## **Oracle® Fusion Middleware**

Installation Guide for Oracle Identity Management 11*g* Release 1 (11.1.1.9.0) **E12002-14** 

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This guide explains how to install single instances of Oracle Identity Management 11g Release 1 (11.1.1.9.0) components and verify the installation was successful.



Oracle Fusion Middleware Installation Guide for Oracle Identity Management, 11g Release 1 (11.1.1.9.0)

F12002-14

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# **Preface**

This Preface provides supporting information for the *Oracle Fusion Middleware Installation Guide for Oracle Identity Management* and includes the following topics:

- Audience
- Documentation Accessibility
- Related Documents
- Conventions

#### **Audience**

The *Installation Guide for Oracle Identity Management* is intended for administrators that are responsible for installing Oracle Identity Management components.

This document assumes you have experience installing enterprise components. Basic knowledge about the Oracle Identity Management components and Oracle Application Server is recommended.

This document does not cover the information for installing Oracle Identity and Access Management components. For information on installing Oracle Identity and Access Management components, refer to *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

# **Documentation Accessibility**

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

#### **Access to Oracle Support**

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# **Related Documents**

This section identifies additional documents related to Oracle Identity Management. You can access Oracle documentation online from the Oracle Technology Network (OTN) Web site at the following URL:

http://www.oracle.com/technetwork/indexes/documentation/index.html

**Note:** Printed documentation is available for sale from the Oracle Store Web site at the following URL:

http://shop.oracle.com/

Refer to the following documents for additional information on each subject:

#### **Oracle Fusion Middleware**

- Administrator's Guide
- Oracle Fusion Middleware Security Guide

#### **Oracle Identity Management**

- Oracle Fusion Middleware Getting Started with Oracle Identity Management
- Oracle Fusion Middleware User Reference for Oracle Identity Management

#### Installing and Upgrading

- Installation Planning Guide
- Oracle Fusion Middleware Quick Installation Guide for Oracle Identity Management
- Oracle Fusion Middleware Upgrade Planning Guide
- Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management
- Oracle Fusion Middleware Getting Started With Installation for Oracle WebLogic Server
- Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server

#### **High Availability**

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

#### **Oracle Internet Directory**

- Administrator's Guide for Oracle Internet Directory
- Oracle Fusion Middleware Application Developer's Guide for Oracle Identity Management

#### **Oracle Directory Integration Platform**

• Oracle Fusion Middleware Integration Guide for Oracle Identity Management

#### **Oracle Virtual Directory**

Administering Oracle Virtual Directory.

#### **Oracle Directory Services Manager**

- Administrator's Guide for Oracle Internet Directory
- Administering Oracle Virtual Directory
- For configuring Oracle Unified Directory (OUD) with Oracle Directory Services Manager (ODSM), refer to the following section in this guide:

Section 10.2, "Configuring Oracle Unified Directory (OUD) with ODSM."

#### **Oracle Identity Federation**

• Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation.

#### **Oracle Unified Directory**

- Oracle Fusion Middleware Installing Oracle Unified Directory
- Oracle Fusion Middleware Administering Oracle Unified Directory

#### **Oracle Single Sign-On**

• Oracle Application Server Single Sign-On Administrator's Guide 10g Release 10.1.4.0.1 available at:

http://www.oracle.com/technology/documentation/oim1014.html

#### **Oracle Delegated Administration Services**

Oracle Identity Management Guide to Delegated Administration 10g Release 10.1.4.0.1

#### **Oracle Fusion Middleware Repository Creation Utility**

Oracle Fusion Middleware Repository Creation Utility User's 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.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

# Part I

# **Introduction and Preparation**

Part I introduces Oracle Identity Management 11*g* Release 1 (11.1.1) installation and describes how to perform preparatory tasks. It contains the following chapters:

- Chapter 1, "Introduction"
- Chapter 2, "Preparing to Install"
- Chapter 3, "Evaluating Single Sign-On Installations"

# Introduction

This chapter provides an overview of the Oracle Identity Management 11g Release 1 (11.1.1.9.0) installation.

This chapter includes the following topics:

- Oracle Identity Management 11g Release 1 (11.1.1.9.0) Components
- **Installation Roadmap**
- Installation Types: "Install Software Do Not Configure" vs. "Install and Configure"
- Understanding Oracle WebLogic Server Administration Domain Options
- **Installing Components on Separate Systems**
- Understanding the State of Oracle Identity Management Components After Installation
- Additional 11g Release 1 (11.1.1) Deployment Information
- Using This Guide

# 1.1 Oracle Identity Management 11g Release 1 (11.1.1.9.0) Components

Oracle Identity Management 11g Release 1 (11.1.1.9.0) includes the following components:

- **Oracle Internet Directory**
- Oracle Virtual Directory
- Oracle Directory Services Manager
- Oracle Directory Integration Platform
- Oracle Identity Federation
- Oracle HTTP Server
- Oracle Enterprise Manager

**Note:** This document does not cover the information for installing Oracle Identity and Access Management components. For information on installing Oracle Identity and Access Management components, refer to Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management.

# 1.2 Installation Roadmap

Table 1–1 describes the high-level tasks for installing and configuring Oracle Identity Management. The table also provides information on where to get more details about each task.

Table 1–1 Tasks in the Oracle Identity Management Installation Procedure

Task	Description	Documentation	Mandatory or Optional?
Task 1 - Prepare your environment	Ensure that your system environment meets the general installation requirements for Oracle Fusion Middleware as well as Oracle Identity Management and RCU.	For system requirements information, go to:	Mandatory
for installation.		http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-requirements-100147.html	
		For certification information, go to:	
		http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html	
Task 2 - Run RCU to create the necessary schemas.	Oracle Identity Management 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 Oracle database up and running. See http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certification-100350.html for more information.	Mandatory
		Instructions for creating the schema are provided in "Running Oracle Fusion Middleware Repository Creation Utility (RCU)" in the <i>Repository Creation Utility User's Guide</i> . In addition, refer to Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU) in this guide.	

Table 1–1 (Cont.) Tasks in the Oracle Identity Management Installation Procedure

Task	Description	Documentation	Mandatory or Optional?
Task 3 - Install Oracle WebLogic Server 11g Release 1 (10.3.6) and create a Middleware home.	Oracle Identity Management requires a Middleware home directory. The Middleware home is created during the Oracle WebLogic Server installation.  The WebLogic Server installer also creates the WebLogic home directory within the Oracle Middleware home directory.	Installation instructions are provided in Installation Guide for Oracle WebLogic Server.  For more information about the Middleware home and WebLogic home directories, see Concepts.	Mandatory
Task 4 - Install Oracle Identity Management	Use the installer to install Oracle Identity Management 11.1.1.9.0	See Installing Oracle Identity Management Using "Install and Configure" Option.	Mandatory
		For more information about the installation types, see Installation Types "Install Software - Do Not Configure" vs. "Install and Configure".	:
Task 5 - Configure	After installing, run the	See the following topics in this guide:	Optional
Oracle Identity Management	Configuration Tool to configure your Oracle Identity Management components.	<ul> <li>Only OID in an Existing WebLogic Domain</li> </ul>	
	Note: This step applies if you selected <b>Install Software - Do Not Configure</b> option in the Select Installation Type screen while installing Oracle Identity Management 11 <i>g</i> Release 1 (11.1.1.9.0)	<ul> <li>Only OID Without a WebLogic Domain</li> </ul>	
		<ul> <li>OID with ODSM and Fusion Middleware Control in a New WebLogic Domain</li> </ul>	
		<ul> <li>OID with ODIP, ODSM, and Fusion Middleware Control in a New WebLogic Domain</li> </ul>	1
		<ul> <li>OVD with ODSM and Fusion Middleware Control in a New WebLogic Domain</li> </ul>	
		<ul> <li>Only OVD in an Existing WebLogi Domain</li> </ul>	c
		<ul> <li>Only OVD Without a WebLogic Domain</li> </ul>	
		<ul> <li>Performing Basic Oracle Identity Federation Configurations</li> </ul>	
		<ul> <li>Performing Advanced Oracle Identity Federation Configurations</li> </ul>	3
		<ul> <li>Configuring Only ODIP with Oracle Internet Directory in an Existing WebLogic Domain</li> </ul>	
		<ul> <li>ODIP with OID and Fusion Middleware Control in a New WebLogic Domain</li> </ul>	
		<ul> <li>Configuring ODIP when OID is Running in SSL Mode 2 - Server Only Authentication</li> </ul>	
		<ul> <li>Configuring Only ODIP with Oracle Unified Directory (OUD)</li> </ul>	
		<ul> <li>Configuring Only ODIP with Oracle Directory Server Enterprise Edition (ODSEE)</li> </ul>	

# 1.3 Installation Types: "Install Software - Do Not Configure" vs. "Install and Configure"

The Select Installation Type screen in the Installer presents two options: **Install and** Configure and Install Software - Do Not Configure. This section describes both options:

- Understanding the "Install Software Do Not Configure" Option
- Understanding the "Install and Configure" Option

#### 1.3.1 Understanding the "Install Software - Do Not Configure" Option

Choose the Install Software - Do Not Configure option to install Oracle Identity Management components without configuring them during installation. If you choose the **Install Software - Do Not Configure** option, the Installer installs the component software and then closes. Oracle Identity Management components will not start running after deploying them using the **Install Software - Do Not Configure** option, as additional configuration is needed.

After you install components using the Install Software - Do Not Configure option, you can configure them at a later time using the Oracle Identity Management 11g Release 1 (11.1.1.9.0) Configuration Wizard. To start the Oracle Identity Management 11g Release 1 (11.1.1.9.0) Configuration Wizard, execute the ORACLE\_ HOME/bin/config.sh script (config.bat on Windows).

## 1.3.2 Understanding the "Install and Configure" Option

The **Install and Configure** option allows you to install Oracle Identity Management components and simultaneously configure some of their fundamental elements, such as passwords, user names, and so on. Oracle Identity Management components start running and are immediately ready for use after deploying them using the **Install and** Configure option.

# 1.4 Understanding Oracle WebLogic Server Administration Domain **Options**

During installation, you have several options for choosing how the Oracle Identity Management components are installed in relation to an Oracle WebLogic Server administration domain. A domain includes a special WebLogic Server instance called the Administration Server, which is the central point from which you configure and manage all resources in the domain.

This section describes each domain option for installing Oracle Identity Management components:

- Create New Domain
- **Extend Existing Domain**
- **Expand Cluster**
- Configure Without a Domain

**See:** The "Understanding Oracle WebLogic Server Domains" chapter in the Oracle Fusion Middleware Understanding Domain Configuration for Oracle WebLogic Server guide for more information about Oracle WebLogic Server administration domains.

#### 1.4.1 Create New Domain

Select the **Create New Domain** option to create a new Oracle WebLogic Server administration domain and install Oracle Identity Management components in it. When you install Oracle Identity Management components in a new domain, the Fusion Middleware Control management component and the Oracle WebLogic Administration Server are automatically deployed with them.

#### 1.4.2 Extend Existing Domain

Select the Extend Existing Domain option to install Oracle Identity Management components in an existing Oracle WebLogic Server administration domain. When you install Oracle Identity Management components using this option, they are essentially "joining" an existing domain.

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

If you want to install and configure Oracle Identity Management components in an existing Oracle WebLogic Server administration domain, by using either the Installer or the Oracle Identity Management 11g Release 1 Configuration Wizard, the existing domain must have been created using the Oracle Identity Management 11g Release 1 Installer. You cannot extend an existing domain for Oracle Identity Management components if the domain was created by another program, such as the Oracle SOA Installer or the Oracle Fusion Middleware Configuration Wizard.

**Note:** When you install components using the **Extend Existing Domain** option, you must provide some credentials for the existing domain, including the user name for the domain. You must enter the user name in ASCII characters only.

## 1.4.3 Expand Cluster

Select the Expand Cluster option to install Oracle Identity Management components in an Oracle WebLogic Server cluster for High Availability (HA). This document does not explain how to install Oracle Identity Management components in HA configurations. Refer to the following documents for more information:

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

# 1.4.4 Configure Without a Domain

Select the Configure without a Domain option to install Oracle Identity Management components and configure them to be without domain membership.

**Note:** Only the Oracle Internet Directory and Oracle Virtual Directory components are certified for installation without a domain. For Oracle Internet Directory, the **Configure without a Domain** option is appropriate for environments that have *both* of the following conditions:

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

For Oracle Virtual Directory, the Configure without a Domain option is appropriate if you want to register Oracle Virtual Directory with a remote WebLogic Administration Server for management purposes, but you do not want to install Oracle WebLogic Server locally.

# 1.5 Installing Components on Separate Systems

You can install Oracle Fusion Middleware instances on separate systems. You can also distribute Oracle Fusion Middleware components over multiple systems, which is especially useful for Oracle Identity Management components. You might want to distribute components to improve performance, security, scalability, and availability of Oracle Identity Management services.

The following are two (of many) examples of Oracle Identity Management deployments that benefit from distributing components over multiple systems:

- Oracle Internet Directory on one system, and Oracle Directory Services Manager and Oracle Directory Integration Platform on a separate system.
- Oracle Identity Management components use an Oracle Database to contain the Oracle Metadata Services Repository. The Oracle Identity Management components and the Oracle Database are installed on separate systems.

Note: If you install Oracle Identity Management components on a separate system from the database containing the Oracle Metadata Services Repository, the Oracle Identity Management components will need network access to the repository.

**See:** The following documents if you want to configure more than one Oracle Internet Directory against the same Oracle Metadata Services Repository:

- Installation Planning Guide
- Administrator's Guide for Oracle Internet Directory

# 1.6 Understanding the State of Oracle Identity Management Components After Installation

This topic provides information about the state of Oracle Identity Management components after installation, including:

- **Default SSL Configurations**
- **Default Passwords**
- Ports Assigned Using Auto Port Configuration

## 1.6.1 Default SSL Configurations

By default, Oracle Internet Directory and Oracle Virtual Directory are installed with SSL configured. You must configure SSL for the Oracle WebLogic Administration Server and Oracle WebLogic Managed Server after installation.

**See:** The Administrator's Guide for more information.

#### 1.6.2 Default Passwords

By default, the passwords for all Oracle Identity Management components are set to the password for the Oracle Identity Management Instance. For security reasons, after installation, you should change the passwords of the various components so they have different values.

**See:** The following documents for information about changing passwords for Oracle Identity Management components:

- Administrator's Guide
- Component-specific guides listed in the "Related Documents" section in this guide's Preface.

## 1.6.3 Ports Assigned Using Auto Port Configuration

When you use the Auto Port Configuration option during installation, the Installer follows specific steps to assign ports. The following information describes the default ports and port assignment logic the Installer uses to assign ports for various Oracle Identity Management components when you use the Auto Port Configuration option during installation.

#### **Oracle Virtual Directory:**

- Non-SSL LDAP port: 6501
- SSL LDAP port: 7501
- HTTP Admin SSL port: 8899
- HTTP Web Gateway port: 2223

First, the Installer attempts to assign the default port. If the default port is unavailable, the Installer tries ports within a range of 50 from the default port. For example, when the Installer assigns the non-SSL port for Oracle Virtual Directory, it first attempts to assign 6501. If 6501 is unavailable, it tries ports from 6501 to 6551. The Installer uses this approach to assign all Oracle Virtual Directory ports.

#### **Oracle Internet Directory:**

- Non-SSL port: 3060
- SSL port: 3131

First, the Installer attempts to assign default ports. If the non-SSL port is unavailable, the Installer tries ports from 3061 to 3070, then from 13060 to 13070. Similarly, the Installer first attempts to assign 3131 as the SSL port, then ports from 3132 to 3141, and then from 13131 to 13141.

#### **Oracle Identity Federation:** 7499

First, the Installer attempts to assign the default port. If the default port is unavailable, the Installer tries ports in increments of one, that is: 7500, then 7501, then 7502, and so on. The Installer tries ports up until 9000 to find an available

**Oracle Directory Services Manager:** 7005

First, the Installer attempts to assign the default port. If the default port is unavailable, the Installer tries ports in increments of one, that is: 7006, then 7007, then 7008, and so on. The Installer tries ports up until 9000 to find an available port.

- Oracle WebLogic Administration Server: 7001
- Oracle Process Manager and Notification Server:

OPMN Local Port: 6700

**OPMN Remote Port: 6701** 

OPMN Request Port: 6702

# 1.7 Additional 11g Release 1 (11.1.1) Deployment Information

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

- Upgrading to Oracle Identity Management 11g Release 1 (11.1.1.9.0)
- Installing Oracle Identity Management 11g Release 1 (11.1.1.9.0) for High Availability

#### 1.7.1 Upgrading to Oracle Identity Management 11 g Release 1 (11.1.1.9.0)

This guide does not explain how to upgrade previous versions of Oracle Identity Management components, including any previous database schemas, to 11g Release 1 (11.1.1.9.0). To upgrade an Oracle Identity Management component that is earlier than 11g, refer to Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management.

If you have an existing Oracle Identity Management 11g Release 1 installation, refer to the "Applying the Latest Oracle Fusion Middleware Patch Set" topic in the *Oracle* Fusion Middleware Patching Guide.

## 1.7.2 Installing Oracle Identity Management 11g Release 1 (11.1.1.9.0) 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 Oracle Fusion Middleware High *Availability Guide.* 

Specifically, see the "Configuring High Availability for Identity Management Components" topic in the *Oracle Fusion Middleware High Availability Guide*.

In addition, you may also refer to the Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management.

# 1.8 Using This Guide

Each document in the Oracle Fusion Middleware Documentation Library has a specific purpose. The specific purpose of this guide is to explain how to:

- 1. Install single instances of Oracle Identity Management 11g Release 1 (11.1.1) components.
- Verify the installation was successful.
- Get started with the component after installation.

This guide covers the most common, certified Oracle Identity Management deployments. The following information is provided for each of these deployments:

- **Appropriate Installation Environment**: Helps you determine which installation is appropriate for your environment.
- **Components Installed**: Identifies the components that are installed in each scenario.
- **Dependencies**: Identifies the components each installation depends on.
- **Procedure**: Explains the steps for the installation.

Part II of this guide explains how to install Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation Management by using the Oracle Identity Management 11.1.1.9.0 Installer and the Oracle Identity Management Configuration Wizard.

The following is a list of recommendations on how to use the information in this guide to install Oracle Identity Management 11g Release 1 (11.1.1.9.0):

- Review Chapter 1, "Introduction," for context.
- Review Chapter 2, "Preparing to Install," for information about what you should consider before you deploy Oracle Identity Management.
- Review Chapter 4, "Installing and Configuring Oracle Identity Management (11.1.1.9.0)," for general installation and configuration information which applies to all Oracle Identity Management 11g Release 1 (11.1.1.9.0) products.
- Install, verify, and get started with your Oracle Identity Management component by referring to its specific chapter in this guide.
- **5.** Use the appendixes in this guide as needed.

**See Also:** The "Related Documents" section in this guide's Preface for a list of documents that provide additional information about Oracle Identity Management components.

# **Preparing to Install**

This chapter provides information you should review before installing Oracle Identity Management 11g Release 1 (11.1.1.9.0) components.

This chapter discusses the following topics:

- Reviewing System Requirements and Certification
- Understanding Oracle Fusion Middleware Support of 64-bit JDK
- Installing and Configuring Java Access Bridge (Windows Only)
- Executing the oracleRoot.sh Script on Linux or UNIX Platforms
- Optional Environment-Specific Preparation
- **Identifying Installation Directories**
- **Determining Port Numbers**
- Configuring Oracle Internet Directory with Privileged Ports on Linux Operating **Systems**
- Optional: Configuring the Minimum Amount for Oracle WebLogic Server's Maximum Heap Size
- Optional: Managing the Oracle WebLogic Server Node Manager Utility for Oracle **Identity Management Installations**
- Locating Installation Log Files

# 2.1 Reviewing System Requirements and Certification

Before performing any installation, you should read the system requirements and certification documents to ensure that your environment meets the minimum installation requirements for the products you are installing.

