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Installation Guide for Oracle SOA Suite
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Oracle Fusion Middleware Installation Guide for Oracle SOA Suite 11g Release 1 (11.1.1)

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Preface

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

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 systems who are installing need `root` access to run some scripts.

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<http://www.fcc.gov/cgb/consumerfacts/trs.html>, and a list of phone numbers is available at <http://www.fcc.gov/cgb/dro/trsphonebk.html>.

Related Documents

For additional information, see the following manuals:

- *Oracle Fusion Middleware Installation Planning Guide*
- *Oracle Fusion Middleware Administrator's Guide*
- *Oracle Fusion Middleware Concepts*
- *Oracle Fusion Middleware High Availability Guide*

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.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Installation Overview

Oracle SOA Suite is a middleware component of Oracle Fusion Middleware. Oracle SOA Suite enables services to be created, managed, and orchestrated into SOA composite applications. Composites enable you to easily assemble multiple technology components into one SOA composite application. Oracle SOA Suite plugs into heterogeneous infrastructures and enables enterprises to incrementally adopt SOA.

This chapter includes the following sections:

- [Section 1.1, "Oracle SOA Suite Components"](#)
- [Section 1.2, "Installation Roadmap"](#)
- [Section 1.3, "Oracle SOA Suite Directory Structure"](#)

1.1 Oracle SOA Suite Components

Oracle SOA Suite contains the following components:

- Oracle Business Process Execution Language (BPEL) Process Manager (PM), with Mediator, Rules, B2B, and Human Workflow

Oracle BPEL is an XML-based language for enabling task sharing across multiple enterprises using a combination of Web services. BPEL is based on the XML schema, simple object access protocol (SOAP), and Web services description language (WSDL).

Oracle BPEL Process Manager provides a framework for easily designing, deploying, monitoring, and administering processes based on BPEL standards.

- Oracle Business Activity Monitoring (BAM)

Oracle BAM provides a framework for creating dashboards that display real-time data inflow and creating rules to send alerts under specified conditions.

1.2 Installation Roadmap

[Table 1-1](#) describes the high-level tasks for installing and configuring Oracle SOA Suite. The table also provides information on where to get more details on each task.

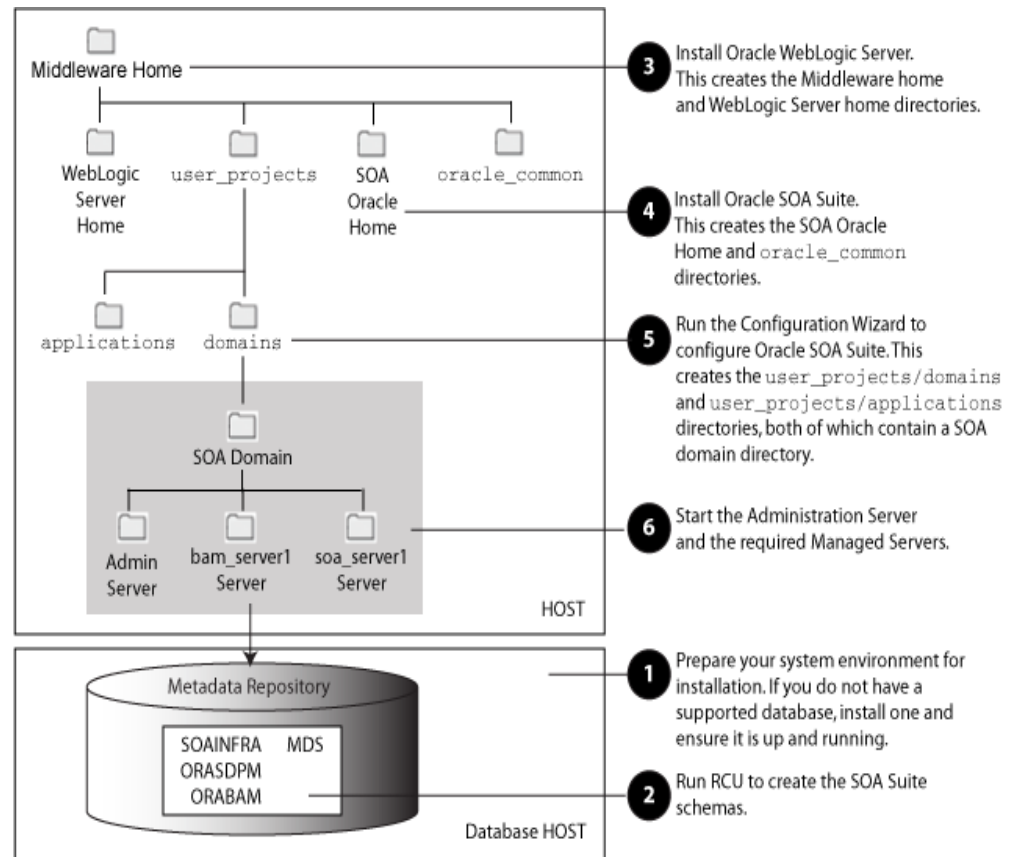
Table 1-1 Tasks in the Oracle SOA Suite Installation Procedure

Task	Description	Documentation
Task 1 - Complete the installation planning requirements	Ensure that your system environment meets the general installation requirements for Oracle Fusion Middleware as well as Oracle SOA Suite and Repository Creation Utility (RCU).	For system requirements information, go to: http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm For certification information, go to: http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html
Task 2 - Run RCU to create the necessary schemas.	Oracle SOA Suite components require schemas that must be installed in an Oracle database. You create and load these schemas in your database by using RCU.	Make sure you have a supported database up and running. See the Oracle Fusion Middleware Certification Document for more information: http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html Instructions for creating the schema are provided in Section 2.1.3, "Create Schemas for Oracle SOA Suite and Oracle BAM" . You can also refer to <i>Oracle Fusion Middleware Repository Creation Utility User's Guide</i> .
Task 3 - Install Oracle WebLogic Server	Oracle SOA Suite runs on Oracle WebLogic Server. You must install Oracle WebLogic Server before you install Oracle SOA Suite. The installer creates the WebLogic Server home directory within the Oracle Middleware Home directory.	Installation instructions are provided in Section 2.1.4, "Install Oracle WebLogic Server and Create the Middleware Home" . You can also refer to <i>Oracle WebLogic Server Installation Guide</i> For more information about the Middleware Home and WebLogic Home directories, see "Middleware Home and WebLogic Home Directories" in <i>Oracle Fusion Middleware Installation Planning Guide</i> .
Task 4 - Install Oracle SOA Suite	Use the installer to install Oracle SOA Suite. By default, the installer will create the <code>Oracle_SOA1</code> and <code>oracle_common</code> directories inside the Middleware Home directory. The <code>Oracle_SOA1</code> directory is your SOA Oracle Home directory, and the <code>oracle_common</code> directory is your Oracle Common Home directory.	Chapter 2, "Installing Oracle SOA Suite"
Task 5 - Configure Oracle SOA Suite	Run the Oracle Fusion Middleware Configuration Wizard to create and configure a new WebLogic domain, and choose the products that you want to configure in that domain. This new domain will contain the Administration Server and other managed servers depending on the products you choose to configure. After you have created a new domain, you can later extend that domain if you want to add more products to that domain.	Chapter 3, "Configuring Oracle SOA Suite"

1.3 Oracle SOA Suite Directory Structure

Figure 1–1 shows the directory structure of a simple Oracle SOA Suite installation on a single host, using all of the default values.

Figure 1–1 Directory Structure of Oracle SOA Suite Installation



When you install Oracle WebLogic Server, the installer creates a WebLogic Server Home directory under Oracle Middleware Home directory. When you install Oracle SOA Suite, the SOA Oracle Home and Oracle Common Home directories are created. The SOA Oracle Home contains the Oracle SOA Suite binaries and support files, and the Oracle Common Home contains the binary and library files required for the Oracle Enterprise Manager Fusion Middleware Control and Java Required Files (JRF).

When you configure Oracle SOA Suite to create a domain, a SOA Domain directory is created inside the User Projects directory. The SOA Domain directory contains the Administration Server and other managed servers that host the various SOA components. Based on the component that you install, the following managed servers may be created:

- soa_server1 - Hosts Oracle SOA
- bam_server1 - Hosts Oracle BAM

Installing Oracle SOA Suite

This chapter describes how to install the Oracle SOA Suite run-time components.

See Section 2.7, "Installing Oracle SOA Suite Design-Time Components" for information about installing Oracle JDeveloper and installing the Oracle SOA Suite extensions in Oracle JDeveloper. These extensions provide the functionality and online documentation for designing SOA composite applications.

The following topics are covered in this chapter:

- Section 2.1, "Preparing to Install"
- Section 2.2, "Installing on DHCP Hosts"
- Section 2.4, "Installing on a Multihomed Computer"
- Section 2.5, "Using Custom Port Numbers"
- Section 2.6, "Installation Instructions"
- Section 2.7, "Installing Oracle SOA Suite Design-Time Components"

2.1 Preparing to Install

Make sure you have read the information in this section before you install Oracle Fusion Middleware SOA Suite:

- Section 2.1.1, "System Requirements and Certification"
- Section 2.1.2, "Check for Supported Database"
- Section 2.1.3, "Create Schemas for Oracle SOA Suite and Oracle BAM"
- Section 2.1.4, "Install Oracle WebLogic Server and Create the Middleware Home"
- Section 2.1.5, "Install and Configure Java Access Bridge (Windows Only)"
- Section 2.1.6, "Enable Unicode Support"
- Section 2.1.7, "Synchronizing Clocks When Working with Clusters"

2.1.1 System Requirements and Certification

Before performing any installation you should read the system requirements and certification documentation to ensure that your environment meets the minimum installation requirements for the products you are installing. Both of these documents are available on Oracle Technology Network (OTN).

The system requirements document covers information such as hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches:

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

The certification document covers supported installation types, platforms, operating systems, databases, JDKs, and third-party products:

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

Note: If you are installing the 32-bit version of the product, the system on which you are installing must also be a supported 32-bit system. Installing a 32-bit version of the product on a 64-bit system is not supported.

2.1.2 Check for Supported Database

Installation of Oracle SOA Suite requires the availability of a database. This database must be up and running, and does not have to be on the same system where you are installing the products.

For the latest information about supported databases, visit the following URL:

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

If you are using an SSL-enabled database, you must make some manual changes in order for your installation to work properly. See Section E.6, "Using Data Sources with an SSL-Enabled Database" for more information.

2.1.3 Create Schemas for Oracle SOA Suite and Oracle BAM

Oracle SOA Suite and Oracle BAM require that certain schemas exist in the database prior to installation. You must run Repository Creation Utility (RCU) to create the schemas in the database. Follow these instructions to do so:

1. Insert the RCU CD-ROM and start RCU from the `rcuHome/bin` (on UNIX operating systems) or `rcuHome\bin` (on Windows operating systems) directory:

On UNIX operating systems:

```
./rcu
```

On Windows operating systems:

```
rcu.bat
```

You can also download a `.zip` file containing RCU from Oracle Technology Network (OTN):

<http://www.oracle.com/technology/>

After downloading the `.zip` file, extract the contents to a directory of your choice, and run RCU from the `RCU_HOME/bin` (on UNIX operating systems) or `RCU_HOME\bin` (on Windows operating systems) directory with the commands shown above, where `RCU_HOME` is the folder where RCU was unzipped, or the drive or mount point of the CD-ROM.

Note: On Windows systems, make sure that you do not extract the RCU .zip file to a directory name containing spaces.

2. Welcome Screen

Click **Next**.

3. Create Repository Screen

Click **Create**.

Click **Next**.

4. Database Connection Details Screen

Provide the necessary credentials for RCU to be able to connect to your Oracle database:

- **Host Name:** Specify the name of the machine on which your database resides in the format *host.domain.com*. For Oracle RAC databases, specify the Virtual IP name or one of the node names as the host name.
- **Port:** Specify the database listener port number. The default port number for Oracle databases is 1521.
- **Database Name:** Specify the service name for the database. Typically, the service name is the same as the global database name.

If you are unsure what the service name for your database is, you can obtain it from the `SERVICE_NAMES` parameter in the database's initialization parameter file. If the initialization parameter file does not contain the `SERVICE_NAMES` parameter, then the service name is the same as the global database name, which is specified in the `DB_NAME` and `DB_DOMAIN` parameters.

For Oracle RAC databases, specify the service name of one of the nodes in this field. For example: `sales.mydomain.com`.

- **Username:** Specify the name of a user with DBA or SYSDBA privileges. The default user name with SYSDBA privileges is `SYS`.
- **Password:** Specify the password for your database user.
- **Role:** Select the database user's role from the drop-down list. The `SYS` user requires the SYSDBA role.

If you are using a Microsoft SQL Server database, provide the following credentials:

- **Unicode Support:** Select Yes or No from the drop-down list.

Note: Oracle SOA Infrastructure schemas are created with Unicode support (database tables created with NVARCHAR) only, regardless of the option selected in this field.

- **Server Name:** Enter the host name, IP address, or complete server name in `host\server` format of the server where your database is running..
- **Port:** Specify the database listener port number.
- **Database Name:** Specify the name of your database.

- Username: Specify the name of a user with DBA or SYSDBA privileges.
- Password: Specify the password for your database user.

Click **Next**. A "Checking Prerequisites" screen will appear. After the checking is complete with no errors, click **OK** to dismiss the screen.

5. Select Components Screen

Near the top of the screen, select **Create a New Prefix**. The default prefix is DEV. If you are sharing the database instance with other Oracle Fusion Middleware users, refer to *Oracle Fusion Middleware Repository Creation Utility User's Guide* for more information about prefixes.

Click the plus sign (+) icon next to **SOA and BPM Infrastructure** to view all the schemas in this category. Select the necessary schemas for the product(s) you want to install. If the schema has dependencies, the dependencies are automatically selected for you.

Note: You must remember or make a note of these schema names and the prefix value from this screen; you will need them later when you are configuring your products. You will need to provide the schema name in the format *prefix_schemaname*. For example, if you used the default prefix DEV, you will supply the following schema name for the MDS schema:

DEV_MDS

Table 2–1 lists the required schemas and dependencies for Oracle SOA Suite products:

Table 2–1 Required Schemas for Oracle SOA Suite Products

Component	Schema Owner	Selected Schemas
SOA Infrastructure	SOAINFRA	<i>prefix_MDS</i> (Metadata Services) <i>prefix_ORASDPM</i> (User Messaging)
Business Activity Monitoring	ORABAM	<i>prefix_MDS</i> (Metadata Services) <i>prefix_ORASDPM</i> (User Messaging)
User Messaging Service	ORASDPM	<i>prefix_MDS</i> (Metadata Services)

Click **Next**. A "Checking Prerequisites" screen will appear. After the checking is complete with no errors, click **OK** to dismiss the screen.

6. Schema Passwords Screen

There are three ways to specify schema passwords on this screen:

- Select **Use same password for all schemas** if you want to use a single password for all schemas and their auxiliary schemas. In the Password field, enter your password. Enter your password again in the Confirm Password field.
- Select **Use main schema passwords for auxiliary schemas** if you want to specify different passwords for the main schemas, but still have the same password used for their respective auxiliary schemas. If you select this option, only the main schemas will be visible in the table. For each schema, you must

enter each schema's password in the Password column in the table, and enter the same password in the Confirm Password column.

- Select **Specify different passwords for all schemas** if you want to specify unique passwords for the main schemas and auxiliary schemas. If you select this option, all main schemas and auxiliary schemas will be visible in the table. For each schema and auxiliary schema, you must enter the password in the Password column in the table, and enter the same password in the Confirm Password column.

Note: You must remember or make a note of the password(s) from this screen; you will need them later when you are configuring your products.

Click **Next**.

7. Custom Variables Screen

If you selected a component on the Select Components Screen that supports custom variables, you should specify those values on this screen. This screen allows you to specify additional configuration information required by the components during runtime.

Click **Next**.

8. Map Tablespaces Screen

Click **Next**. A "Creating Tablespaces" screen will appear. After the tablespaces are created with no errors, click **OK** to dismiss the screen.

9. Summary Screen

Click **Create**. A "CREATE" screen will appear. After the schemas are created with no errors, click **OK** to dismiss the screen.

10. Completion Summary Screen

Click **Close**.

For detailed information about using RCU, refer to *Oracle Repository Creation Utility User's Guide*.

2.1.4 Install Oracle WebLogic Server and Create the Middleware Home

Oracle SOA Suite requires an Oracle WebLogic Server on your system. If you do not already have one, follow the instructions in this section to install Oracle WebLogic Server.

1. Insert the Oracle WebLogic Server CD-ROM or download the installer from the following URL:

http://www.oracle.com/technology/software/products/ias/htdocs/wls_main.html

You are looking for the following executable files:

- `wls1032_linux32.bin` (for 32-bit Linux systems)
- `wls1032_win32.exe` (for 32-bit Windows systems)
- `wls1032_generic.jar` (for all 64-bit platforms)

The 32-bit executable files are bundled with the appropriate JDK version. If you use the 64-bit installer, you will need to invoke the installer with a supported JDK for your platform. This JDK must be installed on your system before you install Oracle WebLogic Server. Refer to the Oracle Fusion Middleware certification document for a list of supported JDKs for your platform:

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

2. Run your installer file directly from the CD-ROM, or copy the file to your local system and run it locally.

Some notes for running the installer:

- Before running the installer, set the `DISPLAY` environment variable on your system.
- Replace `JAVA_HOME` with the installation location of the supported JDK you installed for your platform.
- If you are installing a 64-bit Oracle WebLogic Server on a 64-bit platform, use the `-d64` flag when using 32/64-bit hybrid JDK's (such as the HP JDK for HP-UX and SUN JDK for Solaris SPARC).

Execute `JAVA_HOME/bin/java -version` (or `JAVA_HOME/bin/java -d64 -version` on 32/64-bit hybrid JDKs) to ensure that your `JAVA_HOME` refers to a 64-bit JDK.

To run the installer on a 32-bit Linux operating system:

```
./wls1032_linux32.bin
```

To run the installer on 32-bit Windows operating systems:

```
wls1032_win32.exe
```

To run the installer on 64-bit UNIX operating systems:

```
JAVA_HOME/bin/java -jar wls1032_generic.jar
```

or

```
JAVA_HOME/bin/java -d64 -jar wls1032_generic.jar
```

To run the installer on 64-bit Windows operating systems:

```
JAVA_HOME\bin\java -jar wls1032_generic.jar
```

3. Welcome Screen

Click **Next**.

4. Choose Middleware Home Directory Screen

Select **Create a new Middleware Home** to create a new Middleware Home directory.

Specify the desired location of your new Middleware Home directory. If this directory already exists on your system, it must be an empty directory. If this directory does not already exist, then it will be created for you.

For more information about the Middleware Home directory, refer to "Middleware Home and WebLogic Home Directories" in *Oracle Fusion Middleware Installation Planning Guide*.

Click **Next**.

5. Register for Security Updates Screen

Select whether or not you want to receive the latest product and security updates. If you choose not to receive anything, you will be asked to verify your selection before continuing.

Click **Next**.

6. Choose Install Type Screen

A **Typical** installation includes all Oracle WebLogic Server components by default. It also includes both Sun SDK 1.6.0_14 and Oracle JRockit SDK 1.6.0_14. If you want to perform a **Typical** installation, select **Typical** and click **Next** to go to the Choose Product Installation Directories Screen.

A **Custom** installation gives you the choice of selecting the following components for installation:

- Core Application Server
- Administration Console
- Configuration Wizard and Upgrade Framework
- Web 2.0 HTTP Pub-Sub Server
- WebLogic SCA
- WebLogic JDBC Drivers
- Third Party JDBC Drivers
- WebLogic Server Clients
- WebLogic Web Server Plugins
- UDDI and Xquery Support
- Server Examples (not selected by default)

If you want to perform a **Custom** installation, select **Custom**. You will see the following two screens:

a. Choose Products and Components Screen

Select the products you want to install.

Note: In order to be configured properly, Oracle SOA Suite requires that **Configuration Wizard and Upgrade Framework** is selected.

b. JDK Selection Screen

Select the JDKs you want to install.

Oracle recommends that you use the Sun SDK if you are installing in a development environment. Typically, this environment provides a more relaxed security configuration and enables you to auto-deploy applications. In a development environment, `boot.properties` is used for user names and passwords and polling is used for application deployment.

If you are installing in a production environment, Oracle recommends that you use the Oracle JRockit SDK. Production environments are for applications running in their final form. Full security is enabled and applications may be

clustered or use other advanced features. In this mode, user names and passwords are required and polling is not used for application deployment.

Click **Next**.

7. Choose Product Installation Directories Screen

Specify the desired location for your WebLogic Server Home directory.

For more information about the WebLogic Home directory, refer to "Middleware Home and WebLogic Home Directories" in *Oracle Fusion Middleware Installation Planning Guide*.

Click **Next**.

8. Choose Shortcut Location (Windows only)

If you are installing on a Windows system, you will be asked to specify a location where you would like Windows to create a shortcut to Oracle products.

Click **Next**.

9. Installation Summary Screen

Click **Next**.

10. Installation Progress Screen

Click **Next**.

11. Installation Complete Screen

De-select **Run Quickstart**.

Click **Done**.

For more information about installing Oracle WebLogic Server, refer to *Oracle WebLogic Server Installation Guide*.

2.1.5 Install and Configure Java Access Bridge (Windows Only)

If you are installing on a Windows system, you have the option of installing and configuring Java Access Bridge for Section 508 Accessibility. For more information on how to do this, refer to "Install and Configure Java Access Bridge (Windows Only)" in *Oracle Fusion Middleware Administrator's Guide*.

2.1.6 Enable Unicode Support

Your operating system configuration can influence the behavior of characters supported by Oracle SOA Suite.

On a UNIX operating system, Oracle highly recommends that you enable Unicode support by setting the `LANG` and `LC_ALL` environment variables to a locale with the UTF-8 character set. This enables the operating system to process any character in Unicode. SOA technologies are based on Unicode.

If the operating system is configured to use a non-UTF-8 encoding, SOA components may function in an unexpected way. For example, a non-ASCII file name can make the file inaccessible and cause an error. Oracle does not support problems caused by operating system constraints.

In a design-time environment, if you are using Oracle JDeveloper, select **Tools -> Preferences -> Environment -> Encoding -> UTF-8** to enable Unicode support.

2.1.7 Synchronizing Clocks When Working with Clusters

Oracle SOA uses Quartz, which is an open source job-scheduling framework. When you are setting up clusters on multiple systems, Quartz requires that the clocks on all the systems be synced up. For more information, refer to the following URL:

<http://www.opensymphony.com/quartz/wikidocs/TutorialLesson11.html>

Also refer to the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite* and *Oracle Fusion Middleware High Availability Guide* for more information about clustering in advanced topologies.

2.2 Installing on DHCP Hosts

If you are installing Oracle SOA Suite on a DHCP host, you must follow the configuration steps in this section for your platform.

