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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 Oracle Fusion Middleware 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.

**Documentation Accessibility**

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

**Accessibility of Code Examples in Documentation**

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.
Accessibility of Links to External Web Sites in Documentation
This documentation may contain links to Web sites of other companies or organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these Web sites.

Access to Oracle Support
Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/support/contact.html or visit http://www.oracle.com/accessibility/support.html if you are hearing impaired.

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/technology/documentation/

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Note: Printed documentation is available for sale from the Oracle Store Web site at the following URL:
http://oraclestore.oracle.com/

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

**Oracle Fusion Middleware**
- 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**
- Oracle Fusion Middleware 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**
- Oracle Fusion Middleware Administrator’s Guide for Oracle Internet Directory
Oracle Directory Integration Platform
- Oracle Fusion Middleware Integration Guide for Oracle Identity Management

Oracle Virtual Directory

Oracle Directory Services Manager
- Oracle Fusion Middleware Administrator’s Guide for Oracle Internet Directory
- Oracle Fusion Middleware Administrator’s Guide for Oracle Virtual Directory

Oracle Identity Federation

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

Repository Creation Utility
- Oracle Fusion Middleware Repository Creation Utility User’s Guide

Oracle Identity Manager
- Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Manager

Oracle Access Manager
- Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager

Oracle Adaptive Access Manager
- Oracle Fusion Middleware Administrator’s Guide for Oracle Adaptive Access Manager

Oracle Authorization Policy Manager
- Oracle Fusion Middleware Authorization Policy Manager Administrator’s Guide

Oracle Identity Navigator
- Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator

Conventions
The following text conventions are used in this document:
<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.</td>
</tr>
<tr>
<td><em>italic</em></td>
<td>Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.</td>
</tr>
</tbody>
</table>
This chapter provides a brief overview of Oracle Identity Management 11g Release 1 (11.1.1.3.0) and this guide. This chapter includes the following topics:

- **What is Oracle Fusion Middleware?**
- **What is Oracle Identity Management?**
- **Which Components are in Oracle Identity Management 11g Release 1 (11.1.1.3.0)?**

---

### 1.1 What is Oracle Fusion Middleware?

Oracle Identity Management is part of Oracle Fusion Middleware. Oracle Fusion Middleware is a collection of standards-based software products that spans a range of tools and services: From Java EE and developer tools, to integration services, business intelligence, and collaboration. Oracle Fusion Middleware offers complete support for development, deployment, and management.

---

#### 1.1.1 What is Oracle Enterprise Manager Fusion Middleware Control?

Oracle Enterprise Manager Fusion Middleware Control is a Web browser-based graphical user interface that you can use to monitor and administer Oracle Fusion Middleware components, including Oracle Identity Management components, that are installed in Oracle WebLogic Server domains.

---

**Note:** When you install Oracle Identity Management components in a new domain, the Fusion Middleware Control management component is included.

---

### 1.2 What is Oracle Identity Management?

Oracle Identity Management enables enterprises to manage the end-to-end lifecycle of user identities across all enterprise resources—both within and beyond the firewall. With Oracle Identity Management, you can deploy applications faster, apply the most granular protection to enterprise resources, automatically eliminate latent access privileges, and much more.
Oracle Corporation leads the industry with award-winning Identity Management offerings that constitute the most comprehensive solution offered by any vendor, including:

- Web Access Control
- Adaptive Access Control
- Identity Federation
- Identity Administration
- User Access Provisioning
- Role Management
- Authorization Policy Management
- Directory Services

For more information about Oracle Identity Management, refer to the Identity Management home page on Oracle Corporation’s Web site at:

http://www.oracle.com/identity

1.3 Which Components are in Oracle Identity Management 11g Release 1 (11.1.1.3.0)?

Oracle Identity Management 11g Release 1 (11.1.1.3.0) includes the following components:

- Oracle Internet Directory
- Oracle Directory Integration Platform
- Oracle Virtual Directory
- Oracle Directory Services Manager
- Oracle Identity Federation
- Oracle Identity Manager
- Oracle Access Manager
- Oracle Adaptive Access Manager
- Oracle Identity Navigator
- Oracle Authorization Policy Manager

1.3.1 Oracle Single Sign-On and Oracle Delegated Administration Services Certification for 11g Release 1 (11.1.1.3.0)

Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g are required components for Oracle Portal, Forms, Reports and Discoverer Release 10g and Release 11g.

There are no 11g Release 1 (11.1.1) versions of Oracle Single Sign-On and Oracle Delegated Administration Services. However, both Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.3.0) are certified for use with Oracle Internet Directory 11g Release 1 (11.1.1).

If you are running Oracle Single Sign-On or Oracle Delegated Administration Services Release 10g, you can either:
1.4 What Does This Guide Cover?

This topic describes the scope of information in this guide and how to use it. This topic includes the following sections:

- Using This Guide
- Upgrading to 11g Release 1 (11.1.1.3.0)
- Installing 11g Release 1 (11.1.1.3.0) for High Availability

1.4.1 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 (11.1.1.3.0) components.
2. Verify the installation was successful.
3. 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 2> of this guide explains how to install Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator by using the Oracle Identity Management 11.1.1.3.0 Installer and the Oracle Fusion Middleware Configuration Wizard. The Oracle Identity Management 11g Configuration Wizard is used for configuring Oracle Identity Manager only.
The following is a list of recommendations on how to use the information in this guide to install Oracle Identity Management 11g Release 1 (11.1.1.3.0):

1. Review Chapter 2, "Understanding the Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation," for context.

2. Review Chapter 3, "Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0)," for information about what you should consider before you deploy Oracle Identity Management.

3. Review Chapter 4, "Performing Common Installation Tasks," to understand the tasks that you must perform for most deployments. Understanding this information before you start will expedite and simplify the deployment process.

4. 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.

1.4.2 Upgrading to 11g Release 1 (11.1.1.3.0)

This guide does not explain how to upgrade legacy versions of Oracle Identity Management components, including any previous database schemas, to 11g Release 1 (11.1.1.3.0). To upgrade a legacy version of an Oracle Identity Management component, refer to the following documents:

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

1.4.3 Installing 11g Release 1 (11.1.1.3.0) 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 the following documents:

- *Oracle Fusion Middleware High Availability Guide*
- *Oracle Fusion Middleware Enterprise Deployment Guide for Oracle Identity Management*
Understanding the Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation

This chapter provides an overview of the Oracle Identity Management 11g Release 1 (11.1.1.3.0) installation. This chapter includes the following topics:

- **Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation**
- **OID, OVD, ODSM, ODIP, and OIF**
- **OIM, OAM, OAAM, OAPM, and OIN**

**Note:** For information about installing the 11.1.1.2.0 version of Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), Oracle Directory Services Manager (ODSM), Oracle Directory Integration Platform (ODIP), and Oracle Identity Federation (OIF) and patching them to 11.1.1.3.0, see OID, OVD, ODSM, ODIP, and OIF.

For information about installing the 11g (11.1.1.3.0) version of Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), see OIM, OAM, OAAM, OAPM, and OIN.

### 2.1 Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation

This section discusses the following topics:

- **Overview**
- **Structure of the Installation**

#### 2.1.1 Overview

Oracle Identity Management 11g Release 1 (11.1.1.3.0) includes two distinct suites comprising the following Oracle Identity Management products:

- **idm.zip** comprising Oracle Identity Management 11.1.1.2.0 products (Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), Oracle Directory Services Manager (ODSM), Oracle Directory Integration Platform (ODIP), and Oracle Identity Federation (OIF)
2.1.2 Structure of the Installation

You can install both of the Oracle Identity Management 11.1.1.3.0 products under a common Middleware Home directory. When you install these suites on the same machine, two Oracle Home (also referred to as IDM_Home in this guide) directories are created on the machine. For information about identifying installation directories, see Section 4.1.3, "Identifying Installation Directories" and Section 4.2.4, "Identifying Installation Directories".

Note that two IDM_Home directories are mentioned in descriptions and procedures throughout this guide. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this guide. You can specify any name for either of your IDM_Home directories. In addition, you can install the two distinct Oracle Identity Management suites in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

2.2 OID, OVD, ODSM, ODIP, and OIF

This section discusses the following topics:

- 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
- Executing the oracleRoot.sh Script on UNIX Platforms

Note: You must use the idm_patchset.zip to patch your Oracle Identity Management 11.1.1.2.0 products to Oracle Identity Management 11.1.1.3.0.

See Part I, "Installing and Configuring OID, OVD, ODSM, ODIP, and OIF" in this guide for installing and configuring these products.
2.2.1 Installation Roadmap

Table 2–1 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>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Documentation</th>
<th>Mandatory or Optional?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 2 - Run RCU to create the necessary schemas.</td>
<td>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.</td>
<td>Make sure you have a supported Oracle database up and running. See <a href="http://www.oracle.com/technolgy/software/products/ias/files/fusion_certification.html">http://www.oracle.com/technolgy/software/products/ias/files/fusion_certification.html</a> for more information. Instructions for creating the schema are provided in “Running Repository Creation Utility (RCU)” in the Oracle Fusion Middleware Repository Creation Utility User’s Guide. In addition, refer to Creating Database Schema Using the Repository Creation Utility (RCU) in this guide.</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Task 3 - Install Oracle WebLogic Server and create a Middleware home.</td>
<td>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.</td>
<td>Installation instructions are provided in Oracle WebLogic Server Installation Guide. For more information about the Middleware home and WebLogic home directories, see Oracle Fusion Middleware Concepts Guide.</td>
<td>Mandatory</td>
</tr>
</tbody>
</table>
2.2.2 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**
2.2.2.1 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 (11.1.1.3.0) Configuration Wizard. To start the Oracle Identity Management 11g Release 1 (11.1.1.3.0) Configuration Wizard, execute the ORACLE_HOME/bin/config.sh script (config.bat on Windows).

**Important:** To install the latest Oracle Identity Management software, you must choose the Install Software - Do Not Configure installation type.

2.2.2.2 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.

**Note:** Do not choose the Install and Configure option if you want to install the latest Oracle Identity Management software.

2.2.3 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.

2.2.3.1 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.

2.2.3.2 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.

Note that Oracle Identity Management 11.1.1.3.0 (the suite containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Integration Platform) does not support Oracle JRockit JDK.

---

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 (11.1.1.3.0) Configuration Wizard, the existing domain must have been created using the Oracle Identity Management 11g Release 1 (11.1.1.3.0) 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.

---

2.2.3.3 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

2.2.3.4 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 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.

### 2.2.4 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 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 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 Repository:

- *Oracle Fusion Middleware Installation Planning Guide*
- *Oracle Fusion Middleware Administrator’s Guide for Oracle Internet Directory*

### 2.2.5 Executing the oracleRoot.sh Script on UNIX Platforms

During installation on 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 `/usr/local/bin/` 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.
2.2.6 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

2.2.6.1 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 Oracle Fusion Middleware Administrator’s Guide for more information.

2.2.6.2 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:

- Oracle Fusion Middleware Administrator’s Guide
- Component-specific guides listed in the "Related Documents" section in this guide’s Preface.

2.2.6.3 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 port: 6501
  - SSL port: 7501
  - Admin port: 8899
  - HTTP port: 8080

  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 port.

- **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

### 2.3 OIM, OAM, OAAM, OAPM, and OIN

This section discusses the following topics:

- Installation Roadmap
- Prerequisite Checks Performed by the Oracle Identity Management Installer
- Understanding Oracle WebLogic Server Administration Domain Options
- Additional Configuration Using the Oracle Identity Manager 11g Configuration Wizard
- Additional 11g Release 1 (11.1.1.3.0) Deployment Information
- Silent Installation
- Installing Components on Separate Systems
- Screens in Oracle Fusion Middleware Configuration Wizard
- Understanding the State of Oracle Identity Management Components After Installation

#### 2.3.1 Installation Roadmap

Table 2–2 lists the tasks required to install and configure Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.
Table 2-2  Installation Flow for Oracle Identity Management

<table>
<thead>
<tr>
<th>No.</th>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review installation concepts in the Installation Planning Guide.</td>
<td>Read the <em>Oracle Fusion Middleware Installation Planning Guide</em>, which describes the process for various users to install or upgrade to Oracle Fusion Middleware 11g (11.1.1.3) depending on the user’s existing environment.</td>
</tr>
<tr>
<td>2</td>
<td>Review the system requirements and certification documents to ensure that your environment meets the minimum installation requirements for the components you are installing.</td>
<td>Read the <em>System Requirements and Specifications</em> document that covers information such as hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches: <a href="http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm">http://www.oracle.com/technology/software/products/ias/files/fusion_requirements.htm</a> Read the Certification document that covers supported installation types, platforms, operating systems, databases, JDKs, and third-party products: <a href="http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html">http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html</a></td>
</tr>
<tr>
<td>3</td>
<td>Install the Oracle 11.1.1 database and any required patches.</td>
<td>For more information, see <em>Installing Oracle Database</em>.</td>
</tr>
<tr>
<td>4</td>
<td>Install Oracle WebLogic Server 10.3.3, and create a Middleware Home.</td>
<td>For more information, see <em>Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home</em>.</td>
</tr>
<tr>
<td>5</td>
<td>Run Repository Creation Utility (RCU) to create and load the appropriate schemas for Oracle Identity Management products</td>
<td>For more information, see <em>Creating Database Schema Using the Repository Creation Utility (RCU)</em>.</td>
</tr>
<tr>
<td>6</td>
<td>Install the Oracle Identity Management 11g software.</td>
<td>For more information, see <em>Installing the Oracle Identity Management 11g Software</em>.</td>
</tr>
<tr>
<td>7</td>
<td>For Oracle Identity Manager users only:</td>
<td>Install the latest version of Oracle SOA Suite 11g (11.1.1.3.0). For more information, see <em>Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)</em>.</td>
</tr>
<tr>
<td>8</td>
<td>Run the Oracle Fusion Middleware Configuration Wizard to configure your Oracle Identity Management products in a new or existing WebLogic domain.</td>
<td>For more information, see the following chapters: ■ Configuring Oracle Identity Navigator (OIN) ■ Configuring Oracle Identity Manager (OIM) ■ Configuring Oracle Access Manager (OAM) ■ Configuring Oracle Adaptive Access Manager (OAAM) ■ Configuring Oracle Authorization Policy Manager (OAPM)</td>
</tr>
<tr>
<td>9</td>
<td>Start the servers.</td>
<td>For more information, see <em>Starting the Stack</em>.</td>
</tr>
<tr>
<td>10</td>
<td>For Oracle Identity Manager users only:</td>
<td>For more information, see the following topics: ■ Configuring OIM Server ■ Configuring OIM Design Console ■ Configuring OIM Remote Manager.</td>
</tr>
</tbody>
</table>
Oracle Identity Management components will not start running after installing them using the Oracle Identity Management 11g Installer. For information about starting the components after installation, see the Getting Started topics in specific chapters in this guide.

The following figure illustrates the process of installing the Oracle Identity Management 11g software components (the suite containing OIM, OAM, OAAM, OAPM, and OIN).

**Figure 2–1  Oracle Identity Management Installation and Configuration Workflow**

Table 2–3 lists the Installers and tools used to install and configure Oracle Identity Management 11g components at different stages of the installation process.

**Table 2–3  Installation and Configuration Tools**

<table>
<thead>
<tr>
<th>Task</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install Oracle WebLogic Server</td>
<td>Oracle WebLogic Server Installer</td>
</tr>
</tbody>
</table>

For more information, see Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
### 2.3.2 Prerequisite Checks Performed by the Oracle Identity Management Installer

The Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installer ensures that your machine has a certified version of the operating system, the correct software packages (service packs), and sufficient physical memory to install the Oracle Identity Management applications on your machine.

On Windows operating systems, the Installer verifies the operating system version, service pack, and physical memory (at least 1024 MB).

On UNIX operating systems, the Installer verifies the operating system version, operating system packages, kernel parameters, glibc version, and physical memory (at least 1024 MB).

### 2.3.3 Understanding Oracle WebLogic Server Administration Domain Options

After Oracle Identity Management 11g is installed, you are ready to configure the WebLogic Server Administration Domain for Oracle Identity Management components. 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 a New Domain
- Extend an Existing Domain

### Table 2–3 (Cont.) Installation and Configuration Tools

<table>
<thead>
<tr>
<th>Task</th>
<th>Tool</th>
</tr>
</thead>
</table>
| Install Oracle SOA 11g Suite | Oracle SOA 11g Suite Installer  
For more information, see Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only). |
| Create and load database schema | Repository Creation Utility (RCU)  
For more information, see Creating Database Schema Using the Repository Creation Utility (RCU). |
| Upgrade your existing database schema | Oracle Fusion Middleware 11g Upgrade Assistant  
For more information, see the guide Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management. |
| Install the Oracle Identity Management 11g software | Oracle Identity Management 11g Installer  
For more information, see Installing the Oracle Identity Management 11g Software. |
| Create or extend a WebLogic administration domain | Oracle Fusion Middleware Configuration Wizard  
For more information, see Screens in Oracle Fusion Middleware Configuration Wizard. |
| Install and configure Oracle Identity Manager Server, Design Console, and Remote Manager | Oracle Identity Manager 11g Configuration Wizard  
For more information, see Configuring OIM Server, Design Console, and Remote Manager. |
2.3.3.1 Create a New Domain
Select the **Create a new WebLogic domain** option on the Welcome screen in the Oracle Fusion Middleware Configuration Wizard to create a new WebLogic Server domain.

2.3.3.2 Extend an Existing Domain
Select the **Extend an existing WebLogic domain** option on the Welcome screen in the Oracle Fusion Middleware Configuration Wizard to add Oracle Identity Management components in an existing Oracle WebLogic Server administration domain. When you add Oracle Identity Management components using this option, they are essentially “joining” an existing domain.

For more information, see **Understanding Domain Extension Scenarios**.

2.3.4 Additional Configuration Using the Oracle Identity Manager 11g Configuration Wizard

Read this section only if you are installing Oracle Identity Manager. After you install Oracle Identity Manager by using the Oracle Identity Management 11g Installer software, you can encrypt secure data in Oracle Identity Manager schema, create keystores, and so on. You can configure such elements by using the Oracle Identity Manager 11g Release 1 (11.1.1) Configuration Wizard, which is included with the release media.

On UNIX operating systems, to start the Oracle Identity Manager 11g Release 1 (11.1.1) Configuration Wizard, run the `<IAMSUITE_IDM_HOME>/bin/config.sh` script. On Windows operating systems, run the `<IAMSUITE_IDM_HOME>`\`\bin\config.bat` script. Note that `<IAMSUITE_IDM_HOME>` refers to your IDM_Home directory that contains Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

2.3.5 Additional 11g Release 1 (11.1.1.3.0) Deployment Information

This topic describes additional sources for 11g Release 1 (11.1.1.3.0) deployment information, including documentation on the following subjects:

- **Upgrading to 11g Release 1 (11.1.1.3.0)**
- **Installing 11g Release 1 (11.1.1.3.0) for High Availability**

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.

2.3.5.1 Upgrading to 11g Release 1 (11.1.1.3.0)

This guide does not explain how to upgrade previous versions of Oracle Identity Management components to 11g Release 1 (11.1.1.3.0). To upgrade an Oracle Identity Management component:

From Release 10g to 11g Release 1 (11.1.1.3.0), refer to:

- **Oracle Fusion Middleware Upgrade Planning Guide**
2.3.5.2 Installing 11g Release 1 (11.1.1.3.0) 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 the following documents:

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

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

2.3.6 Silent Installation

In addition to the standard graphical installation option, you can perform silent installation of the Oracle Identity Management 11g software. A silent installation runs on its own without any intervention, and you do not have to monitor the installation and provide input to dialog boxes.

For more information, see Performing a Silent Installation.

2.3.7 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 Identity Manager Server on one system, and Oracle Identity Manager Design Console on a different system.
- Oracle Identity Management components use an Oracle Database to contain the Oracle Metadata 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 Repository, the Oracle Identity Management components will need network access to the repository.

2.3.8 Screens in Oracle Fusion Middleware Configuration Wizard

The Oracle Fusion Middleware Configuration Wizard displays screens based on your domain configuration options. You can use the Oracle Fusion Middleware Configuration Wizard in the following scenarios:

- Creation of a new WebLogic administration domain, which involves the configuration of Administration Server parameters, server start mode, and so on.
- Configuration of an existing domain to support Oracle Identity Management components by extending the domain.
2.3.9 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

2.3.9.1 Default SSL Configurations

By default, most of the Oracle Identity Management 11g components are not installed with SSL configured. Only Oracle Adaptive Access Manager is configured with SSL. For other components, you must configure SSL for the Oracle WebLogic Administration Server and Oracle WebLogic Managed Server after installation.

See: The "SSL Configuration in Oracle Fusion Middleware" topic in the Oracle Fusion Middleware Administrator’s Guide for more information.

2.3.9.2 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:

- The "Getting Started Managing Oracle Fusion Middleware" topic in the guide Oracle Fusion Middleware Administrator’s Guide.
- Component-specific guides listed in the "Related Documents" section in this guide’s Preface.
Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0)

This chapter provides information you should review before installing Oracle Identity Management 11g Release 1 (11.1.1.3.0) components. It includes the following topics:

- OID, OVD, ODSM, ODIP, and OIF
- OIM, OAM, OAAM, OAPM, and OIN

**Note:** For information about prerequisites for installing the 11.1.1.2.0 version of Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), Oracle Directory Services Manager (ODSM), Oracle Directory Integration Platform (ODIP), and Oracle Identity Federation (OIF) and patching them to 11.1.1.3.0, see OID, OVD, ODSM, ODIP, and OIF.

For information about prerequisites for installing the 11g (11.1.1.3.0) version of Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), see OIM, OAM, OAAM, OAPM, and OIN.

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

This section discusses the following topics:

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

### 3.1.1 System Requirements and Certification

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

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


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

Oracle Fusion Middleware Supported System Configurations

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


3.1.2 Installing and Configuring Java Access Bridge (Windows Only)

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

1. Download Java Access Bridge from the following Web site:
   http://java.sun.com/javase/technologies/accessibility/accessbridge/

2. Install Java Access Bridge.

3. Copy access-bridge.jar and 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.

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

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

1. Verify the Oracle WebLogic Server Node Manager utility is stopped. If it is running, kill the process.

2. Determine if the nodemanager.properties file is present in the WL_HOME/common/nodemanager/ directory.

   - If the nodemanager.properties file is not present, continue installing Oracle Identity Management.

   - If the nodemanager.properties file does exist, open it and verify that the ListenPort parameter is included and that it is set. If the ListenPort parameter is not included or set, edit the nodemanager.properties file so that it
is similar to the following, where `NODE_MANAGER_LISTEN_PORT` represents the port the Node Manager listens on, such as 5556:

```
ListenPort=NODE_MANAGER_LISTEN_PORT
```

### 3.1.4 Installing Oracle Database

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

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

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


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

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


---

**Note:** If you are preparing a database for Oracle Single Sign-On and Oracle Delegated Administration Services 10g, ensure that Ultrasearch is installed with the 371 WKSYS Objects in the database. For more information about installing Ultrasearch for 10g components, see the metalink note 337992.1 - How to Manually Install and Uninstall Ultrasearch 10gR2 Server Components, which is available at the following Web site:

https://webiv.oraclecorp.com/cgi-bin/webiv/do.pl/Get?WwwID=note:337992.1

In addition, ensure that the following database parameters are set:

- `'aq_tm_processes' >= 1`
- `'db_cache_size' => '150994944'`
- `'java_pool_size' => '125829120'`
- `'shared_pool_size' => '183500800'`

---

### 3.1.5 Creating Database Schema Using the Repository Creation Utility (RCU)

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

- Oracle Internet Directory, if you want to use an existing schema rather than create a new one using the Installer during installation.
Oracle Identity Federation Advanced configurations that use RDBMS for the Federation Store, Session Store, Message Store, or Configuration Store.

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

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

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.

### 3.1.6 Optional Environment-Specific Preparation

This topic describes optional environment-specific tasks you may want to perform before installing Oracle Identity Management 11g Release 1 (11.1.1.3.0). This topic includes the following sections:

- **Using Symbolic Links**
- **Installing Oracle Identity Management on DHCP Hosts**
- **Installing Oracle Identity Management on a Multihomed System**
3.1.6.1 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.

3.1.6.2 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 server, which assigns a local IP address to your system.

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:

```
IP_address hostname.domainname hostname
```

3.1.6.3 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:
For specific network configuration of a system component, refer to the individual component's documentation listed in "Related Documents" for more information.

3.2 OIM, OAM, OAAM, OAPM, and OIN

This section discusses the following topics related to Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN):

- Oracle Fusion Middleware Certification
- System Requirements
- Installing and Configuring Java Access Bridge (Windows Only)
- Obtaining the Latest Oracle WebLogic Server and Oracle Fusion Middleware 11g Software
- Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home
- Installing Oracle Database
- Creating Database Schema Using the Repository Creation Utility (RCU)
- Upgrading an Existing Database Schema
- Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)

3.2.1 Oracle Fusion Middleware Certification

The Oracle Fusion Middleware Supported System Configurations document provides certification information for Oracle Fusion Middleware, including supported installation types, platforms, operating systems, databases, JDKs, and third-party products related to Oracle Identity Management 11g Release 1 (11.1.1.3.0).

You can access the Oracle Fusion Middleware Supported System Configurations document by searching the Oracle Technology Network (OTN) web site:


3.2.2 System Requirements

This topic describes the system requirements for installing Oracle Identity Management 11g Release 1 (11.1.1.3.0) and includes the following sections:

- Most Recent Information
- Installer Startup Requirements
- Memory Requirements

3.2.2.1 Most Recent Information

The information in this topic is current at the time of publication. For the most recent information, refer to the Oracle Fusion Middleware System Requirements, Prerequisites,
Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0)

3.2.2.2 Installer Startup Requirements

When you start the Installer, it checks for the requirements listed in Table 3–1. The Installer will notify you if any requirements are not met.

Table 3–1 Installer Startup Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum or Accepted Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform</td>
<td>UNIX:</td>
</tr>
<tr>
<td></td>
<td>■ Solaris 9, Solaris 10</td>
</tr>
<tr>
<td></td>
<td>■ HP-UX 11i (11.23), HP-UX 11i (11.31)</td>
</tr>
<tr>
<td></td>
<td>■ Oracle Enterprise Linux 4, Oracle Enterprise Linux 5, Red Hat Linux 4, Suse 11,</td>
</tr>
<tr>
<td></td>
<td>Red Hat Linux 5, SUSE 10</td>
</tr>
<tr>
<td></td>
<td>■ IBM AIX 5.3, IBM AIX 6.1</td>
</tr>
<tr>
<td></td>
<td>Windows:</td>
</tr>
<tr>
<td></td>
<td>■ Windows XP SP2 (Win32 platforms only), Windows 2003, Windows 2008,</td>
</tr>
<tr>
<td></td>
<td>Windows Vista, Windows 7</td>
</tr>
<tr>
<td>CPU Speed</td>
<td>At least 300 MHZ</td>
</tr>
<tr>
<td>Temp Space</td>
<td>At least 500 MB</td>
</tr>
<tr>
<td>Swap Space</td>
<td>At least 500 MB</td>
</tr>
<tr>
<td>Monitor</td>
<td>At least 256 colors</td>
</tr>
</tbody>
</table>

3.2.2.3 Memory Requirements

Table 3–2 lists the minimum memory requirements to install Oracle Identity Management 11g Release 1 (11.1.1.3.0):

Table 3–2 Minimum Memory Requirements

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Minimum Physical Memory</th>
<th>Minimum Available Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux</td>
<td>2 GB</td>
<td>1 GB</td>
</tr>
<tr>
<td>UNIX</td>
<td>2 GB</td>
<td>1 GB</td>
</tr>
<tr>
<td>Microsoft Windows</td>
<td>2 GB</td>
<td>1 GB</td>
</tr>
</tbody>
</table>

The specific memory requirements for your Oracle Identity Management 11g Release 1 (11.1.1.3.0) deployment depends on which components, or combination of components, you install.

3.2.3 Installing and Configuring Java Access Bridge (Windows Only)

If you are installing Oracle Identity Management on a Windows operating 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 URL:

   http://java.sun.com/javase/technologies/accessibility/accessbridge/
2. Install Java Access Bridge.

3. Copy access-bridge.jar and jaccess-1_4.jar from your installation location to the jre\lib\ext directory.

4. Copy the WindowsAccessBridge.dll, JavaAccessBridge.dll, and JAWTAccessBridge.dll files from your installation location to the jre\bin directory.

5. Copy the accessibility.properties file to the jre\lib directory.

3.2.4 Obtaining the Latest Oracle WebLogic Server and Oracle Fusion Middleware 11g Software

Refer to the following for more information about the latest Oracle WebLogic Server and Oracle Fusion Middleware 11g software:

- You can download the latest Oracle Fusion Middleware 11g software from the Oracle Technology Network (OTN):
  http://www.oracle.com/technology/

  For information about downloading Oracle WebLogic Server, see "Product Distribution" in the Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server.

- Oracle Fusion Middleware 11g also requires the latest version of Oracle WebLogic Server. At the time this document was published, the latest version of Oracle WebLogic Server was Oracle WebLogic Server 11g (10.3.3).

- For complete information about patching your Oracle Fusion Middleware 11g to the latest release, refer to the Oracle Fusion Middleware Patching Guide.

3.2.5 Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home

Before you can install Oracle Identity Management 11g Release 1 (11.1.1.3.0) components, you must install Oracle WebLogic Server and create the Oracle Middleware Home directory.

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

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

   For information about downloading Oracle WebLogic Server, see "Product Distribution" in the Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server.

2. Locate the appropriate executable file for your system, such as:
   - wls_linux32.bin for 32-bit Linux systems
   - wls_win32.exe for 32-bit Windows systems
wls_generic.jar for all 64-bit platforms

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


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

For example, on 32-bit systems:

Linux:

./wls_linux32.bin

Windows:

wls_win32.exe

For example, on 64-bit systems:

UNIX:

JAVA_HOME/bin/java -jar wls_generic.jar

or

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

Windows:

JAVA_HOME\bin\java -jar wls_generic.jar

For 64-bit installations:

- Before running the installer, set the DISPLAY environment variable on your system.
- Replace JAVA_HOME with the installation location of the supported JDK you installed for your platform.
- Use the -d64 flag when using 32/64-bit hybrid JDKs (such as the HP JDK for HP-UX and SUN JDK for Solaris SPARC).
- Execute JAVA_HOME/bin/java -version (or JAVA_HOME/bin/java -d64 -version on 32/64-bit hybrid JDKs) to ensure that your JAVA_HOME refers to a 64-bit JDK.

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


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

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

Click Next. The Choose Install Type screen appears.

7. Select the Typical install type and click Next. The JDK Selection screen appears. On this screen, select the Sun JDK or the Oracle JRockit JDK. Click Next.

The Choose Product Installation Directories screen appears.

8. Specify the desired location for your WebLogic Server Home directory and click Next.

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

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


The Installation Progress screen appears.

10. Click Next. The Installation Complete screen appears.

11. De-select Run Quickstart and click Done to exit the Installer.

Notes:

The same user that installed Oracle WebLogic Server must install Oracle Identity Management.

Do not log in to the Oracle WebLogic Server Administration Console during Oracle Identity Management installation.

Oracle WebLogic Server Directory Structure

After you install Oracle WebLogic Server and create a Middleware Home, a home directory, such as wlserver_10.3, is created for Oracle WebLogic Server under your Middleware Home. This home directory is referred to as WL_HOME or WLS_HOME.

At the same level as WL_HOME, separate directories are created for the following components associated with Oracle WebLogic Server:

- Sun JDK - jdk160_18
- Oracle JRockit - jrockit_160_17_R28.0.0-679

Note that WebLogic domains are created in a directory named domains located in the user_projects directory under your Middleware Home. After you configure any of the Oracle Identity Management products in a WebLogic administration domain, a new directory for the domain is created in the domains directory. In addition, a
directory named applications is created in the user_projects directory. This applications directory contains the applications deployed in the domain.

3.2.6 Installing Oracle Database

You must install an Oracle Database before you can install some Oracle Identity Management components. 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 following database versions are supported:

- 10.2.0.4
- 11.1.0.7
- 11.2

Note: You can locate the most recent information about supported databases by referring to the "Oracle Fusion Middleware Certification" topic in this chapter.

The database must also be compatible with Oracle Repository Creation Utility (RCU), which is used to create the schemas that Oracle Identity Management components require.

Table 3–3 lists the databases requirements for RCU at the time of publication:

### Table 3–3  RCU Database Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Minimum or Accepted Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>Oracle Database 10.2.0.4, 11.1.0.7, or 11.2 (11.1.0.7 or later for non-XE database) using the AL32UTF8 character set.</td>
</tr>
<tr>
<td>Shared Pool Size</td>
<td>147456 KB</td>
</tr>
<tr>
<td>SGA Maximum Size</td>
<td>147456 KB</td>
</tr>
<tr>
<td>Block Size</td>
<td>8 KB</td>
</tr>
<tr>
<td>Processes</td>
<td>500</td>
</tr>
</tbody>
</table>

Note: After installing the Oracle 11g database, you must complete the following steps:

1. Log in to the database as the sys (default) user.
2. Run the following scripts:
   ```
   alter system set session_cached_cursors=100 scope=spfile;
   alter system set processes=500 scope=spfile;
   ```
3. Bounce the database and continue with the installation of Repository Creation Utility (RCU) and loading of schemas.

3.2.6.1 Oracle Database 11.1.0.7 Patch Requirements for Oracle Identity Manager

If you are using Oracle Database 11.1.0.7, be sure to download and install the following patches before creating Oracle Identity Manager schemas:
On Linux x86 operating systems: Patch 7614692, Patch 7628358, Patch 7000281, Patch 8327137, and Patch 7598314

On Windows 32-bit operating systems: Patch 8416539, Patch 8689191, Patch 8451592, and Patch 8260294

Note: You can download these patches from the following Oracle Automated Release Updates (ARU) website:

http://support.oracle.com/

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

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

- Oracle Identity Manager
- Oracle Access Manager
- Oracle Adaptive Access Manager
- Oracle Authorization Policy Manager

You create and load Oracle Fusion Middleware schema in your database using the Repository Creation Utility (RCU), which is available on the Oracle Technology Network (OTN) web site. You can access the OTN web site at:

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

Note: RCU is available only on Linux and Windows platforms. Use the Linux RCU to create schemas on supported UNIX databases. Use Windows RCU to create schemas on supported Windows databases. After you extract the contents of the rcuHome.zip file to a directory, you can see the executable file rcu in the BIN directory.

For information about launching and running RCU, see the "Launching RCU with a Variety of Methods" and "Running Repository Creation Utility (RCU)" topics in the guide Oracle Fusion Middleware Repository Creation Utility User’s Guide. For information about troubleshooting RCU, see the "Troubleshooting Repository Creation Utility" topic in the guide Oracle Fusion Middleware Repository Creation Utility User’s Guide.

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 Identity Manager, select the Identity Management - Oracle Identity Manager schema. The SOA Infrastructure schema, the User Messaging Service schema, and the Metadata Services schema are also selected, by default.

- For Oracle Adaptive Access Manager, select the Identity Management - Oracle Adaptive Access Manager schema. By default, the AS Common Schemas - Metadata Services schema is also selected.

For Oracle Adaptive Access Manager with partition schema support, select the Identity Management - Oracle Adaptive Access Manager (Partition Supp...)
schema. By default, the **AS Common Schemas - Metadata Services** schema is also selected.

---

**Note:** For information about Oracle Adaptive Access Manager schema partitions, see **OAAM Partition Schema Reference**.

---

- For Oracle Access Manager, select the **Identity Manager - Oracle Access Manager** schema. By default, the **AS Common Schema - Audit Services** schema is also selected.

- For Oracle Authorization Policy Manager, select the **Identity Management - Authorization Policy Manager** schema. By default, the **AS Common Schemas - Metadata Services** schema is also selected.

---

**Note:** When you create a schema, be sure to remember the schema owner and password that is shown in RCU.

If you are creating schemas on databases with Oracle Database Vault installed, note that statements such as CREATE USER, ALTER USER, DROP USER, CREATE PROFILE, ALTER PROFILE, and DROP PROFILE can only be issued by a user with the DV_ACCTMGR role. SYSDBA can issue these statements by modifying the Can Maintain Accounts/Profiles rule set only if it is allowed.

---

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

### 3.2.8 Upgrading an Existing Database Schema

If you want to reuse an existing database schema, you must upgrade your old database schema to work with Oracle Fusion Middleware 11g products and components.

For information about upgrading your existing database schema, see **Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management**.

### 3.2.9 Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)

If you are installing Oracle Identity Manager, you must install the latest version of Oracle SOA Suite (11.1.1.3.0).

Follow the instructions in this section to install the latest Oracle SOA Suite software. The installation of Oracle SOA Suite is a prerequisite for configuring Oracle Identity Manager.

Installing the latest version of Oracle SOA Suite 11g involves the following steps:

1. **Obtaining the Latest Oracle WebLogic Server and Oracle SOA Suite Software**
2. **Installing Oracle WebLogic Server and Creating the Middleware Home**
3. **Installing the Latest Version of Oracle SOA Suite**
4. **Patching the Software to 11.1.1.3.0**
3.2.9.1 Obtaining the Latest Oracle WebLogic Server and Oracle SOA Suite Software

Refer to the following for more information about the latest Oracle WebLogic Server and Oracle Fusion Middleware 11g software:

- You can download the latest Oracle Fusion Middleware 11g software from the Oracle Technology Network (OTN):
  
  http://www.oracle.com/technology/

- At the time this document was published, the latest release of Oracle Fusion Middleware 11g was 11g Release 1 (11.1.1.3.0), which provides new features and capabilities that supersede those available in Oracle Fusion Middleware 11g Release 1 (11.1.1.1.0) and 11g Release 1 (11.1.1.2.0).

- Oracle Fusion Middleware 11g also requires the latest version of Oracle WebLogic Server. At the time this document was published, the latest version of Oracle WebLogic Server was Oracle WebLogic Server 11g (10.1.3.3).

- For complete information about patching your Oracle Fusion Middleware 11g to the latest release, refer to the Oracle Fusion Middleware Patching Guide.

3.2.9.2 Installing Oracle WebLogic Server and Creating the Middleware Home

Oracle SOA Suite requires Oracle WebLogic Server and a Middleware Home directory. For more information, see "Install Oracle WebLogic Server" in Oracle Fusion Middleware Installation Planning Guide. In addition, see "Running the Installation Program in Graphical Mode" in Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server.

---

**Note:** If you have already created a Middleware Home before installing Oracle Identity Management components, you do not need to create a new Middleware Home again. You must use the same Middleware Home for installing Oracle SOA Suite.

---

3.2.9.3 Installing the Latest Version of Oracle SOA Suite

Note that only Oracle Identity Manager requires Oracle SOA Suite 11g (11.1.1.3.0). This step is required because Oracle Identity Manager uses process workflows in Oracle SOA Suite to manage request approvals.

Follow the instructions in Table 3-4 to install Oracle SOA Suite. If you need additional help with any of the installation screens, click Help to access the online help.

To start the Oracle SOA Suite installation wizard, you must complete the following steps:

1. Extract the contents of the soa.zip (11.1.1.2.0) to a directory, such as soa.
2. From your present working directory, move to the Disk1 directory under soa.
3. From the Disk1 directory, run runInstaller (on UNIX) or setup.exe (on Windows) executable files to launch the Oracle SOA Suite 11.1.1.2.0 installation wizard.
3.2.9.4 Patching the Software to 11.1.1.3.0

After the installation is complete, you must run the Patch Set Installer for Oracle SOA Suite (included in the Disk1 directory under the soa_patchset.zip file) to update your 11.1.1.2.0 software to the latest version of Oracle SOA Suite (11.1.1.3.0).

For instructions, go to "Applying the Latest Oracle Fusion Middleware Patch Set with the Patch Set Installers" in Oracle Fusion Middleware Patching Guide.

---

### Table 3–4 Installation Flow for Install Only Option

<table>
<thead>
<tr>
<th>No.</th>
<th>Screen</th>
<th>Description and Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome Screen</td>
<td>Click Next to continue.</td>
</tr>
<tr>
<td>2</td>
<td>Prerequisite Checks Screen</td>
<td>Click Next to continue.</td>
</tr>
<tr>
<td>3</td>
<td>Specify Installation Location Screen</td>
<td>Specify the Middleware Home and Oracle Home locations. You must specify the location of the same Middleware Home that contains Oracle Identity Management components. For more information about these directories, see &quot;Oracle Fusion Middleware Directory Structure and Concepts&quot; in Oracle Fusion Middleware Installation Planning Guide. Click Next to continue.</td>
</tr>
<tr>
<td>4</td>
<td>Specify Security Updates Screen</td>
<td>Provide your E-mail address to be informed of the latest product issues. Click Next to continue.</td>
</tr>
<tr>
<td>5</td>
<td>Installation Summary Screen</td>
<td>Verify the information on this screen. Click Install to begin the installation.</td>
</tr>
<tr>
<td>6</td>
<td>Installation Progress Screen</td>
<td>If you are installing on a UNIX system, you may be asked to run the ${ORACLE_HOME}/oracleRoot.sh script to set up the proper file and directory permissions. Click Next to continue.</td>
</tr>
<tr>
<td>7</td>
<td>Installation Complete Screen</td>
<td>Click Finish to dismiss the installer.</td>
</tr>
</tbody>
</table>

Note: At this stage of the installation process, do not configure a WebLogic domain for Oracle SOA Suite.
Performing Common Installation Tasks

This chapter describes tasks that are common to most Oracle Identity Management installations and configurations. It includes the following topics:

- OID, OVD, ODSM, ODIP, and OIF
- OIM, OAM, OAAM, OAPM, and OIN

Note: For information about common installation tasks related to the 11.1.1.3.0 version of Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), Oracle Directory Services Manager (ODSM), Oracle Directory Integration Platform (ODIP), and Oracle Identity Federation (OIF), see OID, OVD, ODSM, ODIP, and OIF.

Note: For information about common installation tasks related to the 11g (11.1.1.3.0) version of Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), see OIM, OAM, OAAM, OAPM, and OIN.

4.1 OID, OVD, ODSM, ODIP, and OIF

This section discusses the following topics:

- Starting an Installation
- Creating the Inventory Directory (UNIX Only)
- Identifying Installation Directories
- Determining Port Numbers
- Completing an Installation
- Optional: Configuring the Minimum Amount for Oracle WebLogic Server’s Maximum Heap Size
- Locating Installation Log Files

4.1.1 Starting an Installation

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

Note: Starting the Installer as the root user is not supported.
Perform the following steps to start an Oracle Identity Management installation:

1. Start the Installer by executing one of the following commands:
   - UNIX: ./runInstaller
   - Windows: DRIVE:\setup.exe
   After the Installer starts, the Welcome screen appears.