- Oracle Fusion Middleware System Requirements and Specifications This document contains information related to hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches.
- *Oracle Fusion Middleware Supported System Configurations* This document contains information related to supported installation types, platforms, operating systems, databases, JDKs, and third-party products.
- For interoperability and compatibility issues that may arise when installing, refer to Oracle Fusion Middleware Interoperability and Compatibility Guide.

This document contains important information regarding the ability of Oracle Fusion Middleware products to function with previous versions of other Oracle Fusion Middleware, Oracle, or third-party products. This information is applicable to both new Oracle Fusion Middleware users and existing users who are upgrading their existing environment.

# 2.2 Understanding Oracle Fusion Middleware Support of 64-bit JDK

If you are using a 64-bit JVM in your environment, ensure that all your Oracle Fusion Middleware components are using the 64-bit JVM. You cannot mix components using a 32-bit JVM with those using a 64-bit JVM.

For more information, refer to the System Requirements and Supported Platforms for Oracle Fusion Middleware 11gR1 document, available at the following page:

http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certific ation-100350.html

If your Oracle Fusion Middleware components are running in a 64-bit IVM environment, ensure that WebLogic Server is installed with the 64-bit JDK. For 32-bit JVM support, refer to the Oracle Fusion Middleware Release Notes for information on how to configure your environment for 32-bit JVM support for your platform.

# 2.3 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 access-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.

# 2.4 Executing the oracleRoot.sh Script on Linux or UNIX Platforms

During installation on Linux or UNIX platforms, the installer prompts you to log in as the root user and run the oracleRoot.sh script. You must log in as the root user because the script creates files, edits files, and changes the permissions of certain Oracle executable files in the <code>Oracle\_HOME/bin</code> directory.

If the oracleRoot.sh script finds files of the same name, it prompts you to indicate whether or not to override the existing files. Back up the existing files (you can do this from another window), then overwrite them.

# 2.5 Optional Environment-Specific Preparation

This topic describes optional environment-specific tasks you may want to perform before installing Oracle Identity Management 11g Release 1 (11.1.1.9.0). This topic includes the following sections:

- Using Symbolic Links
- Installing Oracle Identity Management on DHCP Hosts
- Installing Oracle Identity Management on a Multihomed System

**Note:** If the environment variable LD ASSUME KERNEL is set, it needs to be unset.

## 2.5.1 Using Symbolic Links

If you want to install Oracle Identity Management using symbolic links, you must create them before installation. For example, you could create symbolic links for the installation by executing the following commands:

```
prompt> mkdir /home/basedir
prompt> ln -s /home/basedir /home/linkdir
```

Then, when you run the Installer to install Oracle Identity Management, you can specify /home/linkdir as the Oracle Home.

After installation, you cannot create symbolic links to the Oracle Home. Also, you cannot move the Oracle Home to a different location and create a symbolic link to the original Oracle Home.

# 2.5.2 Installing Oracle Identity Management on DHCP Hosts

If you plan to install Oracle Identity Management components on a DHCP server, you must ensure the Installer can resolve host names. This may require editing the /etc/hosts file on UNIX systems, and installing a loopback adapter on Windows systems. The following information provides general examples, you should alter these examples to make them specific to your environment.

#### On UNIX systems:

Configure the host to resolve host names to the loopback IP address by modifying the /etc/hosts file to contain the following entries. Replace the variables with the appropriate host and domain names:

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

Confirm the host name resolves to the loopback IP address by executing the following command:

```
ping hostname.domainname
```

#### On Windows systems:

Install a loopback adapter on the DHCP host and assign it a non routable IP address.

After installing the adapter, add a line to the

%SYSTEMROOT%\system32\drivers\etc\hosts file immediately after the localhost line and using the following format, where *IP\_address* represents the local *IP* address of the loopback adapter:

TP address hostname domainname hostname

## 2.5.3 Installing Oracle Identity Management on a Multihomed System

You can install Oracle Identity Management components on a multihomed system. A multihomed system is associated with multiple IP addresses, typically achieved by having multiple network cards on the system. Each IP address is associated with a host name and you can create aliases for each host name.

The Installer retrieves the fully qualified domain name from the first entry in /etc/hosts file on UNIX, or the %SYSTEMROOT%\system32\drivers\etc\hosts file on Windows. For example, if your file looks like the following, the Installer retrieves myhost1.mycompany.com for configuration:

```
127.0.0.1 localhost.localdomain localhost
10.222.333.444 myhost1.mycompany.com myhost1
20.222.333.444 devhost2.mycompany.com devhost2
```

For specific network configuration of a system component, refer to the individual component's documentation listed in "Related Documents" for more information.

# 2.6 Identifying Installation Directories

This topic 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 topic.

The common directories described in this section include the following:

- Oracle Middleware Home Location
- **Oracle Home Directory**
- WebLogic Server Directory
- Oracle Instance Location
- **Oracle Instance Name**

#### 2.6.1 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 Oracle 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.

## 2.6.2 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 <code>ORACLE\_HOME</code>.

**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.

#### 2.6.3 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.

#### 2.6.4 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, that directory must be empty.

The Installer installs the component's configuration files and runtime components 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.

#### 2.6.5 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 host name or IP address of the computer

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

# 2.7 Determining Port Numbers

If you want to install an Oracle Identity Management 11g Release 1 (11.1.1) component against an existing Oracle Identity Management 11g Release 1 (11.1.1) component, you may need to identify the ports for the existing component. For example, if you want to install Oracle Directory Integration Platform 11g Release 1 (11.1.1) against an existing Oracle Internet Directory 11g Release 1 (11.1.1) component, you must identify its port when you install Oracle Directory Integration Platform.

You can get information about ports using the following:

- WebLogic Server Administration Console.
  - Log in to the Administration Console. Click on **Servers** under **Environment** to see what ports are in use for the Administration Server and Managed Servers.
- ORACLE INSTANCE/config/OPMN/opmn/ports.prop

**Note:** If you change a component's port number after installation, the ports.prop file is *not* updated.

The ORACLE\_INSTANCE/bin/opmnctl status -l command to see port numbers of components managed by OPMN.

# 2.8 Configuring Oracle Internet Directory with Privileged Ports on Linux **Operating Systems**

By default, the Oracle Identity Management 11g Installer does not assign privileged ports to Oracle Internet Directory; however, you can override the default by using the staticports.ini file. (See Section 4.2.8, "Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software.")

If you want to configure Oracle Internet Directory to run on privileged ports on a Linux operating system, then perform the following steps:

- Complete only an installation of Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Chapter 4, "Installing and Configuring Oracle Identity Management (11.1.1.9.0)."
- As the root user, execute ORACLE\_HOME/oracleRoot.sh.

For more information, see Section 2.4, "Executing the oracleRoot.sh Script on Linux or UNIX Platforms."

- **3.** As the root user, execute ORACLE\_HOME/oidRoot.sh.
- Change .apachectl permissions.

To do this, run the following as root user:

/bin/chown root ORACLE\_HOME/ohs/bin/.apachectl /bin/chmod 6750 ORACLE\_HOME/ohs/bin/.apachectl **5.** Configure Oracle Internet Directory with the privileged ports using the staticports.ini file.

# 2.9 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:

- 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.
- 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 2–1 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 2–1 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 Appendix B, "Starting or Stopping the Oracle Stack."

> **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 have precedence over the preceding occurrences.

# 2.10 Optional: Managing the Oracle WebLogic Server Node Manager **Utility for Oracle Identity Management Installations**

Oracle Directory Integration Platform (ODIP) and Oracle Identity Federation (OIF) are configured with a WebLogic domain. Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) can be configured with or without a WebLogic domain. If you want to use the Oracle WebLogic Server Node Manager Utility for Oracle Identity Management products that require a WebLogic domain, you must configure Node Manager.

To configure Node Manager, you must perform the following steps after installing Oracle WebLogic Server and before installing Oracle Identity Management:

Verify the Oracle WebLogic Server Node Manager utility is stopped. If it is running, kill the process. Use the following commands to identify running process and kill the same:

For example, on UNIX:

1) ps -ef | egrep weblogic.NodeManager | egrep -v egrep

This will return the Process Id of the Node Manager Process.

2) kill -9 < Process Id of the Node Manager Process>

On Windows:

Use the Windows Task Manager to identify running Node Manager processes and kill the same.

- 2. Determine if the nodemanager.properties file is present in the WL\_ HOME/common/nodemanager/directory.
  - If the nodemanager properties file is not present, then follow the instructions below:

#### On UNIX:

Run startNodeManager.sh (Located at <WL\_HOME>/server/bin directory) to start Node Manager.

#### On Windows:

Run startNodeManager.cmd (Located at <WL\_HOME>\server\bin directory) to start Node Manager.

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

Also, verify that the StartScriptEnabled parameter is included in this file and that it is set to true. If the StartScriptEnabled parameter is not included or set to true, edit the nodemanager.properties file as follows:

StartScriptEnabled=true

**Note:** You must start the Node Manager with Java Secure Socket Extension (JSSE) enabled if you have applied the following Oracle WebLogic Server patches to your Middleware home:

- 13964737 (YVDZ)
- 14174803 (IMWL)

These patches are available from My Oracle Support. For information on how to start the Node Manager with JSSE enabled, see the "Set the Node Manager Environment Variables" topic in the Node Manager Administrator's Guide for Oracle WebLogic Server.

# 2.11 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
- opatchDATE-TIME\_STAMP.log

## **Evaluating Single Sign-On Installations**

This chapter includes the following topics:

- Before You Begin
- Single Sign-On Options
- Single Sign-On Preparation Considerations
- Oracle Single Sign-On Known Limitations
- Recommendations

**Note:** Existing Oracle Single Sign-On 10g users are encouraged to upgrade to Oracle Access Manager 11g for a more advanced single sign-on solution.

## 3.1 Before You Begin

Before performing any upgrade or installation, you should read the following documents to ensure that your Oracle Fusion Middleware environment meets the minimum installation requirements for the products you are installing.

- Review System Requirements and Specifications
- **Review Certification Information**
- Review Interoperability and Compatibility Information

## 3.1.1 Review System Requirements and Specifications

Oracle Fusion Middleware System Requirements and Specifications document is available at:

http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-requirem ents-100147.html

This document covers information such as hardware and software requirements, database schema requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches.

#### 3.1.2 Review Certification Information

Oracle Fusion Middleware Supported System Configurations document is available at:

http://www.oracle.com/technetwork/middleware/ias/downloads/fusion-certific ation-100350.html

This document contains certification information related to supported 32-bit and 64-bit operating systems, databases, web servers, LDAP servers, adapters, IPv6, JDKs, and third-party products.

### 3.1.3 Review Interoperability and Compatibility Information

For interoperability and compatibility issues that may arise when installing, refer to Oracle Fusion Middleware Interoperability and Compatibility Guide.

This document contains important information regarding the ability of Oracle Fusion Middleware products to function with previous versions of other Oracle Fusion Middleware, Oracle, or third-party products. This information is applicable to both new Oracle Fusion Middleware users and existing users who are upgrading their existing environment.

## 3.2 Single Sign-On Options

Following are the options available for a single sign-on solution:

- Use an existing Oracle Single Sign-On 10g 10.1.2.3.
- Use an existing Oracle Single Sign-On 10g 10.1.4.3.
- Install a new Oracle Single Sign-On 10g 10.1.2.3 as part of Oracle Identity Management 10*g* 10.1.2.3. For more information, refer to the following link:

```
http://download.oracle.com/docs/cd/B14099_19/idmanage.htm
```

Install a new Oracle Single Sign-On 10g 10.1.4.3 as part of Oracle Identity Management 10g 10.1.4.3. For more information, refer to the following link:

```
http://download.oracle.com/docs/cd/B28196_01/idmanage.htm
```

Use Oracle Access Manager 11g. For more information on installing and configuring Oracle Access Manager 11g Release 1 (11.1.1), see "Installing Oracle Identity and Access Management (11.1.1.7.0)" and "Configuring Oracle Access Manager" in the Oracle Fusion Middleware Installation Guide for Oracle Identity Management.

## 3.3 Single Sign-On Preparation Considerations

Consider the following when preparing for a single sign-on solution:

- What Oracle Fusion Middleware products will be installed or configured to use a single sign-on solution?
- Will the single sign-on solution be configured during installation or as a post-installation step?
- If you have an existing Oracle Single Sign-On 10g, when will this installation be upgraded to Oracle Access Manager 11g?
- Oracle Access Manager 11g is an additional installation after installing Oracle Internet Directory 11g.

## 3.4 Oracle Single Sign-On Known Limitations

Following are the Oracle Single Sign-On known limitations:

New installations of Oracle Portal 11g require Oracle Single Sign-On 10g (10.1.2.3 or 10.1.4.3) during the configuration phase.

- Premier support ends for Oracle Single Sign-On 10g (10.1.2.3) and Oracle Single Sign-On 10g (10.1.4.3) soon. For complete information, refer to the Oracle Lifetime Support Policy document available at:
  - http://www.oracle.com/us/support/library/lifetime-support-middleware-06 9163.pdf
- Premier support has been extended until December 2012 for the use of Oracle Single Sign-On 10g (10.1.4.3) with existing Oracle Portal, Forms, Reports, and Discoverer 11g environments, thereby enabling you to prepare for Oracle Access Manager 11g upgrade.
- New installations of Oracle Single Sign-On 10g (10.1.2.3) are not supported against the 11*g* environment.
- New installations of Oracle Single Sign-On 10g (10.1.4.3) have been supported with the 11*g* environment through version 11.1.1.4.

### 3.5 Recommendations

Oracle recommends that you carefully consider the following requirements and options when choosing a single sign-on solution:

- If an Oracle Single Sign-On 10g with Delegated Administration Services environment is necessary, use an existing Oracle Single Sign-On 10g with Delegated Administration Services environment.
- If a new Oracle Single Sign-On 10g environment must be installed, install under previously supported framework. For example, a full Oracle Identity Management 10g infrastructure, with the intention of upgrading to Oracle Access Manager 11g in near future and decommission rest of 10*g*.
- If you are not using Oracle Portal, install and configure Oracle Fusion Middleware products with Oracle Access Manager 11g.
- If you are installing Oracle Portal 11g for upgrade purposes, use an existing Oracle Single Sign-On 10g connection during the installation, and upgrade to Oracle Access Manager 11g at a later time. For more information on upgrading to Oracle Access Manager 11g, see Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management.
  - If you are using Delegated Administration Services, ensure that you run it on Oracle Application Server Containers for J2EE. Move from Oracle Single Sign-On 10g to Oracle Access Manager 11g on Oracle WebLogic Server.
- New Oracle Forms and Oracle Reports installations should use Oracle Forms and Oracle Reports Release 2 (11.1.2). This installation has an option to install with Oracle Single Sign-On 10g or Oracle Access Manager 11g. You may upgrade Oracle Single Sign-On 10g to Oracle Access Manager 11g before or after this installation. For more information, see Oracle Fusion Middleware Installation Guide for Oracle Forms and Reports.
- If you are installing only Oracle Discoverer, do not install the Oracle Single Sign-On solution during Oracle Discoverer installation. Configure Oracle Access Manager 11*g* after the installation.

## Part II

# Installing and Configuring Oracle Identity Management (11.1.1.9.0)

Part II provides information about installing and configuring the following Oracle Identity Management products:

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

Part II contains the following chapters:

- Chapter 4, "Installing and Configuring Oracle Identity Management (11.1.1.9.0)"
- Chapter 5, "Configuring Oracle Internet Directory"
- Chapter 6, "Configuring Oracle Virtual Directory"
- Chapter 7, "Configuring Oracle Directory Integration Platform"
- Chapter 8, "Configuring Oracle Directory Services Manager"
- Chapter 9, "Configuring Oracle Identity Federation"
- Chapter 10, "Configuring Oracle Unified Directory with Oracle Identity Management 11.1.1.9.0"

## **Installing and Configuring Oracle Identity** Management (11.1.1.9.0)

This chapter explains how to install and configure Oracle Identity Management (11.1.1.9.0).

This chapter includes the following topics:

- Important Notes Before You Begin
- Installing Oracle Identity Management Using "Install and Configure" Option
- Configuring Oracle Identity Management for "Install Software Do Not Configure" Option

## 4.1 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products, keep the following points in mind:

- This chapter provides information for installing and configuring Oracle Identity Management (11.1.1.9.0) for new users. If you are an existing Oracle Identity Management 11g user, refer to "Applying the Latest Oracle Fusion Middleware Patch Set" in the *Oracle Fusion Middleware Patching Guide*.
  - For complete information about patching your Oracle Fusion Middleware 11g to the latest release, refer to the *Patching Guide*.
- The Select Installation Type screen in the Installer presents two options: Install and Configure and Install Software - Do Not Configure. For more information about these options, see Installation Types: "Install Software - Do Not Configure" vs. "Install and Configure".

## 4.2 Installing Oracle Identity Management Using "Install and Configure" **Option**

Follow the instructions in this section to install and configure the latest Oracle Identity Management software.

Installing and configuring the latest version of Oracle Identity Management 11g components involves the following steps:

- 1. Obtaining the Oracle Fusion Middleware Software
- **Installing Oracle Database**

- 3. Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU)
- 4. Required Installation Privileges for Oracle WebLogic Server and Oracle Identity Management on Windows Operating Systems
- 5. Installing Oracle WebLogic Server and Creating the Middleware Home
- Creating the Inventory Directory (UNIX Only)
- Starting an Installation
- Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software

### 4.2.1 Obtaining the Oracle Fusion Middleware Software

For installing Oracle Identity Management, you must obtain the following software:

- Oracle WebLogic Server 11g Release 1 (10.3.6)
- Oracle Database
- **Oracle Repository Creation Utility**
- **Oracle Identity Management Suite**

For more information on obtaining Oracle Fusion Middleware 11g software, see Oracle Fusion Middleware Download, Installation, and Configuration ReadMe available at:

http://download.oracle.com/docs/cd/E23104\_01/download\_readme.htm

**Note:** Oracle Identity Management 11g Release 1 (11.1.1.9.0) installer is platform specific.

To install Oracle Identity Management 11g Release 1 (11.1.1.9.0) on a 32-bit operating system, you must use the 32-bit installer and to install Oracle Identity Management 11g Release 1 (11.1.1.9.0) on a 64-bit operating system, you must use the 64-bit installer.

## 4.2.2 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 latest information about supported databases, refer to the Oracle Fusion Middleware Supported System Configurations document.

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 Fusion Middleware Repository Creation Utility (RCU), which is used to create the schemas that Oracle Identity Management components require.

**Note:** For information about RCU requirements for Oracle Databases, see "RCU Requirements for Oracle Databases" topic in the Oracle Fusion Middleware System Requirements and Specifications document.

#### 4.2.2.1 Installing Pluggable Database

To install a pluggable database (PDB), see Installing the Oracle Database Software in the Database Installation Guide.

On the Select Install Type screen, select **Typical Install**.

On the Typical Installation screen, select the Create as Container Database option, and specify a container database name such as cdb1.

To create a pluggable database from an existing container database, see Creating PDBs on Oracle Technology Network.

**Note:** OID is certified to be used with the following versions of Oracle Database: 12.1.0.1, 12.1.0.2, and 12.2.0.1.

**Note:** Also, note that you need to configure at least one pluggable database in order to configure and use a container database.

**Note:** When you install and use PDB, the data that you specify and the steps that you follow while running the RCU or the OID installer remain the same.

## 4.2.3 Creating Database Schema Using the Oracle Fusion Middleware 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 choose to use an existing schema, you must have already created the schema using the Oracle Fusion Middleware Repository Creation Utility before installing 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/technetwork/index.html

For information on RCU requirements, refer to the "Repository Creation Utility (RCU) Requirements" topic in the Oracle Fusion Middleware System Requirements and Specifications document.

**Note:** Use the Linux RCU or the Windows 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 the Oracle Identity Management component you are installing—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.

## 4.2.4 Required Installation Privileges for Oracle WebLogic Server and Oracle Identity **Management on Windows Operating Systems**

In order to install Oracle WebLogic Server and Oracle Identity Management on a Microsoft Windows Vista or newer operating system, the operating system user must have Windows "Administrator" privileges.

Even when a user with "Administrator" privileges logs in to the machine, the administrative role is not granted for default tasks. In order to access the Oracle home files and folders, the user must launch the command prompt or Windows Explorer as "Administrator" explicitly, even if the user is logged in as the administrator.

