Oracle® Fusion Middleware

Quick Installation Guide for Oracle Identity Management

11g Release 1 (11.1.1)

E10033-02

October 2009

This guide is designed to help you quickly install the most common Oracle Identity Management deployments.

See: The Oracle Fusion Middleware Installation Guide for Oracle Identity Management for complete information.

This guide contains the following topics:

- Additional 11g Release 1 (11.1.1) Deployment Information
- Installation Overview
- Before Installing Oracle Identity Management
- Performing Common Installation Tasks
- Installing and Configuring Oracle Internet Directory with Oracle Directory Integration Platform, Oracle Directory Services Manager, and Fusion Middleware Control in a New WebLogic Administration Domain
- Installing and Configuring Only Oracle Internet Directory Without a WebLogic Administration Domain
- Installing and Configuring Oracle Virtual Directory with Oracle Directory Services Manager and Fusion Middleware Control in a New WebLogic Administration Domain
- Installing and Configuring Oracle Identity Federation with Oracle Internet Directory in a New WebLogic Administration Domain for LDAP Authentication, User Store, and Federation Store
- Verifying Installed Components
- Starting and Stopping the Oracle Stack
- Deinstalling and Reinstalling Oracle Identity Management
- Documentation Accessibility

1 Additional 11g Release 1 (11.1.1) Deployment Information

This topic describes additional sources for 11*g* Release 1 (11.1.1) deployment information, including documentation on the following subjects:

- Upgrading to 11g Release 1 (11.1.1)
- Installing 11g Release 1 (11.1.1) for High Availability

ORACLE

1.1 Upgrading to 11*g* Release 1 (11.1.1)

This guide does not explain how to upgrade previous versions of Oracle Identity Management components to 11*g* Release 1 (11.1.1). To upgrade an Oracle Identity Management component:

From Release 10g to 11g Release 1 (11.1.1), refer to:

- Oracle Fusion Middleware Upgrade Planning Guide
- Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management

From 11g Release 1 (11.1.1.1.0) to 11g Release 1 (11.1.1.2.0), refer to:

 "Special Instructions for Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) Users" in the Oracle Fusion Middleware Installation Planning Guide

1.2 Installing 11g Release 1 (11.1.1) for High Availability

This guide does not explain how to install Oracle Identity Management components in High Availability (HA) configurations. To install an Oracle Identity Management component in a High Availability configuration, refer to the following documents:

- Oracle Fusion Middleware High Availability Guide
- Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management

2 Installation Overview

The following is an overview of the steps to install Oracle Identity Management 11g Release 1 (11.1.1):

- **1.** Review the certification information.
- **2.** Review the system requirements.
- **3.** Satisfy all dependencies, such as installing Oracle WebLogic Server and, when required, installing an Oracle Database and creating schema.
- **4.** Install the appropriate component.
- **5.** Verify the installation.

3 Before Installing Oracle Identity Management

This topic provides information you should review before installing Oracle Identity Management components:

- System Requirements and Certification
- Installing and Configuring Java Access Bridge (Windows Only)
- Installing Oracle WebLogic Server and Creating the Oracle Middleware Home
- Managing the Oracle WebLogic Server Node Manager Utility for Oracle Identity Management Installations
- Installing Oracle Database
- Creating Database Schema Using the Repository Creation Utility (RCU)

3.1 System Requirements and Certification

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

Oracle Fusion Middleware System Requirements, Prerequisites, and Specifications

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

Note: The system requirements document also covers Oracle Universal Installer Startup Requirements.

Oracle Fusion Middleware Supported System Configurations

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

3.2 Installing and Configuring Java Access Bridge (Windows Only)

If you are installing Oracle Identity Management on a Windows system, you have the option of installing and configuring Java Access Bridge for Section 508 Accessibility. This is only necessary if you require Section 508 Accessibility features:

1. Download Java Access Bridge from the following Web site:

http://java.sun.com/javase/technologies/accessibility/accessbridge/

- **2.** Install Java Access Bridge.
- **3.** Copy access-bridge.jar and jaccess-1_4.jar from your installation location to the jre\lib\ext directory.
- 4. Copy the WindowsAccessBridge.dll, JavaAccessBridge.dll, and JAWTAccessBridge.dll files from your installation location to the jre\bin directory.
- 5. Copy the accessibility.properties file to the jre\lib directory.

3.3 Installing Oracle WebLogic Server and Creating the Oracle Middleware Home

Before you can install Oracle Identity Management 11g Release 1 (11.1.1) components, you must install Oracle WebLogic Server and create the Oracle Middleware Home directory.

Note: If you are installing Oracle Internet Directory 11g Release 1 (11.1.1) without an Oracle WebLogic administration domain, you do not need to install Oracle WebLogic.

Perform the following steps to install Oracle WebLogic Server and create the Oracle Middleware Home directory. You can refer to the *Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server* for complete information about installing Oracle WebLogic Server.

1. Insert the Oracle WebLogic Server CD-ROM or download the Oracle WebLogic Server Installer from the following Web site:

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

- **2.** Locate the appropriate executable file for your system, such as:
 - 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

- **3.** Run the Oracle WebLogic Server Installer directly from the CD-ROM, or copy the file to your local system and run it locally. For 64-bit installations:
 - 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.
 - 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.

Examples for 32-bit systems:

```
Linux:
```

```
./wls1032_linux32.bin
```

Windows:

wls1032_win32.exe

Examples for 64-bit systems:

UNIX:

JAVA_HOME/bin/java -jar wls1032_generic.jar

or

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

Windows:

JAVA_HOME\bin\java -jar wls1032_generic.jar

Note: After you start the Oracle WebLogic Server Installer, the Welcome screen appears.

- 4. Click Next. The Choose Middleware Home Directory screen appears.
- **5.** Select **Create a new Middleware Home** and identify the desired location for your new Middleware Home directory, which is the top-level directory for all Oracle Fusion Middleware products. The WebLogic Home directory will be created inside the Middleware Home directory.

Note: If the Middleware Home directory already exists on your system, it must be an empty directory.

Click Next. The Register for Security Updates screen appears.

6. 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. The Choose Install Type screen appears.

- **7.** Select **Typical** and click **Next**. The Choose Product Installation Directories screen appears.
- **8.** Specify the desired location for your WebLogic Server Home directory and click **Next**.

If you are installing Oracle WebLogic Server on a UNIX system, the Installation Summary screen appears. Go to step 9 now.

If you are installing Oracle WebLogic Server on a Windows system, the Choose Shortcut Location screen appears. Specify a location where you want Windows to create a shortcut to Oracle products and click **Next**. The Installation Summary screen appears.

9. Click Next on the Installation Summary screen.

The Installation Progress screen appears.

- **10.** Click **Next**. The Installation Complete screen appears.
- 11. De-select **Run Quickstart** and click **Done** to exit the Installer.

Notes:

- The same user that installed Oracle WebLogic Server must install Oracle Identity Management.
- Do not log in to the Oracle WebLogic Server Administration Console during Oracle Identity Management installation.