2. Click **Next** on the Welcome screen. The Select Installation Type screen appears.

3. Select **Install - Do Not Configure** and click **Next**. The Prerequisites Check screen appears.

4. Monitor the prerequisites checking.
   - If there is an issue, an error or warning message will appear. Investigate the issue and resolve it. After resolving the issue, click **Retry** to restart the prerequisite checks.

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

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

After installing the software, you can configure the Oracle Identity Management component by running the Oracle Identity Management Configuration Wizard. To start this configuration wizard, run the following command:

- On UNIX: `<Oracle_Home>/bin/config.sh`
- On Windows: `<Oracle_Home>\bin\config.bat`

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

### 4.1.2 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>
<thead>
<tr>
<th>Screen</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify Inventory Directory</td>
<td>Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory. Click <strong>OK</strong> to continue.</td>
</tr>
<tr>
<td>Inventory Location Confirmation</td>
<td>Run the createCentralInventory.sh script as root. Click <strong>OK</strong> to continue.</td>
</tr>
</tbody>
</table>
4.1.3 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

4.1.3.1 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 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 \textit{MW\_HOME}.

\textbf{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.

4.1.3.2 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 \textit{ORACLE\_HOME}.

\textbf{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.
4.1.3.3 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.

4.1.3.4 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 processes in the Oracle Instance directory. Runtime components will write only to this directory. You can identify any location on your system for the Oracle Instance directory—it does not have to reside inside the Oracle Middleware Home directory.

4.1.3.5 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 hostname or IP address of the computer

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

4.1.4 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.

### 4.1.5 Completing an Installation

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

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

1. Verify the installation and configuration information on the Installation Summary screen.
   - Click **Save** to save the installation response file, which contains your responses to the Installer prompts and fields. You can use this response file to perform silent installations. Refer to Appendix B, "Performing Silent Installations" for more information.

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

   - Click **Install**. The Installation Progress screen appears.

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

   **Note:** On Unix systems, after the installation progress reaches 100%, a confirmation dialog box appears with information about the oracleRoot.sh script. Execute the script in different terminal as described in "Executing the oracleRoot.sh Script on UNIX Platforms" and continue to the Configuration Progress screen.

3. Monitor the progress of the configuration. The location of the configuration log file is listed for reference. After the configuration progress reaches 100%, the Installation Complete screen appears.

4. By default the installation summary file, which can help you get started with administration, is saved to the \OUI_INVENTORY/logs/ directory. The filename is of the form: installSummary\DATE.txt. This file contains information about the configuration, such as locations of install directories and URLs for management components.

   If desired, you can click the **Save** button on the Installation Complete screen and choose a different name and location for the file.
Click **Finish** to close and exit the Installer.

**4.1.6 Optional: Configuring the Minimum Amount for Oracle WebLogic Server’s Maximum Heap Size**

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

---

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

---

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

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

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

1. Open the `setDomainEnv` script (.sh or .bat) in the `MW_HOME/user_projects/domains/DOMAIN_NAME/bin/` directory.

2. Locate the last occurrence of the `EXTRA_JAVA_PROPERTIES` entry.

3. In the last occurrence of the `EXTRA_JAVA_PROPERTIES` entry, locate the last occurrence of heap size parameters: `-Xms`, `-Xmx`, 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 4–1 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 4–1 Heap Size Parameters for Oracle WebLogic Managed Server**

```bash
if [ "${SERVER_NAME}" = "wls_ods1" -o "${SERVER_NAME}" = "wls_oif1" ] ; then
    EXTRA_JAVA_PROPERTIES=" EXTRA_JAVA_PROPERTIES=" ${EXTRA_JAVA_PROPERTIES} 
    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 A, "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.

---

### 4.1.7 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`
- `installDATE-TIME_STAMP.out`
- `installActionsDATE-TIME_STAMP.log`
- `installProfileDATE-TIME_STAMP.log`
- `oraInstallDATE-TIME_STAMP.err`
- `oraInstallDATE-TIME_STAMP.log`
- `opatchDATE-TIME_STAMP.log`

---

### 4.2 OIM, OAM, OAAM, OAPM, and OIN

This section discusses the following topics:

- Starting an Installation
- Starting Oracle Fusion Middleware Configuration Wizard
- List of Executable Files
- Identifying Installation Directories
- Determining Port Numbers
- Completing an Installation
- Optional: Configuring the Minimum Amount for Oracle WebLogic Server’s Maximum Heap Size
- Locating Installation Log Files
Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only)

4.2.1 Starting an Installation

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

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

1. Extract the contents of the iamsuite.zip file to a directory. By default, this directory is named iamsuite.

2. Move to the Disk1 directory under the iamsuite folder.

3. Start the Installer by executing one of the following commands:
   
   **UNIX:** `<full path to the runInstaller directory>/runInstaller -jreLoc <Middleware Home>/jrockit_160_17/jre`
   
   **Windows:** `<full path to the setup.exe directory>/setup.exe -jreLoc <Middleware Home>/jrockit_160_17/jre`

   **Note:** The installer prompts you to enter the absolute path of the JDK that is installed on your system. When you install Oracle WebLogic Server, the jrockit_160_17 directory is created under your Middleware Home. You must enter the absolute path of the JRE folder located in this JDK when launching the installer. For example, on Windows, if the JRE is located in D:\oracle\Middleware\jrockit_160_17, then launch the installer from the command prompt as follows:

   D:\setup.exe -jreLoc D:\oracle\Middleware\jrockit_160_17\jre

   If you do not specify the -jreLoc option on the command line when using the Oracle JRockit JDK, the following warning message is displayed:

   `-XX:MaxPermSize=512m is not a valid VM option. Ignoring`

   This warning message does not affect the installation. You can continue with the installation.

   After the Installer starts, the Welcome screen appears. Continue by referring to the appropriate procedure in this document for the installation you want to perform.

4.2.2 Starting Oracle Fusion Middleware Configuration Wizard

To start the Oracle Fusion Middleware Configuration Wizard, which is used to configure Oracle Identity Management products in a new or existing WebLogic administration domain, run the `<IDM_Home>/common/bin/config.sh` script (on
On Windows, run the `<IDM_Home>\common\bin\config.cmd` script. The Oracle Fusion Middleware Configuration Wizard is displayed.

**Note:** When you run the `config.cmd` or `config.sh` command, the following error message might be displayed:

```
*sys-package-mgr*: can't create package cache dir
```

The error message indicates that the default cache directory is not valid. You can change the cache directory by including the `-Dpython.cachedir=<valid_directory>` option in the command line.

### 4.2.3 List of Executable Files

Table 4–2 lists the executable files that are included in the Oracle WebLogic Server, Oracle Identity Management, Oracle SOA Suite, Oracle Web Tier, and Oracle HTTP Server 11g Webgate for Oracle Access Manager Installers.

**Table 4–2   Executable Files**

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>iamsuite.zip</td>
<td>After you extract the contents of the <code>iamsuite.zip</code> file to a directory, you can see the executable file <code>runInstaller</code> (for UNIX) or <code>setup.exe</code> (for Windows) in the Disk1 directory. Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installer for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator</td>
</tr>
<tr>
<td>wls_linux32.bin</td>
<td>For 32-bit Linux systems, <code>wls_win32.exe</code> for 32-bit Windows systems, and <code>wls_generic.jar</code> for all 64-bit platforms. Oracle WebLogic Server 10.3.3 Installer</td>
</tr>
<tr>
<td>soa.zip</td>
<td>After you extract the contents of the <code>soa.zip</code> file to a directory, you can see the executable file <code>runInstaller</code> (for UNIX) or <code>setup.exe</code> (for Windows) in the Disk1 directory. Oracle SOA Suite 11g Release 1 (11.1.1.2.0) Installer</td>
</tr>
<tr>
<td>soa_patchset.zip</td>
<td>After you extract the contents of the <code>soa_patchset.zip</code> file to a directory, you can see the executable file <code>runInstaller</code> (for UNIX) or <code>setup.exe</code> (for Windows) in the Disk1 directory. Oracle SOA Suite 11g Release 1 (11.1.1.3.0) Patch Set Installer</td>
</tr>
</tbody>
</table>
4.2.4 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
- Oracle Common Directory
- Oracle WebLogic Domain Directory
- WebLogic Server Directory

4.2.4.1 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 Oracle Middleware Home directory is commonly referred to as \( MW\_HOME \).
4.2.4.2 **Oracle Home Directory**

Enter a name for the Oracle Home directory of the component. 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 required to host the component, such as binaries and libraries, in the Oracle Home directory. The Oracle Home directory is commonly referred to as `ORACLE_HOME`.

---

**Note:** Avoid using spaces in the directory names, including Oracle Home. Spaces in such directory names are not supported.

4.2.4.3 **Oracle Common Directory**

The Installer creates this directory under the location you enter in the Oracle Middleware Home Location field.

The Installer installs the Java Required Files (JRF) required to host the components, in the Oracle Common directory. There can be only one Oracle Common Home within each Oracle Middleware Home. The Oracle Common directory is commonly referred to as `oracle_common`.

4.2.4.4 **Oracle WebLogic Domain Directory**

A WebLogic 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. Usually, you configure a domain to include additional WebLogic Server instances called Managed Servers. You deploy Java components, such as Web applications, EJBs, and Web services, and other resources to the Managed Servers and use the Administration Server for configuration and management purposes only.

Managed Servers in a domain can be grouped together into a cluster.

The directory structure of a domain is separate from the directory structure of the WebLogic Server home. It can reside anywhere; it need not be within the Middleware home directory. A domain is a peer of an Oracle instance.

The Oracle Fusion Middleware Configuration Wizard creates a domain in a directory named `user_projects` under your Middleware Home (`MW_HOME`).

4.2.4.5 **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`.

4.2.5 **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 Identity Manager 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 Identity Manager.
4.2.6 Completing an Installation

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

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

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

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

   - Click **Install**. The Installation Progress screen appears.

2. Monitor the progress of your installation. The location of the installation log file is listed for reference. After the installation progress reaches 100%, click OK. The Installation Complete screen appears.

3. Click **Save** to save the installation summary file. This file contains information about the configuration, such as locations of install directories, that will help you get started with configuration and administration.

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

Click **Finish** to close and exit the Installer.

4.2.7 Optional: Configuring the Minimum Amount for Oracle WebLogic Server’s Maximum Heap Size

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

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

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

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

Perform the following steps to configure the heap size for Oracle WebLogic Administration Servers and Oracle WebLogic Managed Servers:
1. Open the setDomainEnv script (.sh or .bat) in the `MW_HOME/user_projects/domains/DOMAIN_NAME/bin/` directory.

2. Locate the last occurrence of the `EXTRA_JAVA_PROPERTIES` entry.

3. In the last occurrence of the `EXTRA_JAVA_PROPERTIES` entry, locate the last occurrence of heap size parameters: `-Xmx`, `-Xms`, and so on.

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

4. Set the heap size parameters (`-Xms` and `-Xmx`) for the Oracle WebLogic Administration Server as desired, for example: `-Xms256m` and `-Xmx512m`

5. To set the heap size parameters for the Oracle WebLogic Managed Server, enter the text in Example 4–2 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 4–2 Heap Size Parameters for Oracle WebLogic Managed Server on UNIX**
   ```bash
   if [ "${SERVER_NAME}" = "wls_ods1" -o "${SERVER_NAME}" = "wls_oim1" ] ; then
     EXTRA_JAVA_PROPERTIES=" ${EXTRA_JAVA_PROPERTIES} -Xms256m -Xmx256m"
   export EXTRA_JAVA_PROPERTIES
   fi
   
   **Example 4–3 Heap Size Parameters for Oracle WebLogic Managed Server on Windows**
   ```
   if [ "%SERVER_NAME%" = "wls_ods1" -o "%SERVER_NAME%" = "wls_oim1" ] ; 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 A, "Starting and 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.
4.2.8 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`
- `installDATE-TIME_STAMP.out`
- `installActionsDATE-TIME_STAMP.log`
- `installProfileDATE-TIME_STAMP.log`
- `oraInstallDATE-TIME_STAMP.err`
- `oraInstallDATE-TIME_STAMP.log`

4.2.9 Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only)

Read this section only if the user name for the WebLogic Administrator for the domain is not `weblogic`. This task is required only if you are using Oracle Identity Manager.

If your WebLogic administrator user name is not `weblogic`, complete the following steps:

1. Ensure that the Oracle Identity Manager Managed server is up and running.
2. Log in to Oracle Enterprise Manager using your WebLogic Server administrator credentials.
3. Click `Identity and Access > oim > oim(11.1.1.2.0)`. Right-click and select `System MBean Browser`. The System MBean Browser page is displayed.
5. View the attribute `username`. By default, the value of the attribute is `weblogic`. Change this value to your WebLogic administrator user name.
6. Click `Apply`. Exit Oracle Enterprise Manager.
7. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the example IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.
8. Launch the WebLogic Scripting Tool (WLST) interface as follows:
   - On UNIX: Run `./wlst.sh` on the command line.
   - On Windows: Run `wlst.cmd`.
   - At the WLST command prompt (`wls:/offline>`, type the following:
connect()

You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

a. Run the `deleteCred` WLST command:
   ```java
   deleteCred(map="oim", key="SOAAdminPassword");
   ```

b. Run the `createCred` WLST command, and replace the `ADMIN Password` with your WebLogic administrator password:
   ```java
   createCred(map="oim", key="SOAAdminPassword", user="xelsysadm", password="<ADMIN_PASSWORD>");
   ```

c. Run the following WLST command to verify the values:
   ```java
   listCred(map="oim", key="SOAAdminPassword");
   ```

d. Type `exit()` to exit the WLST command shell.

9. Open the Oracle Identity Manager Administration Console, and log in as user `xelsysadm`.

10. Create a new user for the user name of your WebLogic administrator.

11. Search for the `Administrators` role. Open the role details, and click the Members tab.

12. Remove all the existing members of the `Administrators` role.

13. Add the newly created user (the one with your WebLogic administrator user name) as a member of the `Administrators` role.

14. Restart Oracle Identity Manager Managed Server, as described in Starting the Stack.
Part I provides information about configuring the following Oracle Identity Management 11g Release 1 (11.1.1.3.0) products:

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

Additionally, Part I provides information about installing Oracle Single Sign-On and Oracle Delegated Administration Services against Oracle Internet Directory.

Part I contains the following chapters:

- Chapter 5, "Installing OID, OVD, ODSM, ODIP, and OIF"
- Chapter 6, "Configuring Oracle Internet Directory (OID)"
- Chapter 7, "Configuring Oracle Virtual Directory (OVD)"
- Chapter 8, "Configuring Oracle Directory Integration Platform (ODIP)"
- Chapter 9, "Configuring Oracle Directory Services Manager (ODSM)"
- Chapter 10, "Configuring Oracle Identity Federation (OIF)"
- Chapter 11, "Installing Oracle Single Sign-On and Oracle Delegated Administration Services Against OID"
This chapter explains how to install the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite that contains Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), Oracle Directory Services Manager (ODSM), Oracle Directory Integration Platform (ODIP), and Oracle Identity Federation (OIF).

It includes the following topics:

- Installing the Latest Version of Oracle Identity Management
- Configuring OID, OVD, ODSM, ODIP, and OIF

5.1 Installing the Latest Version of Oracle Identity Management

Follow the instructions in this section to install 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 Latest Oracle WebLogic Server and Oracle Fusion Middleware 11g Software
2. Installing Oracle WebLogic Server and Creating the Middleware Home
3. Installing the 11.1.1.2.0 Version of Oracle Identity Management Software
4. Patching the Software

5.1.1 Obtaining the Latest Oracle WebLogic Server and Oracle Fusion Middleware 11g Software

Refer to the following for more information about the latest Oracle WebLogic Server and Oracle Fusion Middleware 11g software:

- You can download the latest Oracle Fusion Middleware 11g software from the Oracle Technology Network (OTN):

  http://www.oracle.com/technology/
Installing the Latest Version of Oracle Identity Management

5.1.2 Installing Oracle WebLogic Server and Creating the Middleware Home

Oracle Identity Management requires Oracle WebLogic Server and a Middleware home directory.

For more information, see "Install Oracle WebLogic Server" in Oracle Fusion Middleware Installation Planning Guide. In addition, see "Running the Installation Program in Graphical Mode" in Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server.

**Note:** If you are installing Oracle Internet Directory 11g Release 1 (11.1.1.3.0) without an Oracle WebLogic administration domain, you do not need to install Oracle WebLogic.

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

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


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

   - wls1033_linux32.bin for 32-bit Linux systems
   - wls1033_win32.exe for 32-bit Windows systems
   - wls1033_generic.jar for all 64-bit platforms
The 32-bit executable files are bundled with the appropriate JDK version. If you use the 64-bit installer, you will need to invoke the installer with a supported JDK for your platform. This JDK must be installed on your system before you install Oracle WebLogic Server. Refer to the Oracle Fusion Middleware certification document for a list of supported JDKs for your platform:


For more information about downloading Oracle WebLogic Server, see "Product Distribution" in the Oracle Fusion Middleware Installation Guide for Oracle WebLogic Server.

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

- Before running the installer, set the DISPLAY environment variable on your system.
- Replace JAVA_HOME with the installation location of the supported JDK you installed for your platform.
- Use the -d64 flag when using 32/64-bit hybrid JDKs (such as the HP JDK for HP-UX and SUN JDK for Solaris SPARC).
- Execute JAVA_HOME/bin/java -version (or JAVA_HOME/bin/java -d64 -version on 32/64-bit hybrid JDKs) to ensure that your JAVA_HOME refers to a 64-bit JDK.

Examples for 32-bit systems:

Linux:
./wls1033_linux32.bin

Windows:
wls1033_win32.exe

Examples for 64-bit systems:

UNIX:
JAVA_HOME/bin/java -jar wls1033_generic.jar

or
JAVA_HOME/bin/java -d64 -jar wls1033_generic.jar

Windows:
JAVA_HOME\bin\java -jar wls1033_generic.jar

---

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


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

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

Click **Next**. The Choose Install Type screen appears.

7. Select **Typical** and click **Next**. The Choose Product Installation Directories screen appears.

8. Specify the desired location for your WebLogic Server Home directory and click **Next**.

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

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

9. Click **Next** on the Installation Summary screen.

   The Installation Progress screen appears.

10. Click **Next**. The Installation Complete screen appears.

11. De-select **Run Quickstart** and click **Done** to exit the Installer.

---

**Notes:**

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

---

### 5.1.3 Installing the 11.1.1.2.0 Version of Oracle Identity Management Software

Follow the instructions in Table 5–1 to install Oracle Identity Management 11.1.1.2.0.

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

#### Table 5–1 Installation Flow for Install Only Option

<table>
<thead>
<tr>
<th>No.</th>
<th>Screen</th>
<th>Description and Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome Screen</td>
<td>Click <strong>Next</strong> to continue.</td>
</tr>
<tr>
<td>2</td>
<td>Select Installation Type Screen</td>
<td>Select <strong>Install Software - Do Not Configure</strong>. Click <strong>Next</strong> to continue.</td>
</tr>
<tr>
<td>3</td>
<td>Prerequisite Checks Screen</td>
<td>Click <strong>Next</strong> to continue.</td>
</tr>
</tbody>
</table>
5.1.4 Patching the Software

After the installation is complete, you must run the Patch Set Installer for Oracle Identity Management to update your 11.1.1.2.0 software to 11.1.1.3.0, which is the latest version.

For instructions, go to “Applying the Latest Oracle Fusion Middleware Patch Set with the Patch Set Installers” in Oracle Fusion Middleware Patching Guide.

5.2 Configuring OID, OVD, ODSM, ODIP, and OIF

After you have patched your software to the latest version, you are ready to configure your components, such as Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), Oracle Directory Services Manager (ODSM), Oracle Directory Integration Platform (ODIP), or Oracle Identity Federation (OIF).

You must run the Oracle Identity Management Configuration Wizard to create your WebLogic Domain and configure your components.

On UNIX systems:

```
ORACLE_HOME/bin/config.sh
```

On Windows systems:

```
ORACLE_HOME\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 OIF Configurations
- Performing Advanced OIF Configurations
- ODIP with Fusion Middleware Control in a New WebLogic Domain
- Only ODIP in an Existing WebLogic Domain
- Configuring ODIP when OID is Running in SSL Mode 2 - Server Only Authentication
This chapter explains how to configure Oracle Internet Directory (OID). You can configure Oracle Internet Directory after installing the software, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

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

6.1 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

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 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.

### 6.1.2 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

### 6.1.3 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.

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

1. Ensure that Oracle Internet Directory is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.
2. 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.
3. On the Select Domain screen, select Create New Domain and enter the following information:
   - Enter the user name for the new domain in the User Name field.
   - Enter the user password for the new domain in the User Password field.
   - Enter the user password again in the Confirm Password field.
   - Enter a name for the new domain in the Domain Name field.
   Click Next. The Specify Installation Location screen appears.
4. Identify the Homes, Instances, and the WebLogic Server directory by referring to Identifying Installation Directories. 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 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.

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 Schema Database screen appears.

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

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

   Refer to Creating Database Schema Using the Repository Creation Utility (RCU) 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 9 now.

To create a new 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.

d. Enter the password for the database user in the Password field.

e. Click Next. The Enter OID Passwords screen appears.

f. Create a password for the new ODS schema by entering it in the ODS Schema Password field.
   Enter it again in the Confirm ODS Schema Password field.

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

h. Click Next. The Create Oracle Internet Directory screen appears.

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

Click Next. The Installation Summary screen appears.

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

---

**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 * gsqlmaiaInitAudCtx * Audit struct initialization failed. Audit error code: 62005"
```

You can ignore this error message.

### 6.2 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
6.2.1 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.

6.2.2 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

6.2.3 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.

6.2.4 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:

1. Ensure that Oracle Internet Directory, Oracle Directory Integration Platform, and Oracle Directory Services Manager are installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. Run `<Oracle_Home>/bin/config.sh` (On UNIX) or `<Oracle_Home>in\config.bat` to start the Oracle Identity Management Configuration Wizard. Click Next to continue.

3. On the Select Domain screen, select Create New Domain and enter the following information:
   - Enter the user name for the new domain in the User Name field.
   - Enter the user password for the new domain in the User Password field.
   - Enter the user password again in the Confirm Password field.
   - Enter a name for the new domain in the Domain Name field.

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

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 Schema Database screen appears.

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

---

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

Refer to "Creating Database Schema Using the Repository Creation Utility (RCU)" 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**.
The Create Oracle Internet Directory screen appears.

e. Continue the installation by going to step 9 now.

To create a new 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.

d. Enter the password for the database user in the Password field.

e. Click Next. The Enter OID Passwords screen appears.

f. Create a password for the new ODS schema by entering it in the ODS Schema Password field.

Enter it again in the Confirm ODS Schema Password field.

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

Enter it again in the Confirm ODSSM Schema Password field.

h. Click Next. The Create Oracle Internet Directory screen appears.

9. Enter the following information for Oracle Internet Directory:

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

Click Next. The Installation Summary screen appears.

10. Complete the installation by performing all the steps in Completing an Installation.

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.

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.
6.3 OID and OVD with ODSM in a New WebLogic Domain

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

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

6.3.1 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.

6.3.2 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

6.3.3 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.

6.3.4 Procedure

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

1. Ensure that Oracle Internet Directory and Oracle Virtual Directory are installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.
2. 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.

3. On the Select Domain screen, select **Create New Domain** and enter the following information:
   - Enter the user name for the new domain in the User Name field.
   - Enter the user password for the new domain in the User Password field.
   - Enter the user password again in the Confirm Password field.
   - Enter a name for the new domain in the Domain Name field.

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

4. Identify the Homes, Instances, and the WebLogic Server directory by referring to **Identifying Installation Directories**.

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

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

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

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

Click **Next**. The Specify Schema Database screen is displayed.

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

---

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

Refer to Creating Database Schema Using the Repository Creation Utility (RCU) 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:service`. For Oracle Real Application Clusters (RAC), the connection string must be in the form of `hostname1:port1:instance1^hostname2:port2:instance2@service`

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 9 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:service`. For Oracle Real Application Clusters (RAC), the connection string must be in the form of `hostname1:port1:instance1^hostname2:port2:instance2@service`

c. Enter the name of the database user in the User Name field. The user you identify must have DBA privileges.

d. Enter the password for the database user in the Password field.

e. Click **Next**. The Enter OID Passwords screen appears.

f. Create a password for the new ODS schema by entering it in the ODS Schema Password field.

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

h. Click Next. The Create Oracle Internet Directory screen appears.

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

   Click Next. The Installation Summary screen appears.

11. Complete the installation by performing all the steps in Completing an Installation.

6.4 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

6.4.1 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.

6.4.2 Components Deployed

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

6.4.3 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.
6.4.4 Procedure

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

1. Ensure that Oracle Internet Directory is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. 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.

3. 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.

4. Identify the Homes, Instances, and the WebLogic Server directory by referring to 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.

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 Internet Directory**. 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 Schema Database screen appears.
8. Choose whether to use an existing schema or to create a new one using the Installer.

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

Refer to Creating Database Schema Using the Repository Creation Utility (RCU) 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:servername`. For Oracle Real Application Clusters (RAC), the connection string must be in the form of `hostname1:port1:instance1^hostname2:port2:instance2@servername`.

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 9 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:servername`. For Oracle Real Application Clusters (RAC), the connection string must be in the form of `hostname1:port1:instance1^hostname2:port2:instance2@servername`.

c. Enter the name of the database user in the **User Name** field. The user you identify must have DBA privileges.

d. Enter the password for the database user in the Password field.

e. Click **Next**. The Enter OID Passwords screen appears.

f. Create a password for the new ODS schema by entering it in the ODS Schema Password field.

Enter it again in the Confirm ODS Schema Password field.

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

Enter it again in the Confirm ODSSM Schema Password field.

h. Click **Next**. The Create Oracle Internet Directory screen appears.

9. Enter the following information for Oracle Internet Directory:
6.5 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

6.5.1 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 using Fusion Middleware Control.

6.5.2 Components Deployed

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

6.5.3 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.

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.
6.5.4 Procedure

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

1. Ensure that Oracle Internet Directory is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

Note: Installing Oracle WebLogic Server is optional in this particular scenario. Instead, you can create the Middleware Home by using the Oracle Identity Management Configuration Wizard, as described later in Step 4 of the procedure.

2. 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.

3. On the Select Domain screen, select Configure without a Domain and click Next. The Specify Installation Location screen appears.

4. 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.

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. On the Configure Components screen, select only Oracle Internet Directory. 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 Schema Database screen appears.

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

   **Note:** If you want to use an existing schema, it must currently reside in the database to continue with the installation. If it does not currently reside in the database, you must create it using the Repository Creation Utility now. Refer to Creating Database Schema Using the Repository Creation Utility (RCU) 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 9 now.

   **To create a new schema:**
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6.6 Verifying OID Installation

Verify the Oracle Internet Directory (OID) installation by:


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.

d. Enter the password for the database user in the Password field.

e. Click Next. The Enter OID Passwords screen appears.

f. Create a password for the new ODS schema by entering it in the ODS Schema Password field.

Enter it again in the Confirm ODS Schema Password field.

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

Enter it again in the Confirm ODSSM Schema Password field.

h. Click Next. The Create Oracle Internet Directory screen appears.

9. Enter the following information for Oracle Internet Directory:

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

Click Next. The Installation Summary screen appears.

10. Complete the installation by performing all the steps in Completing an Installation.

---

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] [] [OIDLDAFPD] [host:stadp47] [pid: 26444] [tid: 0] Main:: FATAL * gslsmaiaInitAudCtx * Audit struct initialization failed. Audit error code: 62005"
```

You can ignore this error message.

---
- Executing the `$/ORACLE_INSTANCE/bin/opmnctl status -l` command.
- Executing the `$/ORACLE_HOME/bin/ldapbind` command on the Oracle Internet Directory non-SSL and SSL ports.

### 6.7 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*. 
This chapter explains how to configure Oracle Virtual Directory (OVD). You must configure Oracle Virtual Directory after installing the software, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

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
- Post-Configuration Task
- Verifying OVD
- Getting Started with OVD After Installation

7.1 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

7.1.1 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.
7.1.2 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

7.1.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

7.1.4 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 Virtual Directory is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. 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.

3. On the Select Domain screen, select Create New Domain and enter the following information:
   - Enter the user name for the new domain in the User Name field.
   - Enter the user password for the new domain in the User Password field.
   - Enter the user password again in the Confirm Password field.
   - Enter a name for the new domain in the Domain Name field.
   Click Next. The Specify Installation Location screen appears.

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

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

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

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

7. Choose how you want the Installer to configure ports:
Select **Auto Port Configuration** if you want the Installer to configure ports from a predetermined range.

Select **Specify Ports using Configuration File** if you want the Installer to configure ports using the staticports.ini file. You can click **View/Edit File** to update the settings in the staticports.ini file.

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

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

Click Next. The Installation Summary screen appears.

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

### 7.2 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**

### 7.2.1 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.
7.2.2 Components Deployed
Performing the configuration in this section deploys only Oracle Virtual Directory.

7.2.3 Dependencies
The configuration in this section depends on Oracle WebLogic Server.

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

1. Ensure that Oracle Virtual Directory is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. 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.

3. 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.

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

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

7. Choose how you want the Installer to configure ports:

---

**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.

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

7. Choose how you want the Installer to configure ports:
Select **Auto Port Configuration** if you want the Installer to configure ports from a predetermined range.

Select **Specify Ports using Configuration File** if you want the Installer to configure ports using the staticports.ini file. You can click **View/Edit File** to update the settings in the staticports.ini file.

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

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

Click Next. The Installation Summary screen appears.

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

### 7.3 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**

#### 7.3.1 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.
7.3.2 Components Deployed

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

7.3.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

7.3.4 Procedure

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

1. Ensure that Oracle Virtual Directory is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

   Note: Installing Oracle WebLogic Server is optional in this particular scenario. Instead, you can create the Middleware Home by using the Oracle Identity Management Configuration Wizard, as described later in Step 4 of the procedure.

2. 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.

3. Select Configure without a Domain on the Select Domain screen and click Next. The Specify Installation Location screen appears.

4. 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.

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

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

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

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

   Click Next. The Installation Summary screen appears.

9. Complete the installation by performing all the steps in Completing an Installation.

10. 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.

### 7.4 Post-Configuration Task

After configuring Oracle Virtual Directory, you must complete the following task to update the Oracle Virtual Directory Version Number in Oracle Directory Service Manager:

1. Set the JAVA_HOME and ANT_HOME environment variables and add them to the PATH environment variable.

2. Go to the ORACLE_HOME/ovd/patchset (on UNIX operating systems) or ORACLE_HOME\ovd\patchset (on Windows operating systems) directory and run the following command:

   ```
   ant updateOVDVersion -Dovd_instance=<ovd_instance_location>
   ```

3. Restart the Oracle Virtual Directory instance.

### 7.5 Verifying OVD

Verify the Oracle Virtual Directory (OVD) installation by:

- Executing the `$ORACLE_INSTANCE/bin/opmnctl status -l` command.
- Executing the `$ORACLE_HOME/bin/ldapbind` command on the Oracle Virtual Directory non-SSL and SSL ports.

### 7.6 Getting Started with OVD After Installation

This chapter explains how to configure Oracle Directory Integration Platform (ODIP). You must configure Oracle Directory Integration Platform after installing the software, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

This chapter discusses the following topics:

- ODIP with Fusion Middleware Control in a New WebLogic Domain
- Only ODIP in an Existing WebLogic Domain
- Configuring ODIP when OID is Running in SSL Mode 2 - Server Only Authentication
- Verifying ODIP
- Getting Started with ODIP After Installation

8.1 ODIP with Fusion Middleware Control in a New WebLogic Domain

This topic describes how to configure Oracle Directory Integration Platform (ODIP) with Fusion Middleware Control 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 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.

8.1.2 Components Deployed

Performing the configuration in this section deploys the following components:

- WebLogic Managed Server
- Oracle Directory Integration Platform
8.1.3 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.

8.1.4 Procedure

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

1. Ensure that Oracle Directory Integration Platform is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. 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.

3. On the Select Domain screen, select Create New Domain and enter the following information:
   - Enter the user name for the new domain in the User Name field.
   - Enter the user password for the new domain in the User Password field.
   - Enter the user password again in the Confirm Password field.
   - Enter a name for the new domain in the Domain Name field.
   Click Next. The Specify Installation Location screen appears.

4. Identify the Homes, Instances, and the WebLogic Server directory by referring to Identifying Installation Directories. 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 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.
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 OID Details screen appears.

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. 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:service`. For Oracle Real Application Clusters (RAC), the connection string must be in the form of `hostname1:port1:instance1^hostname2:port2:instance2@service`.
   - **Password**: Enter the password for the ODSSM schema in the Password field.

   Click **Next**. The Installation Summary screen appears.

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

### 8.2 Only ODIP in an Existing WebLogic Domain

This topic describes how to configure only Oracle Directory Integration Platform (ODIP) 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 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.
**8.2.2 Components Deployed**

Performing the configuration in this section deploys the following components:

- WebLogic Managed Server
- Oracle Directory Integration Platform

**8.2.3 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.

**8.2.4 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 Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. 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.

3. 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.

4. Identify the Homes, Instances, and the WebLogic Server directory by referring to 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 only Oracle Directory Integration Platform.** 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 OID Details screen appears.

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. **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.

10. **Complete the installation by performing all the steps in Completing an Installation.**
8.3 Configuring ODIP when OID is Running in SSL Mode 2 - Server Only Authentication

You cannot install and configure Oracle Directory Integration Platform (ODIP) 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 0 - No Authentication.

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

2. Install Oracle Directory Integration Platform, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.


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

8.4 Verifying ODIP

Verify the Oracle Directory Integration Platform (ODIP) installation using the dipStatus command, which is located in the $ORACLE_HOME/bin/ directory.

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 must set the WL_HOME and ORACLE_HOME environment variables before executing the dipStatus command.
8.5 Getting Started with ODIP After Installation

After you install Oracle Directory Integration Platform (ODIP), no additional configuration is needed. The next step is to create synchronization profiles.

The Oracle Fusion Middleware Integration Guide for Oracle Identity Management explains how to manage Oracle Directory Integration Platform. For information about creating synchronization profiles using Oracle Enterprise Manager Fusion Middleware Control Console, refer to the "Managing Synchronization Profiles Using Fusion Middleware Control" section in that guide.
This chapter explains how to configure Oracle Directory Services Manager (ODSM). You must configure Oracle Directory Services Manager after installing the software, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

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

9.1 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

9.1.1 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.

9.1.2 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
9.1.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

9.1.4 Procedure

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

1. Ensure that Oracle Directory Services Manager is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. 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.

3. On the Select Domain screen, select Create New Domain and enter the following information:
   - Enter the user name for the new domain in the User Name field.
   - Enter the user password for the new domain in the User Password field.
   - Enter the user password again in the Confirm Password field.
   - Enter a name for the new domain in the Domain Name field.
     Click Next. The Specify Installation Location screen appears.

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

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 Installation Summary screen appears.

8. Complete the installation by performing all the steps in Completing an Installation.
9.2 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

9.2.1 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.

9.2.2 Components Deployed

Performing the configuration in this section deploys the following components:

- WebLogic Managed Server
- Oracle Directory Services Manager

9.2.3 Dependencies

The configuration in this section depends on Oracle WebLogic Server.

9.2.4 Procedure

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

1. Ensure that Oracle Directory Services Manager is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. 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.

3. 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.

4. Identify the Homes, Instances, and the WebLogic Server directory by referring to "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 Directory Services Manager**. 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 Installation Summary screen appears.

8. Complete the installation by performing all the steps in **Completing an Installation**.

### 9.3 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 by examining the following file:

  `$MW_HOME/ORACLE_IDENTITY_MANAGEMENT_DOMAIN/servers/MANAGED_SERVER/data/nodemanager/MANAGED_SERVER.url`

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


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**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.
This chapter explains how to configure Oracle Identity Federation (OIF). You must configure Oracle Identity Federation after installing the software, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

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 OIF Configurations
- Performing Advanced OIF 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

10.1 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.

10.2 Understanding OIF Deployments

When you configure Oracle Identity Federation (OIF) 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 data.
- **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.

### 10.3 Understanding OIF Basic and Advanced Deployments

There are two types of Oracle Identity Federation (OIF) 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

#### 10.3.1 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

#### 10.3.2 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.

**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.

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**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.

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### 10.4 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 the Latest Version of Oracle Identity Management.
- Run `<Oracle_Home>/bin/config.sh` (On UNIX) or `<Oracle_Home>in\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.

### 10.5 Performing Basic OIF 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**

#### 10.5.1 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

#### 10.5.2 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:**
Performing Basic OIF Configurations

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

10.5.3 Dependencies

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

10.5.4 Procedure

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

1. Ensure that Oracle Identity Federation is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

2. 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.

3. 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:
   a. Select Create New Domain.
   b. Enter the user name for the new domain in the User Name field.
   c. Enter the user password for the new domain in the User Password field.
      Enter the user password again in the Confirm Password field.
   d. Enter a name for the new domain in the Domain Name field.
   e. 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:
   a. Select Extend Existing Domain.
   b. Enter the name of the host that contains the domain in the Host Name field.
   c. Enter the listen port for the WebLogic Administration Server in the Port field.
   d. Enter the user name for the domain in the User Name field.
   e. Enter the password for the domain user in the User Password field.
      Click Next. The Specify Installation Location screen appears.

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

---

**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 10-3 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**. The Installation Summary screen appears.

10. Complete the installation by performing all the steps in **Completing an Installation**.
10.6 Performing Advanced OIF 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

10.6.1 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.

10.6.2 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

10.6.3 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 data using RDBMS for User Store
- LDAP repository, if using LDAP for Authentication, User Store, or Federation Store.
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10.6.4 Procedure

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

1. 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.
   a. Install the database for Oracle Identity Federation. Refer to Installing Oracle Database for more information.

---

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

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2. 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.

3. Ensure that Oracle Identity Federation is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.

4. 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.

5. 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.
   c. Enter the user password for the new domain in the User Password field.
   d. Enter the user password again in the Confirm Password field.
   e. Enter a name for the new domain in the Domain Name field.
   f. 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:**
   a. Select Extend Existing Domain.
   b. Enter the name of the host that contains the domain in the Host Name field.
   c. Enter the listen port for the WebLogic Administration Server in the Port field.
   d. Enter the user name for the domain in the User Name field.
   e. Enter the password for the domain user in the User Password field.
   f. Click Next. The Specify Installation Location screen appears.

6. Identify the Homes, Instances, and the WebLogic Server directory by referring to Identifying Installation Directories.
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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 10-3 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.

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 10-3 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
10.7 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 (OID) in a new WebLogic administration domain for LDAP Authentication, User Store, and Federation Store.

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**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.

13. Complete the installation by performing all the steps in Completing an Installation.
This section includes the following information about this configuration:

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

### 10.7.1 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.

### 10.7.2 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

### 10.7.3 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.

### 10.7.4 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:

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**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.
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 Repository Creation Utility (RCU) for more information.
2. Install the Oracle Database for Oracle Internet Directory. Refer to Installing Oracle Database for more information.
4. Ensure that Oracle Identity Federation is installed, as described in Installation Roadmap and Installing the Latest Version of Oracle Identity Management.
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 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.
   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=us,dc=oracle,dc=com.

14. Select the appropriate option for each configuration item and click Next:

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

- User Session Store: Memory or RDBMS
  - Select Memory to store transient runtime session state data in in-memory tables.
  - Select RDBMS to store transient runtime session state data in a relational database.
- Message Store: Memory or RDBMS
  - Select Memory to store transient protocol messages in in-memory tables
  - Select RDBMS to store transient protocol messages in a relational database.
- Configuration Store: File or RDBMS
  - Select File to store Oracle Identity Federation configuration data on the local file system.
  - Select RDBMS to store Oracle Identity Federation configuration data in a relational database.

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

- If you selected RDBMS for User Session Store, Message Store, or Configuration Store, go to step 15 now.
- If you did not select RDBMS for User Session Store, Message Store, or Configuration Store, go to step 16 now.

15. Enter the following information on the Specify Transient Store Database Details screen:

- HostName: Enter the connection string to the database host in the form: hostname:port:servername. For Oracle Real Application Clusters (RAC), the connection string must be in the form: hostname1:port1:instance1^hostname2:port2:instance2@servername.
Advanced Example: Configuring OIF in a New or Existing WebLogic Domain with RDBMS Data Stores

10.8 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

10.8.1 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.

10.8.2 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

10.8.3 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.

- Username: Enter the name of the schema owner created by RCU, which is of the form `PREFIX_OIF`.
- Password: Enter the password for the database user.

16. Complete the installation by performing all the steps in Completing an Installation.
Advanced Example: Configuring OIF in a New or Existing WebLogic Domain with RDBMS Data Stores

- Table for storing user data in the User Store database.
- LDAP repository, if using LDAP for Authentication.

### 10.8.4 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 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 the Latest Version of Oracle Identity Management.

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.
     c. Enter the user password for the new domain in the User Password field.
     d. Enter the user password again in the Confirm Password field.
     e. Enter a name for the new domain in the Domain Name field.
     f. Click Next. The Specify Installation Location screen appears.
     g. 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.
     c. Enter the listen port for the WebLogic Administration Server in the Port field.
     d. Enter the user name for the domain in the User Name field.
     e. Enter the password for the domain user in the User Password field.
     f. Click Next. The Specify Installation Location screen appears.

7. Identify the Homes, Instances, and the WebLogic Server directory by referring to 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 Identity Federation—and optionally, Oracle HTTP Server. Refer to “Configuring Oracle HTTP Server for OIF” on page 10-3 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 your installation by going to step 14 now.
   - If you selected JAAS for Authentication Type, the Specify User Store Database Details screen appears. Continue your 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.
Advanced Example: Configuring OIF in a New or Existing WebLogic Domain with RDBMS Data Stores

- 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.
- 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.

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. The Installation Summary screen appears.
18. Complete the installation by performing all the steps in Completing an Installation.

10.9 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.

10.10 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*.
This chapter explains how to install Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.3.0) against Oracle Internet Directory (OID) 11g Release 1 (11.1.1).