To do so, you can do either one of the following:

- Find the Command Prompt icon (for example, from the Start menu or from the Desktop), right-click on the icon, and select Run as Administrator. Then you can run the executables (for example, the WebLogic Server installer) from the command line.
- Start Windows Explorer, find the executable you want to run (for example, rcu.bat for RCU, config.bat for the Configuration Wizard, or setup.exe for the installer), right-click on the executable, and select **Run as Administrator**.

### 4.2.5 Installing Oracle WebLogic Server and Creating the Middleware Home

Oracle Identity Management requires Oracle WebLogic Server and a Middleware home directory. Before you install Oracle Identity Management 11g Release 1 (11.1.1.9.0) components, you must ensure that you have installed Oracle WebLogic Server 11g Release 1 (10.3.6) and created a Middleware Home directory.

For more information, see "Installing Oracle WebLogic Server" in *Installation Planning* Guide. In addition, see Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server for complete information about installing Oracle WebLogic Server.

For information on installing the Oracle WebLogic Server, see "Preparing for Installation" and "Running the Installation Program in Graphical Mode" in the Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server.

#### Notes:

- If you are installing Oracle Internet Directory without an Oracle WebLogic administration domain, you do not need to install Oracle WebLogic.
- The same user who 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.
- If you want to configure the minimum amount for Oracle WebLogic Server's maximum heap size, see Section 2.9, "Optional: Configuring the Minimum Amount for Oracle WebLogic Server's Maximum Heap Size".

#### 4.2.5.1 Applying Mandatory Patches for Oracle WebLogic Server

After you have installed Oracle WebLogic Server 11g Release 1 (10.3.6) and created a Middleware home directory, there are some mandatory patches that you must apply to your WebLogic Server Middleware home to fix specific issues with Oracle WebLogic Server 11*g* Release 1 (10.3.6).

To identify the required patches that you must apply for Oracle WebLogic Server, see "Downloading and Applying Required Patches" in the Oracle Fusion Middleware *Infrastructure Release Notes.* 

These patches listed in the release notes are available from My Oracle Support. The patching instructions are mentioned in the README. txt file that is provided with each patch.

## 4.2.6 Creating the Inventory Directory (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 4–1 to configure the inventory directory information:

Table 4–1 Inventory Directory and Group Screens

Screen	Description		
Specify Inventory Directory	Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory.		
	Click <b>OK</b> to continue.		
Inventory Location	Run the createCentralInventory.sh script as root.		
Confirmation	Click <b>OK</b> to continue.		

If you do not want to use the central inventory, you can create the oraInst.loc file, add the custom location of the inventory, and run the runInstaller by using the following command:

runInstaller -invPtrLoc <full location to oraInst.loc>

## 4.2.7 Starting an Installation

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

**Note:** You must be logged in to the UNIX operating system as a non-root user to start the Installer.

Start the Installer by executing one of the following commands:

 $\begin{tabular}{ll} \textbf{UNIX}$: <full path to the runInstaller directory >/runInstaller \\ \end{tabular}$ 

Windows: <full path to the setup.exe directory>\setup.exe

#### Note:

On 64 bit platforms, the MaxPermSize should be set to 512M. Before launching the Installer, you can set the MaxPermSize in the environment as follows:

export \_JAVA\_OPTIONS=-XX:MaxPermSize=512m

If the MaxPermSize is not set to 512M, you will see the following error message:

java.lang.OutOfMemoryError: PermGen space

## 4.2.8 Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software

Follow the instructions in Table 4–2 to install and configure Oracle Identity Management 11.1.1.9.0.

If you need additional help with any of the installation screens, click **Help** to access the online help.

Installation and Configuration Flow for Install and Configure Option Table 4–2

No.	Screen	When Does This Screen Appear?	Description and Action Required
1	Welcome	Always	Click <b>Next</b> to continue.
2	Install Software Updates	Always	Specify any software updates to install before you install Oracle Identity Management.
			To get updates from My Oracle Support, you can select <b>Search My Oracle Support for Updates</b> , specify a user name and password, and then click <b>Search for Updates</b> . Before you search, you can click <b>Proxy Settings</b> to change the settings for the proxy server and <b>Test Connection</b> to test the credentials.
			To get updates that you have saved to your computer, you can select <b>Search Local Directory for Updates</b> , specify a directory, and then click <b>Search for Updates</b> .
			If you do not want to update any software, select <b>Skip Software Updates</b> , and then click <b>Next</b> to continue the installation.
3	Select Installation Type	Always	Select Install and Configure option.
			Notes:
			<ul> <li>If you choose Install Software - Do Not Configure option, you can configure them at a later time using the Oracle Identity Management 11g Release 1 (11.1.1.9.0) Configuration Wizard. To start the Oracle Identity Management 11g Release 1 (11.1.1.9.0) Configuration Wizard, execute the ORACLE_HOME/bin/config.sh script (config.bat on Windows). For more information, see Configuring Oracle Identity Management for "Install Software - Do Not Configure" Option.</li> <li>If you want to configure Oracle Directory Integration Platform with Oracle Unified Directory</li> </ul>
			(OUD), or Oracle Directory Integration Platform with Oracle Directory Server Enterprise Edition (ODSEE), you must select <b>Install Software - Do Not Configure</b> option while installing Oracle Identity Management 11 <i>g</i> Release 1 (11.1.1.9.0). After Oracle Identity Management installation is complete, depending on the component you choose to configure with Oracle Directory Integration Platform, refer to the following sections:
			<ul> <li>Configuring Only ODIP with Oracle Unified Directory (OUD)</li> </ul>
			<ul> <li>Configuring Only ODIP with Oracle Directory Server Enterprise Edition (ODSEE)</li> </ul>
			Click <b>Next</b> to continue.
4	Prerequisite Checks	Always	Ensure that all the prerequisites are met.
			Click <b>Next</b> to continue.

No.	Table 4	When Does This Screen Appear?	Configuration Flow for Install and Configure Option  Description and Action Required
5	Select Domain	This screen is displayed	Select one of the following options:
		if you select <b>Install and Configure</b> option.	<ul> <li>Create New Domain: Enter the User Name, User Password, and Domain Name for the domain you want to create.</li> </ul>
			Depending on the component you choose, refer to the following sections:
			<ul> <li>OID with ODSM and Fusion Middleware Control in a New WebLogic Domain</li> </ul>
			<ul> <li>OID with ODIP, ODSM, and Fusion Middleware Control in a New WebLogic Domain</li> </ul>
			<ul> <li>OID and OVD with ODSM in a New WebLogic Domain</li> </ul>
			<ul> <li>OVD with ODSM and Fusion Middleware Control in a New WebLogic Domain</li> </ul>
			<ul> <li>Only ODSM in a New WebLogic Domain</li> </ul>
			ODIP with OID and Fusion Middleware Control in a New Webl origin Domain

- WebLogic Domain Advanced Example:
- Configuring OIF with OID in a New WebLogic Domain for LDAP Authentication, User Store, and Federation Store
- Extend Existing Domain: Enter the Host Name, Port, User Name, and User Password for the existing domain you want to extend into.

Depending on the component you choose, refer to the following sections:

- Only OID in an Existing WebLogic Domain
- Only OVD in an **Existing WebLogic** Domain
- Only ODSM in an Existing WebLogic
- Domain

Table 4–2 (Cont.) Installation and Configuration Flow for Install and Configure Option

No.	Screen	When Does This Screen Appear?	Description and Action Required
6	Specify Installation Location	Always	Specify the Oracle Middleware Home location, Oracle Home Directory, WebLogic Server Directory, Oracle Instance Location, and Oracle Instance Name.
			For more information about these directories, see "Understanding Oracle Fusion Middleware Concepts and Directory Structure" in <i>Installation Planning Guide</i> .
			Click <b>Next</b> to continue.
7	Specify Security Updates	Always	This screen allows you to decide how you want to be notified about security issues:
			<ul> <li>If you want to be notified about security issues through E-mail, enter your E-mail address in the E-mail field.</li> </ul>
			<ul> <li>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.</li> </ul>
			<ul> <li>If you do not want to be notified about security issues, leave all fields empty. You will see the following message:</li> </ul>
			You have not provided an E-mail address. Do you wish to remain uninformed of critical security issues in your configuration?
			Click <b>Yes</b> to continue.
			Click <b>Next</b> to continue.

Table 4–2 (Cont.) Installation and Configuration Flow for Install and Configure Option

	Table 4–2	(Cont.) Installation and	Configuration Flow for Install and Configure Option
No.	Screen	When Does This Screen Appear?	Description and Action Required
8	Configure Components	This screen is displayed if you select <b>Install and</b>	<ul> <li>Select the Oracle Identity Management components that you wish to install and configure.</li> </ul>
		Configure option.	■ For Create Domain installations, the Enterprise Manager check box under Management Components is automatically selected. Oracle Enterprise Manager Fusion Middleware Control Console (Fusion Middleware Control Console) will be installed and configured; you cannot deselect it. It is implicitly selected for configuration.
			<ul> <li>If you select No Domain Flow, only Oracle Internet Directory and Oracle Virtual Directory will be available for configuration.</li> </ul>
			■ In installations in which you select to extend the Domain, Enterprise Manager (Fusion Middleware Control Console) is not available as a selectable component. In the extend the domain installation only Oracle Directory Services Manager is available as a selection under the Management Components area.
			<ul> <li>Oracle Directory Services Manager can be installed and configured as a stand-alone component.</li> </ul>
			■ If you select to install Oracle Internet Directory or Oracle Virtual Directory in the create domain installation flow, Oracle Directory Services Manager is automatically selected and cannot be deselected. For extend domain or expand cluster, the Oracle Directory Services Manager can be deselected by you if you select to install Oracle Internet Directory or Oracle Virtual Directory.
			■ The Clustered selection field appears and is available if at least one Java component is selected for installation and configuration. Only managed servers and the applications that are deployed to them can be clustered. Enterprise Manager (Fusion Middleware Control Console) is not clustered during the installation because it is deployed to the administrative server.
			■ If you select to expand a cluster installation, at least one cluster should be present when you select this option.
			<ul> <li>If you select to expand a cluster the Java EE components which are configured as part of the cluster will be listed.</li> </ul>
			Click <b>Next</b> to continue.
9	Configure Ports	This screen is displayed	Choose how you want the Installer to configure ports:
	if you select <b>Install a</b> <b>Configure</b> option.		<ul> <li>Select Auto Port Configuration if you want the Installer to configure ports from a predetermined range.</li> </ul>
			Select <b>Specify Ports using Configuration File</b> if you want the Installer to configure ports using the staticports.ini file. You can click <b>View/Edit</b> File to update the settings in the staticports, in file

Click **Next** to continue.

to update the settings in the staticports.ini file.

	Table 4-	-2 (Cont.) Installation and	Cor	nfiguration Flow for Install and Configure Option
No.	Screen	When Does This Screen Appear?	De	scription and Action Required
10	Specify Schema Database	This screen is displayed if you select <b>Install and</b>		oose whether to use an existing schema or to create a w one using the Installer.
		Configure option and choose to configure Oracle Internet Directory.	cur ins dat	ote: If you want to use an existing schema, it must reently reside in the database to continue with the stallation. If it does not currently reside in the tabase, you must create it now using the Oracle sion Middleware Repository Creation Utility.
			To	use an existing schema:
			1.	Select Use Existing Schema.
			2.	Enter the database connection information in the Connect String field. The connection string must be in the form of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of hostname1:port1:instance1^hostname2:port2:in stance2@servicename.
			3.	Enter the password for the existing ODS schema in the Password field.
			4.	Click <b>Next</b> to continue.
				<b>Note:</b> If your existing ODS and ODSSM schemas have different passwords, the Specify ODSSM Password screen will appear after you click <b>Next</b> . Enter the password for your existing ODSSM schema and click <b>Next</b> .
			To	create a new schema:
			1.	Select Create Schema.
			2.	Enter the database connection information in the Connect String field. The connection string must be in the form of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of hostname1:port1:instance1^hostname2:port2:in stance2@servicename.
			3.	Enter the name of the database user in the User Name field. The user you identify must have DBA privileges.
				<b>Note:</b> If you are using Oracle Database 11 <i>g</i> Release 2 (11.2) or higher version, the database user should be only 'SYS'.
			4.	Enter the password for the database user in the Password field.
			5.	Click <b>Next</b> . The Enter OID Passwords screen appears.
			6.	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.
			7.	Create a password for the new ODSSM schema by entering it in the ODSSM Schema Password field.
				F

Enter it again in the Confirm ODSSM Schema Password field.

Table 4–2 (Cont.) Installation and Configuration Flow for Install and Configure Option

No.	Screen	When Does This Screen Appear?	Description and Action Required
11	Specify Oracle Virtual	This screen is displayed if you select <b>Install and Configure</b> option and choose to configure Oracle Virtual Directory.	Enter the following information:
	Directory Information		■ LDAP v3 Name Space: Enter the name space for Oracle Virtual Directory. The default value is dc=myhost, dc=mycompany, dc=com.
			<ul> <li>HTTP Web Gateway: Select this option to enable the Oracle Virtual Directory HTTP Web Gateway.</li> </ul>
			<ul> <li>Secure: Select this option if you enabled the HTTP Web Gateway and you want to secure it using SSL.</li> </ul>
			<ul> <li>Administrator User Name: Enter the user name for the Oracle Virtual Directory administrator. The default value is cn=orcladmin.</li> </ul>
			<ul> <li>Password: Enter the password for the Oracle Virtual Directory administrator.</li> </ul>
			<ul> <li>Confirm Password: Enter the password for the Oracle Virtual Directory administrator again.</li> </ul>
			■ 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 <b>Next</b> to continue.
12	Specify OID Administrator	This screen is displayed if you select <b>Install and Configure</b> option and choose to configure Oracle Internet Directory.	Enter the password for the Oracle Internet Directory administrator.
			Click <b>Next</b> to continue.

Table 4–2 (Cont.) Installation and Configuration Flow for Install and Configure Option

	Table 4–2	(Cont.) Installation and	Configuration Flow for Install and Configure Option
No.	Screen	When Does This Screen Appear?	Description and Action Required
13	Select Oracle Identity Federation Configuration Type	This screen is displayed if you select <b>Install and Configure</b> option and choose to configure Oracle Identity Federation.	Select one of the following configuration types:
			■ <b>Basic</b> : You do not need to choose the data store and authentication engine types or specify the connection details for Oracle Identity Federation.
			For more information, see Performing Basic Oracle Identity Federation Configurations
			■ Advanced: This option will enable you to choose the configuration types for the data stores, the authentication engine, and specify the connection details data stores and authentication engine.
			For more information, see Performing Advanced Oracle Identity Federation Configurations
			<b>Note</b> : The procedure in this table shows the screens that appears when the <b>Basic</b> option is selected. If you want to select <b>Advanced</b> option, refer to the following for complete details:
			<ul> <li>Performing Advanced         Oracle Identity         Federation         Configurations     </li> </ul>
			Advanced Example: Configuring OIF with OID in a New WebLogic Domain for LDAP Authentication, User Store, and Federation Store
			<ul> <li>Advanced Example:         <ul> <li>Configuring OIF in a</li> <li>New or Existing</li> </ul> </li> <li>WebLogic Domain with</li> <li>RDBMS Data Stores</li> </ul>

Click **Next** to continue.

Table 4–2 (Cont.) Installation and Configuration Flow for Install and Configure Option

No.	Screen	When Does This Screen Appear?	Description and Action Required
14	Specify Oracle Identity	This screen is displayed if you select <b>Install and Configure</b> option and choose to configure Oracle Identity Federation.	Enter the following information:
	Federation Details		■ 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.
			<ul> <li>Confirm Password: Enter the PKCS12 password again.</li> </ul>
			■ Server ID: Enter a string that will be used to identify this Oracle Identity Federation instance. A prefix 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 <b>Next</b> to continue.
15	Installation Summary	Always	Verify the information on this screen. If you want to change any options, you can return to a previous screen by clicking a link in the navigation tree on the left or by clicking <b>Back</b> until you get to the screen. After you edit the required options, you can continue the installation from the previous screen.
			Click <b>Save</b> if you want to save a response file. You will be prompted for a name and location for the response file, which will contain information specific to your installation. After the installer creates the response file, you can use it exactly as is to replicate the installation on other systems, or you can modify the response file in a text editor.
			Click Install to begin the installation.
16	Installation Progress	Always	If you are installing on a UNIX system, you may be asked to run the <code>ORACLE_HOME/oracleRoot.sh</code> script to set up the proper file and directory permissions. For more information, see Section 2.4, "Executing the oracleRoot.sh Script on Linux or UNIX Platforms".
			Click <b>Next</b> to continue.
17	Configuration Progress	This screen is displayed if you select <b>Install and Configure</b> option.	Click <b>Next</b> to continue.
18	Installation Complete	Always	Click <b>Save</b> to save the installation configuration, and then click <b>Finish</b> to exit the installer.

Oracle Identity Management 11g Release 1 (11.1.1.9.0) is installed and configured if you selected Install and Configure option in the Select Installation Type screen. By default Oracle\_IDM1 is created as the Oracle Identity Management Oracle home directory. This home directory is also referred to as IDM\_Home in this guide.

To locate the installation log files, see Section 2.11, "Locating Installation Log Files".

## 4.3 Configuring Oracle Identity Management for "Install Software - Do Not **Configure**" Option

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard to configure the following components:

- Oracle Internet Directory (OID)
- Oracle Virtual Directory (OVD)
- Oracle Directory Services Manager (ODSM)
- Oracle Directory Integration Platform (ODIP)
- Oracle Identity Federation (OIF)
- Oracle HTTP Server (OHS)
- Oracle Enterprise Manager

Run the Oracle Identity Management 11g Configuration Wizard as follows:

#### On UNIX systems:

ORACLE\_IDM1/bin/config.sh

#### On Windows systems:

ORACLE\_IDM1\bin\config.bat

The Oracle Identity Management 11g Configuration Wizard is displayed. You can use this wizard to configure your component in a new domain, in an existing domain, or without a domain. Note that you can install and configure only Oracle Internet Directory and Oracle Virtual Directory without a domain. For more information, see the following topics:

- Only OID in an Existing WebLogic Domain
- Only OID Without a WebLogic Domain
- OID with ODSM and Fusion Middleware Control in a New WebLogic Domain
- OID with ODIP, ODSM, and Fusion Middleware Control in a New WebLogic Domain
- OVD with ODSM and Fusion Middleware Control in a New WebLogic Domain
- Only OVD in an Existing WebLogic Domain
- Only OVD Without a WebLogic Domain
- Performing Basic Oracle Identity Federation Configurations
- Performing Advanced Oracle Identity Federation Configurations
- Configuring Only ODIP with Oracle Internet Directory in an Existing WebLogic Domain
- ODIP with OID and Fusion Middleware Control in a New WebLogic Domain
- Configuring ODIP when OID is Running in SSL Mode 2 Server Only Authentication
- Configuring Only ODIP with Oracle Unified Directory (OUD)

Configuring Only ODIP with Oracle Directory Server Enterprise Edition (ODSEE)

## **Configuring Oracle Internet Directory**

This chapter explains how to configure Oracle Internet Directory.

This chapter discusses the following topics:

- OID with ODSM and Fusion Middleware Control in a New WebLogic Domain
- OID with ODIP, ODSM, and Fusion Middleware Control in a New WebLogic **Domain**
- OID and OVD with ODSM in a New WebLogic Domain
- Only OID in an Existing WebLogic Domain
- Only OID Without a WebLogic Domain
- Verifying OID Installation
- Getting Started with OID After Installation

Table 5-1 Oracle Internet Directory Configuration Scenarios

#### Scenario Description OID with ODSM and Fusion The configuration described in this topic is appropriate for Middleware Control in a environments that have all of the following conditions: New WebLogic Domain You want to manage Oracle Internet Directory using Fusion Middleware Control. You want Oracle Internet 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 Internet Directory and a WebLogic Administration Server colocated on the same OID with ODIP, ODSM, and The configuration described in this topic is appropriate for Fusion Middleware Control environments that have *both* of the following conditions: in a New WebLogic Domain You want to install Oracle Internet Directory and Oracle Directory Integration Platform colocated on the same host.

components.