3.4 Managing the Oracle WebLogic Server Node Manager Utility for Oracle Identity Management Installations

For Oracle Identity Management Installations that require Oracle WebLogic Server, you must perform the following steps after installing Oracle WebLogic Server and before installing Oracle Identity Management:

- **1.** Verify the Oracle WebLogic Server Node Manager utility is stopped. If it is running, kill the process.
- **2.** Determine if the nodemanager.properties file is present in the *WL*_*HOME*/common/nodemanager/ directory.
 - If the nodemanager.properties file is *not* present, continue installing Oracle Identity Management.
 - If the nodemanager.properties file *does* exist, open it and verify that the ListenPort parameter is included and that it is set. If the ListenPort parameter is not included or set, edit the nodemanager.properties file so that it is similar to the following, where *NODE_MANAGER_LISTEN_PORT* represents the port the Node Manager listens on, such as 5556:

ListenPort=NODE_MANAGER_LISTEN_PORT

3.5 Installing Oracle Database

You must install an Oracle Database before you can install some Oracle Identity Management components, such as:

- Oracle Internet Directory
- Oracle Identity Federation, if you want to use an RDBMS data store

For the latest information about supported databases, visit the following Web site:

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

The database must be up and running to install the relevant Oracle Identity Management component. The database does not have to be on the same system where you are installing the Oracle Identity Management component.

The database must also be compatible with Oracle Repository Creation Utility (RCU), which is used to create the schemas that Oracle Identity Management components require. For information about RCU requirements, refer to the system requirements document at the following Web site:

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

3.6 Creating Database Schema Using the Repository Creation Utility (RCU)

You must create and load the appropriate Oracle Fusion Middleware schema in your database before installing the following Oracle Identity Management components and configurations:

 Oracle Internet Directory, if you want to use an existing schema rather than create a new one using the Installer during installation.

Note: When you install Oracle Internet Directory, you have the choice of using an existing schema or creating a new one using the Installer. If you want to use an existing schema, you must create it using the Repository Creation Utility (RCU) before you can install Oracle Internet Directory. If you choose to create a new schema during installation, the Installer creates the appropriate schema for you and you do not need to use the RCU.

• Oracle Identity Federation Advanced configurations that use RDBMS for the Federation Store, Session Store, Message Store, or Configuration Store.

You create and load Oracle Fusion Middleware schema in your database using the RCU, which is available in the Oracle Fusion Middleware 11g Release 1 (11.1.1) release media and on the Oracle Technology Network (OTN) Web site. You can access the OTN Web site at:

http://www.oracle.com/technology/index.html

Note: RCU is available only on Linux and Windows platforms. Use the Linux RCU to create schemas on supported UNIX databases. Use Windows RCU to create schemas on supported Windows databases.

When you run RCU, create and load only the following schema for your Oracle Identity Management—do not select any other schema available in RCU:

- For Oracle Internet Directory, select only the Identity Management Oracle Internet Directory schema
- For Oracle Identity Federation, select only the Identity Management Oracle Identity Federation schema

Note: When you create schema, be sure to remember the schema owner and password that is shown in RCU. For Oracle Identity Federation, it is of the form *PREFIX_*OIF. You will need to provide this information when configuring Oracle Identity Federation with RDBMS stores.

See: The Oracle Fusion Middleware Repository Creation Utility User's *Guide* for complete information.

4 Performing Common Installation Tasks

This topic describes tasks that are common to most Oracle Identity Management installations and configurations:

- Starting an Installation
- Identifying Installation Directories
- Completing an Installation
- Optional: Configuring the Minimum Amount for Oracle WebLogic Server's Maximum Heap Size
- Locating Installation Log Files

4.1 Starting an Installation

This section explains the steps that are common to starting most Oracle Identity Management installations and configurations. It begins with starting the Installer and ends after you complete the steps on the Prerequisites Check screen.

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

Perform the following steps to start an Oracle Identity Management installation:

1. Start the Installer by executing one of the following commands:

UNIX: ./runInstaller

Windows: DRIVE:\setup.exe

After the Installer starts, the Welcome screen appears.

- 2. Click Next on the Welcome screen. The Select Installation Type screen appears.
- **3.** Select **Install and Configure** and click **Next**. The Prerequisites Check screen appears.
- **4.** Monitor the prerequisites checking.
 - If there is an issue, an error or warning message will appear. Investigate the issue and resolve it. After resolving the issue, click **Retry** to restart the prerequisite checks.

Note: You can proceed with the installation without resolving the issue by clicking **Continue**. However, failing to resolve the issue during the prerequisites checking may cause additional issues later in the installation.

• If all prerequisite checks pass inspection, click **Next**.

The Select Domain screen appears. Continue by referring to the appropriate procedure in this document for the installation you want to perform.

4.2 Identifying Installation Directories

This section describes directories you must identify in most Oracle Identity Management installations and configurations—it does not describe one particular Installer screen. During installation, you will have to identify other component-specific directories not described in this section.

Oracle Middleware Home Location

Identify the location of your Oracle Middleware Home directory. The Installer creates an Oracle Home directory for the component you are installing under the Oracle Middleware Home that you identify in this field. The Installer also creates an Oracle Common Home directory under the Oracle Middleware Home. The Oracle Common Home contains the binary and library files required for Oracle Enterprise Manager Fusion Middleware Control and Java Required Files (JRF). There can be only one Oracle Common Home within each Oracle Middleware Home.

The Oracle Middleware Home directory is commonly referred to as MW_HOME.

Note: To install Oracle Identity Management components in an existing Oracle WebLogic Server administration domain, each Oracle Middleware Home directory in the domain must have identical directory paths and names.

Oracle Home Directory

Enter a name for the component's Oracle Home directory. The Installer uses the name you enter in this field to create the Oracle Home directory under the location you enter in the Oracle Middleware Home Location field. The Installer installs the files (such as binaries and libraries) required to host the component in the Oracle Home directory.

The Oracle Home directory is commonly referred to as ORACLE_HOME.

Note: To install Oracle Identity Management components in an existing Oracle WebLogic Server administration domain, each Oracle Home directory in the domain must have identical directory paths and names.

WebLogic Server Directory

Enter the path to your Oracle WebLogic Server Home directory. This directory contains the files required to host the Oracle WebLogic Server. It is commonly referred to as *WL_HOME*.

Note: To install Oracle Identity Management components in an existing Oracle WebLogic Server administration domain, each Oracle WebLogic Server Home directory in the domain must have identical directory paths and names.

Oracle Instance Location

Enter the path to the location where you want to create the Oracle Instance directory. The Installer creates the Oracle Instance directory using the location you enter in this field and using the name you enter in the Oracle Instance Name field. Do not enter a path to an existing directory that contains files—if you enter a path to an existing directory must be empty.

The Installer installs the component's configuration files and runtime processes in the Oracle Instance directory. Runtime components will write only to this directory. You can identify any location on your system for the Oracle Instance directory—it does not have to reside inside the Oracle Middleware Home directory.

Oracle Instance Name

Enter a name for the Oracle Instance directory. The Installer uses the name you enter in this field to create the Oracle Instance directory at the location you specify in the Oracle Instance Location field. This directory is commonly referred to as *ORACLE_INSTANCE*.

Instance names are important because Oracle Fusion Middleware uses them to uniquely identify instances. If you install multiple Oracle Fusion Middleware instances on the same computer, for example, an Oracle Identity Management instance and an Oracle WebLogic Server instance, you must give them different names.