**Note:** If you already have Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.3.0) installed against Oracle Internet Directory Release 10g, refer to the Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management for information on upgrading to Oracle Internet Directory 11g Release 1 (11.1.1).

This chapter includes the following topics:

- Understanding the inspre11.pl Script
- Procedure
- Verifying Oracle Single Sign-On and Oracle Delegated Administration Services
- Getting Started After Installation

### 11.1 Understanding the inspre11.pl Script

You must use the inspre11.pl Perl script when installing Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.3.0) against Oracle Internet Directory 11g Release 1 (11.1.1). This topic describes how to use the inspre11.pl script.

The inspre11.pl script is located in the $ORACLE_HOME/ldap/bin/ directory on the host where Oracle Internet Directory 11g Release 1 (11.1.1) is installed. Perl is located in the $ORACLE_HOME/perl/bin/ directory.

Before you execute the inspre11.pl script, you must set the following environment variables:

- `ORACLE_INSTANCE` to the Oracle Internet Directory 11g Release 1 (11.1.1) Oracle Instance location.
- `ORACLE_HOME` to the Oracle Internet Directory 11g Release 1 (11.1.1) Oracle Home location.
The following is the syntax for the inspre11.pl script:

```
$OID11gR1_ORACLE_HOME/perl/bin/perl \\
$OID11gR1_ORACLE_HOME/ldap/bin/inspre11.pl OID_HOST OID_PORT (-ssl | -nonssl) \\
OID_COMPONENT TNS_CONNECT_STRING ODS_PASSWORD ORCLADMIN_PASSWORD \\
{-op1 | -op2 | -op3}
```

The following list defines each of the options for the inspre11.pl script:

**OID_HOST**
Identifies the host where Oracle Internet Directory 11g Release 1 (11.1.1) is installed.

**OID_PORT**
The SSL or non-SSL Oracle Internet Directory port.

- **-ssl**
  Indicates the port identified by OID_PORT is the Oracle Internet Directory SSL port.

- **-nonssl**
  Indicates the port identified by OID_PORT is the Oracle Internet Directory non-SSL port.

**OID_COMPONENT**
The name of the Oracle Internet Directory component, such as oid1. You can identify
the name of the Oracle Internet Directory component using the $ORACLE_INSTANCE/bin/opmnctl status command.

**TNS_CONNECT_STRING**
Represents the Oracle Internet Directory database connect string defined in the
ORACLE_INSTANCE/config/tnsnames.ora file. The default value is oiddb.

**Note:** Only use the Oracle Internet Directory database connect string
defined in the ORACLE_INSTANCE/config/tnsnames.ora file—do not use any other tnsnames.ora file to identify the connect string.

**ODS_PASSWORD**
The password for the ODS schema.

**ORCLADMIN_PASSWORD**
The password for the Oracle Internet Directory administrator, which is typically
cn=orcladmin.

- **-op1**
  Enables anonymous bind and disables entry caching. While the -op1 option does not use the TNS_CONNECT_STRING value, you must include it when executing inspre11.pl with the -op1 option.

- **-op2**
  Resets the Oracle Internet Directory version to allow you to install Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.3.0). This option also sets the seealso attribute to point to the database identified by the TNS_CONNECT_STRING option.

- **-op3**
  Sets the Oracle Internet Directory version back to 11g Release 1 (11.1.1) and enables entry caching.
11.2 Procedure

Perform the following steps to install Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.3.0) against Oracle Internet Directory 11g Release 1 (11.1.1):

1. Install Oracle Internet Directory 11g Release 1 (11.1.1). Refer to Chapter 6, "Configuring Oracle Internet Directory (OID)" for more information.

2. Execute the inspre11.pl script with -op1. This will enable anonymous bind in Oracle Internet Directory and allow the Oracle OracleAS RepCA to load schema into the database for Oracle Single Sign-On and Oracle Delegated Administration Services. Execute the script as follows:

   $OIID11gR1.ORACLE_HOME/perl/bin/perl \
   $OIID11gR1.ORACLE_HOME/ldap/bin/inspre11.pl OID_HOST OID_PORT { -ssl | -nonssl } \ 
   OID_COMPONENT TNS_CONNECT_STRING ODS_PASSWORD ORCLADMIN_PASSWORD -op1

   When this command completes successfully, the following message is displayed:

   'Use RepCA to load SSO and other schemas against DB before running -op2'

   **Note:** If desired, you can disable anonymous bind in Oracle Internet Directory in the last step of this procedure.

3. Use the OracleAS RepCA Release 10.1.4.3.1 to create and load Oracle Single Sign-On 10.1.4.0.1 schema in the database. You can get OracleAS RepCA 10.1.4.3.1 from the Oracle Technology Network (OTN) Web site:


   You must use only this specific version of MRCA for installing Oracle Single Sign-On (10.1.4.x) against Oracle Internet Directory 11g Release 1 (11.1.1) in an Oracle Fusion Middleware 11g deployment. This MRCA cannot be used as a generic replacement for MRCA 10g in an Application Server 10g deployment because it only carries only a subset of the original MRCA 10g schemas to support Oracle Single Sign-On (10.1.4.x) for Oracle Fusion Middleware 11g deployment.
When you run OracleAS RepCA 10.1.4.3.1:

- You must register the Oracle Single Sign-On schema with Oracle Internet Directory using its SSL port. This is required for various Oracle Single Sign-On and Oracle Internet Directory interdependencies.

- You might receive error messages that some database session parameters do not have appropriate values. If you receive these errors, you should reset the parameters identified by OracleAS RepCA, adhering to the minimum values that are given. After you reset the parameters, exit OracleAS RepCA and start it again. If you used SPFILE as the scope in any of the alter commands, you may also have to restart the database.

- Only the schema required for Oracle Single Sign-On will be loaded, not all schema.

4. Reset the ODS password to the value that was set when Oracle Internet Directory was installed and restart Oracle Internet Directory. You must reset the password because it was randomized when you loaded the Oracle Single Sign-On 10.1.4.0.1 schema in the database.

Perform the following steps:

a. Use SQL*PLUS to connect the database as the SYS user.

b. Change the ODS password using alter user ods identified by PASSWORD, where PASSWORD represents the ODS schema password before running the OracleAS RepCA.

c. Set the TNS_ADMIN environment variable to point to the $ORACLE_INSTANCE/config directory.

d. Execute the following command, where TNS_CONNECT_STRING represents the Oracle Internet Directory database connect string defined in the ORACLE_INSTANCE/config/tnsnames.ora file. You can set the TNS_ADMIN environment variable if you want to use a different location.
Installing Oracle Single Sign-On and Oracle Delegated Administration Services Against OID

4. Restart Oracle Internet Directory.

5. Execute the inspre11.pl script with `-op2`, which resets the Oracle Internet Directory version and allows you to install Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.0.1). The `-op2` option will also verify the orcdirectoryversion attribute has a value of OID 10.1.4.0.1.

Execute the script as follows:

```
$OID11gR1_ORACLE_HOME/perl/bin/perl \\
$OID11gR1_ORACLE_HOME/ldap/bin/inspre11.pl OID_HOST OID_PORT (-ssl | -nonssl) \ 
OID_COMPONENT TNS_CONNECT_STRING ODS_PASSWORD ORCLADMIN_PASSWORD -op2
```

When this command completes successfully, the following message is displayed:

'Install SSO/DAS against 11g OID before running -op3'

6. Install Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.0.1) in an `ORACLE_HOME` directory that is different from the `ORACLE_HOME` where you installed Oracle Internet Directory. Do not install Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.0.1) in the same `ORACLE_HOME` where you installed Oracle Internet Directory 11g Release 1 (11.1.1).

You can get Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.0.1) from the Oracle Technology Network (OTN) Web site. To access the OTN Web site, go to the following URL:

http://www.oracle.com/technology/
Note: After MRCA 10.1.4.3.1 is installed, you can perform an Identity Management 10g (10.1.4.0.1) installation and choose SSO+DAS only, rather than a full Infrastructure. This is available in the 10g download location (http://www.oracle.com/technology/software/products/ias/htdocs/101401.html).

If you are installing Oracle Single Sign-On and Oracle Delegated Administration Services against a Release 11.x database, you must apply **Patch 5649850 for release 10.1.0.5** to the Oracle Single Sign-On ORACLE_HOME directory. Patch 5649850 updates the 10.1.0.5 JDBC driver, allowing connectivity to a Release 11.x database. If you are unable to apply this patch due to a prerequisite failure, apply **Patch 6880880 for release 1** before applying patch 5649850.

When you install Oracle Single Sign-On and Oracle Delegated Administration Services, apply patch 5649850 when you are prompted to run the root.sh script on UNIX systems. On Windows systems, you should wait for the Configuration Assistant to fail, apply the patch and rerun the Configuration Assistant.

You can get **Patch 5649850 for release 10.1.0.5** from My Oracle Support (formerly MetaLink), located at:

http://metalink.oracle.com/

The 10.1.4.3 Patchset (**Patch 7215628**) is then applied to the SSO+DAS home. To apply the 10.1.4.3 Patchset with where a 11.2 database is associated, you must first download **Patch 6265268**, following its readme file. This final 10.1.4.3.0 SSO+DAS home is used in conjunction with the OID 11g and MRCA 10.1.4.3.1 previously installed.

---

7. Upgrade Oracle Single Sign-On and Oracle Delegated Administration Services to Release 10g (10.1.4.3.0) by applying the Oracle Identity Management 10g (10.1.4.3.0) Patch Set. You can get the Oracle Identity Management 10g (10.1.4.3.0) Patch Set from My Oracle Support (formerly MetaLink) by searching for Bug or **Patch Number 7215628**.

You can access My Oracle Support (formerly MetaLink) at:

http://metalink.oracle.com/

8. Execute the inspre11.pl script with -op3, which sets the Oracle Internet Directory version back to 11g Release 1 (11.1.1). For example:

```
$OID11gR1 ORACLE_HOME/perl/bin/perl \
$OID11gR1 ORACLE_HOME/ldap/bin/inspre11.pl OID_HOST OID_PORT {-ssl | -nonssl} \ 
OID_COMPONENT TNS_CONNECT_STRING ODS_PASSWORD ORCLADMIN_PASSWORD -op3
```

When this command completes successfully, the following message is displayed:

'Finished all actions!'

9. Executing the inspre11.pl script with -op1 in step 2 enables anonymous bind in Oracle Internet Directory. If desired, you can disable anonymous bind in Oracle Internet Directory by referring to "Managing Anonymous Binds" in the **Oracle Fusion Middleware Administrator’s Guide for Oracle Internet Directory**.
11.3 Verifying Oracle Single Sign-On and Oracle Delegated Administration Services

Verify the Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.3.0) installation against Oracle Internet Directory 11g Release 1 (11.1.1) by logging in to Oracle Delegated Administration Services. You will be redirected to Oracle Single Sign-On and prompted to log in. If you have access to the Oracle Delegated Administration Services content after logging in to Oracle Single Sign-On, the installation against Oracle Internet Directory 11g Release 1 (11.1.1) was successful.

11.4 Getting Started After Installation

The following information describes how to get started after installing Oracle Single Sign-On and Oracle Delegated Administration Services Release 10g (10.1.4.3.0) against Oracle Internet Directory 11g Release 1 (11.1.1).

11.4.1 Getting Started with Oracle Single Sign-On Release 10g (10.1.4.3.0)

After installing Oracle Single Sign-On Release 10g (10.1.4.3.0) against Oracle Internet Directory 11g Release 1 (11.1.1) as described in this chapter, refer to the "Basic Administration" chapter in 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

11.4.2 Getting Started with Oracle Delegated Administration Services Release 10g (10.1.4.3.0)

After installing Oracle Delegated Administration Services Release 10g (10.1.4.3.0) against Oracle Internet Directory 11g Release 1 (11.1.1) as described in this chapter, refer to the "Getting Started with Oracle Delegated Administration Services" chapter in the Oracle Identity Management Guide to Delegated Administration 10g Release 10.1.4.0.1 available at:

http://www.oracle.com/technology/documentation/oim1014.html
Part II provides information about configuring the following Oracle Identity Management 11g Release 1 (11.1.1.3.0) products:

- Oracle Identity Manager (OIM)
- Oracle Access Manager (OAM)
- Oracle Adaptive Access Manager (OAAM)
- Oracle Authorization Policy Manager (OAPM)
- Oracle Identity Navigator (OIN)

Additionally, Part II provides information about installing and configuring Oracle HTTP Server 11g Webgate for Oracle Access Manager, setting up integration between OIM and OAM, and migrating from Domain Agent to Oracle HTTP Server 10g Webgate for Oracle Access Manager.

Part II contains the following chapters:

- Chapter 12, "Installing OIM, OAM, OAAM, OAPM, and OIN"
- Chapter 13, "Understanding Domain Extension Scenarios"
- Chapter 14, "Oracle Identity Management Suite-Level Installation Scenarios"
- Chapter 15, "Configuring Oracle Identity Navigator (OIN)"
- Chapter 16, "Configuring Oracle Identity Manager (OIM)"
- Chapter 17, "Configuring Oracle Access Manager (OAM)"
- Chapter 18, "Configuring Oracle Adaptive Access Manager (OAAM)"
- Chapter 19, "OAM and OAAM Joint Domain Configuration Scenarios"
- Chapter 20, "Configuring Oracle Authorization Policy Manager (OAPM)"
- Chapter 21, "Integration Between OIM and OAM"
- Chapter 22, "Migrating from Domain Agent to Oracle HTTP Server 10g Webgate for OAM"
- Chapter 23, "Installing and Configuring Oracle HTTP Server 11g Webgate for OAM"
- Chapter 24, "Lifecycle Management"
This chapter explains how to install the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite that contains Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Identity Navigator (OIN), and Oracle Authorization Policy Manager (OAPM).

It includes the following topics:
- Installing the Oracle Identity Management 11g Software
- Understanding the Directory Structure After Installation
- After Installing the Oracle Identity Management Software
- Configuring Oracle Identity Management Products

12.1 Installing the Oracle Identity Management 11g Software

This topic describes how to install the Oracle Identity Management 11g software, which includes Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Identity Navigator, and Oracle Authorization Policy Manager.

It includes the following sections:
- Products Installed
- Dependencies
- Procedure

12.1.1 Products Installed

Performing the installation in this section installs the following products:
- Oracle Identity Manager
- Oracle Access Manager
- Oracle Adaptive Access Manager
- Oracle Identity Navigator
- Oracle Authorization Policy Manager

12.1.2 Dependencies

The installation in this section depends on the following:
- Oracle WebLogic Server
12.1.3 Procedure

Complete the following steps to install the Oracle Identity Management software that contains Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator:

1. Install the Oracle Database. Refer to Installing Oracle Database for more information.

   **Note:** Ensure that the Oracle database is with the AL32UTF8 character set encoding.

2. Decide if you want to create new schemas for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Metadata Services, and SOA Infrastructure by using Repository Creation Utility (RCU) or if you want to use an existing schema:
   - If you want to create a new schema using the Repository Creation Utility (RCU), refer to Creating Database Schema Using the Repository Creation Utility (RCU) for more information about creating schemas. After creating schemas, continue this procedure by going to Step 3.
   - If you want to use an existing schema, you must upgrade the schema by using the Upgrade Assistant tool. For more information, see the Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management.

3. Install Oracle WebLogic Server. Refer to Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home for more information.

4. Install Oracle SOA 11g suite if you want to use Oracle Identity Manager. For information about installing the Oracle SOA 11g suite, refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only).

5. Start your installation by performing all the steps in Starting an Installation. After you complete those steps, the Welcome screen appears.

6. Click **Next** on the Welcome screen. The Prerequisite Checks screen appears.

7. If all prerequisite checks pass inspection, click **Next**. The Specify Installation Location screen appears.

8. On the Specify Installation Location screen, enter the path to the Oracle Middleware Home installed on your system. Ensure that Oracle WebLogic Server is already installed on the system in the same Middleware Home. This directory is the same as the Oracle Home created in the Oracle WebLogic Server installation.
9. In the **Oracle Home Directory** field, enter a name for the Oracle Home folder that will be created under your Middleware Home. This directory is also referred to as IDM_HOME, Oracle_IDM1, or Oracle_IDM2 in this book.

Click **Next**. The Summary Page screen appears.

The Summary Page screen displays a summary of the choices that you made. Review this summary and decide whether to start the installation. If you want to modify any of the configuration settings at this stage, select a topic in the left navigation page and modify your choices. To continue installing Oracle Identity Management, click **Install**.

This installation process copies the Identity Management software to your system and creates an IDM_HOME directory under your Middleware Home. You must proceed to create a WebLogic Domain, as described in **After Installing the Oracle Identity Management Software**. In addition, you must configure the Administration Server settings while creating the domain.

To configure Oracle Identity Manager Server, Oracle Identity Manager Design Console, and Oracle Identity Manager Remote Manager, you must launch the Oracle Identity Management 11g Configuration Wizard, as described in **Starting the Oracle Identity Manager 11g Configuration Wizard**.

In addition, see **Configuring OIM Server**, **Configuring OIM Design Console**, and **Configuring OIM Remote Manager**.

**Note:** If you do not specify a valid Middleware Home directory on the Specify Installation Location screen, the Installer displays a message and prompts you to confirm whether you want to proceed with the installation of only Oracle Identity Manager Design Console and Oracle Identity Manager Remote Manager. These two components of Oracle Identity Manager do not require a Middleware Home directory.

If you want to install only Oracle Identity Manager Design Console or Remote Manager, you do not need to install Oracle WebLogic Server or create a Middleware Home directory on the machine where Design Console or Remote Manager is being configured.

Before using Oracle Identity Manager Design Console or Remote Manager, you must configure Oracle Identity Manager Server on the machine where the Administration Server is running. When configuring Design Console or Remote Manager on a different machine, you can specify the Oracle Identity Manager Server host and URL information.

**Note:** If you cancel or abort when the installation is in progress, you must manually delete the `<IDM_HOME>` directory before you can reinstall the Oracle Identity Management software.

To invoke online help at any stage of the installation process, click the **Help** button on the installation wizard screens.
12.2 Understanding the Directory Structure After Installation

This section describes the directory structure after installation of Oracle WebLogic Server and Oracle Identity Management. It also shows the structure of directories created after the Oracle Identity Management software is installed.

After you install the Oracle Identity Management software, an Oracle Home directory for Oracle Identity Management, such as Oracle_IDM1, is created under your Middleware Home. This home directory is also referred to as IDM_Home.

For more information about identifying installation directories, see Identifying Installation Directories.

12.3 After Installing the Oracle Identity Management Software

After installing the Oracle Identity Management software, you must proceed to configure Oracle Identity Management products in a new or existing WebLogic domain. In addition, you must configure the Administration Server settings while creating the domain. You can use the Oracle Fusion Middleware Configuration Wizard to create a WebLogic domain or extend an existing domain. For more information about WebLogic administration domain options, see Understanding Oracle WebLogic Server Administration Domain Options.

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.

To configure Oracle Identity Manager Server, Oracle Identity Manager Design Console, and Oracle Identity Manager Remote Manager, you must launch the Oracle Identity Manager 11g Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

12.4 Configuring Oracle Identity Management Products

For information about configuration scenarios for Oracle Identity Management products, including joint-installation scenarios, read the following chapters:

- Configuring Oracle Identity Navigator (OIN)
- Configuring Oracle Identity Manager (OIM)
- Configuring Oracle Access Manager (OAM)
- Configuring Oracle Adaptive Access Manager (OAAM)
- OAM and OAAM Joint Domain Configuration Scenarios
- Configuring Oracle Authorization Policy Manager (OAPM)
This chapter describes the scenarios in which an existing Oracle Identity Management domain can be extended to support new Oracle Identity Management products. It includes the following topics:

- Overview
- Important Notes Before You Begin
- Domain Extension Scenarios
- Starting the Administration Server on the Local Machine
- Creating Managed Servers on a Remote Machine

13.1 Overview

When you extend an Oracle Identity Management domain, you are configuring new products in the existing domain to support new Oracle Identity Management products.

For example, you can extend an Oracle Identity Management 11.1.1.3.0 domain to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Identity Navigator, or Oracle Authorization Policy Manager. The existing Oracle Identity Management 11.1.1.3.0 domain may contain one or more of the various combinations of Oracle Identity Management products, such as Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Identity Federation, or Oracle Directory Integration Platform.

In addition, you can extend an Oracle Identity Management domain that contains any of the various combinations of Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Identity Navigator, and Oracle Authorization Policy Manager.

Note: Note that the existing domain must have been created using the Oracle Identity Management 11g Release 1 (11.1.1) Installer and configured using the Oracle Identity Management 11g Configuration Wizard. You cannot extend an existing domain for Oracle Identity Management components if the domain was created by another program, such as the Oracle SOA Suite Installer or the Oracle Fusion Middleware Configuration Wizard.
13.2 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products in any of the scenarios discussed in this chapter, keep the following points in mind:

- It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator on the same machine.

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**Note:** In this chapter, two IDM_Home directories are mentioned in descriptions and procedures. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as Oracle_IDM1, under your Middleware_Home directory.

For more information, see Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation.

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- For Oracle Identity Manager users: You must use the Oracle Identity Manager Configuration Wizard to configure only Oracle Identity Manager Server, Oracle Identity Manager Design Console (on Windows only), and Oracle Identity Manager Remote Manager.

You must complete this additional configuration for Oracle Identity Manager components after configuring Oracle Identity Manager in a new or existing WebLogic administration domain. For more information, see the chapter Configuring Oracle Identity Manager (OIM).

If you are configuring Oracle Identity Manager Server, you must run the Oracle Identity Manager configuration wizard on the machine where the Administration
Server is running. For configuring the Server, you can run the wizard only once during the initial setup of the Server. After the successful setup of Oracle Identity Manager Server, you cannot run the Oracle Identity Manager Configuration Wizard again to modify the configuration of Oracle Identity Manager Server. For such modifications, you must use Oracle Enterprise Manager.

If you are configuring only Design Console or Remote Manager, you can run the Oracle Identity Manager Configuration Wizard on the machine where Design Console or Remote Manager is being configured. Note that you can run the Oracle Identity Manager Configuration Wizard to configure Design Console or Remote Manager as and when you need to configure them on new machines.

Note that Oracle Identity Manager requires Oracle SOA Suite 11g (11.1.1.3.0), which should be exclusive to Oracle Identity Management. You must install Oracle SOA Suite before configuring Oracle Identity Manager. If you are setting up integration between Oracle Identity Manager and Oracle Access Manager, ensure that Oracle Identity Manager and Oracle SOA Suite are installed under the same Middleware Home directory and configured in the same WebLogic domain.

13.3 Domain Extension Scenarios

The following lists the scenarios in which you can extend an existing Oracle Identity Management domain to support new Oracle Identity Management products:

- Extending an Oracle Identity Management 11.1.1.3.0 Domain to Support OIM, OAM, OAAM, OAPM or OIN on the Local Machine
- Understanding Joint Configuration and Domain Extension Scenarios for OIM, OAM, OAAM, OAPM, and OIN on the Local Machine

13.3.1 Extending an Oracle Identity Management 11.1.1.3.0 Domain to Support OIM, OAM, OAAM, OAPM or OIN on the Local Machine

It is assumed that you have installed the latest versions of Oracle WebLogic Server and Oracle Identity Management before patching your Oracle Identity Management software to 11.1.1.3.0.

After the installation is complete, you must run the Patch Set Installer for Oracle Identity Management Suite to update your software to the latest version.

For instructions, go to "Applying the Latest Oracle Fusion Middleware Patch Set with the Patch Set Installers" in Oracle Fusion Middleware Patching Guide.

You should have installed and configured the Oracle Identity Management 11.1.1.3.0 products (Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation), before attempting to extend the 11.1.1.3.0 domain to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, or Oracle Identity Navigator.

This scenario involves the following tasks:

1. Installing the latest version of Oracle SOA 11g Suite (for Oracle Identity Manager only), as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only).

2. Installing the Oracle Identity Management Suite under your existing Middleware Home, as described in Installing the Oracle Identity Management 11g Software.
3. Creating and loading the necessary schemas for the new components to be added, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

4. Launching the Oracle Fusion Middleware Configuration Wizard `<Oracle_IDM2>/common/bin/config.sh` script on UNIX (`<Oracle_IDM2>/common/bin/config.cmd` on Windows).

5. Selecting the **Extend an existing WebLogic domain** option on the Welcome screen.

6. Selecting the existing Oracle Identity Management 11.1.1.3.0 domain on the Select a WebLogic Domain Directory screen.

7. Selecting the required domain templates on the Select Extension Source screen to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Identity Navigator, or Oracle Authorization Policy Manager.

8. Modifying JDBC component schemas, configuration of Managed Servers, Deployments and Services, and so on.

9. Starting the Administration Server on the local machine, as described in Starting or Stopping the Oracle Stack.

10. Starting Managed Servers, as described in Starting or Stopping the Oracle Stack.

---

**Note:** When you extend an existing WebLogic domain to support Oracle Identity Manager, you should restart the Administration Server before launching the Oracle Identity Manager Configuration Wizard to configure Oracle Identity Manager Server.

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### 13.3.2 Understanding Joint Configuration and Domain Extension Scenarios for OIM, OAM, OAAM, OAPM, and OIN on the Local Machine

It is assumed that you have installed the latest versions of Oracle WebLogic Server and the Oracle Identity Management Suite. For Oracle Identity Manager, you should have installed the latest version of Oracle SOA Suite. You should have created and loaded the necessary schemas by using Repository Creation Utility (RCU).

You should have configured a new domain to support any of the various combinations of Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Identity Navigator (OIN), and Oracle Authorization Policy Manager (OAPM).

For example, you can configure Oracle Identity Manager in an existing Oracle Identity Management domain that contains Oracle Access Manager or Oracle Identity Navigator.

Several combinations are possible, based on your Oracle Identity Management environment and deployment.

This scenario involves the following tasks:

1. Creating and loading the necessary schemas for the new components to be added, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

2. Launching the Oracle Fusion Middleware Configuration Wizard `<Oracle_IDM2>/common/bin/config.sh` script on UNIX (`<Oracle_IDM2>/common/bin/config.cmd` on Windows).
3. Selecting the **Extend an existing WebLogic domain** option on the Welcome screen.

4. Selecting the existing Oracle Identity Management domain (the domain that contains any of the various combinations of Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Identity Navigator, and Oracle Authorization Policy Manager) on the Select a WebLogic Domain Directory screen.

5. Selecting the required domain templates on the Select Extension Source screen to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Identity Navigator, or Oracle Authorization Policy Manager. The choice of domain templates in this step depends on the component you are trying to configure in the same domain.

6. Modifying JDBC component schemas, configuration of Managed Servers, Deployments and Services, and so on.

7. Starting the Administration Server on the local machine, as described in *Starting or Stopping the Oracle Stack*.

8. Starting Managed Servers, as described in *Starting or Stopping the Oracle Stack*.

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**Note:** When you extend an existing WebLogic domain to support Oracle Identity Manager, you should restart the Administration Server before launching the Oracle Identity Manager Configuration Wizard to configure Oracle Identity Manager Server.

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### 13.4 Starting the Administration Server on the Local Machine

In some scenarios, you may want to install the Administration Server on one machine and component-specific Managed Servers on another machine. You must start the Administration Server on the machine where it is installed before you can create and run Managed Servers on the remote machine.

### 13.5 Creating Managed Servers on a Remote Machine

Before you can create and run Managed Servers on a remote machine, you must install Oracle WebLogic Server and Oracle Identity Management Suite on the remote machine. Then you must use the pack and unpack commands to create Managed Servers on the remote machine.

#### 13.5.1 Installing Oracle WebLogic Server and Oracle Identity Management Suite on the Remote Machine

You must install Oracle WebLogic Server and Oracle Identity Management Suite on the remote machine.

- On the remote machine, install Oracle WebLogic Server and create a Middleware Home directory, as described in *Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home*.

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**Note:** The structure of Middleware Home and IDM Home directories on the remote machine should be identical to that of the local machine.
Creating Managed Servers on a Remote Machine

- On the remote machine, install Oracle Identity Management Suite, as described in Installing the Oracle Identity Management 11g Software.

After this installation, you can create and start Managed Servers on the remote machine, as described in the following topic.

13.5.2 Creating and Starting Managed Servers on a Remote Machine

To create and start a Managed Server on a remote machine, complete the following steps:

- On the local machine where the domain is configured and the Administration Server is created, use the pack command located in the \common\bin directory under your IDM_Home directory to create a Managed Server template that contains a subset of the files in a domain that are required to create a Managed Server domain directory hierarchy on a remote machine.

  The -managed={true} parameter of the pack command specifies whether the template is to be used to create Managed Servers on remote machines.

- Ensure that the Administration Server is up and running on the local machine.

- On the remote machine, use the unpack command located in the \common\bin directory under your IDM_Home directory to create the Managed Server domain directory on the remote machine.

For more information, see the topic “Creating and Starting a Managed Server on a Remote Machine” in the guide Oracle Fusion Middleware Creating Templates and Domains Using the Pack and Unpack Commands. In addition, see the topic “Extending WebLogic Domains” in the guide Oracle Fusion Middleware Creating Domains Using the Configuration Wizard.

Note: For Oracle Identity Manager users only:

If you want to start the SOA Server on a remote machine, then you must manually copy the composite files from the <DOMAIN_HOME>/soa/autodeploy directory on the local machine to the <DOMAIN_HOME>/soa/autodeploy directory on the remote machine after running the unpack command on the remote machine.

If the <DOMAIN_HOME>/soa/autodeploy directory does not exist on the remote machine, you must create this directory before copying the composite files.
This chapter describes how to implement some of the most common and important Oracle Identity Management suite-level installation scenarios.

It discusses the following scenarios:

- General Prerequisites
- Important Notes Before You Begin
- Simultaneous configuration of OIN, OAPM, OAAM, OAM, and OIM
- OIM with LDAP Sync, and OAM
- OIM with LDAP Sync, OAM, and OAAM
- OIM with LDAP Sync in an Existing OAM Installation with LDAP Configured
- OIM with LDAP Sync in an Existing OAM and OAAM Installation with LDAP Configured
- OAM in an Existing OIM with LDAP Sync
- OAAM in an Existing OIM with LDAP Sync and OAAM

### 14.1 General Prerequisites

You must complete the following prerequisites before configuring Oracle Identity Management 11g Release 1 (11.1.1.3.0) products in any scenario:

1. Installing Oracle Database, as described in [Installing Oracle Database](#).
2. Installing Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in [Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home](#).
3. For Oracle Identity Manager users only: Installing Oracle SOA Suite 11g Release 1 (11.1.1.2.0) and patching it to 11.1.1.3.0, as described in [Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)](#).
4. Creating and loading schemas using Repository Creation Utility (RCU), as described in [Creating Database Schema Using the Repository Creation Utility (RCU)](#).
5. Installing the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite, as described in [Installing the Oracle Identity Management 11g Software](#). The Oracle Identity Management suite contains Oracle Identity Manager (OIM), Oracle
Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN).

14.2 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products in any of the scenarios discussed in this chapter, keep the following points in mind:

- It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Identity Navigator, and Oracle SOA Suite on the same machine.

**Note:** In this chapter, two IDM_Home directories are mentioned in descriptions and procedures. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as Oracle_IDM1, under your Middleware_Home directory.

For more information, see Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation.

- By performing the domain configuration procedures described in this chapter, you can create Managed Servers on a local machine (the machine on which the Administration Server is running). However, you can create and start Managed Servers for Oracle Identity Management components on a remote machine. For more information, see the “Creating and Starting a Managed Server on a Remote
Simultaneous configuration of OIN, OAPM, OAAM, OAM, and OIM

This section discusses how to configure Oracle Identity Navigator (OIN), Oracle Authorization Policy Manager (OAPM), Oracle Access Manager (OAM), and Oracle Identity Manager (OIM).

It includes the following sections:

- Overview
- Prerequisites
- Scenario 1: OIM with LDAP Sync, OAM with LDAP, OAAM, OAPM, and OIN in a New WebLogic Domain
- Scenario 2: OIM with LDAP Sync, OAM with LDAP, OAAM, OAPM, and OIN in an Existing Domain Containing OID and OVD

14.3.1 Overview

In this section, you perform the following tasks:

1. Install and configure Oracle Internet Directory and Oracle Virtual Directory
2. Install and configure Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator
3. Configure Oracle Access Manager to use Oracle Internet Directory as the LDAP provider
4. Set up LDAP sync for Oracle Identity Manager
5. Configure Oracle Identity Manager Server, Design Console (Windows only), and Remote Manager

14.3.2 Prerequisites
The following lists the prerequisites for installing and configuring Oracle Identity Manager with LDAP Synchronization, and Oracle Access Manager:

- Install a supported version of Oracle Database, as described in Installing Oracle Database.
- Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).
- Install Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
- Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

An IDM_Home directory, such as Oracle_IDM1, is created. This directory is the Oracle Home for Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), and Oracle Directory Services Manager (ODSM).

- Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) in a WebLogic administration domain, as described in OID and OVD with ODSM in a New WebLogic Domain.
- Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM) Oracle Adaptive Access Manager, Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), as described in Installing the Oracle Identity Management 11g Software.

An IDM_Home directory, such as Oracle_IDM2, is created. This directory is the Oracle Home for Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

**Note:** It is assumed that you are installing and configuring Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), Oracle Identity Manager (OIM), and Oracle Access Manager (OAM) on the same machine. Therefore, two distinct IDM_Home directories are mentioned in this chapter.

- Install the latest version of Oracle SOA Suite under the same Middleware Home, and patch the Oracle SOA Suite to the latest version, as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)
14.3.3 Scenario 1: OIM with LDAP Sync, OAM with LDAP, OAAM, OAPM, and OIN in a New WebLogic Domain

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

14.3.3.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to configure Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN) simultaneously in a new WebLogic administration domain. Then you can configure Oracle Access Manager to use Oracle Internet Directory (OID) as its LDAP Provider. You can also set up LDAP Sync for Oracle Identity Manager.

14.3.3.2 Components Deployed

Performing the configuration in this section deploys the following:

- WebLogic Administration Server
- A Managed Server each for Oracle Identity Manager, Oracle Access Manager, and Oracle Adaptive Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Identity Navigator and Oracle Authorization Policy Manager applications on the Administration Server
- Administration Consoles for the Oracle Access Manager and Oracle Adaptive Access Manager on the Administration Server

14.3.3.3 Dependencies

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

- Oracle WebLogic Server
- Installation of Oracle Identity Management Suite, as described in Installing the Oracle Identity Management 11g Software
- Oracle Database
- Oracle SOA 11g Suite
- JDK (either Oracle WebLogic JRockit JDK or Sun JDK 1.6.0)
- Database schemas for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager. For more information about schemas specific to each product, see Creating Database Schema Using the Repository Creation Utility (RCU).
14.3.3.4 Procedure

To configure Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Identity Navigator, and Oracle Authorization Policy Manager in a new WebLogic domain, complete the following steps:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (On UNIX). `<Oracle_IDM2>/common\bin\config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select Create a new WebLogic domain, and click Next. The Select Domain Source screen appears.

4. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected.

5. Create a WebLogic administration domain, which supports the following products:
   - Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]
   - Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]
   - Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]
   - Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]
   - Optional: Oracle Adaptive Access Manager Server - 11.1.1.3.0 [Oracle_IDM2]
   - Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2]

   **Note:** When you select any the Oracle Identity Management products, the Oracle JRF 11.1.1.0 [oracle_common] option is also selected automatically.

   When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1] option, the Oracle WSM Policy Manager - 11.1.1.0 [oracle_common] option, and the Oracle Enterprise Manager - 11.1.1.0 [oracle_common] option are also selected.

   Click Next. The Specify Domain Name and Location screen appears

6. Enter a name and a location for the domain to be created, and click Next. The Configure Administrator User Name and Password screen appears.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next.


   The Configure JDBC Component Schema screen displays a list of the following component schemas:
   - SOA Infrastructure
   - User Messaging Service
Simultaneous configuration of OIN, OAPM, OAAM, OAM, and OIM

- OAAM Server Schema
- OIM MDS Schema
- OWSM MDS Schema
- OAAM Admin Server
- OAAM Admin MDS Schema
- APM MDS Schema
- APM Schema
- OIM Schema
- SOA MDS Schema
- OAM Infrastructure


10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, JMS File Store, and RDBMS Security Store. Select the relevant check boxes and click Next.

- Optional: Configure Administration Server, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.
- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.
- Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, you can view the summary of your configuration for deployments, application, and service. Review the domain configuration, and click Create to start creating the domain.

A WebLogic domain to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and
Oracle Identity Navigator is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

12. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

13. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

      On UNIX: Run `./wlst.sh` on the command line.

      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`), type the following:

      ```
      connect()
      ```

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

      Run the `createUserIdentityStore` WLST command, as in the following example:

      ```
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=acme,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true",userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
      ```

      **Note:** Users that are members of the group specified in the `roleSecAdmin` attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the `groupSearchBase` attribute. If the group is not available, you can specify the user name, such as `orcladmin`, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.
14. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

15. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

16. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

17. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

18. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

14.3.4 Scenario 2: OIM with LDAP Sync, OAM with LDAP, OAAM, OAPM, and OIN in an Existing Domain Containing OID and OVD

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

14.3.4.1 Appropriate Deployment Environment

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

- You want to add Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator to an existing Oracle Identity Management domain that contains Oracle Internet Directory and Oracle Virtual Directory.

- You want to configure all Oracle Identity Management products, including 11.1.1.3.0, in the same WebLogic administration domain.

- You want a single WebLogic Administration Server to manage all of the Oracle Identity Management 11g products.

14.3.4.2 Components Deployed

Performing the configuration in this section deploys the following components:

- A Managed Server each for Oracle Identity Manager, Oracle Access Manager, and Oracle Adaptive Access Manager

- Oracle Identity Manager, Oracle Access Manager, and Oracle Adaptive Access Manager applications on Managed Servers

- Administration Consoles for Oracle Access Manager and Oracle Adaptive Access Manager on the existing Administration Server
Simultaneous configuration of OIN, OAPM, OAAM, OAM, and OIM

- Oracle Identity Navigator application and Oracle Authorization Policy Manager on the existing Administration Server
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

**14.3.4.3 Dependencies**
The configuration in this section depends on the following:

- Oracle WebLogic Server
- Installation of Oracle Identity Management Suite, as described in Installing the Oracle Identity Management 11g Software
- Oracle Database
- Oracle SOA 11g Suite
- JDK (either Oracle WebLogic JRockit JDK or Sun JDK 1.6.0)
- Database schemas for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager. For more information about schemas specific to each product, see Creating Database Schema Using the Repository Creation Utility (RCU).

**14.3.4.4 Procedure**
To extend an existing Oracle Identity Management 11.1.1.3.0 domain (the domain with Oracle Internet Directory and Oracle Virtual Directory) to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, complete the following steps:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM1>/bin/config.sh` on UNIX operating systems to start the Oracle Identity Management Configuration Wizard. On Windows, run the `<Oracle_IDM1>/bin/config.bat` to start the wizard.

3. On the Select Domain screen, select the Create New Domain option. Set the Administrator user name and password, as required.

4. Ensure that you select Oracle Internet Directory and Oracle Virtual Directory on the Configure Components screen.

5. Follow the wizard, provide the necessary input, and configure the domain.

A new WebLogic domain to support Oracle Internet Directory and Oracle Virtual Directory is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

6. Ensure that your Oracle database version is supported and you have installed the necessary patches. For more information, see Installing Oracle Database.

7. Ensure that any appropriate schemas required by Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager are created and loaded, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

8. Ensure that the Oracle Identity Management 11g software is installed. Refer to Installing the Oracle Identity Management 11g Software for more information.
new Oracle Home for Oracle Identity Management, such as Oracle_IDM2, is created under the Middleware Home directory.

9. Ensure that the latest version of Oracle SOA Suite is installed under the same Middleware Home. Refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only) for more information.

10. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common\bin\config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

11. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click Next. The Select a WebLogic Domain Directory screen is displayed.

12. On the Select a WebLogic Domain Directory screen, select the directory that contains the domain in which you configured Oracle Internet Directory and Oracle Virtual Directory. Click Next.

13. On the Select Domain Source screen, ensure that the **Extend my domain to automatically to support the following added products:** is selected.

14. Select the following options:

   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]** option, and the **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]** option are also selected.

15. Click Next. The Configure JDBC Component Schema appears.

The screen displays a list of the following component schemas:

   - SOA Infrastructure
   - User Messaging Service
   - OAAM Admin Schema
   - OAAM Admin MDS Schema
   - APM Schema
   - APM MDS Schema
   - OIM MDS Schema
   - OWSM MDS Schema
   - SOA MDS Schema
   - OAM Infrastructure
   - OIM Schema
16. On the Configure JDBC Component Schema screen, select a component schema that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

17. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines, Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

18. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Internet Directory and Oracle Virtual Directory is configured to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

19. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in **Starting the Stack**.

20. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore WLST` command:

a. On the command line, use the cd command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. Oracle_IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

   On UNIX: Run `.wlst.sh` on the command line.

   On Windows: Run `wlst.cmd`.

   At the WLST command prompt (wlst:/offline), type the following: `connect()`
You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the `createUserIdentityStore` WLST command, as in the following example:

```java
createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=acme,dc=com", ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=acme,dc=com")
```

**Note:** Users that are members of the group specified in the `roleSecAdmin` attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the `groupSearchBase` attribute. If the group is not available, you can specify the user name, such as `orcladmin`, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

21. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.
22. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.
23. Restart the Administration Server, as described in Restarting Servers.
24. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.
25. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.
26. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.
14.4 OIM with LDAP Sync, and OAM

This section discusses how to configure Oracle Identity Manager (OIM) and Oracle Access Manager (OAM) in different scenarios:

It includes the following sections:

- Overview
- Prerequisites
- Scenario 1: OIM with LDAP Sync, and OAM in a New WebLogic Domain
- Scenario 2: OIM with LDAP Sync, and OAM, in an Existing Domain Containing OID and OVD
- Scenario 3: OIM with LDAP Sync, and OAM, in a Domain Containing OAAM, OAPM, and OIN

14.4.1 Overview

In this section, you perform the following tasks:

1. Install and configure Oracle Internet Directory and Oracle Virtual Directory
2. Install and configure Oracle Identity Manager and Oracle Access Manager
3. Configure Oracle Access Manager to use Oracle Internet Directory as the LDAP provider
4. Set up LDAP sync for Oracle Identity Manager
5. Configure Oracle Identity Manager Server, Design Console (Windows only), and Remote Manager

14.4.2 Prerequisites

The following lists the prerequisites for installing and configuring Oracle Identity Manager with LDAP Synchronization, and Oracle Access Manager:

- Install a supported version of Oracle Database, as described in Installing Oracle Database.
- Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).
- Install Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
- Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

An IDM_Home directory, such as Oracle_IDM1, is created. This directory is the Oracle Home for Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), and Oracle Directory Services Manager (ODSM).

- Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) in a WebLogic administration domain, as described in OID and OVD with ODSM in a New WebLogic Domain.
- Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM) Oracle Adaptive
Oracle Identity Manager (OIM) with LDAP synchronization, and Oracle Access Manager (OAM), as described in Installing the Oracle Identity Management 11g Software.

An IDM_Home directory, such as Oracle_IDM2, is created. This directory is the Oracle Home for Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

**Note:** It is assumed that you are installing and configuring Oracle Internet Directory (OVD), Oracle Virtual Directory (OVD), Oracle Identity Manager (OIM), and Oracle Access Manager (OAM) on the same machine. Therefore, two distinct IDM_Home directories are mentioned in this chapter.

- Install the latest version of Oracle SOA Suite under the same Middleware Home, and patch the Oracle SOA Suite to the latest version, as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)

### 14.4.3 Scenario 1: OIM with LDAP Sync, and OAM in a New WebLogic Domain

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

#### 14.4.3.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Manager (OIM) with LDAP Synchronization in an environment where you may set up integration between Oracle Identity Manager and Oracle Access Manager (OAM) at a later time. You can set up this integration, as described in Integration Between OIM and OAM.

#### 14.4.3.2 Components Deployed

Performing the configuration in this section deploys the following:

- WebLogic Administration Server
- Managed Servers for Oracle Identity Manager and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console on the Administration Server

#### 14.4.3.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
14.4.3.4 Procedure

Perform the following steps to configure Oracle Identity Manager with LDAP Synchronization, and Oracle Access Manager in a new WebLogic domain:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script on UNIX (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the following domain configuration options:
   - Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]
   - Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.
You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure **Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, RDBMS Security Store, and JMS File Store**. Select the relevant check boxes and click Next.

- Optional: Configure Administration Server, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure RDBMS Security Store, as required.
- Optional: Configure JMS File Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

A new WebLogic domain to support Oracle Identity Manager and Oracle Access Manager is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

12. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

13. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the cd command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. **Oracle_IDM2** is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:
      
      On UNIX: Run `./wlst.sh` on the command line.
      
      On Windows: Run `wlst.cmd`.
At the WLST command prompt (wls:/offline>), type the following:

c\n
You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the the createUserIdentityStore WLST command, as in the following example:

c\n
**Note:** Users that are members of the group specified in the roleSecAdmin attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the groupSearchBase attribute. If the group is not available, you can specify the user name, such as orcladmin, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

14. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

15. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

16. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

17. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

18. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.
14.4.4 Scenario 2: OIM with LDAP Sync, and OAM, in an Existing Domain Containing OID and OVD

This section discusses the following topics:

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

### 14.4.4.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Manager (OIM) with LDAP Synchronization in an environment where you have installed and configured Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD). At a later time, you may set up integration between Oracle Identity Manager and Oracle Access Manager (OAM), as described in Integration Between OIM and OAM.

### 14.4.4.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Servers for Oracle Identity Manager and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console on the existing Administration Server

### 14.4.4.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

### 14.4.4.4 Procedure

Perform the following steps to configure Oracle Identity Manager with LDAP Synchronization, and Oracle Access Manager in an existing Oracle Identity
Management 11.1.1.3.0 domain that contains Oracle Internet Directory and Oracle Virtual Directory:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM1>/bin/config.sh` on UNIX operating systems to start the Oracle Identity Management Configuration Wizard. On Windows, run the `<Oracle_IDM1>/bin/config.bat` to start the wizard.

3. On the Select Domain screen, select the Create New Domain option. Set the Administrator user name and password, as required.

4. Ensure that you select Oracle Internet Directory and Oracle Virtual Directory on the Configure Components screen.

5. Follow the wizard, provide the necessary input, and configure the domain.

   A new WebLogic domain to support Oracle Internet Directory and Oracle Virtual Directory is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

6. Ensure that your Oracle database version is supported and you have installed the necessary patches. For more information, see Installing Oracle Database.

7. Ensure that any appropriate schemas required by Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager are created and loaded, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

8. Ensure that the Oracle Identity Management 11g software is installed. Refer to Installing the Oracle Identity Management 11g Software for more information. A new Oracle Home for Oracle Identity Management, such as Oracle_IDM2, is created under the Middleware Home directory.

9. Ensure that the latest version of Oracle SOA Suite is installed under the same Middleware Home. Refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only) for more information.

10. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

11. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


13. On the Select Extension Source screen, select the following domain configuration options:

   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

---

**Note:** When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1], and Oracle WSM Policy Manager - 11.1.1.0 [oracle_common].
Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]

14. After selecting the domain configuration options, click Next. The Configure JDBC Component Schema screen is displayed.

15. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

16. On the Select Optional Configuration screen, you can configure JMS Distributed Destination, Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

- Optional: Select a JMS Distributed Destination Type, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

17. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain.

Your existing Oracle Identity Management 11.1.1.3.0 domain with Oracle Internet Directory and Oracle Virtual Directory is extended to support Oracle Identity Manager and Oracle Access Manager.

18. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

19. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the createUserIdentityStore WLST command:

   a. On the command line, use the cd command to move from your present working directory to the Oracle_IDM2/common/bin directory. Oracle_
IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

On UNIX: Run ./wlst.sh on the command line.

On Windows: Run wlst.cmd.

At the WLST command prompt (wls:/offline>, type the following:

connect()

You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the the createUserIdentityStore WLST command, as in the following example:

createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true",userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")

Note: Users that are members of the group specified in the roleSecAdmin attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the groupSearchBase attribute. If the group is not available, you can specify the user name, such as orcladmin, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

20. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

21. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

22. Restart the Administration Server, as described in Restarting Servers.

23. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

24. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select
the **Enable LDAP Sync** option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

25. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

---

**Note:** If **weblogic** is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

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### 14.4.5 Scenario 3: OIM with LDAP Sync, and OAM, in a Domain Containing OAAM, OAPM, and OIN

This section discusses the following topics:
- **Appropriate Deployment Environment**
- **Components Deployed**
- **Dependencies**
- **Procedure**

#### 14.4.5.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Manager (OIM) with LDAP Synchronization in an environment where other Oracle Identity Management products, such as Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN) are installed and configured.

At a later time, you may set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM.

You can use Oracle Identity Navigator to discover and launch Consoles for the Oracle Identity Management products from within the Oracle Identity Navigator user interface.

#### 14.4.5.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Servers for Oracle Identity Manager and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console on the existing Administration Server

#### 14.4.5.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
• Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
• Installation of the Oracle Identity Management 11g software.
• Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
• Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.4.5.4 Procedure
Perform the following steps to configure Oracle Identity Manager with LDAP Synchronization, and Oracle Access Manager in an existing Oracle Identity Management domain that contains Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the following domain configuration options:
   - Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]

   **Note:** When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle Enterprise Manager - 11.1.1.0 [oracle_common], Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2] and Oracle JRF - 11.1.1.0 [oracle_common].

   - Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2]

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.

9. On the Configure JDBC Component Schema screen, select a component schema, such as the OAAM Admin Schema, the APM Schema Schema, the APM MDS Schema, or the OAAM Admin MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store. Select the relevant check boxes and click Next.

- Optional: Configure Administration Server, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the “Configuring High Availability for Identity Management Components” topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain. After the domain configuration is complete, click Done to dismiss the wizard.

A new WebLogic domain to support Oracle Authorization Policy Manager and Oracle Adaptive Access Manager, and Oracle Identity Navigator is created in the \user_projects\domains directory (on Windows), by default. On UNIX, the domain is created in the \user_projects\domains directory, by default.

12. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common/bin\config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

13. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


15. On the Select Extension Source screen, select the following domain configuration options:
16. After selecting the domain configuration options, click Next. The Configure JDBC Component Schema screen is displayed.

17. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the SOA Infrastructure Schema, the OAAM Admin Schema, the APM Schema, the APM MDS Schema, the User Messaging Service Schema, the WSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

18. On the Select Optional Configuration screen, you can configure JMS Distributed Destination, Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

- Optional: Select a JMS Distributed Destination Type, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

19. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Authorization Policy Manager and Oracle Adaptive Access Manager, and Oracle Identity
Navigator is extended to support Oracle Identity Manager and Oracle Access Manager.

20. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

21. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the `cd` command to move from your present working directory to the `/Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

      On UNIX: Run `./wlst.sh` on the command line.

      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`), type the following:

      ```
      connect()
      ```

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic “Using the WebLogic Scripting Tool” in the guide *Oracle Fusion Middleware Oracle WebLogic Scripting Tool*.

      Run the the `createUserIdentityStore` WLST command, as in the following example:

      ```
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true",userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
      ```

      **Note:** Users that are members of the group specified in the `roleSecAdmin` attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the `groupSearchBase` attribute. If the group is not available, you can specify the user name, such as `orcladmin`, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide *Oracle Fusion Middleware Administaror’s Guide for Oracle Access Manager*.

22. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.
23. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

24. Restart the Administration Server, as described in Restarting Servers.

25. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

26. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

27. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

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**Note:** If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

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### 14.5 OIM with LDAP Sync, OAM, and OAAM

This topic describes how to configure Oracle Identity Manager (OIM) with LDAP Synchronization, Oracle Access Manager (OAM), and Oracle Adaptive Access Manager (OAAM) in a new or existing WebLogic domain.

It includes the following sections:

- Overview
- Prerequisites
- Scenario 1: OIM with LDAP Sync, and OAM in a New WebLogic Domain
- Scenario 2: Configuration in a Domain Containing OID and OVD
- Scenario 3: Configuration in a Domain Containing OAPM and OIN

### 14.5.1 Overview

In this section, you perform the following tasks:

1. Install and configure Oracle Internet Directory and Oracle Virtual Directory
2. Install and configure Oracle Identity Manager, Oracle Access Manager, and Oracle Adaptive Access Manager
3. Configure Oracle Access Manager to use Oracle Internet Directory as the LDAP provider
4. Set up LDAP sync for Oracle Identity Manager
5. Configure Oracle Identity Manager Server, Design Console (Windows only), and Remote Manager
14.5.2 Prerequisites

The following lists the prerequisites for installing and configuring Oracle Identity Manager with LDAP Synchronization, Oracle Access Manager, and Oracle Adaptive Access Manager:

- Install a supported version of Oracle Database, as described in Installing Oracle Database.
- Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).
- Install Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
- Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

An IDM_Home directory, such as Oracle_IDM1, is created. This directory is the Oracle Home for Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), and Oracle Directory Services Manager (ODSM).

- Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) in a WebLogic administration domain, as described in OID and OVD with ODSM in a New WebLogic Domain.
- Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM) Oracle Adaptive Access Manager, Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), as described in Installing the Oracle Identity Management 11g Software.

An IDM_Home directory, such as Oracle_IDM2, is created. This directory is the Oracle Home for Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

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**Note:** It is assumed that you are installing and configuring Oracle Internet Directory (OVD), Oracle Virtual Directory (OVD), Oracle Identity Manager (OIM), and Oracle Access Manager (OAM) on the same machine. Therefore, two distinct IDM_Home directories are mentioned in this chapter.

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- Install the latest version of Oracle SOA Suite under the same Middleware Home, and patch the Oracle SOA Suite to the latest version, as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)

14.5.3 Scenario 1: Configuration in a New WebLogic Domain

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure
14.5.3.1 Appropriate Deployment Environment
Perform the configuration in this topic if you want to install Oracle Identity Manager (OIM) with LDAP Synchronization in an environment where you may set up integration between Oracle Identity Manager and Oracle Access Manager (OAM) at a later time, as described in Integration Between OIM and OAM.
You may add other Oracle Identity Management products, such as Oracle Authorization Policy Manager and Oracle Identity Navigator at a later time in the same domain.

14.5.3.2 Components Deployed
Performing the configuration in this section deploys the following:

- WebLogic Administration Server
- Managed Servers for Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the Administration Server

14.5.3.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.5.3.4 Procedure
Perform the following steps to configure Oracle Identity Manager with LDAP Synchronization, and Oracle Access Manager in a new WebLogic domain:

1. Ensure that all the prequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM2>/common/bin/config.sh` script on UNIX (`<IDM_Home>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.
3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.
4. On the Select Domain Source screen, select the following domain configuration options:
   - Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]
Note: When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1], Oracle Enterprise Manager - 11.1.1.0 [oracle_common], Oracle JRF - 11.1.1.0 [oracle_common] and Oracle WSM Policy Manager - 11.1.1.0 [oracle_common].

- Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]
- Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]

When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2] option is also selected, by default.

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the OAAM Admin Schema, the OAAM Admin MDS Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, JMS Distributed Destination, Managed Servers, Clusters, and Machines, Deployments and Services, RDBMS Security Store, and JMS File Store. Select the relevant check boxes and click Next.
    - Optional: Configure Administration Server, as required.
    - Optional: Select JMS Distributed Destination Type, as required.
    - Optional: Configure Managed Servers, as required.
    - Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the “Configuring High Availability for Identity Management Components” topic in the guide Oracle Fusion Middleware High Availability Guide.
Optional: Assign Managed Servers to Clusters, as required.

Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

Optional: Assign the Administration Server to a machine.

Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure RDBMS Security Store, as required.

Optional: Configure JMS File Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click **Create** to start creating the domain.

A new WebLogic domain to support Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows), by default. On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory, by default.

12. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

13. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

      On UNIX: Run `./wlst.sh` on the command line.

      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`), type the following:

      ```
      connect()
      ```

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide *Oracle Fusion Middleware Oracle WebLogic Scripting Tool*.

      Run the the `createUserIdentityStore` WLST command, as in the following example:

      ```
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true"
      ```
Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

14. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

15. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

16. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

17. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

18. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

Note: If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

14.5.4 Scenario 2: Configuration in a Domain Containing OID and OVD

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure
14.5.4.1 Appropriate Deployment Environment
Perform the configuration in this topic if you want to install Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), and Oracle Identity Manager (OIM) with LDAP Synchronization in an environment where you have installed and configured Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD). At a later time, you may set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM.

14.5.4.2 Components Deployed
Performing the configuration in this section deploys the following:

■ Managed Servers for Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager
■ Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
■ Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the existing Administration Server

14.5.4.3 Dependencies
The configuration in this section depends on the following:

■ Oracle WebLogic Server.
■ Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
■ Installation of the Oracle Identity Management 11g software.
■ Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
■ Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.5.4.4 Procedure
Perform the following steps to configure Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager with LDAP Synchronization in an existing Oracle Identity Management 11.1.1.3.0 domain that contains Oracle Internet Directory and Oracle Virtual Directory:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the <Oracle_IDM1>/bin/config.sh on UNIX operating systems to start the Oracle Identity Management Configuration Wizard. On Windows, run the <Oracle_IDM1>\bin\config.bat to start the wizard.
3. On the Select Domain screen, select the Create New Domain option. Set the Administrator user name and password, as required.
4. Ensure that you select Oracle Internet Directory and Oracle Virtual Directory on the Configure Components screen.
5. Follow the wizard, provide the necessary input, and configure the domain.
A new WebLogic domain to support Oracle Internet Directory and Oracle Virtual Directory is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

6. Ensure that your Oracle database version is supported and you have installed the necessary patches. For more information, see Installing Oracle Database.

7. Ensure that any appropriate schemas required by Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager are created and loaded, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

8. Ensure that the Oracle Identity Management 11g software is installed. Refer to Installing the Oracle Identity Management 11g Software for more information. A new Oracle Home for Oracle Identity Management, such as `Oracle_IDM2`, is created under the Middleware Home directory.

9. Ensure that the latest version of Oracle SOA Suite is installed under the same Middleware Home. Refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only) for more information.

10. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

11. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


13. On the Select Extension Source screen, select the following domain configuration options:

   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

     **Note:** When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1], and Oracle WSM Policy Manager - 11.1.1.0 [oracle_common].

   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**

   - **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]**

     When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2] option is also selected, by default.

14. After selecting the domain configuration options, click Next. The Configure JDBC Component Schema screen is displayed.

15. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.
You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

16. On the Select Optional Configuration screen, you can configure **JMS Distributed Destination, Managed Servers, Clusters, and Machines, Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click Next.

- Optional: Select a JMS Distributed Destination Type, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

17. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management 11.1.1.1.3.0 domain with Oracle Internet Directory and Oracle Virtual Directory is extended to support Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager.

18. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in **Starting the Stack**.

19. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

a. On the command line, use the cd command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

   On UNIX: Run `./wlst.sh` on the command line.
   On Windows: Run `wlst.cmd`.

   At the WLST command prompt (`wls:/offline>`, type the following:
   `connect()`
You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the the `createUserIdentityStore` WLST command, as in the following example:

```java
createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
```

**Note:** Users that are members of the group specified in the `roleSecAdmin` attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the `groupSearchBase` attribute. If the group is not available, you can specify the user name, such as `orcladmin`, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

20. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

21. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

22. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

23. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

24. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.
This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

### 14.5.5.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), and Oracle Identity Manager (OIM) with LDAP Synchronization, in an environment where other Oracle Identity Management products, such as Oracle Authorization Policy Manager (OAPM) and Oracle Identity Navigator (OIN) are installed and configured.

At a later time, you may set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM.

You can use Oracle Identity Navigator to discover and launch Consoles for the Oracle Identity Management products from within the Oracle Identity Navigator user interface.

### 14.5.5.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Servers for Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the existing Administration Server

### 14.5.5.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).

Note: If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).
Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.5.5.4 Procedure
Perform the following steps to configure Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager with LDAP Synchronization, in an existing Oracle Identity Management domain that contains Oracle Authorization Policy Manager and Oracle Identity Navigator:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the following domain configuration options:
   - Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2]
   - Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]

   **Note:** When you select the Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following option is also selected, by default: Oracle JRF - 11.1.1.0 [oracle_common].

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the APM Schema, or the APM MDS Schema, that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store. Select the relevant check boxes and click Next.
   - Optional: Configure Administration Server, as required.
■ Optional: Configure Managed Servers, as required.

■ Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

■ Optional: Assign Managed Servers to Clusters, as required.

■ Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

■ Optional: Assign the Administration Server to a machine.

■ Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

■ Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain. After the domain configuration is complete, click Done to dismiss the wizard.

   A new WebLogic domain to support Oracle Authorization Policy Manager and Oracle Identity Navigator is created in the <Middleware_Home>\user_projects\domains directory (on Windows), by default. On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory, by default.

12. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common\bin\config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

13. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


15. On the Select Extension Source screen, select the following domain configuration options:

   ■ **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1], and Oracle WSM Policy Manager - 11.1.1.0 [oracle_common].

   ■ **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**
Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]

When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2] option is also selected, by default.

16. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

17. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click Next. The Configure JDBC Component Schema screen is displayed.

18. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the SOA Infrastructure Schema, the OAAM Admin Schema, the APM Schema, the APM MDS Schema, the OAAM Admin MDS Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

19. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

20. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Authorization Policy Manager and Oracle Identity Navigator is extended to support Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager.

21. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

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22. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the createUserIdentityStore WLST command:

   a. On the command line, use the cd command to move from your present working directory to the Oracle_IDM2/common/bin directory. Oracle_IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:
      
      On UNIX: Run ./wlst.sh on the command line.
      
      On Windows: Run wlst.cmd.
      
      At the WLST command prompt (wls:/offline>, type the following:
      
      connect()
      
      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.
      
      Run the the createUserIdentityStore WLST command, as in the following example:
      
      ```java
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
      ```
      
      **Note:** Users that are members of the group specified in the roleSecAdmin attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the groupSearchBase attribute. If the group is not available, you can specify the user name, such as orcladmin, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

23. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

24. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

25. Restart the Administration Server, as described in Restarting Servers.
26. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

27. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

28. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

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**Note:** If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

### 14.6 OIM with LDAP Sync in an Existing OAM Installation with LDAP Configured

This section describes how to configure Oracle Identity Manager (OIM) with LDAP Sync to an existing Oracle Access Manager installation, which has Oracle Internet Directory (OID) configured as the LDAP provider.

It contains the following sections:

- Overview
- Prerequisites
- Scenario 1: Configuration in a New WebLogic Domain
- Scenario 2: Configuration in a Domain Containing OID and OVD
- Scenario 3: Configuration in a Domain Containing OAAM, OAPM, and OIN

#### 14.6.1 Overview

In this section, you perform the following tasks:

1. Install and configure Oracle Internet Directory and Oracle Virtual Directory
2. Install and configure Oracle Access Manager
3. Configure Oracle Access Manager to use Oracle Internet Directory as the LDAP provider
4. Configure Oracle Identity Manager
5. Set up LDAP sync for Oracle Identity Manager
6. Configure Oracle Identity Manager Server, Design Console (Windows only), and Remote Manager
14.6.2 Prerequisites

The following lists the prerequisites for installing and configuring Oracle Identity Manager with LDAP Synchronization to an existing Oracle Access Manager installation, which has LDAP configured:

- Install a supported version of Oracle Database, as described in Installing Oracle Database.
- Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).
- Install Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
- Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

An IDM_Home directory, such as Oracle_IDM1, is created. This directory is the Oracle Home for Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), and Oracle Directory Services Manager (ODSM).

- Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) in a WebLogic administration domain, as described in OID and OVD with ODSM in a New WebLogic Domain.
- Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM) Oracle Adaptive Access Manager, Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), as described in Installing the Oracle Identity Management 11g Software.

An IDM_Home directory, such as Oracle_IDM2, is created. This directory is the Oracle Home for Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

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**Note:** It is assumed that you are installing and configuring Oracle Internet Directory (OVD), Oracle Virtual Directory (OVD), Oracle Identity Manager (OIM), and Oracle Access Manager (OAM) on the same machine. Therefore, two distinct IDM_Home directories are mentioned in this chapter.

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- Install the latest version of Oracle SOA Suite under the same Middleware Home, and patch the Oracle SOA Suite to the latest version, as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only).

14.6.3 Scenario 1: Configuration in a New WebLogic Domain

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure
14.6.3.1 **Appropriate Deployment Environment**
Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, and Oracle Identity Manager are installed on the same machine.
- Oracle Access Manager is configured in a new WebLogic domain, which is extended to support Oracle Identity Manager at a later time.
- Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider before configuring LDAP Sync for Oracle Identity Manager.

14.6.3.2 **Components Deployed**
Performing this configuration deploys the following:

- A WebLogic Administration Server
- Managed Servers for Oracle Access Manager and Oracle Identity Manager
- Oracle Access Manager Console on the Administration Server
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

14.6.3.3 **Dependencies**
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see *Creating Database Schema Using the Repository Creation Utility (RCU)*.

14.6.3.4 **Procedure**
Perform the following steps to configure Oracle Identity Manager with LDAP Synchronization, to an existing Oracle Access Manager installation, which has LDAP configured:

1. Ensure that all the prequisites, listed in **Prerequisites**, are satisfied. In addition, see **Important Notes Before You Begin**.
2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.
3. On the Welcome screen, select the **Create a new WebLogic domain** option. Click **Next**. The Select Domain Source screen is displayed.
4. On the Select Domain Source screen, ensure that the **Generate a domain configured automatically to support the following products** option is selected.
Select **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**, and click Next. The Select Domain Name and Location screen appears.

**Note:** When you select the **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle JRF 11.1.1.0 [Oracle_Common]** option is also selected, by default.

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, and RDBMS Security Store. Select the relevant check boxes and click Next.

   - Optional: Configure Administration Server, as required.
   - Optional: Select JMS Distributed Destination Type, as required.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.
   
   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide **Oracle Fusion Middleware High Availability Guide**.

   - Optional: Assign Managed Servers to Clusters, as required.

   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
   - Optional: Configure RDBMS Security Store, as required.
11. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

A new WebLogic domain to support Oracle Access Manager is created in the
<Middleware_Home>/user_projects/domains directory (on Windows), by
default. On UNIX, the domain is created in the <Middleware_Home>/user_ projects/domains directory, by default.

12. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

13. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the createUserIdentityStore WLST command:

a. On the command line, use the cd command to move from your present
working directory to the Oracle_IDM2/common/bin directory. Oracle_IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

On UNIX: Run ./.wlst.sh on the command line.

On Windows: Run wlst.cmd.

At the WLST command prompt (wls:/offline>, type the following:

connect()

You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the the createUserIdentityStore WLST command, as in the
following example:

createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP",
userAttr="uid", ldapProvider="OID",
roleSecAdmin="OAMAdministrators",
userSearchBase="cn=Users,dc=us,dc=oracle,dc=com",
,ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true",
,userIdProvider="OracleUserRoleAPI",
groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")

Note: Users that are members of the group specified in the
roleSecAdmin attribute are allowed access to the Oracle Access
Manager Administration Console. This group must exist under the
Directory Information Tree (DIT) specified in the groupSearchBase
attribute. If the group is not available, you can specify the user name,
such as orcladmin, who will have access to the Oracle Access
Manager Administration Console. Note that only the user specified in
this attribute will have access to the Oracle Access Manager
Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the

14. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

15. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


17. On the Select Extension Source screen, select the following domain configuration options:

   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]** option, the following options are also selected, by default: Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1], Oracle Enterprise Manager - 11.1.1.0 [oracle_common], and Oracle WSM Policy Manager - 11.1.1.0 [oracle_common].

18. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

19. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click Next. The Configure JDBC Component Schema screen is displayed.

20. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

21. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines**, **Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click Next.

   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.
Tip: Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

22. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Access Manager is extended to support Oracle Identity Manager.

23. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

24. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

25. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

26. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the **Enable LDAP Sync** option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

27. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

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**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

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### 14.6.4 Scenario 2: Configuration in a Domain Containing OID and OVD

This section discusses the following topics:

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

#### 14.6.4.1 Appropriate Deployment Environment

Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, and Oracle Identity Manager are installed on the same machine.
Oracle Access Manager is configured in the existing Oracle Identity Management domain containing Oracle Internet Directory and Oracle Virtual Directory. This domain is extended to support Oracle Identity Manager at a later time.

Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider before configuring LDAP Sync for Oracle Identity Manager.

### 14.6.4.2 Components Deployed
Performing this configuration deploys the following:

- Managed Servers for Oracle Access Manager and Oracle Identity Manager
- Oracle Access Manager Console on the existing Administration Server
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

### 14.6.4.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

### 14.6.4.4 Procedure
Perform the following steps to configure Oracle Identity Manager with LDAP Synchronization, to an existing Oracle Access Manager installation, which has LDAP configured:

1. Ensure that all the prequisites, listed in Prerequisites, are satisified. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM1>/bin/config.sh` on UNIX operating systems to start the Oracle Identity Management Configuration Wizard. On Windows, run the `<Oracle_IDM1>in\config.bat` to start the wizard.
3. On the Select Domain screen, select the Create New Domain option. Set the Administrator user name and password, as required.
4. Ensure that you select Oracle Internet Directory and Oracle Virtual Directory on the Configure Components screen.
5. Follow the wizard, provide the necessary input, and configure the domain.

A new WebLogic domain to support Oracle Internet Directory and Oracle Virtual Directory is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

6. Ensure that your Oracle database version is supported and you have installed the necessary patches. For more information, see Installing Oracle Database.
7. Ensure that any appropriate schemas required by Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager are created and loaded, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

8. Ensure that the Oracle Identity Management 11g software is installed. Refer to Installing the Oracle Identity Management 11g Software for more information. A new Oracle Home for Oracle Identity Management, such as Oracle_IDM2, is created under the Middleware Home directory.

9. Ensure that the latest version of Oracle SOA Suite is installed under the same Middleware Home. Refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only) for more information.

10. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

11. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**. The Select a WebLogic Domain Directory screen is displayed.

12. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management 11.1.1.3.0 domain in which you configured Oracle Internet Directory and Oracle Virtual Directory. Click **Next**. The Select Extension Source screen is displayed.

13. On the Select Extension Source screen, select the following domain configuration options:

   **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**

14. After selecting the domain configuration options, click **Next**. The Configure JDBC Component Schema screen is displayed.

15. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

16. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines, Deployments and Services**. Select the relevant check boxes and click **Next**.

   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.
     
     For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.
   
   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

17. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management 11.1.1.3.0 domain with Oracle Internet Directory and Oracle Virtual Directory is extended to support Oracle Access Manager.

18. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in **Starting the Stack**.

19. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. Oracle_IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

      On UNIX: Run `./wlst.sh` on the command line.

      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`), type the following:

      ```
      connect()
      ```

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide *Oracle Fusion Middleware Oracle WebLogic Scripting Tool*.

      Run the the `createUserIdentityStore` WLST command, as in the following example:

      ```
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
      ```

      **Note:** Users that are members of the group specified in the `roleSecAdmin` attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the `groupSearchBase` attribute. If the group is not available, you can specify the user name, such as `orcladmin`, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.
Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations” topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

20. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

21. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**. The Select a WebLogic Domain Directory screen is displayed.

22. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management domain in which you configured Oracle Access Manager, Oracle Internet Directory and Oracle Virtual Directory. Click **Next**. The Select Extension Source screen is displayed.

23. On the Select Extension Source screen, select the following domain configuration options:

   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]** option, the following options are also selected, by default: **Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]**, **Oracle Enterprise Manager - 11.1.1.0 [oracle_common]**, and **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]**.

24. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

25. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

26. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

27. On the Select Optional Configuration screen, you can configure **Managed Servers**, **Clusters, and Machines**, **Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click **Next**.

   - Optional: Configure Managed Servers, as required.

   - Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components” topic in the guide Oracle Fusion Middleware High Availability Guide.

   - Optional: Assign Managed Servers to Clusters, as required.
Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

Optional: Assign the Administration Server to a machine.

Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure JMS File Store, as required.

28. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Access Manager is extended to support Oracle Identity Manager.

29. Set up LDAP Synchronization for Oracle Identity Manager, as described in **Setting Up LDAP Synchronization**.

30. Verify LDAP Synchronization, as described in **Verifying the LDAP Synchronization**.

31. Restart the Administration Server, as described in **Restarting Servers**.

32. Start the Oracle Identity Manager Configuration Wizard, as described in **Starting the Oracle Identity Manager 11g Configuration Wizard**.

33. Configure Oracle Identity Manager Server, as described in **Configuring OIM Server**. When configuring Oracle Identity Manager Server, ensure that you select the **Enable LDAP Sync** option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

34. Follow the wizard and the steps described in **Configuring OIM Server** to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in **Configuring OIM Design Console**, and **Configuring OIM Remote Manager**.

---

**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see **Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only)**.

### 14.6.5 Scenario 3: Configuration in a Domain Containing OAAM, OAPM, and OIN

This section discusses the following topics:

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

Perform the configuration in this topic if you want to install Oracle Access Manager (OAM) in an existing Oracle Identity Management domain that contains Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN). You can configure Oracle Access Manager to use Oracle Internet Directory (OID) as the LDAP provider. Then you can add Oracle Identity Manager (OIM) to the same domain and set up LDAP Sync.

At a later time, you may set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM.

You can use Oracle Identity Navigator to discover and launch Consoles for the Oracle Identity Management products from within the Oracle Identity Navigator user interface.

14.6.5.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Servers for Oracle Identity Manager and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console on the existing Administration Server

14.6.5.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.6.5.4 Procedure

Perform the following steps to configure Oracle Identity Manager with LDAP Sync to an existing Oracle Access Manager installation, which has LDAP configured:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the following domain configuration options:

   - Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]
5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the APM Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, or the APM MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store. Select the relevant check boxes and click Next.

   ■ Optional: Configure Administration Server, as required.

   ■ Optional: Configure Managed Servers, as required.

   ■ Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

   ■ Optional: Assign Managed Servers to Clusters, as required.

   ■ Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

   ■ Optional: Assign the Administration Server to a machine.
Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain. After the domain configuration is complete, click Done to dismiss the wizard.

A new WebLogic domain to support Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator is created in the <Middleware_Home>/user_projects/domains directory (on Windows), by default. On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory, by default.

12. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common/bin/config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

13. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


15. On the Select Extension Source screen, select the following domain configuration options:

   Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]

16. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

17. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click Next. The Configure JDBC Component Schema screen is displayed.

18. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the OAM Admin Schema, the APM Schema, the APM MDS Schema, the OAAM Admin MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

19. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, and Deployments and Services. Select the relevant check boxes and click Next.

   Optional: Configure Managed Servers, as required.

   Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the ”Configuring High Availability for Identity Management Components” topic in the guide Oracle Fusion Middleware High Availability Guide.

   Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

20. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator is extended to support Oracle Access Manager.

21. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

22. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the cd command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. Oracle_IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

   On UNIX: Run `.wlst.sh` on the command line.

   On Windows: Run `wlst.cmd`.

   At the WLST command prompt (`wls:/offline>`) type the following:

   ```
   connect()
   ```

   You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide *Oracle Fusion Middleware Oracle WebLogic Scripting Tool*.

   Run the the `createUserIdentityStore` WLST command, as in the following example:

   ```
   createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true",userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
   ```

Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.
Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

23. Run the \<Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common/bin/config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

24. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


26. On the Select Extension Source screen, select the following domain configuration options:

Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]

27. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

28. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click Next. The Configure JDBC Component Schema screen is displayed.

29. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the OAM Infrastructure Schema, the OAAM Admin Schema, the User Messaging Service Schema, the OIM Schema, the OWSM MDS Schema, the OIM MDS Schema, the APM Schema, the APM MDS Schema, the OAAM Admin MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

Note: Users that are members of the group specified in the roleSecAdmin attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the groupSearchBase attribute. If the group is not available, you can specify the user name, such as orcladmin, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Note: When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle WSM Policy Manager - 11.1.1.0 [oracle_common] and Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]

Note: When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle WSM Policy Manager - 11.1.1.0 [oracle_common] and Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]
30. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines, Deployments and Services**, and JMS File Store. Select the relevant check boxes and click **Next**.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

31. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator is extended to support Oracle Identity Manager.

32. Set up LDAP Synchronization for Oracle Identity Manager, as described in **Setting Up LDAP Synchronization**.

33. Verify LDAP Synchronization, as described in **Verifying the LDAP Synchronization**.

34. Restart the Administration Server, as described in **Restarting Servers**.

35. Start the Oracle Identity Manager Configuration Wizard, as described in **Starting the Oracle Identity Manager 11g Configuration Wizard**.

36. Configure Oracle Identity Manager Server, as described in **Configuring OIM Server**. When configuring Oracle Identity Manager Server, ensure that you select the **Enable LDAP Sync** option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

37. Follow the wizard and the steps described in **Configuring OIM Server** to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in **Configuring OIM Design Console**, and **Configuring OIM Remote Manager**.
14.7 OIM with LDAP Sync in an Existing OAM and OAAM Installation with LDAP Configured

This section describes how to configure Oracle Identity Manager (OIM) with LDAP Sync to an existing Oracle Access Manager and Oracle Adaptive Access Manager installation, which has Oracle Internet Directory (OID) configured as the LDAP provider.

It contains the following sections:

- Overview
- Prerequisites
- Scenario 1: Configuration in a New WebLogic Domain
- Scenario 2: Configuration in a Domain Containing OID and OVD
- Scenario 3: Configuration in a Domain Containing OAAM, OAPM, and OIN

14.7.1 Overview

In this section, you perform the following tasks:

1. Install and configure Oracle Internet Directory and Oracle Virtual Directory
2. Install and configure Oracle Access Manager and Oracle Adaptive Access Manager
3. Configure Oracle Access Manager to use Oracle Internet Directory as the LDAP provider
4. Configure Oracle Identity Manager
5. Set up LDAP sync for Oracle Identity Manager
6. Configure Oracle Identity Manager Server, Design Console (Windows only), and Remote Manager

14.7.2 Prerequisites

The following lists the prerequisites for installing and configuring Oracle Identity Manager with LDAP Synchronization to an existing Oracle Access Manager and Oracle Adaptive Access Manager installation, which has LDAP configured:

- Install a supported version of Oracle Database, as described in Installing Oracle Database.
- Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).
- Install Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.

Note: If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).
Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

An IDM_Home directory, such as **Oracle_IDM1**, is created. This directory is the Oracle Home for Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), and Oracle Directory Services Manager (ODSM).

Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) in a WebLogic administration domain, as described in OID and OVD with ODSM in a New WebLogic Domain.

Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager, Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), as described in Installing the Oracle Identity Management 11g Software.

An IDM_Home directory, such as **Oracle_IDM2**, is created. This directory is the Oracle Home for Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

**Note:** It is assumed that you are installing and configuring Oracle Internet Directory (OVD), Oracle Virtual Directory (OVD), Oracle Identity Manager (OIM), and Oracle Access Manager (OAM) on the same machine. Therefore, two distinct IDM_Home directories are mentioned in this chapter.

Install the latest version of Oracle SOA Suite under the same Middleware Home, and patch the Oracle SOA Suite to the latest version, as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)

### 14.7.3 Scenario 1: Configuration in a New WebLogic Domain

This section discusses the following topics:

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

#### 14.7.3.1 Appropriate Deployment Environment

Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager are installed on the same machine.
- Oracle Access Manager and Oracle Adaptive Access Manager are configured in a new WebLogic domain, which is extended to support Oracle Identity Manager at a later time.
- Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider before configuring LDAP Sync for Oracle Identity Manager.
14.7.3.2 Components Deployed
Performing this configuration deploys the following:

- A WebLogic Administration Server
- Managed Servers for Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager
- Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the Administration Server
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

14.7.3.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.7.3.4 Procedure
Perform the following steps to configure Oracle Identity Manager with LDAP Synchronization, to an existing Oracle Access Manager and Oracle Adaptive Access Manager installation, which has LDAP configured:

1. Ensure that all the prequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script on UNIX (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected.

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the OAAM Admin Schema, or the OAAM Admin MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store. Select the relevant check boxes and click Next.

   - Optional: Configure Administration Server, as required.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
- Optional: Target deployments and services to servers or clusters.
- Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click **Create** to start creating the domain.

A new WebLogic domain to support Oracle Adaptive Access Manager and Oracle Access Manager is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows), by default. On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory, by default.

12. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in **Starting the Stack**.

13. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

      On UNIX: Run `./wlst.sh` on the command line.
      
      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`), type the following:

      ```
      connect()
      ```

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic “Using the WebLogic Scripting Tool” in the guide *Oracle Fusion Middleware Oracle WebLogic Scripting Tool*.

      Run the the `createUserIdentityStore` WLST command, as in the following example:

      ```
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true",userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
      ```

      **Note:** Users that are members of the group specified in the `roleSecAdmin` attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the `groupSearchBase` attribute. If the group is not available, you can specify the user name, such as `orcladmin`, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.
Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

14. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

15. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**. The Select a WebLogic Domain Directory screen is displayed.

16. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management domain in which you configured Oracle Adaptive Access Manager and Oracle Access Manager. Click **Next**. The Select Extension Source screen is displayed.

17. On the Select Extension Source screen, select the following domain configuration options:
   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

     **Note:** When you select the **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]** option, the following options are also selected, by default: **Oracle SOA Suite - 11.1.1.0 [Oracle_SO1]**, and **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]**.

18. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

19. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

20. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the SOA Infrastructure Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

21. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines**, **Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click **Next**.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.

     For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

   - Optional: Assign Managed Servers to Clusters, as required.
Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

Optional: Assign the Administration Server to a machine.

Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure JMS File Store, as required.

22. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain. Your existing Oracle Identity Management domain with Oracle Adaptive Access Manager and Oracle Access Manager is extended to support Oracle Identity Manager.

23. Set up LDAP Synchronization for Oracle Identity Manager, as described in **Setting Up LDAP Synchronization**.

24. Verify LDAP Synchronization, as described in **Verifying the LDAP Synchronization**.

25. Restart the Administration Server, as described in **Restarting Servers**.

26. Start the Oracle Identity Manager Configuration Wizard, as described in **Starting the Oracle Identity Manager 11g Configuration Wizard**.

27. Configure Oracle Identity Manager Server, as described in **Configuring OIM Server**. When configuring Oracle Identity Manager Server, ensure that you select the **Enable LDAP Sync** option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

28. Follow the wizard and the steps described in **Configuring OIM Server** to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in **Configuring OIM Design Console**, and **Configuring OIM Remote Manager**.

---

**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see **Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only)**.

### 14.7.4 Scenario 2: Configuration in a Domain Containing OID and OVD

This section discusses the following topics:

- **Appropriate Deployment Environment**
- **Components Deployed**
- **Dependencies**
- **Procedure**
14.7.4.1 Appropriate Deployment Environment
Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager are installed on the same machine.
- Oracle Access Manager and Oracle Adaptive Access Manager are configured in the existing Oracle Identity Management domain containing Oracle Internet Directory and Oracle Virtual Directory. This domain is extended to support Oracle Identity Manager at a later time.
- Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider before configuring LDAP Sync for Oracle Identity Manager.

14.7.4.2 Components Deployed
Performing this configuration deploys the following:

- Managed Servers for Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager
- Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the existing Administration Server
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

14.7.4.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.7.4.4 Procedure
Perform the following steps to configure Oracle Identity Manager with LDAP Synchronization, to an existing Oracle Access Manager and Oracle Adaptive Access Manager installation, which has LDAP configured:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM1>/bin/config.sh` on UNIX operating systems to start the Oracle Identity Management Configuration Wizard. On Windows, run the `<Oracle_IDM1>/bin/config.bat` to start the wizard.
3. On the Select Domain screen, select the Create New Domain option. Set the Administrator user name and password, as required.
4. Ensure that you select **Oracle Internet Directory** and **Oracle Virtual Directory** on the Configure Components screen.

5. Follow the wizard, provide the necessary input, and configure the domain.

   A new WebLogic domain to support Oracle Internet Directory and Oracle Virtual Directory is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

6. Ensure that your Oracle database version is supported and you have installed the necessary patches. For more information, see Installing Oracle Database.

7. Ensure that any appropriate schemas required by Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager are created and loaded, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

8. Ensure that the Oracle Identity Management 11g software is installed. Refer to Installing the Oracle Identity Management 11g Software for more information. A new Oracle Home for Oracle Identity Management, such as `Oracle_IDM2`, is created under the Middleware Home directory.

9. Ensure that the latest version of Oracle SOA Suite is installed under the same Middleware Home. Refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only) for more information.

10. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common\bin\config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

11. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


13. On the Select Extension Source screen, select the following domain configuration options:

   **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**

   **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]**

   **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]** option is also selected, by default.

14. After selecting the domain configuration options, click Next. The Configure JDBC Component Schema screen is displayed.

15. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the OAAM Admin Schema, or the OAAM Admin MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.
16. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines, Deployments and Services**. Select the relevant check boxes and click **Next**.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

17. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management 11.1.1.1.3.0 domain with Oracle Internet Directory and Oracle Virtual Directory is extended to support Oracle Access Manager and Oracle Adaptive Access Manager.

18. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in **Starting the Stack**.

19. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. **Oracle_IDM2** is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:
      
      On UNIX: Run `./*wlst.sh` on the command line.

      On Windows: Run `wlist.cmd`.

      At the WLST command prompt (`wls:/offline>`), type the following:

      `connect()`

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide *Oracle Fusion Middleware Oracle WebLogic Scripting Tool*.

      Run the the `createUserIdentityStore` WLST command, as in the following example:
createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

20. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

21. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


23. On the Select Extension Source screen, select the following domain configuration options:

   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]** option, the following options are also selected, by default: **Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]** and **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]**.

24. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

25. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click Next. The Configure JDBC Component Schema screen is displayed.

26. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the SOA Infrastructure Schema, the User
Messaging Service Schema, the OWSM MDS Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

27. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.
- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

28. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Internet Directory, and Oracle Virtual Directory is extended to support Oracle Identity Manager.

29. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

30. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

31. Restart the Administration Server, as described in Restarting Servers.

32. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

33. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

34. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to
configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

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**Note:** If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

### 14.7.5 Scenario 3: Configuration in a Domain Containing OAPM, and OIN

This section discusses the following topics:

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

#### 14.7.5.1 Appropriate Deployment Environment

Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager are installed on the same machine.
- Oracle Access Manager and Oracle Adaptive Access Manager are configured in the existing Oracle Identity Management domain containing Oracle Authorization Policy Manager and Oracle Identity Navigator. This domain is extended to support Oracle Identity Manager at a later time.
- Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider before configuring LDAP Sync for Oracle Identity Manager.

#### 14.7.5.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Servers for Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the existing Administration Server

#### 14.7.5.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

### 14.7.5.4 Procedure

Perform the following steps to configure Oracle Identity Manager with LDAP Sync to an existing Oracle Access Manager and Oracle Adaptive Access Manager installation, which has LDAP configured:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.
3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.
4. On the Select Domain Source screen, select the following domain configuration options:
   - **Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2]**
     
     **Note:** When you select the **Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle JRF - 11.1.1.0 [oracle_common]** option is also selected, by default.
   - **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**
5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.
6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.
7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.
9. On the Configure JDBC Component Schema screen, select a component schema, such as the APM Schema, or the APM MDS Schema, that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.
10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store. Select the relevant check boxes and click Next.
Optional: Configure Administration Server, as required.

Optional: Configure Managed Servers, as required.

Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

Optional: Assign Managed Servers to Clusters, as required.

Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

Optional: Assign the Administration Server to a machine.

Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click **Create** to start creating the domain. After the domain configuration is complete, click **Done** to dismiss the wizard.

A new WebLogic domain to support Oracle Authorization Policy Manager and Oracle Identity Navigator is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows), by default. On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory, by default.

12. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin\config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

13. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**. The Select a WebLogic Domain Directory screen is displayed.

14. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management domain in which you configured Oracle Authorization Policy Manager, and Oracle Identity Navigator. Click **Next**. The Select Extension Source screen is displayed.

15. On the Select Extension Source screen, select the following domain configuration options:

   **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**

   **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle Enterprise Manager - 11.1.1.0 [oracle_common] option and the Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2] option are also selected, by default.
16. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

17. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

18. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema, the OAAM Admin Schema, the APM Schema, the APM MDS Schema, the OAAM Admin MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

19. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, and Deployments and Services. Select the relevant check boxes and click **Next**.

   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide **Oracle Fusion Middleware High Availability Guide**.

   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the **ping** command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
   - Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

20. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

   Your existing Oracle Identity Management domain with Oracle Authorization Policy Manager and Oracle Identity Navigator is extended to support Oracle Access Manager and Oracle Adaptive Access Manager.

21. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in **Starting the Stack**.

22. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the **cd** command to move from your present working directory to the **Oracle_IDM2/common/bin** directory. **Oracle_IDM2** is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:
On UNIX: Run ./wlst.sh on the command line.

On Windows: Run wlst.cmd.

At the WLST command prompt (wls:/offline>), type the following:
connect()

You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the the createUserIdentityStore WLST command, as in the following example:

```
createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", roleSecAdmin="OAMAdministrators", userAttr="uid", ldapProvider="OID", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true",userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
```

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager.

23. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common/bin/config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

24. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


26. On the Select Extension Source screen, select the following domain configuration options:

   Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]
27. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

28. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

29. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the OAM Infrastructure Schema, the OAAM Admin Schema, the OIM Schema, the OWSM MDS Schema, the OIM MDS Schema, the APM Schema, the APM MDS Schema, the OAAM Admin MDS Schema, that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

30. On the Select Optional Configuration screen, you can configure **Managed Servers**, **Clusters**, and **Machines**, **Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click **Next**.

   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.
     For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.
   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
   - Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
   - Optional: Configure JMS File Store, as required.

31. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

   Your existing Oracle Identity Management domain with Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator is extended to support Oracle Identity Manager.

32. Set up LDAP Synchronization for Oracle Identity Manager, as described in *Setting Up LDAP Synchronization*. 

---

**Note:** When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle WSM Policy Manager - 11.1.1.0 [oracle_common] and Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]
33. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

34. Restart the Administration Server, as described in Restarting Servers.

35. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

36. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

37. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

---

**Note:** If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

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### 14.8 OAM in an Existing OIM with LDAP Sync

This section describes how to add Oracle Access Manager to an existing Oracle Identity Manager (OIM) installation, which has LDAP Sync configured. It also describes how to configure Oracle Access Manager to use Oracle Internet Directory (OID) as its LDAP provider.

It contains the following sections:

- **Overview**
- **Prerequisites**
- **Scenario 1: Configuration in a New WebLogic Domain**
- **Scenario 2: Configuration in a Domain Containing OID and OVD**
- **Scenario 3: Configuration in a Domain Containing OAAM, OAPM, and OIN**

#### 14.8.1 Overview

In this section, you perform the following tasks:

1. Install and configure Oracle Internet Directory and Oracle Virtual Directory
2. Install and configure Oracle Identity Manager
3. Set up LDAP Sync for Oracle Identity Manager
4. Configure Oracle Access Manager
5. Configure Oracle Access Manager to use Oracle Internet Directory as the LDAP provider
6. Configure Oracle Identity Manager Server, Design Console (Windows only), and Remote Manager
14.8.2 Prerequisites

The following lists the prerequisites for installing and configuring Oracle Identity Manager with LDAP Synchronization to an existing Oracle Access Manager and Oracle Adaptive Access Manager installation, which has LDAP configured:

- Install a supported version of Oracle Database, as described in Installing Oracle Database.
- Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).
- Install Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
- Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

An IDM_Home directory, such as Oracle_IDM1, is created. This directory is the Oracle Home for Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), and Oracle Directory Services Manager (ODSM).

- Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) in a WebLogic administration domain, as described in OID and OVD with ODSM in a New WebLogic Domain.
- Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM) Oracle Adaptive Access Manager, Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), as described in Installing the Oracle Identity Management 11g Software.

An IDM_Home directory, such as Oracle_IDM2, is created. This directory is the Oracle Home for Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

**Note:** It is assumed that you are installing and configuring Oracle Internet Directory (OVD), Oracle Virtual Directory (OVD), Oracle Identity Manager (OIM), and Oracle Access Manager (OAM) on the same machine. Therefore, two distinct IDM_Home directories are mentioned in this chapter.

- Install the latest version of Oracle SOA Suite under the same Middleware Home, and patch the Oracle SOA Suite to the latest version, as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only).

14.8.3 Scenario 1: Configuration in a New WebLogic Domain

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure
14.8.3.1 Appropriate Deployment Environment
Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

■ Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, and Oracle Identity Manager are installed on the same machine.
■ Oracle Identity Manager is configured in a new WebLogic domain, which is extended to support Oracle Access Manager at a later time.
■ Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider after configuring LDAP Sync for Oracle Identity Manager.

14.8.3.2 Components Deployed
Performing this configuration deploys the following:

■ A WebLogic Administration Server
■ Managed Servers for Oracle Identity Manager and Oracle Access Manager
■ Oracle Access Manager Console on the Administration Server
■ Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

14.8.3.3 Dependencies
The configuration in this section depends on the following:

■ Oracle WebLogic Server.
■ Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
■ Installation of the Oracle Identity Management 11g software.
■ Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
■ Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.8.3.4 Procedure
Perform the following steps to configure Oracle Access Manager to an existing Oracle Identity Manager installation with LDAP Sync:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the <Oracle_IDM2>/common/bin/config.sh script on UNIX (<Oracle_IDM2>/common/bin/config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.
3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.
4. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected. Select Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2].
5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the User Messaging Service Schema, the OIM MDS Schema, the OWSM MDS Schema, the SOA MDS Schema, or the OIM Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, JMS File Store, and RDBMS Security Store. Select the relevant check boxes and click Next.

   - Optional: Configure Administration Server, as required.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.

      For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

   - Optional: Assign Managed Servers to Clusters, as required.

   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

      **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.
Optional: Assign the Administration Server to a machine.

Optional: Target deployments and services to servers or clusters.

Optional: Configure JMS File Store, as required.

Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click **Create** to start creating the domain.

A new WebLogic domain to support Oracle Identity Manager is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows), by default. On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory, by default.

12. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

13. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

14. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common\bin\config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

15. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**. The Select a WebLogic Domain Directory screen is displayed.

16. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management domain in which you configured Oracle Identity Manager. Click **Next**. The Select Extension Source screen is displayed.

17. On the Select Extension Source screen, select the following domain configuration options:

```
Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]
```

18. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

19. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

20. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the OAm Infrastructure Schema, the User Messaging Service Schema, the OIM MDS Schema, the OWSM MDS Schema, the SOA MDS Schema, or the OIM Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

21. On the Select Optional Configuration screen, you can configure **Managed Servers**, **Clusters, and Machines**, **Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click **Next**.

```
Optional: Configure Managed Servers, as required.
Optional: Configure Clusters, as required.
```

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management"
Management Components” topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

22. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Identity Manager is extended to support Oracle Access Manager.

23. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in **Starting the Stack**.

24. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the **createUserIdentityStore** WLST command:

   a. On the command line, use the cd command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. Oracle_IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

      On UNIX: Run `./wlst.sh` on the command line.

      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`), type the following:

      ```
      connect()
      ```

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

      Run the the `createUserIdentityStore` WLST command, as in the following example:

      ```
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
      ```
Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager.

25. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

26. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

27. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

---

**Note:** Users that are members of the group specified in the roleSecAdmin attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the groupSearchBase attribute. If the group is not available, you can specify the user name, such as orcladmin, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

---

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager.

14.8.4 Scenario 2: Configuration in a Domain Containing OID and OVD

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

14.8.4.1 Appropriate Deployment Environment

Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, and Oracle Identity Manager are installed on the same machine.
Oracle Identity Manager is configured in the existing Oracle Identity Management domain containing Oracle Internet Directory and Oracle Virtual Directory. This domain is extended to support Oracle Access Manager at a later time.

Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider after configuring LDAP Sync for Oracle Identity Manager.

### 14.8.4.2 Components Deployed
Performing this configuration deploys the following:

- Managed Servers for Oracle Access Manager and Oracle Identity Manager
- Oracle Access Manager Console on the existing Administration Server
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

### 14.8.4.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

### 14.8.4.4 Procedure
Perform the following steps to configure Oracle Access Manager to an existing Oracle Identity Manager installation, which has LDAP Sync set up:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM1>/bin/config.sh` on UNIX operating systems to start the Oracle Identity Management Configuration Wizard. On Windows, run the `<Oracle_IDM1>\bin\config.bat` to start the wizard.
3. On the Select Domain screen, select the Create New Domain option. Set the Administrator user name and password, as required.
4. Ensure that you select Oracle Internet Directory and Oracle Virtual Directory on the Configure Components screen.
5. Follow the wizard, provide the necessary input, and configure the domain.

A new WebLogic domain to support Oracle Internet Directory and Oracle Virtual Directory is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

6. Ensure that your Oracle database version is supported and you have installed the necessary patches. For more information, see Installing Oracle Database.
7. Ensure that any appropriate schemas required by Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager are created and loaded, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

8. Ensure that the Oracle Identity Management 11g software is installed. Refer to Installing the Oracle Identity Management 11g Software for more information. A new Oracle Home for Oracle Identity Management, such as Oracle_IDM2, is created under the Middleware Home directory.

9. Ensure that the latest version of Oracle SOA Suite is installed under the same Middleware Home. Refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only) for more information.

10. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

11. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


13. On the Select Extension Source screen, select the following domain configuration options:

   Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]

   **Note:** When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle WSM Policy Manager - 11.1.1.0 [oracle_common] option and the Oracle SOA Suite - 11.1.1.3.0 [Oracle_SOA1] option are also selected, by default.

14. After selecting the domain configuration options, click Next. The Configure JDBC Component Schema screen is displayed.

15. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the User Messaging Service Schema, the OIM MDS Schema, the OWSM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

16. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

   - Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

17. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management 11.1.1.3.0 domain with Oracle Internet Directory and Oracle Virtual Directory is extended to support Oracle Identity Manager.

18. Set up LDAP Synchronization for Oracle Identity Manager, as described in [Setting Up LDAP Synchronization](#).

19. Verify LDAP Synchronization, as described in [Verifying the LDAP Synchronization](#).

20. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

21. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**. The Select a WebLogic Domain Directory screen is displayed.

22. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management domain in which you configured Oracle Identity Manager, Oracle Internet Directory, and Oracle Virtual Directory. Click **Next**. The Select Extension Source screen is displayed.

23. On the Select Extension Source screen, select the following domain configuration options:

   - **Oracle Access Manager with Database Policy Store** - 11.1.1.3.0 [Oracle_IDM2]

24. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

25. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

26. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the OAM Infrastructure Schema, the User Messaging Service Schema, the OIM MDS Schema, the OWSM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

27. On the Select Optional Configuration screen, you can configure **Managed Servers**, **Clusters, and Machines**, **Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click **Next**.
Optional: Configure Managed Servers, as required.

Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

Optional: Assign Managed Servers to Clusters, as required.

Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

Optional: Assign the Administration Server to a machine.

Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure JMS File Store, as required.

28. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Identity Manager, Oracle Internet Directory, and Oracle Virtual Directory is extended to support Oracle Access Manager.

29. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

30. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the createUserIdentityStore WLST command:

a. On the command line, use the cd command to move from your present working directory to the Oracle_IDM2/common/bin directory. Oracle_IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

On UNIX: Run ./wlst.sh on the command line.

On Windows: Run wlst.cmd.

At the WLST command prompt (wls:/offline>, type the following:

```
clean()
```

You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the the createUserIdentityStore WLST command, as in the following example:

```
createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP",
```
userAttr="uid", ldapProvider="OID",
roleSecAdmin="OAMAdministrators",
userSearchBase="cn=Users,dc=us,dc=oracle,dc=com",
ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true",
userIDProvider="OracleUserRoleAPI",
groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")

---

**Note:** Users that are members of the group specified in the roleSecAdmin attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the groupSearchBase attribute. If the group is not available, you can specify the user name, such as orcladmin, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide **Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager**.

31. Restart the Administration Server, as described in Restarting Servers.
32. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.
33. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.
34. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

---

**Note:** If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

14.8.5 Scenario 3: Configuration in a Domain Containing OAPM, and OIN

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure
14.8.5.1 Appropriate Deployment Environment
Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, and Oracle Identity Manager are installed on the same machine.
- Oracle Identity Manager is configured in the existing Oracle Identity Management domain containing Oracle Authorization Policy Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator. This domain is extended to support Oracle Access Manager at a later time.
- Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider after configuring LDAP Sync for Oracle Identity Manager.

14.8.5.2 Components Deployed
Performing the configuration in this section deploys the following:

- Managed Servers for Oracle Identity Manager and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console on the existing Administration Server

14.8.5.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.8.5.4 Procedure
Perform the following steps to configure Oracle Access Manager in an existing Oracle Identity Manager with LDAP Sync installation:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the following domain configuration options:
   - Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2]
Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]

Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]

**Note:** When you select the Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle JRF - 11.1.1.0 [oracle_common] option is also selected, by default.

When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2] option is also selected, by default.

When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle Enterprise Manager - 11.1.1.0 [oracle_common], Oracle WSM Policy Manager - 11.1.1.0 [oracle_common], and Oracle SOA Suite - 11.1.1.3.0 [Oracle_SOA1].

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the APM Schema, the SOA Infrastructure Schema, the SOA MDS Schema, the OIM MDS Schema, the OIM Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, the OWSM MDS Schema, the User Messaging Service Schema, or the APM MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, JMS File Store, and RDBMS Security Store. Select the relevant check boxes and click Next.

    ■ Optional: Configure Administration Server, as required.
    ■ Optional: Configure Managed Servers, as required.
    ■ Optional: Configure Clusters, as required.

    For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.
Optional: Assign Managed Servers to Clusters, as required.

Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

Optional: Assign the Administration Server to a machine.

Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure JMS File Store, as required.

Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click **Create** to start creating the domain. After the domain configuration is complete, click **Done** to dismiss the wizard.

A new WebLogic domain to support Oracle Authorization Policy Manager, Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows), by default. On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory, by default.

12. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

13. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

14. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

15. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**. The Select a WebLogic Domain Directory screen is displayed.

16. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management domain in which you configured Oracle Identity Manager, Oracle Authorization Policy Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator. Click **Next**. The Select Extension Source screen is displayed.

17. On the Select Extension Source screen, select the following domain configuration options:

   **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**

18. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

19. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

20. On the Configure JDBC Component Schema screen, select a component schema, such as the APM Schema, the OAM Infrastructure Schema, the SOA Infrastructure Schema, the SOA MDS Schema, the OIM MDS Schema, the OIM Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, the OWSM MDS...
Schema, the User Messaging Service Schema, or the APM MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

21. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

22. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Identity Manager, Oracle Authorization Policy Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator is extended to support Oracle Access Manager.

23. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

24. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the cd command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. Oracle_IDM2 is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:
      
      On UNIX: Run `./wlst.sh` on the command line.

      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`, type the following: connect()
You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the the `createUserIdentityStore` WLST command, as in the following example:

```java
createUserIdentityStore(name="OAMOIDIdStoreForOIM", principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
```

**Note:** Users that are members of the group specified in the `roleSecAdmin` attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the `groupSearchBase` attribute. If the group is not available, you can specify the user name, such as `orcladmin`, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

25. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

26. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

27. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).
14.9 OAAM in an Existing OIM with LDAP Sync and OAAM

This section describes how to add Oracle Adaptive Access Manager to an existing Oracle Access Manager and Oracle Identity Manager (OIM) installation, which has LDAP Sync configured. It also describes how to configure Oracle Access Manager to use Oracle Internet Directory (OID) as its LDAP provider.

It contains the following sections:

■ Overview
■ Prerequisites
■ Scenario 1: Configuration in a New WebLogic Domain
■ Scenario 2: Configuration in a Domain Containing OID and OVD
■ Scenario 3: Configuration in a Domain Containing OAAM, OAPM, and OIN

14.9.1 Overview

In this section, you perform the following tasks:

1. Install and configure Oracle Internet Directory and Oracle Virtual Directory
2. Install and configure Oracle Identity Manager and Oracle Access Manager
3. Configure Oracle Access Manager to use Oracle Internet Directory as the LDAP provider
4. Set up LDAP Sync for Oracle Identity Manager
5. Configure Oracle Identity Manager Server, Design Console (Windows only), and Remote Manager

14.9.2 Prerequisites

The following lists the prerequisites for installing and configuring Oracle Adaptive Access Manager to an existing Oracle Access Manager Oracle Identity Manager installation with LDAP sync:

■ Install a supported version of Oracle Database, as described in Installing Oracle Database.
■ Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).
■ Install Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home
■ Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

An IDM_Home directory, such as Oracle_IDM1, is created. This directory is the Oracle Home for Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), and Oracle Directory Services Manager (ODSM).

■ Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) in a WebLogic administration domain, as described in OID and OVD with ODSM in a New WebLogic Domain.
■ Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager, Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), as described in Installing the Oracle Identity Management 11g Software.

An IDM_Home directory, such as Oracle_IDM2, is created. This directory is the Oracle Home for Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

**Note:** It is assumed that you are installing and configuring Oracle Internet Directory (OVD), Oracle Virtual Directory (OVD), Oracle Identity Manager (OIM), and Oracle Access Manager (OAM) on the same machine. Therefore, two distinct IDM_Home directories are mentioned in this chapter.

■ Install the latest version of Oracle SOA Suite under the same Middleware Home, and patch the Oracle SOA Suite to the latest version, as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)

### 14.9.3 Scenario 1: Configuration in a New WebLogic Domain

This section discusses the following topics:

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

#### 14.9.3.1 Appropriate Deployment Environment

Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

■ Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager are installed on the same machine.

■ Oracle Identity Manager and Oracle Access Manager are configured in a new WebLogic domain, which is extended to support Oracle Adaptive Access Manager at a later time.

■ Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider after configuring LDAP Sync for Oracle Identity Manager.

#### 14.9.3.2 Components Deployed

Performing this configuration deploys the following:

■ A WebLogic Administration Server
■ Managed Servers for Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager
■ Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the Administration Server
14.9.3.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.9.3.4 Procedure
Perform the following steps to configure Oracle Adaptive Access Manager to an existing Oracle Access Manager and Oracle Identity Manager installation with LDAP Sync:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM2>/common/bin/config.sh` script on UNIX (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.
3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.
4. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected.
   Select Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2].
   Select Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2].

   **Note:** When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default:

   * Oracle JRF 11.1.1.0 [Oracle_Common], Oracle Enterprise Manager - 11.1.1.0 [oracle_common], Oracle WSM Policy Manager - 11.1.1.0 [oracle_common], and Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1].

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.
6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.
7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the User Messaging Service Schema, the OIM MDS Schema, the OWSM MDS Schema, the SOA MDS Schema, the OAM Infrastructure Schema, or the OIM Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, JMS File Store, and RDBMS Security Store. Select the relevant check boxes and click Next.

   - Optional: Configure Administration Server, as required.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
   - Optional: Target deployments and services to servers or clusters.
   - Optional: Configure JMS File Store, as required.
   - Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

    A new WebLogic domain to support Oracle Identity Manager and Oracle Access Manager is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows), by default. On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory, by default.

12. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.
13. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

14. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

15. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

      On UNIX: Run `./wlst.sh` on the command line.
      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`, type the following:

         `connect()`

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

      Run the the `createUserIdentityStore` WLST command, as in the following example:

      ```
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>",isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
      ```

      **Note:** Users that are members of the group specified in the `roleSecAdmin` attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the `groupSearchBase` attribute. If the group is not available, you can specify the user name, such as `orcladmin`, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.
16. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

17. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click Next. The Select a WebLogic Domain Directory screen is displayed.

18. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management domain in which you configured Oracle Identity Manager and Oracle Access Manager. Click Next. The Select Extension Source screen is displayed.

19. On the Select Extension Source screen, select the following domain configuration options:

   **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]** option is also selected, by default.

20. After selecting the domain configuration options, click Next. The Configure JDBC Component Schema screen is displayed.

21. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the OAM Infrastructure Schema, the User Messaging Service Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, the OIM MDS Schema, the OWSM MDS Schema, the SOA MDS Schema, or the OIM Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

22. On the Select Optional Configuration screen, you can configure **Managed Servers**, **Clusters, and Machines**, **Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click Next.

   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.
   
     For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.
   
     Optional: Assign Managed Servers to Clusters, as required.
   
     Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.
   
     **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.
   
     Optional: Assign the Administration Server to a machine.
Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure JMS File Store, as required.

23. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Identity Manager and Oracle Access Manager is extended to support Oracle Adaptive Access Manager.

24. Start the Oracle Identity Manager Configuration Wizard, as described in **Starting the Oracle Identity Manager 11g Configuration Wizard**.

25. Configure Oracle Identity Manager Server, as described in **Configuring OIM Server**. When configuring Oracle Identity Manager Server, ensure that you select the **Enable LDAP Sync** option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

26. Follow the wizard and the steps described in **Configuring OIM Server** to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in **Configuring OIM Design Console**, and **Configuring OIM Remote Manager**.

---

**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see **Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only)**.

### 14.9.4 Scenario 2: Configuration in a Domain Containing OID and OVD

This section discusses the following topics:

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

#### 14.9.4.1 Appropriate Deployment Environment

Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager are installed on the same machine.

- Oracle Identity Manager and Oracle Access Manager are configured in the existing Oracle Identity Management domain containing Oracle Internet Directory and Oracle Virtual Directory. This domain is extended to support Oracle Adaptive Access Manager at a later time.

- Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider after configuring LDAP Sync for Oracle Identity Manager.
14.9.4.2 Components Deployed
Performing this configuration deploys the following:

- Managed Servers for Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager
- Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the existing Administration Server
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

14.9.4.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.9.4.4 Procedure
Perform the following steps to configure Oracle Adaptive Access Manager in an existing Oracle Identity Management installation, which has Oracle Internet Directory, Oracle Access Manager, Oracle Identity Manager, and Oracle Virtual Directory configured:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM1>/bin/config.sh` on UNIX operating systems to start the Oracle Identity Management Configuration Wizard. On Windows, run the `<Oracle_IDM1>/bin/config.bat` to start the wizard.
3. On the Select Domain screen, select the Create New Domain option. Set the Administrator user name and password, as required.
4. Ensure that you select Oracle Internet Directory and Oracle Virtual Directory on the Configure Components screen.
5. Follow the wizard, provide the necessary input, and configure the domain.
   A new WebLogic domain to support Oracle Internet Directory and Oracle Virtual Directory is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.
6. Ensure that your Oracle database version is supported and you have installed the necessary patches. For more information, see Installing Oracle Database.
7. Ensure that any appropriate schemas required by Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager are
created and loaded, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

8. Ensure that the Oracle Identity Management 11g software is installed. Refer to Installing the Oracle Identity Management 11g Software for more information. A new Oracle Home for Oracle Identity Management, such as Oracle_IDM2, is created under the Middleware Home directory.

9. Ensure that the latest version of Oracle SOA Suite is installed under the same Middleware Home. Refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only) for more information.

10. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common/bin/config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

11. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


13. On the Select Extension Source screen, select the following domain configuration options:

   Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]
   Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]

   Note: When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle WSM Policy Manager - 11.1.1.0 [oracle_common] option, and the Oracle SOA Suite - 11.1.1.3.0 [Oracle_SOA1] option are also selected, by default.

14. After selecting the domain configuration options, click Next. The Configure JDBC Component Schema screen is displayed.

15. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the User Messaging Service Schema, the OIM MDS Schema, the OAM Infrastructure Schema, the OWSM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

16. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

   ■ Optional: Configure Managed Servers, as required.
   ■ Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.
- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

17. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management 11.1.1.3.0 domain with Oracle Internet Directory and Oracle Virtual Directory is extended to support Oracle Identity Manager and Oracle Access Manager.

18. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

19. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

20. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

21. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore` WLST command:

   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:

      On UNIX: Run `./wlst.sh` on the command line.

      On Windows: Run `wlst.cmd`.

      At the WLST command prompt (`wls:/offline>`), type the following:

      ```
      connect()
      ```

      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

      Run the the `createUserIdentityStore` WLST command, as in the following example:

      ```
      createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com"
      ```
Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

22. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common\bin\config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

23. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


25. On the Select Extension Source screen, select the following domain configuration options:

Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]

Note: When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2] option is also selected, by default.

26. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

27. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click Next. The Configure JDBC Component Schema screen is displayed.

28. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, the OAM Infrastructure Schema, the User Messaging Service Schema, the OIM MDS Schema, the OWSM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.
You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

29. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store**. Select the relevant check boxes and click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

- Optional: Assign Managed Servers to Clusters, as required.

- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

30. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Identity Manager, Oracle Access Manager, Oracle Internet Directory, and Oracle Virtual Directory is extended to support Oracle Adaptive Access Manager.

31. Restart the Administration Server, as described in **Restarting Servers**.

32. Start the Oracle Identity Manager Configuration Wizard, as described in **Starting the Oracle Identity Manager 11g Configuration Wizard**.

33. Configure Oracle Identity Manager Server, as described in **Configuring OIM Server**. When configuring Oracle Identity Manager Server, ensure that you select the **Enable LDAP Sync** option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

34. Follow the wizard and the steps described in **Configuring OIM Server** to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in **Configuring OIM Design Console**, and **Configuring OIM Remote Manager**.

---

**Note:** If *weblogic* is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see **Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only)**.
14.9.5 Scenario 3: Configuration in a Domain Containing OAPM, and OIN

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

14.9.5.1 Appropriate Deployment Environment

Perform configuration in this section for Oracle Identity Management environments that have the following conditions:

- Oracle Internet Directory, Oracle Virtual Directory, Oracle Adaptive Access Manager, Oracle Access Manager, and Oracle Identity Manager are installed on the same machine.
- Oracle Identity Manager and Oracle Access Manager are configured in the existing Oracle Identity Management domain containing Oracle Authorization Policy Manager, and Oracle Identity Navigator. This domain is extended to support Oracle Adaptive Access Manager at a later time.
- Oracle Access Manager is configured to use Oracle Internet Directory as the LDAP provider after configuring LDAP Sync for Oracle Identity Manager.

14.9.5.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Servers for Oracle Identity Manager, Oracle Adaptive Access Manager, and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console and Oracle Adaptive Access Manager Console on the existing Administration Server

14.9.5.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation and configuration of Oracle Internet Directory and Oracle Virtual Directory.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager).
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, Oracle Adaptive Access Manager, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

14.9.5.4 Procedure

Perform the following steps to configure Oracle Adaptive Access Manager in an existing Oracle Identity Management installation, which has Oracle Identity Manager
with LDAP Sync, Oracle Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the following domain configuration options:

 Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2]
 Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]
 Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]
 Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]

5. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

6. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


9. On the Configure JDBC Component Schema screen, select a component schema, such as the APM Schema, the SOA Infrastructure Schema, the SOA MDS Schema, the OAM Infrastructure Schema, the OIM MDS Schema, the OIM Schema, the OWSM MDS Schema, the User Messaging Service Schema, or the APM MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.
10. On the Select Optional Configuration screen, you can configure **Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, JMS File Store, and RDBMS Security Store**. Select the relevant check boxes and click **Next**.

- Optional: Configure Administration Server, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide **Oracle Fusion Middleware High Availability Guide**.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.
- Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click **Create** to start creating the domain. After the domain configuration is complete, click **Done** to dismiss the wizard.

A new WebLogic domain to support Oracle Authorization Policy Manager, Oracle Identity Manager, Oracle Access Manager, and Oracle Identity Navigator is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows), by default. On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory, by default.

12. Set up LDAP Synchronization for Oracle Identity Manager, as described in Setting Up LDAP Synchronization.

13. Verify LDAP Synchronization, as described in Verifying the LDAP Synchronization.

14. Start the WebLogic Administration Server and Managed Servers (Oracle Identity Manager and Oracle Access Manager), as described in Starting the Stack.

15. Configure Oracle Access Manager (OAM) to use Oracle Internet Directory (OID) as an LDAP provider by running the `createUserIdentityStore WLST` command:

   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. `Oracle_IDM2` is the IDM_Home for Oracle Identity Manager and Oracle Access Manager.

   b. Launch the WebLogic Scripting Tool (WLST) interface as follows:
On UNIX: Run \./wlst.sh on the command line.

On Windows: Run \wlst.cmd.

At the WLST command prompt (wls:/offline>, type the following:

```java
connect()
```

You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the the createUserIdentityStore WLST command, as in the following example:

```java
createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="welcome1", type="LDAP", userAttr="uid", ldapProvider="OID", roleSecAdmin="OAMAdministrators", userSearchBase="cn=Users,dc=us,dc=oracle,dc=com", ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=oracle,dc=com")
```

Alternatively, you can use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

16. Run the \<Oracle_IDM2>/common/bin/config.sh script (on UNIX).
(\<Oracle_IDM2>/common/bin\config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

17. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.

18. On the Select a WebLogic Domain Directory screen, select the Oracle Identity Management domain in which you configured Oracle Identity Manager, Oracle Authorization Policy Manager, Oracle Access Manager, and Oracle Identity Navigator. Click Next. The Select Extension Source screen is displayed.

19. On the Select Extension Source screen, select the following domain configuration options:

   **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]**

20. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.
21. On the Specify Domain Name and Location screen, select a location to store the applications in the domain. Click Next. The Configure JDBC Component Schema screen is displayed.

22. On the Configure JDBC Component Schema screen, select a component schema, such as the APM Schema, the OAM Infrastructure Schema, the SOA Infrastructure Schema, the SOA MDS Schema, the OIM MDS Schema, the OIM Schema, the OAAM Admin Schema, the OAAM Admin MDS Schema, the OWSM MDS Schema, the User Messaging Service Schema, or the APM MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

23. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

24. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Identity Manager, Oracle Authorization Policy Manager, Oracle Access Manager, and Oracle Identity Navigator is extended to support Oracle Adaptive Access Manager.

25. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

26. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the LDAP Sync and OAM Screen in the Oracle Identity Manager Configuration Wizard.

27. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to
configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

**Note:** If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).
15 Configuring Oracle Identity Navigator (OIN)

This chapter explains how to configure Oracle Identity Navigator (OIN). It includes the following topics:

- General Prerequisites
- Installing OIN
- Important Notes Before You Begin
- Configuring Only OIN in a New WebLogic Domain
- OIN with OIM, OAM, OAAM, and OAPM
- Starting the Servers
- Verifying OIN
- Getting Started with Oracle OIN After Installation

15.1 General Prerequisites

The following are the general prerequisites for installing and configuring Oracle Identity Management 11g Release 1 (11.1.1.3.0) products:

1. Installing Oracle Database, as described in Installing Oracle Database.
2. Installing Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
3. Installing the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite, as described in Installing the Oracle Identity Management 11g Software. The Oracle Identity Management suite contains Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN).

15.2 Installing OIN

Oracle Identity Navigator (OIN) is included in the Oracle Identity Management Suite. You can use the Oracle Identity Management 11g Installer to install Oracle Identity Management Suite, as described in Installing the Oracle Identity Management 11g Software.
15.3 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products in any of the scenarios discussed in this chapter, keep the following points in mind:

It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator on the same machine.

**Note:** In this chapter, two IDM_Home directories are mentioned in descriptions and procedures. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as Oracle_IDM1, under your Middleware_Home directory.

For more information, see Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation.

15.4 Configuring Only OIN in a New WebLogic Domain

This topic describes how to configure only Oracle Identity Navigator (OIN) in a new WebLogic administration domain. It includes the following sections:

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

Perform the configuration in this topic if you want to configure Oracle Identity Navigator with Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager in a new WebLogic domain and then run the Oracle Identity Navigator discovery feature. This feature populates links to the product consoles for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager. You can then access those product consoles from within the Oracle Identity Navigator interface, without having to remember the individual console URLs.

15.4.2 Components Deployed

Performing the configuration in this section deploys the Oracle Identity Navigator application on a new WebLogic Administration Server.

15.4.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server
- Installation of the Oracle Identity Management 11g software

For more information, see Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) and Installing the Oracle Identity Management 11g Software.

15.4.4 Procedure

Perform the following steps to configure only Oracle Identity Navigator in a new WebLogic administration domain:

1. Install Oracle WebLogic Server, and create a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.

2. Install the Oracle Identity Management 11g software. Refer to Installing the Oracle Identity Management 11g Software for more information.

3. Run the `<Oracle_IDM2>/common/bin/config.sh` script. (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Welcome screen of the Oracle Fusion Middleware Configuration Wizard appears.

4. On the Welcome screen, select Create a new WebLogic domain, and click Next. The Select Domain Source screen appears.

5. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected. Create a WebLogic administration domain, which supports Oracle Identity Navigator (choose Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]), and click Next. The Specify Domain Name and Location screen appears.

Note: Oracle_IDM2 is used as an example here. You must run this script from your IDM_Home directory that contains Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.
6. Enter a name and a location for the domain to be created, and click **Next**. The Configure Administrator User Name and Password screen appears.

7. Configure a user name and a password for the administrator. The default user name is weblogic. Click **Next**.


The Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure Administration Server and Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store options. Click **Next**.

10. Optional: Configure the following Administration Server parameters:

   - Name
   - Listen address
   - Listen port
   - SSL listen port
   - SSL enabled or disabled

11. Optional: Configure Managed Servers, as required.

12. Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

13. Optional: Assign Managed Servers to clusters, as required.

14. Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

15. Optional: Assign the Administration Server to a machine.

16. Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

17. Optional: Configure RDBMS Security Store, as required.

18. On the Configuration Summary screen, you can view summaries of your configuration for deployments, application, and service. Review the domain configuration, and click **Create** to start creating the domain.

   A new WebLogic domain to support Oracle Identity Navigator is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows). On
UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

### 15.5 OIN with OIM, OAM, OAAM, and OAPM

This topic describes how to configure Oracle Identity Navigator (OIN) in an existing Oracle Identity Management domain that contains Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), and Oracle Authorization Policy Manager (OAPM).

It includes the following sections:
- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

#### 15.5.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Navigator in an existing Oracle Identity Management environment where Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager are installed.

After performing this configuration, you can run the discovery feature of Oracle Identity Navigator to discover the product consoles for Oracle Identity Manager, Oracle Access Manager, and Oracle Adaptive Access Manager. You can view the product consoles in the dashboard of Oracle Identity Navigator. Then you can use the Oracle Identity Navigator user interface to launch consoles for products, such as Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Enterprise Manager, and so on.

#### 15.5.2 Components Deployed

Performing the configuration in this section deploys the Oracle Identity Navigator application on the existing Administration Server. This application is deployed on the same machine where the Administration Server is running.

#### 15.5.3 Dependencies

The configuration in this section depends on the following:
- Oracle WebLogic Server
- Installation of the Oracle Identity Management 11g software

For more information, see Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) and Installing the Oracle Identity Management 11g Software.

#### 15.5.4 Procedure

To configure only Oracle Identity Navigator in an existing Oracle Identity Management domain that contains Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager, complete the following steps:
1. Install Oracle WebLogic Server, and create a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.

2. Install the Oracle Identity Management 11g software. Refer to Installing the Oracle Identity Management 11g Software for more information.

3. Run the `<Oracle_IDM2>/common/bin/config.sh` script. Use the Oracle Fusion Middleware Configuration Wizard to create a new domain to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager in the same domain. Ensure that the appropriate domain templates are selected during domain configuration.

   A new domain with the selected configuration is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

4. Run the `<Oracle_IDM2>/common/bin/config.sh` script. The Oracle Fusion Middleware Configuration Wizard appears.

5. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next.


7. On the Select Extension Source screen, ensure that the Extend my domain automatically to support the following products: option is selected. Select Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2], and click Next. The Configure JDBC Component Schema screen appears.

8. On the Configure JDBC Component Schema screen, select a component schema that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. Optional: On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes, and Click Next.

10. Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the “Configuring High Availability for Identity Management Components” topic in the guide Oracle Fusion Middleware High Availability Guide.

11. Optional: Assign Managed Servers to clusters, as required.

12. Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

13. Optional: Assign the Administration Server to a machine.
14. Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

15. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing Oracle Identity Management domain with Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager is configured to support Oracle Identity Navigator.

16. Start the Oracle Identity Manager Configuration Wizard, as described in **Starting the Oracle Identity Manager 11g Configuration Wizard**.

17. Configure Oracle Identity Manager Server, as described in **Configuring OIM Server**.

18. Follow the wizard and the steps described in **Configuring OIM Server** to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in **Configuring OIM Design Console**, and **Configuring OIM Remote Manager**.

### 15.6 Starting the Servers

After installing and configuring Oracle Identity Navigator, you must run the Oracle WebLogic Administration Server and various Managed Servers, as described in **Starting or Stopping the Oracle Stack**.

### 15.7 Verifying OIN

To verify the installation of Oracle Identity Navigator (OIN), complete the following steps:

1. Launch Oracle Identity Navigator in a browser by using the following URL:
   
   http://<host>:7001/oinav/faces/idmNag.jspx

   The Oracle Identity Navigator dashboard and the resource catalog are displayed.

2. Click the **Customize** link on the upper right corner of the screen to switch to the Edit mode.

3. Click the **Add Content** button on the page. A resource catalog pops up.

4. In the pop-up dialog, click the **Open** link for the folder IDM Product Launcher. The Launcher task flow pops up.

5. In the pop-up dialog, click the **Add** link. Verify that the Launcher portlet is added to the page content. Continue to add News task flows to the page, without closing the pop-up dialog. Click the up arrow at the upper left corner. The top folder layout is displayed again. Click the **Open** link for the folder News. The News and Announcements task flow pops up.

6. In the News and Announcements pop-up dialog, click the **Add** link. Verify that the Report portlet is added to the page content. Continue to add Reports task flows to the page, without closing the pop-up dialog. Click the up arrow at the upper left corner. The top folder layout is displayed again. Click the **Open** link for the folder My Reports. Click the **Add** link and the Close button (X). All the three workflows are added to the page content.

7. Change the default layout, if necessary, by clicking the Pencil icon located on the upper right area of the screen.
8. To exit the Edit mode, click the Close button.

   If the task flows are properly added to the page content, the screen displays the task flow content.

9. Test the Product Registration functionality as follows:
   a. Create, edit, or delete the product information by clicking the Administration tab.
   b. To add a new product, click the Create image icon in the Product Registration section. The New Product Registration dialog pops up.
   c. Enter the relevant information in this dialog, and the new product registration is updated accordingly. The new product registration data is updated on the Launcher portlet after you click the Dashboard tab.
   d. Click the product link and ensure that a new browser window or tab opens with the registered product URL.

10. Test the News functionality as follows:
   a. Click the refresh icon to update the RSS feed content.
   b. Click the news item link to open the source of content in a new browser window or tab.

11. Test the Reports functionality as follows:
   a. Add a report by clicking the Add icon. The Add Report dialog pops up.
   b. In this dialog, select a report to add, and click the Add Report button. Verify that the report is added.
   c. Run a report by clicking the report icon. The report opens in a new browser window or tab.

15.8 Getting Started with Oracle OIN After Installation

   After installing Oracle Identity Navigator (OIN), refer to the "Using Identity Navigator" chapter in the Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator.
This chapter explains how to configure Oracle Identity Manager (OIM) in a new or existing WebLogic domain.