2.2.1 For UNIX Platforms

On UNIX systems, configure the host to resolve hostnames to the loopback IP address by modifying the `/etc/hosts` file to contain the following entries:

```
127.0.0.1 hostname.domainname hostname
127.0.0.1 localhost.localdomain localhost
```

After doing so, check that the hostname resolves to the loopback IP address by entering the following command:

```
/bin/ping hostname.domainname
```

2.2.2 For Windows x86 Platforms

On Windows systems, install a loopback adapter on the DHCP server (see Section 2.2.3, "Installing a Loopback Adapter (Windows Only)"). This assigns a local IP address to your computer.

After installing the adapter, add a line to the `%SYSTEMROOT%\system32\drivers\etc\hosts` file with the following format, immediately after the `localhost` line:

```
IP_address hostname.domainname hostname
```

Replace `IP_address` with the local IP address of the loopback adapter.

2.2.3 Installing a Loopback Adapter (Windows Only)

To install a loopback adapter on Windows 2003 or Windows XP:

1. Open the Windows Control Panel.
Windows 2003: Select **Start > Control Panel > Add Hardware**.
Windows XP: Select **Start > Control Panel**, then double-click **Add Hardware**.
2. In the "Welcome" window, click **Next**.
3. In the "Is the hardware connected?" window, select **Yes, I have already connected the hardware**, then click **Next**.
4. In the "The following hardware is already installed on your computer" window, in the list of installed hardware, select **Add a new hardware device**, then click **Next**.

5. In the "The wizard can help you install other hardware" window, select **Install the hardware that I manually select from a list**, then click **Next**.
6. In the "From the list of hardware types, select the type of hardware you are installing" window, select **Network adapters**, then click **Next**.
7. In the "Select Network Adapter" window, make the following selections:
 - Manufacturer: Microsoft
 - Network Adapter: Microsoft Loopback Adapter
8. Click **Next**.
9. In the "The wizard is ready to install your hardware" window, click **Next**.
10. In the "Completing the Add Hardware Wizard" window, click **Finish**.
11. If you are using Windows 2003, restart your computer.
12. Right-click **My Network Places** on the desktop and choose **Properties**. This displays the Network Connections Control Panel.
13. Right-click the connection that was just created. This is usually named "Local Area Connection 2". Choose **Properties**.
14. On the "General" tab, select **Internet Protocol (TCP/IP)**, then click **Properties**.
15. In the "Properties" dialog box, click **Use the following IP address** and do the following:
 - a. IP Address: Enter a non-routable IP for the loopback adapter. Oracle recommends the following non-routable addresses:
192.168.x.x (x is any value between 1 and 255)
10.10.10.10
 - b. Subnet mask: Enter 255.255.255.0.
 - c. Record the values you entered, which you will need later in this procedure.
 - d. Leave all other fields empty.
 - e. Click **OK**.
16. In the "Local Area Connection 2 Properties" dialog, click **OK**.
17. Close Network Connections.
18. Restart the computer.

2.2.4 Removing a Loopback Adapter (Windows Only)

To remove a loopback adapter on Windows 2003 or Windows XP:

1. Start the System Control panel.
Windows 2003: Select **Start > Control Panel > System**.
Windows XP: Select **Start > Control Panel**, then double-click **System**.
2. In the "Hardware" tab, click **Device Manager**.
3. In the "Device Manager" window, expand **Network adapters**. You should see **Microsoft Loopback Adapter**.
4. Right-click **Microsoft Loopback Adapter** and select **Uninstall**.
5. Click **OK**.

2.3 Installing on a Non-Networked Computer

You can install Oracle SOA Suite on a non-networked computer, such as a laptop. Because a non-networked computer has no access to other computers, you have to install all the components that you need on the computer.

In addition, you must follow the instructions in Section 2.2, "Installing on DHCP Hosts" to install a loopback adapter and modify the `hosts` file on your system.

2.4 Installing on a Multihomed Computer

You can install Oracle SOA Suite on a multihomed computer. A multihomed computer is associated with multiple IP addresses. This is typically achieved by having multiple network cards on the computer. Each IP address is associated with a host name; additionally, you can set up aliases for each hostname.

The installer picks up the fully qualified domain name from the first entry in `/etc/hosts` (on UNIX operating systems) or `%SYSTEMROOT%\system32\drivers\etc\hosts` (on Windows operating systems) file.

For details about WebLogic Server network configuration, refer to "Configure network connections" in *Oracle Fusion Middleware Oracle WebLogic Server Administration Console Help*.

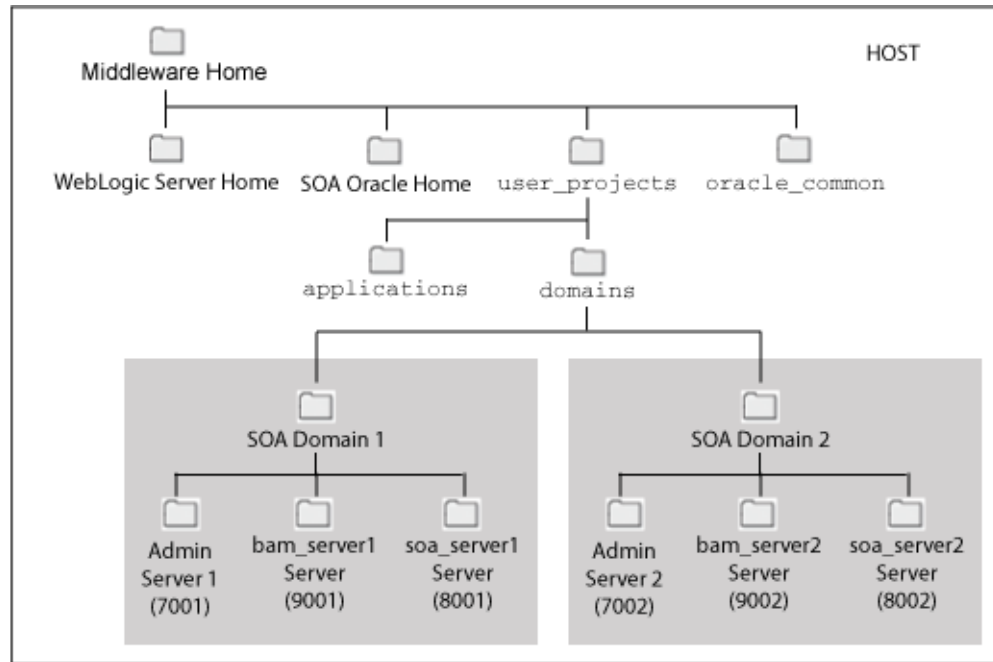
For specific network configuration of a system component, refer to the individual component's configuration documentation.

2.5 Using Custom Port Numbers

By default, the servers that are created in each domain use the same set of port numbers (for example, the Administration Server uses port 7001). If you want to use custom port numbers, you can change the port number when you run the Oracle Fusion Middleware Configuration Wizard:

- The Administration Server port number can be changed on the Configure Administration Server Screen.
- The port number for all managed servers in your domain can be changed on the Configure Managed Servers Screen.

If you install multiple instances of Oracle SOA Suite on your system, you must make sure that all of your managed servers use different port numbers, as shown in Figure 2-1:

Figure 2–1 Multiple Instances of Oracle SOA Suite on a Single System

For more information, refer to Chapter 3, "Configuring Oracle SOA Suite".

For more information about port numbers, refer to "Port Numbers" in *Oracle Fusion Middleware Administrator's Guide*.

2.6 Installation Instructions

Oracle BAM and Oracle SOA Suite are both installed onto your system by default. After the products are installed, you must run the Configuration Wizard to configure the product(s) of your choice.

This section contains the following topics:

- Section 2.6.1, "Starting the Installer"
- Section 2.6.2, "Installation Log Files"
- Section 2.6.4, "Installation Screens and Instructions"

2.6.1 Starting the Installer

The installer requires the location of a Java Runtime Environment (JRE) on your system. When you installed Oracle WebLogic Server, Section 2.1.4, "Install Oracle WebLogic Server and Create the Middleware Home", a JRE was installed on your system. You can use this location (the location of the `jre` directory) to start the installer. The default location for the JRE is `MW_HOME/jdk160_14_R27.6.4-18` (on UNIX operating systems) or `MW_HOME\jdk160_14_R27.6.4-18` (on Windows operating systems), where `MW_HOME` is the Middleware Home directory.

On 64-bit platforms, the JRE location is the `JAVA_HOME` you used to install Oracle WebLogic Server. Refer to Section 2.1.4, "Install Oracle WebLogic Server and Create the Middleware Home" for more information.

Note: Starting the installer as root user is not supported.

On UNIX operating systems:

```
> ./runInstaller -jreLoc JRE_LOCATION
```

On Windows operating systems:

```
D:\ setup.exe -jreLoc JRE_LOCATION
```

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

You must also specify the JRE location in the same manner if you are installing Oracle SOA Suite on a 64-bit platform with a 32-bit JDK.

If no JRE location is specified, you will be prompted to provide the location of your JRE before the installer is started:

```
[> ./runInstaller
Platform is Linux X86 32 bit
Starting Oracle Universal Installer...

Checking if CPU speed is above 300 MHz.   Actual 2999 MHz   Passed
Checking Temp space: must be greater than 150 MB.   Actual 60229 MB   Passed
Checking swap space: must be greater than 512 MB.   Actual 1013 MB   Passed
Checking monitor: must be configured to display at least 256 colors.   Actual 256
Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2009-04-01_
02-45-07PM. Please wait ...
Please specify JRE/JDK location ( Ex. /home/jre ), <location>/bin/java should
exist :
```

Specify the absolute path to the JRE on your system before you continue.

2.6.2 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. Refer to Section E.2.1, "Installation Log Files" for more information about the log files and their contents.

2.6.3 Inventory Screens (UNIX Only)

If you are installing on a UNIX system, and if this is the first time any Oracle product is being installed on your system with the Oracle Universal Installer, you will be asked to provide the location of an inventory directory. This is where the installer will set up subdirectories and maintain inventory data for each Oracle product that is installed on this system.

Follow the instructions in Table 2-2 to configure the inventory directory information. For more help, click on the screen name in the table below, or click the **Help** button in the GUI.

Table 2–2 Inventory Directory and Group Screens

No.	Screen	Description and Action Required
1	Specify Inventory Directory Screen (UNIX Only)	Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory. Click OK to continue.
2	Inventory Location Confirmation Screen (UNIX Only)	Run the <code>createCentralInventory.sh</code> script as root. Click OK to continue.

2.6.4 Installation Screens and Instructions

Follow the instructions in Table 2–3 to install the Oracle SOA Suite components.

If you need additional help with any of the installation screens, refer to Appendix A, "Oracle SOA Suite Installation Screens" or click **Help** to access the online help.

Table 2–3 Installation Flow for Install and Configure Option (Common Screens)

No.	Screen	When Does This Screen Appear?	Description and Action Required
1	Welcome Screen	Always.	Click Next to continue.
2	Prerequisite Checks Screen	Always.	Click Next to continue.
3	Specify Installation Location Screen	Always.	Specify Oracle Middleware Home and Oracle Home locations. The Oracle Common Home (<code>oracle_common</code>) directory will automatically be created inside the Middleware Home; do not use <code>oracle_common</code> as the name of your Oracle Home directory. Click Next to continue.
4	Installation Summary Screen	Always.	Verify the installation about to be performed. Click Install to continue.
5	Installation Progress Screen	Always.	This screen shows the progress of the installation.
6	Installation Completed Screen	Always.	Click Finish to dismiss the screen.

After the installation is complete., you must configure your products before you can begin using them. Go to Chapter 3, "Configuring Oracle SOA Suite".

2.7 Installing Oracle SOA Suite Design-Time Components

Oracle SOA Suite is not automatically installed with Oracle JDeveloper. Before you can create a SOA application and project, you must install the SOA Suite extension for JDeveloper.

For instructions on installing SOA Suite extension for JDeveloper, see *Oracle Fusion Middleware Installation Guide for Oracle JDeveloper*.

Configuring Oracle SOA Suite

This chapter describes how to configure Oracle SOA Suite after the components have already been installed.

The following topics are covered:

- Section 3.1, "Configuration Instructions"
- Section 3.2, "Manual Configuration for Oracle BAM"
- Section 3.3, "Applying Java Required Files (JRF)"
- Section 3.4, "Starting the Servers"
- Section 3.6, "Starting Node Manager"
- Section 3.7, "Verifying the Installation"

3.1 Configuration Instructions

After the installation is complete, you must configure the components. The instructions in this section describe how to do so.

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 Shutting Down Running Managed Servers

Before you start the Configuration Wizard, you must shut down any managed servers that are currently running. 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*.

3.1.3 Running the Configuration Wizard with an Oracle RAC Database

If you are running the Configuration Wizard with a backend Oracle RAC database, Oracle recommends that you keep all the RAC instances configured for the service to

be up and running. This will ensure that JDBC validation checks are reliable and minimize the possibility of accidental misconfiguration.

3.1.4 Starting the Oracle Fusion Middleware Configuration Wizard

The Configuration Wizard is located in the *SOA_ORACLE_HOME/common/bin* (on UNIX operating systems) or *SOA_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
```

If this is a new installation and you need to create a new WebLogic domain, follow the instructions in Section 3.1.6, "Creating a New Domain". You can also run the Configuration Wizard to extend an existing WebLogic domain, as described in Section 3.1.7, "Extending an Existing Domain".

If you are using a 32-bit operating system, Oracle JRockit SDK is installed as part of the Oracle WebLogic installation (see Section 2.1.4, "Install Oracle WebLogic Server and Create the Middleware Home"). 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_14_R27.6.4-18* (on UNIX operating systems) or *MW_HOME\jdk160_14_R27.6.4-18* (on Windows operating systems) directory.
2. Set the `JAVA_VENDOR` environment variable to "Sun."

3.1.5 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
```

On Windows operating systems:

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

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 *SOA_ORACLE_HOME/common/bin* (on UNIX operating systems) or *SOA_ORACLE_HOME\common\bin* (on Windows operating systems) directory.

3.1.6 Creating a New Domain

Follow the instructions in Table 3–1 to create a new WebLogic domain for your Oracle SOA components.

Note: For more information about WebLogic Server domains, refer to "WebLogic Server Domain" in *Oracle Fusion Middleware Installation Planning Guide*.

If you need additional help with any of the configuration screens, refer to Appendix B, "Oracle SOA Suite Configuration Screens" or click **Help** at the bottom of each screen to access the online help for that screen.

Table 3–1 Configuration Flow for Creating a New Domain

No.	Screen	Description and Action Required
1	Welcome Screen	Select Create a new WebLogic Domain . Click Next to continue.
2	Select Domain Source Screen	Select products you want to create in your domain. Click Next to continue.
3	Specify Domain Name and Location Screen	Specify the name and location for the new domain. Click Next to continue.
4	Configure Administrator Username and Password Screen	Specify a user and password for the Administrator role. Click Next to continue.
5	Configure Server Start Mode and JDK Screen	Select the WebLogic domain startup mode and the JDK to be used for the domain. Click Next to continue.
6	Configure JDBC Component Schema Screen	Configure the schema owner and password for each component schema listed on this screen. Changes to any of the fields on this screen are applied to all selected component schema in the table. For example, if all of your schemas reside on the same database, select all of the schemas in the table, then specify the appropriate database values for the schemas (DBMS/Service, Host Name, and Port). If, for example, you have a different password for each schema, then you must select each schema individually and specify the password for the selected schema only. Click Next to continue.
7	Test Component Schema Screen	Test and verify the connections to your component schema. Click Next to continue.

Table 3–1 (Cont.) Configuration Flow for Creating a New Domain

No.	Screen	Description and Action Required
8	Select Optional Configuration Screen	<p>Select the category or categories for which you want to make additional configuration changes:</p> <ul style="list-style-type: none"> ▪ If you select Administration Server, see Section 3.1.9.1, "Administration Server Options". ▪ If you select Managed Servers, Clusters and Machines, see Section 3.1.9.2, "Managed Server, Clusters and Machines Options". ▪ If you select Deployments and Services, see Section 3.1.9.3, "Deployments and Services Options". ▪ If you select JMS File Store, see Section 3.1.9.4, "JMS File Store Options". ▪ If you select RDBMS Security Store, see Section 3.1.9.5, "RDBMS Security Store Options". <p>If you choose not to select anything on this screen, skip to the Configuration Summary Screen.</p> <p>Click Next to continue.</p>
9	Configuration Summary Screen	<p>Review the contents of your domain.</p> <p>Click Create to continue.</p>
10	Creating Domain Screen	<p>Click Done when finished.</p>

3.1.7 Extending an Existing Domain

While creating your SOA domain, if you chose not to configure all of the components in Oracle SOA Suite, you can add these components at a later date by extending your domain. If this is a first time installation or you do not want to add more components, you can skip this section and move to the next section.

Note: Before proceeding, make sure that schemas exist in your database for the components you are configuring when you extend the domain. For example, if you are planning to extend the domain and configure Oracle BAM, then make sure the required schemas for Oracle BAM (MDS, ORASDPM, and ORABAM) exist in your database before you continue.

Follow the instructions in Table 3–2 to extend an existing domain.

Table 3–2 Configuration Flow for Extending an Existing Domain

No.	Screen	Description and Action Required
1	Welcome Screen	<p>Select Extend an existing WebLogic Domain.</p> <p>Click Next to continue.</p>
2	Select a WebLogic Domain Directory Screen	<p>Select the WebLogic Domain directory to which you want to add your applications and services. The domain name and location were specified on the Specify Domain Name and Location Screen when you created the domain.</p> <p>Click Next to continue.</p>

Table 3–2 (Cont.) Configuration Flow for Extending an Existing Domain

No.	Screen	Description and Action Required
3	Select Extension Source Screen	<p>Select the products with which you want to extend this domain.</p> <p>NOTE - if you select only Oracle JRF WebServices Asynchronous services - 11.1.1.0 (oracle_common) there are special instructions you must follow. See Section 3.1.8, "Extending an Existing Domain with Oracle JRF" for more information.</p> <p>Click Next to continue.</p>
4	Configure JDBC Component Schema Screen	<p>Configure the schema owner and password for each component schema listed on this screen. Changes to any of the fields on this screen are applied to all selected component schema in the table.</p> <p>For example, if all of your schemas reside on the same database, select all of the schemas in the table, then specify the appropriate database values for the schemas (DBMS/Service, Host Name, and Port).</p> <p>If, for example, you have a different password for each schema, then you must select each schema individually and specify the password for the selected schema only.</p> <p>Click Next to continue.</p>
5	Test Component Schema Screen	<p>Verify the connection to your component schemas.</p> <p>Click Next to continue.</p>
6	Select Optional Configuration Screen	<p>Select the category or categories for which you want to make additional configuration changes:</p> <ul style="list-style-type: none"> ■ If you select Managed Servers, Clusters and Machines, see Section 3.1.9.2, "Managed Server, Clusters and Machines Options". ■ If you select Deployments and Services, see Section 3.1.9.3, "Deployments and Services Options". ■ If you select JMS File Store, see Section 3.1.9.4, "JMS File Store Options". <p>If you choose not to select anything on this screen, skip to the Configuration Summary Screen.</p> <p>Click Next to continue.</p>
15	Configuration Summary Screen	<p>Review the contents of your domain.</p> <p>Click Extend to continue.</p>
16	Creating Domain Screen	<p>Click Done when finished.</p>

3.1.8 Extending an Existing Domain with Oracle JRF

3.1.9 Configuration Wizard Optional Configuration Screens

The Select Optional Configuration Screen gives you the following advanced configuration options:

- Administration Server Options
- Managed Server, Clusters and Machines Options
- Deployments and Services Options

- JMS File Store Options
- RDBMS Security Store Options

3.1.9.1 Administration Server Options

If you select **Administration Server** on the Select Optional Configuration Screen, you will see the Configure Administration Server Screen. This screen enables you to customize your Administration Server settings, such as the server name, port number, and secure connection settings.

3.1.9.2 Managed Server, Clusters and Machines Options

If you select **Managed Servers, Clusters, and Machines** on the Select Optional Configuration Screen, you will see the screens described in Table 3–3:

Table 3–3 Managed Servers, Clusters, and Machines Advanced Settings Screens

No.	Screen	Description and Action Required
1	Configure Managed Servers Screen	Add new managed servers, or edit and delete existing managed servers. Click Next to continue.
2	Configure Clusters Screen	Create clusters if you are installing in a high availability environment. For more information, refer to <i>Oracle Fusion Middleware High Availability Guide</i> . Click Next to continue.
3	Assign Servers to Clusters Screen	Assign your managed servers to a cluster in your domain. Click Next to continue.
4	Create HTTP Proxy Applications Screen	Select whether or not you want to configure an HTTP proxy server for your cluster. Click Next to continue.
5	Configure Machines Screen	Configure the machines that will host the managed servers. Click Next to continue.
6	Assign Servers to Machines Screen	Assign each managed server to the machine on which it runs. Click Next to continue.

3.1.9.3 Deployments and Services Options

If you select **Deployments and Services** on the Select Optional Configuration Screen, you will see the screens described in Table 3–4.

The Configuration Wizard automatically takes care of all necessary deployment and services targeting. You should not have to change anything on these screens unless specifically directed to do so. Typically, this will happen in an enterprise deployment configuration. For more information, see *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*.

Table 3–4 Deployments and Services Advanced Settings Screens

No.	Screen	Description and Action Required
1	Target Deployments to Servers or Clusters Screen	Target your deployments to servers or clusters. Click Next to continue.

Table 3–4 (Cont.) Deployments and Services Advanced Settings Screens

No.	Screen	Description and Action Required
2	Target Services to Servers or Clusters Screen	Target your services to servers or clusters. Click Next to continue.

3.1.9.4 JMS File Store Options

If you select **JMS File Store** on the Select Optional Configuration Screen, you will see the Configure JMS File Stores Screen. This screen enables you to configure the names, location, and write policy for your file stores.

3.1.9.5 RDBMS Security Store Options

If you select **RDBMS Security Store** on the Select Optional Configuration Screen, you will see the Configure RDBMS Security Store Database Screen. This screen enables you to configure an external relational database management system (RDBMS) as a data store for various security providers.

3.2 Manual Configuration for Oracle BAM

Depending on your configuration options and environment, Oracle BAM may require some custom configuration steps, as described in this section.