The name you enter for the Oracle Instance directory must:

- Contain only alphanumeric and underscore (_) characters
- Begin with an alphabetic character (a-z or A-Z)
- Consist of 4-30 characters
- Not contain the hostname or IP address of the computer

Note: You cannot change the Oracle Instance name after installation.

4.3 Completing an Installation

This section explains the steps that are common to completing most Oracle Identity Management installations and configurations. It begins with the steps on the Installation Summary screen and ends after the Installation Complete screen.

When the Installation Summary screen appears, perform the following steps to complete the installation:

- **1.** Verify the installation and configuration information on the Installation Summary screen.
 - Click Save to save the installation response file, which contains your responses to the Installer prompts and fields. You can use this response file to perform silent installations.

Note: The installation response file is not saved by default—you must click **Save** to retain it.

- Click **Install**. The Installation Progress screen appears.
- **2.** Monitor the progress of your installation. The location of the installation log file is listed for reference. After the installation progress reaches 100%, the Configuration Progress screen appears.

Note: On Unix systems, after the installation progress reaches 100%, a confirmation dialog box appears with information about the oracleRoot.sh script. Execute the script in a different terminal as described in the dialog box.

- **3.** Monitor the progress of the configuration. The location of the configuration log file is listed for reference. After the configuration progress reaches 100%, the Installation Complete screen appears.
- **4.** By default the installation summary file, which can help you get started with administration, is saved to the *OUI_INVENTORY*/logs/ directory. The filename is of the form: installSummary*DATE*.txt. This file contains information about the configuration, such as locations of install directories and URLs for management components.

If desired, you can click the **Save** button on the Installation Complete screen and choose a different name and location for the file.

Click Finish to close and exit the Installer.

4.4 Optional: Configuring the Minimum Amount for Oracle WebLogic Server's Maximum Heap Size

After installing Oracle Identity Management 11g Release 1 (11.1.1), if you want to configure the minimum (lowest) level of maximum heap size (-Xmx) required for Oracle WebLogic Server to host Oracle Identity Management components, perform the steps in this section.

Note: This is an *optional* step, typically performed only for test, development, or demonstration environments.

The minimum (lowest) levels for maximum heap size are:

- Oracle WebLogic Administration Server: 512 MB
- Oracle WebLogic Managed Server: 256 MB

Perform the following steps to configure the heap size for Oracle WebLogic Administration Servers and Oracle WebLogic Managed Servers:

- 1. Open the setDomainEnv script (.sh or .bat) in the *MW_HOME*/user_ projects/domains/*DOMAIN_NAME*/bin/ directory.
- **2.** Locate the *last* occurrence of the EXTRA_JAVA_PROPERTIES entry.
- **3.** In the last occurrence of the EXTRA_JAVA_PROPERTIES entry, locate the *last* occurrence of heap size parameters: -Xmx, -Xms, and so on.

Note: These are the heap size parameters for the Oracle WebLogic Administration Server.

- **4.** Set the heap size parameters (-Xms and -Xmx) for the Oracle WebLogic Administration Server as desired, for example: -Xms256m and -Xmx512m
- **5.** To set the heap size parameters for the Oracle WebLogic Managed Server, enter the text in Example 1 immediately below the *last* occurrence of the EXTRA_JAVA_PROPERTIES entry and:
 - Set the heap size parameters (-Xms and -Xmx) as desired, for example:
 -Xms256m -Xmx256m

- Replace wls_ods1 with the name of the Oracle WebLogic Managed Server hosting Oracle Directory Services Manager.
- Replace wls_oif1 with the name the Oracle WebLogic Managed Server hosting Oracle Identity Federation.

Example 1 Heap Size Parameters for Oracle WebLogic Managed Server

```
if [ "${SERVER_NAME}" = "wls_ods1" -o "${SERVER_NAME}" = "wls_oif1" ] ; then
        EXTRA_JAVA_PROPERTIES=" ${EXTRA_JAVA_PROPERTIES} -Xms256m -Xmx256m "
        export EXTRA_JAVA_PROPERTIES
fi
```

- **6.** Save and close the setDomainEnv script.
- 7. Restart the Oracle WebLogic Administration Server and the Oracle WebLogic Managed Server by referring to "Starting and Stopping the Oracle Stack" on page 28.

Note: On UNIX systems, if you execute the ps -ef command and grep for AdminServer or the name of the Oracle WebLogic Managed Server (for example, ps -ef | grep AdminServer or ps -ef | grep wls_oif1), the output contains multiple occurrences of heap size parameters (-Xmx and -Xms).

Be aware that the last occurrence of the heap size parameters in the output are effective and take precedence over the preceding occurrences.

4.5 Locating Installation Log Files

The Installer writes log files to the ORACLE_INVENTORY_LOCATION/logs directory on UNIX systems and to the ORACLE_INVENTORY_LOCATION\logs directory on Windows systems.

On UNIX systems, if you do not know the location of your Oracle Inventory directory, you can find it in the *ORACLE_HOME*/oraInst.loc file.

On Microsoft 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
- install*DATE*-*TIME_STAMP*.out
- installActionsDATE-TIME_STAMP.log
- installProfileDATE-TIME_STAMP.log
- oraInstallDATE-TIME_STAMP.err
- oraInstallDATE-TIME_STAMP.log

5 Installing and Configuring Oracle Internet Directory with Oracle Directory Integration Platform, Oracle Directory Services

Manager, and Fusion Middleware Control in a New WebLogic Administration Domain

This topic describes how to install and configure Oracle Internet Directory with Oracle Directory Integration Platform, Oracle Directory Services Manager, and Fusion Middleware Control in a new WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

5.1 Appropriate Deployment Environment

The installation and configuration described in this topic is appropriate for environments that have *both* of the following conditions:

- You want to install Oracle Internet Directory and Oracle Directory Integration Platform colocated on the same host.
- There is no WebLogic Administration Server managing other 11g Release 1 (11.1.1) Oracle Directory Services components.

5.2 Components Deployed

Performing the installation and configuration in this section deploys the following components:

- WebLogic Administration Server
- Oracle Internet Directory
- WebLogic Managed Server
- Oracle Directory Integration Platform
- Oracle Directory Services Manager
- Fusion Middleware Control

5.3 Dependencies

The installation and configuration in this section depends on the following:

- Oracle WebLogic Server
- Oracle Database
- If you want to use an existing schema, *Identity Management Oracle Internet Directory* schema existing in the Oracle Database.

5.4 Procedure

Perform the following steps to install and configure Oracle Internet Directory with Oracle Directory Integration Platform, Oracle Directory Services Manager, and Fusion Middleware Control in a new domain:

- 1. Install the Oracle Database for Oracle Internet Directory. Refer to "Installing Oracle Database" on page 6 for more information.
- **2.** Decide if you want to create a new schema for Oracle Internet Directory using the Installer during installation or if you want to use an existing schema:
 - If you want to create a new schema using the Installer, continue this procedure by going to step 3 now.
 - If you want to use an existing schema, it must be present in the Oracle Internet Directory database before you can install Oracle Internet Directory. Refer to "Creating Database Schema Using the Repository Creation Utility (RCU)" on page 7 for more information.
- **3.** Install Oracle WebLogic Server. Refer to "Installing Oracle WebLogic Server and Creating the Oracle Middleware Home" on page 3 for more information.
- **4.** Start your installation by performing all the steps in "Starting an Installation" on page 8. After you complete those steps, the Select Domain screen appears.
- **5.** On the Select Domain screen, select **Create New Domain** and enter the following information:
 - Enter the user name for the new domain in the User Name field.
 - Enter the user password for the new domain in the User Password field.
 - Enter the user password again in the Confirm Password field.
 - Enter a name for the new domain in the Domain Name field.