It includes the following topics:

- OIM Server Configuration Workflow
- Prerequisites
- Important Notes Before You Start Configuring OIM
- OIM Domain Configuration Scenarios
- Starting the Servers
- Configuring OIM Server, Design Console, and Remote Manager
- Before Configuring OIM Server, Design Console, or Remote Manager
- Starting the Oracle Identity Manager 11g Configuration Wizard
- Configuring OIM Server
- Installing and Configuring Only OIM Design Console on Windows
- Configuring OIM Design Console
- Configuring OIM Remote Manager
- Verifying the OIM Installation
- Setting Up LDAP Synchronization
- Setting Up Integration with OAM
- Using the Diagnostic Dashboard
- Getting Started with OIM After Installation

**Note:** The Oracle Identity Manager Configuration Wizard enables you to configure only some fundamental non-J2EE elements of Oracle Identity Manager, such as Oracle Identity Manager Server, Oracle Identity Manager Design Console, and Oracle Identity Manager Remote Manager. For more information about configuring and administering Oracle Identity Manager, see the *Oracle Identity Manager System Administrator’s Guide*.

To invoke online help at any stage of the Oracle Identity Manager configuration process, click the **Help** button on the Oracle Identity Manager Configuration Wizard screens.
16.1 OIM Server Configuration Workflow

The following figure illustrates the process of configuring Oracle Identity Manager (OIM) Server.

Figure 16–1 OIM Server Configuration Workflow

For information about configuring Oracle Identity Manager (OIM) Server on the machine where the Administration Server is running, see Configuring OIM Server.

After configuring OIM Server, you can configure Design Console and Remote Manager on a local or remote machine. For information about configuring OIM Design Console, see Configuring OIM Design Console. For information about configuring Remote Manager, see Configuring OIM Remote Manager.

16.2 Prerequisites

The following are the prerequisites for installing and configuring Oracle Identity Management 11g Release 1 (11.1.1.3.0) products:

1. Installing Oracle Database, as described in Installing Oracle Database.

2. Creating and loading schemas using Repository Creation Utility (RCU), as described in Creating Database Schema Using the Repository Creation Utility (RCU).

3. Installing Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
4. **For Oracle Identity Manager users only**: Installing Oracle SOA Suite 11g Release 1 (11.1.1.2.0) and patching it to 11.1.1.3.0, as described in *Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only)*.

5. Installing the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite, as described in *Installing the Oracle Identity Management 11g Software*. The Oracle Identity Management suite contains Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN).

### 16.3 Important Notes Before You Start Configuring OIM

Before you start configuring Oracle Identity Manager, keep the following points in mind:

- It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator on the same machine.

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**Note:** In this chapter, two IDM_Home directories are mentioned in descriptions and procedures. For example, the first one, `Oracle_IDM1` can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, `Oracle_IDM2` can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that `Oracle_IDM1` and `Oracle_IDM2` are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Internet Directory Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an `Oracle_IDM1` directory, and the second installation creates an `Oracle_IDM2` directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as `Oracle_IDM1`, under your Middleware_Home directory.

For more information, see *Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation*.
By performing the domain configuration procedures described in this chapter, you can create Managed Servers on a local machine (the machine on which the Administration Server is running). However, you can create and start Managed Servers for Oracle Identity Management components on a remote machine. For more information, see the “Creating and Starting a Managed Server on a Remote Machine” topic in the guide Oracle Fusion Middleware Creating Templates and Domains Using the Pack and Unpack Commands.

You must use the Oracle Identity Manager Configuration Wizard to configure only Oracle Identity Manager Server, Oracle Identity Manager Design Console (on Windows only), and Oracle Identity Manager Remote Manager.

You must complete this additional configuration for Oracle Identity Manager components after configuring Oracle Identity Manager in a new or existing WebLogic administration domain. For more information, see OIM Domain Configuration Scenarios.

If you are configuring Oracle Identity Manager Server, you must run the Oracle Identity Manager configuration wizard on the machine where the Administration Server is running. For configuring the Server, you can run the wizard only once during the initial setup of the Server. After the successful setup of Oracle Identity Manager Server, you cannot run the Oracle Identity Manager Configuration Wizard again to modify the configuration of Oracle Identity Manager Server. For such modifications, you must use Oracle Enterprise Manager.

If you are configuring only Design Console or Remote Manager, you can run the Oracle Identity Manager Configuration Wizard on the machine where Design Console or Remote Manager is being configured. Note that you can run the Oracle Identity Manager Configuration Wizard to configure Design Console or Remote Manager as and when you need to configure them on new machines.

Note that Oracle Identity Manager requires Oracle SOA Suite 11g (11.1.1.3.0), which should be exclusive to Oracle Identity Management. You must install Oracle SOA Suite before configuring Oracle Identity Manager. If you are setting up integration between Oracle Identity Manager and Oracle Access Manager, ensure that Oracle Identity Manager, Oracle Access Manager, and Oracle SOA Suite are configured in the same domain.

16.4 OIM Domain Configuration Scenarios

The following sections describe basic configuration scenarios for Oracle Identity Manager (OIM):

- OIM Without LDAP Sync in a New Domain
- OIM with LDAP Sync
- OIM and OIN in a New WebLogic Domain
- OIM and OAM in a WebLogic Domain Containing OIN
- OIM and OIN in a WebLogic Domain Containing OAM
- OIM, OAM, and OIN in a New WebLogic Domain

Note: For additional configuration scenarios, see Oracle Identity Management Suite-Level Installation Scenarios.
16.4.1 OIM Without LDAP Sync in a New Domain

This topic describes how to configure Oracle Identity Manager (OIM) without LDAP Synchronization in a new WebLogic domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

16.4.1.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install only Oracle Identity Manager in an environment where you may use Oracle Identity Manager as a provisioning or request solution. This option is also appropriate for Oracle Identity Manager environments that do not use Single Sign-On (SSO) or Oracle Access Manager.

16.4.1.2 Components Deployed

Performing the configuration in this section installs the following components:

- Administration Server
- A Managed Server for Oracle Identity Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

16.4.1.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite.
- Database schemas for Oracle Identity Manager and Oracle SOA 11g Suite. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

16.4.1.4 Procedure

Complete the following steps to configure Oracle Identity Manager in a new WebLogic administration domain and to configure Oracle Identity Manager Server, Design Console, and Remote Manager:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Welcome screen of the Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select Create a new WebLogic domain, and click Next. The Select Domain Source screen appears.

4. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected.
Select **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**.

The **Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]** option, the Oracle JRF 11.1.1.0 [oracle_common] option, the **Oracle Enterprise Manager - 11.1.1.0 [oracle_common]**, and the **Oracle WSM Policy Manager 11.1.1.0 [oracle_common]** option are also selected, by default.

Click **Next**. The Specify Domain Name and Location screen appears.

5. Enter a name and a location for the domain to be created, and click **Next**. The Configure Administrator User Name and Password screen appears.

6. Configure a user name and a password for the administrator. The default user name is weblogic. Click **Next**.

7. Choose **JRockit SDK 160_17_R28.0.0-679** and Production Mode in the Configure Server Start Mode and JDK screen of the Oracle Fusion Middleware Configuration Wizard. Click **Next**. The Configure JDBC Component Schema screen appears. This screen displays a list of the following component schemas:
   - SOA Infrastructure
   - User Messaging Service
   - OIM MDS Schema
   - OWSM MDS Schema
   - SOA MDS Schema
   - OIM Infrastructure

8. On the Configure JDBC Component Schema screen, select a component schema that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Select the driver as **Oracle's Driver (Thin) for Instance connections; Versions:9.0.1,9.2.0,10,11**. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure the Administration Server, JMS Distributed Destination, Managed Servers, Clusters, and Machines, Deployments and Services. Click **Next**.

10. Optional: Configure the following Administration Server parameters:
   - Name
   - Listen address
   - Listen port
   - SSL listen port
   - SSL enabled or disabled

   Click **Next**.

11. Optional: Configure JMS Distributed Destination, as required. Click **Next**.

12. Optional: Configure Managed Servers, as required. Click **Next**.

13. Optional: Configure Clusters, as required. Click **Next**.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide **Oracle Fusion Middleware High Availability Guide**.

14. Optional: Assign Managed Servers to Clusters, as required. Click **Next**.
15. Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine. Click Next.

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.


17. Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server. Click Next.

18. On the Configuration Summary screen, you can view summaries of your configuration for deployments, application, and service. Review the domain configuration, and click Create to start creating the domain.

After the domain configuration is complete, click Done to close the configuration wizard.

A new WebLogic domain to support Oracle Identity Manager is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

19. Start the Administration Server, as described in Starting or Stopping the Oracle Stack.

20. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

21. Configure the Oracle Identity Manager Server, Design Console, or Remote Manager, as described in Configuring OIM Server, Configuring OIM Design Console, and Configuring OIM Remote Manager.

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Note: If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

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### 16.4.2 OIM with LDAP Sync

This topic describes how to configure Oracle Identity Manager (OIM) with LDAP Synchronization in a new or existing WebLogic domain. It includes the following sections:

- Configuring OIM with LDAP Sync in a New WebLogic Domain
- OIM with LDAP Sync in an Oracle Identity Management 11.1.1.3.0 Domain Containing OID and OVD

#### 16.4.2.1 Configuring OIM with LDAP Sync in a New WebLogic Domain

This section discusses the following topics:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure
16.4.2.1.1  **Appropriate Deployment Environment**  Perform the configuration in this topic if you want to install only Oracle Identity Manager (OIM) in an environment where you may install Oracle Access Manager at a later time and set up integration between Oracle Identity Manager and Oracle Access Manager.

16.4.2.1.2  **Components Deployed**  Performing the configuration in this section installs the following components:

- Administration Server
- A Managed Server for Oracle Identity Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

16.4.2.1.3  **Dependencies**  The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite.
- Installation of the latest version of Oracle Internet Directory and Oracle Virtual Directory under the same Middleware Home directory or on a different machine.
- Database schemas for Oracle Identity Manager and Oracle SOA 11g Suite. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

16.4.2.1.4  **Procedure**  Complete the following steps to configure Oracle Identity Manager in a new WebLogic administration domain, to enable LDAP sync, and to configure Oracle Identity Manager Server, Design Console, and Remote Manager:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common\bin\config.cmd` on Windows). The Welcome screen of the Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select Create a new WebLogic domain, and click Next. The Select Domain Source screen appears.

4. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected.

   Select Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2].

   The Oracle SOA Suite - 11.1.1.1.0 [Oracle_SOA1] option, the Oracle JRF 11.1.1.0 [oracle_common] option, the Oracle Enterprise Manager - 11.1.1.0 [oracle_common], and the Oracle WSM Policy Manager 11.1.1.0 [oracle_common] option are also selected, by default.

   Click Next. The Specify Domain Name and Location screen appears.

5. Enter a name and a location for the domain to be created, and click Next. The Configure Administrator User Name and Password screen appears.

6. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next.
7. Choose JRockit SDK 160_17_R28.0.0-679 and Production Mode in the Configure Server Start Mode and JDK screen of the Oracle Fusion Middleware Configuration Wizard. Click Next. The Configure JDBC Component Schema screen appears. This screen displays a list of the following component schemas:

- SOA Infrastructure
- User Messaging Service
- OIM MDS Schema
- OWSM MDS Schema
- SOA MDS Schema
- OIM Infrastructure

8. On the Configure JDBC Component Schema screen, select a component schema that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Select the driver as Oracle's Driver (Thin) for Instance connections; Versions:9.0.1,9.2.0,10,11. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure the Administration Server, JMS Distributed Destination, Managed Servers, Clusters, and Machines, Deployments and Services. Click Next.

10. Optional: Configure the following Administration Server parameters:

- Name
- Listen address
- Listen port
- SSL listen port
- SSL enabled or disabled

Click Next.

11. Optional: Configure JMS Distributed Destination, as required. Click Next.

12. Optional: Configure Managed Servers, as required. Click Next.

13. Optional: Configure Clusters, as required. Click Next.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

14. Optional: Assign Managed Servers to Clusters, as required. Click Next.

15. Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine. Click Next.

   **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.


17. Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server. Click Next.
18. On the Configuration Summary screen, you can view summaries of your configuration for deployments, application, and service. Review the domain configuration, and click Create to start creating the domain.

After the domain configuration is complete, click Done to close the configuration wizard.

A new WebLogic domain to support Oracle Identity Manager is created in the <Middleware_Home>/user_projects/domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.

19. Start the Administration Server, as described in Starting or Stopping the Oracle Stack.

20. Set up LDAP Synchronization, as described in Setting Up LDAP Synchronization.

21. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

22. Configure the Oracle Identity Manager Server, Design Console, or Remote Manager, as described in Configuring OIM Server, Configuring OIM Design Console, and Configuring OIM Remote Manager.

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**Note:** If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

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### 16.4.2.2 OIM with LDAP Sync in an Oracle Identity Management 11.1.1.3.0 Domain Containing OID and OVD

This section discusses the following topics:

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

#### 16.4.2.2.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install only Oracle Identity Manager (OIM) in an existing Oracle Identity Management environment where you have installed and configured Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD). You can enable LDAP Synchronization for Oracle Identity Manager. At a later time, you may install Oracle Access Manager and set up integration between Oracle Identity Manager and Oracle Access Manager.

#### 16.4.2.2.2 Components Deployed

Performing the configuration in this section installs the following components:

- A Managed Server for Oracle Identity Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server

#### 16.4.2.2.3 Dependencies

The configuration in this section depends on the following:
Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite.
- Database schemas for Oracle Identity Manager and Oracle SOA 11g Suite. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

16.4.2.2.4 Procedure  Complete the following steps to configure Oracle Identity Manager in an existing Oracle Identity Management 11.1.1.3.0 domain that has Oracle Internet Directory and Oracle Virtual Directory installed and configured:

1. Install Oracle WebLogic Server and create a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.

2. Ensure that your Oracle Identity Management 11g installation is patched to 11.1.1.3.0, as described in Installing the Latest Version of Oracle Identity Management.

3. Run the `<Oracle_IDM1>/bin/config.sh` on UNIX operating systems to start the Oracle Identity Management Configuration Wizard. On Windows, run the `<Oracle_IDM1>/bin/config.bat` to start the wizard.

4. On the Select Domain screen, select the Create New Domain option. Set the Administrator user name and password, as required.

5. Ensure that you select Oracle Internet Directory and Oracle Virtual Directory on the Configure Components screen.

6. Follow the wizard, provide the necessary input, and configure the domain.

   A new WebLogic domain to support Oracle Internet Directory and Oracle Virtual Directory is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

7. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

8. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (<`Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

9. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next. The Select a WebLogic Domain Directory screen is displayed.


11. On the Select Extension Source screen, select the following domain configuration options:

   - **Oracle Identity Manager - 11.1.1.3.0** [Oracle_IDM2]
12. After selecting the domain configuration options, click **Next**. The Configure JDBC Component Schema screen is displayed.

13. On the Configure JDBC Component Schema screen, select a component schema, such as the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, the OIM Schema, or the SOA MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

14. On the Select Optional Configuration screen, you can configure **JMS Distributed Destination**, **Managed Servers, Clusters, and Machines, Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click **Next**.

   - Optional: Select a JMS Distributed Destination Type, as required.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.
   
     For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.
   
   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

     **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
   - Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
   - Optional: Configure JMS File Store, as required.

15. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

   Your existing Oracle Identity Management 11.1.1.3.0 domain with Oracle Internet Directory and Oracle Virtual Directory is extended to support Oracle Identity Manager.

16. Start the Administration Server, as described in *Starting or Stopping the Oracle Stack*.

17. Set up LDAP Synchronization, as described in *Setting Up LDAP Synchronization*.

18. Verify LDAP Synchronization, as described in *Verifying the LDAP Synchronization*.

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**Note:** When you select the *Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]* option, the following options are also selected, by default: *Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]*, and *Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]*.
19. Restart the Administration Server, as described in Restarting Servers.

20. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

21. Configure Oracle Identity Manager Server, as described in Configuring OIM Server. When configuring Oracle Identity Manager Server, ensure that you select the Enable LDAP Sync option on the BI Publisher and OAM Screen in the Oracle Identity Manager Configuration Wizard.

22. Follow the wizard and the steps described in Configuring OIM Server to complete the server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

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**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

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### 16.4.3 OIM and OIN in a New WebLogic Domain

This topic describes how to configure Oracle Identity Manager (OIM) and Oracle Identity Navigator (OIN) together in a new WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

#### 16.4.3.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Manager in an environment where you want to use Oracle Identity Navigator as a centralized user interface to discover Oracle Identity Manager. You can also launch the Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, or Oracle Identity Manager Advanced Administration Console from within the Oracle Identity Navigator user interface.

#### 16.4.3.2 Components Deployed

Performing the configuration in this section deploys the following:

- Administration Server
- Managed Server for Oracle Identity Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Managed Server
- Oracle Identity Navigator application on the Administration Server

#### 16.4.3.3 Dependencies

The configuration in this section depends on the following:
- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite.
- Database schemas for Oracle Identity Manager and Oracle SOA Suite. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

16.4.3.4 Procedure

Perform the following steps to configure Oracle Identity Manager and Oracle Identity Navigator together in a new WebLogic domain:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows. The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the Generate a domain configured automatically to support the following products: option.

5. Select the following domain configuration options:
   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default:

   - Oracle JRF - 11.1.1.0 [oracle_common], Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1], Oracle WSM Policy Manager - 11.1.1.0 [oracle_common], and Oracle Enterprise Manager - 11.1.1.0 [oracle_common]

   **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**

6. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

7. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

8. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.


10. On the Configure JDBC Component Schema screen, select a component schema, such as the OIM Infrastructure Schema, the SOA Infrastructure Schema, the User...
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Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

11. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, JMS File Store, and RDBMS Security Store. Select the relevant check boxes and click Next.

- Optional: Configure Administration Server, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.
- Optional: Configure RDBMS Security Store, as required.

12. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain. After the domain configuration is complete, click Done.

A new WebLogic domain to support Oracle Identity Manager and Oracle Identity Navigator is created in the <Middleware_Home>/user_projects/domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.

**Note:** If you want to start the SOA Server on a remote machine, then you must manually copy the composite files from the <DOMAIN_HOME>/soa/autodeploy directory on the local machine to the <DOMAIN_HOME>/soa/autodeploy directory on the remote machine after running the unpack command on the remote machine. If the <DOMAIN_HOME>/soa/autodeploy directory does not exist on the remote machine, you must create this directory before copying the composite files.
13. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

14. Configure Oracle Identity Manager Server, as described in Configuring OIM Server.

15. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

### 16.4.4 OIM and OAM in a WebLogic Domain Containing OIN

This topic describes how to configure Oracle Identity Manager (OIN) and Oracle Access Manager (OAM) together in a WebLogic administration domain that has Oracle Identity Navigator (OIN) installed. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

#### 16.4.4.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Manager and Oracle Access Manager in an environment where Oracle Identity Navigator is already installed. You can set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM. You can use the Oracle Identity Navigator user interface to discover and access product consoles for Oracle Identity Manager and Oracle Access Manager.

#### 16.4.4.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Servers for Oracle Identity Manager and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console on the Administration Server

#### 16.4.4.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
Installation of the latest version of Oracle SOA Suite (this is required by Oracle Identity Manager)

- Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

- Configuration of Oracle Identity Navigator in a new WebLogic domain.

### 16.4.4.4 Procedure

Perform the following steps to configure Oracle Identity Manager and Oracle Access Manager in a WebLogic domain that has Oracle Identity Navigator installed:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

2. Configure only Oracle Identity Navigator in a new WebLogic domain, as described in Configuring Only OIN in a New WebLogic Domain.

3. Verify the installation of Oracle Identity Navigator, as described in Verifying OIN.

4. Install Oracle SOA Suite under the same Middleware Home. Refer to Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only) for more information.

5. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common\bin\config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

6. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**.

7. On the Select a WebLogic Domain Directory screen, browse to the directory that contains the WebLogic domain in which you configured Oracle Identity Navigator. Click **Next**. The Select Extension Source screen appears.

8. On the Select Extension Source screen, select the following domain configuration options:

   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

     **Note:** When you select the **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]** option, the following options are also selected, by default: **Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]**, **Oracle Enterprise Manager - 11.1.1.0 [oracle_common]**, and **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]**.

   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**

9. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

10. On the Specify Domain Name and Location screen, enter a location to store applications for the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

11. On the Configure JDBC Component Schema screen, select a component schema, such as the OIM Infrastructure Schema, the SOA Infrastructure Schema, the User
Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

12. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.

13. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain. When the domain configuration is complete, click Done.

The existing Oracle Identity Navigator domain is configured to support Oracle Identity Manager and Oracle Access Manager.

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**Note:** If you want to start the SOA Server on a remote machine, then you must manually copy the composite files from the `<DOMAIN_HOME>/soa/autodeploy` directory on the local machine to the `<DOMAIN_HOME>/soa/autodeploy` directory on the remote machine after running the unpack command on the remote machine. If the `<DOMAIN_HOME>/soa/autodeploy` directory does not exist on the remote machine, you must create this directory before copying the composite files.

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14. Restart the Administration Server, as described in Restarting Servers.

15. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

16. Configure Oracle Identity Manager Server, as described in Configuring OIM Server.
17. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

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**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

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### 16.4.5 OIM and OIN in a WebLogic Domain Containing OAM

This topic describes how to configure Oracle Identity Manager (OIM) and Oracle Identity Navigator (OIN) together in a WebLogic domain that has Oracle Access Manager (OAM) installed. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

#### 16.4.5.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Manager and Oracle Identity Navigator in an Oracle Identity Management environment where Oracle Access Manager is already installed. You can set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM. You can use the Oracle Identity Navigator user interface to discover and access product consoles for both Oracle Identity Manager and Oracle Access Manager.

#### 16.4.5.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Server for Oracle Identity Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Identity Navigator application on the existing Administration Server

#### 16.4.5.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite.
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).
■ Configuration of Oracle Access Manager in a new WebLogic domain.

16.4.5.4 Procedure
Perform the following steps to configure Oracle Identity Manager and Oracle Identity Navigator together in a WebLogic administration domain that has Oracle Access Manager installed:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

2. Configure only Oracle Access Manager in a new WebLogic domain, as described in OAM in a New WebLogic Domain.

3. Verify the installation of Oracle Access Manager, as described in Verifying the OAM Installation.

4. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

5. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**.

6. On the Select a WebLogic Domain Directory screen, browse to the directory that contains the WebLogic domain in which you configured Oracle Access Manager. Click **Next**. The Select Extension Source screen appears.

7. On the Select Extension Source screen, select the following domain configuration options:

   ■ **Oracle Identity Manager - 11.1.1.3.0** [Oracle_IDM2]

   __Note:__ When you select the **Oracle Identity Manager - 11.1.1.3.0** [Oracle_IDM2] option, the following options are also selected, by default: **Oracle SOA Suite - 11.1.1.0** [Oracle_SOA1], **Oracle Enterprise Manager - 11.1.1.0** [oracle_common], and **Oracle WSM Policy Manager - 11.1.1.0** [oracle_common].

   ■ **Oracle Identity Navigator - 11.1.1.3.0** [Oracle_IDM2]

   8. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

   9. On the Specify Domain Name and Location screen, enter a location to store applications for the domain. Click **Next**. The Configure JDBC Component Schema screen is displayed.

   10. On the Configure JDBC Component Schema screen, select a component schema, such as the OIM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

       You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

   11. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click **Next**.
■ Optional: Configure Managed Servers, as required.

■ Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

■ Optional: Assign Managed Servers to Clusters, as required.

■ Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

■ Optional: Assign the Administration Server to a machine.

■ Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

■ Optional: Configure JMS File Store, as required.

12. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing WebLogic domain with Oracle Access Manager is extended to support Oracle Identity Manager and Oracle Identity Navigator.

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**Note:** If you want to start the SOA Server on a remote machine, then you must manually copy the composite files from the `<DOMAIN_HOME>/soa/autodeploy` directory on the local machine to the `<DOMAIN_HOME>/soa/autodeploy` directory on the remote machine after running the `unpack` command on the remote machine. If the `<DOMAIN_HOME>/soa/autodeploy` directory does not exist on the remote machine, you must create this directory before copying the composite files.

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13. Restart the Administration Server, as described in Restarting Servers.

14. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

15. Configure Oracle Identity Manager Server, as described in Configuring OIM Server.

16. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

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**Note:** If `weblogic` is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).
16.4.6 OIM, OAM, and OIN in a New WebLogic Domain

This topic describes how to configure Oracle Identity Manager (OIM), Oracle Access Manager (OAM), and Oracle Identity Navigator (OIN) together in a new WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

16.4.6.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Manager, Oracle Access Manager, and Oracle Identity Navigator together in an Oracle Identity Management environment. You can set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM. You can use the Oracle Identity Navigator user interface to discover and access product consoles for Oracle Identity Manager and Oracle Access Manager.

At a later time, you can also add Oracle Adaptive Access Manager to this environment and set up integration between Oracle Access Manager and Oracle Adaptive Access Manager.

16.4.6.2 Components Deployed

Performing the configuration in this section deploys the following:

- Administration Server
- Managed Servers for Oracle Identity Manager and Oracle Access Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Identity Navigator application and Oracle Access Manager Console on the Administration Server

16.4.6.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

16.4.6.4 Procedure

Perform the following steps to configure Oracle Identity Manager, Oracle Access Manager, and Oracle Identity Navigator together in a new WebLogic domain:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.
2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the **Create a new WebLogic domain** option. Click **Next**. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the **Generate a domain configured automatically to support the following products**: option.

5. Select the following domain configuration options:
   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]** option, the following options are also selected, by default: **Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1]**, **Oracle Enterprise Manager - 11.1.1.0 [oracle_common]**, **Oracle JRF - 11.1.1.0 [oracle_common]**, and **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]**.

6. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

7. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click **Next**. The Configure Administrator User Name and Password screen is displayed.

8. Configure a user name and a password for the administrator. The default user name is weblogic. Click **Next**. The Configure Server Start Mode and JDK screen is displayed.

9. Choose JRockit SDK 160_17_R28_0.0-679 and Production Mode in the Configure Server Start Mode and JDK screen of the Oracle Fusion Middleware Configuration Wizard. Click **Next**. If you selected **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]** option on the Select Extension Source screen, the Configure JDBC Data Sources Screen is displayed. Configure the oamDS data source, as required. After the test succeeds, the Configure JDBC Component Schema screen is displayed.

10. On the Configure JDBC Component Schema screen, select a component schema, such as the OIM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

    You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

11. On the Select Optional Configuration screen, you can configure **Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, JMS File Store**, and **RDBMS Security Store**. Select the relevant check boxes and click **Next**.
Optional: Configure Administration Server, as required.

Optional: Configure Managed Servers, as required.

Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

Optional: Assign Managed Servers to Clusters, as required.

Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

Optional: Assign the Administration Server to a machine.

Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure JMS File Store, as required.

Optional: Configure RDBMS Security Store, as required.

12. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

A new WebLogic domain to support Oracle Identity Manager, Oracle Access Manager, and Oracle Identity Navigator is created in the <Middleware_Home>/user_projects/domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.

Note: If you want to start the SOA Server on a remote machine, then you must manually copy the composite files from the <DOMAIN_HOME>/soa/autodeploy directory on the local machine to the <DOMAIN_HOME>/soa/autodeploy directory on the remote machine after running the unpack command on the remote machine. If the <DOMAIN_HOME>/soa/autodeploy directory does not exist on the remote machine, you must create this directory before copying the composite files.

13. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

14. Configure Oracle Identity Manager Server, as described in Configuring OIM Server.

15. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.
16.5 Starting the Servers

After installing and configuring Oracle Identity Manager in a WebLogic domain, you must run the Oracle WebLogic Administration Server and various Managed Servers, as described in Starting the Stack.

Note: If weblogic is not your WebLogic administrator user name, you must complete a set of manual steps after starting the servers. For more information, see Optional: Updating the WebLogic Administrator Server User Name in Enterprise Manager (OIM Only).

16.6 Configuring OIM Server, Design Console, and Remote Manager

The Oracle Identity Management 11g Configuration Wizard enables you to configure Oracle Identity Manager (OIM) Server, Design Console (Windows only), and Remote Manager.

If you are configuring OIM Server, you must run this configuration wizard on the machine where the Administration Server is running.

You must complete this additional configuration for Oracle Identity Manager components after configuring Oracle Identity Manager in a new or existing WebLogic administration domain.

Note: You can run the Oracle Identity Manager Configuration Wizard to configure Oracle Identity Manager Server only once during the initial setup. After the initial setup, you cannot run the Oracle Identity Manager Configuration Wizard again to modify the configuration of Oracle Identity Manager Server, Design Console, or Remote Manager. For such modifications, you must use Oracle Enterprise Manager.

Note that Oracle Identity Manager requires Oracle SOA Suite 11g (11.1.1.3.0), which should be exclusive to Oracle Identity Management. You must install Oracle SOA Suite before configuring Oracle Identity Manager. If you are setting up integration between Oracle Identity Manager and Oracle Access Manager, ensure that Oracle Identity Manager, Oracle Access Manager, and Oracle SOA Suite are configured in the same domain.

This section discusses the following topics:

- Scope of Configuration Using the Oracle Identity Manager 11g Configuration Wizard
- Scenario 1: Oracle Identity Manager Server and Design Console on Different Machines
Configuring OIM Server, Design Console, and Remote Manager

- Scenario 2: Oracle Identity Manager Server and Remote Manager on Different Machines
- Scenario 3: Oracle Identity Manager Server, Design Console, and Remote Manager on a Single Windows Machine

16.6.1 Scope of Configuration Using the Oracle Identity Manager 11g Configuration Wizard

You can use the Oracle Identity Manager 11g Configuration Wizard to configure the non-J2EE components and elements of Oracle Identity Manager. Most of the J2EE configuration is done automatically in the domain template for Oracle Identity Manager.

16.6.2 Scenario 1: Oracle Identity Manager Server and Design Console on Different Machines

In this scenario, you configure Oracle Identity Manager Server on one machine, and install and configure only Oracle Identity Manager Design Console on a different Windows machine (a development or design system).

The following are the high-level tasks in this scenario:

1. Install and configure Oracle Identity Manager Server on a machine after completing all the prerequisites, as described in Configuring OIM Server. Ensure that the Oracle Identity Manager Server is up and running.

2. On a different Windows machine, install the Oracle Identity Management 11g (11.1.1.3.0) software containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator. For information, see Installing the Oracle Identity Management 11g Software.

3. On the Windows machine where you installed the Oracle Identity Management 11g (11.1.1.3.0) software, run the Oracle Identity Manager Configuration Wizard to configure only Design Console. Note that you must provide the Oracle Identity Manager Server information, such as host and URL, when configuring Design Console. For more information, see Installing and Configuring Only OIM Design Console on Windows.

16.6.3 Scenario 2: Oracle Identity Manager Server and Remote Manager on Different Machines

In this scenario, you configure Oracle Identity Manager Server on one machine, and install and configure only Oracle Identity Manager Remote Manager on a different machine.

The following are the high-level tasks in this scenario:

1. Install and configure Oracle Identity Manager Server on a machine after completing all the prerequisites, as described in Configuring OIM Server. Ensure that the Oracle Identity Manager Server is up and running.

2. On a different machine, install the Oracle Identity Management 11g (11.1.1.3.0) software containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator. For information, see Installing the Oracle Identity Management 11g Software.
3. On the machine where you installed the Oracle Identity Management 11g (11.1.1.3.0) software, run the Oracle Identity Manager Configuration Wizard to configure only Remote Manager. Note that you must provide the Oracle Identity Manager Server information, such as host and URL, when configuring Remote Manager. For more information, see Configuring OIM Remote Manager.

16.6.4 Scenario 3: Oracle Identity Manager Server, Design Console, and Remote Manager on a Single Windows Machine

In this scenario, suitable for test environments, you install and configure Oracle Identity Manager Server, Design Console, and Remote Manager on a single Windows machine.

The following are the high-level tasks in this scenario:

1. Install and configure Oracle Identity Manager Server on a machine after completing all the prerequisites, as described in Configuring OIM Server. Ensure that the Oracle Identity Manager Server is up and running.

2. On the same machine, configure Design Console, as described in Configuring OIM Design Console.

3. On the same machine, configure Remote Manager, as described in Configuring OIM Remote Manager.

16.7 Before Configuring OIM Server, Design Console, or Remote Manager

Before configuring Oracle Identity Manager (OIM) using the Oracle Identity Manager Wizard, ensure that you have completed the prerequisites for configuring Oracle Identity Manager components (Server, Design Console, and Remote Manager).

The Oracle Identity Manager 11g Configuration Wizard prompts you to enter information about certain configurations, such as Database, Schemas, WebLogic Administrator User Name and Password, and LDAP Server. Therefore, keep this information ready with you before starting the Identity Management 11g Configuration Wizard.

This section discusses the following topics:

- Prerequisites for Configuring OIM Server
- Prerequisites for Configuring Only OIM Design Console on a Different Machine
- Prerequisites for Configuring Only OIM Remote Manager on a Different Machine

16.7.1 Prerequisites for Configuring OIM Server

Before you can configure Oracle Identity Manager (OIM) Server using the Oracle Identity Manager Configuration Wizard, you must complete the following prerequisites:

1. Installing Oracle WebLogic Server 10.3.3 and created a Middleware Home directory. For more information, see Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.

2. Installing a supported version of Oracle database. For more information, see Installing Oracle Database.

3. Creating and loading the required schemas (OIM and MDS) in the database. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).
4. Installing Oracle SOA Suite 11g Release 1(11.1.1.3.0) under the same Middleware Home directory. For more information, see Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only).

5. Installing the Oracle Identity Management Suite (the suite that contains Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) under the Middleware Home directory. For more information, see Installing the Oracle Identity Management 11g Software.

6. Configuring Oracle Identity Manager and Oracle SOA Suite in the same WebLogic administration domain (a new or existing domain). For more information, see the following example scenarios:
   - OIM Without LDAP Sync in a New Domain
   - OIM with LDAP Sync
   - OIM and OIN in a New WebLogic Domain
   - OIM and OAM in a WebLogic Domain Containing OIN
   - OIM and OIN in a WebLogic Domain Containing OAM
   - OIM, OAM, and OIN in a New WebLogic Domain

7. Starting the Oracle WebLogic Administration Server for the domain in which the Oracle Identity Manager application is deployed. For more information, see Starting the Stack.

8. Optional: Installing Oracle HTTP Server 11g Webgate for Oracle Access Manager, if you want to set up integration between Oracle Identity Manager and Oracle Access Manager. For more information, see Migrating from Domain Agent to Oracle HTTP Server 10g Webgate for OAM.

9. Optional: Setting up LDAP Synchronization for Oracle Identity Manager, if you want to enable LDAP Sync. For more information, see Setting Up LDAP Synchronization.

10. Optional: Installing Oracle BI Publisher, if you want to configure Oracle BI Publisher for reporting features in Oracle Identity Manager. For more information, see the guide Oracle Fusion Middleware Quick Installation Guide for Oracle Business Intelligence.

16.7.2 Prerequisites for Configuring Only OIM Design Console on a Different Machine

On the machine where you are installing and configuring Design Console, you must install the Oracle Identity Management 11g (11.1.1.3.0) software containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator. For information, see Installing the Oracle Identity Management 11g Software.

Before you can configure Oracle Identity Manager (OIM) Design Console by running the Oracle Identity Manager Configuration Wizard, you should have configured the Oracle Identity Manager Server, as described in Configuring OIM Server on a local or remote machine. In addition, the Oracle Identity Manager Server should be up and running.
16.7.3 Prerequisites for Configuring Only OIM Remote Manager on a Different Machine

On the machine where you are installing and configuring Remote Manager, you must install the Oracle Identity Management 11g (11.1.1.3.0) software containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator. For information, see Installing the Oracle Identity Management 11g Software.

Before you can configure Oracle Identity Manager (OIM) Remote Manager by running the Oracle Identity Manager Configuration Wizard, you should have configured the Oracle Identity Manager Server, as described in Configuring OIM Server. In addition, the Oracle Identity Manager Server should be up and running.

16.8 Starting the Oracle Identity Manager 11g Configuration Wizard

To start the Oracle Identity Manager 11g Configuration Wizard, execute the `<Oracle_IDM2>/bin/config.sh` script (on UNIX) on the machine where the Administration Server is running. (`<Oracle_IDM2>/bin/config.bat` on Windows). The Oracle Identity Management 11g Configuration Wizard starts, and the Welcome Screen appears.

16.9 Configuring OIM Server

This topic describes how to install and configure only Oracle Identity Manager (OIM) Server. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure
- Post-Configuration Steps
16.9.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Identity Manager Server on a separate host.

16.9.2 Components Deployed

Performing the configuration in this section deploys only Oracle Identity Manager Server.

16.9.3 Dependencies

The installation and configuration in this section depends on Oracle WebLogic Server, on Oracle SOA Suite, and on the installation of Oracle Identity Management 11g software. For more information, see Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) and Installing the Oracle Identity Management 11g Software.

16.9.4 Procedure

Perform the following steps to configure only Oracle Identity Manager Server:

1. Ensure that all the prerequisites, described in Prerequisites for Configuring OIM Server, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

2. On the machine where the Administration Server is running, start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard. The Welcome screen appears.

3. On the Welcome screen, click Next. The Components to Configure screen appears.

   On the Components to Configure screen, ensure that only the **OIM Server** option is selected. It is selected, by default. Click Next. The Database screen appears.

4. On the Database screen, enter the full path, listen port, and service name for the database in the **Connect String** field. For a single host instance, the format of connect string is `hostname:port:servicename`. For example, if the hostname is `aaa.bbb.com`, port is 1234, and the service name is `xxx.bbb.com`, then you must enter the connect string for a single host instance as follows:

   aaa.bbb.com:1234:xxx.bbb.com

   If you are using a Real Application Cluster database, the format of the database connect string is as follows:

   hostname1:port1^hostname2:port2@servicename

   **Note:** You can use the same database or different databases for creating the Oracle Identity Manager schema and the Metadata Services schema.

5. In the **OIM Schema User Name** field, enter the name of the schema that you created for Oracle Identity Manager using the Repository Creation Utility (RCU). For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

6. In the **OIM Schema Password** field, enter the password for the Oracle Identity Manager schema that you set while creating the schema using the Repository Creation Utility (RCU).
7. If you want to use a different database for the Metadata Services (MDS) schema, select the **Select different database for MDS Schema** check box.

8. If you choose to use a different database for MDS schema, In the **MDS Connect String** field, enter the full path, listen port, and service name for the database associated with the MDS schema. For the format of the connect string, see Step 4.

In the **MDS Schema User Name** field, enter the name of the schema that you created for AS Common Services - Metadata Services using the Repository Creation Utility (RCU). For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

In the **MDS Schema Password** field, enter the password for the AS Common Services - Metadata Services schema that you set while creating the schema using the Repository Creation Utility (RCU). Click **Next**. The WebLogic Admin Server screen appears.

9. On the WebLogic Admin Server screen, in the **WebLogic Admin Server URL** field, enter the URL of the WebLogic Administration Server of the domain in the following format:

   \[t3://hostname:port\]

   In the **UserName** field, enter the WebLogic administrator user name of the domain in which the Oracle Identity Manager (OIM) application and the Oracle SOA Suite application are deployed. If you are setting up integration between Oracle Identity Manager and Oracle Access Manager, the Oracle Access Manager application is also configured in the same domain.

   In the **Password** field, enter the WebLogic administrator password of the domain in which the Oracle Identity Manager (OIM) application and the Oracle SOA Suite application are deployed. Click **Next**.

   The OIM Server screen appears. The OIM Server screen enables you to set a password for the system administrator (**xelsysadm**).

10. On the OIM Server screen, in the **OIM Administrator Password** field, enter a new password for the administrator. A valid password contains at least 6 characters; begins with an alphabetic character; includes at least one number, one uppercase letter, and one lowercase letter. The password cannot contain the first name, last name, or the login name for Oracle Identity Manager.

11. In the **Confirm User Password** field, enter the new password again.

12. In the **OIM HTTP URL** field, enter the http URL that front-ends the Oracle Identity Manager application.

   The URL is of the format: \[http(s)://<oim_host>:<oim_port>\]. For example, \[https://localhost:7002\].

13. In the **KeyStore Password** field, enter a new password for the keystore. A valid password can contain 6 to 30 characters, begin with an alphabetic character, and use only alphanumeric characters and special characters like Dollar ($), Underscore (_), and Pound (#). The password must contain at least one number.

14. In the **Confirm Keystore Password** field, enter the new password again. Click **Next**. The LDAP Sync and OAM screen appears.

   The LDAP Sync and OAM screen enables you to perform the following optional tasks:

   - Enable synchronization of Oracle Identity Manager roles, users, and their hierarchy to an LDAP directory
● Enable Identity Administration Integration with Oracle Access Manager (OAM)

● Configure Oracle Identity Manager to use Oracle BI Publisher for reporting purposes

15. Optional: To enable LDAP Sync, you must select the **Enable LDAP Sync** option on the LDAP Sync and OAM screen. However, note that you must first set up LDAP Sync for Oracle Identity Manager (OIM), as described in **Setting Up LDAP Synchronization**, before enabling LDAP Sync.

16. Optional: To enable identity administration integration with Oracle Access Manager, select the **Enable Identity Administration Integration with OAM** option on the LDAP Sync and OAM screen, and enter the following information:

   - **Password of Access Gate** - Enter the access gate password for Oracle Identity Manager. This password is generated when you run the configureOIM WLST command to configure Oracle Access Manager (OAM) for Oracle Identity Manager (OIM) integration. For more information about this WLST command and the complete setup to integrate OIM and OAM, see **Setting Up Integration Between OIM and OAM Using the Domain Agent**.

   - **Domain of Cookie** - Enter the domain of the machine on which Oracle HTTP Server for Oracle Identity Manager is running.

---

**Note:** When you choose to enable identity administration integration with Oracle Access Manager, LDAP Synchronization is enabled, by default.

---

17. Optional: To configure Oracle Identity Manager to use Oracle BI Publisher for reporting purposes, select the **Configure BI Publisher** option, and enter the **BI Publisher URL** in the **BI Publisher URL** field. Note that you should have installed Oracle BI Publisher on a local or remote machine before selecting the **Configure BI Publisher** option on the LDAP Sync and OAM screen. In addition, ensure that Oracle BI Publisher is up and running.

18. After making your selections, click **Next** on the LDAP Sync and OAM screen. If you chose to enable identity administration integration with OAM or enable LDAP Sync, the LDAP Server screen appears.