3.2.1 Configuring Oracle BAM with Custom Port Numbers

The default port number of the Oracle BAM managed server (`bam_server1`) is 9001. If, during configuration, you changed this port number or specified a listen address using the WebLogic Configuration Wizard, you must make the following changes:

1. Manually change the port number from 9001 to the new port number in the `SOA_ORACLE_HOME/bam/config/BAMCommandConfig.xml` (on UNIX operating systems) or `SOA_ORACLE_HOME\bam\config\BAMCommandConfig.xml` (on Windows operating systems) file. The parameter that needs to be changed is shown below:

```
<ADCServerPort>9001</ADCServerPort>
```

2. Oracle BAM single-instance web application configuration information is maintained in the `MW_HOME/user_projects/domains/domain_name/servers/BAM_server_name/tmp/_WL_user/oracle-bam_11.1.1/yhryfp/APP-INF/classes/config` (on UNIX operating systems) or `MW_HOME\user_projects\domains\domain_name\servers\BAM_server_name\tmp_WL_user\oracle-bam_11.1.1\yhryfp\APP-INF\classes\config` (on Windows operating systems) directory. The properties in these files can be modified by using the Mbeans exposed in the Oracle Enterprise Manager Fusion Middleware Control. The properties exposed through MBeans are specific to each server:

Note: The folder name under `oracle-bam_11.1.1` is randomly generated (in this case, it is `yhryfp`). When you are looking for this directory on your system, be aware that the name of the directory on your system may not match the name of the directory shown in the documentation.

a. Changes in `BAMCommonConfig.xml`:

The `<ApplicationURL>` parameter should contain the new URL.

b. Changes in `BAMServerConfig.xml`:

```
<ADCServerName>localhost</ADCServerName>
<ADCServerPort>9001</ADCServerPort>
```

c. Changes in `BAMWebConfig.xml`:

```
<ServerName>localhost</ServerName>
<ServerPort>9001</ServerPort>
```

3.2.2 Deploying Oracle SOA and Oracle BAM on Different Servers

Oracle SOA and Oracle BAM are configured in their own managed servers by default (`soa_server1` for Oracle SOA and `bam_server1` for Oracle BAM). If you choose to configure Oracle SOA on `AdminServer` by deleting `soa_server1` in the Configuration Wizard, and if Oracle BAM is also selected for configuration, then Oracle BAM also needs to be targeted on `AdminServer` by deleting `bam_server1` in the Configuration Wizard.

3.2.3 Configuring Oracle SOA and Oracle BAM Against an External LDAP Server

If you are configuring Oracle SOA and Oracle BAM against an external LDAP server, make sure the following are present in the external LDAP server:

- `OracleSystemUser` (a user in the external LDAP server)
- `OracleSystemGroup` (a group in the external LDAP server)
- `OracleSystemUser` must be a part of the `OracleSystemGroup`

3.3 Applying Java Required Files (JRF)

Java Required Files (JRF) consists of those components not included in the Oracle WebLogic Server installation and that provide common functionality for Oracle business applications and application frameworks.

JRF consists of a number of independently developed libraries and applications that are deployed into a common location (the Oracle Common Home or `oracle_common` directory). The components that are considered part of Java Required Files include: Oracle Application Development Framework, Oracle Fusion Middleware Audit Framework, Dynamic Monitoring Service, Infrastructure Security, Java Object Cache, Oracle Platform Security Services, logging, MDS, Oracle Web Services, and Oracle Web Services Manager.

If you are creating or extending a domain and JRF is the only component selected on the Select Domain Source Screen or Select Extension Source Screen, you must manually apply JRF to a Managed Server or cluster. To do so:

1. Start the Configuration Wizard (see Section 3.1.4, "Starting the Oracle Fusion Middleware Configuration Wizard").
2. When you reach the Select Optional Configuration Screen, select **Deployments and Services**.
3. On the Target Services to Servers or Clusters Screen, target the `mds-owsm` data source to the Administration Server (by default, it is not targeted to any server).
4. Finish the domain creation or extension.

3.4 Starting the Servers

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

1. 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:

```
MW_HOME/user_projects/domains/domain_name/startWebLogic.sh
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\startWebLogic.cmd
```

You entered the domain name and location on the Specify Domain Name and Location Screen in the configuration wizard.

2. To start the Managed Servers, run the `startManagedWebLogic.sh` (on UNIX operating systems) or `startManagedWebLogic.cmd` (on Windows operating systems) script in the `bin` directory inside the directory where you created your domain. 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 are:

- `soa_server1` (Oracle SOA Server)
- `bam_server1` (Oracle BAM Server)

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

```
MW_HOME/user_projects/domains/domain_name/bin/startManagedWebLogic.sh soa_server1
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\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.

Note: If this is the first time that both Oracle SOA Server and Oracle BAM Server are being started after installation and configuration, you must make sure that your startup of Oracle SOA Server is complete before starting Oracle BAM Server.

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:

```
MW_HOME/user_projects/domains/domain_name/bin/startManagedWebLogic.sh soa_server1 http://host:admin_server_port
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\bin\startManagedWebLogic.cmd soa_
server1 http://host:admin_server_port
```

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

On UNIX systems:

```
MW_HOME/user_projects/domains/domain_name/bin/startManagedWebLogic.sh soa_
server1 http://host:admin_server_port -Dweblogic.management.username=user_name
-Dweblogic.management.password=password
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\bin\startManagedWebLogic.cmd soa_
server1 http://host:admin_server_port -Dweblogic.management.username=user_name
-Dweblogic.management.password=password
```

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:

```
MW_HOME/user_projects/domains/domain_name/startManagedWebLogic_readme.txt
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\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.

3.5 Creating an Administration Server Only Domain

When the Administration Server is started, the contents of the `soa-infra` directory under `DOMAIN_HOME/config` (on UNIX systems) or `DOMAIN_HOME\config` (on Windows systems) are overwritten by the Administration Server. However, since SOA configuration parameters are updated only on managed servers and on a per-server basis, all updates to the SOA configuration are lost when the managed servers are restarted if the system hosting the Administration Server does not have an updated copy.

The `SOA_ORACLE_HOME/bin/ant-soa-util.xml` (on UNIX operating systems) or `SOA_ORACLE_HOME\bin\ant-soa-util.xml` (on Windows operating systems) script can be used to resolve this issue. The script does the following:

Note: The script must be run before you try to start the Administration Server or any of the Managed Servers.

- Moves the `config/soa-infra` (on UNIX operating systems) or `config\soa-infra` (on Windows operating systems) to the `DOMAIN_HOME/soa_backup/config/soa-infra` (on UNIX operating systems) or `DOMAIN_HOME\soa_backup\config\soa-infra` (on Windows operating systems) directory.

- Replaces the `startManagedWebLogic.sh` (on UNIX operating systems) or `startManagedWebLogic.cmd` (on Windows operating systems) scripts with versions that prevent the Managed Servers from starting.

3.6 Starting Node Manager

Node Manager is a Java utility that runs as separate process from Oracle WebLogic Server and allows you to perform common operations for a Managed Server, regardless of its location with respect to its Administration Server. While use of Node Manager is optional, it provides valuable benefits if your WebLogic Server environment hosts applications with high-availability requirements.

If you run Node Manager on a system that hosts Managed Servers, you can start and stop the Managed Servers remotely using the Administration Console or the command line. Node Manager can also automatically restart a Managed Server after an unexpected failure.

For more information about Node Manager, refer to *Oracle Fusion Middleware Node Manager Administrator's Guide for Oracle WebLogic Server*.

3.7 Verifying the Installation

To verify the installation, start your browser and enter the following URLs:

- To access the Administration Server console:
`http://host:admin_server_port/console`
- If you configured your Administration Server to accept SSL connection, use the following URL to access the Administration Server console in secure mode:
`https://host:secure_admin_server_port/console`
- To access Enterprise Manager:
`http://host:admin_server_port/em`

Deinstalling Oracle SOA Suite

This chapter describes how to remove Oracle SOA Suite from your system.

You should always use the instructions provided in this chapter for removing the software. If you try to remove the software manually, you may experience problems when you try to reinstall the software again at a later time. Following the procedures in this chapter will ensure that the software is properly removed. See Section 4.2, "Reinstallation" for more information.

The following topics are covered:

- Section 4.1, "Deinstallation Instructions"
- Section 4.2, "Reinstallation"

4.1 Deinstallation Instructions

The deinstaller will attempt to remove the Oracle Home from which it was started. Before you choose to remove your SOA 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.

This procedure will not remove any WebLogic domains that you have created - it only removes the software in the SOA Oracle Home.

To remove Oracle SOA Suite from your system properly, perform the following tasks:

- Stopping Oracle Fusion Middleware
- Removing Oracle SOA Suite Schemas
- Removing Oracle SOA Suite
- Removing Oracle WebLogic Server
- Removing Oracle JDeveloper
- Removing the Program Groups (Windows Only)

4.1.1 Stopping Oracle Fusion Middleware

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

1. Stop the WebLogic Managed Servers.

On UNIX operating systems:

```
MW_HOME/user_projects/domains/domain_name/bin/stopManagedWeblogic.sh managed_  
server_name admin_url username password
```

On Windows operating systems:

```
MW_HOME\user_projects\domains\domain_name\bin\stopManagedWeblogic.cmd managed_server_name admin_url username password
```

2. Stop WebLogic Administration Server.

On UNIX operating systems:

```
MW_HOME/user_projects/domains/domain_name/bin/stopWeblogic.sh username password admin_url
```

On Windows operating systems:

```
MW_HOME\user_projects\domains\domain_name\bin\stopWeblogic.cmd username password admin_url
```

For both commands, specify the *admin_url* using the following format:

```
http://admin_server_host.admin_server_domain:admin_server_port
```

For more information about starting and stopping Oracle Fusion Middleware, refer to "Starting and Stopping Oracle Fusion Middleware" in *Oracle Fusion Middleware Administrator's Guide*.

4.1.2 Removing Oracle SOA Suite Schemas

Run the Repository Creation Utility (RCU) to drop the Oracle SOA Suite schemas from your database.

4.1.2.1 Starting RCU

Insert the RCU CD-ROM and start RCU from the `rcuHome/bin` (on UNIX operating systems) or `rcuHome\bin` (on Windows operating systems) directory:

On UNIX operating systems:

```
./rcu
```

On Windows operating systems:

```
rcu.bat
```

If you download the RCU .zip file from OTN, then you can also start RCU as shown above from the `rcuHome/bin` (on UNIX operating systems) or `rcuHome\bin` (on Windows operating systems) directory on your system.

4.1.2.2 Instructions for Dropping the Schemas

Follow the instructions below to drop the Oracle SOA Suite and Oracle BAM schemas:

1. Welcome Screen
Click **Next**.
2. Create Repository Screen
Select **Drop**.
Click **Next**.
3. Database Connection Details Screen

Provide the following credentials to connect to your Oracle database. These are the same credentials you provided on this screen when you created the Oracle SOA Suite and Oracle BAM schemas. See Section 2.1.3, "Create Schemas for Oracle SOA Suite and Oracle BAM" for more information.

Click **Next**. A "Checking Prerequisites" screen will appear. If there are errors, some details about the error will be displayed on the Database Connection Details Screen. Fix the error messages and click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the screen.

4. Select Components Screen

Select the prefix and schemas you want to drop from the repository.

Click **Next**. A "Checking Prerequisites" screen will appear. If there are errors, some details about the error will be displayed on the Select Components Screen. Fix the error messages and click **Next** again.

After the checking is complete with no errors, click **OK** to dismiss the screen.

5. Summary Screen

Click **Drop**. A "DROP" screen will appear. If there are errors, some details about the error will be displayed on the Summary Screen. Fix the error messages and click **Next** again.

After the schemas are dropped with no errors, click **OK** to dismiss the screen.

6. Completion Summary Screen

Click **Close**.

4.1.3 Removing Oracle SOA Suite

Deinstalling Oracle SOA Suite involves removing the SOA 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 SOA 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.

4.1.3.1 Removing the SOA Oracle Home

To start the deinstaller, navigate to the *SOA_ORACLE_HOME/oui/bin* (on UNIX operating systems) or *SOA_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 systems, you can also start the deinstaller from the Start menu by selecting **Programs > Oracle SOA 11g - Home1 > Uninstall**.

Follow the instructions in Table 4-1 to deinstall Oracle SOA Suite 11g Release 1 (11.1.1).

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

Table 4–1 Deinstallation Flow

No.	Screen	Description and Action Required
1	Welcome Screen	Click Next to continue.
2	Deinstall Oracle Home Screen	Verify the Oracle Home you are about to deinstall. Click Deinstall to continue.
3	Deinstall Progress Screen	This screen shows the progress and status of the deinstallation.
4	Deinstall Completed Screen	Click Finish to dismiss the screen.

After this is done, you must manually remove the SOA Oracle Home directory and all sub-directories. For example, if your SOA Oracle Home directory was `/home/Oracle/Middleware/Oracle_SOA1` on a UNIX operating system:

```
> cd /home/Oracle/Middleware
> rm -rf Oracle_SOA1
```

On a Windows operating system, if your SOA Oracle Home directory was `C:\Oracle\Middleware\Oracle_SOA1`, use a file manager window and navigate to the `C:\Oracle\Middleware` directory, then right-click on the `Oracle_SOA1` folder and select **Delete**.

4.1.3.2 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 4–1 to remove the Oracle Common Home directory.

4.1.4 Removing Oracle WebLogic Server

To deinstall Oracle WebLogic Server:

1. Start the deinstaller from the `WebLogic_Home/uninstall` (on UNIX operating systems) or `WebLogic_Home\uninstall` (on Windows operating systems) directory. You specified the location of the WebLogic Home directory on the

Choose Product Installation Directories Screen in Section 2.1.4, "Install Oracle WebLogic Server and Create the Middleware Home".

On UNIX systems:

```
./uninstall.sh
```

On Windows systems:

```
uninstall.cmd
```

On Windows systems, you can also start the deinstaller from the Start menu by selecting **Programs > Oracle WebLogic > Uninstall Oracle WebLogic**.

2. Welcome Screen

Click **Next**.

3. Choose Components Screen

By default, all components are selected.

Click **Next**.

4. Uninstalling WebLogic Platform Screen

Click **Done**.

After this is done, 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**.

4.1.5 Removing Oracle JDeveloper

If you have installed Oracle JDeveloper on your system, refer to *Oracle Fusion Middleware Installation Guide for Oracle JDeveloper* for instructions on how to remove this software from your system.

4.1.6 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 11.1.1.2.0
- Oracle SOA Suite 11g - Home1
- Oracle WebLogic

4.2 Reinstallation

The installer does not allow reinstallation of Oracle SOA Suite in a directory that already contains an Oracle product. To reinstall Oracle SOA Suite in the same directory as before, you must follow the instructions in this chapter to deinstall the software,

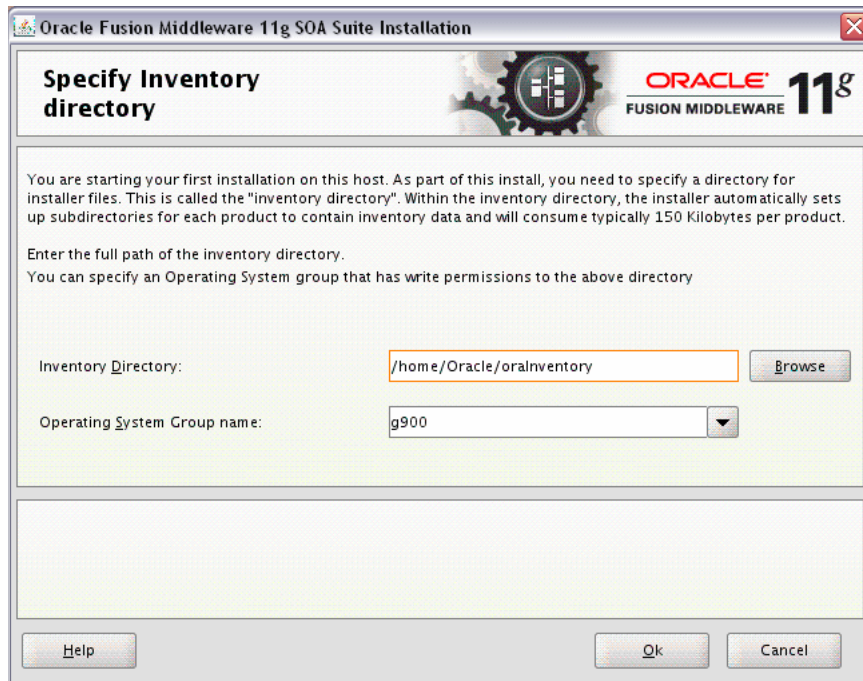
then follow the instructions in Chapter 2, "Installing Oracle SOA Suite" to reinstall the software.

Oracle SOA Suite Installation Screens

This appendix contains screenshots and descriptions for all of the Oracle SOA Suite installation screens:

- Specify Inventory Directory Screen (UNIX Only)
- Inventory Location Confirmation Screen (UNIX Only)
- Welcome Screen
- Prerequisite Checks Screen
- Specify Installation Location Screen
- Installation Summary Screen
- Installation Progress Screen
- Installation Completed Screen

A.1 Specify Inventory Directory Screen (UNIX Only)



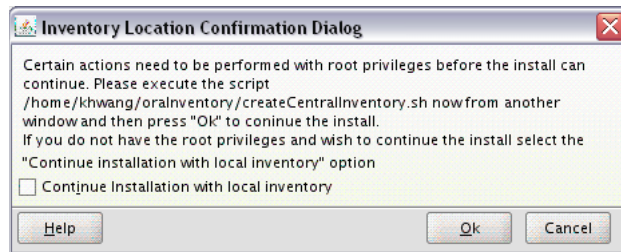
This screen appears for UNIX systems only; if this is your first Oracle installation on this host, you must specify the location of the inventory directory. This inventory directory is used by the installer to keep track of all Oracle products installed on the computer.

The default inventory location is *USER_HOME/orainventory*.

In the **Operating System Group name** field, select the group whose members you want to grant access to the inventory directory; all members of this group will be able to install products on this system.

Click **OK** to continue.

A.2 Inventory Location Confirmation Screen (UNIX Only)

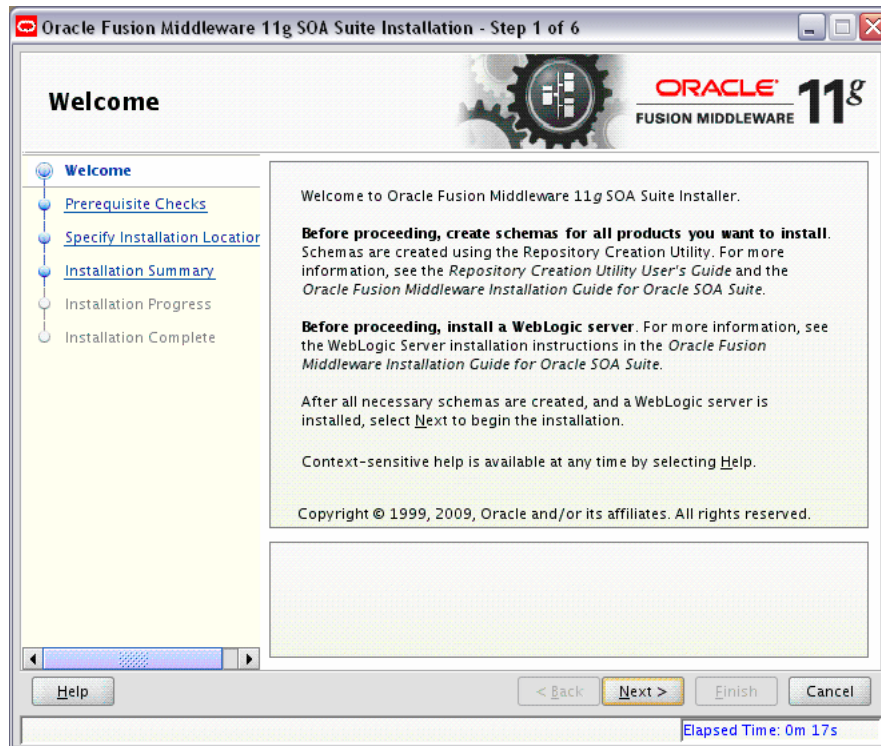


This screen appears for UNIX systems only; you are asked to run the `inventory_directory/createCentralInventory.sh` script as root.

If you do not have root access on this system but wish to continue with the installation, select **Continue installation with local inventory**.

Click **OK** to continue.

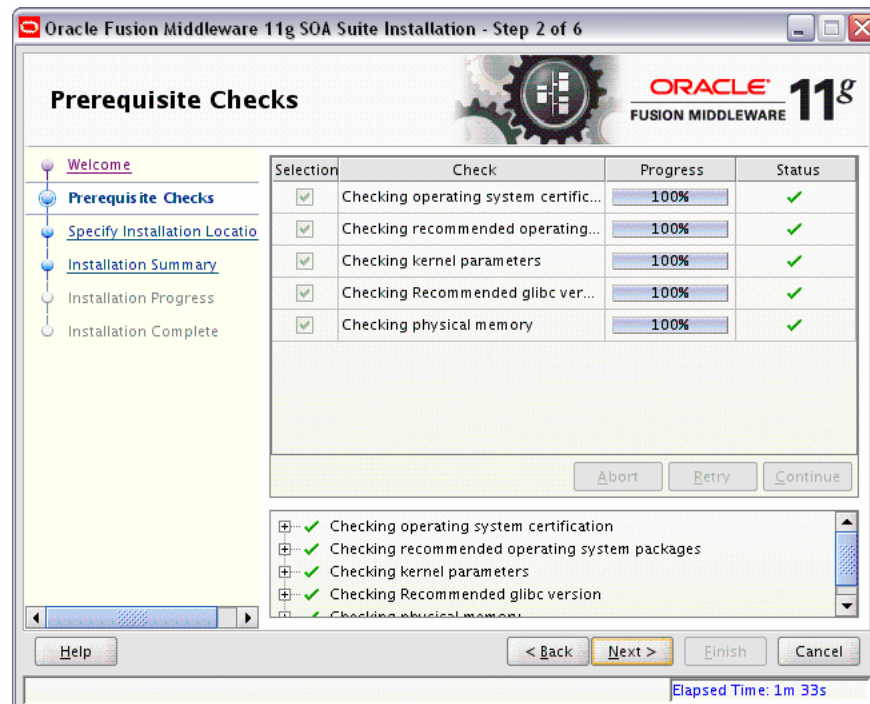
A.3 Welcome Screen



The Welcome screen is displayed each time you start the installer.

Click **Next** to continue.