Click Next. The Specify Installation Location screen appears.

- **6.** Identify the Homes, Instances, and the WebLogic Server directory by referring to "Identifying Installation Directories" on page 8. After you enter information for each field, click **Next.** The Specify Security Updates screen appears.
- 7. Choose how you want to be notified about security issues:
 - If you want to be notified about security issues through email, enter your email address in the Email field.
 - If you want to be notified about security issues through My Oracle Support (formerly MetaLink), select the My Oracle Support option and enter your My Oracle Support Password.
 - If you do not want to be notified about security issues, leave all fields empty.

Click Next. The Configure Components screen appears.

8. Select **Oracle Internet Directory** and **Oracle Directory Integration Platform**. The Oracle Directory Services Manager and Fusion Middleware Control management components are automatically selected for this installation.

Ensure no other components are selected and click **Next**. The Configure Ports screen appears.

- **9.** Choose how you want the Installer to configure ports:
 - Select **Auto Port Configuration** if you want the Installer to configure ports from a predetermined range.
 - Select **Specify Ports using Configuration File** if you want the Installer to configure ports using the staticports.ini file. You can click **View/Edit File** to update the settings in the staticports.ini file.

Click Next. The Specify Schema Database screen appears.

10. Choose whether to use an existing schema or to create a new one using the Installer.

Note: If you want to use an existing schema, it must currently reside in the database to continue with the installation. If it does not currently reside in the database, you must create it using the Repository Creation Utility now.

Refer to "Creating Database Schema Using the Repository Creation Utility (RCU)" on page 7 for more information.

To use an existing schema:

- a. Select Use Existing Schema.
- **b.** Enter the database connection information in the Connect String field. The connection string must be in the form: *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form: *hostname1:port1:instance1^hostname2:port2:instance2@servicename*.
- **c.** Enter the password for the existing ODS schema in the Password field.
- d. Click Next.

Note: If your existing ODS and ODSSM schemas have different passwords, the Specify ODSSM Password screen will appear after you click **Next**. Enter the password for your existing ODSSM schema and click **Next**.

The Create Oracle Internet Directory screen appears.

e. Continue the installation by going to step 11 now.

To create a new schema:

- a. Select Create Schema.
- **b.** Enter the database connection information in the Connect String field. The connection string must be in the form: *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form: *hostname1:port1:instance1^hostname2:port2:instance2@servicename*.
- **c.** Enter the name of the database user in the User Name field. The user you identify must have DBA privileges.
- d. Enter the password for the database user in the Password field.
- e. Click Next. The Enter OID Passwords screen appears.
- f. Create a password for the new ODS schema by entering it in the ODS Schema Password field.

Enter it again in the Confirm ODS Schema Password field.

g. Create a password for the new ODSSM schema by entering it in the ODSSM Schema Password field.

Enter it again in the Confirm ODSSM Schema Password field.

- **h.** Click **Next**. The Create Oracle Internet Directory screen appears.
- **11.** Enter the following information for Oracle Internet Directory:
 - Realm: Enter the location for your realm.
 - Administrator Password: Enter the password for the Oracle Internet Directory administrator.
 - Confirm Password: Enter the administrator password again.

Click Next. The Installation Summary screen appears.

12. Complete the installation by performing all the steps in "Completing an Installation" on page 10.

6 Installing and Configuring Only Oracle Internet Directory Without a WebLogic Administration Domain

This topic describes how to install and configure only Oracle Internet Directory without a WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

6.1 Appropriate Deployment Environment

The installation and configuration described in this topic is appropriate for environments that have *both* of the following conditions:

- You do not want to include Oracle Internet Directory in a WebLogic administration domain for management purposes.
- You do not want to manage Oracle Internet Directory using Fusion Middleware Control.

6.2 Components Deployed

Performing the installation and configuration in this section deploys only Oracle Internet Directory.

6.3 Dependencies

The installation and configuration in this section depends on the following:

- Oracle Database
- If you want to use an existing schema, *Identity Management Oracle Internet Directory* schema existing in the Oracle Database.

6.4 Procedure

Perform the following steps to install and configure only Oracle Internet Directory without a domain:

- 1. Install the Oracle Database for Oracle Internet Directory. Refer to "Installing Oracle Database" on page 6 for more information.
- **2.** Decide if you want to create a new schema for Oracle Internet Directory using the Installer during installation or if you want to use an existing schema:
 - If you want to create a new schema using the Installer, continue this procedure by going to step 3 now.
 - If you want to use an existing schema, it must be present in the Oracle Internet Directory database before you can install Oracle Internet Directory. Refer to "Creating Database Schema Using the Repository Creation Utility (RCU)" on page 7 for more information.
- **3.** Start your installation by performing all the steps in "Starting an Installation" on page 8. After you complete those steps, the Select Domain screen appears.
- **4.** Select **Configure without a Domain** on the Select Domain screen and click **Next**. The Specify Installation Location screen appears.
- **5.** Enter the following information in each field:
 - **Oracle Middleware Home Location**: If an Oracle Middleware Home directory already exists, enter the path to it in this field. If an Oracle Middleware Home directory *does not* exist, enter a path to the location where you want the Installer to create the directory that will contain the Oracle Common Home and Oracle Home directories. The Installer creates an Oracle Common Home directory and an Oracle Home directory inside the directory you identify in this field.

The Oracle Middleware Home directory is commonly referred to as *MW*_*HOME*.

Note: The Oracle Middleware Home directory is *not* required to contain an Oracle WebLogic Server installation.

- **Oracle Home Directory**: Enter a name for the Oracle Home directory. The Installer uses the name you enter in this field to create the Oracle Home directory under the location you enter in the Oracle Middleware Home Location field. The Oracle Home directory is commonly referred to as *ORACLE_HOME*.
- Oracle Instance Location: Enter the directory path to the location where you want to create the Oracle Instance directory. The Installer creates the Oracle Instance directory using the location you enter in this field and using the name you enter in the Oracle Instance Name field. You can identify any location on your system for the Oracle Instance directory—it does not have to reside inside the Oracle Middleware Home directory.
- **Oracle Instance Name**: Enter a name for the Oracle Instance directory. The Installer uses the name you enter in this field to create the Oracle Instance directory at the location you specify in the Oracle Instance Location field. This directory is commonly referred to as *ORACLE_INSTANCE*.

After you enter information for each field, click **Next.** The Specify Security Updates screen appears.

6. Choose how you want to be notified about security issues:

- If you want to be notified about security issues through email, enter your email address in the Email field.
- If you want to be notified about security issues through My Oracle Support (formerly MetaLink), select the My Oracle Support option and enter your My Oracle Support Password.
- If you do not want to be notified about security issues, leave all fields empty.

Click Next. The Configure Components screen appears.