There is no WebLogic Administration Server managing other 11g Release 1 (11.1.1) Oracle Directory Services

Table 5-1 (Cont.) Oracle Internet Directory Configuration Scenarios

Scenario	Description		
OID and OVD with ODSM in a New WebLogic Domain	The configuration described in this topic is appropriate for environments that have the following conditions:		
	<ul> <li>A new WebLogic Administration Server is necessary to manage Oracle Internet Directory and Oracle Virtual Directory components.</li> </ul>		
	You want to install Oracle Internet Directory and Oracle Virtual Directory together in the same WebLogic domain, which can be extended at a later time to add new Oracle Identity Management components.		
Only OID in an Existing WebLogic Domain	The configuration described in this topic is appropriate for environments that have <i>both</i> of the following conditions:		
	■ A WebLogic Administration Server is available to manage 11 <i>g</i> Release 1 (11.1.1) Oracle Directory Services components and you want Oracle Internet Directory to join that domain.		
	<ul> <li>You want to install Oracle Internet Directory separately from the WebLogic Administration Server.</li> </ul>		
Only OID Without a WebLogic Domain	The configuration described in this topic is appropriate for environments that have <i>both</i> of the following conditions:		
	<ul> <li>You do not want to include Oracle Internet Directory in a WebLogic administration domain for management purposes.</li> </ul>		
	<ul> <li>You do not want to manage Oracle Internet Directory using Fusion Middleware Control.</li> </ul>		

## 5.1 OID with ODSM and Fusion Middleware Control in a New WebLogic **Domain**

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

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

## **5.1.1 Appropriate Deployment Environment**

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

- You want to manage Oracle Internet Directory using Fusion Middleware Control.
- You want Oracle Internet 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 Internet Directory and a WebLogic Administration Server colocated on the same host.

### 5.1.2 Components Deployed

Performing the configuration in this section deploys the following components:

- WebLogic Administration Server
- **Oracle Internet Directory**
- Oracle Directory Services Manager
- Fusion Middleware Control

### 5.1.3 Dependencies

The 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.

#### 5.1.4 Procedure

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

> **Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

> If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 1. 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.

- 2. Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories". After you enter information for each field, click **Next.** The Specify Security Updates screen appears.
- 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.

4. Select Oracle Internet 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.

- **5.** 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.

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 now using the Oracle Fusion Middleware Repository Creation Utility or follow the To create a new schema section mentioned below.

> Refer to Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU) 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 of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of  $host name 1: port 1: instance 1 \verb|^host name 2: port 2: instance 2@service name.$
- 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 7 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 of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of  $host name 1: port 1: instance 1 ^host name 2: port 2: instance 2 @ service name. \\$
- Enter the name of the database user in the User Name field. The user you identify must have DBA privileges.

**Note:** If you are using Oracle Database 11g Release 2 (11.2) or higher version, the database user should be only 'SYS'.

- Enter the password for the database user in the Password field.
- Click **Next**. The Enter OID Passwords screen appears.
- 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.
- 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.
- Enter the following information for Oracle Internet Directory:
  - Realm: Enter the location for your realm. For example, dc=mycompany, dc=com
  - 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. Verify the information on this screen. Click **Configure** to begin the configuration.
- The Configuration Progress screen appears. Click **Next** to continue.
- **10.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click Finish to exit the installer.

**Note:** You may see the following error message in \$Instance\_ home/diagnostics/logs/OID/oid1/\*\* log files after configuring Oracle Internet Directory:

```
"2010-02-01T07:27:42+00:00] [OID] [NOTIFICATION:16] []
[OIDLDAPD] [host:stadp47] [pid: 26444] [tid: 0] Main:: FATAL
* gslsmaiaInitAudCtx * Audit struct initialization failed.
Audit error code: 62005"
```

You can ignore this error message.

## 5.2 OID with ODIP, ODSM, and Fusion Middleware Control in a New WebLogic Domain

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

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

## 5.2.1 Appropriate Deployment Environment

The 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.

## 5.2.2 Components Deployed

Performing the 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

## 5.2.3 Dependencies

The 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.

#### 5.2.4 Procedure

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

Ensure that Oracle Internet Directory, Oracle Directory Integration Platform, and Oracle Directory Services Manager are installed, as described in Installation

Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

**Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 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.

- Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories". After you enter information for each field, click **Next.** The Specify Security Updates screen appears.
- 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.

- 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.
- 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.

7. 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 now using the Oracle Fusion Middleware Repository Creation Utility or follow the To create a new schema section mentioned below.

> Refer to "Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU)" 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 of *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form of 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 8 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 of *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form of 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.

**Note:** If you are using Oracle Database 11g Release 2 (11.2) or higher version, the database user should be only 'SYS'.

- **d.** Enter the password for the database user in the Password field.
- **e.** Click **Next**. The Enter OID Passwords screen appears.

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.
- Enter the following information for Oracle Internet Directory:
  - Realm: Enter the location for your realm. For example: dc=mycompany, dc=com
  - 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. Verify the information on this screen. Click **Configure** to begin the configuration.
- **10.** The Configuration Progress screen appears. Click **Next** to continue.
- **11.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click Finish to exit the installer.

**Note:** You may see the following error message in \$Instance\_ home/diagnostics/logs/OID/oid1/\*\* log files after configuring Oracle Internet Directory:

```
"2010-02-01T07:27:42+00:00] [OID] [NOTIFICATION:16] []
[OIDLDAPD] [host:stadp47] [pid: 26444] [tid: 0] Main:: FATAL
* gslsmaiaInitAudCtx * Audit struct initialization failed.
Audit error code: 62005"
```

You can ignore this error message.

## 5.3 OID and OVD with ODSM in a New WebLogic Domain

This topic describes how to configure Oracle Internet Directory and Oracle Virtual Directory (OVD) with Oracle Directory Services Manager in a new WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- **Dependencies**
- Procedure

## 5.3.1 Appropriate Deployment Environment

The configuration described in this topic is appropriate for environments that have the following conditions:

A new WebLogic Administration Server is necessary to manage Oracle Internet Directory and Oracle Virtual Directory components.

You want to install Oracle Internet Directory and Oracle Virtual Directory together in the same WebLogic domain, which can be extended at a later time to add new Oracle Identity Management components.

### 5.3.2 Components Deployed

Performing the configuration in this section deploys the following:

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

## 5.3.3 Dependencies

The 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.

#### 5.3.4 Procedure

Perform the following steps to configure Oracle Internet Directory and Oracle Virtual Directory in a new domain:

Ensure that Oracle Internet Directory and Oracle Virtual Directory are installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

**Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE\_HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 2. 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.

3. Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories".

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

- **4.** 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.

5. Select Oracle Internet Directory and Oracle Virtual Directory. The Oracle Directory Services Manager and Oracle Fusion Middleware Control will be automatically selected.

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

- **6.** 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.

- **7.** Enter the following information:
  - LDAP v3 Name Space: Enter the name space for Oracle Virtual Directory. The default value is dc=myhost, dc=mycompany, 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 Specify Schema Database screen is displayed.

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 now using the Oracle Fusion Middleware Repository Creation Utility or follow the To create a new schema section mentioned below.

> Refer to Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU) 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 of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of  $host name 1: port 1: instance 1 \verb|^host name 2: port 2: instance 2@service name.$
- **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 8 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 of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of  $hostname1:port1:instance1^hostname2:port2:instance2@servicename.$
- **c.** Enter the name of the database user in the User Name field. The user you identify must have DBA privileges.

**Note:** If you are using Oracle Database 11g Release 2 (11.2) or higher version, the database user should be only 'SYS'.

- **d.** Enter the password for the database user in the Password field.
- **e.** Click **Next**. The Enter OID Passwords screen appears.
- 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.
- **9.** Enter the following information for Oracle Internet Directory:
  - Realm: Enter the location for your realm. For example: dc=mycompany,dc=com
  - Administrator Password: Enter the password for the Oracle Internet Directory administrator.
  - Confirm Password: Enter the administrator password again.

Click Next.

- **10.** The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **11.** The Configuration Progress screen appears. Click **Next** to continue.
- **12.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click **Finish** to exit the installer.

## 5.4 Only OID in an Existing WebLogic Domain

This topic describes how to configure only Oracle Internet Directory (OID) in an existing WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- **Dependencies**
- Procedure

## 5.4.1 Appropriate Deployment Environment

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

- A WebLogic Administration Server is available to manage 11g Release 1 (11.1.1) Oracle Directory Services components and you want Oracle Internet Directory to join that domain.
- You want to install Oracle Internet Directory separately from the WebLogic Administration Server.

## 5.4.2 Components Deployed

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

## 5.4.3 Dependencies

The 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.

#### 5.4.4 Procedure

Perform the following steps to configure only Oracle Internet Directory in an existing domain:

Ensure that Oracle Internet Directory is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

**Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE\_HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 2. On the Select Domain screen, select **Extend Existing Domain** and enter the following information:
  - Enter the name of the host that contains the domain in the Host Name field.
  - Enter the Oracle WebLogic Server listen port in the Port field.
  - Enter the user name for the domain in the User Name field.
  - Enter the password for the domain user in the User Password field.

Click **Next**. The Specify Installation Location screen appears.

Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories".

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

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

- **4.** 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.

- Select only Oracle Internet Directory. Ensure no other components are selected and click **Next**. The Configure Ports screen appears.
- 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.

7. 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 now using the Oracle Fusion Middleware Repository Creation Utility or follow the To create a new schema section mentioned below.

> Refer to Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU) for more information.

### To use an existing schema

- a. Select Use Existing Schema.
- Enter the database connection information in the Connect String field. The connection string must be in the form of *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form of  $host name 1: port 1: instance 1 ^host name 2: port 2: instance 2 @ service name. \\$
- **c.** Enter the password for the existing ODS schema in the Password field.
- 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.

Continue the installation by going to step 8 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 of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of hostname1:port1:instance1^hostname2:port2:instance2@servicename.
- Enter the name of the database user in the User Name field. The user you identify must have DBA privileges.

**Note:** If you are using Oracle Database 11g Release 2 (11.2) or higher version, the database user should be only 'SYS'.

- Enter the password for the database user in the Password field.
- Click **Next**. The Enter OID Passwords screen appears.
- 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.
- 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.
- Enter the following information for Oracle Internet Directory:
  - Realm: Enter the location for your realm. For example: dc=mycompany, dc=com
  - 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. Verify the information on this screen. Click **Configure** to begin the configuration.
- **10.** The Configuration Progress screen appears. Click **Next** to continue.
- 11. The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click **Finish** to exit the installer.

**Note:** You may see the following error message in \$Instance\_ home/diagnostics/logs/OID/oid1/\*\* log files after configuring Oracle Internet Directory:

```
"2010-02-01T07:27:42+00:00] [OID] [NOTIFICATION:16] []
[OIDLDAPD] [host:stadp47] [pid: 26444] [tid: 0] Main:: FATAL
* gslsmaiaInitAudCtx * Audit struct initialization failed.
Audit error code: 62005"
```

You can ignore this error message.

# 5.5 Only OID Without a WebLogic Domain

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

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

### 5.5.1 Appropriate Deployment Environment

The 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 and Oracle Directory Services Manager using Fusion Middleware Control.

## 5.5.2 Components Deployed

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

## 5.5.3 Dependencies

The 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.

### 5.5.4 Procedure

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

Ensure that Oracle Internet Directory is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

#### Notes:

- Installing Oracle WebLogic Server is optional in this particular scenario. Instead, you can create the Middleware Home by following the procedure as described later in Step 3.
- If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.
- If you selected **Install Software Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run < ORACLE HOME>/bin/config.sh (on UNIX) or <ORACLE\_ HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.
- On the Select Domain screen, select Configure without a Domain and click Next. The Specify Installation Location screen appears.
- 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.

- **4.** 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.

- **5.** On the Configure Components screen, select only **Oracle Internet Directory**. Ensure no other components are selected and click Next. The Configure Ports screen appears.
- **6.** 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.

7. 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 now using the Oracle Fusion Middleware Repository Creation Utility or follow the To create a new schema section mentioned below.

Refer to Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU) 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 of *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form of hostname1:port1:instance1^hostname2:port2:instance2@servicename.
- 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 8 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 of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of 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.

**Note:** If you are using Oracle Database 11g Release 2 (11.2) or higher version, the database user should be only 'SYS'.

- **d.** Enter the password for the database user in the Password field.
- Click **Next**. The Enter OID Passwords screen appears.
- 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.

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.
- Enter the following information for Oracle Internet Directory:
  - Realm: Enter the location for your realm. For example: dc=mycompany, dc=com
  - 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. Verify the information on this screen. Click **Configure** to begin the configuration.
- **10.** The Configuration Progress screen appears. Click **Next** to continue.
- 11. The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click **Finish** to exit the installer.

#### 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.

You may see the following error message in \$Instance\_ home/diagnostics/logs/OID/oid1/\*\* log files after configuring Oracle Internet Directory:

```
"2010-02-01T07:27:42+00:00] [OID] [NOTIFICATION:16] []
[OIDLDAPD] [host:stadp47] [pid: 26444] [tid: 0] Main::
FATAL * gslsmaiaInitAudCtx * Audit struct initialization
failed. Audit error code: 62005"
```

You can ignore this error message.

# 5.6 Verifying OID Installation

Verify the Oracle Internet Directory (OID) installation by:

Executing the \$ORACLE\_INSTANCE/bin/opmnctl status -1 command. For example, if Oracle Internet Directory is configured then the following result can be seen:

Processes in Instance: asinst_1						
			++		+	-+
ias-component		p	rocess-type	pid   status		
uid   memused   uptime   ports						
			+		+	-+
		+-				
oid1			oidldapd	24032	Alive	
582907955	113004	0:00:41	N/A			
oid1			oidldapd	24024	Alive	
582907954	56288	0:00:42	N/A			
oid1			oidmon	24001	Alive	
582907953	50232	0:00:43	LDAPS:3131,LDAP:3060			
EMAGENT		ĺ	EMAGENT	24000	Alive	
582907952	5852	0:00:43	N/A			•

Executing the \$ORACLE\_HOME/bin/ldapbind command on the Oracle Internet Directory non-SSL and SSL ports. For example:

#### On Non-SSL ports:

\$ORACLE\_HOME/bin/ldapbind -h <hostname> -p <port> -D cn=orcladmin -w <password>

### On SSL ports:

\$ORACLE\_HOME/bin/ldapbind -h <hostname> -p <port> -D cn=orcladmin -w <password> -U 1

# 5.7 Getting Started with OID After Installation

After installing Oracle Internet Directory (OID), refer to the "Getting Started with Oracle Internet Directory" chapter in the Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory.

# **Configuring Oracle Virtual Directory**

This chapter explains how to configure Oracle Virtual Directory (OVD).

This chapter discusses the following topics:

- OVD with ODSM and Fusion Middleware Control in a New WebLogic Domain
- Only OVD in an Existing WebLogic Domain
- Only OVD Without a WebLogic Domain
- Verifying OVD
- Getting Started with OVD After Installation

# 6.1 OVD with ODSM and Fusion Middleware Control in a New WebLogic Domain

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

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

## **6.1.1 Appropriate Deployment Environment**

The 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.

# 6.1.2 Components Deployed

Performing the configuration in this section deploys the following components.

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

### 6.1.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

### 6.1.4 Procedure

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

1. Ensure that Oracle WebLogic Server 11g Release 1 (10.3.6) is installed. For more information, see "Installing Oracle WebLogic Server" in the *Installation Planning* Guide. In addition, see Installation Guide for Oracle WebLogic Server for complete information about installing Oracle WebLogic Server.

**Note:** After installing Oracle WebLogic Server, ensure that you complete the following steps:

- Open the nodemanager.properties file (located at WL\_ HOME/common/nodemanager directory), and ensure that the StartScriptEnabled property is set to true.
- Run the <MW\_HOME>/oracle\_common/common/bin/setNMProps.sh script (on UNIX) or <MW\_HOME>\oracle\_common\common\bin\setNMProps.cmd (on Windows).
- **3.** Start the Node Manager by executing the following command:

On UNIX:

Run startNodeManager.sh (Located at <WL HOME>/server/bin directory).

On Windows:

Run startNodeManager.cmd (Located at <WL HOME>\server\bin directory).

Note that you must start the Node Manager with Java Secure Socket Extension (JSSE) enabled if you have applied the following Oracle WebLogic Server patches to your Middleware home:

- 13964737 (YVDZ)
- 14174803 (IMWL)

These patches are available from My Oracle Support. For information on how to start the Node Manager with JSSE enabled, see the "Set the Node Manager Environment Variables" topic in the Node Manager Administrator's Guide for Oracle WebLogic Server.

Ensure that Oracle Virtual Directory is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

**Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE\_HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- **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 Section 2.6, "Identifying Installation Directories". 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=myhost, dc=mycompany, 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. Verify the information on this screen. Click **Configure** to begin the configuration.
- **10.** The Configuration Progress screen appears. Click **Next** to continue.
- 11. The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click **Finish** to exit the installer.

A new WebLogic domain (for example: domain2) is created to support Oracle Virtual Directory (OVD) with Oracle Directory Services Manager (ODSM) and Fusion Middleware Control in the <MW\_HOME>\user\_projects\domains directory (on Windows). On UNIX, the domain is created in the <MW\_HOME>/user\_ projects/domains directory.

For managing Oracle Virtual Directory (OVD) with Oracle Directory Services Manager (ODSM), refer to the "Getting Started with Administering Oracle Virtual Directory" chapter in the *Administering Oracle Virtual Directory*.

# 6.2 Only OVD in an Existing WebLogic Domain

This topic describes how to configure only Oracle Virtual Directory (OVD) in an existing WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- **Dependencies**
- Procedure

# 6.2.1 Appropriate Deployment Environment

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

A WebLogic Administration Server is available to manage 11g Release 1 (11.1.1) Oracle Directory Services components and you want Oracle Virtual Directory to join that domain.

You want to install Oracle Virtual Directory separately from the WebLogic Administration Server.

## 6.2.2 Components Deployed

Performing the configuration in this section deploys only Oracle Virtual Directory.

### 6.2.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

### 6.2.4 Procedure

Perform the following steps to configure only Oracle Virtual Directory in an existing domain:

Ensure that Oracle Virtual Directory is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

> **Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 2. On the Select Domain screen, select Extend Existing Domain and enter the following information:
  - Enter the name of the host that contains the domain in the Host Name field.
  - Enter the Oracle WebLogic Server listen port in the Port field.
  - Enter the user name for the domain in the User Name field.
  - Enter the password for the domain user in the User Password field.

Click **Next**. The Specify Installation Location screen appears.

Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories".

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

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

- **4.** 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.

- 5. Select only Oracle Virtual Directory. Ensure no other components are selected and click **Next**. The Configure Ports screen appears.
- **6.** 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.

- **7.** Enter the following information:
  - LDAP v3 Name Space: Enter the name space for Oracle Virtual Directory. The default value is dc=myhost, dc=mycompany, 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. Verify the information on this screen. Click **Configure** to begin the configuration.
- **9.** The Configuration Progress screen appears. Click **Next** to continue.
- **10.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click Finish to exit the installer.

# 6.3 Only OVD Without a WebLogic Domain

This topic describes how to configure only Oracle Virtual Directory (OVD) without a WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

## 6.3.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to register Oracle Virtual Directory with a remote WebLogic Administration Server for management purposes, but you do not want to install Oracle WebLogic Server locally.

**Note:** To manage Oracle Virtual Directory using Fusion Middleware Control in this environment, you must register Oracle Virtual Directory with the remote WebLogic Administration Server after installation.

### 6.3.2 Components Deployed

Performing the configuration in this section deploys only Oracle Virtual Directory.

### 6.3.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

### 6.3.4 Procedure

Perform the following steps to configure only Oracle Virtual Directory without a domain:

Ensure that Oracle Virtual Directory is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

#### Notes:

- Installing Oracle WebLogic Server is optional in this particular scenario. Instead, you can create the Middleware Home by following the procedure as described later in Step 3.
- If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.
- If you selected **Install Software Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run < ORACLE HOME>/bin/config.sh (on UNIX) or <ORACLE\_ HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.
- Select Configure without a Domain on the Select Domain screen and click Next. The Specify Installation Location screen appears.
- 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.

