus features. Note that this is a required component and you will not have the option to de-select this component.
Oracle Service Bus IDE	The integrated design environment for Oracle Service Bus which provides comprehensive facilities to computer programmers for software development.
	NOTE: If you are installing on an HP-UX or AIX operating system, you must make sure that this component is not selected.

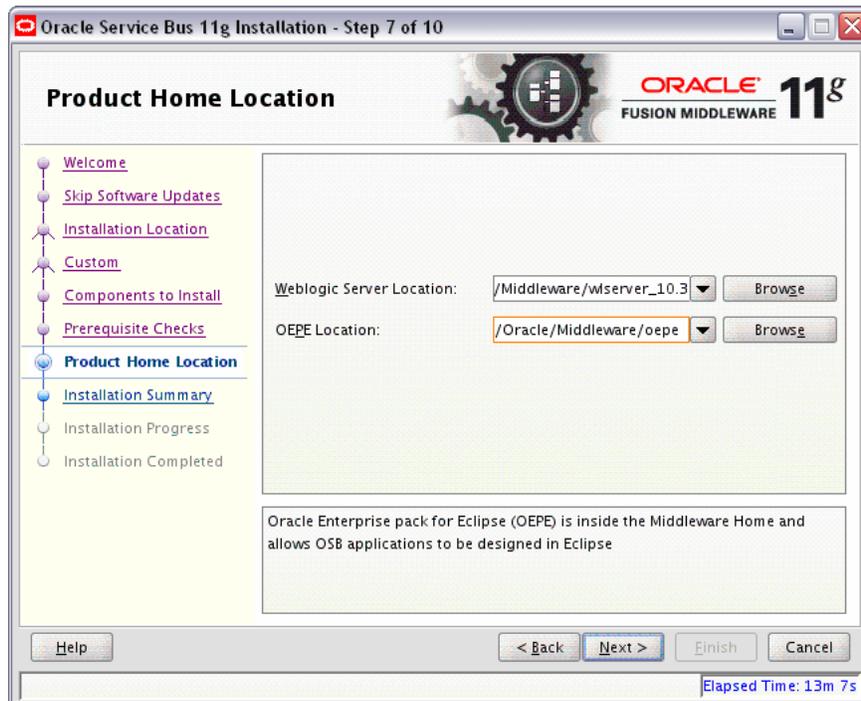| Element	Description
Oracle Service Bus Examples	This option provides a quick and easy way to experience the run-time capability of using Oracle Service Bus proxy services in your design environment.
	The examples are user-driven, pre-configured scenarios that use Oracle Service Bus to communicate with business services. The examples are based on typical business scenarios that benefit from using the proxy services to communicate between clients and business processes.
	You can run the examples to see how Oracle Service Bus operates in the run-time environment, or you can build the examples in the development environment to get more in-depth knowledge of how to configure the proxy service.

B.6 Prerequisite Checks
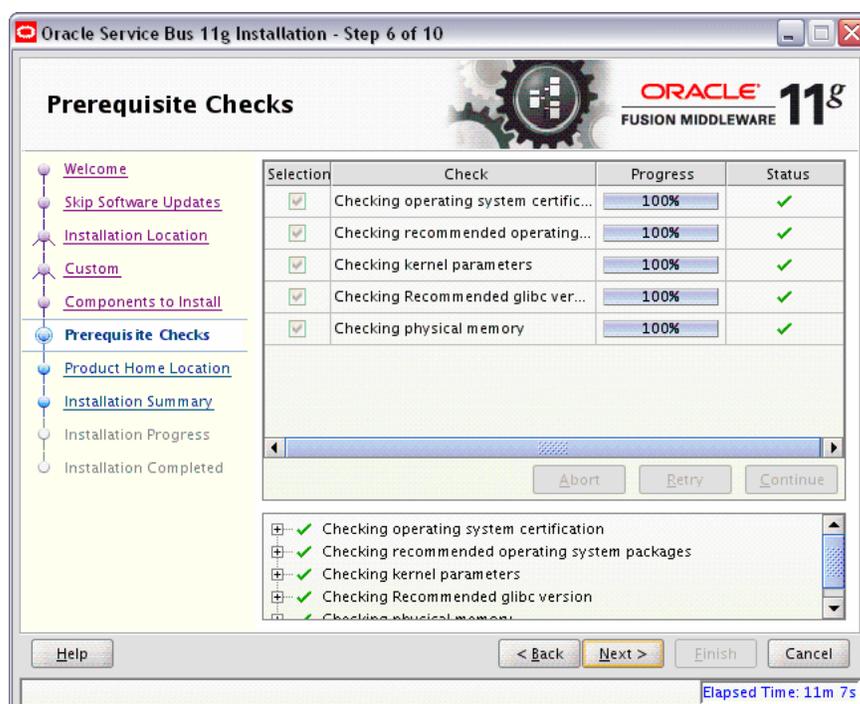
This screen analyzes the host computer to ensure that specific operating system prerequisites have been met.