- **7.** On the Configure Components screen, select only **Oracle Internet Directory**. Ensure no other components are selected and click **Next**. The Configure Ports screen appears.
- **8.** Choose how you want the Installer to configure ports:
 - Select **Auto Port Configuration** if you want the Installer to configure ports from a predetermined range.
 - Select Specify Ports using Configuration File if you want the Installer to configure ports using the staticports.ini file. You can click View/Edit File to update the settings in the staticports.ini file.

Click Next. The Specify Schema Database screen appears.

9. Choose whether to use an existing schema or to create a new one using the Installer.

Note: If you want to use an existing schema, it must currently reside in the database to continue with the installation. If it does not currently reside in the database, you must create it using the Repository Creation Utility now.

Refer to "Creating Database Schema Using the Repository Creation Utility (RCU)" on page 7 for more information.

To use an existing schema:

- a. Select Use Existing Schema.
- **b.** Enter the database connection information in the Connect String field. The connection string must be in the form: *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form: *hostname1:port1:instance1^hostname2:port2:instance2@servicename*.
- c. Enter the password for the existing ODS schema in the Password field.
- d. Click Next.

Note: If your existing ODS and ODSSM schemas have different passwords, the Specify ODSSM Password screen will appear after you click **Next**. Enter the password for your existing ODSSM schema and click **Next**.

The Create Oracle Internet Directory screen appears.

e. Continue the installation by going to step 10 now.

To create a new schema:

- a. Select Create Schema.
- **b.** Enter the database connection information in the Connect String field. The connection string must be in the form: *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form: *hostname1:port1:instance1^hostname2:port2:instance2@servicename*.
- **c.** Enter the name of the database user in the User Name field. The user you identify must have DBA privileges.
- **d.** Enter the password for the database user in the Password field.
- e. Click Next. The Enter OID Passwords screen appears.
- f. Create a password for the new ODS schema by entering it in the ODS Schema Password field.

Enter it again in the Confirm ODS Schema Password field.

g. Create a password for the new ODSSM schema by entering it in the ODSSM Schema Password field.

Enter it again in the Confirm ODSSM Schema Password field.

- **h.** Click **Next**. The Create Oracle Internet Directory screen appears.
- **10.** Enter the following information for Oracle Internet Directory:
 - Realm: Enter the location for your realm.
 - Administrator Password: Enter the password for the Oracle Internet Directory administrator.
 - Confirm Password: Enter the administrator password again.

Click Next. The Installation Summary screen appears.

11. Complete the installation by performing all the steps in "Completing an Installation" on page 10.

Note: If you perform this installation and configuration, but later decide you want to manage Oracle Internet Directory using Fusion Middleware Control, you must register Oracle Internet Directory with a WebLogic Administration Server.

Refer to the "Registering an Oracle Instance or Component with the WebLogic Server" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory* for more information.

7 Installing and Configuring Oracle Virtual Directory with Oracle Directory Services Manager and Fusion Middleware Control in a New WebLogic Administration Domain

This topic describes how to install and configure Oracle Virtual Directory with Oracle Directory Services Manager and Fusion Middleware Control in a new WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed

- Dependencies
- Procedure

7.1 Appropriate Deployment Environment

The installation and configuration described in this topic is appropriate for environments that have *all* of the following conditions:

- You want to manage Oracle Virtual Directory using Fusion Middleware Control.
- You want Oracle Virtual Directory to be in a WebLogic administration domain.
- There is no WebLogic Administration Server managing other 11g Release 1 (11.1.1) Oracle Directory Services components.
- You want to install Oracle Virtual Directory and a WebLogic Administration Server colocated on the same host.

7.2 Components Deployed

Performing the installation and configuration in this section deploys the following components.

- WebLogic Administration Server
- Oracle Virtual Directory
- Oracle Directory Services Manager
- Fusion Middleware Control

7.3 Dependencies

The installation and configuration in this section depends on Oracle WebLogic Server.

7.4 Procedure

Perform the following steps to install and configure Oracle Virtual Directory with Oracle Directory Services Manager and Fusion Middleware Control in a new domain:

- 1. Install Oracle WebLogic Server. Refer to "Installing Oracle WebLogic Server and Creating the Oracle Middleware Home" on page 3 for more information.
- **2.** Start your installation by performing all the steps in "Starting an Installation" on page 8. After you complete those steps, the Select Domain screen appears.
- **3.** On the Select Domain screen, select **Create New Domain** and enter the following information:
 - Enter the user name for the new domain in the User Name field.
 - Enter the user password for the new domain in the User Password field.
 - Enter the user password again in the Confirm Password field.
 - Enter a name for the new domain in the Domain Name field.

Click Next. The Specify Installation Location screen appears.

4. Identify the Homes, Instances, and the WebLogic Server directory by referring to "Identifying Installation Directories" on page 8. After you enter information for each field, click **Next.** The Specify Security Updates screen appears.

- **5.** Choose how you want to be notified about security issues:
 - If you want to be notified about security issues through email, enter your email address in the Email field.
 - If you want to be notified about security issues through My Oracle Support (formerly MetaLink), select the My Oracle Support option and enter your My Oracle Support Password.
 - If you do not want to be notified about security issues, leave all fields empty.

Click Next. The Configure Components screen appears.

6. Select only **Oracle Virtual Directory**. The Oracle Directory Services Manager and Fusion Middleware Control management components are automatically selected for this installation.

Ensure no other components are selected and click **Next**. The Configure Ports screen appears.

- 7. Choose how you want the Installer to configure ports:
 - Select **Auto Port Configuration** if you want the Installer to configure ports from a predetermined range.
 - Select Specify Ports using Configuration File if you want the Installer to configure ports using the staticports.ini file. You can click View/Edit File to update the settings in the staticports.ini file.

Click Next. The Specify Oracle Virtual Directory Information screen appears.

- **8.** Enter the following information:
 - LDAP v3 Name Space: Enter the name space for Oracle Virtual Directory. The default value is dc=us,dc=oracle,dc=com.
 - HTTP Web Gateway: Select this option to enable the Oracle Virtual Directory HTTP Web Gateway.
 - Secure: Select this option if you enabled the HTTP Web Gateway and you want to secure it using SSL.
 - Administrator User Name: Enter the user name for the Oracle Virtual Directory administrator. The default value is cn=orcladmin.
 - Password: Enter the password for the Oracle Virtual Directory administrator.
 - Confirm Password: Enter the password for the Oracle Virtual Directory administrator again.
 - Configure Administrative Server in secure mode: Select this option to secure the Oracle Virtual Directory Administrative Listener using SSL. This option is selected by default. Oracle recommends selecting this option.

Click Next. The Installation Summary screen appears.

9. Complete the installation by performing all the steps in "Completing an Installation" on page 10.

8 Installing and Configuring Oracle Identity Federation with Oracle Internet Directory in a New WebLogic Administration

Domain for LDAP Authentication, User Store, and Federation Store

This section describes how to install and configure Oracle Identity Federation with Oracle Internet Directory in a new WebLogic administration domain for LDAP Authentication, User Store, and Federation Store.

Note: When you install Oracle Identity Federation with Oracle Internet Directory, the Installer automatically configures connection, credential, attribute, and container settings using the Oracle Internet Directory configuration.

This section includes the following information about this installation and configuration:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

8.1 Appropriate Deployment Environment

Perform the installation and configuration in this topic to quickly deploy Oracle Identity Federation with Oracle Internet Directory as the LDAP repository for Authentication, User Store, and Federation Store.