A.4 Prerequisite Checks Screen



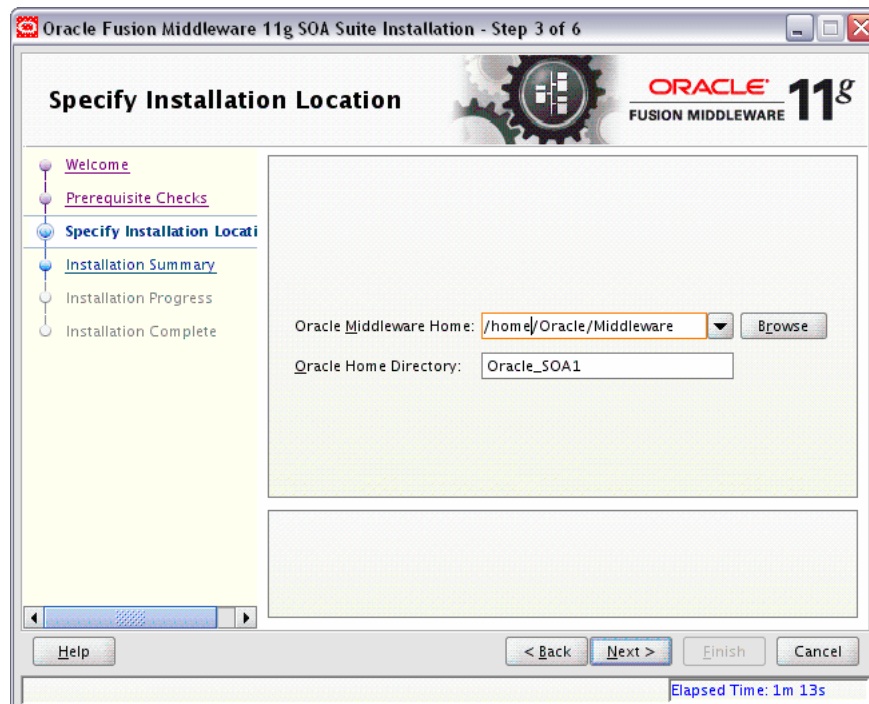
If there is a problem, a short error message appears in the bottom portion of the screen. Fix the error and click **Retry** to try again.

If you want to ignore the error and warning messages and continue with the installation, click **Continue**.

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

When you are finished, click **Next** to continue.

A.5 Specify Installation Location Screen



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.

In the Oracle Home Directory field, specify the directory inside the Oracle 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 Oracle 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 SOA Suite to an existing Oracle Home because of an incomplete previous installation).
- If you specify a new directory, it will be created inside the Oracle Middleware Home.

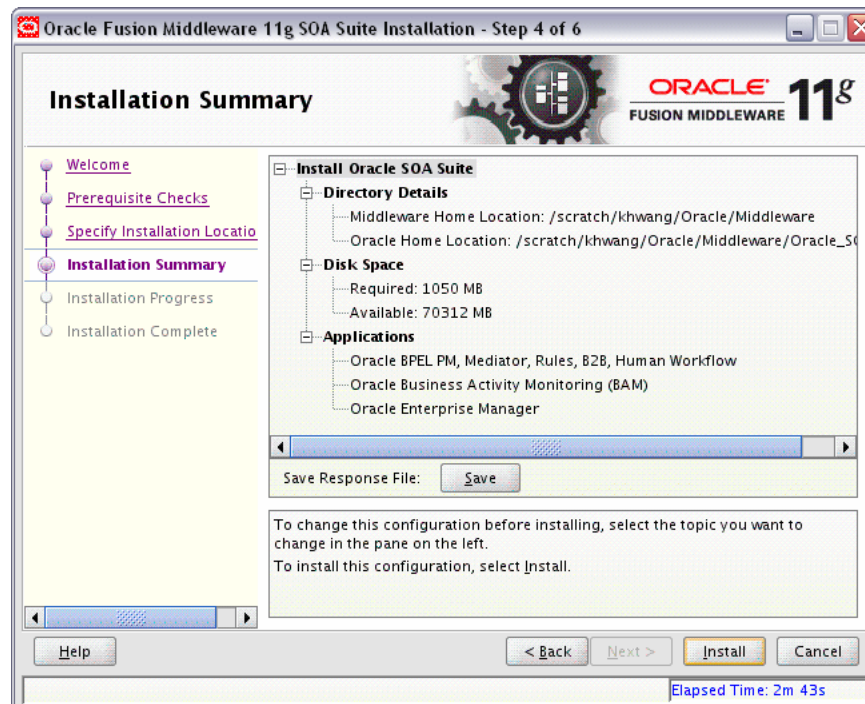
If you are performing an installation on a Windows operating system, be sure that your directory paths are valid and do not contain double backslashes (\\).

The Oracle Home directory is where your products will be installed. All software binaries will reside in this directory, and no runtime process can write to this directory.

Note: For the remainder of this document, this directory will be referred to as your SOA Oracle Home to avoid any confusion with the Oracle Home directories of other Oracle Fusion Middleware products. For more information about Oracle Home directories, refer to *Oracle Fusion Middleware Installation Planning Guide*.

Click **Next** to continue.

A.6 Installation Summary Screen

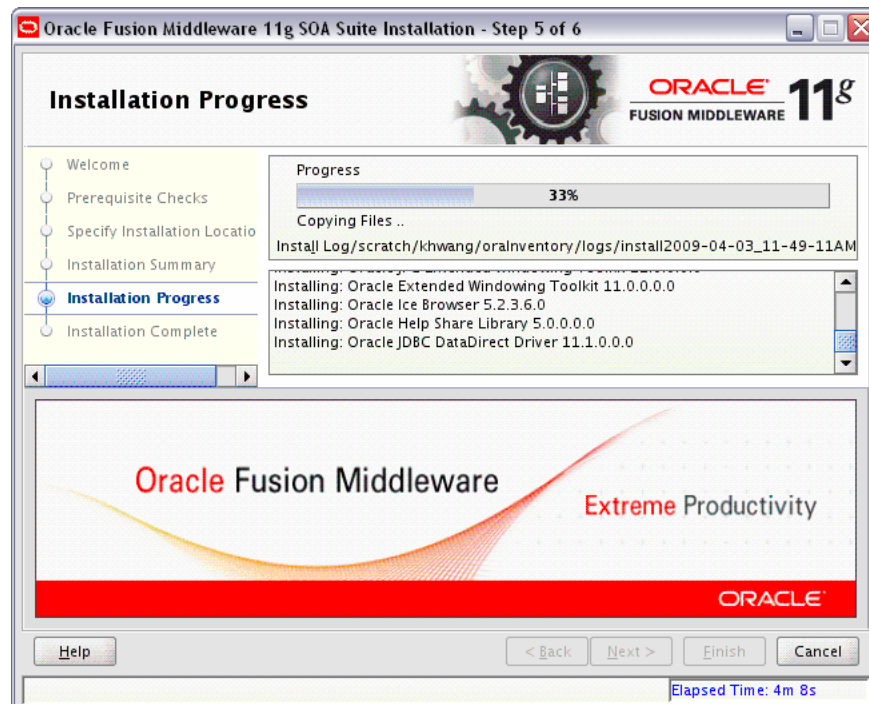


Review the information on this screen, and click **Install** to begin the installation. The operations summarized on this page will be performed when you click **Install**.

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

If you want to save this configuration to a text file, click **Save**. This file can be used later if you choose to perform the same installation from the command line. See Appendix D, "Silent Installation" for more information.

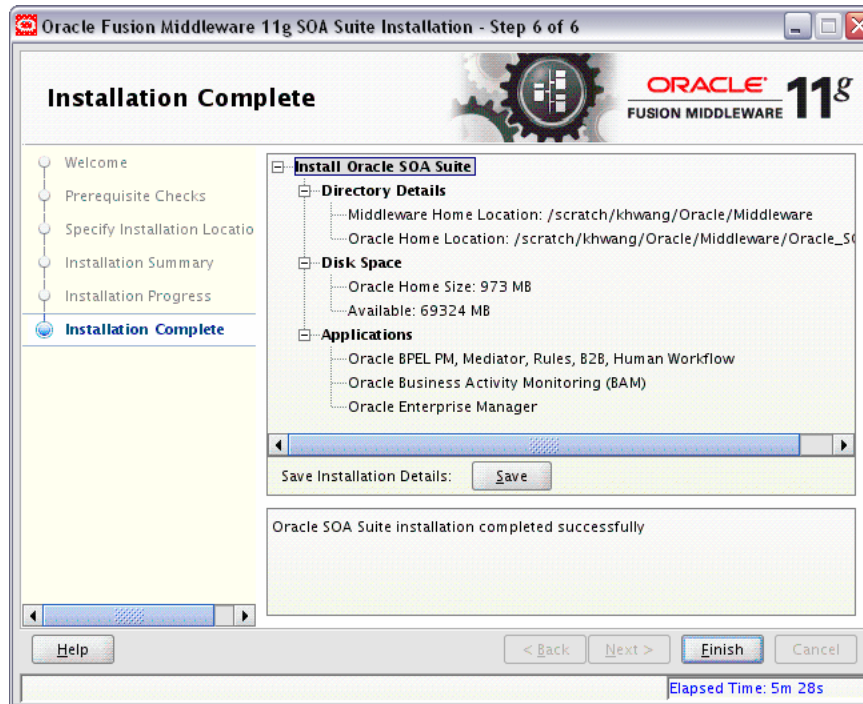
A.7 Installation Progress Screen



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.

A.8 Installation Completed Screen



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**.

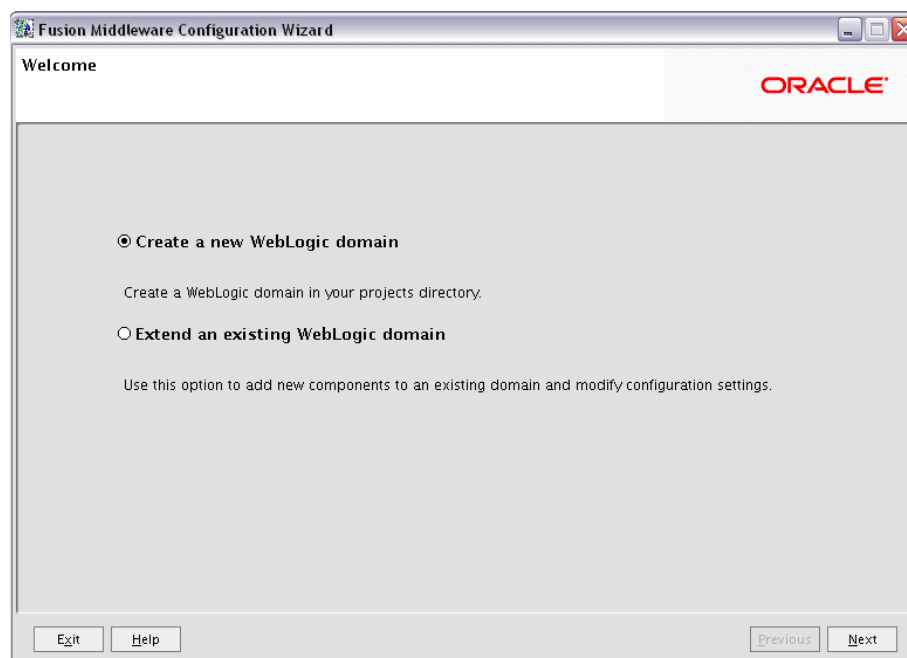
Click **Finish** to dismiss the screen.

Oracle SOA Suite Configuration Screens

This appendix contains screenshots and descriptions for all of the Oracle SOA Suite configuration screens:

- Welcome Screen
- Select a WebLogic Domain Directory Screen
- Select Domain Source Screen
- Select Extension Source Screen
- Specify Domain Name and Location Screen
- Configure Administrator Username and Password Screen
- Configure Server Start Mode and JDK Screen
- Configure JDBC Component Schema Screen
- Test Component Schema Screen
- Select Optional Configuration Screen
- Configure Administration Server Screen
- Configure Managed Servers Screen
- Configure Clusters Screen
- Assign Servers to Clusters Screen
- Configure Machines Screen
- Assign Servers to Machines Screen
- Target Deployments to Servers or Clusters Screen
- Target Services to Servers or Clusters Screen
- Configure JMS File Stores Screen
- Configure RDBMS Security Store Database Screen
- Configuration Summary Screen
- Creating Domain Screen

B.1 Welcome Screen

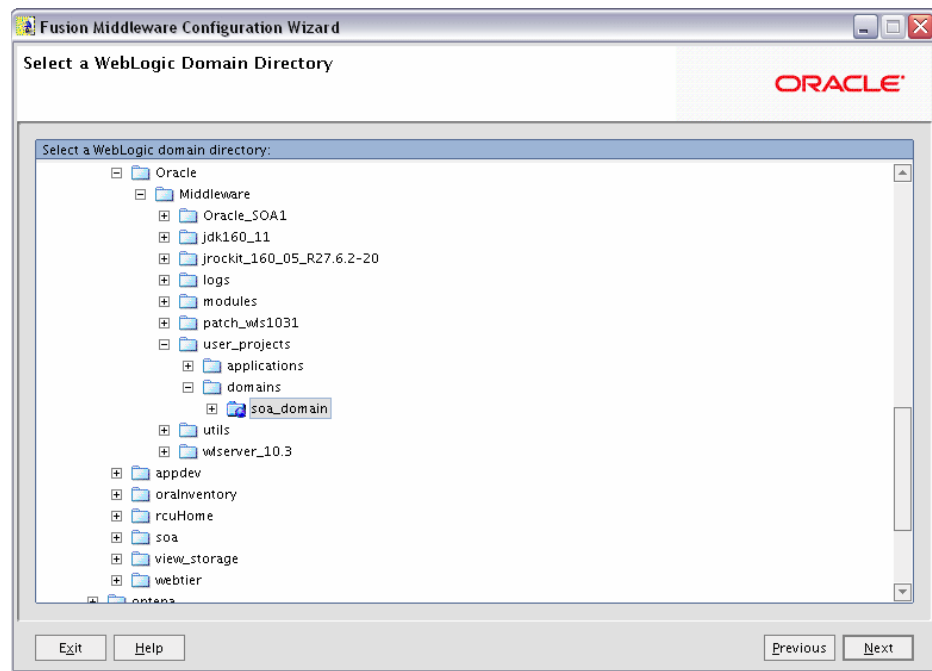


The Welcome screen is displayed each time you start the Oracle Fusion Middleware Configuration Wizard.

Select **Create a new WebLogic domain** to create a new WebLogic domain in your `projects` directory.

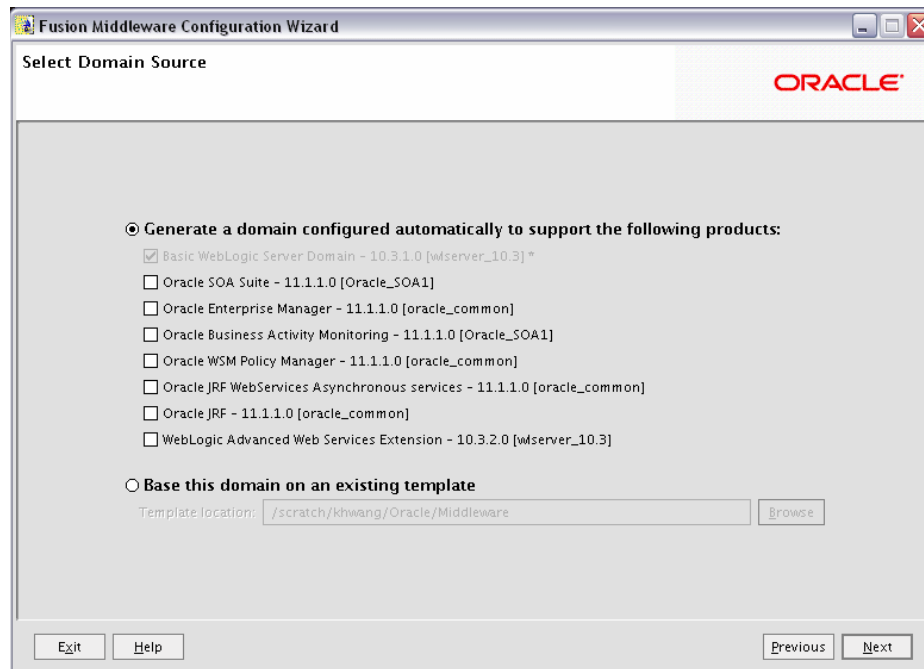
Select **Extend an existing WebLogic domain** if you want to add applications and services, or to modify existing configuration settings.

B.2 Select a WebLogic Domain Directory Screen



Select the WebLogic directory to which you want to add your applications and services.

B.3 Select Domain Source Screen

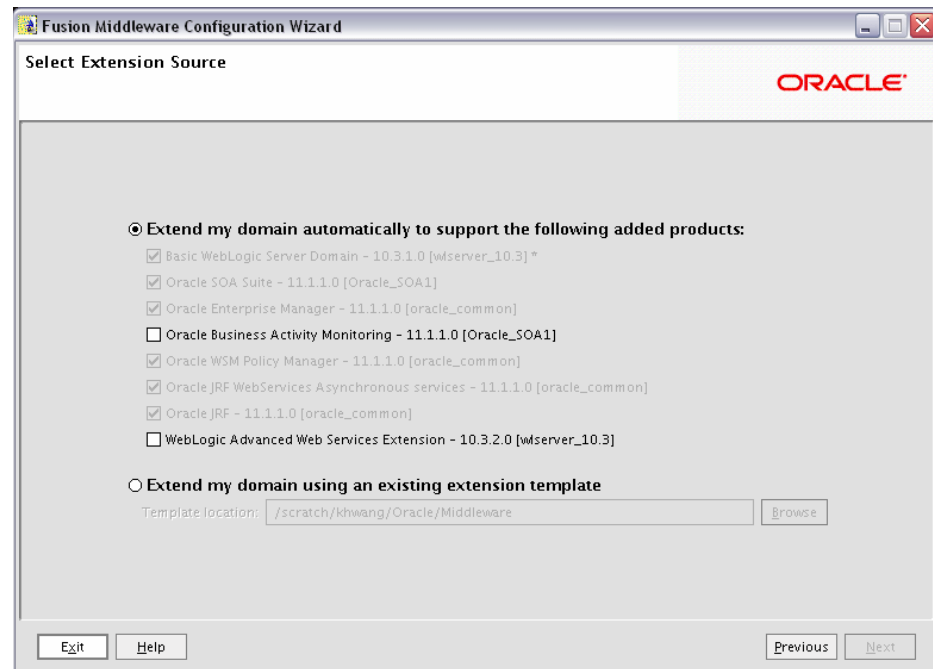


Select the source from which you want to create your new domain.

Select **Generate a domain configured automatically to support the following products** to create your domain to support selected products. Then, select the products for which you want support.

Select **Base this domain on an existing template** to create your domain based on an existing domain template. Click **Browse** to navigate your directories to find an existing template.

B.4 Select Extension Source Screen



Select the source from which you want to extend your domain.

Select **Extend my domain automatically to support the following added products** to extend your domain to support selected products. Then, select the products for which you want support.

Select **Extend my domain using an existing extension template** to extend your domain based on an existing extension template. Click **Browse** to navigate your directories to find an existing template.

If a conflict with an existing product is detected, you will see the following screen:



Select the action you want to take to resolve the conflict, then click **OK**. Select **Apply this selection if further conflicts are detected (don't prompt)** if this is the action you

want to take for all conflicts during domain extension. You will not be prompted again.

B.5 Specify Domain Name and Location Screen

Specify the following information for the domain you are creating:

- Domain name

The name of the domain you want to create. The default name is `base_domain`.

- Domain Location

The absolute path to the directory where this domain should be created. The default location is `MW_HOME/user_projects/domains` (on UNIX operating systems) or `MW_HOME\user_projects\domains` (on Windows operating systems), but you can specify any location.

Note: On Windows systems, be sure to include the drive letter when you specify the domain location.

- Application Location

The absolute path to the directory where applications created in this domain should reside. The default location is `MW_HOME/user_projects/applications` (on UNIX operating systems) or `MW_HOME\user_projects\applications` (on Windows operating systems).

Note: On Windows systems, be sure to include the drive letter when you specify the application location.

B.6 Configure Administrator Username and Password Screen

Oracle WebLogic Configuration Wizard

Configure Administrator User name and Password

Create a user to be assigned to the Administrator role.
This user is the default administrator used to start development mode servers.

ORACLE

Disard Changes

*User name: weblogic

*User password: *****

*Confirm user password: *****

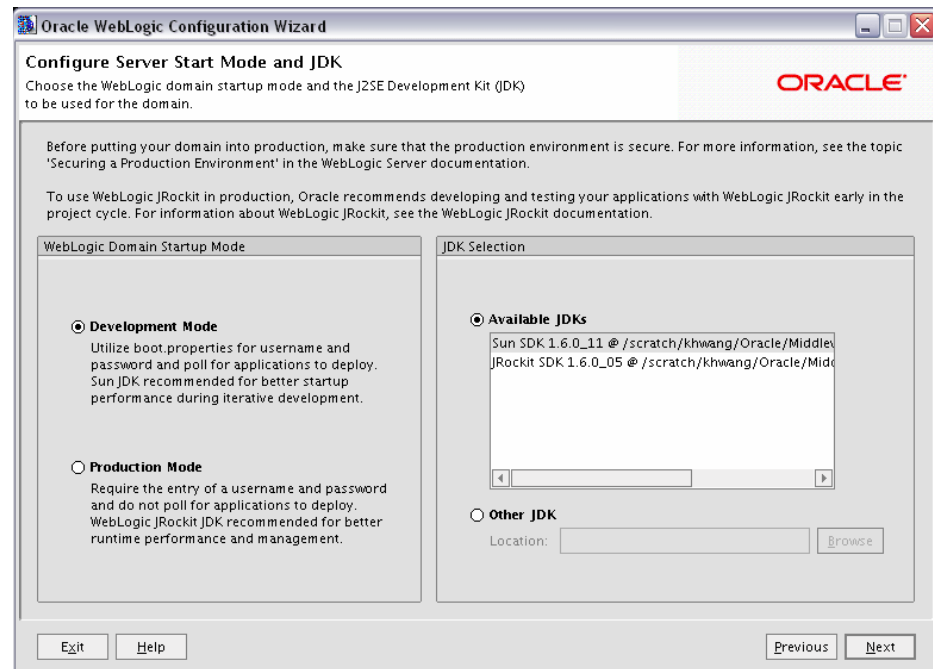
Description: This user is the default administrator.

Exit Help Previous Next

Create a user that will be assigned to the Administrator role. This user is the default administrator used to start development mode servers.

- User name
Specify the user name. The default name is `weblogic`.
- User password
Specify the password for the user.
- Confirm user password
Re-enter the user password.
- Description
Enter a description for the user. This field is optional.

B.7 Configure Server Start Mode and JDK Screen



In the WebLogic Domain Startup Mode section, select one of the following startup modes:

- **Development Mode**
Development mode should be used while you are developing your applications. Development mode uses a relaxed security configuration and enables you to auto-deploy applications. In this mode, `boot.properties` is used for username and passwords and polling is used for application deployment.
- **Production Mode**
Production mode should be used when your application is running in its final form. A production domain uses full security and may use clusters or other advanced features. In this mode, usernames and passwords are required and polling is not used for application deployment.

In the JDK Selection section, select the recommended JDK for your startup mode from the list of available JDKs, or select **Other JDK** and click **Browse** to find another JDK on your system. The recommended JDKs are described in the text for each mode in the WebLogic Domain Startup Mode section.