If any of the prerequisite checks fail, then a short error message appears in the bottom portion of the screen. Fix the error and click **Retry** to try again. If you want to ignore the error or warning messages and continue with the installation, click **Continue**.

Click **Abort** to stop prerequisite checking for all components.

B.7 Product Home Location

Use this screen to provide the location of the Oracle WebLogic Server home and the location of the Oracle Enterprise Pack for Eclipse (OEPE) software.

The following table describes the fields on this screen.

Element	Description
Oracle WebLogic Server Location	The directory name for your WebLogic Server home. This directory will automatically be created inside the Middleware home. The default name for this directory is `wlserver_10.3`.
OEPE (Oracle Enterprise Pack for Eclipse) Location	The OEPE directory name. The default name for this directory is `oepe_11.1.1.8.0` inside your Middleware home. **Note:** This option appears only if you are installing Oracle Service Bus IDE, either with a Typical installation, or by selecting **Oracle Service Bus IDE** on the Components to Install screen.

If you are performing an installation on a Windows operating system, be sure that your directory paths are valid and do not contain double backslashes (\\).

B.8 Installation Summary
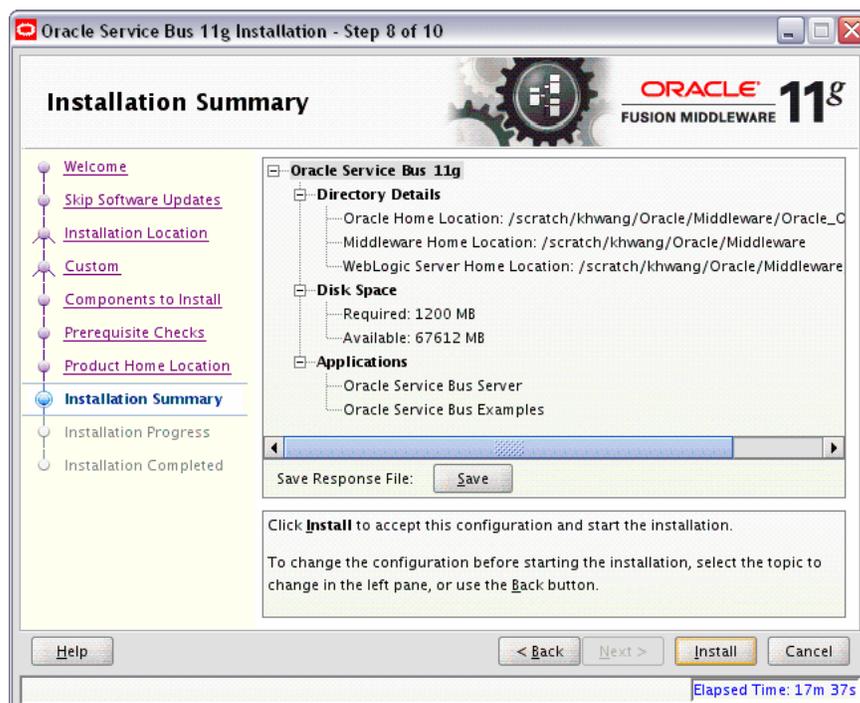
This screen summarizes the selections you have made during this installation session. It includes the following information:

- The location of your installation

- How much disk space will be used for the installation

- The applications you have selected for installation

Review information on this screen carefully, and take one of the following actions:

- If you want to make any changes to the configuration before starting the installation, use the navigation pane to select the Installer screen you want to return to and edit.

- If you are satisfied with the information, click **Install** to begin the installation procedure.