   The LDAP Server screen enables you to specify the following Oracle Virtual Directory information:

   - **LDAP URL** - enter the LDAP URL in the format: `ldap://ovd_host:ovd_port`

   - **LDAP User** - enter the LDAP user name.

   - **LDAP Password** - enter the LDAP password.

   - **LDAP SearchDN** - enter the Distinguished Names (DN). For example, `dc=oracle, dc=com`. SearchDN is the top-level container for users and roles in LDAP, and Oracle Identity Manager uses this container for reconciliation.

   Click **Next**. The LDAP Server Continued screen appears.

19. On the LDAP Server Continued screen, enter the following LDAP information:

   - **LDAP RoleContainer** - enter a name for the container that will be used as a default container of roles in the LDAP directory. You can configure isolation
rules in Oracle Identity Manager to create roles in different containers in LDAP. For example, cn=groups, dc=mycountry, dc=com.

- **LDAP RoleContainer Description** - enter a description for the default role container.

- **LDAP Usercontainer** - enter a name for the container that will be used as a default container of users in the LDAP directory. You can configure isolation rules in Oracle Identity Manager to create users in different containers in LDAP. For example, cn=users, dc=mycountry, dc=com.

- **LDAP Usercontainer Description** - enter a description for the default user container.

- **User Reservation Container** - enter a name for the container that will be used for reserving user names in the LDAP directory while their creation is being approved in Oracle Identity Manager. When the user names are approved, they are moved from the reservation container to the user container in the LDAP directory. For example, cn=reserve, dc=mycountry, dc=com.

---

**Note:** For more information about user reservation containers in Oracle Internet Directory, see the guide *Oracle Fusion Middleware Administrator’s Guide for Oracle Internet Directory*.

---

After enabling LDAP synchronization, you can verify it by using the Oracle Identity Manager Administration Console. For more information, see **Verifying the LDAP Synchronization**. Click Next. The Configuration Summary screen appears.

20. If you did not choose the **Enable LDAP Sync** option or the **Enable Identity Administration Integration with OAM** option on the LDAP Sync and OAM screen, the Configuration Summary screen appears after you enter information in the OIM Server screen.

The Configuration Summary screen lists the applications you selected for configuration and summarizes your configuration options, such as database connect string, OIM schema user name, MDS schema user name, WebLogic Admin Server URL, WebLogic Administrator user name, and OIM HTTP URL.

Review this summary and decide whether to start the configuration. If you want to modify any of the configuration settings at this stage, select a topic in the left navigation page and modify your choices. To continue installing this configuration of the Oracle Identity Manager Server, click **Configure**.

---

**Note:** Before configuring an application, you can save your configuration settings and preferences in a response file. Response files are text files that you can create or edit in a text editor. You can use response files to perform a silent installation or use as templates or customized settings for your environment. For more information, see **Performing a Silent Installation**.

---

After you click **Configure**, the Configuration Progress screen appears. Click **Next**.

A configuration log is saved to the *logs* directory under Oracle Inventory directory. For information about the log files, see **Installation Log Files**. If the Configuration Progress screen displays any errors, click **Abort** to stop the installation and restart the Oracle Identity Manager Configuration Wizard.
21. Click Finish.

---

**Note:** If the configuration fails, click **Abort** to stop the installation and restart the Oracle Identity Manager Configuration Wizard, as described in *Starting the Oracle Identity Manager 11g Configuration Wizard*.

### 16.9.5 Post-Configuration Steps

After installing and configuring Oracle Identity Manager Server, you must complete the following manual steps:

- Set the `XEL_HOME` variable in the `setenv` script (`setenv.bat` on Windows, and `setenv.sh` on UNIX) as follows:

  **On Windows:** Edit the `<IDM_Home>/server/bin/setenv.bat` file in a text editor, and set the path of the `XEL_HOME` variable to the absolute path of `<IDM_Home>/server`. For example, if your IDM_Home is the `C:\oracle\Middleware\Oracle_IDM1` directory, then set `XEL_HOME` in the `setenv.bat` file to the `C:\oracle\Middleware\Oracle_IDM1\server` directory.

  **On UNIX:** Edit the `<IDM_Home>/server/bin/setenv.sh` file in a text editor, and set the path of the `XEL_HOME` variable to the absolute path of `<IDM_Home>/server`. For example, if your IDM_Home is the `/test/Middleware/Oracle_IDM1` directory, then set `XEL_HOME` in the `setenv.sh` file to the `/test/Middleware/Oracle_IDM1/server` directory.

- After installing and configuring Oracle Identity Manager Server for the first time, you must start the Oracle Identity Manager Managed Server. For information about starting the server, see *Starting the Stack*.

### 16.10 Installing and Configuring Only OIM Design Console on Windows

Table 16–1 lists the steps required to install and configure only Oracle Identity Manager (OIM) Design Console on Windows operating systems.

<table>
<thead>
<tr>
<th>Task</th>
<th>For more information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installing the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator on the Windows machine where you want to install only Design Console</td>
<td>See <em>Installing the Oracle Identity Management 11g Software.</em></td>
</tr>
<tr>
<td>Configuring Oracle Identity Manager Server on a local or remote machine</td>
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</tr>
<tr>
<td><strong>Note:</strong> The Oracle Identity Manager Server must be up and running when you configure only Design Console.</td>
<td></td>
</tr>
<tr>
<td>Configuring Oracle Identity Manager Design Console on the Windows machine where you want to install only Design Console</td>
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</tr>
<tr>
<td>Completing any post-configuration steps</td>
<td>See <em>Post-Configuration Steps.</em></td>
</tr>
</tbody>
</table>
16.11 Configuring OIM Design Console

This topic describes how to install and configure only Oracle Identity Manager (OIM) Design Console, which is supported on Windows operating systems only.

It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure
- Post-Configuration Steps
- Updating the xconfig.xml File to Change the Port for Design Console
- Configuring Design Console to Use SSL

16.11.1 Appropriate Deployment Environment

Perform the installation and configuration in this topic if you want to install Oracle Identity Manager Design Console on a separate Windows machine where Oracle Identity Manager Server is not configured. For more information, see Scenario 1: Oracle Identity Manager Server and Design Console on Different Machines.

16.11.2 Components Deployed

Performing the installation and configuration in this section deploys only Oracle Identity Manager Design Console on Windows operating systems.

16.11.3 Dependencies

The installation and configuration in this section depends on the installation of Oracle Identity Management 11g software and on the Oracle Identity Manager Server. For more information, see Installing the Oracle Identity Management 11g Software and Configuring OIM Server.

16.11.4 Procedure

Perform the following steps to install and configure only Oracle Identity Manager Design Console on the Windows operating system:

1. Ensure that all the prerequisites, described in Prerequisites for Configuring Only OIM Design Console on a Different Machine, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

2. On the Windows machine where Oracle Identity Manager Design Console sound be configured, start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard. The Welcome screen appears.

3. On the Welcome screen, click Next. The Components to Configure screen appears.
On the Components to Configure screen, select only the **OIM Design Console** check box. Click **Next**. The OIM Server Host and Port screen appears.

4. On the OIM Server Host and Port screen, enter the host name of the Oracle Identity Server Manager Server in the **OIM Server Hostname** field. In the **OIM Server Port** field, enter the port number for the Oracle Identity Manager Server on which the Oracle Identity Manager application is running. Click **Next**. The Configuration Summary screen appears.

The Configuration Summary screen lists the application that you selected for configuration and summarizes your configuration options, such as OIM Server host name and port.

Review this summary and decide whether to start the configuration. If you want to modify any of the configuration settings at this stage, select a topic in the left navigation page and modify your choices. To continue installing this configuration of the Oracle Identity Management Design Console, click **Configure**.

---

**Note:** Before configuring an application, you can save your configuration settings and preferences in a response file. Response files are text files that you can create or edit in a text editor. You can use response files to perform a silent installation or use as templates or customized settings for your environment. For more information, see **Performing a Silent Installation**.

---

After you click **Configure**, the Configuration Progress screen appears. A configuration log is saved to the `logs` directory under Oracle Inventory directory. For information about the log files, see **Installation Log Files**. If the Configuration Progress screen displays any errors, click **Abort** to stop the installation and restart the Oracle Identity Manager Configuration Wizard.

5. Click **Finish**.

---

**Note:** If the configuration fails, click **Abort** to stop the installation and restart the Oracle Identity Manager Configuration Wizard, as described in **Starting the Oracle Identity Manager 11g Configuration Wizard**.

---

### 16.11.5 Post-Configuration Steps

Complete the following steps after configuring the Oracle Identity Manager Design Console on Windows operating systems:

1. On the machine where Oracle WebLogic Server is installed (the machine where Oracle Identity Manager Server is installed), create the `wlfullclient.jar` file as follows:

   a. Use the `cd` command to move from your present working directory to the `<Middleware_Home>\wlserver_10.3\server\lib` directory.

   b. Ensure that `JAVA_HOME` is set, as in the following example:

   ```
   D: \oracle\<Middleware_Home>\jdk160_11
   ```

   To set this variable, right-click the **My Computer** icon and select **Properties**. The System Properties screen is displayed. Click the **Advanced** tab and click the **Environment Variables** button. The Environment Variables screen is
displayed. Ensure that the JAVA_HOME variable in the User Variables section is set to the path of the JDK directory installed on your machine.

After setting the JAVA_HOME variable, select the Path variable in the System Variables section on the same Environment Variables screen, and click Edit. The Edit System Variable dialog box is displayed. In the variable value field, enter the complete path to your JAVA_HOME, such as D:\oracle\<Middleware_Home>\jdk160_11, preceded by a semicolon (;). The semicolon is used as the delimiter for multiple paths entered in this field.

c. After verifying the values, click OK.

2. At the DOS command prompt, type the following command:
   ```
   java -jar <Middleware_Home>modules/com.bea.core.jarbuilder_1.5.0.0.jar
   ```
   This command generates the wlfullclient.jar file.

3. Copy the wlfullclient.jar file to the <Oracle_IDM2>\designconsole\ext\ directory on the machine where Design Console is configured.

4. Ensure that the Administration Server and the Oracle Identity Manager Managed Server are started. For information about starting the servers, see Starting the Stack.

5. Start the Design Console client by running the xlclient.cmd executable script, which is available in the <IDM_Home>\designconsole\ directory.

6. Log in to the Design Console with your Oracle Identity Manager user name and password.

### 16.11.6 Updating the xlconfig.xml File to Change the Port for Design Console

To update the xlconfig.xml file and start the Design Console on a new port as opposed to what was set during configuration, complete the following steps:

1. In a text editor, open the <IDM_HOME>\designconsole\config\xlconfig.xml file.

2. Edit the following tags:
   - ApplicationURL
   - java.naming.provider.url

3. Change the port number.

4. Restart the Design Console.

**Note:** You do not have to perform this procedure during installation. It is required if you want to change ports while using the product. You must ensure that the Oracle Identity Manager server port is changed to this new port before performing these steps.

### 16.11.7 Configuring Design Console to Use SSL

To configure the Design Console to use SSL, complete the following steps:
1. Add the WebLogic Server jar files required to support SSL by copying the webserviceclient+ssl.jar file from the `<WL_HOME>/server/lib` directory to the `<IDM_Home>/designconsole/ext` directory.

2. Use the server trust store in Design Console as follows:
   a. Log in to the WebLogic Administration Console using the WebLogic administrator credentials.
   b. Under Domain Structure, click Environment > Servers. The Summary of Servers page is displayed.
   c. Click on the Oracle Identity Manager server name (for example, oim_server1). The Settings for oim_server1 is displayed.
   d. Click the Keystore tab.
   e. From the Trust section, note down the path and file name of the trust keystore.

3. Set the TRUSTSTORE_LOCATION environment variable as follows:
   - If Oracle Identity Manager Design Console and Oracle Identity Manager Server are installed and configured on the same machine, set the TRUSTSTORE_LOCATION environment variable to the location of the trust keystore that you noted down.
     For example, `setenv TRUSTSTORE_LOCATION=/test/DemoTrust.jks`
   - If Oracle Identity Manager Design Console and Oracle Identity Manager Server are installed and configured on different machines, copy the trust keystore file to the machine where Design Console is configured. Set the TRUSTSTORE_LOCATION environment variable to the location of the copied trust keystore file on the local machine.

4. If the Design Console was installed without SSL enabled, complete the following steps:
   a. Open the `<IDM_Home>/designconsole/config/xlconfig.xml` file in a text editor.
   b. Edit the `<ApplicationURL>` entry to use HTTPS, T3S protocol, and SSL port to connect to the server, as in the following example:

   ```xml
   ```

   **Note:** For a clustered installation, you can send an https request to only one of the servers in the cluster, as shown in the following element:

   ```xml
   <java.naming.provider.url>t3s://<host>:<sslport></java.naming.provider.url>
   ```

   c. Save the file and exit.

**16.12 Configuring OIM Remote Manager**

This topic describes how to install and configure only Oracle Identity Manager (OIM) Remote Manager. It includes the following sections:

- Appropriate Deployment Environment
Configuring Oracle Identity Manager (OIM) Remote Manager

16.12 Components Deployed

Components Deployed

- Components Deployed
- Dependencies
- Procedure

16.12.1 Appropriate Deployment Environment

Perform the installation and configuration in this topic if you want to install Oracle Identity Manager Remote Manager on a separate machine. For more information, see Scenario 2: Oracle Identity Manager Server and Remote Manager on Different Machines.

16.12.2 Components Deployed

Performing the installation and configuration in this section deploys only Oracle Identity Manager Remote Manager.

16.12.3 Dependencies

The installation and configuration in this section depends on the installation of Oracle Identity Management 11g software. For more information, see Installing the Oracle Identity Management 11g Software and Prerequisites for Configuring Only OIM Remote Manager on a Different Machine.

16.12.4 Procedure

Perform the following steps to install and configure only Oracle Identity Manager Remote Manager:

1. Ensure that all the prerequisites, described in Prerequisites for Configuring Only OIM Remote Manager on a Different Machine, are satisfied. In addition, see Important Notes Before You Start Configuring OIM.

2. On the machine where Oracle Identity Manager Remote Manager should be configured, start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard. The Welcome screen appears.

3. On the Welcome screen, click Next. The Components to Configure screen appears.

4. On the Components to Configure screen, select only the OIM Remote Manager check box. Click Next. The Remote Manager screen appears.

5. On the Remote Manager screen, enter the service name in the Service Name field. Oracle Identity Manager Remote Manager will be registered under this service name. The service name is used with the Registry URL to build a fully qualified service name, such as rmi://host:RMI Registry Port/service name.

6. In the RMI Registry Port field, enter the port number on which the RMI registry should be started. The default port number is 12345.

7. In the Listen Port (SSL) field, enter the port number on which a secure socket is opened to listen to client requests. The default port number is 12346. Click Next. The Keystore Password screen appears.

8. On the Keystore Password screen, in the KeyStore Password field, enter a new password for the keystore. A valid password contains 6 to 30 characters, begins with an alphabetic character, and uses only alphanumeric characters and special characters like Dollar ($), Underscore (_), and Pound (#). The password must
contain at least one number. In the Confirm KeyStore Password field, enter the new password again. Click Next. The Configuration Summary screen appears.

8. The Configuration Summary screen lists the application that you selected for configuration and summarizes your configuration options, such as Remote Manager Service Name, RMI Registry Port, and Remote Manager Listen Port (SSL).

Review this summary and decide whether to start the configuration. If you want to modify any of the configuration settings at this stage, select a topic in the left navigation page and modify your choices. To continue installing this configuration of the Oracle Identity Manager Remote Manager, click Configure.

---

**Note:** Before configuring an application, you can save your configuration settings and preferences in a response file. Response files are text files that you can create or edit in a text editor. You can use response files to perform a silent installation or use as templates or customized settings for your environment. For more information, see Performing a Silent Installation.

---

9. After you click Configure, the Configuration Progress screen appears. A configuration log is saved to the logs directory under Oracle Inventory directory. For information about the log files, see Installation Log Files. If the Configuration Progress screen displays any errors, click Abort to stop the installation and restart the Oracle Identity Manager Configuration Wizard.

10. Click Finish.

---

**Note:** Oracle Identity Manager Server certificates, such as $xsserver.cert$, are created in the $DOMAIN_HOME/config/fmwconfig/$ directory. You can use these certificates if you require server-side certificates for configuring Oracle Identity Manager Remote Manager.

If the configuration fails, click Abort to stop the installation and restart the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

---

**16.13 Verifying the OIM Installation**

Before you can verify the Oracle Identity Manager (OIM) installation, ensure that the following servers are up and running:

- Administration Server for the domain in which the Oracle Identity Manager application is deployed
- Managed Server hosting Oracle Identity Manager
- Managed Server hosting the Oracle SOA 11g suite

You can verify your Oracle Identity Manager installation by:

- Checking the Oracle Identity Manager Server URL, such as http://<Hostname>:<Port>/oim/faces/faces/pages/Admin.jspx.
Setting Up LDAP Synchronization

Configuring Oracle Identity Manager (OIM)

16.4 Setting Up LDAP Synchronization

This section discusses the following topics:

1. Prerequisites
2. Task 1: Running the LDAP Preconfiguration Utility
3. Task 2: Configuring OVD and OID for OIM
4. Task 3: Running the LDAP Post-Configuration Utility
5. After Setting Up LDAP Synchronization
6. Verifying the LDAP Synchronization

16.14 Prerequisites

You must complete the following prerequisites for setting up LDAP synchronization:

- Checking the Identity Management shell, such as http://<Hostname>:<Port>/admin/faces/pages/Admin.jspx. This shell is used for Users and Role Management tasks.
- Checking the Oracle Identity Manager Self Service URL, such as http://<Hostname>/<Port>/oim.
- Verifying the configuration between Oracle Identity Manager and Oracle SOA (BPEL Process Manager) as follows:
  a. Log in to the Oracle Identity Manager Administration Console, with xelsysadm:
     http://<host>:<oim_port>/oim/faces/pages/Admin.jspx
  b. Create a Request, such as modifying a user profile.
  c. Log in to the SOA Infrastructure to verify whether the composite applications are displayed.
     http://<host>:<bpel_port>/soa-infra
  d. Log in to the BPEL Worklist application, with xelsysadm:
     http://<host>:<soa_port>/integration/worklistapp
  e. In the list of tasks, verify whether the request has come for approval.
  f. Click on the task, and click Approve in the Actions tab.
  g. Click on the refresh icon. The request comes back. Approve it again.
  h. Go to http://<host>:<oim_port>/oim/faces/pages/Admin.jspx and verify whether the request is completed.
  i. Go to http://<host>:<oim_port>/admin/faces/pages/Admin.jspx and verify whether the user profile is modified.
- Logging in to the Design Console, xelsysadm, and the appropriate password. A successful login indicates that the installation was successful.
- Starting the Remote Manager service by running remotemanager.sh or remotemanager.bat, as appropriate. (remotemanager.sh on UNIX or remotemanager.bat on Windows resides in your Oracle Home directory under a folder named remote_manager.)
1. Install a supported version of Oracle Database, as described in Installing Oracle Database.

2. Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

3. Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

4. Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) with or without a WebLogic administration domain. For more information, see Configuring Oracle Internet Directory (OID) and Configuring Oracle Virtual Directory (OVD).

5. Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN), as described in Installing the Oracle Identity Management 11g Software.

16.14.2 Task 1: Running the LDAP Preconfiguration Utility

After completing the prerequisites, you must run the LDAP preconfiguration utility as follows:

1. Open the ldapconfig.props file in a text editor. This file is located in the server/ldap_config_util directory under Oracle_IDM2, which is your IDM_Home for Oracle Identity Manager and Oracle Access Manager.

2. In the ldapconfig.props file, set values for the following parameters:
   - **OIMProviderURL** - Specify the URL for the OIM provider in the format: t3://localhost:8003
   - **OIDURL** - Specify the URL for the OID instance.
   - **OIDAdminUsername** - Specify the OID Administrator’s user name, such as `cn=orcladmin`.
   - **OIDSearchBase** - Specify the OID search base, such as `ou=people,dc=com`.
   - **UserContainerName** - Specify the name of the user container, which is used as a default container of users in the LDAP directory.
   - **RoleContainerName** - Specify the name of the user container, which is used as a default container of roles in the LDAP directory.
   - **ReservationContainerName** - Specify the name of the user reservation container, which is used to reserve users while waiting for user creation approvals in Oracle Identity Manager. When the user creation is approved, users are moved from the reservation container to the actual user container.

3. Ensure that the WL_HOME environment variable is set to the wlserver_10.3 directory under your Middleware Home. On UNIX, it is the `<Middleware_Home>/wlserver_10.3` directory. On Windows, it is the `<Middleware_Home>\wlserver_10.3` directory. In addition, set the JAVA_HOME environment variable to the directory where the JDK is installed on your machine.

4. On the command line, run the LDAP configuration pre-setup script (LDAPConfigPreSetup.bat on Windows, and LDAPConfigPreSetup.sh on...
UNIX). The files are located in the same `server/ldap_config_util` directory under your IDM_Home for Oracle Identity Manager and Oracle Access Manager.

5. When prompted, enter the OID administrator’s password and the OIM administrator’s password.

16.14.3 Task 2: Configuring OVD and OID for OIM

After running the LDAP preconfiguration utility, as described in Task 1: Running the LDAP Preconfiguration Utility, you must create and configure two Oracle Virtual Directory (OVD) adapters and Changelog adapters.

For information about creating Oracle Identity Manager (OIM) user adapter by using Oracle Directory Services Manager, refer to the "Creating LDAP Adapters" topic in the Oracle Fusion Middleware Administrator’s Guide for Oracle Virtual Directory.

To configure the adapters, complete the following steps:

1. Create a User adapter as follows:
   a. Choose the `User_OID` template.
   b. For `namespace`, select `Remote Base` and map it to `Mapped Namespace` in Oracle Virtual Directory.
   c. Specify `Proxy DN` as follows:
      \[ \text{cn=oidadmin, cn=users, cn=oim, cn=products, cn=oraclecontext} \]
   d. Specify `Proxy Password` as the value that is specified for the `oimadmin` user.

2. Create a Changelog adapter as follows:
   a. Choose the `Changelog_OID` template.
   b. For `namespace`, set both `Remote Base` and map it to `Mapped Namespace` to `cn=changelog`.

3. Verify that the plug-in parameter values for the user adapter match with the values listed in Table 16–2.
   a. Select the user adapter to modify, and click the `Plug-ins` tab.
   b. Click the plug-in, and click `Edit`.
   c. In the Parameters table, update the parameters, if necessary, to match the following values:
      d. Click `OK`.
      e. Click `Apply`.

4. Verify that the plug-in parameter values for the changelog adapter match with the values listed in Table 16–3.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>directoryType</td>
<td>oid</td>
</tr>
<tr>
<td>pwdMaxFailure</td>
<td>10</td>
</tr>
<tr>
<td>oamEnabled</td>
<td>true or false</td>
</tr>
</tbody>
</table>

Note that this parameter should be set to `true` if you are setting up integration between Oracle Identity Manager and Oracle Access Manager.
Setting Up LDAP Synchronization

1. Select the changelog adapter to modify, and click the Plug-ins tab.
2. Click the plug-in, and click Edit.
3. In the Parameters table, update the parameters, if necessary, to match the following values:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>directoryType</td>
<td>oid</td>
</tr>
<tr>
<td>mapAttribute</td>
<td>targetGUID=orclGUID</td>
</tr>
<tr>
<td>mapObjectclass</td>
<td>changelog=changelogentry</td>
</tr>
<tr>
<td>requiredAttribute</td>
<td>orclGUID</td>
</tr>
<tr>
<td>addAttribute</td>
<td>orclContainerOC,changelogSupported=1</td>
</tr>
<tr>
<td>modifierDNFilter</td>
<td>cn=oimadmin,cn=users,cn=OIM,cn=Products,cn=OracleContext</td>
</tr>
<tr>
<td>sizeLimit</td>
<td>1000</td>
</tr>
<tr>
<td>targetDNFilter</td>
<td>Search based from which reconciliation needs to happen. This value needs to same as the LDAP SearchDN that is specified during OIM installation</td>
</tr>
<tr>
<td>mapUserState</td>
<td>true</td>
</tr>
<tr>
<td>oamEnabled</td>
<td>true or false</td>
</tr>
</tbody>
</table>

4. Click OK.
5. Click Apply.

**Note:** For more information about these plug-in parameters, refer to the "Understanding the Oracle Virtual Directory Plug-ins" section in the Oracle Fusion Middleware Administrator’s Guide for Oracle Virtual Directory 11g Release 1 (11.1.1).

16.14.4 Task 3: Running the LDAP Post-Configuration Utility

After configuring OID and OVD for OIM, as described in Task 2: Configuring OVD and OID for OIM, you must run the LDAP post-configuration utility as follows:

1. In the ldapconfig.props file, set values for the following parameters:
   - **OIMProviderURL** - Specify the URL for the OIM provider in the format: t3://localhost:8003
   - **OIDURL** - Specify the URL for the OID instance.
   - **OIDAdminUsername** - Specify the OID Administrator’s user name, such as cn=orcladmin.
   - **OIDSearchBase** - Specify the OID search base, such as ou=people,dc=com.
   - **UserContainerName** - Specify the name of the user container, which is used as a default container of users in the LDAP directory.
   - **RoleContainerName** - Specify the name of the user container, which is used as a default container of roles in the LDAP directory.
- **ReservationContainerName** - Specify the name of the user reservation container, which is used to reserve users while waiting for user creation approvals in Oracle Identity Manager. When the user creation is approved, users are moved from the reservation container to the actual user container.

2. Ensure that the `WL_HOME` environment variable is set to the `wlserver_10.3` directory under your Middleware Home. On UNIX, it is the `<Middleware_Home>/wlserver_10.3` directory. On Windows, it is the `<Middleware_Home>\wlserver_10.3` directory. In addition, set the `JAVA_HOME` environment variable to the directory where the JDK is installed on your machine.

3. On the command line, run the LDAP configuration post-setup script (`LDAPConfigPostSetup.bat` on Windows, and `LDAPConfigPostSetup.sh` on UNIX). The files are located in the `server/ldap_config_util` directory under your IDM_Home for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

4. When prompted, enter the OIM administrator’s password and the `xelsysadm` password.

### 16.14.5 After Setting Up LDAP Synchronization

After setting up LDAP synchronization, you can enable LDAP Sync for Oracle Identity Manager by selecting the **Enable LDAP Sync** option on the BI Publisher and OAM screen in the Oracle Identity Management 11g Configuration Wizard while configuring Oracle Identity Manager (OIM) Server. For more information, see [Configuring OIM Server](#).

Note that LDAP Sync is enabled automatically if you choose to enable identity administration integration with Oracle Access Manager on the BI Publisher and OAM screen.

### 16.14.6 Verifying the LDAP Synchronization

To verify the configuration of LDAP with Oracle Identity Manager, complete the following steps:

1. Ensure that the WebLogic Administration Server is up and running.

2. Invoke the Oracle Identity Manager Administration Console, which is deployed on the Administration Server.

3. In this console, click **Search** under **Configurations -> Manage IT Resource**. If the LDAP information is correct, the resource information is displayed.

4. Create a normal user using the same console.

5. If a user is created, verify the LDAP store by using the Oracle Data Services Manager URL, such as `http://<host>:<odsm_port>/odsm/faces/odsm.jspx`.

---

**Note:** Ensure that Oracle Identity Directory being used has an Oracle Virtual Directory configured. They both must be up and running because Oracle Identity Manager communicates with the LDAP data store via the Oracle Virtual Directory component.
16.15 Setting Up Integration with OAM

For information about setting up integration between Oracle Identity Manager (OIM) and Oracle Access Manager (OAM), see Integration Between OIM and OAM.

16.16 List of Supported Languages

Oracle Identity Manager supports the following languages:

Arabic, Brazilian Portuguese, Czech, Danish, Dutch, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Simplified Chinese, Slovak, Spanish, Swedish, Thai, Traditional Chinese, and Turkish

16.17 Using the Diagnostic Dashboard

Diagnostic Dashboard is a stand-alone application that helps you validate some of the Oracle Identity Manager prerequisites and installation.

You must have the appropriate system administrator permissions for your Application Server and Oracle Identity Manager environments to use this tool. You need DBA-level permissions to execute some database-related tests.

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**Note:** The Diagnostic Dashboard and Oracle Identity Manager must be installed on the same application server.

For more information about installing and using the Diagnostic Dashboard for Oracle Identity Manager, see the "Working with the Diagnostic Dashboard" topic in the Oracle Fusion Middleware System Administrator’s Guide for Oracle Identity Manager.

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16.18 Getting Started with OIM After Installation

This chapter explains how to configure Oracle Access Manager (OAM). It includes the following topics:

- Prerequisites
- Important Notes Before You Begin
- Installing OAM
- Oracle Access Manager Domain Configuration Template
- OAM in a New WebLogic Domain
- OAM and OIN in a New WebLogic Domain
- OAM in a Domain Containing OIM and OIN
- OAM in a Domain Containing OAAM and OIN
- Starting the Servers
- Optional Post-Installation Tasks
- Verifying the OAM Installation
- Setting Up OAM Agents
- Setting Up Integration with OIM
- Getting Started with OAM After Installation

17.1 Prerequisites

The following are the prerequisites for installing and configuring Oracle Identity Management 11g Release 1 (11.1.1) products:

1. Installing Oracle Database, as described in Installing Oracle Database.
2. Installing Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
3. Creating and loading schemas using Repository Creation Utility (RCU), as described in Creating Database Schema Using the Repository Creation Utility (RCU).
4. Installing the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite, as described in Installing the Oracle Identity Management 11g Software. The Oracle Identity Management suite contains Oracle Identity Manager (OIM), Oracle
Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN).

17.2 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products in any of the scenarios discussed in this chapter, keep the following points in mind:

It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator on the same machine.

Note: In this chapter, two IDM_Home directories are mentioned in descriptions and procedures. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as Oracle_IDM1, under your Middleware_Home directory.

For more information, see Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation.

17.3 Installing OAM

Oracle Access Manager (OAM) is included in the Oracle Identity Management Suite. You can use the Oracle Identity Management 11g Installer to install the Oracle Identity Management Suite. For more information, see Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) and Installing the Oracle Identity Management 11g Software.
17.4 Oracle Access Manager Domain Configuration Template

When configuring Oracle Access Manager in a new or existing WebLogic administration domain, you must choose Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2] as the domain configuration template on the Select Domain Source screen in the Oracle Fusion Middleware Configuration Wizard.

A database policy store offers more security measures that can be layered based on the storage, thereby ensuring higher resiliency to corruption and better high availability.

To configure Oracle Access Manager with a database policy store, choose the Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2] option on the Select Domain Source screen in the Oracle Fusion Middleware Configuration Wizard.

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**Note:** It is recommended that you use a database policy store in production environments.

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For a list of screens in the Oracle Fusion Middleware Configuration Wizard, see Screens in Oracle Fusion Middleware Configuration Wizard.

17.5 OAM in a New WebLogic Domain

This topic describes how to configure Oracle Access Manager (OAM) in a new WebLogic domain.

It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

17.5.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install only Oracle Access Manager in an environment where you may add other Oracle Identity Management 11g components, such as Oracle Identity Navigator, Oracle Identity Manager, and Oracle Adaptive Access Manager at a later time in the same domain.

17.5.2 Components Deployed

Performing the configuration in this section deploys the following:

- WebLogic Administration Server
- Managed Server for Oracle Access Manager
- Oracle Access Manager Console on the Administration Server

17.5.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server
- Installation of the Oracle Identity Management 11g software
Database schemas for Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

17.5.4 Procedure

Perform the following steps to configure Oracle Access Manager in a new WebLogic domain:

1. Ensure that all prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>/common/bin/config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen appears.

4. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected. Select Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2], and click Next. The Select Domain Name and Location screen appears.

5. Enter a name and a location for the domain to be created, and click Next. The Configure Administrator User Name and Password screen appears.

6. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next.


8. On the Configure JDBC Component Schema screen, select a component schema, such as the OAM Infrastructure Schema that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure the Administration Server and Managed Servers, Clusters, and Machines. Click Next.

10. Optional: Configure the following Administration Server parameters:

    - Name
    - Listen address
    - Listen port
    - SSL listen port
    - SSL enabled or disabled

11. Optional: Configure Managed Servers, as required.
12. Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

13. Optional: Assign Managed Servers to clusters, as required.

14. Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

15. Optional: If the Administration Server is not assigned to a machine, you can assign it to a machine.

Note that deployments, such as applications and libraries, and services that are targeted to a particular cluster or server are selected, by default.

16. Optional: Assign the newly created Managed Server, such as oam_server1, to a machine.

17. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

A new WebLogic domain to support Oracle Access Manager is created in the <Middleware_Home>/user_projects/domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.

17.6 OAM and OIN in a New WebLogic Domain

This topic describes how to configure Oracle Access Manager (OAM) and Oracle Identity Navigator (OIN) together in a new WebLogic domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

17.6.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Oracle Access Manager in an environment where you may add other Oracle Identity Management products, such as Oracle Identity Access Manager and Oracle Adaptive Access Manager, at a later time. You can use Oracle Identity Navigator to discover and launch the Oracle Access Manager Console from within the Oracle Identity Navigator user interface.
17.6.2 Components Deployed
Performing the configuration in this section deploys the following:

- Administration Server
- Managed Server for Oracle Access Manager
- Oracle Access Manager Console and Oracle Identity Navigator application on the Administration Server

17.6.3 Dependencies
The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Database schemas for Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).

17.6.4 Procedure
Perform the following steps to configure Oracle Access Manager and Oracle Identity Navigator in a new WebLogic domain:

1. Ensure that all prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX).  
  (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.
3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.
4. On the Select Domain Source screen, select the Generate a domain configured automatically to support the following products: option.
5. Select the following domain configuration options:
   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**
     
     Note: When you select the Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle JRF - 11.1.1.0 [oracle_common] option is also selected, by default.
   - **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**
6. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.
7. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.
8. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.

10. On the Configure JDBC Sources screen, configure the oamDS data source, as required. After the test succeeds, the Select Optional Configuration screen is displayed.

11. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store. Select the relevant check boxes and click Next.

- Optional: Configure Administration Server, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure RDBMS Security Store, as required.

12. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

A new WebLogic domain to support Oracle Access Manager and Oracle Identity Navigator is created in the <Middleware_Home>/user_projects/domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.

17.7 OAM in a Domain Containing OIM and OIN

This topic describes how to configure Oracle Access Manager (OAM) in a Oracle Identity Management domain that has Oracle Identity Manager (OIM) and Oracle Identity Navigator (OIN) installed. It includes the following sections:

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

Perform the configuration in this topic if you want to install Oracle Access Manager in an environment where Oracle Identity Manager and Oracle Identity Navigator are already installed. You can use Oracle Identity Navigator to discover and launch the Oracle Access Manager Console and the Oracle Identity Manager Consoles (Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console) from within the Oracle Identity Navigator user interface. At a later time, you can also set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM.

17.7.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Server for Oracle Access Manager
- Oracle Access Manager Console on the existing Administration Server

17.7.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).
- Installation and configuration of Oracle Identity Manager with Oracle Identity Navigator in a new WebLogic domain.

17.7.4 Procedure

Perform the following steps to configure Oracle Access Manager in a WebLogic domain that contains Oracle Identity Manager and Oracle Identity Navigator:

1. Ensure that all prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Configure Oracle Identity Manager and Oracle Identity Navigator in a new WebLogic domain, as described in OIM and OIN in a New WebLogic Domain. A new WebLogic domain to support Oracle Identity Manager and Oracle Identity Navigator is created in the <Middleware_Home>\user_projects\domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.
3. Run the <Oracle_IDM2>/common/bin/config.sh script (on UNIX). (<Oracle_IDM2>\common\bin\config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.
4. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next.
5. On the Select a WebLogic Domain Directory screen, browse to the directory that contains the WebLogic domain in which you configured Oracle Identity Manager
6. On the Select Extension Source screen, select the **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]** domain configuration option.

7. After selecting the domain configuration options, click **Next**. The Configure JDBC Data Sources Screen is displayed. Configure the **oamDS** data source, as required. After the test succeeds, the Configure JDBC Component Schema screen is displayed.

8. On the Configure JDBC Component Schema screen, select a component schema, such as the OIM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines, Deployments and Services**, and **JMS File Store**. Select the relevant check boxes and click **Next**.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.
     - For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide **Oracle Fusion Middleware High Availability Guide**.
   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the **ping** command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
   - Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
   - Optional: Configure JMS File Store, as required.

10. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

    Your existing WebLogic domain with Oracle Identity Manager and Oracle Identity Navigator is extended to support Oracle Access Manager.

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**17.8 OAM in a Domain Containing OAAM and OIN**

This topic describes how to configure Oracle Access Manager (OAM) in an Oracle Identity Management domain that has Oracle Adaptive Access Manager (OAAM) and Oracle Identity Navigator (OIN) installed. It includes the following sections:

- **Appropriate Deployment Environment**
17.8.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Access Manager in an environment where Oracle Adaptive Access Manager and Oracle Identity Navigator are already installed. At a later time, you may install Oracle Identity Manager in the same domain and set up integration between Oracle Access Manager and Oracle Identity Manager. You can also set up integration between Oracle Adaptive Access Manager and Oracle Access Manager, as described in the "Integrating OIM, OAM, and OAAM" topic in the Oracle Fusion Middleware Developer’s Guide for Oracle Adaptive Access Manager.

You can use Oracle Identity Navigator to discover and launch Consoles for Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Manager from within the Oracle Identity Navigator user interface.

17.8.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Server for Oracle Access Manager
- Oracle Access Manager Console on the existing Administration Server

17.8.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Database schemas for Oracle Access Manager and Oracle Adaptive Access Manager. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).
- Installation and configuration of Oracle Adaptive Access Manager with Oracle Identity Navigator in a new WebLogic domain, as described in OAAM in a New WebLogic Domain.

17.8.4 Procedure

Perform the following steps to configure Oracle Access Manager in an Oracle Identity Management domain that has Oracle Adaptive Access Manager and Oracle Identity Navigator installed:

1. Ensure that all prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Configure Oracle Adaptive Access Manager and Oracle Identity Navigator in a new WebLogic domain, as described in OAAM in a New WebLogic Domain. A new WebLogic domain to support Oracle Adaptive Access Manager and Oracle Identity Navigator is created in the <Middleware_Home>\user_projects\domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.
3. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

4. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**.

5. On the Select a WebLogic Domain Directory screen, browse to the directory that contains the WebLogic domain in which you configured Oracle Adaptive Access Manager and Oracle Identity Navigator. Click **Next**. The Select Extension Source screen appears.

6. On the Select Extension Source screen, select the **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]** domain configuration option.

7. After selecting the domain configuration options, click **Next**. The Configure JDBC Data Sources Screen is displayed. Configure the `oamDS` data source, as required. After the test succeeds, the Configure JDBC Component Schema screen is displayed.

8. On the Configure JDBC Component Schema screen, select a component schema, such as the OAAM Admin Server Schema, the OAAM Admin MDS Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines** and **Deployments and Services**. Select the relevant check boxes and click **Next**.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.
     
     For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

   - Optional: Assign Managed Servers to Clusters, as required.
   - Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

   - Optional: Assign the Administration Server to a machine.
   - Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

10. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

    Your existing domain with Oracle Adaptive Access Manager and Oracle Identity Navigator is extended to support Oracle Access Manager.
17.9 Starting the Servers

After configuring Oracle Access Manager in a new or existing domain, you must start the Oracle WebLogic Administration Server and various Managed Servers, as described in Starting or Stopping the Oracle Stack.

17.10 Optional Post-Installation Tasks

After installing and configuring Oracle Access Manager, you can perform the following optional tasks:

- Configure your own LDAP to use instead of the default embedded LDAP, which comes with Oracle WebLogic Server.
- Configure a policy store to protect resources.
- Configure the database schema for Oracle Access Manager as a store for Oracle Entitlements Server.
- Add more Managed Servers to the existing domain.
- Add a Managed Server instance.

For more information, see the “Getting Started with Administering Oracle Access Manager” chapter in the Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

17.11 Verifying the OAM Installation

After completing the installation process, including post-installation steps, you can verify the installation and configuration of Oracle Access Manager (OAM) as follows:

1. Ensure that the Administration Server and the Managed Server are up and running.

2. Log in to the Administration Console for Oracle Access Manager using the URL: http://<adminserver-host>:<adminserver-port>/oamconsole

   When you access this Administration Console running on the Administration Server, you are prompted to enter a user name and password. Note that you must have Administrator's role and privileges.

3. Verify the Oracle WebLogic Server Administration Console. If the installation and configuration of Oracle Access Manager is successful, this console shows the Administration Server (for example, oam_admin) and the Managed Server (for example, oam_server) in the running mode. In addition, if you check Application Deployments in this console, both oam_admin and oam_server must be in active state.

17.12 Setting Up OAM Agents

You can set up either Oracle HTTP Server WebGate or mod_OSSO as an Agent for Oracle Access Manager (OAM). Setting up an Agent involves the following steps:

1. Installing and Configuring the Agent (WebGate or mod_osso)
2. Registering the Agent as a Partner Application
3. Restarting the WebLogic Managed Servers
17.12.1 Setting Up Oracle HTTP Server WebGate

Oracle HTTP Server WebGate is a Web server plug-in that is shipped out-of-the-box with Oracle Access Manager. The Oracle HTTP Server WebGate intercepts HTTP requests from users for Web resources and forwards them to the Access Server for authentication and authorization. Oracle HTTP Server WebGate installation packages are found on media and virtual media that is separate from the core components.

17.12.1.1 Installing and Configuring WebGate

To install and configure Oracle HTTP Server WebGate, complete the following steps:

1. Install Oracle HTTP Server 11g WebGate for Oracle Access Manager, as described in Installing and Configuring Oracle HTTP Server 11g Webgate for OAM.

2. Complete the post-installation steps and the registration setup, as described in Post-Installation Steps and Getting Started with a New Oracle HTTP Server 11g Webgate Agent for Oracle Access Manager.

17.12.1.2 Registering WebGate as a Partner Application

For information about registering WebGate as a Partner Application, refer to the "Agent Registration" topic and the "Managing Agents: OAM (WebGate) and OSSO (mod_osso)” chapter in the Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager. Note that the Administration Server must be up and running when you are registering WebGate as a Partner Application.

17.12.1.3 Restarting Managed Servers

For information about restarting Managed Servers, see Starting the Stack.