- **4.** 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.

- 5. Select only Oracle Virtual Directory. Ensure no other components are selected and click **Next**. The Configure Ports screen appears.
- **6.** 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.

- **7.** Enter the following information:
  - LDAP v3 Name Space: Enter the name space for Oracle Virtual Directory. The default value is dc=myhost, dc=mycompany, 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**.

- **8.** The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **9.** The Configuration Progress screen appears. Click **Next** to continue.
- **10.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click **Finish** to exit the installer.

11. Execute the following command to register Oracle Virtual Directory with the WebLogic Administration Server. Registering with the WebLogic Administration Server allows you to manage Oracle Virtual Directory using Fusion Middleware Control.

```
$ORACLE_INSTANCE/bin/opmnctl registerinstance
-adminHost HOSTNAME
-adminPort WEBLOGIC PORT
-adminUsername WEBLOGIC_ADMIN_USERNAME
```

**Note:** You will be prompted for the WebLogic administrator's user name and password.

### For example:

```
$ORACLE_INSTANCE/bin/opmnctl registerinstance \
-adminHost myhost \
-adminPort 7001 \
-adminUsername weblogic \
```

**Note:** The default administrative port on the WebLogic Administration Server is 7001.

# 6.4 Verifying OVD

Verify the Oracle Virtual Directory (OVD) installation by:

Starting the Oracle Virtual Directory instance, by executing the following command:

```
$ORACLE_INSTANCE/bin/opmnctl startall
```

Verifying that Oracle Virtual Directory has started by executing the following command:

```
$ORACLE_INSTANCE/bin/opmnctl status -1
```

Executing the \$ORACLE HOME/bin/ldapbind command on the Oracle Virtual Directory non-SSL and SSL ports.

### For example:

```
ldapbind -p <port number>
ldapbind -p <SSL port> -U 1
```

**Note:** For more information on OPMN commands, see *Oracle Fusion* Middleware Oracle Process Manager and Notification Server Administrator's Guide.

# 6.5 Getting Started with OVD After Installation

After installing Oracle Virtual Directory (OVD), refer to the "Getting Started with Administering Oracle Virtual Directory" chapter in the Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory.

# **Configuring Oracle Directory Integration Platform**

This chapter explains how to configure Oracle Directory Integration Platform.

This chapter discusses the following topics:

- Configuring Only ODIP with Oracle Internet Directory in an Existing WebLogic Domain
- Configuring Oracle Directory Integration Platform with Oracle Internet Directory
- Configuring Only ODIP with Oracle Unified Directory (OUD)
- Configuring Only ODIP with Oracle Directory Server Enterprise Edition (ODSEE)
- Verifying ODIP
- Getting Started with ODIP After Installation

# 7.1 Configuring Only ODIP with Oracle Internet Directory in an Existing WebLogic Domain

This topic describes how to configure only Oracle Directory Integration Platform (ODIP) with Oracle Internet Directory (OID) in an existing WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

# 7.1.1 Appropriate Deployment Environment

The configuration described in this topic is appropriate for the following environments:

#### An environment that has the following condition:

A WebLogic Administration Server is managing an 11g Release 1 (11.1.1) Oracle Internet Directory component and you want Oracle Directory Integration Platform to join that domain.

An environment that has the following condition:

A WebLogic Administration Server is managing other 11g Release 1 (11.1.1) Oracle Directory Services—but not Oracle Internet Directory, which is installed without a domain.

### 7.1.2 Components Deployed

Performing the configuration in this section deploys the following components:

- WebLogic Managed Server
- Oracle Directory Integration Platform

## 7.1.3 Dependencies

The configuration in this section depends on the following:

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

### 7.1.4 Procedure

Perform the following steps to configure only Oracle Directory Integration Platform in an existing domain:

1. Ensure that Oracle Directory Integration Platform is installed, as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software.

**Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE\_HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 2. On the Select Domain screen, select Extend Existing Domain and enter the following information:
  - Enter the name of the host that contains the domain in the Host Name field.
  - Enter the Oracle WebLogic Server listen port in the Port field.
  - Enter the user name for the domain in the User Name field.
  - Enter the password for the domain user in the User Password field.

Click **Next**. The Specify Installation Location screen appears.

Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories".

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

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

- 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.

- Select only **Oracle Directory Integration Platform**. Ensure no other components are selected and click **Next**. The Configure Ports screen appears.
- 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 OID Details screen appears.

- Identify the Oracle Internet Directory for Oracle Directory Integration Platform by entering the following information:
  - Hostname: Enter the hostname or IP address of the Oracle Internet Directory host.
  - Port: Enter the Oracle Internet Directory LDAP SSL port.
  - User Name: Enter the user name of the Oracle Internet Directory Administrator.
  - Password: Enter the password for the user name Oracle Directory Integration Platform will use to connect to Oracle Internet Directory.

Click **Next**. The Specify Schema Database screen appears.

- Enter the following information about the Oracle Internet Directory schema:
  - Connect String: Enter the database connection information. The connection string must be in the form of *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form of hostname1:port1:instance1^hostname2:port2:instance2@servicename.

- Password: Enter the password for the ODSSM schema in the Password field. Click Next.
- The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **10.** The Configuration Progress screen appears. Click **Next** to continue.
- 11. The Installation Complete screen appears. Click Save to save the configuration information to a file, and then click Finish to exit the installer.

# 7.2 Configuring Oracle Directory Integration Platform with Oracle Internet **Directory**

This section describes how to configure Oracle Directory Integration Platform with Oracle Internet Directory. It includes the following topics:

- ODIP with OID and Fusion Middleware Control in a New WebLogic Domain
- Configuring ODIP when OID is Running in SSL Mode 2 Server Only Authentication

## 7.2.1 ODIP with OID and Fusion Middleware Control in a New WebLogic Domain

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

- Appropriate Deployment Environment
- Components Deployed
- **Dependencies**
- Procedure

### 7.2.1.1 Appropriate Deployment Environment

The configuration described in this topic is appropriate if there is no WebLogic Administration Server managing other 11g Release 1 (11.1.1) Oracle Directory Services components and Oracle Internet Directory is installed without a domain.

#### 7.2.1.2 Components Deployed

Performing the configuration in this section deploys the following components:

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

#### 7.2.1.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server
- **Oracle Internet Directory**
- Oracle Database for Oracle Internet Directory

*Identity Management - Oracle Internet Directory* schema existing in the Oracle Internet Directory database.

#### 7.2.1.4 Procedure

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

Ensure that Oracle Directory Integration Platform is installed, as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software.

**Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected Install Software - Do Not Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE\_HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 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.

- Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories". After you enter information for each field, click Next. The Specify Security Updates screen appears.
- 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.

Select Oracle Internet Directory and Oracle Directory Integration Platform. The Fusion Middleware Control management component is automatically selected for this installation.

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

- **6.** 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 OID Details screen appears.

- 7. Enter the following information about the Oracle Internet Directory schema:
  - Connect String: Enter the database connection information. The connection string must be in the form of *hostname:port:servicename*. For Oracle Real Application Clusters (RAC), the connection string must be in the form of hostname1:port1:instance1^hostname2:port2:instance2@servicename.
  - Password: Enter the password for the ODSSM schema in the Password field.

#### Click **Next**.

- 8. Identify the Oracle Internet Directory for Oracle Directory Integration Platform by entering the following information:
  - Hostname: Enter the hostname or IP address of the Oracle Internet Directory host.
  - Port: Enter the Oracle Internet Directory LDAP SSL port.
  - User Name: Enter the user name of the Oracle Internet Directory Administrator.
  - Password: Enter the password for the user name Oracle Directory Integration Platform will use to connect to Oracle Internet Directory.

Click **Next**. The Specify Schema Database screen appears.

- **9.** The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **10.** The Configuration Progress screen appears. Click **Next** to continue.
- 11. The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click Finish to exit the installer.

## 7.2.2 Configuring ODIP when OID is Running in SSL Mode 2 - Server Only **Authentication**

You cannot install and configure Oracle Directory Integration Platform 11g Release 1 (11.1.1) when Oracle Internet Directory (OID) is already installed and running in SSL Mode 2 - Server Only Authentication.

If Oracle Internet Directory is already installed and running in SSL Mode 2 - Server Only Authentication, you must perform the following steps to configure Oracle Directory Integration Platform 11g Release 1 (11.1.1):

1. Configure Oracle Internet Directory to temporarily run in SSL Mode 1 - No Authentication.

Refer to the "Configuring Secure Sockets Layer (SSL)" chapter in the *Administrator's Guide for Oracle Internet Directory* for complete information.

- 2. Install Oracle Directory Integration Platform, as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software.
- **3.** Configure Oracle Internet Directory to run in SSL Mode 2 Server Only Authentication again. Refer to the "Configuring Secure Sockets Layer (SSL)" chapter in the *Administrator's Guide for Oracle Internet Directory*.
- 4. Configure Oracle Directory Integration Platform to run in SSL Mode 2 by referring to the following sections in the Oracle Fusion Middleware Integration Guide for Oracle *Identity Management:* 
  - Configuring Oracle Directory Integration Platform for SSL Mode 2 Server Only Authentication
  - Managing the SSL Certificates of Oracle Internet Directory and Connected Directories

# 7.3 Configuring Only ODIP with Oracle Unified Directory (OUD)

For information on configuring Oracle Directory Integration Platform (ODIP) with Oracle Unified Directory (OUD), refer to the "Configuring Oracle Unified Directory" topic in the Oracle Fusion Middleware Administrator's Guide for Oracle Directory *Integration Platform.* 

# 7.4 Configuring Only ODIP with Oracle Directory Server Enterprise **Edition (ODSEE)**

For information on configuring Oracle Directory Integration Platform (ODIP) with Oracle Directory Server Enterprise Edition (ODSEE), refer to the "Configuring Oracle Directory Server Enterprise Edition" topic in the Oracle Fusion Middleware Administrator's Guide for Oracle Directory Integration Platform.

# 7.5 Verifying ODIP

Verify the Oracle Directory Integration Platform (ODIP) installation using the dipStatus command, which is 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.

# 7.6 Getting Started with ODIP After Installation

After you install and configure Oracle Directory Integration Platform (ODIP), refer to the "Getting Started with Oracle Directory Integration Platform" topic in the Oracle Fusion Middleware Administrator's Guide for Oracle Directory Integration Platform.

# **Configuring Oracle Directory Services** Manager

This chapter explains how to configure Oracle Directory Services Manager (ODSM).

This chapter discusses the following topics:

- Only ODSM in a New WebLogic Domain
- Only ODSM in an Existing WebLogic Domain
- Verifying ODSM
- Getting Started with ODSM After Installation

# 8.1 Only ODSM in a New WebLogic Domain

This topic describes how to configure only Oracle Directory Services Manager (ODSM) in a new WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

# 8.1.1 Appropriate Deployment Environment

The configuration described in this topic is appropriate if Oracle Internet Directory was installed without a domain and you want to manage it using Oracle Directory Services Manager.

# 8.1.2 Components Deployed

Performing the configuration in this section deploys the following components:

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

# 8.1.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

### 8.1.4 Procedure

Perform the following steps to configure only Oracle Directory Services Manager in a new domain:

Ensure that Oracle Directory Services Manager is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

**Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE\_HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 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.

- Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories". After you enter information for each field, click Next. The Specify Security Updates screen appears.
- 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.

- Select only Oracle Directory Services Manager. The Fusion Middleware Control management component is automatically selected for this installation.
  - Ensure no other components are selected and click **Next**. The Configure Ports screen appears.
- 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.

- **7.** The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **8.** The Configuration Progress screen appears. Click **Next** to continue.
- The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click Finish to exit the installer.

# 8.2 Only ODSM in an Existing WebLogic Domain

This topic describes how to configure only Oracle Directory Services Manager (ODSM) in an existing WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

## 8.2.1 Appropriate Deployment Environment

The configuration described in this topic is appropriate if you want to deploy an additional Oracle Directory Services Manager component in an existing domain.

# 8.2.2 Components Deployed

Performing the configuration in this section deploys the following components:

- WebLogic Managed Server
- Oracle Directory Services Manager

# 8.2.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

#### 8.2.4 Procedure

Perform the following steps to configure only Oracle Directory Services Manager in an existing domain:

Ensure that Oracle Directory Services Manager is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.

**Note:** If you selected Install and Configure option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, the **Select Domain** screen is displayed.

If you selected **Install Software - Do Not Configure** option in the Select Installation Type screen while installing Oracle Identity Management 11g Release 1 (11.1.1.9.0), as described in Installing and Configuring Oracle Identity Management 11g Release 1 (11.1.1.9.0) Software, you must now start the Oracle Identity Management Configuration Wizard. Run <ORACLE\_HOME>/bin/config.sh (on UNIX) or <ORACLE\_HOME>\bin\config.bat (on Windows) to start the Oracle Identity Management Configuration Wizard. The Select Domain screen is displayed.

- 2. On the Select Domain screen, select Extend Existing Domain and enter the following information:
  - **a.** Enter the name of the host that contains the domain in the Host Name field.
  - **b.** Enter the Oracle WebLogic Server listen port in the Port field.
  - **c.** Enter the user name for the domain in the User Name field.
  - **d.** Enter the password for the domain user in the User Password field.

Click **Next**. The Specify Installation Location screen appears.

3. Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories".

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

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

- 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.

- Select only **Oracle Directory Services Manager**. Ensure no other components are selected and click **Next**. The Configure Ports screen appears.
- **6.** 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 Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **8.** The Configuration Progress screen appears. Click **Next** to continue.
- The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click Finish to exit the installer.

# 8.3 Verifying ODSM

To verify the Oracle Directory Services Manager (ODSM) 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 of the Managed Server through the Oracle WebLogic Administration Console. After logging in to the console, expand Environment on the left navigation pane. Click Servers. The Summary of Servers page is displayed. The port for the Oracle Directory Services Manager (ODSM) Managed Server is displayed on this page.

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 Oracle Internet Directory or Oracle Virtual Directory from Oracle Directory Services Manager without the appropriate credentials.

# 8.4 Getting Started with ODSM After Installation

After you install Oracle Directory Services Manager (ODSM), no additional configuration is needed. The next step is to log in to Oracle Internet Directory or Oracle Virtual Directory. The process for logging in to both directory servers is the same. Information about logging in to both Oracle Internet Directory and Oracle Virtual Directory provided below so you can learn more about Oracle Directory Services Manager in the context of each directory server.

- For information about logging in to Oracle Internet Directory from Oracle Directory Services Manager, refer to the "Logging in to the Directory Server from Oracle Directory Services Manager" section in the Oracle Fusion Middleware Administrator's Guide for Oracle Internet Directory.
- For information about logging in to Oracle Virtual Directory from Oracle Directory Services Manager, refer to the "Logging in to the Directory Server from Oracle

Directory Services Manager" section in the Oracle Fusion Middleware Administrator's Guide for Oracle Virtual Directory.

# **Configuring Oracle Identity Federation**

This chapter explains how to configure Oracle Identity Federation (OIF).

This chapter discusses the following topics:

- Using the Information in This Chapter
- **Understanding OIF Deployments**
- Understanding OIF Basic and Advanced Deployments
- Configuring Oracle HTTP Server for OIF
- Performing Basic Oracle Identity Federation Configurations
- Performing Advanced Oracle Identity Federation Configurations
- Advanced Example: Configuring OIF with OID in a New WebLogic Domain for LDAP Authentication, User Store, and Federation Store
- Advanced Example: Configuring OIF in a New or Existing WebLogic Domain with RDBMS Data Stores
- Verifying OIF
- Getting Started with OIF After Installation

# 9.1 Using the Information in This Chapter

Oracle Identity Federation deployments vary greatly. As described in the following topics, there are several components, and several options for those components, that comprise an Oracle Identity Federation deployment.

Use this chapter as a starting point for your Oracle Identity Federation deployment, as it does not describe every possible installation and configuration. You should also use the Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation, which provides additional and detailed deployment information, to supplement the information in this chapter.

# 9.2 Understanding OIF Deployments

When you configure Oracle Identity Federation 11g Release 1 (11.1.1), a WebLogic Managed Server is created and the Oracle Identity Federation J2EE application is installed on it. If you configure Oracle Identity Federation in a new Oracle WebLogic Server administration domain by selecting the Create Domain option, the Fusion Middleware Control management component is also deployed.

Oracle Identity Federation functionality depends on several components and modules. You can integrate and configure these components and modules during or after the Oracle Identity Federation installation.

The following is a list and brief description of some of the components and modules that determine Oracle Identity Federation functionality. Refer to the *Oracle Fusion* Middleware Administrator's Guide for Oracle Identity Federation for complete information.

- **Authentication Engine**: The module that challenges users when they log in.
- **User Data Store**: The repository containing the identity information of the users the Oracle Identity Federation system authenticates.
- Federation Data Store: The repository containing federated user account linking
- **Service Provider (SP) Integration Engine**: The module that creates a local authenticated session for the user based on a received federated Single Sign-On (SSO) token.
- User Session Store and Message Store: The repository containing transient runtime session state data and protocol messages.
- Configuration Data Store: The repository containing Oracle Identity Federation configuration data.

# 9.3 Understanding OIF Basic and Advanced Deployments

There are two types of Oracle Identity Federation 11g Release 1 (11.1.1) deployments: Basic and Advanced. This topic describes both types of deployments and includes the following sections:

- **Basic Deployment**
- **Advanced Deployments**

# 9.3.1 Basic Deployment

The Basic deployment includes Oracle Identity Federation with minimum functionality enabled and the following configuration:

- No User Data Store
- No Federation Store
- JAAS Authentication Engine
- Test Service Provider (SP) Engine
- Memory Session Data Store
- Memory Message Data Store
- XML file system Configuration Store

# 9.3.2 Advanced Deployments

The Advanced deployments allows you to choose between different types of data stores and authentication engines. The following is a list and description of the types of data stores and authentication engines you can choose during an Advanced installation:

### **Authentication Engine**

- JAAS: Delegates authentication to the application server.
- LDAP: Uses form login and LDAP bind with credentials supplied by user to authenticate against LDAP repository.

#### **User Data Store**

- None: No User Data Store. Typically used with Custom or JAAS Authentication Engines, environments without user attributes, or Windows CardSpace.
- LDAP: Typical configuration that stores user data in an LDAP repository.
- RDBMS: Uses database tables with user names (and optionally user attributes) in columns.

#### **Federation Data Store**

- None: No Federation Data Store. Typically used when there are no persistent account linking records. No Federation Data Store is also an alternative to using name identifiers, such as e-mail address, X.509 DN, Kerberos, or Windows Name Identifier.
- LDAP: Stores federation in an LDAP repository. Commonly deployed when the User Data Store is also LDAP.
- RDBMS: Stores federation in a relational database repository. Commonly deployed when the User Data Store is also RDBMS.
- XML: Stores federation data in an XML file system. Commonly used for testing purposes.

### **User Session Store and Message Store**

- Memory: Stores transient runtime session state data and protocol messages in in-memory tables. Commonly used for single instance deployments. Memory provides better performance than the RDBMS User Session Store, but increases runtime memory requirements.
- RDBMS: Stores transient runtime session state data and protocol messages in a relational database. Recommended for High Availability cluster environments.

**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.

#### **Configuration Data Store**

- File System: Stores Oracle Identity Federation configuration data on the local file system. Commonly used in single-instance and testing environments.
- RDBMS: Stores Oracle Identity Federation configuration data in a relational database. Commonly used in High Availability environments or single-instances with failover redundancy.

# 9.4 Configuring Oracle HTTP Server for OIF

When you install Oracle Identity Federation (OIF), Oracle HTTP Server also gets installed. 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.

To configure the Oracle HTTP Server so that the Oracle Identity Federation application can be accessed through Oracle HTTP Server ports, you can:

- Ensure that Oracle Identity Federation is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.
- Run <ORACLE\_HOME>/bin/config.sh (On UNIX) or <ORACLE\_ HOME>\bin\config.bat to start the Oracle Identity Management Configuration Wizard. Click **Next** to continue.
- On the Configure Components screen, select Oracle HTTP Server and Oracle Identity Federation.