- If you want to save this configuration to a text file (called a response file), click **Save**. The resulting response file can be used later if you choose to perform the same installation from the command line. See Chapter 4, "Silent Installation and Deinstallation" for more information.

B.9 Installation Progress
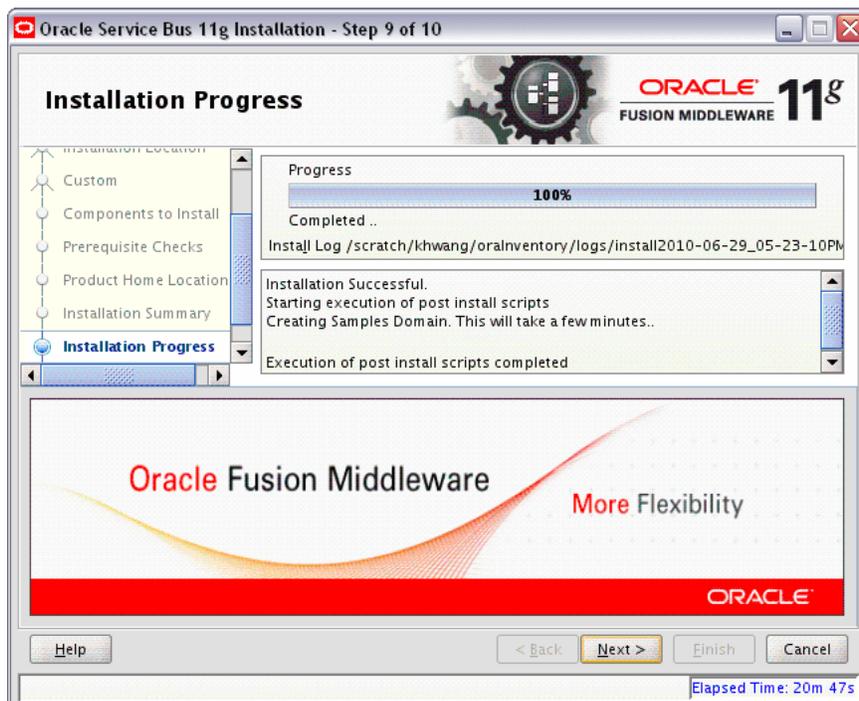
This screen shows you the progress of the installation.

If you want to quit before the installation is completed, click **Cancel**. Doing so will result in a partial installation; the portion of the software that was installed on your system before you click **Cancel** will remain on your system, and you will have to remove it manually.

B.10 Installation Completed
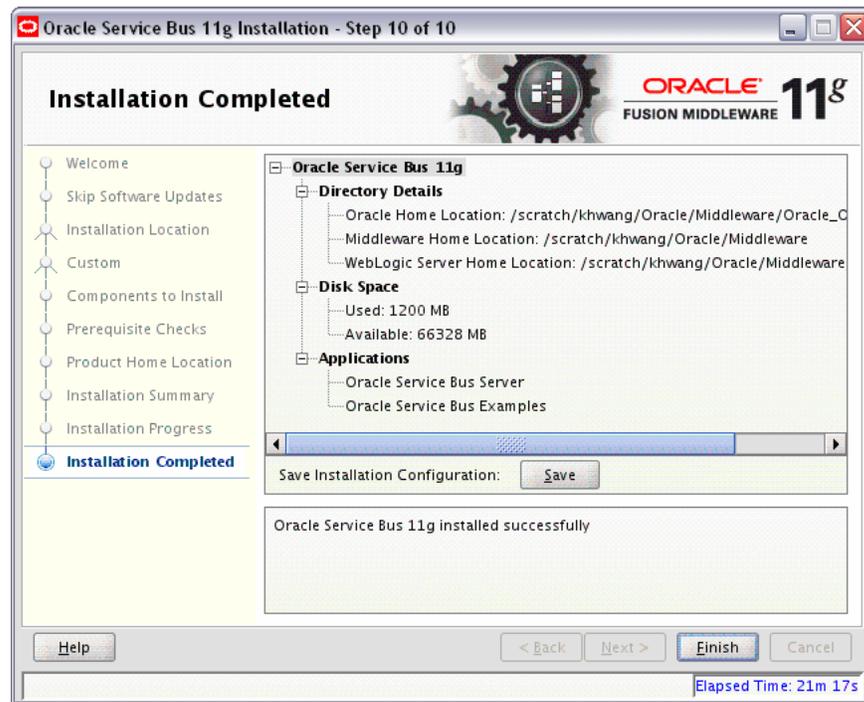
This screen summarizes the installation that was just completed.