B.8 Configure JDBC Component Schema Screen

Note: Change only the input fields below that you wish to modify and values will be applied to all selected rows.

Vendor: Oracle DBMS/Service: orcl
 Driver: *Oracle's Driver (Thin) for Service connections; Versions:9.0.1 Host Name: dbhost.example.com
 Schema Owner: Varies among component schemas Port: 1521
 Schema Password: *****
 Configure selected component schemas as RAC multi data source schemas in the next panel.

Component Schema	DBMS/Service	Host Name	Port	Schema Owner	Schema Password
<input checked="" type="checkbox"/> BAM Schema	orcl	dbhost.example.com	1521	DEV_ORABAM	*****
<input checked="" type="checkbox"/> SOA Infrastructure	orcl	dbhost.example.com	1521	DEV_SOAINFRA	*****
<input checked="" type="checkbox"/> User Messaging Service	orcl	dbhost.example.com	1521	DEV_ORASDPM	*****
<input checked="" type="checkbox"/> OWSM MDS Schema	orcl	dbhost.example.com	1521	DEV_MDS	*****
<input checked="" type="checkbox"/> SOA MDS Schema	orcl	dbhost.example.com	1521	DEV_MDS	*****

Exit Help Previous Next

Configure the schema owner and password for each component schema listed on this screen. Changes to any of the fields on this screen are applied to all selected component schema in the table.

For example, if all of your schemas reside on the same database, select all of the schemas in the table, then specify the appropriate database values for the schemas (DBMS/Service, Host Name, and Port).

If, for example, you have a different password for each schema, then you must select each schema individually and specify the password for the selected schema only.

Review the table on this screen and identify which fields you need to modify:

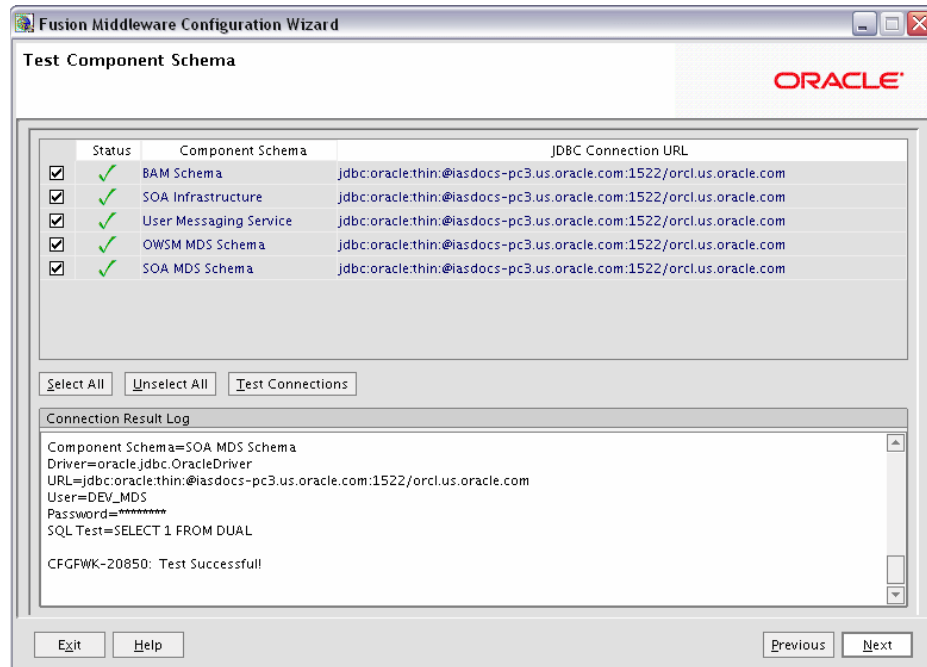
- Vendor
 - Select the vendor for your database from the drop-down list.
- Driver
 - Select the driver type from the drop-down list.
- Schema Owner
 - Specify the schema owner for the schema. This schema owner was assigned when you created the schema using RCU.
- Password
 - Specify the password for the schema. You specified this password when creating the schema using RCU.
- DBMS/Service
 - Specify the service name for your database. This is the database on which the schema resides.
- Host Name

Specify the name of the system where your database is running.

- Port

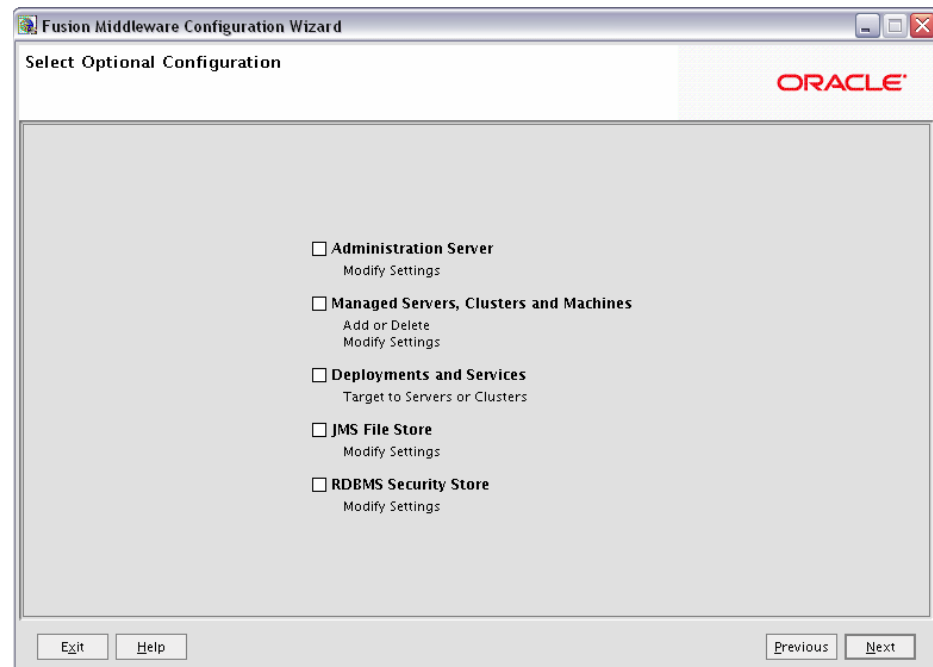
Specify the database listen port number.

B.9 Test Component Schema Screen



Verify that the connections to your data sources are successful.

B.10 Select Optional Configuration Screen



Select any category for which you want to perform custom or advanced configuration. Note that selection of any of these categories is optional, and your domain will be created or extended if you choose not to customize any of these categories:

- Administration Server

Select this to edit your Administration Server settings. You will be able to:

- Change the name of your Administration Server (default is AdminServer).
- Specify custom port numbers.
- Configure the Administration Server to accept SSL connections.

- Managed Servers, Clusters and Machines

Select this to add or delete managed servers, clusters, and machines. You can also modify the settings of any existing server, cluster, or machine.

For more information about these concepts, refer to "Oracle Fusion Middleware Concepts for All Users" in *Oracle Fusion Middleware Installation Planning Guide*.

- Deployments and Services

Select this to customize how deployments and services are targeted to machines and clusters.

Typically, these screens do not need to be modified unless specifically told to do so. For more information, refer to *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite*.

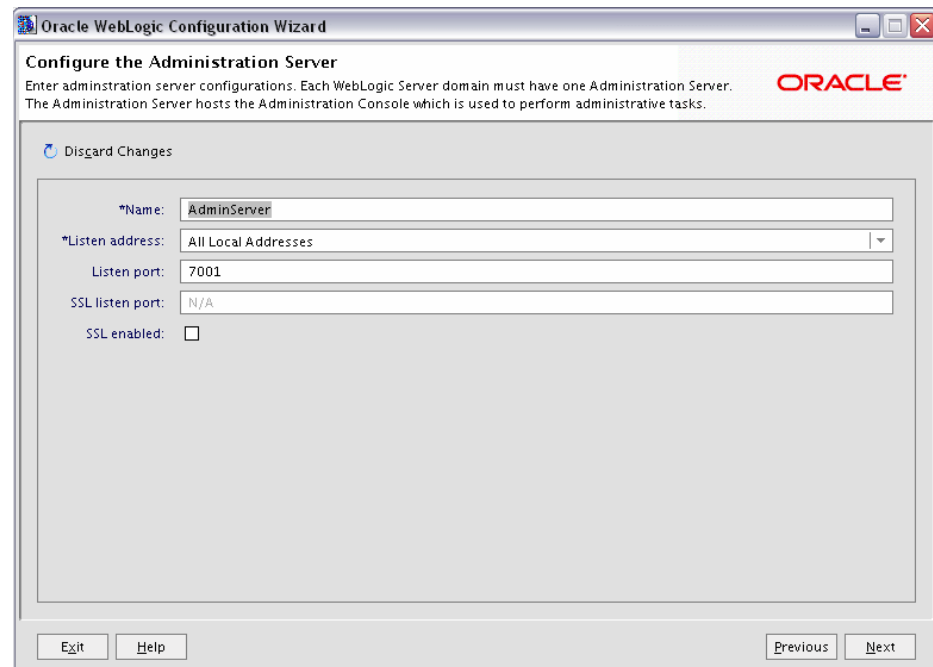
- JMS File Store

Select this to customize your JMS file store settings.

- RDBMS Security Store

Select this if you want to configure an external relational database management system (RDBMS) as a data store for various security providers.

B.11 Configure Administration Server Screen



The Administration Server is the primary tool used to manage a WebLogic Server domain.

One WebLogic Server instance in each domain is configured as the Administration Server. If you have multiple WebLogic Server instances, then all the other instances are referred to as Managed Servers. In a domain with only one WebLogic Server instance, that instance functions both as Administration Server and Managed Server.

- Name

Specify the name of your Administration Server. The default name is AdminServer.

- Listen Address

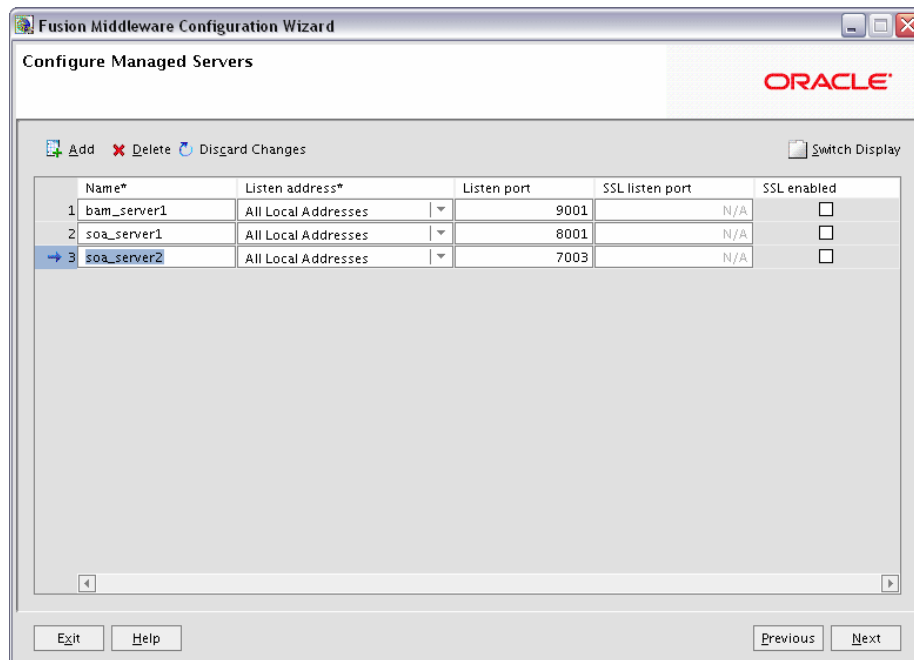
Use the drop-down list to select an address or range of addresses that the Administration Server will listen to for events. The default selection is All Local Addresses.

- Listen Port

Specify the listen port number. The default port number is 7001.

Select **SSL enabled** if you want your Administration Server to accept SSL connections. Be sure to specify the SSL Listen Port if you select the **SSL enabled** option.

B.12 Configure Managed Servers Screen



A managed server is an instance of WebLogic Server used to host enterprise applications. A typical production environment has at least one managed server, which is managed by the Administration Server.

Use this screen to add or delete managed servers; click **Add** to add a managed server. To delete a managed server, select the server name and click **Delete**.

Note: Deleting one of the default managed servers (soa_server1 or bam_server1) is not recommended.

For each managed server, specify:

- **Name**
Name of the managed server. Each server within the domain must have a unique name. The server name is not used as part of the URL for applications that are deployed on the server. It is for your identification purposes only.
- **Listen Address**
Enter an IP address or DNS name if you want to limit the number of valid addresses for a server instance. Otherwise, URLs to the server can specify any of the host computer's IP address, any DNS name that maps to one of the IP addresses, or the localhost string.
- **Listen Port**
Enter the port number from which you want to access the server instance. If you run multiple server instances on a single computer, each server must use its own listen port.

Note: Do not set the listen port number to 7001; this is the default port for the Administration Server.

- **SSL Listen Port**

Enter the port number from which you want to access the server instance for SSL connections - this column is only active if the corresponding **SSL enabled** checkbox in the same row is selected.

Click **Switch Display** to see the managed server information in tabs rather than in a table:

Oracle WebLogic Configuration Wizard

Configure Managed Servers

Add or delete configuration information for Managed Servers. A typical production environment has one or more Managed Servers. Each Managed Server is an instance of WebLogic Server used to host enterprise applications.

ORACLE

Add Delete Discard Changes Switch Display

bam_server1 soa_server1

*Name: bam_server1

*Listen address: All Local Addresses

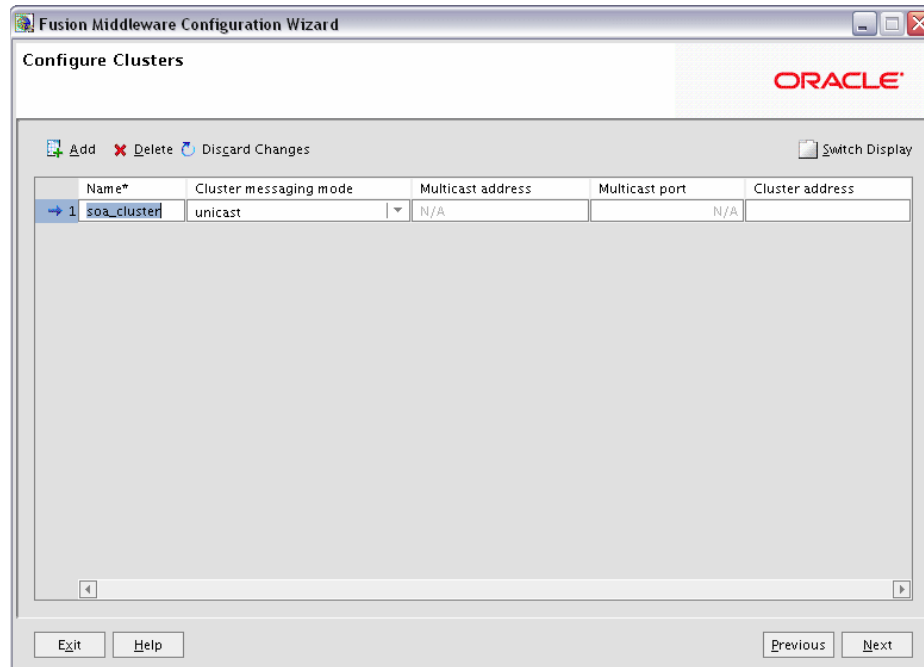
Listen port: 9001

SSL listen port: N/A

SSL enabled:

Exit Help Previous Next

B.13 Configure Clusters Screen



A cluster consists of multiple managed server instances working together to provide increased scalability and reliability.

Use this screen to add or delete clusters; click **Add** to add a cluster. To delete a cluster, select the cluster name and click **Delete**.

For each cluster, specify:

- Name
- Cluster messaging mode

If you are creating a cluster within a new WebLogic Server environment, it is recommended that you use the Unicast messaging type.

If you are creating a cluster within an existing WebLogic Server environment or you need to ensure backward compatibility with older versions of WebLogic Server, you must use the Multicast messaging type. This enables multiple applications to subscribe to a given IP address and port number and listen for messages.

Select "multicast" or "unicast" from the drop-down list. If you select "multicast" you must also provide:

- Multicast address

A multicast address is an IP address in the range from 224.0.0.0 to 239.255.255.255. The valid range is from 224.0.0.0 to 239.255.255.255. The default value used by WebLogic Server is 239.192.0.0. You should avoid using multicast addresses in the range x.0.0.1. This address must be unique to this cluster and should not be shared by other applications.

- Multicast port

The multicast port is used by cluster members to communicate with each other. Valid values are between 1 and 65535.

- Cluster address

Address of the cluster.

Click **Switch Display** to see the cluster information in tabs rather than in a table:

Oracle WebLogic Configuration Wizard

Configure Clusters
Add or delete configuration information for clusters. A cluster consists of multiple server instances working together to provide increased scalability and reliability.

ORACLE

Add Delete Discard Changes Switch Display

soa_Cluster_1

*Name: soa_Cluster_1

Cluster messaging mode: multicast

Multicast address: 239.192.0.0

Multicast port: 7001

Cluster address:

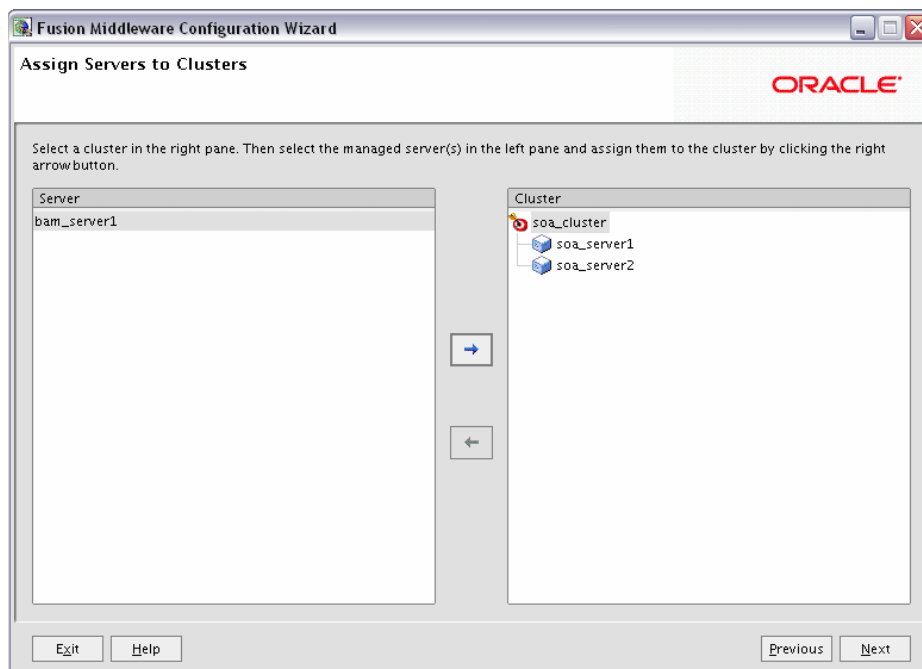
Exit Help Previous Next

Note: Oracle SOA uses Quartz, which is an open source job-scheduling framework. When you are setting up clusters on multiple systems, Quartz requires that the clocks on all the systems be synchronized. For more information, refer to the following URL:

<http://www.opensymphony.com/quartz/wikidocs/TutorialLesson11.html>

Also refer to the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite* and *Oracle Fusion Middleware High Availability Guide* for more information about clustering in advanced topologies.

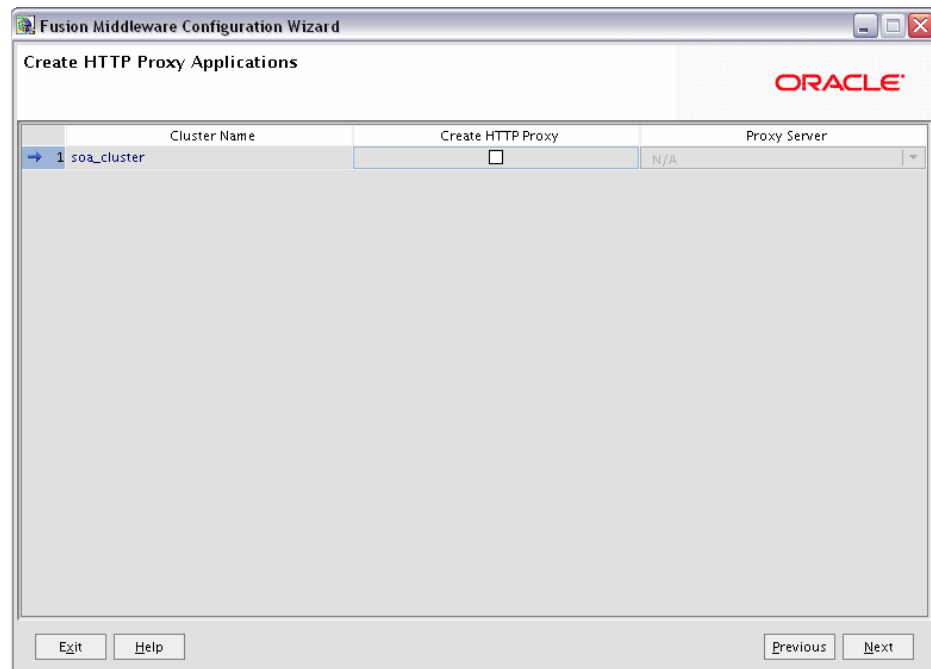
B.14 Assign Servers to Clusters Screen



This screen only appears if you created at least one cluster on the Configure Clusters Screen.

Use this screen to assign each managed server in your domain to a cluster.

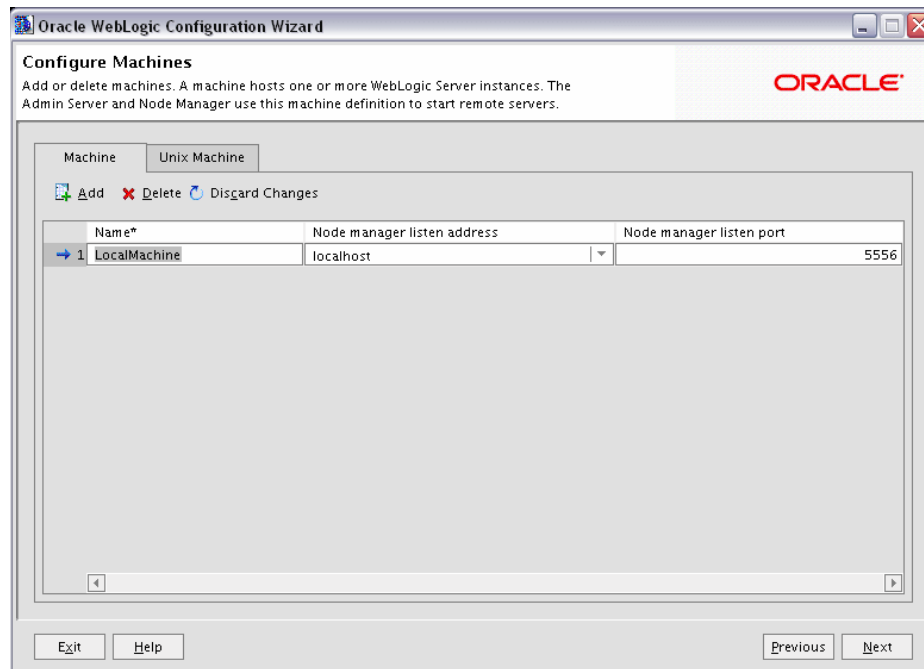
B.15 Create HTTP Proxy Applications Screen



An HTTP proxy server proxies requests from a web server to WebLogic Server instances in a cluster, and provides load balancing and failover for the proxied HTTP requests.