8.2 Components Deployed

Performing the installation and configuration in this section deploys the following components:

- WebLogic Managed Server
- Oracle Identity Federation
- Oracle Internet Directory
- Oracle Directory Services Manager
- WebLogic Administration Server
- Fusion Middleware Control
- Optionally, Oracle HTTP Server

8.3 Dependencies

The installation and configuration in this section depends on the following components:

- Oracle WebLogic Server
- Oracle Database for Oracle Internet Directory
- *Identity Management Oracle Internet Directory* schema existing in the database for Oracle Internet Directory.

- Oracle Database for Oracle Identity Federation, if using RDBMS for Session Store, Message Store, or Configuration Store.
- New Identity Management Oracle Identity Federation schema existing in the database for Oracle Identity Federation, if using RDBMS for Session Store, Message Store, or Configuration Store.

8.4 Procedure

Perform the following steps to install and configure Oracle Identity Federation with Oracle Internet Directory in a new domain for LDAP Authentication, User Store, and Federation Store:

- 1. Decide if you want to use RDBMS for Session Store, Message Store, or Configuration Store. If you do, perform the following steps a and b.
 - **a.** Install the database for Oracle Identity Federation. Refer to "Installing Oracle Database" on page 6 for more information.
 - **b.** Create the *Identity Management Oracle Identity Federation* schema in the database. Refer to "Creating Database Schema Using the Repository Creation Utility (RCU)" on page 7 for more information.
- **2.** Install the Oracle Database for Oracle Internet Directory. Refer to "Installing Oracle Database" on page 6 for more information.
- **3.** Create the *Identity Management Oracle Internet Directory* schema in the database for Oracle Internet Directory. Refer to "Creating Database Schema Using the Repository Creation Utility (RCU)" on page 7 for more information.
- **4.** Install Oracle WebLogic Server. Refer to "Installing Oracle WebLogic Server and Creating the Oracle Middleware Home" on page 3 for more information.
- **5.** Start your installation by performing all the steps in "Starting an Installation" on page 8. After you complete those steps, the Select Domain screen appears.
- **6.** On the Select Domain screen, select **Create New Domain** and enter the following information:
 - User Name: Enter the user name for the new domain.
 - User Password: Enter the user password for the new domain.

Enter the user password again in the Confirm Password field.

Domain Name: Enter a name for the new domain.

Click Next. The Specify Installation Location screen appears.

- **7.** Identify the Homes, Instances, and the WebLogic Server directory by referring to "Identifying Installation Directories" on page 8. After you enter information for each field, click **Next.** The Specify Security Updates screen appears.
- 8. Choose how you want to be notified about security issues:
 - If you want to be notified about security issues through email, enter your email address in the Email field.
 - If you want to be notified about security issues through My Oracle Support (formerly MetaLink), select the My Oracle Support option and enter your My Oracle Support Password.
 - If you do not want to be notified about security issues, leave all fields empty.

Click Next. The Configure Components screen appears.

9. Select **Oracle Internet Directory**, **Oracle Identity Federation**, and *optionally*, **Oracle HTTP Server**.

Note: Oracle HTTP Server is required when using Oracle Identity Federation for enterprise level single sign-on with Oracle Single Sign-On and Oracle Access Manager. Although Oracle Identity Federation can function without Oracle HTTP Server, there are advantages to configuring it as a proxy for Oracle Identity Federation.

If you use the **Install and Configure** option, as described in this procedure, and select Oracle HTTP Server and Oracle Identity Federation on this Configure Components screen, the Installer configures the Oracle HTTP Server so that the Oracle Identity Federation application can be accessed through Oracle HTTP Server ports.

You can also use the Configuration Wizard (config.sh or config.bat) to configure Oracle HTTP Server so that the Oracle Identity Federation application can be accessed through Oracle HTTP Server ports.

Refer to the "Deploying Oracle Identity Federation with Oracle HTTP Server" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation* for more information.

The Oracle Directory Services Manager and Fusion Middleware Control management components are automatically selected for this installation.

Ensure no other components are selected and click **Next**. The Configure Ports screen appears.

- **10.** Choose how you want the Installer to configure ports:
 - Select **Auto Port Configuration** if you want the Installer to configure ports from a predetermined range.
 - Select Specify Ports using Configuration File if you want the Installer to configure ports using the staticports.ini file. You can click View/Edit File to update the settings in the staticports.ini file.

Click Next. The Specify Schema Database screen appears.

- **11.** Identify the ODS schema for Oracle Internet Directory that you created in step 3 by selecting **Use Existing Schema** and entering the following information:
 - Enter the database connection information in the Connect String field. The connection string must be in the form: *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form: *hostname1:port1:instance1^hostname2:port2:instance2@servicename*.
 - Enter the password for the ODS schema in the Password field and click Next.

Note: If your existing ODS and ODSSM schemas have different passwords, the Specify ODSSM Password screen will appear after you click **Next**. Enter the password for your existing ODSSM schema and click **Next**.

The Create Oracle Internet Directory screen appears.

- **12.** Enter the following information for Oracle Internet Directory:
 - Realm: Enter the location for your realm.
 - Administrator Password: Enter the password for the Oracle Internet Directory administrator.
 - Confirm Password: Enter the administrator password again.

Click Next. The Specify OIF Details screen appears.

- **13.** Enter the following information:
 - PKCS12 Password: Enter the password Oracle Identity Federation will use for encryption and for signing wallets. The Installer automatically generates these wallets with self-signed certificates. Oracle recommends using the wallets only for testing.
 - Confirm Password: Enter the PKCS12 password again.
 - Server ID: Enter a string that will be used to identify this Oracle Identity Federation instance. A prefix of oif will be added to the beginning of the string you enter. Each logical Oracle Identity Federation instance within an Oracle WebLogic Server administration domain must have a unique Server ID. Clustered Oracle Identity Federation instances acting as a single logical instance will have the same Server ID.

Click Next. The Select OIF Advanced Flow Attributes screen appears.

Notes:

- Notice that the options for Authentication Type, User Store and Federation Store are automatically set to LDAP because you are installing Oracle Internet Directory with Oracle Identity Federation.
- The Installer sets the User Federation Record Context to cn=fed,BASE_REALM, where BASE_REALM is typically dc=us,dc=oracle,dc=com.
- **14.** Select the appropriate option for each configuration item and click **Next**:

Note: User Session Store and Message Store appear in the Installer as separate configuration items, however, most deployments use the same type of repository for both stores.

- User Session Store: Memory or RDBMS
 - Select Memory to store transient runtime session state data in in-memory tables.
 - Select RDBMS to store transient runtime session state data in a relational database.
- Message Store: Memory or RDBMS
 - Select Memory to store transient protocol messages in in-memory tables

- Select RDBMS to store transient protocol messages in a relational database.
- Configuration Store: File or RDBMS
 - Select File to store Oracle Identity Federation configuration data on the local file system.
 - Select RDBMS to store Oracle Identity Federation configuration data in a relational database.

Note: The screens that appear next depend on the options you selected for the configuration items.