If you want to save this summary information to a text file for future reference, click **Save**.

Click **Finish** to dismiss the screen.

C

Oracle Service Bus Deinstallation Screens

This appendix contains screenshots and descriptions for the Oracle Service Bus software deinstallation screens. The deinstaller wizard enables you to remove the Oracle Service Bus software from your machine.

This appendix contains the following sections:

- Welcome
- Deinstall Oracle Home
- Deinstallation Progress
- Deinstallation Completed

C.1 Welcome
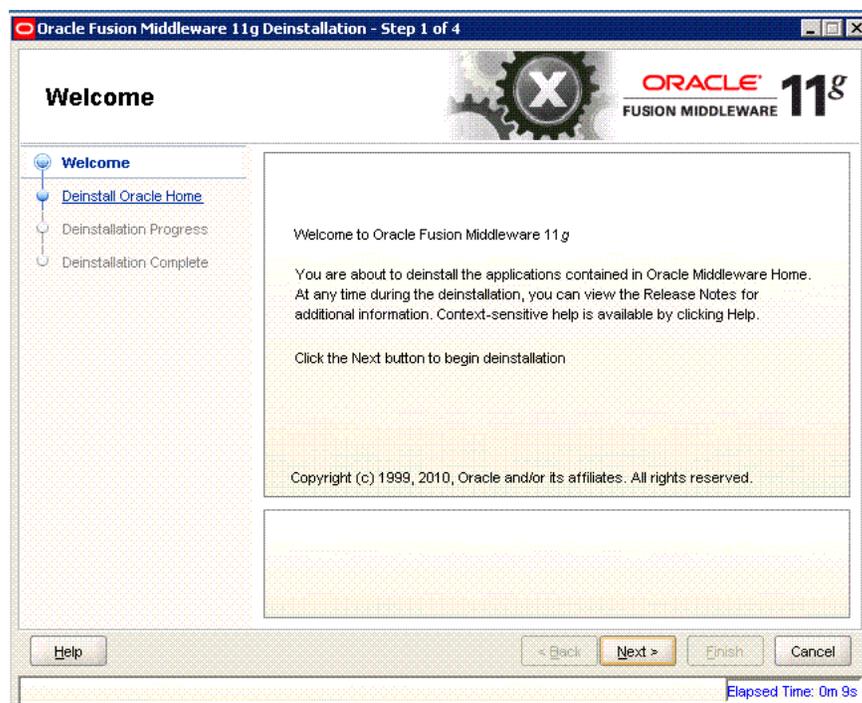
The installer displays this screen when you are about to deinstall one or more Oracle Fusion Middleware software components.

When you use the installer to deinstall your Oracle Fusion Middleware software, the installer removes the software files in the selected Oracle home from disk, updates the Oracle inventory, and performs other operating-specific tasks to remove the components.

Like the Welcome screen that appears when you are about to install a product, the deinstallation Welcome screen contains a navigation pane on the left that summarizes the tasks the installer will help you complete.

Each item in the navigation pane represents a specific installer screen that will prompt you for information required to install the software.