**See:** 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 about integrating Oracle Identity Federation and Oracle HTTP Server.

# 9.5 Performing Basic Oracle Identity Federation Configurations

This topic describes how to perform a Basic Oracle Identity Federation (OIF) configuration. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- **Dependencies**
- Procedure

## 9.5.1 Appropriate Deployment Environment

The Basic Oracle Identity Federation configuration is appropriate for:

- Creating a base to gradually build complex implementations upon after installation
- Deploying test environments
- Deploying small, self-contained configurations

# 9.5.2 Components Deployed

Performing the Basic Oracle Identity Federation configuration deploys the following components:

#### If you install Oracle Identity Federation in a new domain:

- WebLogic Managed Server
- **Oracle Identity Federation**
- WebLogic Administration Server
- Fusion Middleware Control
- Optionally, Oracle HTTP Server

### If you install Oracle Identity Federation in an existing domain:

- WebLogic Managed Server
- Oracle Identity Federation

Optionally, Oracle HTTP Server

#### 9.5.3 Dependencies

The Basic Oracle Identity Federation configuration depends on Oracle WebLogic Server.

#### 9.5.4 Procedure

Perform the following steps to deploy a Basic Oracle Identity Federation configuration:

- Ensure that Oracle Identity Federation is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.
- Run <ORACLE\_HOME>/bin/config.sh (On UNIX) or <ORACLE\_ HOME>\bin\config.bat to start the Oracle Identity Management Configuration Wizard. Click **Next** to continue.
- On the Select Domain screen, choose whether to configure Oracle Identity Federation in a new or existing domain:

#### To configure Oracle Identity Federation in a new domain:

- Select Create New Domain.
- 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.

Continue the installation by going to step 4 now.

#### To configure Oracle Identity Federation in an existing domain:

- Select Extend Existing Domain.
- Enter the name of the host that contains the domain in the Host Name field.
- Enter the listen port for the WebLogic Administration Server in the Port field.
- Enter the user name for the domain in the User Name field. d.
- Enter the password for the domain user in the User Password field.

Click **Next**. The Specify Installation Location screen appears.

Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories".

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

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 **Oracle Identity Federation**—and *optionally*, **Oracle HTTP Server**. Refer to "Configuring Oracle HTTP Server for OIF" on page 9-3 for information about configuring these two components simultaneously.

If you are installing Oracle Identity Federation in a new domain, the Fusion Middleware Control management component is automatically selected for 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 Select Oracle Identity Federation Configuration Type screen appears.

- **8.** Select **Basic** and click **Next**. The Specify OIF Details screen appears.
- **9.** 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.

- **10.** The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **11.** The Configuration Progress screen appears. Click **Next** to continue.
- **12.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click **Finish** to exit the installer.

## 9.6 Performing Advanced Oracle Identity Federation Configurations

This topic generally describes how to perform an Advanced Oracle Identity Federation (OIF) configuration. Refer to the next two topics in this chapter for information on performing specific Advanced Oracle Identity Federation configurations.

This topic includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

#### 9.6.1 Appropriate Deployment Environment

The Advanced Oracle Identity Federation configuration provides a fast and simplified method for deploying Oracle Identity Federation with its vital components integrated and configured.

### 9.6.2 Components Deployed

Performing the Advanced Oracle Identity Federation configuration deploys the following components:

#### If you configure Oracle Identity Federation in a new domain:

- WebLogic Managed Server
- Oracle Identity Federation
- WebLogic Administration Server
- Fusion Middleware Control
- Optionally, Oracle HTTP Server

#### If you configure Oracle Identity Federation in an existing domain:

- WebLogic Managed Server
- Oracle Identity Federation
- Optionally, Oracle HTTP Server

### 9.6.3 Dependencies

The Advanced Oracle Identity Federation configuration depends on the following components:

- Oracle WebLogic Server
- Oracle Database, if using RDBMS for User Store, Federation Store, Session Store, Message Store, or Configuration Store.
- New Identity Management Oracle Identity Federation schema existing in the database, if using RDBMS for Federation Store, Session Store, Message Store, or Configuration Store.
- Database table for storing user dative using RDBMS for User Store
- LDAP repository, if using LDAP for Authentication, User Store, or Federation Store.

#### 9.6.4 Procedure

Perform the following steps to deploy an Advanced Oracle Identity Federation configuration:

- Decide if you want to use RDBMS for User Store, Federation Store, Session Store, Message Store, or Configuration Store. If you do, perform the following steps a and b.
  - Install the database for Oracle Identity Federation. Refer to Installing Oracle Database for more information.
  - Create the *Identity Management Oracle Identity Federation* schema in the database. Refer to "Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU)" for more information.

**Note:** The schema is not required for RDBMS User Stores.

- Decide if you want to use an LDAP repository for Authentication, User Store, or Federation Store. If you do, you must install the LDAP repository before you can install Oracle Identity Federation.
- Ensure that Oracle Identity Federation is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.
- Run <ORACLE\_HOME>/bin/config.sh (On UNIX) or <ORACLE\_ HOME>\bin\config.bat to start the Oracle Identity Management Configuration Wizard. Click **Next** to continue.
- On the Select Domain screen, choose whether to install Oracle Identity Federation in a new or existing domain:

#### To configure Oracle Identity Federation in a new domain:

- Select Create New Domain.
- 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.

Continue the installation by going to step 6 now.

#### To configure Oracle Identity Federation in an existing domain:

- Select Extend Existing Domain.
- Enter the name of the host that contains the domain in the Host Name field.
- Enter the listen port for the WebLogic Administration Server in the Port field.
- Enter the user name for the domain in the User Name field.
- Enter the password for the domain user in the User Password field.
- Click **Next**. The Specify Installation Location screen appears.
- Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories".

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

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 Identity Federation**—and *optionally*, **Oracle HTTP Server**. Refer to "Configuring Oracle HTTP Server for OIF" on page 9-3 for information about configuring these two components simultaneously.

If you are installing Oracle Identity Federation in a new domain, the Fusion Middleware Control management component is automatically selected for 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 Select Oracle Identity Federation Configuration Type screen appears.

- **10.** Select **Advanced** and click **Next**. The Specify OIF Details screen appears.
- **11.** 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.

**12.** 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.

The screens that appear next depend on the options you selected for the configuration items on the Select OIF Advanced Flow Attributes screen. The following information describes all possible screens that may appear. This information about all possible screens that may appear is not presented in a linear sequence and your installation may not encounter all of the screens. Enter information for the appropriate screens and proceed to step 13.

If you selected LDAP for Authentication Type, the Specify Authentication LDAP Details screen will appear. Enter the following information:

- LDAP Type: Select the appropriate LDAP repository.
- LDAP URL: Enter the URL connection string for the LDAP repository in the form: protocol://hostname:port

**Note:** If you selected Microsoft Active Directory for the LDAP Type, you must specify an SSL LDAP URL, that is, ldaps://hostname:port.

- LDAP Bind DN: Enter the bind DN for the LDAP repository.
- LDAP Password: Enter the password for the bind DN.
- User Credential ID Attribute: Enter the LDAP attribute Oracle Identity Federation will use to authenticate users. For example, if you enter mail and the value of the mail attribute for a user is jane.doe@domain.com, then Jane Doe must enter jane.doe.@domain.com when challenged. Values for the LDAP attribute you identify for User Credential ID Attribute must be unique for all users.
- User Unique ID Attribute: Enter the LDAP attribute that will uniquely identify users to Oracle Identity Federation. The value you enter must be identical to the value you enter for the User Data Store's User ID Attribute parameter. For example, if you enter mail for User Unique ID Attribute and you configure the User Data Store's User ID Attribute parameter with a value of EmailAddress, then the value of mail in the authentication engine repository must equal the value of EmailAddress in the User Data Store. Values for the LDAP attribute you identify for User Unique ID Attribute must be unique for all users.
- Person Object Class: Enter the LDAP object class that represents a user in the LDAP repository. For example: inetOrgPerson for Oracle Internet Directory and Sun Java System Directory Server, and user for Microsoft Active Directory.
- Base DN: Enter the root DN that searches will start from.

If you selected LDAP for User Store, the Specify LDAP Attributes for User Data Store screen will appear. Enter the following information:

- LDAP Type: Select the appropriate LDAP repository.
- LDAP URL: Enter the URL connection string for the LDAP repository in the form: protocol://hostname:port

**Note:** If you selected Microsoft Active Directory for the LDAP Type, you must specify an SSL LDAP URL, that is, ldaps://hostname:port.

- LDAP Bind DN: Enter the bind DN for the LDAP repository.
- LDAP Password: Enter the password for the bind DN.
- User Description Attribute: Enter the readable LDAP attribute that will identify the owner of a federation record. For example: uid for Oracle Internet Directory and Sun Java System Directory Server, and sAMAccountName for Microsoft Active Directory.
- User ID Attribute: Enter the LDAP attribute that will uniquely identify the user during authentication. For example: uid for Oracle Internet Directory and Sun Java System Directory Server, and sAMAccountName for Microsoft Active Directory.
- Person Object Class: Enter the LDAP object class that represents a user in the LDAP repository. For example: inetOrgPerson for Oracle Internet Directory and Sun Java System Directory Server, and user for Microsoft Active Directory.
- Base DN: Enter the root DN that searches will start from.

#### If you selected RDBMS for User Store, the Specify User Store Database Details screen will appear. Enter the following information:

- 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 database username.
- Password: Enter the password for the database user.
- Login Table: Enter the name of the table that will store user data. The value you enter must be a valid table name, and the values you enter for User ID Attribute and User Description Attribute must be valid column names in the table you identify.
- User ID Attribute: Enter the name of the table column to use for the Oracle Identity Federation user ID. The value you enter must be a valid column name in the table you identified for the Login Table parameter.
- User Description Attribute: Enter the name of the table column to use for the user description. The value you enter must be a valid column name in the table you identified for the Login Table parameter.

#### If you selected LDAP for Federation Store, the Specify LDAP Attributes for Federation Data Store screen will appear. Enter the following information:

- LDAP Type: Select the appropriate LDAP repository.
- LDAP URL: Enter the URL connection string for the LDAP repository in the form: protocol://hostname:port

**Note:** If you selected Microsoft Active Directory for the LDAP Type, you must specify an SSL LDAP URL, that is, ldaps://hostname:port.

LDAP Bind DN: Enter the bind DN for the LDAP repository.

- LDAP Password: Enter the password for the bind DN.
- User Federation Record Context: Enter the location of the container where you want Oracle Identity Federation to store federation records. If the container you identify does not exist, it will be created at runtime. However, if you identify cn=example,dc=test,dc=com as the User Federation Record Context, dc=test,dc=com must exist in the LDAP repository.
- LDAP Container Object Class: Optional. Enter the object class for the container that stores federation records. If this field is empty, the default value of applicationProcess is used.
- Active Directory Domain: Appears only if you select Microsoft Active Directory for the LDAP Type. Enter the name of the Microsoft Active Directory domain.

#### If you selected RDBMS for Federation Store, the Specify Federation Store Database Details screen will appear. Enter the following information:

- 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.

#### If you selected RDBMS for User Session Store, Message Store, or Configuration Store, the Specify Transient Store Database Details screen will appear. Enter the following information:

- 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. Click Next.
- **13.** The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **14.** The Configuration Progress screen appears. Click **Next** to continue.
- **15.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click **Finish** to exit the installer.

## 9.7 Advanced Example: Configuring OIF with OID in a New WebLogic Domain for LDAP Authentication, User Store, and Federation Store

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

**Note:** When you configure 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 configuration:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

#### 9.7.1 Appropriate Deployment Environment

Perform the 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.

### 9.7.2 Components Deployed

Performing the 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

#### 9.7.3 Dependencies

The 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.

#### 9.7.4 Procedure

Perform the following steps to 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 for more information.
  - **b.** Create the *Identity Management Oracle Identity Federation* schema in the database. Refer to Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU) for more information.
- 2. Install the Oracle Database for Oracle Internet Directory. Refer to Installing Oracle Database 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 Oracle Fusion Middleware Repository Creation Utility (RCU)" for more information.
- 4. Ensure that Oracle Identity Federation is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.
- 5. Run <ORACLE\_HOME>/bin/config.sh (On UNIX) or <ORACLE\_ HOME>\bin\config.bat to start the Oracle Identity Management Configuration Wizard. Click **Next** to continue.
- **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 Section 2.6, "Identifying Installation Directories". 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. Refer to "Configuring Oracle HTTP Server for OIF" on page 9-3 for information about configuring Oracle HTTP Server with Oracle Identity Federation.
  - 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 of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of 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=myhost, dc=mycompany, 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
  - 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. Click Next.
- **16.** The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **17.** The Configuration Progress screen appears. Click **Next** to continue.
- **18.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click **Finish** to exit the installer.

## 9.8 Advanced Example: Configuring OIF in a New or Existing WebLogic Domain with RDBMS Data Stores

This topic describes how to configure Oracle Identity Federation (OIF) in a new or existing WebLogic administration domain with RDBMS data stores. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- **Dependencies**
- Procedure

### 9.8.1 Appropriate Deployment Environment

Perform the configuration in this topic to quickly deploy Oracle Identity Federation with RDBMS User Store, Federation Store, Session Store, Message Store, and Configuration Store.

## 9.8.2 Components Deployed

Performing the configuration in this section deploys the following components:

#### If you configure Oracle Identity Federation in a new domain:

- WebLogic Administration Server
- Fusion Middleware Control
- WebLogic Managed Server
- Oracle Identity Federation
- Optionally, Oracle HTTP Server

#### If you configure Oracle Identity Federation in an existing domain:

- WebLogic Managed Server
- Oracle Identity Federation
- Optionally, Oracle HTTP Server

#### 9.8.3 Dependencies

The configuration in this section depends on the following:

Oracle WebLogic Server

- Oracle Database for User Store, Federation Store, Session Store, Message Store, and Configuration Store.
- New Identity Management Oracle Identity Federation schema existing in the database for Federation Store, Session Store, Message Store, and Configuration
- Table for storing user data in the User Store database.
- LDAP repository, if using LDAP for Authentication.

#### 9.8.4 Procedure

Perform the following steps to configure Oracle Identity Federation in a new or existing domain with RDBMS User Store, Federation Store, User Session Store, Message Store, and Configuration Store:

- 1. Install the database(s) for the RDBMS User Store, Federation Store, User Session Store, Message Store, and Configuration Store. Refer to Installing Oracle Database for more information.
- **2.** Create the *Identity Management Oracle Identity Federation* schema in the database(s). Refer to Creating Database Schema Using the Oracle Fusion Middleware Repository Creation Utility (RCU) for more information.
- **3.** Decide if you want to use an LDAP repository for Authentication. If you do, you must install the LDAP repository before you can install Oracle Identity Federation.
- 4. Ensure that Oracle Identity Federation is installed, as described in Installation Roadmap and Installing Oracle Identity Management Using "Install and Configure" Option.
- 5. Run <ORACLE\_HOME>/bin/config.sh (On UNIX) or <ORACLE\_ HOME>\bin\config.bat to start the Oracle Identity Management Configuration Wizard. Click **Next** to continue.
- 6. On the Select Domain screen, choose whether to install Oracle Identity Federation in a new or existing domain:

#### To configure Oracle Identity Federation in a new domain:

- a. Select Create New Domain.
- **b.** 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.
- Continue the installation by going to step 7 now.

#### To install Oracle Identity Federation in an existing domain:

- a. Select Extend Existing Domain.
- **b.** Enter the name of the host that contains the domain in the Host Name field.
- Enter the listen port for the WebLogic Administration Server in the Port field.
- Enter the user name for the domain in the User Name field.
- Enter the password for the domain user in the User Password field.

- Click **Next**. The Specify Installation Location screen appears.
- Identify the Homes, Instances, and the WebLogic Server directory by referring to Section 2.6, "Identifying Installation Directories".

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

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

- 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.

Select Oracle Identity Federation—and optionally, Oracle HTTP Server. Refer to "Configuring Oracle HTTP Server for OIF" on page 9-3 for information about configuring these two components simultaneously.

If you are installing Oracle Identity Federation in a new domain, the Fusion Middleware Control management component is automatically selected for 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 Select Oracle Identity Federation Configuration Type screen appears.

- **11.** Select **Advanced** and click **Next**. The Specify OIF Details screen appears.
- **12.** 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.

- **13.** Select the following and click **Next**:
  - Authentication Type: **JAAS** or **LDAP** 
    - Select JAAS to delegate authentication to the application server.
    - Select LDAP to authenticate against an LDAP repository.

User Store: RDBMS

Federation Store: RDBMS User Session Store: RDBMS Message Store: **RDBMS** 

Configuration Store: **RDBMS** 

**Note:** The screen that appears next depends on what you selected for Authentication:

- If you selected LDAP for Authentication Type, the Specify Authentication LDAP Details screen appears. Continue you installation by going to step 14 now.
- If you selected JAAS for Authentication Type, the Specify User Store Database Details screen appears. Continue you installation by going to step 15 now.
- 14. Enter the following information on the Specify Authentication LDAP Details screen to identify the LDAP repository that will perform authentication:
  - LDAP Type: Select the appropriate LDAP repository.
  - LDAP URL: Enter the URL connection string for the LDAP repository in the form: *protocol://hostname:port*

**Note:** If you selected Microsoft Active Directory for the LDAP Type, you must specify an SSL LDAP URL, that is, ldaps://hostname:port.

- LDAP Bind DN: Enter the bind DN for the LDAP repository.
- LDAP Password: Enter the password for the bind DN.
- User Credential ID Attribute: Enter the LDAP attribute Oracle Identity Federation will use to authenticate users. For example, if you enter mail and the value of the mail attribute for a user is jane.doe@domain.com, then Jane Doe must enter **jane.doe.@domain.com** when challenged. Values for the LDAP attribute you identify for User Credential ID Attribute must be unique for all users.
- User Unique ID Attribute: Enter the LDAP attribute that will uniquely identify users to Oracle Identity Federation. The value you enter must be identical to the value you enter for the User Data Store's User ID Attribute parameter. For

- example, if you enter mail for User Unique ID Attribute and you configure the User Data Store's User ID Attribute parameter with a value of EmailAddress, then the value of mail in the authentication engine repository must equal the value of EmailAddress in the User Data Store. Values for the LDAP attribute you identify for User Unique ID Attribute must be unique for all users.
- Person Object Class: Enter the LDAP object class that represents a user in the LDAP repository. For example: inetOrgPerson for Oracle Internet Directory and Sun Java System Directory Server, and user for Microsoft Active Directory.
- Base DN: Enter the root DN that searches will start from.

Click **Next**. The Specify User Store Database Details screen appears.

- **15.** Enter the following information to identify the database that will store user data:
  - 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 database username.
  - Password: Enter the password for the database user.
  - Login Table: Enter the name of the table that will store user data. The value you enter must be a valid table name, and the values you enter for User ID Attribute and User Description Attribute must be valid column names in the table you identify.
  - User ID Attribute: Enter the name of the table column to use for the Oracle Identity Federation user ID. The value you enter must be a valid column name in the table you identified for the Login Table parameter.
  - User Description Attribute: Enter the name of the table column to use for the user description. The value you enter must be a valid column name in the table you identified for the Login Table parameter.

Click **Next**. The Specify Federation Store Database Details screen appears.

- **16.** Enter the following information to identify the database that will store federated user account linking data:
  - 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.

Click **Next**. The Specify Transient Store Database screen appears.

- 17. Enter the following information to identify the database that will store transient runtime session state data, protocol messages, and Oracle Identity Federation configuration data:
  - 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.

Click Next.

- **18.** The Installation Summary screen appears. Verify the information on this screen. Click **Configure** to begin the configuration.
- **19.** The Configuration Progress screen appears. Click **Next** to continue.
- **20.** The Installation Complete screen appears. Click **Save** to save the configuration information to a file, and then click Finish to exit the installer.

## 9.9 Verifying OIF

Verify the Oracle Identity Federation (OIF) 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.

## 9.10 Getting Started with OIF After Installation

After installing Oracle Identity Federation (OIF), refer to the "Common Tasks" section in the Oracle Fusion Middleware Administrator's Guide for Oracle Identity Federation.