- If you selected RDBMS for User Session Store, Message Store, or Configuration Store, go to step 15 now.
- If you did *not* select RDBMS for User Session Store, Message Store, or Configuration Store, go to step 16 now.
- **15.** Enter the following information on the Specify Transient Store Database Details screen:
 - HostName: Enter the connection string to the database host in the form: hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form: hostname1:port1:instance1^hostname2:port2:instance2@servicename.
 - Username: Enter the name of the schema owner created by RCU, which is of the form *PREFIX_OIF*.
 - Password: Enter the password for the database user.
- **16.** Complete the installation by performing all the steps in "Completing an Installation" on page 10.

Note: To configure Oracle Identity Federation so that it is integrated with Oracle HTTP Server, refer to the "Deploying Oracle Identity Federation with Oracle HTTP Server" section in the *Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation*.

9 Verifying Installed Components

This topic describes how to verify the components you installed and includes the following sections:

- Oracle Internet Directory or Oracle Virtual Directory
- Oracle Directory Integration Platform
- Oracle Directory Services Manager
- Oracle Identity Federation

9.1 Oracle Internet Directory or Oracle Virtual Directory

Verify an Oracle Internet Directory or an Oracle Virtual Directory installation by:

Executing the \$ORACLE_INSTANCE/bin/opmnctl status -1 command.

• Executing the \$*ORACLE_HOME*/bin/ldapbind command on the non-SSL and SSL ports.

9.2 Oracle Directory Integration Platform

Verify the Oracle Directory Integration Platform installation using the dipStatus command located in the \$ORACLE_HOME/bin/ directory.

Note: You must set the *WL_HOME* and *ORACLE_HOME* environment variables before executing the dipStatus command.

The following is the syntax for the dipStatus command:

\$ORACLE_HOME/bin/dipStatus -h HOST -p PORT -D wlsuser [-help]

- -h | -host identifies the Oracle WebLogic Server where Oracle Directory Integration Platform is deployed.
- -p | -port identifies the listening port of the Oracle WebLogic Managed Server where Oracle Directory Integration Platform is deployed.
- -D | -wlsuser identifies the Oracle WebLogic Server login ID.

Note: You will be prompted for the Oracle WebLogic Server login password. You cannot provide the password as a command-line argument.

Best security practice is to provide a password only in response to a prompt from the command. If you must execute dipStatus from a script, you can redirect input from a file containing the Oracle WebLogic Server password. Use file permissions to protect the file and delete it when it is no longer necessary.

9.3 Oracle Directory Services Manager

To verify the Oracle Directory Services Manager installation, enter the following URL into your browser's address field:

http://host:port/odsm

- *host* represents the name of the WebLogic Managed Server hosting Oracle Directory Services Manager.
- *port* represents the WebLogic Managed Server listen port. You can determine the exact port number by examining the

\$MW_HOME/ORACLE_IDENTITY_MANAGEMENT_DOMAIN/servers/MANAGED_ SERVER/data/nodemanager/MANAGED_SERVER.url

Oracle Directory Services Manager is installed and running if the Welcome to Oracle Directory Services Manage screen appears.

Note: While the appearance of the Welcome screen verifies Oracle Directory Services Manager is installed and running, you cannot connect to an Oracle Internet Directory or Oracle Virtual Directory from Oracle Directory Services Manager without the appropriate directory server credentials.

9.4 Oracle Identity Federation

Verify the Oracle Identity Federation installation by:

 Accessing the Oracle Identity Federation metadata at the following URL. Oracle Identity Federation was installed and the Oracle Identity Federation server is running if you can access the metadata.

http://host:port/fed/sp/metadata

Note: *host* represents the name of the WebLogic Managed Server where Oracle Identity Federation was installed. *port* represents the listen port on that WebLogic Managed Server.

 Accessing Fusion Middleware Control to verify that Oracle Identity Federation is available and running. For more information, see "Getting Started Using Oracle Enterprise Manager Fusion Middleware Control" in the Oracle Fusion Middleware Administrator's Guide.

10 Starting and Stopping the Oracle Stack

You must start and stop the components of the Oracle stack in a specific order. This topic describes that order and contains the following sections:

- Starting the Stack
- Stopping the Stack

Note: When executing the startManagedWebLogic and stopManagedWebLogic scripts described in the following topics:

- The default value for *DOMAIN_NAME* is IDMDomain
- SERVER_NAME represents the name of the Oracle WebLogic Managed Server. The default value for the Oracle Directory Integration Platform and Oracle Directory Services Manager WebLogic Managed Server is wls_ods1. The default value for the Oracle Identity Federation WebLogic Managed Server is wls_oif1.
- You will be prompted for values for *USER_NAME* and *PASSWORD* if you do not provide them as options when you execute the script.
- The value for *ADMIN_URL* will be inherited if you do not provide it as an option when you execute the script.

10.1 Starting the Stack

Start the stack components in the following order:

1. Start the Oracle WebLogic Administration Server by executing the following command:

MW_HOME/user_projects/domains/DOMAIN_NAME/bin/startWebLogic.sh

Note: When you start the Oracle WebLogic Administration Server from the command line, it runs in the foreground and prints output to the screen.

2. Ensure the Node Manager is running. Normally, the Oracle WebLogic Administration Server starts the Node Manager. If the Node Manager is not running, start it by executing the following command:

MW_HOME/user_projects/domains/DOMAIN_NAME/bin/startNodeManager.sh

3. Start system components, such as Oracle Internet Directory and Oracle Virtual Directory, by executing the following command:

ORACLE_INSTANCE/bin/opmnctl startall

You can verify that the system components have started by executing the following command:

ORACLE_INSTANCE/bin/opmnctl status -1

4. Start WebLogic managed components, such as Oracle Directory Integration Platform, Oracle Identity Federation, and Oracle Directory Services Manager, by executing the following command:

MW_HOME/user_projects/domains/DOMAIN_NAME/bin/startManagedWebLogic.sh \
SERVER_NAME {ADMIN_URL}

Note: You can use the Oracle WebLogic Administration Console to start managed components in the background. See *Oracle Fusion Middleware Introduction to Oracle WebLogic Server* for more information.

10.2 Stopping the Stack

You can stop the Oracle WebLogic Administration Server and all the managed servers by using Oracle WebLogic Administration Console. See *Oracle Fusion Middleware Introduction to Oracle WebLogic Server* for more information.

To stop the stack components from the command line, perform the following steps:

1. Stop WebLogic managed components, such as Oracle Directory Integration Platform, Oracle Identity Federation, and Oracle Directory Services Manager, by executing the following command:

MW_HOME/user_projects/domains/DOMAIN_NAME/bin/stopManagedWebLogic.sh \
{SERVER_NAME} {ADMIN_URL} {USER_NAME} {PASSWORD}

2. Stop system components, such as Oracle Internet Directory and Oracle Virtual Directory, by executing the following command:

ORACLE_INSTANCE/bin/opmnctl stopall

3. Stop the Oracle WebLogic Administration Server by executing the following command:

MW_HOME/user_projects/domains/DOMAIN_NAME/bin/stopWebLogic.sh

 If you want to stop the Node Manager, you can use the kill command: kill -9 PID

11 Deinstalling and Reinstalling Oracle Identity Management

This topic provides information about deinstalling and reinstalling Oracle Identity Management 11*g* Release 1 (11.1.1). It contains the following sections:

- Deinstalling Oracle Identity Management 11g Release 1 (11.1.1)
- Reinstalling Oracle Identity Management 11g Release 1 (11.1.1)

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

11.1 Deinstalling Oracle Identity Management 11g Release 1 (11.1.1)

This topic contains procedures for deinstalling Oracle Identity Management 11*g* Release 1 (11.1.1) and contains the following sections:

- Deinstalling the Oracle Identity Management Oracle Home
- Deinstalling the Oracle Common Home

11.1.1 Deinstalling the Oracle Identity Management Oracle Home

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

Deinstalling Oracle Identity Management will not remove any WebLogic domains that you have created—it only removes the software in the Oracle Identity Management Oracle Home directory.