C.2 Deinstall Oracle Home
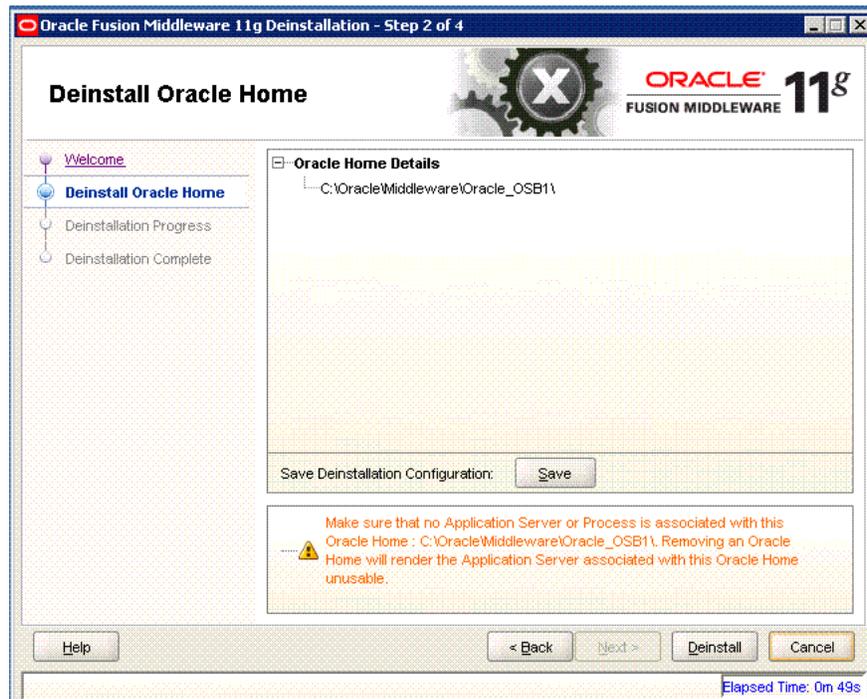
Use this screen to verify that you have selected the Oracle home that you want to deinstall.

When you click **Deinstall**, then the installer will begin the process of deinstalling the Oracle home shown on this screen.

> **Note:**   Before you click **Deinstall**, ensure that all processes associated with the selected Oracle home have been stopped.

If you want to save this configuration to a text file (called a response file), click **Save**. The resulting response file can be used later if you choose to perform the same deinstallation procedure from the command line.

Verify that this is the correct directory, then click **Deinstall** to continue.

C.3 Deinstallation Progress
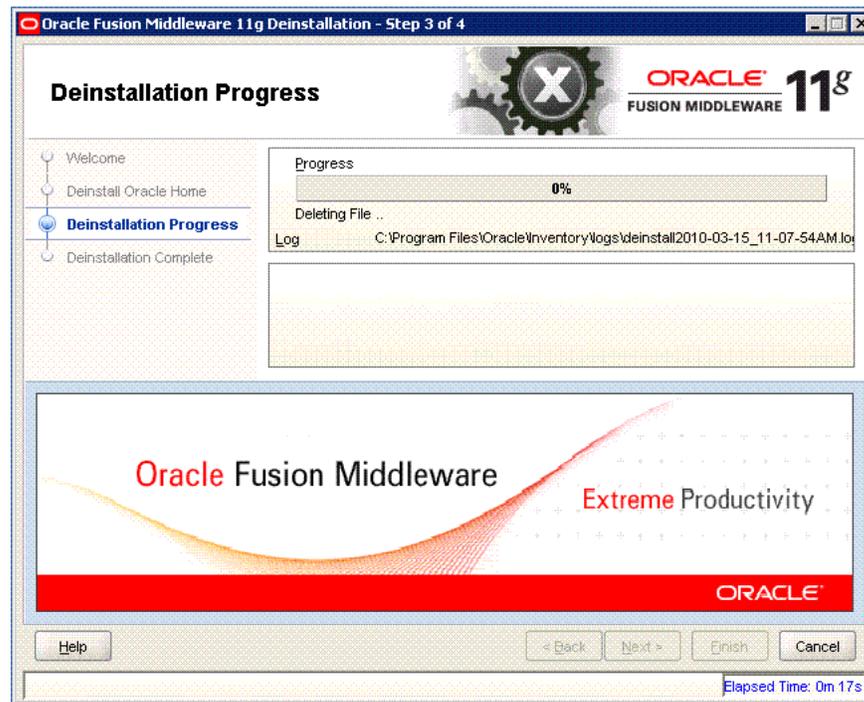
Use this screen to monitor the progress of the deinstallation process.

Click **Cancel** to stop the desinstallation process.

C.4 Deinstallation Completed

This screen summarizes the deinstallation that was just completed. When this screen appears, it indicates that the deinstallation is complete and the selected components have been cleared from the Oracle Inventory.

D

Troubleshooting the Installation

This appendix describes solutions to common problems that you might encounter when installing Oracle Service Bus. It contains the following topics:

- General Troubleshooting Tips
- Installation and Configuration Log Files
- Need More Help?