## **Configuring Oracle Unified Directory with** Oracle Identity Management 11.1.1.9.0

This chapter explains how to configure Oracle Unified Directory.

This chapter discusses the following topics:

- Configuring Only Oracle Unified Directory (OUD)
- Configuring Oracle Unified Directory (OUD) with ODSM
- Configuring OUD/ODSM/ODIP and Fusion Middleware Control in a New WebLogic Administration Domain

## 10.1 Configuring Only Oracle Unified Directory (OUD)

To configure only Oracle Unified Directory (OUD), refer to the following topics in *Oracle Fusion Middleware Installing Oracle Unified Directory:* 

- "Installing the Oracle Unified Directory Software"
- "Setting Up Oracle Unified Directory as a Directory Server"

## 10.2 Configuring Oracle Unified Directory (OUD) with ODSM

To configure Oracle Unified Directory (OUD) with Oracle Directory Services Manager (ODSM), refer to the following topics:

- Installing Oracle WebLogic Server 11g Release 1 (10.3.6). For more information, see "Installing Oracle WebLogic Server" in the Oracle Fusion Middleware Installation Planning Guide. In addition, see Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server for complete information about installing Oracle WebLogic Server.
- "Installing the Oracle Unified Directory Software" in Oracle Fusion Middleware *Installing Oracle Unified Directory.*
- "Setting Up Oracle Unified Directory as a Directory Server" in Oracle Fusion Middleware Installing Oracle Unified Directory.
- For managing Oracle Unified Directory With Oracle Directory Services Manager, refer to Oracle Fusion Middleware Administering Oracle Unified Directory.

## 10.3 Configuring OUD/ODSM/ODIP and Fusion Middleware Control in a **New WebLogic Administration Domain**

To configure Oracle Unified Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Fusion Middleware Control in an Oracle WebLogic Server domain, refer to the "Configuring Oracle Unified Directory" topic in the Oracle Fusion Middleware Administrator's Guide for Oracle Directory Integration

# Part III

## **Appendixes**

#### Part IV contains the following appendixes:

- Appendix A, "Oracle Identity Management 11.1.1.9.0 Software Installation Screens"
- Appendix B, "Starting or Stopping the Oracle Stack"
- Appendix C, "Deinstalling and Reinstalling Oracle Identity Management"
- Appendix D, "Performing Silent Installations"
- Appendix E, "Troubleshooting the Installation"
- Appendix F, "Software Deinstallation Screens"

## **Oracle Identity Management 11.1.1.9.0 Software Installation Screens**

This appendix describes the screens of the Oracle Identity Management 11g software Installation and Wizard that enables you to install and configure Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Service Manager, Oracle Directory Integration Platform, and Oracle Identity Federation.

It contains the following topics:

- Welcome
- **Install Software Updates**
- Select Installation Type
- Prerequisite Checks
- Select Domain
- Specify Installation Location
- **Specify Security Updates**
- Configure Components
- **Configure Ports**
- Specify Schema Database
- Specify Oracle Virtual Directory Information
- Specify OID Administrator Password
- Select Oracle Identity Federation Configuration Type
- Specify Oracle Identity Federation Details
- **Installation Summary**
- **Installation Progress**
- **Configuration Progress**
- **Installation Complete**

## A.1 Welcome

The Welcome screen is displayed each time you start the Oracle Identity Management 11*g* Installer wizard.

Figure A-1 Welcome Screen



Click Next to continue.

## A.2 Install Software Updates

This screen enables you to search for and install software updates before you install Oracle Identity Management.

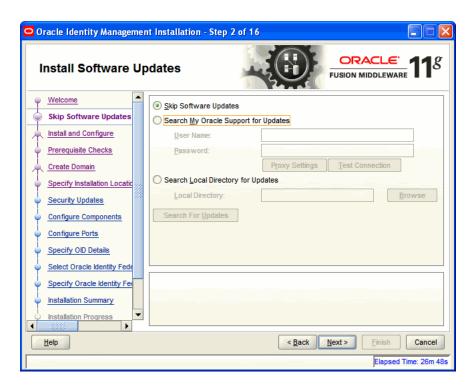


Figure A-2 Install Software Updates Screen

To get updates from My Oracle Support, you can select Search My Oracle Support for **Updates**, specify a user name and password, and then click **Search for Updates**. Before you search, you can click **Proxy Settings** to change the settings for the proxy server and Test Connection to test the credentials.

To get updates that you have saved to your computer, you can select Search Local **Directory for Updates**, specify a directory, and then click **Search for Updates**.

If you do not want to update any software, you can select Skip Software Updates. The link on the left changes from My Oracle Support Updates to Skip Software Updates.

Click **Next** to start the software updates or continue the installation.

## A.3 Select Installation Type

This screen enables you to select the installation type.

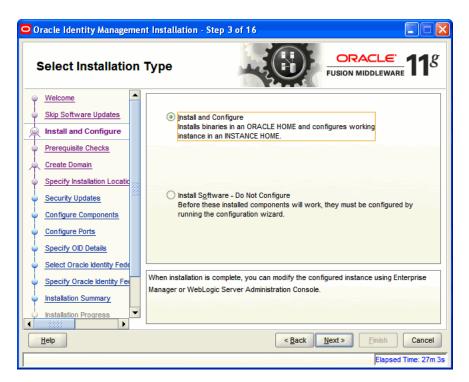


Figure A-3 Select Installation Type Screen

The Select Installation Type screen presents two options: **Install and Configure** and Install Software - Do Not Configure.

- Choose the **Install and Configure** option to install Oracle Identity Management components and simultaneously configure some of their fundamental elements, such as passwords, user names, and so on. Oracle Identity Management components start running and are immediately ready for use after deploying them using the Install and Configure option.
- Choose the **Install Software Do Not Configure** option to install Oracle Identity Management components without configuring them during installation. If you choose the Install Software - Do Not Configure option, the Installer installs the component software and then closes. Oracle Identity Management components will not start running after deploying them using the Install Software - Do Not **Configure** option, as additional configuration is needed.

After you install components using the **Install Software - Do Not Configure** option, you can configure them at a later time using the Oracle Identity Management 11g Release 1 (11.1.1.9.0) Configuration Wizard. To start the Oracle Identity Management 11g Release 1 (11.1.1.9.0) Configuration Wizard, execute the ORACLE\_HOME/bin/config.sh script (config.bat on Windows).

Click Next to continue.

## A.4 Prerequisite Checks

The installation program ensures that you have a certified version, the correct software packages, sufficient space and memory to perform the operations that you have selected. If any issues are detected, errors appear on this page.

The following example screen applies to Windows operating systems only.

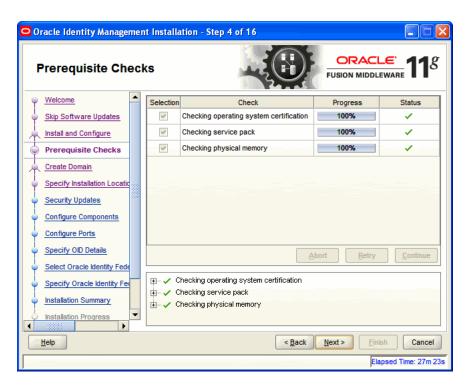


Figure A-4 Prerequisite Checks Screen

On this screen, you can select to **Abort**, **Retry**, or **Continue** with the installation. If all the prerequisite checks pass inspection, click **Next** to continue.

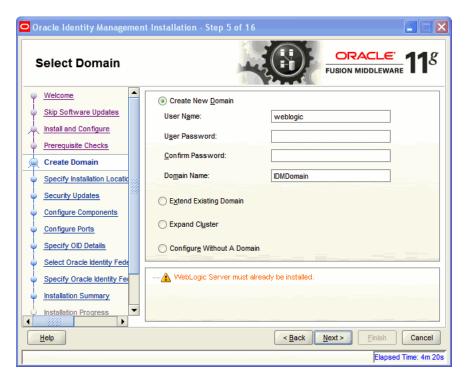
## A.5 Select Domain

This screen allows you to select the Domain. Select one of the following options:

- Option 1: Create New Domain
- Option 2: Extend Existing Domain
- Option 3: Expand Cluster
- Option 4: Configure Without a Domain

#### **Option 1: Create New Domain**

Figure A-5 Create New Domain option

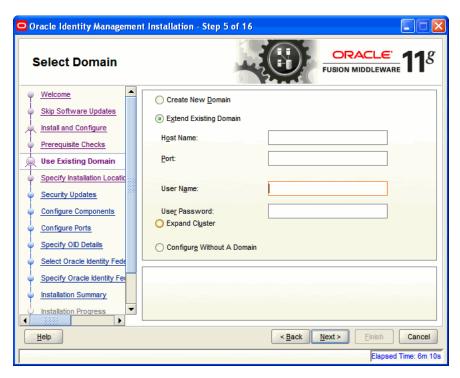


Enter the User Name, User Password, and Domain Name for the domain you want to create.

Click **Next** to continue.

#### **Option 2: Extend Existing Domain**

Figure A-6 Extend Existing Domain option

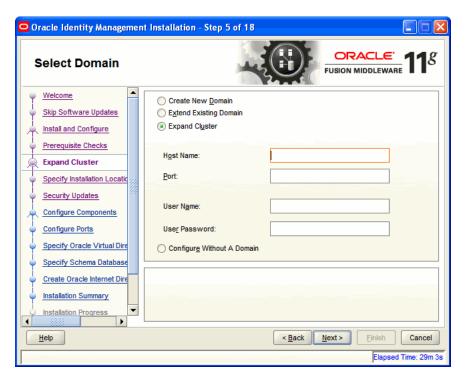


Enter the Host Name, Port, User Name, and User Password for the existing domain you want to extend into.

Click **Next** to continue.

#### **Option 3: Expand Cluster**

Figure A-7 Expand Cluster option



Enter the information for the existing cluster you want to expand your Oracle Identity Management installation into. Enter the Host Name, Port, User Name, and User Password for cluster inclusion.

Click Next to continue.

#### **Option 4: Configure Without a Domain**

If you select this option, you will not be creating or extending the domain of your installation.

Click **Next** to continue.

## A.6 Specify Installation Location

This screen allows you to enter a location for the new Oracle Identity Management 11g software being installed.

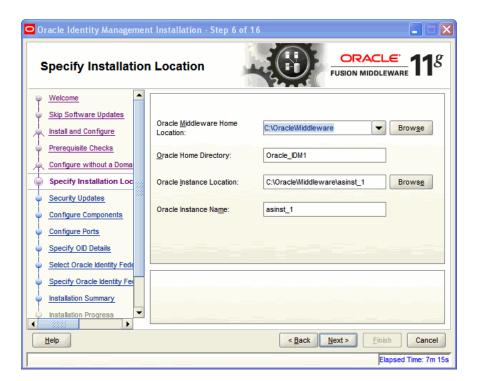


Figure A-8 Specify Installation Location Screen

Ensure that Oracle WebLogic Server is already installed on your machine. Navigate to the Oracle Fusion Middleware Home directory by clicking Browse. Enter a name for the new Oracle Home directory for Oracle Identity Management 11g components.

If the Middleware location does not exist, you must install WebLogic Server and create a Middleware Home directory, as described in Section 4.2.5, "Installing Oracle WebLogic Server and Creating the Middleware Home", before running the Oracle Identity Management Installer.

**Note:** If you selected the **Configure Without a Domain** option on the Select Domain screen, you do not need to install Oracle WebLogic Server and specify a WebLogic Server directory on the Specify Installation Location screen. If you do not specify a valid WebLogic Server Middleware home that contains an Oracle WebLogic Server installation, you can proceed with the configuration of only Oracle Internet Directory and Oracle Virtual Directory. These two components of Oracle Identity Management do not require a valid WebLogic Server Middleware home.

If you want to install only Oracle Internet Directory or Oracle Virtual Directory, you do not need to install Oracle WebLogic Server on the machine where Oracle Internet Directory or Oracle Virtual Directory is being configured.

Click Next to continue.

## A.7 Specify Security Updates

This screen allows you to provide your E-mail address to be informed of the latest product issues.



Figure A-9 Specify Security Updates Screen

Click **Next** to continue.

## **A.8 Configure Components**

This screen allows you to select the Oracle Identity Management components that you wish to install and configure.



Figure A-10 Configure Components Screen

Click Next to continue.

## **A.9 Configure Ports**

This screen allows you to choose how you want the Installer to configure ports.

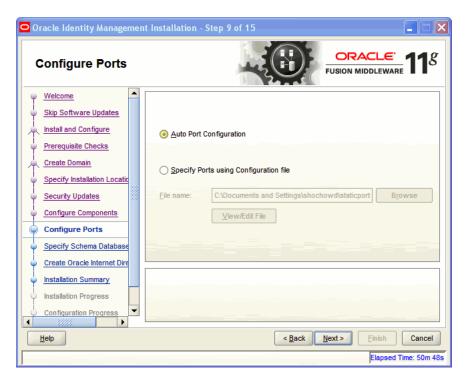


Figure A-11 Configure Ports Screen

The Configure Ports screen presents two options:

- 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** to continue.

## A.10 Specify Schema Database

This screen is displayed if you selected Oracle Internet Directory. This screen allows you to choose whether to use an existing schema or to create a new one using the Installer.

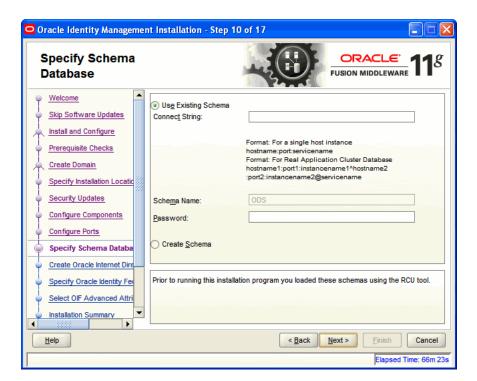


Figure A-12 Specify Schema Database Screen

The Specify Schema Database screen presents two options:

**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 now using the Oracle Fusion Middleware Repository Creation Utility.

Use Existing Schema

To use an existing schema:

- 1. Select Use Existing Schema.
- Enter the database connection information in the Connect String field. The connection string must be in the form of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the form of

hostname1:port1:instance1^hostname2:port2:instance2@servicename.

- **3.** Enter the password for the existing ODS schema in the Password field.
- 4. Click **Next** to continue.

**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.

Create Schema

To create a new schema:

- 1. Select Create Schema.
- **2.** Enter the database connection information in the Connect String field. The connection string must be in the form of hostname:port:servicename. For Oracle Real Application Clusters (RAC), the connection string must be in the
  - hostname1:port1:instance1^hostname2:port2:instance2@servicename.
- **3.** Enter the name of the database user in the User Name field. The user you identify must have DBA privileges.

**Note:** If you are using Oracle Database 11g Release 2 (11.2) or higher version, the database user should be only 'SYS'.

- **4.** Enter the password for the database user in the Password field.
- **5.** Click **Next**. The Enter OID Passwords screen appears.
- **6.** 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.
- 7. 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.
- **8.** Click **Next** to continue.

## A.11 Specify Oracle Virtual Directory Information

This screen is displayed if you selected Oracle Virtual Directory. This screen allows you to specify Oracle Virtual Directory information.



Figure A-13 Specify Oracle Virtual Directory Information Screen

### Enter the following information:

- LDAP v3 Name Space: Enter the name space for Oracle Virtual Directory. The default value is dc=myhost, dc=mycompany, 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** to continue.

## A.12 Specify OID Administrator Password

This screen is displayed if you selected Oracle Internet Directory.



Figure A-14 Specify OID Administrator Password Screen

Enter the password for the Oracle Internet Directory administrator. Click **Next** to continue.

# A.13 Select Oracle Identity Federation Configuration Type

This screen is displayed if you selected Oracle Identity Federation.



Figure A-15 Select Oracle Identity Federation Configuration Type Screen

Select one of the following configuration types:

- **Basic**: You do not need to choose the datastore and authentication engine types or specify the connection details for Oracle Identity Federation.
- **Advanced**: This option will enable you to choose the configuration types for the datastores, the authentication engine, and specify the connection details datastores and authentication engine.

Click **Next** to continue.

# A.14 Specify Oracle Identity Federation Details

This screen is displayed if you selected Oracle Identity Federation.

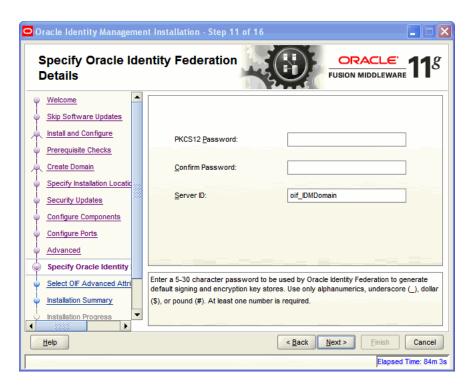


Figure A–16 Specify Oracle Identity Federation Details Screen

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 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** to continue.

# A.15 Installation Summary

This screen displays a summary of your Oracle Identity Management 11g installation.

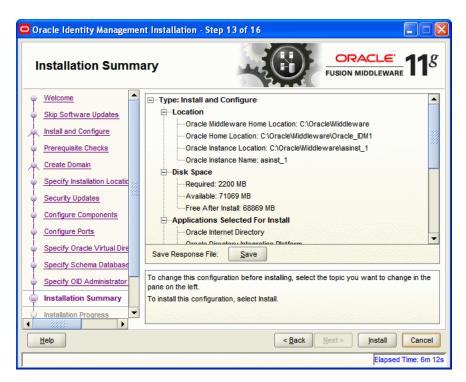


Figure A-17 Installation Summary Screen

Review the contents of this screen, and click Install to start installing the Oracle Identity Management 11g software.

# A.16 Installation Progress

This screen displays the progress of the Oracle Identity Management installation.

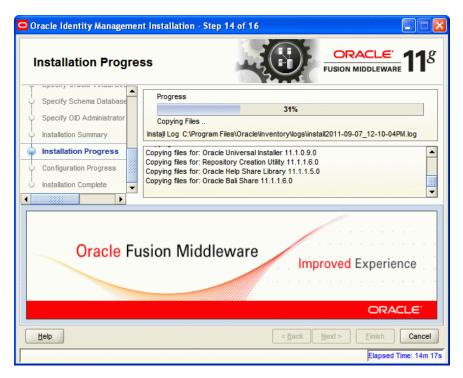


Figure A-18 Installation Progress Screen

If you want to quit before the installation is completed, click Cancel. The installation progress indicator gives a running inventory of the files that are being installed. If you are only installing the software binaries, installation is complete after all of the binaries have been installed.

Click Next to continue.

# **A.17 Configuration Progress**

This screen displays the progress of the Oracle Identity Management configuration.

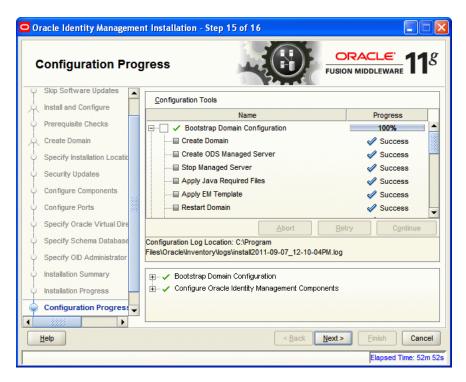


Figure A-19 Configuration Progress Screen

If you want to abort the configuration before the configuration is completed, click **Abort**. If you want to retry the configuration, click **Retry**.

Click **Next** to continue.

# A.18 Installation Complete

This screen displays a summary of the installation parameters, such as Location, Disk Space, and Applications. To save the installation configuration in a response file, which is used to perform silent installations, click **Save**.