If you want to proxy requests for a cluster, select **Create HTTP Proxy** next to the cluster name, then select a proxy server from the drop-down list in the "Proxy Server" field.

B.16 Configure Machines Screen



A machine is the logical representation of the computer that hosts one or more WebLogic Server instances. Each Managed Server must be assigned to a machine. The Administration Server and Node Manager are used to manage the machines defined on this screen.

If you are creating a new machine on a non-UNIX operating system, specify the following:

- Name
Name of the machine. This name is used to identify the machine within the WebLogic Server domain; it does not have to correspond to the machine's network name.
- Node manager listen address
Enter the DNS name or IP address on which the Node Manager listens.
- Node manager listen port
Enter the port number on which the Node Manager listens for incoming requests.

For UNIX machine, click the "Unix Machine" tab and specify the following:

- Name
Name of the machine. This name is used to identify the machine within the WebLogic Server domain; it does not have to correspond to the machine's network name.
- Post bind GID enabled and Post bind GID
Select **Post bind GID enabled** to specify a non-privileged group account under which the server instance runs, then enter the group in the **Post bind GID** column. The default group is `nobody`, which is a standard UNIX group ID that provides the least possible privileges. In a production environment, Oracle recommends

that you create a group account specifically for running instances of WebLogic Server.

- **Post bind UID enabled and Post bind UID**

Select **Post bind UID enabled** to specify a non-privileged user account under which the server instance runs, then enter the user in the **Post bind UID** column. The default user is `nobody`, which is a standard UNIX account that provides the least possible privileges. In a production environment, Oracle recommends that you create a user account specifically for running instances of WebLogic Server.

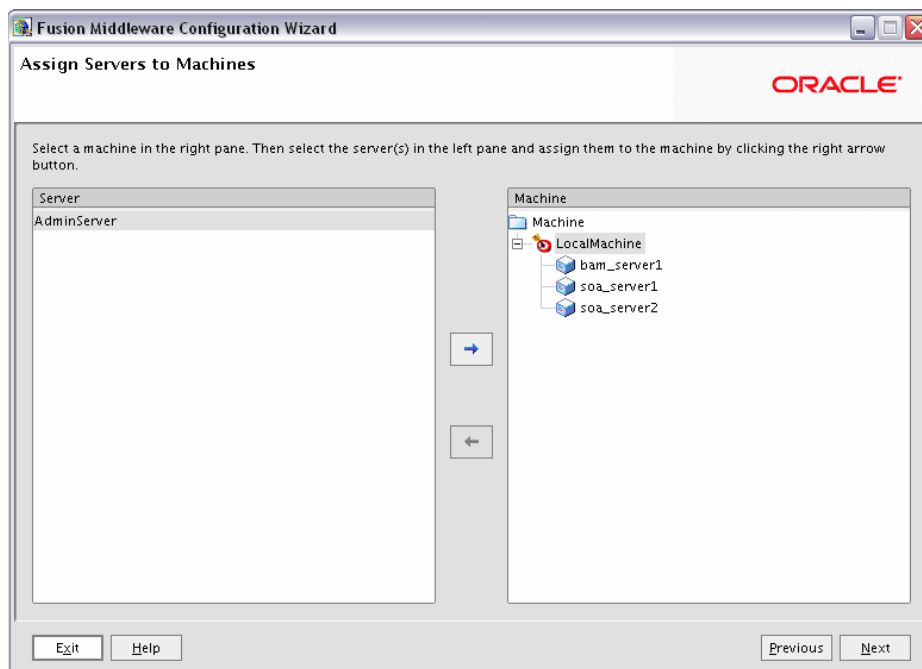
- **Node manager listen address**

Enter the DNS name or IP address on which the Node Manager listens.

- **Mode manager listen port**

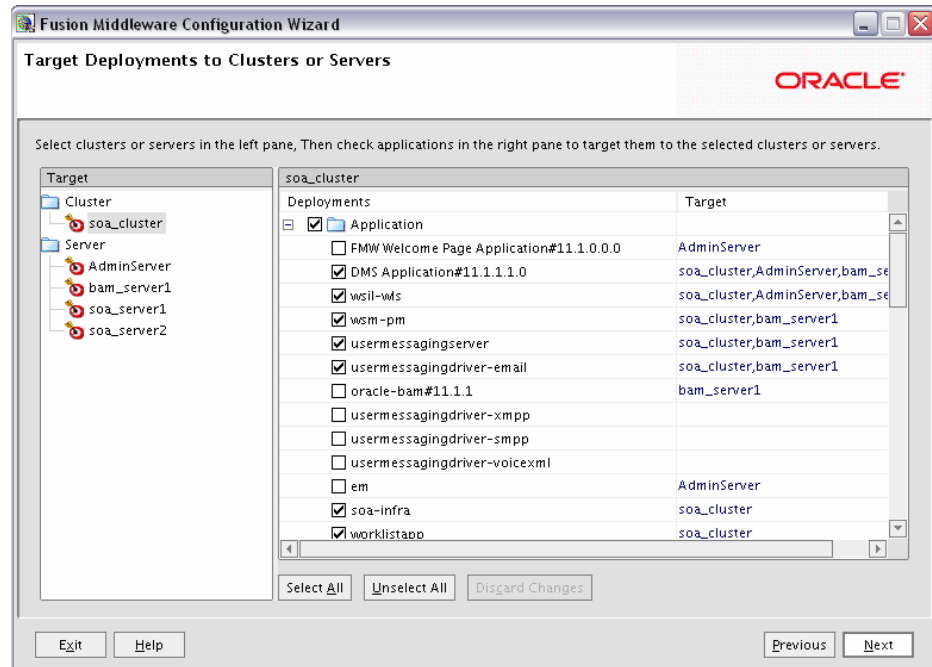
Enter the port number on which the Node Manager listens for incoming requests.

B.17 Assign Servers to Machines Screen



Use this screen to assign each WebLogic Server instance to the corresponding machine on which it runs.

B.18 Target Deployments to Servers or Clusters Screen

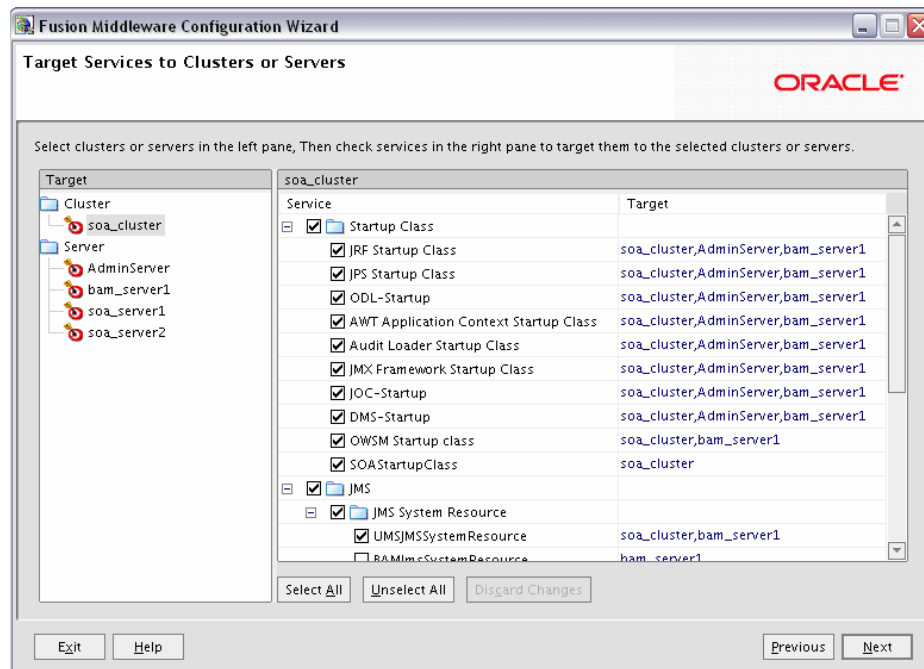


Use this screen to target your deployments to servers or clusters. Doing so enables WebLogic Server to serve the deployment to clients.

The Configuration Wizard automatically takes care of all necessary deployment targeting. You should not have to change anything on this screen unless specifically directed to do so.

In the left pane, select the server or cluster. Then, select the deployment in the right pane that you want to target to the selected server or cluster. The "Target" column in the right pane shows you the servers and clusters to which each deployment is targeted.

B.19 Target Services to Servers or Clusters Screen

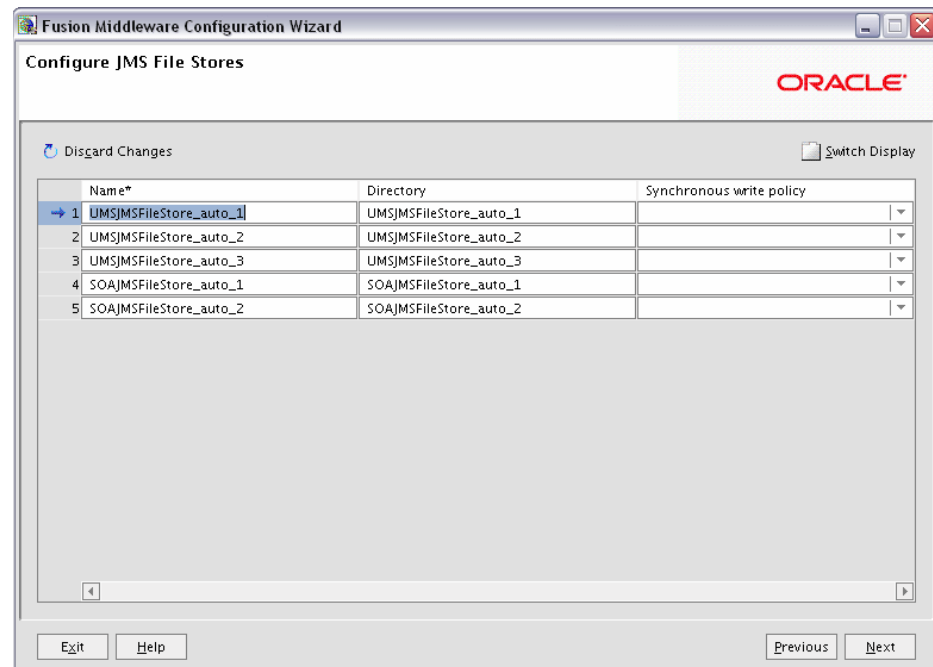


Use this screen to target your services to servers or clusters. Doing so enables WebLogic Server to serve the deployment to clients.

The Configuration Wizard automatically takes care of all necessary services targeting. You should not have to change anything on this screen unless specifically directed to do so.

In the left pane, select the server or cluster. Then, select the service in the right pane that you want to target to the selected server or cluster. The "Target" column in the right pane shows you the servers and clusters to which each service is targeted.

B.20 Configure JMS File Stores Screen



Edit the configuration information for the JMS file stores, which are used to store persistent messages and durable subscribers.

- Name

Alphanumeric (no spaces) name of your JMS file store. Each JMS file store configuration in your WebLogic environment must have a unique name, regardless of the domain or cluster in which it resides.

- Directory

Directory where the JMS file store is located.

- Synchronous write policy

Use the drop-down list to select one of the following for each file store:

- Cache-Flush

Transactions cannot complete until all of their writes have been flushed down to disk. This policy is reliable and scales well as the number of simultaneous users increases.

- Direct-Write

File store writes are written directly to disk. This policy is supported on Solaris and Windows. If this policy is set on an unsupported platform, the file store automatically uses the Cache-Flush policy instead.

- Disabled

Transactions are complete as soon as their writes are cached in memory, instead of waiting for the writes to successfully reach the disk. This policy is the fastest, but the least reliable (that is, transactionally safe). It can be much faster than the other policies, but power outages or operating system failures can cause lost or duplicate messages.

B.21 Configure RDBMS Security Store Database Screen

Fusion Middleware Configuration Wizard
Configure RDBMS Security Store Database

ORACLE

Discard Changes Test Connection

Create RDBMS tables in your data store before booting your domain using scripts in your WebLogic Server's server/lib directory

Database Type: Oracle

Driver: *Oracle's Driver (Thin) for Instance connections; Versions: 9.0.1, 9.2.0, 10, 11

Class Name: oracle.jdbc.OracleDriver

DBMS SID: User Name:

DBMS Host: User Password:

DBMS Port: 1521 Confirm User Password:

URL: jdbc:oracle:thin:@\$host:1521:\$dbms

Known Properties: user=\$username

Additional Properties: Optional

Exit Help Previous Next

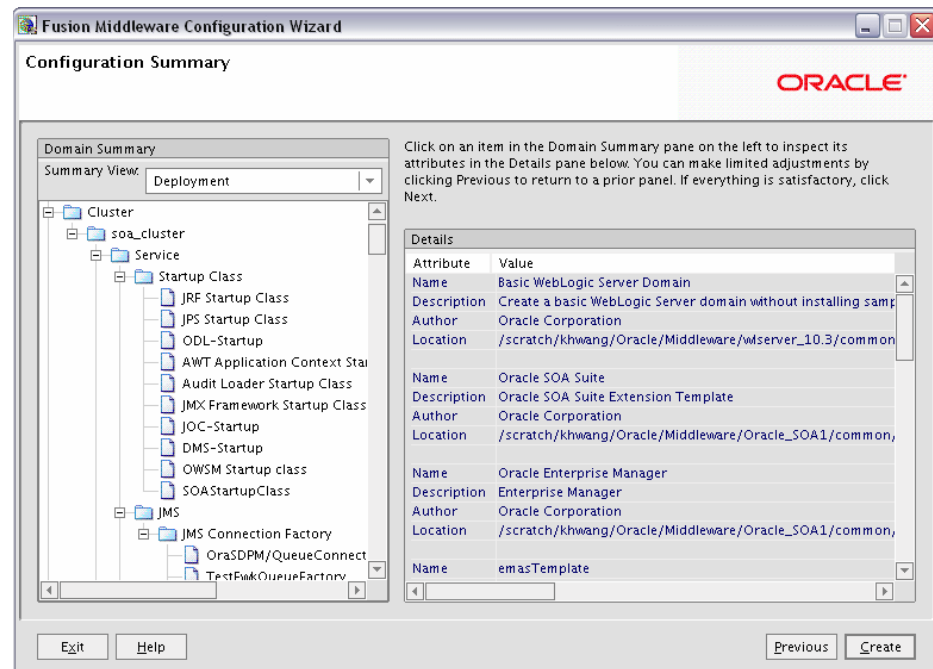
To make changes on this screen, select a database type from the drop-down list in the "Database Type" field. Then, select the appropriate driver in the "Driver" field.

Provide the following credentials for the selected database:

- **DBMS SID**
The service ID of your database; this is usually the same as the global ID.
- **DBMS Host**
The name of the system on which the database is running.
- **DBMS Port**
The listen port number of the database.
- **User Name**
The user name to access the database.
- **User Password**
The password for the database user.
- **Confirm User Password**
Re-enter the password for the database user.

Click **Test Connection** to make sure that the connection to your database is valid.

B.22 Configuration Summary Screen



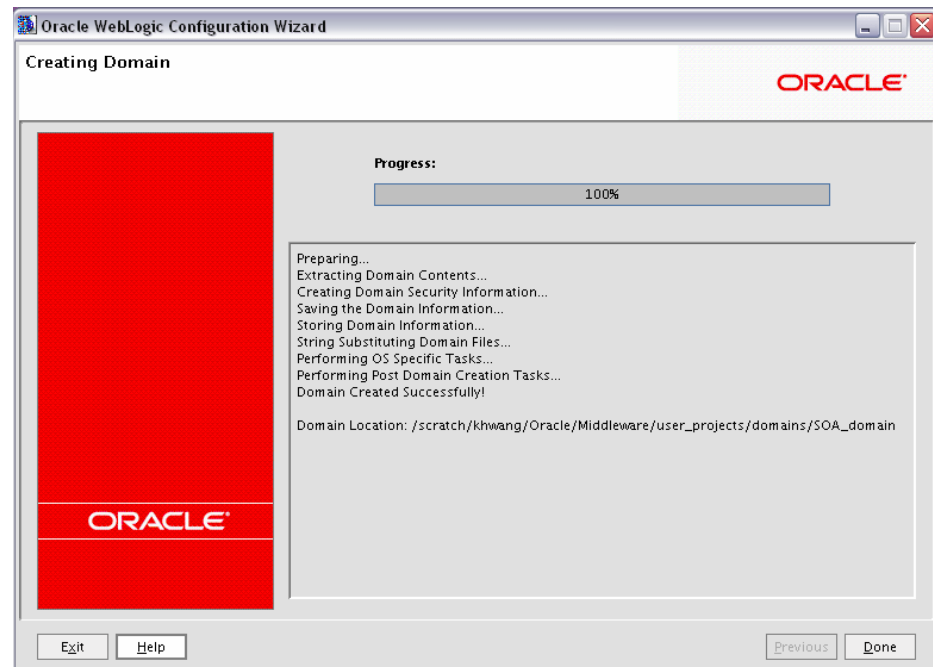
Verify the information on this screen. In the Summary View field, select a category from the drop-down list to view information about that category:

- **Deployment**
Shows the deployments that will be configured in each cluster and server. You can click on the name of a deployment to view detailed information about the selected deployment.
- **Application**
Shows the applications that will be configured in each cluster and server. You can click on the name of an application to view detailed information about the selected application.
- **Service**
Shows the services that will be configured in each cluster and server. You can click on the name of a service to view detailed information about the selected service.
- **Cluster**
Shows the clusters that will be configured in this domain and the servers that will be configured in each cluster. You can click on each server name to view information specific to that server.
- **Machine**
Shows the machines that will be configured in this domain and the servers that will be configured in each machine. You can click on each server name to view information specific to that server.
- **JMS Server**
Shows the JMS file store information for each managed server.

Use the **Previous** button if you want to return to a previous screen to alter some portion of the configuration.

If everything is correct, click **Create**.

B.23 Creating Domain Screen



This screen shows the progress of the domain creation.

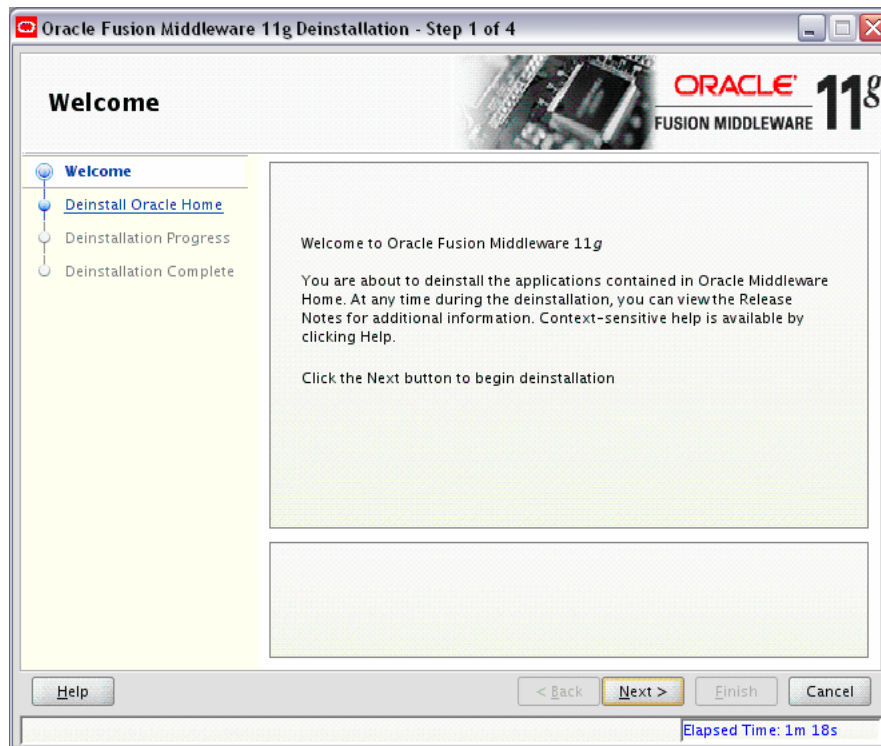
When it is finished, click **Done** to dismiss the window.

Oracle SOA Suite Deinstallation Screens

This appendix contains screenshots and descriptions for all of the Oracle SOA Suite deinstallation screens:

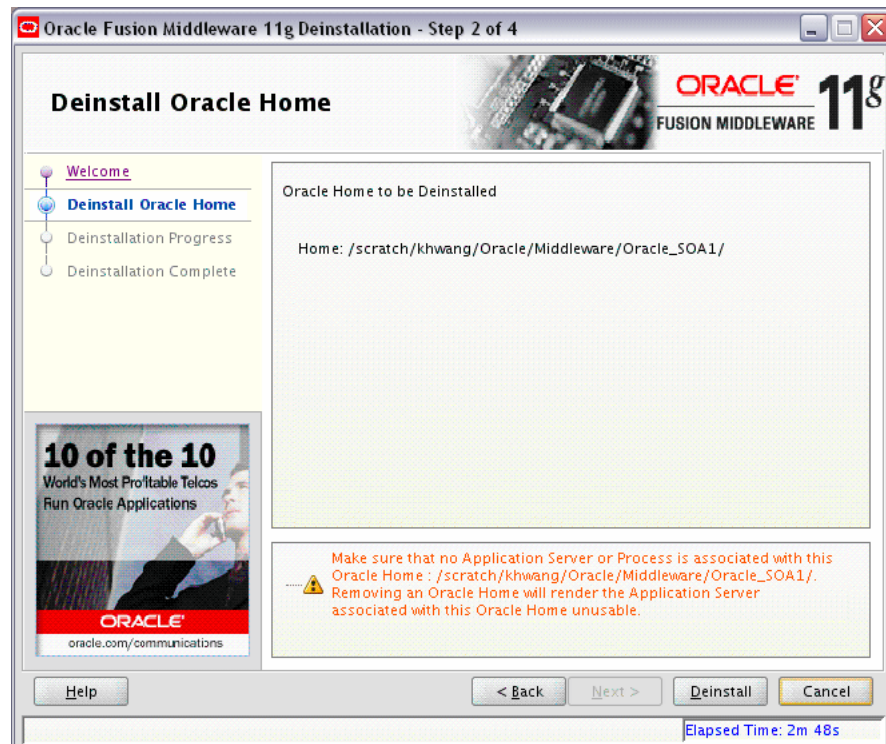
- [Welcome Screen](#)
- [Deinstall Oracle Home Screen](#)
- [Deinstall Progress Screen](#)
- [Deinstall Completed Screen](#)

C.1 Welcome Screen



The Welcome screen is displayed each time you start the deinstaller.
Click **Next** to continue.