D.1 General Troubleshooting Tips

If you encounter an error during installation:

- Read the *Oracle Fusion Middleware Release Notes for Linux x86* or *Oracle Fusion Middleware Release Notes for Microsoft Windows (32-Bit)* (depending on your platform) for the latest updates. The most current version of the release notes is available on the Oracle Fusion Middleware 11 g Release 1 (11.1.1) Documentation page on Oracle Technology Network:

  http://www.oracle.com/technetwork/middleware/docs/middleware-093940.html

  Click the **View Library** link for the documentation library corresponding to your release. The Release Notes are available in the library.

- Verify your system and configuration is certified. Refer to the *System Requirements and Supported Platforms for Oracle Fusion Middleware 11gR1* document on the Oracle Fusion Middleware Supported System Configurations page:

  http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html

- Verify your system meets the minimum system requirements. Refer to the System Requirements and Specifications document:

  http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm

- If you entered incorrect information on one of the installation screens, return to that screen by clicking **Back** until you see the screen.

- If an error occurred while the Installer is copying or linking files:

  1. Note the error and review the installation log files.

  2. Remove the failed installation.

  3. Correct the issue that caused the error.

    4. Restart the installation.

D.2 Installation and Configuration Log Files

This section contains information about the log files that are created when running the Oracle Service Bus installer and the Oracle Fusion Middleware Configuration Wizard. Log files contain information that can help you troubleshoot problems with your installation or configuration.

D.2.1 Installation Log Files

The installer writes logs files to the *Oracle_Inventory_Location*/log (on UNIX operating systems) or *Oracle_Inventory_Location*\logs (on Windows operating systems) directory. On UNIX systems, if you do not know the location of your Oracle Inventory directory, you can find it in the *OSB_ORACLE_HOME*/oraInst.loc file. On Windows systems, the default location for the inventory directory is C:\Program Files\Oracle\Inventory\logs.

The following install log files are written to the log directory:

- install*date-time-stamp*.log

  This is the main log file.

- install*date-time-stamp*.out

  This log file contains the output and error streams during the installation.

- installActions*date-time-stamp*.log

  This file is used by the installer GUI to keep track of internal information.

- installProfile*date-time-stamp*.log

  This log file contains the overall statistics like time taken to complete the installation, as well as configuration, memory and CPU details.

- oraInstall*date-time-stamp*.log

  This log file contains the output stream of the copy session.

If you start the installer with the -printtime parameter, the timeTaken*date-time-stamp*.log and time*date-time-stamp*.log files are created in the same directory:

- timeTaken*date-time-stamp*.log

  This file contains information for the amount of time taken to move between screens (applicable for GUI installations only).

- time*date-time-stamp*.log

  This file contains time information for the copy session.

If you start the installer with the -printmemory parameter, the memory*date-time-stamp*.log file is created. This file contains memory usage information for the copy session.

D.2.2 Configuration Log Files

To create a log file of your configuration session, start the Configuration Wizard with the -log option, as shown below:

On UNIX operating systems:

```
./config.sh -log=log_filename -log_priority=log_level
```

On Windows operating systems:

```
config.cmd -log=log_filename -log_priority=log_level
```

See Table D–1 for more details about the `-log` and `-log_priority` options.

Table D–1   Configuration Wizard Log File Options

Parameter	Description
`-log`	Specify the location of your log file.
	If you specify an absolute path with your `log_filename` then your log file will be created there. If you only specify a file name with no path, then the log files are created in the `MW_HOME`/logs (on UNIX operating systems) or `MW_HOME`\logs (on Windows operating systems) directory.
	Other values that can be specified with `-log` are:
	■ `stdout` This writes the error message to the standard output stream.
	■ `stderr` This writes the error messages to the standard error stream.
	■ `disable` This disables default logging so that no log files are generated in `MW_HOME`/logs (on UNIX operating systems) or `MW_HOME`\logs (on Windows operating systems).
`-log_priority`	Specify the level of detail you want included in your logs.
	The acceptable values are listed below, from most detailed to least detailed:
	■ `debug`
	■ `info`
	■ `warning`
	■ `error`
	■ `fatal`

D.3 Need More Help?

If you cannot solve a problem using the information in this appendix, look for additional information in My Oracle Support (formerly MetaLink) at http://support.oracle.com.

If you cannot find a solution to your problem, open a service request.