This topic describes how to deinstall Oracle Identity Management 11g Release 1 (11.1.1) using the graphical, screen-based deinstaller. However, you can also perform a silent deinstallation using a response file. A deinstall response file template that you can customize for your deinstallation is included in the Disk1/stage/Response directory on UNIX, or in the Disk1\stage\Response directory on Windows.

Perform the following steps to deinstall Oracle Identity Management 11g Release 1 (11.1.1) using the graphical, screen-based deinstaller:

- **1.** Verify your Oracle Identity Management Oracle Home is not in use by an existing domain.
- 2. Stop all processes that use the Oracle Identity Management Oracle Home.

- **3.** Open a command prompt and move (cd) into the *IDENTITY_MANAGEMENT_ ORACLE_HOME*/oui/bin directory (UNIX) or the *IDENTITY_MANAGEMENT_ ORACLE_HOME*\oui\bin directory (Windows).
- **4.** Invoke the Deinstaller from command line using the -deinstall option. For example:

On UNIX:

./runInstaller -deinstall

On Windows:

setup.exe -deinstall

The Welcome screen appears.

- 5. Click Next. The Select Deinstallation Type screen appears.
- **6.** Select the deinstallation type you want to perform. Table 1 lists and describes each of the deinstallation types:

Table 1Deinstallation Types

Туре	Description
Deinstall Oracle Home	Select this option to deinstall the binaries contained in the listed Oracle Identity Management Oracle Home.
	If you select this option, the Deinstall Oracle Home screen appears next, where you can save a response file that contains the deinstallation settings before deinstalling.
Deinstall ASInstances managed by WebLogic Domain	Select this option to deinstall the Oracle Identity Management system component instances, such as Oracle Internet Directory and Oracle Virtual Directory, that are registered in a WebLogic domain.
	If you select this option, the Specify WebLogic Domain Detail screen appears next where you identify the administration domain containing the system components you want to deinstall. The Select Managed Instance screen appears next, where you identify the instances you want to deinstall.
DeInstall Unmanaged ASInstances	Select this option to deinstall the Oracle Identity Management system component instances, such as Oracle Internet Directory and Oracle Virtual Directory, that are not registered in a WebLogic domain.
	If you select this option, the Specify Instance Location screen appears next where you identify the instances you want to deinstall.

7. Regardless of the option you choose and the subsequent screens that appear, you will arrive at the Deinstall Progress screen, which shows the progress and status of the deinstallation. If you want to quit before the deinstallation is completed, click **Cancel**.

Click **Finish** after the deinstallation progresses to 100%. The Deinstallation Complete screen appears.

8. Click Finish on the Deinstallation Complete screen to exit the deinstaller.

11.1.2 Deinstalling the Oracle Common Home

The ORACLE_COMMON_HOME directory located in the MW_HOME directory contains the binary and library files required for Oracle Enterprise Manager Fusion Middleware Control and Java Required Files (JRF). Before you deinstall the ORACLE_COMMON_HOME directory, ensure that no other Oracle Fusion Middleware software, such as Oracle SOA Suite, depends on ORACLE_COMMON_HOME. You cannot deinstall the ORACLE_COMMON_HOME directory until all software that depends on it has been deinstalled.

Perform the following steps to deinstall the ORACLE_COMMON_HOME directory:

- **1.** Stop all processes that use the *ORACLE_COMMON_HOME* directory.
- **2.** Deinstall your Oracle Identity Management Oracle Home by performing the steps in Deinstalling the Oracle Identity Management Oracle Home.
- **3.** Open a command prompt and move (cd) into the *ORACLE_COMMON*/oui/bin/ directory (on UNIX) or the *ORACLE_COMMON_HOME*\oui\bin\ directory (on Windows).
- **4.** Invoke the Deinstaller from command line using the -deinstall option and the -jreLoc option, which identifies the location where Java Runtime Environment (JRE) is installed. For example:

On UNIX:

./runInstaller -deinstall -jreLoc FULL_PATH_TO_JRE_DIRECTORY

On Windows:

setup.exe -deinstall -jreLoc FULL_PATH_TO_JRE_DIRECTORY

The Welcome screen appears.

- 5. Click Next. The Select Deinstallation Type screen appears.
- **6.** Select the **Deinstall Oracle Home** option at the top of the Select Deinstallation Type screen.

Note: The path to the *ORACLE_COMMON_HOME* directory appears in the text describing the **Deinstall Oracle Home** option.

Click **Next**. The Deinstall Oracle Home screen appears.

7. Confirm the correct *ORACLE_COMMON_HOME* directory is listed and click **Deinstall**.

The Deinstallation Progress screen appears, along with a Warning dialog box prompting you to confirm that you want to deinstall the *ORACLE_COMMON_HOME* directory.

- **8.** Click **Yes** on the Warning dialog box to confirm you want to remove the *ORACLE_COMMON_HOME* directory. The deinstallation begins.
- **9.** Click **Finish** after the deinstallation progresses to 100%. The Deinstallation Complete screen appears.
- **10.** Click **Finish** on the Deinstallation Complete screen to exit the deinstaller.

11.2 Reinstalling Oracle Identity Management 11g Release 1 (11.1.1)

Perform the following steps to reinstall Oracle Identity Management 11*g* Release 1 (11.1.1):

- 1. Verify the directory you want to reinstall Oracle Identity Management into does not contain an existing Oracle Identity Management instance. If it does, you must deinstall it before reinstalling. You cannot reinstall Oracle Identity Management 11*g* Release 1 (11.1.1) in a directory that contains an existing Oracle Identity Management instance.
- **2.** Reinstall Oracle Identity Management as if it was the first installation by performing the steps in the appropriate procedure in this document.

12 Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible to all users, including users that are disabled. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Accessibility standards will continue to evolve over time, and Oracle is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For more information, visit the Oracle Accessibility Program Web site at http://www.oracle.com/accessibility/.

Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

Accessibility of Links to External Web Sites in Documentation

This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Deaf/Hard of Hearing Access to Oracle Support Services

To reach Oracle Support Services, use a telecommunications relay service (TRS) to call Oracle Support at 1.800.223.1711. An Oracle Support Services engineer will handle technical issues and provide customer support according to the Oracle service request process. Information about TRS is available at

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.

Oracle Fusion Middleware Quick Installation Guide for Oracle Identity Management 11g Release 1 (11.1.1) E10033-02

Copyright © 2009 Oracle and/or its affiliates. All rights reserved.

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

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

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

U.S. GOVERNMENT RIGHTS Programs, software, databases, and related documentation and technical data delivered to U.S. Government

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

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

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

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