C.2 Deinstall Oracle Home Screen

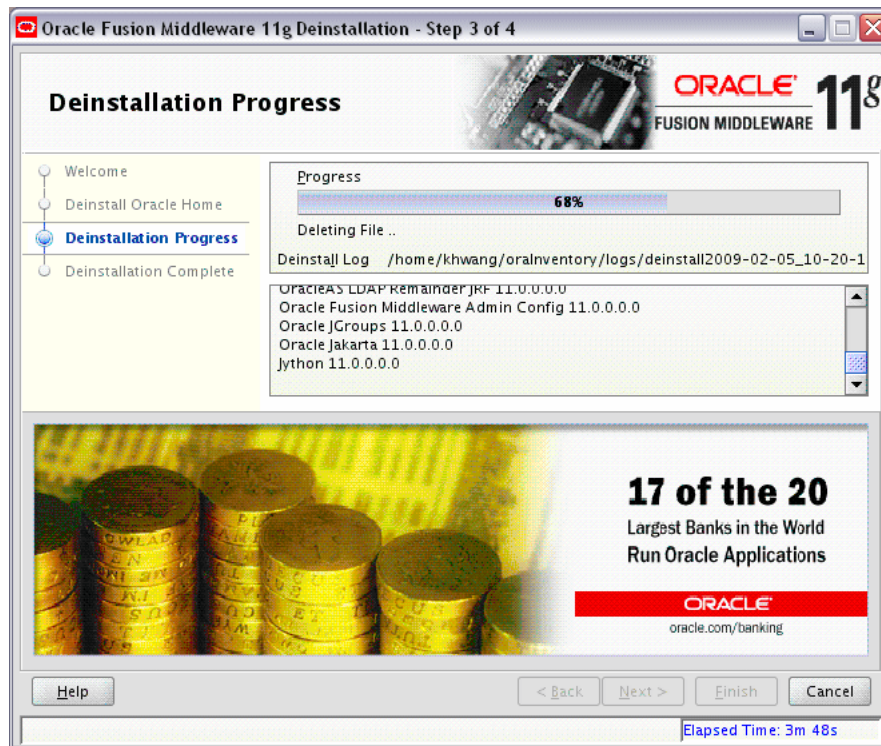


This screen shows the Oracle Home directory that is about to be deinstalled. This is the Oracle Home directory from which the deinstaller was started.

Note: Before you choose to remove this Oracle Home, make sure that it is not in use by an existing domain.

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

C.3 Deinstall Progress Screen



This screen shows you the progress of the deinstallation.

If you want to quit before the deinstallation is completed, click **Cancel**.

C.4 Deinstall Completed Screen



This screen summarizes the deinstallation that was just completed.

Click **Finish** to dismiss the screen.

Silent Installation

This appendix describes how to install Oracle SOA Suite from the command line in silent mode. This appendix contains the following topics:

- [Section D.1, "What is a Silent Installation?"](#)
- [Section D.2, "Creating Response Files"](#)
- [Section D.3, "Pre-Installation Tasks"](#)
- [Section D.4, "Silent Installation Instructions"](#)
- [Section D.5, "Silent De-Installation"](#)

D.1 What is a Silent Installation?

Silent installation eliminates the need to monitor the Oracle SOA Suite installation because no graphical output is displayed and no input by the user is required.

Silent installation of Oracle SOA Suite is accomplished by supplying the installer with a response file and using the `-silent` flag on the command line. The response file is a text file containing variables and parameter values which provide answers to the installer prompts.

Note: For UNIX users, if this is a first time installation of Oracle SOA Suite, you must create the `oraInst.loc` file before starting. Please refer to [Section D.3.1, "UNIX Users: Creating the `oraInst.loc` File"](#) for more information.

Following installation of Oracle SOA Suite, you need to run the `root.sh` script as the root user. The `root.sh` script detects settings of environment variables and enables you to enter the full path of the local `bin` directory.

Note: For Windows users, if this is a first time installation of Oracle SOA Suite, you must create the registry keys before starting. Registry key creation is described in [Section D.3.2, "Windows Users: Creating the Registry Key"](#)

D.2 Creating Response Files

Before doing a silent installation, you must provide information specific to your installation 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

Table D–1 lists the response files provided in the `Disk1/stage/Response` (on UNIX operating systems) or `Disk1\stage\Response` (on Windows operating systems) directory on the installation CD-ROM:

Table D–1 Oracle SOA Suite Installation and Configuration Response File Templates

Template	Description
<code>oracle.as.soa.top.Custom.rsp</code>	<p>This is the template response file that should be used if you want to install and configure Oracle SOA Suite products. The GUI equivalent would be installing the software and then running the Configuration Wizard to create or extend your WebLogic domain and configure your Oracle SOA Suite products.</p> <p>To complete this template, you must provide a valid value for each field containing <code><Value Required></code>. See Section D.2.1, "Contents of the <code>oracle.as.soa.top.Custom.rsp</code> File" to view the contents of this file.</p>
<code>sampleResponse.rsp</code>	<p>This is the template response file that should be used if you want to install the Oracle SOA Suite software only. You will still need to run the Configuration Wizard separately to create or extend your WebLogic domain and configure Oracle SOA Suite products.</p> <p>The only parameters you need to specify in this file are <code>ORACLE_HOME</code> and <code>MIDDLEWARE_HOME</code>. See Section D.2.2, "Contents of the <code>sampleResponse.rsp</code> File" to view the contents of this file.</p>

In addition to these pre-existing response files, you can create your own response file by 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.

D.2.1 Contents of the `oracle.as.soa.top.Custom.rsp` File

This section shows the contents of the `Disk1/stage/Response/oracle.as.soa.top.Custom.rsp` response file on a UNIX system:

```
#####
## Copyright (c) 1999, 2009 Oracle. All rights reserved.      ##
##                                                            ##
## Specify values for the variables listed below to customize ##
## your installation.                                         ##
##                                                            ##
## Each variable is associated with a comment. The comment   ##
## identifies the variable type.                             ##
##                                                            ##
## Please specify the values in the following format:        ##
##                                                            ##
##          Type          Example                             ##
##          String        "Sample Value"                    ##
##          Boolean       True or False                     ##
##          Number        1000                               ##
##          StringList    {"String value 1","String Value 2"} ##
##                                                            ##
## The values that are given as <Value Required> need to be  ##
## specified for a silent installation to be successful.     ##
##                                                            ##
```



```

##                                                                 ##
## This response file is generated by Oracle Software           ##
## Packager.                                                  ##
#####
RESPONSEFILE_VERSION=2.2.1.0.0

#-----
#Name      : UNIX_GROUP_NAME
#Datatype  : String
#Description: Unix group to be set for the inventory directory. Valid only in Unix
platforms.
#Example: UNIX_GROUP_NAME = "install"
#-----
UNIX_GROUP_NAME=<Value Unspecified>

#-----
#Name      : FROM_LOCATION
#Datatype  : String
#Description: Complete path to the products.xml.
#Example: FROM_LOCATION = "../stage/products.xml"
#-----
FROM_LOCATION="../stage/products.xml"

#-----
#Name      : FROM_LOCATION_CD_LABEL
#Datatype  : String
#Description: This variable should only be used in multi-CD installations. It
includes the label of the compact disk where the file "products.xml" exists. The
label can be found in the file "disk.label" in the same directory as products.xml.
#Example: FROM_LOCATION_CD_LABEL = "CD Label"
#-----
FROM_LOCATION_CD_LABEL=<Value Unspecified>

#-----
#Name      : ORACLE_HOME
#Datatype  : String
#Description: Complete path of the Oracle Home.
#Example: ORACLE_HOME = "C:\OHOME1"
#-----
ORACLE_HOME=<Value Required>

#-----
#Name      : ORACLE_BASE
#Datatype  : String
#Description: Complete path of the Oracle Base.
#Example: ORACLE_BASE =
#-----
ORACLE_BASE=<Value Required>

#-----
#Name      : ORACLE_HOME_NAME
#Datatype  : String
#Description: Oracle Home Name. Used in creating folders and services.
#Example: ORACLE_HOME_NAME = "OHOME1"
#-----
ORACLE_HOME_NAME="OHOME1"

#-----
#Name      : SHOW_WELCOME_PAGE

```

```

#Datatype   : Boolean
#Description: Set to true if the Welcome page in OUI needs to be shown.
#Example: SHOW_WELCOME_PAGE = false
#-----
SHOW_WELCOME_PAGE=false

#-----
#Name       : SUPPRESS_BUGLIST_WARNING
#Datatype   : Boolean
#Description: Set to true if the Welcome page in OUI needs to be shown.
#Example: SUPPRESS_BUGLIST_WARNING = false
#-----
SUPPRESS_BUGLIST_WARNING=false

#-----
#Name       : SHOW_NODE_SELECTION_PAGE
#Datatype   : Boolean
#Description: Set to true if the node selection page in OUI needs to be shown.
#Example: SHOW_NODE_SELECTION_PAGE = false
#-----
SHOW_NODE_SELECTION_PAGE=false

#-----
#Name       : SHOW_CUSTOM_TREE_PAGE
#Datatype   : Boolean
#Description: Set to true if the custom tree page in OUI needs to be shown.
#Use this page to select or de-select dependencies. This page appears only in a
custom install type.
#Example: SHOW_CUSTOM_TREE_PAGE = false
#-----
SHOW_CUSTOM_TREE_PAGE=false

#-----
#Name       : SHOW_COMPONENT_LOCATIONS_PAGE
#Datatype   : Boolean
#Description: Set to true if the component locations page in OUI needs to be
shown.
#This page only appears if there are products whose installed directory can be
changed.
#If you set this to false you will prevent the user from being able to specify
alternate directories.
#Example: SHOW_COMPONENT_LOCATIONS_PAGE = false
#-----
SHOW_COMPONENT_LOCATIONS_PAGE=false

#-----
#Name       : SHOW_SUMMARY_PAGE
#Datatype   : Boolean
#Description: Set to true if the summary page in OUI needs to be shown.
#The summary page shows the list of components that will be installed in this
session.
#Example: SHOW_SUMMARY_PAGE = true
#-----
SHOW_SUMMARY_PAGE=true

#-----
#Name       : SHOW_INSTALL_PROGRESS_PAGE
#Datatype   : Boolean
#Description: Set to true if the install progress page in OUI needs to be shown.
#This page shows the current status in the installation. The current status
includes the product being installed and the file being copied.

```

```
#Example: SHOW_INSTALL_PROGRESS_PAGE = true
#-----
SHOW_INSTALL_PROGRESS_PAGE=true

#-----
#Name      : SHOW_REQUIRED_CONFIG_TOOL_PAGE
#Datatype  : Boolean
#Description: Set to true if the required config assistants page in OUI needs to
be shown.
#This page shows the list of required configuration assistants that are part of
this installation.
#It shows the status of each assistant, including any failures with detailed
information on why it failed.
#Example: SHOW_REQUIRED_CONFIG_TOOL_PAGE = true
#-----
SHOW_REQUIRED_CONFIG_TOOL_PAGE=true

#-----
#Name      : SHOW_CONFIG_TOOL_PAGE
#Datatype  : Boolean
#Description: Set to true if the config assistants page in OUI needs to be shown.
#This page shows the list of configuration assistants that are part of this
installation and are configured to launch automatically.
#It shows the status of each assistant, including any failures with detailed
information on why it failed.
#Example: SHOW_CONFIG_TOOL_PAGE = true
#-----
SHOW_CONFIG_TOOL_PAGE=true

#-----
#Name      : SHOW_RELEASE_NOTES
#Datatype  : Boolean
#Description: Set to true if the release notes of this installation need to be
shown at the end of installation.
#This dialog is launchable from the End of Installation page and shows the list of
release notes available for the products just installed.
# This also requires the variable SHOW_END_SESSION_PAGE variable to be set to
true.
#Example: SHOW_RELEASE_NOTES = true
#-----
SHOW_RELEASE_NOTES=true

#-----
#Name      : SHOW_ROOTSH_CONFIRMATION
#Datatype  : Boolean
#Description: Set to true if the Confirmation dialog asking to run the root.sh
script in OUI needs to be shown.
#Valid only for Unix platforms.
#Example: SHOW_ROOTSH_CONFIRMATION = true
#-----
SHOW_ROOTSH_CONFIRMATION=true

#-----
#Name      : SHOW_END_SESSION_PAGE
#Datatype  : Boolean
#Description: Set to true if the end of session page in OUI needs to be shown.
#This page shows if the installation is successful or not.
#Example: SHOW_END_SESSION_PAGE = true
#-----
SHOW_END_SESSION_PAGE=true
```

```

#-----
#Name      : SHOW_EXIT_CONFIRMATION
#Datatype  : Boolean
#Description: Set to true if the confirmation when exiting OUI needs to be shown.
#Example: SHOW_EXIT_CONFIRMATION = true
#-----
SHOW_EXIT_CONFIRMATION=true

#-----
#Name      : NEXT_SESSION
#Datatype  : Boolean
#Description: Set to true to allow users to go back to the File Locations page for
another installation. This flag also needs to be set to true in order to process
another response file (see NEXT_SESSION_RESPONSE).
#Example: NEXT_SESSION = true
#-----
NEXT_SESSION=true

#-----
#Name      : NEXT_SESSION_ON_FAIL
#Datatype  : Boolean
#Description: Set to true to allow users to invoke another session even if current
install session has failed. This flag is only relevant if NEXT_SESSION is set to
true.
#Example: NEXT_SESSION_ON_FAIL = true
#-----
NEXT_SESSION_ON_FAIL=true

#-----
#Name      : NEXT_SESSION_RESPONSE
#Datatype  : String
#Description: Set to true to allow users to go back to the File Locations page for
another installation. This flag also needs to be set to true in order to process
another response file (see NEXT_SESSION_RESPONSE).
#Example: NEXT_SESSION_RESPONSE = "nextinstall.rsp"
#-----
NEXT_SESSION_RESPONSE=<Value Unspecified>

#-----
#Name      : DEINSTALL_LIST
#Datatype  : StringList
#Description: List of components to be deinstalled during a deinstall session.
#The following choices are available. The value should contain only one of these
choices.
#The choices are of the form Internal Name, Version : External name. Please use
the internal name and version while specifying the value.
# oracle.as.soa.top, 11.0.0.0.0 : Oracle SOA Suite 11g 11.0.0.0.0
#Example: DEINSTALL_LIST = {"oracle.as.soa.top", "11.0.0.0"}
#-----
DEINSTALL_LIST={"oracle.as.soa.top", "11.0.0.0"}

#-----
#Name      : SHOW_DEINSTALL_CONFIRMATION
#Datatype  : Boolean
#Description: Set to true if deinstall confirmation is needed during a deinstall
session.
#Example: SHOW_DEINSTALL_CONFIRMATION = true
#-----
SHOW_DEINSTALL_CONFIRMATION=true

#-----

```

```
#Name      : SHOW_DEINSTALL_PROGRESS
#Datatype  : Boolean
#Description: Set to true if deinstall progress is needed during a deinstall
session.
#Example: SHOW_DEINSTALL_PROGRESS = true
#-----
SHOW_DEINSTALL_PROGRESS=true

#-----
#Name      : CLUSTER_NODES
#Datatype  : StringList
#Description: This variable represents the cluster node names selected by the user
for installation.
#Example: CLUSTER_NODES = {"node1"}
#-----
CLUSTER_NODES=<Value Unspecified>

#-----
#Name      : REMOTE_NODES
#Datatype  : StringList
#Description: This variable represents the remote node names on which installation
is carried out.
#Example: REMOTE_NODES =
#-----
REMOTE_NODES=<Value Required>

#-----
#Name      : LOCAL_NODE
#Datatype  : String
#Description: This variable represents the local node.
#Example: LOCAL_NODE =
#-----
LOCAL_NODE=<Value Required>

#-----
#Name      : RESTART_SYSTEM
#Datatype  : Boolean
#Description: Set to true to allow automatic restart of the system, if set to
false then installer will exit without restarting, no exit confirmation dialog is
shown
#Example: RESTART_SYSTEM = false
#-----
RESTART_SYSTEM=<Value Unspecified>

#-----
#Name      : RESTART_REMOTE_SYSTEM
#Datatype  : Boolean
#Description: Set to true to allow automatic restart of the remote systems, if set
to false then installer will not restart the remote systems, no exit confirmation
dialog is shown
#Example: RESTART_REMOTE_SYSTEM = false
#-----
RESTART_REMOTE_SYSTEM=<Value Unspecified>

#-----
#Name      : ORACLE_HOSTNAME
#Datatype  : String
#Description: This variable holds the hostname of the system as set by the user.
#Example: ORACLE_HOSTNAME =
#-----
```

```

ORACLE_HOSTNAME=<Value Unspecified>

#-----
#Name      : REMOVE_HOMES
#Datatype  : StringList
#Description: List of the homes to be removed during a deinstall session. Each
home is represented by its full path.
#Example: REMOVE_HOMES = {<full_path_of_home1>,<full_path_of_home2>, ...}
#-----
REMOVE_HOMES=<Value Unspecified>

#-----
#Name      : SHOW_XML_PREREQ_PAGE
#Datatype  : Boolean
#Description: This variable determines whether or not to show the prereq page.
#Example: SHOW_XML_PREREQ_PAGE = true
#-----
SHOW_XML_PREREQ_PAGE=true

#-----
#Name      : SHOW_END_OF_INSTALL_MSGS
#Datatype  : Boolean
#Description: Set to true if the text on end of install screen is to be shown. The
text is always available under <Oracle Home>/install/readme.txt.
#Example: SHOW_END_OF_INSTALL_MSGS = true
#-----
SHOW_END_OF_INSTALL_MSGS=true

#-----
#Name      : ACCEPT_LICENSE_AGREEMENT
#Datatype  : Boolean
#Description: By setting this variable to true, you are accepting the license
agreement. This variable is used only for silent installations.
#Example: ACCEPT_LICENSE_AGREEMENT = true
#-----
ACCEPT_LICENSE_AGREEMENT=true

#-----
#Name      : METALINK_LOCATION
#Datatype  : String
#Description: This variable represents the Oracle metalink location.
#Example: METALINK_LOCATION =
#-----
METALINK_LOCATION=<Value Required>

#-----
#Name      : METALINK_USERNAME
#Datatype  : String
#Description: This variable represents the Oracle metalink user name.
#Example: METALINK_USERNAME =
#-----
METALINK_USERNAME=<Value Required>

#-----
#Name      : MYORACLESUPPORT_USERNAME
#Datatype  : String
#Description: This variable represents the Oracle metalink user name.
#Example: MYORACLESUPPORT_USERNAME =
#-----
MYORACLESUPPORT_USERNAME=<Value Required>

```

```
#-----  
#Name      : METALINK_PASSWORD  
#Datatype  : String  
#Description: This variable represents the corresponding Oracle metalink password.  
#Example: METALINK_PASSWORD =  
#-----  
METALINK_PASSWORD=<Value Required>  
  
#-----  
#Name      : MYORACLESUPPORT_PASSWORD  
#Datatype  : String  
#Description: This variable represents the corresponding Oracle metalink password.  
#Example: MYORACLESUPPORT_PASSWORD =  
#-----  
MYORACLESUPPORT_PASSWORD=<Value Required>  
  
#-----  
#Name      : PROXY_HOST  
#Datatype  : String  
#Description: The proxy host used to connect to Oracle metalink.  
#Example: PROXY_HOST =  
#-----  
PROXY_HOST=<Value Required>  
  
#-----  
#Name      : PROXY_PORT  
#Datatype  : String  
#Description: The proxy port used to connect to Oracle metalink.  
#Example: PROXY_PORT =  
#-----  
PROXY_PORT=<Value Required>  
  
#-----  
#Name      : PROXY_REALM  
#Datatype  : String  
#Description: The realm for the proxy used to connect to Oracle metalink.  
#Example: PROXY_REALM =  
#-----  
PROXY_REALM=<Value Required>  
  
#-----  
#Name      : PROXY_USER  
#Datatype  : String  
#Description: The username for the proxy used to connect to Oracle metalink.  
#Example: PROXY_USER =  
#-----  
PROXY_USER=<Value Required>  
  
#-----  
#Name      : PROXY_PWD  
#Datatype  : String  
#Description: The password for the proxy used to connect to Oracle metalink.  
#Example: PROXY_PWD =  
#-----  
PROXY_PWD=<Value Required>  
  
#-----  
#Name      : DONT_PROXY_FOR  
#Datatype  : String  
#Description: The dont proxy for list.  
#Example: DONT_PROXY_FOR =
```

```

#-----
DONT_PROXY_FOR=<Value Required>

#-----
#Name      : DECLINE_SECURITY_UPDATES
#Datatype  : Boolean
#Description: OUI Session variable set to decline from receiving the security
updates
#Example: DECLINE_SECURITY_UPDATES =
#-----
DECLINE_SECURITY_UPDATES=<Value Required>

#-----
#Name      : COLLECTOR_RESPONSE_FILE
#Datatype  : String
#Description: OUI Session variable used to provide the OCM response file location
#Example: COLLECTOR_RESPONSE_FILE =
#-----
COLLECTOR_RESPONSE_FILE=<Value Required>

#-----
#Name      : SECURITY_UPDATES_VIA_METALINK
#Datatype  : Boolean
#Description: OUI Session variable used to set if the security updates should be
received via Metalink details
#Example: SECURITY_UPDATES_VIA_METALINK =
#-----
SECURITY_UPDATES_VIA_METALINK=<Value Required>
#-----
#Name      : SECURITY_UPDATES_VIA_MYORACLESUPPORT
#Datatype  : Boolean
#Description: OUI Session variable used to set if the security updates should be
received via Metalink details
#Example: SECURITY_UPDATES_VIA_MYORACLESUPPORT =
#-----
SECURITY_UPDATES_VIA_MYORACLESUPPORT=<Value Required>

#-----
#Name      : TOPLEVEL_COMPONENT
#Datatype  : StringList
#Description: The top level component to be installed in the current session.
#The following choices are available. The value should contain only one of these
choices.
#The choices are of the form Internal Name, Version : External name. Please use
the internal name and version while specifying the value.
# oracle.as.soa.top, 11.0.0.0.0 : Oracle SOA Suite 11g 11.0.0.0.0
#Example: TOPLEVEL_COMPONENT = {"oracle.as.soa.top", "11.0.0.0.0"}
#-----
TOPLEVEL_COMPONENT={"oracle.as.soa.top", "11.0.0.0.0"}

#-----
#Name      : SHOW_SPLASH_SCREEN
#Datatype  : Boolean
#Description: Set to true if the initial splash screen in OUI needs to be shown.
#Example: SHOW_SPLASH_SCREEN =
#-----
SHOW_SPLASH_SCREEN=true

#-----
#Name      : SELECTED_LANGUAGES

```



```

#Datatype : StringList
#Description: Languages in which the components will be installed.
#The following choices are available. The value should contain only one of these
choices.
#The choices are of the form Internal Name : External name. Please use the
internal name while specifying the value.
# en, : English
# fr, : French
# ar, : Arabic
# bn, : Bengali
# pt_BR, : Brazilian Portuguese
# bg, : Bulgarian
# fr_CA, : Canadian French
# ca, : Catalan
# hr, : Croatian
# cs, : Czech
# da, : Danish
# nl, : Dutch
# ar_EG, : Egyptian
# en_GB, : English (United Kingdom)
# et, : Estonian
# fi, : Finnish
# de, : German
# el, : Greek
# iw, : Hebrew
# hu, : Hungarian
# is, : Icelandic
# in, : Indonesian
# it, : Italian
# ja, : Japanese
# ko, : Korean
# es, : Latin American Spanish
# lv, : Latvian
# lt, : Lithuanian
# ms, : Malay
# es_MX, : Mexican Spanish
# no, : Norwegian
# pl, : Polish
# pt, : Portuguese
# ro, : Romanian
# ru, : Russian
# zh_CN, : Simplified Chinese
# sk, : Slovak
# sl, : Slovenian
# es_ES, : Spanish
# sv, : Swedish
# th, : Thai
# zh_TW, : Traditional Chinese
# tr, : Turkish
# uk, : Ukrainian
# vi, : Vietnamese
#Example: SELECTED_LANGUAGES = {"en"}
#-----
#SELECTED_LANGUAGES={"en"}
#-----
#Name : COMPONENT_LANGUAGES
#Datatype : StringList
#Description: Languages in which the components will be installed.
#The following choices are available. The value should contain only one of these
choices.