Oracle Identity Management Installation - Step 16 of 16 ORACLE **Installation Complete** FUSION MIDDLEWARE Install and Configure - Type: Install and Configure Prerequisite Checks ----Location: C:\Oracle\Middleware\Oracle\_IDM1 Disk Space Create Domain Required: 2200 MB Specify Installation Location ---Available: 71069 MB Free After Install: 68869 MB Security Updates - Applications Selected For Install Configure Components Oracle Internet Directory Configure Ports ····Oracle Directory Integration Platform ···Oracle Virtual Directory Specify Oracle Virtual Dire .... Oracle Identity Federation Specify Schema Database --- Oracle HTTP Server Specify OID Administrator Save Installation Summary: Save Installation Summary Installation Progress Oracle Fusion Middleware 11g IDM installed and configured successfully. Configuration Progress Installation Complete < Back Next > Finish Help Elapsed Time: 53m 52s

Figure A-20 Installation Complete Screen

Click **Finish** to complete the installation process.

# Starting or Stopping the Oracle Stack

You must start or stop the components of the Oracle stack in a specific order.

This appendix describes that order and contains the following topics:

- Starting the Stack
- Stopping the Stack
- **Restarting Servers**

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

- SERVER\_NAME represents the name of the Oracle WebLogic Managed Server, such as wls\_oif1 or wls\_ods1.
- 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.

# **B.1 Starting the Stack**

After completing the installation and domain configuration, you must start the Administration Server and various Managed Servers to get your deployments up and running:

**Note:** You must start the Node Manager, the WebLogic Administration Server, and the Managed Servers with Java Secure Socket Extension (JSSE) enabled if you have applied the following Oracle WebLogic Server patches to your Middleware home:

- 13964737 (YVDZ)
- 14174803 (IMWL)

These patches are available from My Oracle Support.

For information on how to start the Node Manager with JSSE enabled, see the "Set the Node Manager Environment Variables" topic in the Node Manager Administrator's Guide for Oracle WebLogic Server.

After starting Node Manager with JSSE enabled, you must start the WebLogic Administration Server and Managed Servers with JSSE enabled. For more information, see the "Using the JSSE-Enabled SSL Implementation" topic in Securing Oracle WebLogic Server.

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. Ensure that the Node Manager is running. Oracle WebLogic Administration Server does not do this automatically. If the Node Manager is not running, start the Node Manager by executing the following command:

WLS\_HOME/server/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. 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. You must start these Managed Servers from the command line.

This command also requires that you specify a server name. You must start the servers you created when configuring the domain, as shown in the following example:

wls\_ods1 (Oracle Directory Services Manager)

## wls\_oif1 (Oracle Identity Federation)

For example, to start the Oracle Directory Services Manager Managed Server on a UNIX system:

MW\_HOME/user\_projects/domains/domain\_name/bin/startManagedWebLogic.sh wls\_ods1

#### On Windows systems:

MW\_HOME\user\_projects\domains\domain\_name\bin\startManagedWebLogic.cmd wls\_ods1

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

If 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 wls\_ods1 http://host:admin\_server\_port

## On Windows systems:

MW\_HOME\user\_projects\domains\domain\_name\bin\startManagedWebLogic.cmd wls\_ods1 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 lime.

### On UNIX systems:

MW\_HOME/user\_projects/domains/domain\_name/bin/startManagedWebLogic.sh wls\_ods1 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 wls ods1 http://host:admin\_server\_port -Dweblogic.management.username=user\_name -Dweblogic.management.password=password

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

If you do not know the names of the Managed Servers that should 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.

# **B.2 Stopping the Stack**

You can stop the Oracle WebLogic Administration Server and all the managed servers by using Oracle WebLogic Administration Console. See *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
```

**4.** If you want to stop the Node Manager, you can use the kill command:

```
kill -9 PID
```

## **B.3 Restarting Servers**

To restart the Administration Server or Managed Servers, you must stop the running Administration Server or Managed Servers first before starting them again. For more information, see Stopping the Stack and Starting the Stack.

# Deinstalling and Reinstalling Oracle Identity Management

This appendix provides information about deinstalling and reinstalling Oracle Identity Management 11g Release 1 (11.1.1).

It contains the following topics:

- Deinstalling Oracle Identity Management
- Reinstalling Oracle Identity Management

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

# C.1 Deinstalling Oracle Identity Management

This topic contains procedures for deinstalling Oracle Identity Management. It contains the following sections:

- Deinstalling the Oracle Identity Management Oracle Home
- Deinstalling the Oracle Common Home
- Deinstalling Applications Registered with Oracle Single Sign-On 10g Release 10.1.4.3.0

## C.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.

**Note:** The oralnventory is required for removing instances and Oracle Home. For example, on UNIX it can be found in the following location:

/etc/oraInst.loc

This section describes how to deinstall your Oracle Identity Management Oracle Home 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 your Oracle Identity Management Oracle Home using the graphical, screen-based deinstaller:

- Verify your Oracle Identity Management Oracle Home is not in use by an existing domain.
- Stop all processes that use the Oracle Identity Management Oracle Home.
- **3.** Open a command prompt and move (cd) into the <code>IDM\_ORACLE\_HOME/oui/bin</code> directory (UNIX) or the IDM\_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.

If you are deinstalling Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation, the Select Deinstallation Type screen appears.

Select the deinstallation type you want to perform. Table C-1 lists and describes each of the deinstallation types:

Table C-1 Deinstallation 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.

Table C–1 (Cont.) Dei	nstallation Types
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Туре	Description
Deinstall ASInstances managed by WebLogic Domain - Applicable to Oracle Internet Directory and Oracle Virtual Directory only.	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.
	Note: When de-installing managed instances, ensure that the Administration server is up and running.
<b>DeInstall Unmanaged ASInstances</b> - Applicable to Oracle Internet Directory and Oracle Virtual Directory only.	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.

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.

**6.** Click **Finish** on the Deinstallation Complete screen to exit the deinstaller.

## C.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 Oracle 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:

Stop all processes that use the ORACLE\_COMMON\_HOME directory. To know all the processes that are using ORACLE\_COMMON\_HOME directory use the following commands:

#### On UNIX:

ps-ef grep <oracle\_common>

#### On Windows:

Use the Windows Task Manager to identify the 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\_HOME/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.

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

**Note:** The path to the <code>ORACLE\_COMMON\_HOME</code> directory appears in the text describing the **Deinstall Oracle Home** option.

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

- 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.

## C.1.3 Deinstalling Applications Registered with Oracle Single Sign-On 10*g* Release 10.1.4.3.0

To deinstall a partner application registered with Oracle Single Sign-On 10g Release 10.1.4.3.0, you must manually deregister the partner application from Oracle Single Sign-On. Refer to the "Reregister mod osso on the single sign-on middle tiers" section in Chapter 9 of the Oracle Application Server Single Sign-On Administrator's Guide 10g Release 10.1.4.0.1 available at:

http://www.oracle.com/technology/documentation/oim1014.html

# C.2 Reinstalling Oracle Identity Management

Perform the following steps to reinstall Oracle Identity Management:

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 11g Release1(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 guide.

Reinstalling C	Oracle	Identity	Management
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# **Performing Silent Installations**

This appendix describes how to install Oracle Identity Management in silent mode.

This appendix contains the following topics:

- What is a Silent Installation?
- Before Performing a Silent Installation
- Creating Response Files
- Performing a Silent Installation
- **Installer Command Line Parameters**

## D.1 What is a Silent Installation?

A silent installation eliminates the need to monitor the Oracle Identity Management installation because no graphical output is displayed and no input by the user is required.

To perform a silent Oracle Identity Management installation, you invoke the Installer with the -silent flag and provide a response file from the command line. The response file is a text file containing variables and parameter values which provide answers to the Installer prompts.

# D.2 Before Performing a Silent Installation

This topic describes tasks that may be required before you perform a silent installation. This topic includes the following sections:

- UNIX Systems: Creating the oraInst.loc File
- Windows Systems: Creating the Registry Key

## D.2.1 UNIX Systems: Creating the oralnst.loc File

The Installer uses the Oracle inventory directory to keep track of all Oracle products installed on the systems. The inventory directory is stored in a file named oralnst.loc. If this file does not already exist on your system, you must create it before starting a silent installation.

Perform the following steps to create the oraInst.loc file if it does not exist:

- Log in as the root user.
- Using a text editor such as vi or emacs, create the oralnst.loc file in any directory. 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. Replace oui\_install\_group with the name of the group whose members have write permissions to this directory.

Exit from the root user.

**Note:** After you performing the silent installation on UNIX platforms, you must run the ORACLE\_HOME/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.

## D.2.2 Windows Systems: Creating the Registry Key

If you have not installed Oracle Identity Management on your system, you must 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.3 Creating Response Files**

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

Several default response files, which you can use as templates and customize for your environment, are included in the installation media. These default response files are located in the Disk1/stage/Response directory on UNIX, or in the Disk1\stage\Response directory on Windows.

## Creating Response Files for Oracle Identity Management Software Installation

When you use the Oracle Identity Management Installation Wizard to install the software for the first time, you can save a summary of your installation in a response file.

To create a response file for Oracle Identity Management software Installer for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Service Manager, Oracle Directory Integration Platform, and Oracle Identity Federation, complete the following steps:

- 1. On the Installation Summary screen in the installation wizard, click **Save** in the Save Response File field.
- When prompted, save the file to a local directory.

## D.3.1 OID, OVD, ODSM, ODIP, and OIF

The following is a list of the default response files included in the installation media for the Oracle Identity Management Suite containing Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), Oracle Directory Services Manager (ODSM), Oracle Directory Integration Platform (ODIP), and Oracle Identity Federation (OIF):

- im\_install\_only.rsp: Use this response file to install Oracle Identity Management components without configuring them.
- im\_install\_config.rsp: Use this response file to install and configure Oracle Identity Management components.
- im\_config\_only.rsp: Use this response file with the Oracle Identity Management 11g Release 1 (11.1.1) Configuration Wizard (config.sh script or config.bat) in *ORACLE\_HOME*/bin/ to configure installed components.

## D.3.2 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.4 Performing a Silent Installation

To perform a silent Oracle Identity Management installation, you invoke the Installer with the -silent flag and provide a response file from the command line.

#### On UNIX

The following is the syntax for running the Installer from the command line on UNIX systems:

```
runInstaller [-mode] [-options] [(COMMAND_LINE_VARIABLE=VARIABLE_VALUE)*]
```

## For example:

./runInstaller -silent -response FILE

## On Windows

The following is the syntax for running the Installer from the command line on Windows systems:

```
setup.exe [-mode] [-options] [(COMMAND_LINE_VARIABLE=VARIABLE_VALUE)*]
```

#### For example:

setup.exe -silent -response FILE

## **D.5 Installer Command Line Parameters**

Table D–1 lists and describes supported Installer command line parameters:

Table D-1 Installer Command Line Parameters

Parameter	Description
Installation Modes - Only One Mode Can be Specified	
-i   -install	Launches the Installer in GUI mode. This is the default mode

Table D-1 (Cont.) Installer Command Line Parameters

Parameter	Description		
-silent	Install in silent mode. The Installer must be passed either a response file or command line variable value pairs.		
-d   -deinstall	Launches the Installer in GUI mode for deinstallation.		
-p   -prerequisite	Launches the Installer in GUI mode but only checks the prerequisites. No software is installed.		
-v   -validate	Launches the Installer in GUI mode and performs all prerequisite and validation checking, but does not install any software.		
-sv   -silentvalidate	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.		
Installation Options			
-help  help  usage	Displays the usage parameters for the runInstaller command.		
-invPtrLoc file	Pointer to the inventory location file. Replace file with the full path and name of the oraInst.loc file.		
-response file   -responseFile file	Pointer to the response file. Replace file with the full path and name of the response file.		
-jreLoc location	Pointer to the location where Java Runtime Environment (JRE) is installed. Replace <i>location</i> with the full path to the jre 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 level will be recorded. Valid levels are:		
	■ severe		
	<ul><li>warning</li></ul>		
	■ info		
	<ul><li>config</li></ul>		
	■ 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 timeTakentimestamp.log 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.		
-paramFile <i>file</i>	Specify the full path to the oraparam.ini file. This file is the initialization file for the Installer. The default location of this file is Disk1/install/platform.		

Table D-1 (Cont.) Installer Command Line Parameters

Parameter	Description
-novalidation	Disables all validation checking performed by the Installer.
-nodefaultinput	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 <i>varName=value</i> . For example:
	ORACLE_HOME=/scratch/install/IDM_Home
Session Variables	Session variables are specified using session:varName=value

# Troubleshooting the Installation

This appendix describes solutions to common problems that you might encounter when installing Oracle Identity Management.

It contains the following topics:

- **General Troubleshooting Tips**
- **Installation Log Files**
- Need More Help?

# **E.1 General Troubleshooting Tips**

If you encounter an error during installation:

Consult the Oracle Fusion Middleware 11g Release 1 (11.1.1) Release Notes. You can access the Release Notes on the Oracle Technology Network (OTN) Documentation Web site. To access this Web site, go to the following URL:

http://www.oracle.com/technetwork/indexes/documentation/index.html

- Verify your system and configuration is certified. See Reviewing System Requirements and Certification for more information.
- Verify your system meets the minimum system requirements. See Reviewing System Requirements and Certification for more information.
- Verify you have satisfied the dependencies for the deployment you are attempting. Each deployment documented in this guide contains a "Dependencies" section.
- 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. See "Deinstalling Oracle Identity Management" for more information.
  - **3.** Correct the issue that caused the error.
  - Restart the installation.

# E.2 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 server log files are created in the DOMAIN\_HOME/server/servername/logs directory.

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

- install DATE-TIME\_STAMP.log
- install DATE-TIME STAMP.out
- installActionsDATE-TIME\_STAMP.log
- installProfileDATE-TIME\_STAMP.log
- oraInstallDATE-TIME\_STAMP.err
- oraInstallDATE-TIME\_STAMP.log

## E.3 Need More Help?

If you cannot solve a problem using the information in this appendix, look for additional information in My Oracle Support at

http://support.oracle.com.

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

# **Software Deinstallation Screens**

This appendix describes the screens of the Oracle Fusion Middleware 11g Deinstallation Wizard that enables you to remove the Oracle Identity Management software from your machine.

This appendix contains the following topics:

- Welcome
- Select Deinstallation Type
- **Deinstallation Progress**
- Deinstallation Complete

## F.1 Welcome

The Welcome screen is the first screen that appears when you start the Oracle Fusion Middleware 11g Deinstallation Wizard.

Figure F-1 Welcome Screen



Click **Next** to continue.

# F.2 Select Deinstallation Type

Select the type of deinstallation you want to perform.

Figure F-2 Select Deinstallation Type Screen



Table F-1 Deinstallation 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 - Applicable to Oracle Internet Directory and Oracle Virtual Directory only.	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.
	For this option, the Oracle WebLogic Administration Server must be running.
	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.

Table F-1 (Cont.) Deinstallation Types

Туре	Description
Deinstall Unmanaged ASInstances - Applicable to Oracle Internet Directory and Oracle Virtual Directory only.	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.

Click Next to continue.

## F.2.1 Option 1: Deinstall Oracle Home

If you selected **Deinstall Oracle Home** on the Select Deinstallation Type screen, the following screen appears:

#### F.2.1.1 Deinstall Oracle Home

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

Figure F-3 Deinstall Oracle Home Screen



Verify that this is the correct directory, and also verify that there are no processes associated with this Oracle Home.

Click **Deinstall** to start the deinstallation process.

# F.2.2 Option 2: Deinstall ASInstances managed by WebLogic Domain

If you selected Deinstall ASInstances managed by WebLogic Domain on the Select Deinstallation Type screen, the following screens appears:

- Specify WebLogic Domain Detail
- Select Managed Instance
- Deinstallation Summary (Managed Instance)

## F.2.2.1 Specify WebLogic Domain Detail

Specify the WebLogic Domain credentials:

#### **Domain Host Name**

The name of the system on which the WebLogic Domain is running.

## **Domain Port No**

Listen port number of the domain. The default port number is 7001.

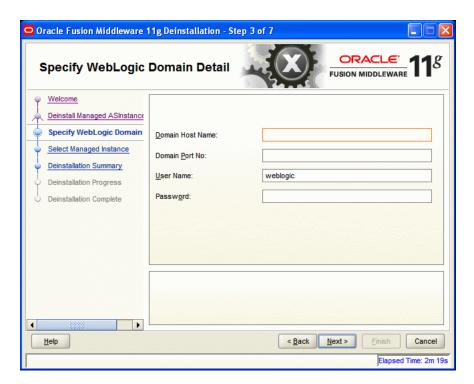
### **User Name**

The WebLogic Domain user name.

#### **Password**

The password of the WebLogic Domain user.

Figure F-4 Specify WebLogic Domain Detail Screen



Click **Next** to continue.

## F.2.2.2 Select Managed Instance

Select the managed instance you want to deinstall.

🗖 Oracle Fusion Middleware 11g Deinstallation - Step 4 of 7 ORACLE **Select Managed Instance** FUSION MIDDLEWARE Select Managed Instance Deinstall Managed ASInstance - LocalHost Specify WebLogic Domain De asinst\_2 Select Managed Instance --ovd1 Deinstallation Summary oid3 Deinstallation Progress instance22 Deinstallation Complete instance101 ---webcache1 Select the Oracle Instance(s) you want to deinstall. To deinstall the entire farm, select all Oracle Instances. The selected instance(s) must be up and running before you can perform a deinstallation. < Back Help Elapsed Time: 16m 59s

Figure F-5 Select Managed Instance Screen

Click **Next** to continue.

## F.2.2.3 Deinstallation Summary (Managed Instance)

Verify that the specified instance is the one you want to deinstall.

Figure F-6 Deinstallation Summary Screen



Click **Deinstall** to start the deinstallation process.

## F.2.3 Option 3: Deinstall Unmanaged ASInstances

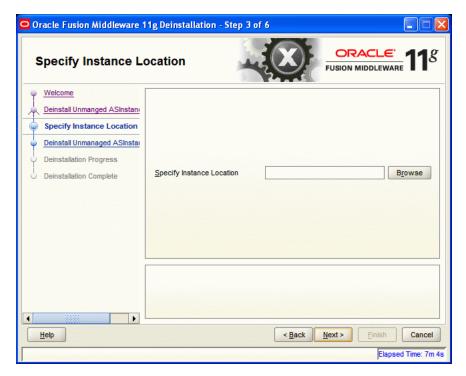
If you selected **Deinstall Unmanaged ASInstances** on the Select Deinstallation Type screen, the following screen appears:

- **Specify Instance Location**
- Deinstallation Summary (Unmanaged ASInstance)

## F.2.3.1 Specify Instance Location

Specify the full path to your Oracle Instance directory. If you are unsure, click Browse to find this directory on your system.

Figure F-7 Specify Instance Location Screen



Click **Next** to continue.

## F.2.3.2 Deinstallation Summary (Unmanaged ASInstance)

Verify that the specified instance is the one you want to deinstall.

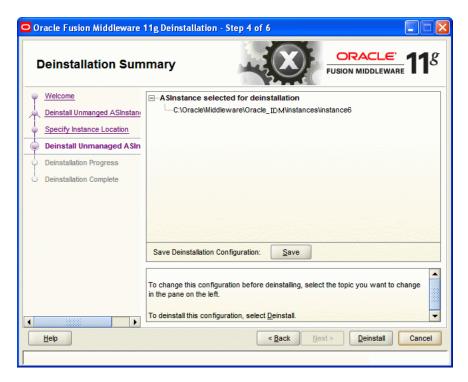


Figure F-8 Deinstallation Summary Screen

Click **Deinstall** to start the deinstallation process.

# **F.3 Deinstallation Progress**

This screen shows you the progress of the deinstallation.

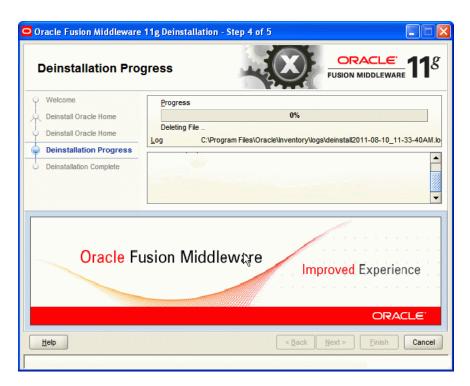


Figure F-9 Deinstallation Progress Screen

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

# F.4 Deinstallation Complete

This screen summarizes the deinstallation that was just completed.



Figure F-10 Deinstallation Complete Screen

Click Finish to dismiss the deinstaller.