```

```

#The choices are of the form Internal Name : External name. Please use the
internal name while specifying the value.
#   en,   : English
#   fr,   : French
#   ar,   : Arabic
#   bn,   : Bengali
#   pt_BR, : Brazilian Portuguese
#   bg,   : Bulgarian
#   fr_CA, : Canadian French
#   ca,   : Catalan
#   hr,   : Croatian
#   cs,   : Czech
#   da,   : Danish
#   nl,   : Dutch
#   ar_EG, : Egyptian
#   en_GB, : English (United Kingdom)
#   et,   : Estonian
#   fi,   : Finnish
#   de,   : German
#   el,   : Greek
#   iw,   : Hebrew
#   hu,   : Hungarian
#   is,   : Icelandic
#   in,   : Indonesian
#   it,   : Italian
#   ja,   : Japanese
#   ko,   : Korean
#   es,   : Latin American Spanish
#   lv,   : Latvian
#   lt,   : Lithuanian
#   ms,   : Malay
#   es_MX, : Mexican Spanish
#   no,   : Norwegian
#   pl,   : Polish
#   pt,   : Portuguese
#   ro,   : Romanian
#   ru,   : Russian
#   zh_CN, : Simplified Chinese
#   sk,   : Slovak
#   sl,   : Slovenian
#   es_ES, : Spanish
#   sv,   : Swedish
#   th,   : Thai
#   zh_TW, : Traditional Chinese
#   tr,   : Turkish
#   uk,   : Ukrainian
#   vi,   : Vietnamese
#Example: COMPONENT_LANGUAGES = {"en"}
#Component : oracle.as.soa.top
#-----

COMPONENT_LANGUAGES={"en"}
#-----
#Name      : DEPENDENCY_LIST
#Datatype  : StringList
#Description: List of dependees that need to be installed along with this product.
#The following choices are available. The value can contain any combination of
these choices.
#The choices are of the form Internal Name, Version : External name. Please use
the internal name and version while specifying the value.

```

```
# oracle.sysman.common.core, 10.2.0.1.0 : Enterprise Manager Common Core Files
11.1.0.2.0
#Example: DEPENDENCY_LIST = {"oracle.sysman.common.core:10.2.0.1.0"}
#Component : oracle.sysman.common
#-----

DEPENDENCY_LIST={ "oracle.sysman.common.core:11.1.0.2.0" }
```

D.2.2 Contents of the sampleResponse.rsp File

This section shows the contents of the
Disk1/stage/Response/sampleResponse.rsp response file on a UNIX system:

```
[ENGINE]

#DO NOT CHANGE THIS.
Response File Version=1.0.0.0.0

[GENERIC]

#Provide the Oracle Home location. The location has to be the immediate child
under the specified Middleware Home location. The Oracle Home directory name may
only contain alphanumeric , hyphen (-) , dot (.) and underscore (_) characters,
and it must begin with an alphanumeric character. The total length has to be less
than or equal to 128 characters. The location has to be an empty directory or a
valid SOA Oracle Home.
ORACLE_HOME=/scratch/aragunad/middleware/Oracle_SOA2

#Provide existing Middleware Home location.
MIDDLEWARE_HOME=/scratch/aragunad/middleware

[SYSTEM]

[APPLICATIONS]

[RELATIONSHIPS]
```

D.2.3 Securing Your Silent Installation

Your response files contain certain passwords required by the installer. To minimize security issues regarding these passwords in the response file, follow these guidelines:

- Set the permissions on the response files so that they are readable only by the operating system user who will be performing the silent installation.
- If possible, remove the response files from the system after the silent installation is completed.

D.3 Pre-Installation Tasks

This section covers the pre-installation tasks that may be required before you are able to perform a silent installation.

The following topics are covered:

- [Section D.3.1, "UNIX Users: Creating the oraInst.loc File"](#)
- [Section D.3.2, "Windows Users: Creating the Registry Key"](#)

D.3.1 UNIX Users: Creating the `oraInst.loc` File

The Oracle inventory directory is used by the installer to keep track of all Oracle products installed on the computer. The inventory directory is stored in a file called `oraInst.loc`. If this file does not already exist on your system, you must create it before starting a silent installation. This file is used by the installer.

1. Log in as the root user.

```
prompt> su
```

2. Using a text editor such as `vi` or `emacs`, create the `oraInst.loc` file in the directory of your choice. The contents of the file consist of the following two lines:

```
inventory_loc=oui_inventory_directory
inst_group=oui_install_group
```

Replace `oui_inventory_directory` with the full path to the directory where you want the installer to create the inventory directory. Then, replace `oui_install_group` with the name of the group whose members have write permissions to this directory.

3. Exit from the root user.

```
# exit
```

D.3.2 Windows Users: Creating the Registry Key

If you have not installed Oracle SOA Suite on your computer, then you need to create the following Registry key and value:

```
HKEY_LOCAL_MACHINE / SOFTWARE / Oracle / inst_loc = [inventory_directory]
```

Replace `Inventory_Directory` with the full path to your installer files. For example:

```
C:\Program Files\Oracle\Inventory
```

D.4 Silent Installation Instructions

The syntax for running the installer from the command line on UNIX systems is shown below:

```
runInstaller [-mode] [-options] [(<CommandLinevariable=Value>)*]
```

On Windows systems:

```
setup.exe [-mode] [-options] [(<CommandLinevariable=Value>)*]
```

Table D-2 *Installer Command Line Parameters*

Parameter	Description
Installation Modes - Only One Mode Can be Specified	
<code>-i</code>	Launches the installer in GUI mode. This is the default mode and is used if no mode is specified on the command line.
<code>-install</code>	
<code>-silent</code>	Install in silent mode. The installer must be passed either a response file or command line variable value pairs.
<code>-d</code>	Launches the installer in GUI mode for deinstallation.
<code>-deinstall</code>	

Table D–2 (Cont.) Installer Command Line Parameters

Parameter	Description
-p	Launches the installer in GUI mode but only checks the prerequisites. No software is installed.
-prerequisite	
-v	Launches the installer in GUI mode and performs all prerequisite and validation checking, but does not install any software.
-validate	
-sv	Performs all prerequisite and validation checking in silent mode. You must pass the installer either a response file or a series of command line variable value pairs.
-silentvalidate	
Installation Options	
-help	Displays the usage parameters for the <code>runInstaller</code> command.
--help	
--usage	
-invPtrLoc <i>file</i>	Pointer to the inventory location file. Replace <i>file</i> with the full path and name of the <code>oraInst.loc</code> file.
-response <i>file</i>	Pointer to the response file. Replace <i>file</i> with the full path and name of the response file.
-responseFile <i>file</i>	
-jreLoc <i>location</i>	Pointer to the location where Java Runtime Environment (JRE) is installed. Replace <i>location</i> with the full path to the <code>jre</code> directory where your JRE is installed.
-logLevel <i>level</i>	Specify the level of logging performed by the installer; all messages with a lower priority than the specified <i>level</i> will be recorded. Valid levels are: <ul style="list-style-type: none"> ▪ severe ▪ warning ▪ info ▪ config ▪ fine ▪ finer ▪ finest
-debug	Obtain debug information from the installer.
-force	Allow the silent installation to proceed in a non-empty directory.
-printdiskusage	Log debugging information pertaining to disk usage.
-printmemory	Log debugging information pertaining to memory usage.
-printtime	Log debugging information pertaining to time usage. This command causes the <code>timeTakenTimestamp.log</code> file to be created.
-waitforcompletion	Windows only - the installer will wait for completion instead of spawning the Java engine and exiting.
-noconsole	Messages will not be displayed to the console window.
-ignoreSysPrereqs	Ignore the results of the system prerequisite checks and continue with the installation.
-executeSysPrereqs	Execute the system prerequisite checks only, then exit.

Table D-2 (Cont.) Installer Command Line Parameters

Parameter	Description
<code>-paramFile file</code>	Specify the full path to the <code>oraparam.ini</code> file. This file is the initialization file for the installer. The default location of this file is <code>Disk1/install/platform</code> .
<code>-novalidation</code>	Disables all validation checking performed by the installer.
<code>-nodefaultinput</code>	For the GUI install, several screens have information or default values pre-populated. Specifying this option disables this behavior so that no information or values are pre-populated.
Command Line Variables	
Installer Variables	Installer variables are specified using <code>varName=value</code> . For example: <code>ORACLE_HOME=/scratch/jdoe/Oracle/Middleware/Oracle_SOA1</code>
Session Variables	Session variables are specified using <code>session:varName=value</code> .
Component Variables	Component variables are specified using <code>session:compInternalName:[Version:]varName=value</code> .

D.4.1 Sample Commands

If this is the first time you are installing on your system (meaning there is no pre-existing Oracle Inventory location), use the following command to perform a silent installation on UNIX systems:

```
./runInstaller -silent -response file -invPtrLoc file
```

On Windows systems:

```
setup.exe -silent -response file -invPtrLoc file
```

Below is a full example of this command for UNIX systems:

```
./runInstaller -silent -response /home/Oracle/response/devSOA.rsp -invPtrLoc /home/jdoe/oraInst.loc
```

On Windows operating systems:

```
setup.exe -silent -response C:\home\Oracle\response\devSOA.rsp -invPtrLoc c:\home\Oracle\oraInst.loc
```

If you have already installed an Oracle product on your system and do not need to specify an inventory location, then you can use a command similar to the following on UNIX systems:

```
./runInstaller -silent -response file
```

On Windows systems:

```
setup.exe -silent -response file
```

Below is a full example of this command on a UNIX system:

```
./runInstaller -silent -response /home/Oracle/response/devSOA.rsp
```

On Windows operating systems:

```
setup.exe -silent -response c:\home\Oracle\response\devSOA.rsp
```

D.4.2 Sample Output

Below is a sample output from a silent install using the `sampleResponse.rsp` template:

```
$ ./runInstaller -jreLoc /home/Oracle/Middleware/jdk160_14_R27.6.4-18/ -silent
-response /home/Oracle/response/sampleResponse.rsp
Platform is Linux X86 32 bit
Starting Oracle Universal Installer...

Checking if CPU speed is above 300 MHz.    Actual 2999 MHz    Passed
Checking Temp space: must be greater than 150 MB.    Actual 69669 MB    Passed
Checking swap space: must be greater than 512 MB.    Actual 1395 MB    Passed
Preparing to launch Oracle Universal Installer from /tmp/OraInstall2009-04-03_
10-49-20PM. Please wait ...[jdoe@dadvmn0789 Disk1]$ Log:
/home/Oracle/oraInventory/logs/install2009-04-03_10-49-20PM.log
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Reading response file..
Expected result: One of enterprise-4,enterprise-5,redhat-4,redhat-5,SuSE-10
Actual Result: enterprise-4
Check complete. The overall result of this check is: Passed
CertifiedVersions Check: Success.
Checking for gcc-3.4.3-22.1; found gcc-3.4.6-10.0.1-i386.    Passed
Checking for gcc-c++-3.4.3-22.1; found gcc-c++-3.4.6-10.0.1-i386.    Passed
Checking for openmotif21-2.1.30-11.RHEL4.4 ; found
openmotif21-2.1.30-11.0.1.RHEL4.6-i386.    Passed
Checking for setarch-1.6-1; found setarch-1.6-1-i386.    Passed
Checking for pdksh-5.2.14-30; found pdksh-5.2.14-30.6-i386.    Passed
Checking for sysstat-5.0.5-1; found sysstat-5.0.5-19.el4-i386.    Passed
Checking for gnome-libs-1:1.4.1.2.90-44.1; found
gnome-libs-1:1.4.1.2.90-44.2-i386.    Passed
Checking for libstdc++-3.4.3-22.1 ; found libstdc++-3.4.6-10.0.1-i386.    Passed
Checking for libstdc++-devel-3.4.3-22.1; found libstdc++-devel-3.4.6-10.0.1-i386.
Passed
Checking for compat-libstdc++-296-2.96-132.7.2; found
compat-libstdc++-296-2.96-132.7.2-i386.    Passed
Checking for compat-db-4.1.25-9; found compat-db-4.1.25-9-i386.    Passed
Checking for control-center-2.8.0-12; found
control-center-1:2.8.0-12.rhel4.5-i386.    Passed
Checking for glibc-common-2.3.4-2.9; found glibc-common-2.3.4-2.41-i386.
Passed
Checking for binutils-2.15.92.0.2-13; found binutils-2.15.92.0.2-25-i386.
Passed
Checking for make-1:3.80-5; found make-1:3.80-7.EL4-i386.    Passed
Checking for xscreensaver-4.18-5.rhel4.2; found
xscreensaver-1:4.18-5.rhel4.14.0.1-i386.    Passed
Check complete. The overall result of this check is: Passed
Packages Check: Success.
Checking for VERSION=2.6.9; found VERSION=2.6.9-78.0.0.0.1.ELxenU.    Passed
Checking for hardnofiles=4096; found hardnofiles=4096.    Passed
Checking for softnofiles=4096; found softnofiles=4096.    Passed
Check complete. The overall result of this check is: Passed
Kernel Check: Success.
Expected result: ATLEAST=2.3.4-2.19
Actual Result: 2.3.4-2.41
Check complete. The overall result of this check is: Passed
GLIBC Check: Success.
Expected result: 922MB
Actual Result: 4000MB
Check complete. The overall result of this check is: Passed
TotalMemory Check: Success.
```

```
Verifying data.....  
Copying Files...  
-----20%-----40%-----60%-----80%-----100%
```

The installation of Oracle SOA Suite 11g completed successfully.

D.5 Silent De-Installation

You can also de-install the software on your system by using the `-d` or `-deinstall` parameter from the command line.

On UNIX systems:

```
./runInstaller -silent -deinstall -response file
```

On Windows systems:

```
setup.exe -silent -deinstall -response file
```

Troubleshooting

This appendix describes solutions to common problems that you might encounter when installing Oracle SOA Suite. It contains the following sections:

- Section E.1, "General Troubleshooting Tips"
- Section E.2, "Troubleshooting Oracle Fusion Middleware Installation"
- Section E.3, "Keeping Track of Your JRE Location"
- Section E.4, "Invoking SOA Composites Over SSL"
- Section E.5, "Synchronizing Clocks When Working with Clusters"
- Section E.6, "Using Data Sources with an SSL-Enabled Database"
- Section E.7, "Extending an Identity Management Domain with a SOA Installation"
- Section E.8, "Need More Help?"

E.1 General Troubleshooting Tips

If you encounter an error during installation:

- Read the *Oracle Fusion Middleware Release Notes* for the latest updates. The most current version of the release notes is available on Oracle Technology Network (<http://www.oracle.com/technology/documentation>).
- Verify that your computer meets the requirements specified in Section 2.1.1, "System Requirements and Certification".
- 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 by following the steps in Chapter 4, "Deinstalling Oracle SOA Suite".
 3. Correct the issue that caused the error.
 4. Restart the installation.

E.2 Troubleshooting Oracle Fusion Middleware Installation

This section contains solutions to common problems that you might encounter when installing Oracle Fusion Middleware. The following topics are covered:

- Section E.2.1, "Installation Log Files"
- Section E.2.2, "Configuration Log Files"

E.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 *SOA_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:

- *installdate-time-stamp.log*
This is the main log file.
- *installdate-time-stamp.out*
This log file contains the output and error streams during the installation.
- *installActionsdate-time-stamp.log*
This file is used by the installer GUI to keep track of internal information.
- *installProfiledate-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.
- *oraInstalldate-time-stamp.log*
This log file contains the output stream of the copy session.

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

- *timeTakedate-time-stamp.log*
This file contains information for the amount of time taken to move between screens (applicable for GUI installations only).
- *timedate-time-stamp.log*
This file contains time information for the copy session.

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

E.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
```

On Windows operating systems:

```
G:\ config.cmd -log=log_filename
```

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 *SOA_ORACLE_HOME/common/bin* (on UNIX operating systems) or *SOA_ORACLE_HOME\common\bin* (on Windows operating systems) directory.

E.3 Keeping Track of Your JRE Location

The JRE location used by the installer is stored in the *SOA_ORACLE_HOME/oui/oraparam.ini* (on UNIX operating systems) or *SOA_ORACLE_HOME\oui\oraparam.ini* (on Windows operating systems) file. This file is used by OPatch and Oracle Universal Installer (OUI) to determine the location of your preferred JRE.

It is possible to change the location of your JRE (for example, the JRE directory is moved out of the Middleware Home). If this happens, you will get an error message when trying to run OPatch or OUI since the JRE location can no longer be found. If this happens, you can do one of the following:

- Edit the *SOA_ORACLE_HOME/oui/oraparam.ini* (on UNIX operating systems) or *SOA_ORACLE_HOME\oui\oraparam.ini* (on Windows operating systems) file to point to the new JRE location.
- Use the `-jreLoc` command line option to point to the new JRE location. See Section 2.6.1, "Starting the Installer" for more information.

E.4 Invoking SOA Composites Over SSL

If Oracle WebLogic Server is configured to use custom trust key store, you must manually revise the *setDomainEnv.cmd* (on Windows operating systems) or *setDomainEnv.sh* (on UNIX operating systems) file so that the *Djavadoc.net.ssl.trustStore* parameter points to the custom trust keystore file. For example:

```
Djavadoc.net.ssl.trustStore=/myfolder/mystore/mytrustkeystore.jks
```

E.5 Synchronizing Clocks When Working with Clusters

Oracle SOA uses Quartz, which is an open source job-scheduling framework. When you are setting up clusters on multiple systems, Quartz requires that the clocks on all the systems be synchronized. For more information, refer to the following URL:

```
http://www.opensymphony.com/quartz/wikidocs/TutorialLesson11.html
```

Also refer to the *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle SOA Suite* and *Oracle Fusion Middleware High Availability Guide* for more information about clustering in advanced topologies.

E.6 Using Data Sources with an SSL-Enabled Database

If you are using an SSL-enabled database, follow the instructions below so that your data sources will work with SSL connections:

1. Create a truststore and add the *./root/b64certificate.txt* as a trusted certificate to the truststore using a keytool:

```
keytool -importcert -trustcacerts -alias dbroot -keystore ./truststore
-storepass welcome1 -file ./b64certificate.txt
```

2. In the WebLogic Server console, navigate to the "Connection Pool" tab of the data source you are using. Modify the following properties accordingly:

- a. Requires Authentication:

```
javax.net.ssl.keyStore=keystore_password
javax.net.ssl.keyStoreType=JKS
javax.net.ssl.keyStorePassword=keystore_password
javax.net.ssl.trustStore=truststore_location
javax.net.ssl.trustStoreType=JKS
javax.net.ssl.trustStorePassword=truststore_password
```

- b. Does Not Require Authentication:

```
javax.net.ssl.trustStore=truststore_location
javax.net.ssl.trustStoreType=JKS
javax.net.ssl.trustStorePassword=truststore_password
```

3. In the URL field, enter the following:

```
jdbc:oracle:thin:@(DESCRIPTION=(ADDRESS_
LIST=(ADDRESS=(PROTOCOL=TCPS)(HOST=database_host)(PORT=database_
port)))(CONNECT_DATA=(SERVICE_NAME=service_name))(SECURITY=(SSL_SERVER_CERT_
DN="distinguished_name"
)))
```

4. In the JDBC data source files, modify the <property> parameter as shown below:

```
<property>
@ <name>javax.net.ssl.trustStorePassword</name>
<value>truststore_password</value>
</property>
```

E.7 Extending an Identity Management Domain with a SOA Installation

If you create a domain by installing Oracle Identity Management, then extend it by installing Oracle SOA Suite, the Oracle SOA installer changes the `ORACLE_HOME` environment variable. This breaks the Oracle Identity Federation (OIF) WebLogic Scripting Tool (WLST) environment, which relies on the value of `ORACLE_HOME` as set by the Identity Management installation.

To work around this issue, do the following:

1. Follow the instructions in "Setting up the WLST Environment" in *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*.
2. Copy all of the `.py` files in the `OIF_ORACLE_HOME/fed/script` (on UNIX operating systems) or `OIF_ORACLE_HOME\fed\script` (on Windows operating systems) directory to the `WebLogic_Home/common/wlst` (on UNIX operating systems) or `WebLogic_Home\common\wlst` (on Windows operating systems) directory.
3. Append the `OIF_ORACLE_HOME/fed/script` (on UNIX operating systems) or `OIF_ORACLE_HOME\fed\script` (on Windows operating systems) directory to the `CLASSPATH` environment variable.

E.8 Need More Help?

If this appendix does not solve the problem you encountered, try these other sources:

- *Oracle Fusion Middleware Release Notes*, available on the Oracle Technology Network (<http://www.oracle.com/technology/documentation>)
- My Oracle Support (formerly *OracleMetaLink*: <http://metalink.oracle.com>)

If you do not find a solution for your problem, open a service request.

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