17.12.2 Setting Up the OSSO Agent

OSSO Agent (mod_osso) is used by Oracle HTTP Server to check for an existing, valid Oracle HTTP Server cookie. If necessary, it redirects to the Oracle Access Manager runtime server to communicate with the directory during authentication. In addition, it decrypts the encrypted user identity populated by the OSSO server and sets the headers with user attributes.

17.12.2.1 Installing mod_osso

To install mod_osso, complete the following steps:

1. Install the latest version of Oracle HTTP Server. For information about installing the Web Tier, including Oracle HTTP Server, see Installing and Configuring Oracle HTTP Server 11g (11.1.1.2.0 or 11.1.1.3.0).

2. After patching your Oracle Web Tier software to the latest version, run the configuration tool to configure Oracle HTTP Server.
   On UNIX operating systems:
   ```bash
   <Web_Tier_ORACLE_HOME>/bin/config.sh
   ```
   On Windows operating systems:
   ```bash
   <Web_Tier_ORACLE_HOME>\bin\config.bat
   ```
   For complete instructions, go to “Configuring Your Components” in Oracle Fusion Middleware Installation Guide for Oracle Web Tier.
3. Copy the mod_osso.conf file from the <ORACLE_INSTANCE>/config/OHS/<OHS_INSTANCE>/disabled directory to the <ORACLE_INSTANCE>/config/OHS/<OHS_INSTANCE>/moduleconf directory.

4. Register mod_osso as a Partner Application.

   For information about registering mod_osso as a Partner Application, refer to the "Agent Registration" topic and the "Managing Agents: OAM (WebGate) and OSSO (mod_osso)" chapter in the Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager. Note that the Administration Server must be up and running when you are registering mod_osso as a Partner Application.

5. Edit the mod_osso.conf file to update the location of the osso.conf file as follows:

   <IfModule osso_module>
       OssoIpCheck off
       OssoIdleTimeout off
       OssoSecureCookies off
       OssoConfigFile <location of the osso.conf>
       <Location>
           require valid-user
           AuthType Osso
       </Location>
   </IfModule osso_module>

6. Restart Oracle HTTP Server by running the restartproc command in Oracle Process Manager and Notification Server (OPMN) or by using Oracle Fusion Middleware Control.

17.12.2.2 Restarting Managed Servers

   For information about restarting Managed Servers, see Starting the Stack.

17.13 Setting Up Integration with OIM

   For information about setting up integration between Oracle Access Manager and Oracle Identity Manager (OIM), see the chapter Integration Between OIM and OAM.

17.14 Getting Started with OAM After Installation

   After installing Oracle Access Manager (OAM), refer to the "Getting Started with Administering Oracle Access Manager" chapter in the Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager.
This chapter explains how to configure Oracle Adaptive Access Manager (OAAM). It includes the following topics:

- Prerequisites
- Important Notes Before You Begin
- Installing OAAM
- OAAM in a New WebLogic Domain
- OAAM in a Domain Containing OAM, OIM, and OIN
- Starting the Servers
- Post-Installation Steps
- Verifying the OAAM Installation
- Migrating Policy and Credential Stores
- Getting Started with OAAM After Installation

### 18.1 Prerequisites

The following are the prerequisites for installing and configuring Oracle Identity Management 11g Release 1 (11.1.1.3.0) products:

1. Installing Oracle Database, as described in Installing Oracle Database.
2. Installing Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
3. Creating and loading schemas using Repository Creation Utility (RCU), as described in Creating Database Schema Using the Repository Creation Utility (RCU).
4. Installing the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite, as described in Installing the Oracle Identity Management 11g Software. The Oracle Identity Management suite contains Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN).
18.2 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products in any of the scenarios discussed in this chapter, keep the following points in mind:

It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator on the same machine.

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**Note:** In this chapter, two IDM_Home directories are mentioned in descriptions and procedures. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as Oracle_IDM1, under your Middleware_Home directory.

For more information, see Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation.

---

18.3 Installing OAAM

Oracle Adaptive Access Manager (OAAM) is included in the Oracle Identity Management 11g Release 1 (11.1.1.3.0) Suite. You can use the Oracle Identity Management 11g Installer to install the Oracle Identity Management Suite. For more information, see Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) and Installing the Oracle Identity Management 11g Software.
18.4 OAAM in a New WebLogic Domain

This topic describes how to configure Oracle Adaptive Access Manager (OAAM) in a new WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

18.4.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Adaptive Access Manager in an environment where you may install other Oracle Identity Management 11g components, such as Oracle Identity Navigator, Oracle Access Manager, or Oracle Identity Manager at a later time in the same domain.

You can use the Oracle Identity Navigator interface and dashboard to discover and launch the Oracle Adaptive Access Manager console from within Oracle Identity Navigator.

18.4.2 Components Deployed

Performing the configuration in this section deploys the following:

- WebLogic Administration Server
- Managed Server for Oracle Adaptive Access Manager
- Oracle Adaptive Access Manager Console and Oracle Identity Navigator application on the Administration Server

18.4.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Database schema for Oracle Adaptive Access Manager. For more information about schemas specific to Oracle Adaptive Access Manager, see Creating Database Schema Using the Repository Creation Utility (RCU).

18.4.4 Procedure

Perform the following steps to configure only Oracle Adaptive Access Manager in a new WebLogic domain:

1. Ensure that all prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common\bin\config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen appears.
4. On the Select Domain Source screen ensure that the **Generate a domain configured automatically to support the following products:** option is selected. Select **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]**, which is mandatory.

In addition, you can select **Oracle Adaptive Access Manager - Server - 11.1.1.3.0**, which is optional. Click **Next**. The Select Domain Name and Location screen appears.

---

**Note:** When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the **Oracle JRF 11.1.1.0 [oracle_common]** option and the **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]** option are also selected, by default.

---

5. Enter a name and a location for the domain to be created, and click **Next**. The Configure Administrator User Name and Password screen appears.

6. Configure a user name and a password for the administrator. The default user name is **weblogic**. Click **Next**.


8. On the Configure JDBC Component Schema screen, select a component schema, such as the OAAM Admin Server Schema or the OAAM Admin MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure the **Administration Server** and **Managed Servers, Clusters, and Machines**, and **Deployments and Services**, and **RDBMS Security Store**. Click **Next**.

10. Optional: Configure the following Administration Server parameters:

    - Name
    - Listen address
    - Listen port
    - SSL listen port
    - SSL enabled or disabled

11. Optional: Configure Managed Servers, as required.

12. Optional: Configure Clusters, as required.

    For more information about configuring clusters for Oracle Identity Management products, see the “Configuring High Availability for Identity Management Components” topic in the guide **Oracle Fusion Middleware High Availability Guide**.

13. Optional: Assign Managed Servers to Clusters, as required.

14. Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.
18. Optional: Assign the Administration Server to a machine.

16. Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

17. Optional: Configure RDBMS Security Store, as required.

18. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

A new WebLogic domain to support Oracle Adaptive Access Manager is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

18.5 OAAM in a Domain Containing OAM, OIM, and OIN

This topic describes how to configure Oracle Adaptive Access Manager (OAAM) in an existing Oracle Identity Management domain that contains Oracle Access Manager (OAM), Oracle Identity Manager (OIM), and Oracle Identity Navigator (OIN).

It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

18.5.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Adaptive Access Manager in an environment where you may want to set up integration between Oracle Identity Manager and Oracle Adaptive Access Manager. You may use Oracle Access Manager for Single Sign-On and access management. Oracle Identity Navigator enables you to discover and launch Consoles for these products from within the Oracle Identity Navigator user interface.

18.5.2 Components Deployed

Performing the configuration in this section deploys the following:

- Managed Server for Oracle Adaptive Access Manager
- Oracle Adaptive Access Manager Console on the existing Administration Server

18.5.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
18.5.4 Procedure

To configure Oracle Adaptive Access Manager in an existing Oracle Identity Management domain that contains Oracle Access Manager, Oracle Identity Manager, and Oracle Identity Navigator, complete the following steps:

1. Ensure that all prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Ensure that Oracle Access Manager, Oracle Identity Manager, and Oracle Identity Navigator are configured in a new WebLogic domain, as described in OIM, OAM, and OIN in a New WebLogic Domain.

3. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

4. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next.

5. On the Select a WebLogic Domain Directory screen, browse to the domain directory that contains Oracle Access Manager, Oracle Identity Manager, and Oracle Identity Navigator. Click Next. The Select Domain Source screen appears.

6. On the Select Extension Source screen, ensure that the Extend my domain automatically to support the following products: option is selected. Select Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2], which is mandatory.

   When you select the Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2] option is also selected, by default.

   In addition, you can select Oracle Adaptive Access Manager - Server - 11.1.1.3.0 [Oracle_IDM2], which is optional. Click Next. The Configure JDBC Component Schema screen appears.

   The screen lists the following component schemas:

   - SOA Infrastructure
   - OAAM Admin Schema
   - User Messaging Service
   - OAAM Admin MDS Schema
   - OIM MDS Schema
   - OWSM MDS Schema
   - SOA MDS Schema
   - OIM Schema

7. On the Configure JDBC Component Schema screen, select a component schema that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

Database schema for Oracle Adaptive Access Manager. For more information about schemas specific to Oracle Adaptive Access Manager, see Creating Database Schema Using the Repository Creation Utility (RCU).
8. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines, Deployments and Services**, and **JMS File Store**. Select the relevant check boxes, and Click **Next**.

9. Optional: Configure Managed Servers, as required.

10. Optional: Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide **Oracle Fusion Middleware High Availability Guide**.

11. Optional: Assign Managed Servers to Clusters, as required.

12. Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

   **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

13. Optional: Assign the Administration Server to a machine.

14. Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server, such as `oaam_server1` (default value).

15. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

   Your existing Oracle Identity Management domain with Oracle Access Manager, Oracle Identity Manager, and Oracle Identity Navigator is extended to support Oracle Adaptive Access Manager.

### 18.6 Starting the Servers

After installing and configuring Oracle Adaptive Access Manager, you must run the Oracle WebLogic Administration Server and various Managed Servers, as described in **Starting the Stack**.

---

**Note:** If you are upgrading from Oracle Adaptive Access Manager 10g to Oracle Adaptive Access Manager 11g, do not start Oracle Adaptive Access Manager Managed Servers until you have performed the Oracle Adaptive Access Manager Middle Tier Upgrade using the Upgrade Assistant tool. For more information, see the **Oracle Fusion Middleware Upgrade Guide for Oracle Identity Management**.

---

### 18.7 Post-Installation Steps

After installing and configuring Oracle Adaptive Access Manager, you must complete the following tasks:

1. Create Oracle WebLogic Server Users as follows:
   
a. Log in to the Oracle WebLogic Administration Console for your WebLogic administration domain.

   b. Click on **Security Realms**, and then click on your security realm.
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c. Click the **Users and Groups** tab, and then click the **Users** tab under it.

d. Create a user, such as `user1`, in the security realm.

e. Assign the user `user1` to any of the newly created groups with the OAAM prefix.

2. Set up and back up Oracle Adaptive Access Manager Encryption Keys, as described in the "Setting Up Encryption and Database Credentials for OAAM" topic in the *Oracle Fusion Middleware Administrator’s Guide for Oracle Adaptive Access Manager*. Ensure that you have a backup of the Oracle Adaptive Access Manager Encryption Keys; they are required if you want to re-create the Oracle Adaptive Access Manager domain.

3. Import Policies as follows:

   a. Ensure that you have downloaded the policies.
   
   b. Log in to the Oracle Adaptive Access Manager Administration (OAAM_ADMIN) using the following URL: `http://<host>:<port>/oaam_admin`
   
   c. Click the **Policy** tab, and then click **Import Policies**. The default policies are located in the `<Oracle_IDM2>/oaam/init` directory.

   **Note:** For more information about policies, see the "Managing Policies, Rules, and Conditions" topic in the *Oracle Fusion Middleware Administrator’s Guide for Oracle Adaptive Access Manager*.

4. Import Knowledge Based Authentication (KBA) questions as follows:

   a. Log in to the Oracle Adaptive Access Manager Administration (OAAM_ADMIN) using the following URL: `http://<host>:<port>/oaam_admin`
   
   b. Click the **KBA Questions** tab, and then click **Import KBA**. The default questions are located in the `<Oracle_IDM2>/oaam/kba_questions` directory. You must load questions for the languages you want to support.

5. Load Location Data into the Oracle Adaptive Access Manager database as follows:

   a. Configure the IP Location Loader script, as described in the topics "OAAM Command Line Interface Scripts" and "Importing IP Location Data" in the *Oracle Fusion Middleware Administrator’s Guide for Oracle Adaptive Access Manager*.

   b. Make a copy of the `sample.bharosa_location.properties` file, which is located under the `oaam/WEB-INF/classes/` directory. Enter location data details in the `location.data.properties`, as in the following examples:

   ```
   location.data.provider=quova
   location.data.file=/tmp/quova/EDITION_Gold_2008-07-22_v374.dat.gz
   location.data.ref.file=/tmp/quova/EDITION_Gold_2008-07-22_v374.ref.gz
   location.data.anonymizer.file=/tmp/quova/anonymizers_2008-07-09.dat.gz
   ```

   c. Run the loader on the command line as follows:

   ```
   On Windows: loadIPLocationData.bat
   ```
18.8 Verifying the OAAM Installation

After completing the installation process, including post-installation steps, you can verify the installation and configuration of Oracle Adaptive Access Manager (OAAM) as follows:

1. Start the Administration Server to register the newly created managed servers with the domain. To start the Administration Server, run the following command:
   - On Windows: At the command prompt, run the `startWebLogic` script to start the Administration Server, as in the following example:
     ```bash
     \middleware\user_projects\domains\base_domain\bin\startWebLogic
     ```
   - On UNIX: At the `$` prompt, run the `startWebLogic.sh` script, as in the following example:
     ```bash
     sh /Middleware_Home/user_projects/domains/base_domain/bin/startWebLogic.sh
     ```

2. Start the Managed Server, as described in Starting the Servers.
   Wait for the Administration Server and the Managed Server to start up.

3. Log in to the Administration Server for Oracle Adaptive Access Manager using the URL: `http://<host>:<port>/oaam_admin`

4. Log in to the Oracle Adaptive Access Manager Server using the URL: `https://<host>:<sslport>:oaam_server`

18.9 Migrating Policy and Credential Stores

You begin policy and credential store migration by creating the JPS root and then you reassociate the policy and credential store with Oracle Internet Directory.

Migrating policy and credential stores involves the following steps:

1. Creating JPS Root
2. Reassociating the Policy and Credential Store

18.9.1 Creating JPS Root

Create the jpsroot in Oracle Internet Directory using the command line `ldapadd` command as shown in these steps:

1. Create an `.ldif` file similar to this:
   
   ```
   dn: cn=jpsroot_idm
   cn: jpsroot_idm_idm
   objectclass: top
   objectclass: orclcontainer
   ```

Note: If you wish to generate CSF keys or passwords manually, see the "Setting Up Encryption and Database Credentials for OAAM" topic in the Oracle Fusion Middleware Administrator’s Guide for Oracle Adaptive Access Manager.
2. Use `ORACLE_HOME/bin/ldapadd` to add these entries to Oracle Internet Directory. For example:

```
ORACLE_HOME/bin/ldapadd -h oid.mycompany.com -p 389 -D cn=orcladmin -w welcome1 -c -v -f jps_root.ldif
```

### 18.9.2 Reassociating the Policy and Credential Store

To reassociate the policy and credential store with Oracle Internet Directory, use the `WLST reassociateSecurityStore` command. Follow these steps:

1. From IDMHOST1, start the `wlst` shell from the `ORACLE_HOME/common/bin` directory. For example:

   ```
   ./wlst.sh
   ```

2. Connect to the WebLogic Administration Server using the `wlst connect` command shown below.

   ```
   connect('AdminUser','AdminUserPassword',t3://hostname:port')
   ```

   For example:

   ```
   connect("weblogic_idm,"welcome1","t3://idmhost-vip.mycompany.com:7001")
   ```

3. Run the `reassociateSecurityStore` command as shown below:

   Syntax:

   ```
   reassociateSecurityStore(domain="domainName",admin="cn=orcladmin",
   password="orclPassword",ldapurl="ldap://LDAPHOST:LDAPPORT",servertype="OID",
   jpsroot="cn=jpsRootContainer")
   ```

   For example:

   ```
   wls:/IDMDomain/serverConfig> reassociateSecurityStore(domain="IDMDomain",
   admin="cn=orcladmin",password="password",
   ldapurl="ldap://oid.mycompany.com:389",servertype="OID",
   jpsroot="cn=jpsRoot IDMIDMhost1")
   ```

   The output for the command is as follows:

   ```
   {servertype=OID, jpsroot=cn=jpsRoot IDMIDMhost1, admin=cn=orcladmin, domain=IDMDomain, ldapurl=ldap://oid.mycompany.com:389, password=password}
   ```

   Location changed to domainRuntime tree. This is a read-only tree with DomainMBean as the root.

   For more help, use help(domainRuntime)

   Starting Policy Store reassociation.

   LDAP server and ServiceConfigurator setup done.

   Schema is seeded into LDAP server

   Data is migrated to LDAP server

   Service in LDAP server after migration has been tested to be available

   Update of jps configuration is done

   Policy Store reassociation done.

   Starting credential Store reassociation

   LDAP server and ServiceConfigurator setup done.

   Schema is seeded into LDAP server

   Data is migrated to LDAP server

   Service in LDAP server after migration has been tested to be available

   Update of jps configuration is done
Credential Store reassociation done
Jps Configuration has been changed. Please restart the server.

4. Restart the Administration Server after the command completes successfully. For information about restarting the Administration Server, see Starting the Servers.

18.10 Getting Started with OAAM After Installation

This chapter explains how to configure Oracle Access Manager (OAM) and Oracle Adaptive Access Manager (OAAM) with other Oracle Identity Management components, such as Oracle Identity Manager (OIM) and Oracle Identity Navigator (OIN), in a new or existing WebLogic domain. It includes the following topics:

- Prerequisites
- Important Notes Before You Begin
- Installing Oracle Identity Management 11g Release 1 (11.1.1.3.0)
- OAM and OIN in a New WebLogic Domain
- OAM in a Domain Containing OIM and OIN
- OAM, OIM, and OIN in a New WebLogic Domain
- OAM, OAAM, and OIN in a New WebLogic Domain
- OAM in a Domain Containing OAAM and OIN
- Starting the Servers
- Getting Started with OAM After Installation
- Getting Started with OAAM After Installation

19.1 Prerequisites

The following are the prerequisites for installing and configuring Oracle Identity Management 11g Release 1 (11.1.1.3.0) products:

1. Installing Oracle Database, as described in Installing Oracle Database.
2. Installing Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.
3. For Oracle Identity Manager users only: Installing Oracle SOA Suite 11g Release 1 (11.1.1.2.0) and patching it to 11.1.1.3.0, as described in Installing the Latest Version of Oracle SOA Suite (Oracle Identity Manager Users Only).

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5. Installing the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite, as described in Installing the Oracle Identity Management 11g Software. The Oracle Identity Management suite contains Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN).

19.2 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products in any of the scenarios discussed in this chapter, keep the following points in mind:

It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator on the same machine.

Note: In this chapter, two IDM_Home directories are mentioned in descriptions and procedures. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as Oracle_IDM1, under your Middleware_Home directory.

For more information, see Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation.
19.3 Installing Oracle Identity Management 11g Release 1 (11.1.1.3.0)

You can use the Oracle Identity Management 11g Installer to install the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite that contains Oracle Access Manager (OAM), Oracle Identity Manager (OIM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN). For more information, see Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) and Installing the Oracle Identity Management 11g Software.

19.4 OAM and OIN in a New WebLogic Domain

This topic describes how to configure Oracle Access Manager (OAM) and Oracle Identity Navigator (OIN) in a new WebLogic administration domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

19.4.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Oracle Access Manager in an environment where you want to add other Oracle Identity Management products at a later time.

19.4.2 Components Deployed

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

- Administration Server
- Managed Server for Oracle Access Manager
- Oracle Access Manager Console and Oracle Identity Navigator application on the Administration Server

19.4.3 Dependencies

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

- Oracle WebLogic Server.
- Complete installation of the Oracle Identity Management 11g software.
- Database schemas for Oracle Access Manager. For more information about schemas specific to Oracle Access Manager, see Creating Database Schema Using the Repository Creation Utility (RCU).

19.4.4 Procedure

Perform the following steps to install and configure Oracle Access Manager and Oracle Identity Navigator in a new WebLogic administration domain:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM2>/common/bin/config.sh` script. ( `<Oracle_IDM2>/common/bin/config.cmd` on Windows ). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the **Create a new WebLogic domain** option. Click **Next**. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the **Generate a domain configured automatically to support the following products** : option.

5. Select the following domain configuration options:
   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle JRF - 11.1.1.0 [oracle_common]** option is also selected, by default.

6. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

7. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click **Next**. The Configure Administrator User Name and Password screen is displayed.

8. Configure a user name and a password for the administrator. The default user name is weblogic. Click **Next**. The Configure Server Start Mode and JDK screen is displayed.

9. Choose **JRockit SDK 160_17_R28.0.0-679** and Production Mode in the Configure Server Start Mode and JDK screen of the Oracle Fusion Middleware Configuration Wizard. Click **Next**. If you selected **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM1]** option on the Select Extension Source screen, the Configure JDBC Data Sources Screen is displayed. Configure the `oamDS` data source, as required. After the test succeeds, the Select Optional Configuration screen is displayed.

10. On the Select Optional Configuration screen, you can configure **Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store**. Select the relevant check boxes and click **Next**.
   - **Optional:** Configure Administration Server, as required.
   - **Optional:** Configure Managed Servers, as required.
   - **Optional:** Configure Clusters, as required.

   For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide **Oracle Fusion Middleware High Availability Guide**.
   - **Optional:** Assign Managed Servers to Clusters, as required.
   - **Optional:** Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.
Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure RDBMS Security Store, as required.

11. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

The WebLogic domain with your configuration attributes is created.

19.5 OAM in a Domain Containing OIM and OIN

This topic describes how to configure Oracle Access Manager (OAM) in a Oracle Identity Management domain that has Oracle Identity Manager (OIM) and Oracle Identity Navigator (OIN) installed. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

19.5.1 Appropriate Deployment Environment

Perform the installation and configuration in this topic if you want to install Oracle Access Manager in an environment where Oracle Identity Manager and Oracle Identity Navigator are already installed. You can also set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM.

19.5.2 Components Deployed

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

- Managed Server for Oracle Access Manager
- Oracle Access Manager Console deployed on the Administration Server

19.5.3 Dependencies

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

- Oracle WebLogic Server.
- Complete installation of the Oracle Identity Management 11g software.
- Installation of Oracle SOA Suite
- Database schemas for Oracle Identity Manager, Oracle SOA Suite, and Oracle Access Manager. For more information about schemas specific to Oracle Identity Manager and Oracle Access Manager, see Creating Database Schema Using the Repository Creation Utility (RCU).
- Installation and configuration of Oracle Identity Manager with Oracle Identity Navigator in a new WebLogic domain.

### 19.5.4 Procedure

Perform the following steps to install and configure Oracle Access Manager in a WebLogic administration domain that has Oracle Identity Manager and Oracle Identity Navigator installed:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Configure Oracle Identity Manager and Oracle Identity Navigator in a new WebLogic domain, as described in OIM and OIN in a New WebLogic Domain.

3. Run the `<Oracle_IDM2>/common/bin/config.sh` script. ( `<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

4. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click Next.

5. On the Select a WebLogic Domain Directory screen, browse to the directory that contains the WebLogic domain in which you installed and configured Oracle Identity Navigator. Click Next. The Select Extension Source screen appears.

6. On the Select Extension Source screen, select the following domain configuration options:
   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**

7. After selecting the domain configuration options, click Next. If you selected Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2] option on the Select Extension Source screen, the Configure JDBC Data Sources Screen is displayed. Configure the oamDS data source, as required. After the test succeeds, the Configure JDBC Component Schema screen is displayed.

8. On the Configure JDBC Component Schema screen, select a component schema, such as the OIM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes and click Next.
   - Optional: Configure Managed Servers, as required.
   - Optional: Configure Clusters, as required.

     For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide *Oracle Fusion Middleware High Availability Guide*.

   - Optional: Assign Managed Servers to Clusters, as required.
Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

**Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

Optional: Assign the Administration Server to a machine.

Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

Optional: Configure JMS File Store, as required.

10. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the domain.

Your existing WebLogic domain with Oracle Identity Manager and Oracle Identity Navigator is extended to support Oracle Access Manager.

### 19.6 OAM, OIM, and OIN in a New WebLogic Domain

This topic describes how to configure Oracle Access Manager (OAM), Oracle Identity Manager (OIM), and Oracle Identity Navigator (OIN) in a new WebLogic administration domain. It includes the following sections:

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

#### 19.6.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Oracle Access Manager, Oracle Identity Manager, and Oracle Identity Navigator together in an environment. You can also set up integration between Oracle Identity Manager and Oracle Access Manager, as described in Integration Between OIM and OAM.

#### 19.6.2 Components Deployed

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

- Administration Server
- Managed Servers for Oracle Access Manager and Oracle Identity Manager
- Oracle Identity Administration Console, Oracle Identity Manager Self Service Console, and Oracle Identity Manager Advanced Administration Console on the Oracle Identity Manager Managed Server
- Oracle Access Manager Console and Oracle Identity Navigator application on the Administration Server

#### 19.6.3 Dependencies

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

- Oracle WebLogic Server.
19.6.4 Procedure

Perform the following steps to install and configure Oracle Access Manager, Oracle Identity Manager, and Oracle Identity Navigator in a new WebLogic administration domain:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script. (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the Generate a domain configured automatically to support the following products: option.

5. Select the following domain configuration options:

   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2] option, the Oracle JRF - 11.1.1.0 [oracle_common] option is also selected, by default.

   - **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**

   - **Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the Oracle Identity Manager - 11.1.1.3.0 [Oracle_IDM2] option, the following options are also selected, by default: Oracle SOA Suite - 11.1.1.0 [Oracle_SOA1], Oracle Enterprise Manager - 11.1.1.0 [oracle_common], and Oracle WSM Policy Manager - 11.1.1.0 [oracle_common].

6. After selecting the domain configuration options, click Next. The Specify Domain Name and Location screen is displayed.

7. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. In addition, enter a location to store applications for the domain. Click Next. The Configure Administrator User Name and Password screen is displayed.

8. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next. The Configure Server Start Mode and JDK screen is displayed.
9. Choose JRockit SDK 160_17_R28.0.0-679 and Production Mode in the Configure Server Start Mode and JDK screen of the Oracle Fusion Middleware Configuration Wizard. Click Next. The Configure JDBC Data Sources Screen is displayed. Configure the oamDS data source, as required. After the test succeeds, the Configure JDBC Component Schema screen is displayed.

10. On the Configure JDBC Component Schema screen, select a component schema, such as the OIM Infrastructure Schema, the SOA Infrastructure Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

11. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, JMS File Store, and RDBMS Security Store. Select the relevant check boxes and click Next.

- Optional: Configure Administration Server, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.

For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

Tip: Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure JMS File Store, as required.
- Optional: Configure RDBMS Security Store, as required.

12. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

A new WebLogic domain to support Oracle Identity Manager, Oracle Access Manager, and Oracle Identity Navigator is created in the <Middleware_Home>\user_projects\domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.

13. Start the Oracle Identity Manager Configuration Wizard, as described in Starting the Oracle Identity Manager 11g Configuration Wizard.

14. Configure Oracle Identity Manager Server, as described in Configuring OIM Server.
15. Follow the wizard and the steps described in Configuring OIM Server to complete the Oracle Identity Manager Server configuration. Similarly, follow the wizard to configure Oracle Identity Manager Design Console (Windows only) and to configure Oracle Identity Manager Remote Server, as described in Configuring OIM Design Console, and Configuring OIM Remote Manager.

19.7 OAM, OAAM, and OIN in a New WebLogic Domain

This topic describes how to configure Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), and Oracle Identity Navigator (OIN) together in a new WebLogic administration domain. It includes the following sections:

■ Appropriate Deployment Environment
■ Components Deployed
■ Dependencies
■ Procedure

19.7.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Oracle Access Manager, Oracle Access Manager, and Oracle Identity Navigator together in an environment.

19.7.2 Components Deployed

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

■ Administration Server
■ Managed Servers for Oracle Access Manager and Oracle Adaptive Access Manager
■ Oracle Access Manager Console, Oracle Adaptive Access Manager Console, and Oracle Identity Navigator application on the Administration Server

19.7.3 Dependencies

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

■ Oracle WebLogic Server.
■ Complete installation of the Oracle Identity Management 11g software.
■ Database schemas for Oracle Access Manager and Oracle Adaptive Access Manager. For more information about schemas specific to Oracle Adaptive Access Manager and Oracle Access Manager, see Creating Database Schema Using the Repository Creation Utility (RCU).

19.7.4 Procedure

Perform the following steps to install and configure Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator in a new WebLogic administration domain:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.
2. Run the `<Oracle_IDM2>/common/bin/config.sh` script. (<`Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the **Create a new WebLogic domain** option. Click **Next**. The Select Domain Source screen is displayed.

4. On the Select Domain Source screen, select the **Generate a domain configured automatically to support the following products:** option.

5. Select the following domain configuration options:
   - **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]**
   - **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]**, which is mandatory.

   and

   Optionally, **Oracle Adaptive Access Manager - Server - 11.1.1.3.0 [Oracle_IDM2]**

   **Note:** When you select the **Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle JRF - 11.1.1.0 [oracle_common]** option is also selected, by default.

   **Note:** When you select the **Oracle Adaptive Access Manager - Server - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle WSM Policy Manager - 11.1.1.0 [oracle_common]** option is also selected, by default.

   When you select the **Oracle Adaptive Access Manager Admin Server - 11.1.1.3.0 [Oracle_IDM2]** option, the **Oracle Identity Navigator - 11.1.1.3.0 [Oracle_IDM2]** option is also selected, by default.

6. After selecting the domain configuration options, click **Next**. The Specify Domain Name and Location screen is displayed.

7. On the Specify Domain Name and Location screen, enter a name and location for the domain to be created. Click **Next**. The Configure Administrator User Name and Password screen is displayed.

8. Configure a user name and a password for the administrator. The default user name is `weblogic`. Click **Next**. The Configure Server Start Mode and JDK screen is displayed.

9. Choose **JRockit SDK 160_17_R28.0_0-679 and Production Mode** in the Configure Server Start Mode and JDK screen of the Oracle Fusion Middleware Configuration Wizard. Click **Next**. The Configure JDBC Data Sources Screen is displayed. Configure the `oamDS` data source, as required. After the test succeeds, the Configure JDBC Component Schema screen is displayed.

10. On the Configure JDBC Component Schema screen, select a component schema, such as the **OAAM Admin Server Schema**, the **OAAM Admin MDS Schema**, that you want to modify.
You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

11. On the Select Optional Configuration screen, you can configure Administration Server, Managed Servers, Clusters, and Machines, Deployments and Services, and RDBMS Security Store. Select the relevant check boxes and click Next.

- Optional: Configure Administration Server, as required.
- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.

- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.
- Optional: Configure RDBMS Security Store, as required.

12. On the Configuration Summary screen, review the domain configuration, and click Create to start creating the domain.

A new WebLogic domain to support Oracle Adaptive Access Manager, Oracle Access Manager, and Oracle Identity Navigator is created in the `<Middleware_Home>/user_projects/domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

19.8 OAM in a Domain Containing OAAM and OIN

This topic describes how to install and configure Oracle Access Manager (OAM) in an Oracle Identity Management domain that has Oracle Adaptive Access Manager (OAAM) and Oracle Identity Navigator (OIN) installed. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

19.8.1 Appropriate Deployment Environment

Perform the installation and configuration in this topic if you want to install Oracle Access Manager in an environment where Oracle Adaptive Access Manager and
Oracle Identity Navigator are already installed. You can also set up integration between Oracle Adaptive Access Manager and Oracle Access Manager, as described in the "Integrating OIM, OAM, and OAAM" topic in the Oracle Fusion Middleware Developer’s Guide for Oracle Adaptive Access Manager.

19.8.2 Components Deployed
Performing the installation and configuration in this section deploys the following:

- Managed Server for Oracle Access Manager
- Oracle Access Manager Console on the Administration Server

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

- Oracle WebLogic Server.
- Complete installation of the Oracle Identity Management 11g software.
- Database schemas for Oracle Access Manager and Oracle Adaptive Access Manager. For more information about schemas specific to Oracle Adaptive Access Manager and Oracle Access Manager, see Creating Database Schema Using the Repository Creation Utility (RCU).
- Installation and configuration of Oracle Adaptive Access Manager with Oracle Identity Navigator in a new WebLogic domain, as described in OAAM in a New WebLogic Domain.

19.8.4 Procedure
Perform the following steps to install and configure Oracle Access Manager in an Oracle Identity Management domain that has Oracle Adaptive Access Manager and Oracle Identity Navigator installed:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Configure Oracle Adaptive Access Manager and Oracle Identity Navigator in a new WebLogic domain, as described in OAAM in a New WebLogic Domain.

3. Run the `<Oracle_IDM2>/common/bin/config.sh` script. ( `<Oracle_IDM2>/common\bin\config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

4. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next.

5. On the Select a WebLogic Domain Directory screen, browse to the directory that contains the WebLogic domain in which you installed and configured Oracle Adaptive Access Manager and Oracle Identity Navigator. Click Next. The Select Extension Source screen appears.

6. On the Select Extension Source screen, select the following domain configuration options:

   Oracle Access Manager with Database Policy Store - 11.1.1.3.0 [Oracle_IDM2]

7. After selecting the domain configuration options, click Next. The Configure JDBC Data Sources Screen is displayed. Configure the oamDS data source, as required.
After the test succeeds, the Configure JDBC Component Schema screen is displayed.

8. On the Configure JDBC Component Schema screen, select a component schema, such as the OAAM Admin Server Schema, the OAAM Admin MDS Schema, the User Messaging Service Schema, the OWSM MDS Schema, the OIM MDS Schema, or the SOA MDS Schema, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines and Deployments and Services. Select the relevant check boxes and click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

10. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the domain.

Your existing WebLogic domain with Oracle Adaptive Access Manager and Oracle Identity Navigator is extended to support Oracle Access Manager.

### 19.9 Starting the Servers

After installing and configuring Oracle Access Manager and Oracle Adaptive Access Manager, you must run the Oracle WebLogic Administration Server and various Managed Servers, as described in Starting or Stopping the Oracle Stack.

### 19.10 Getting Started with OAM After Installation

After installing Oracle Access Manager (OAM), refer to the "Getting Started with Administering Oracle Access Manager" chapter in the Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.
19.11 Getting Started with OAAM After Installation

After installing Oracle Adaptive Access Manager (OAAM), refer to the *Oracle Fusion Middleware Administrator’s Guide for Oracle Adaptive Access Manager.*
This chapter explains how to configure Oracle Authorization Policy Manager (OAPM) in a new or existing WebLogic administration domain.

It discusses the following topics:

- Prerequisites
- Important Notes Before You Begin
- Installing OAPM
- OAPM in a New WebLogic Domain
- OAPM in a Domain Containing OIM
- OAPM in a Domain Containing OIM, OAM, OAAM, and OIN
- Starting the Servers
- Reassociating WebLogic Server with LDAP
- Verifying the OAPM Installation
- Getting Started with OAPM After Installation

### 20.1 Prerequisites

The following are the prerequisites for installing and configuring Oracle Identity Management 11g Release 1 (11.1.1) products:

1. Installing Oracle Database, as described in Installing Oracle Database.

2. Installing Oracle WebLogic Server 10.3.3 and creating a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.

3. Creating and loading schemas using Repository Creation Utility (RCU), as described in Creating Database Schema Using the Repository Creation Utility (RCU).

4. Installing the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite, as described in Installing the Oracle Identity Management 11g Software. The Oracle Identity Management suite contains Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN).
20.2 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products in any of the scenarios discussed in this chapter, keep the following points in mind:

It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator on the same machine.

Note: In this chapter, two IDM_Home directories are mentioned in descriptions and procedures. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as Oracle_IDM1, under your Middleware_Home directory.

For more information, see Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation.

20.3 Installing OAPM

You must run the Oracle Identity Management 11g Installer to install Oracle Authorization Policy Manager (OAPM). For more information, see Preparing to Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) and Installing the Oracle Identity Management 11g Software.
20.4 OAPM in a New WebLogic Domain

This topic describes how to configure Oracle Authorization Policy Manager (OAPM) in a new WebLogic domain. It includes the following sections:

- Appropriate Deployment Environment
- Components Deployed
- Dependencies
- Procedure

20.4.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Authorization Policy Manager in an environment where you may install Oracle Identity Manager, Oracle Access Manager, Oracle Identity Navigator, or Oracle Adaptive Access Manager at a later stage in the same domain.

20.4.2 Components Deployed

Performing the configuration in this section deploys the following:

- WebLogic Administration Server
- Oracle Authorization Policy Manager application on the Administration Server

20.4.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Database schema for Oracle Authorization Policy Manager and Metadata Services (MDS). For more information about schemas specific to Oracle Authorization Policy Manager, see Creating Database Schema Using the Repository Creation Utility (RCU).

20.4.4 Procedure

Perform the following steps to configure Oracle Authorization Policy Manager in a new WebLogic domain:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. On the Welcome screen, select the Create a new WebLogic domain option. Click Next. The Select Domain Source screen appears.

4. On the Select Domain Source screen, ensure that the Generate a domain configured automatically to support the following products: option is selected.

Select the Oracle Application Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2] option. When you select this option, the Oracle JRF 11.1.1.0 [oracle_common] option is also selected, by default. For association with Enterprise Manager at a later stage, select the Oracle Enterprise Manager - 11.1.1.3.0 [oracle_
common] template. Click Next. The Select Domain Name and Location screen appears.

5. Enter a name and a location for the domain to be created, and click Next. The Configure Administrator User Name and Password screen appears.

6. Configure a user name and a password for the administrator. The default user name is weblogic. Click Next.


8. On the Configure JDBC Component Schema screen, select a component schema, such as the APM MDS Schema or the APM Schema that you want to modify. You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

9. On the Select Optional Configuration screen, you can configure the Administration Server, Managed Servers, Clusters, Machines, Deployments and Services, and RDBMS Security Store. Select the relevant check boxes and click Next.

- Optional: Configure the following Administration Server parameters:
  - Name
  - Listen Address
  - Listen Port
  - SSL Listen Port
  - SSL Enabled

- Optional: Add and configure Managed Servers, as required. Note that Oracle Authorization Policy Manager does not require a Managed Server because the application is deployed on the WebLogic Administration Server.

- Optional: Configure Clusters, as required.
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.

- Optional: Assign Managed Servers to Clusters, as required.

- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.

- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server.

- Optional: Configure RDBMS Security Store Database, as required.
10. On the Configuration Summary screen, review the domain configuration, and click **Create** to start creating the domain.

A new WebLogic domain to support Oracle Authorization Policy Manager is created in the `<Middleware_Home>\user_projects\domains` directory (on Windows). On UNIX, the domain is created in the `<Middleware_Home>/user_projects/domains` directory.

### 20.5 OAPM in a Domain Containing OIM

This topic describes how to configure Oracle Authorization Policy Manager (OAPM) in an existing Oracle Identity Management domain that has Oracle Identity Manager (OIM) installed and configured.

It includes the following sections:

- **Appropriate Deployment Environment**
- **Components Deployed**
- **Dependencies**
- **Procedure**
- **Post-Configuration Steps**

#### 20.5.1 Appropriate Deployment Environment

Perform the configuration in this topic if you want to install Oracle Authorization Policy Manager in an environment where Oracle Identity Manager and Oracle SOA Suite are already installed and configured. Note that Oracle Identity Manager requires Oracle SOA Suite. You may install other Oracle Identity Management products, such as Oracle Access Manager, Oracle Identity Navigator, and Oracle Adaptive Access Manager at a later time in the same domain. You can discover and launch Consoles for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Authorization Policy Manager from within the Oracle Identity Navigator user interface.

#### 20.5.2 Components Deployed

Performing the configuration in this section deploys the Oracle Authorization Policy Manager application on the existing WebLogic Administration Server.

#### 20.5.3 Dependencies

The configuration in this section depends on the following:

- **Oracle WebLogic Server.**
- **Installation of the Oracle Identity Management 11g software.**
- **Oracle SOA Suite (required by Oracle Identity Manager).**
- **Database schemas for Oracle Authorization Policy Manager and Metadata Services (MDS), Oracle Identity Manager, and Oracle SOA Suite. For more information, see Creating Database Schema Using the Repository Creation Utility (RCU).**
20.5.4 Procedure

To configure Oracle Authorization Policy Manager in an existing WebLogic domain that has Oracle Identity Manager configured, complete the following steps:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` (on UNIX) script. (<Oracle_IDM2>/common/bin/config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. Configure Oracle Identity Manager in a new WebLogic domain, as described in OIM Without LDAP Sync in a New Domain.

4. Ensure that the WebLogic domain with Oracle Identity Manager is configured correctly. After the domain configuration is complete, on the Creating Domain screen, click Done to dismiss the Oracle Fusion Middleware Configuration Wizard.

A new WebLogic domain to support Oracle Identity Manager is created in the <Middleware_Home>/user_projects/domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory.

5. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (<Oracle_IDM2>/common/bin/config.cmd on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

6. On the Welcome screen, select the Extend an existing WebLogic domain option. Click Next.

7. On the Select a WebLogic Domain Directory screen, browse to the <Middleware_Home>/user_projects/domains directory that contains your Oracle Identity Manager domain. Click Next. The Select Extension Source screen appears.

8. On the Select Extension Source screen, ensure that the Extend my domain automatically to support the following products: option is selected.


9. On the Configure JDBC Component Schema screen, select a component schema that you want to modify.

The screen lists the following component schemas:

- SOA Infrastructure
- User Messaging Service
- APM MDS Schema
- APM Schema
- OIM MDS Schema
- OWSM MDS Schema
- SOA MDS Schema
- OIM Schema

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click Next. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.
10. On the Select Optional Configuration screen, you can configure Managed Servers, Clusters, and Machines, Deployments and Services, and JMS File Store. Select the relevant check boxes, and Click Next.

- Optional: Configure Managed Servers, as required.
- Optional: Configure Clusters, as required.
  For more information about configuring clusters for Oracle Identity Management products, see the "Configuring High Availability for Identity Management Components" topic in the guide Oracle Fusion Middleware High Availability Guide.
- Optional: Assign Managed Servers to Clusters, as required.
- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server, such as oam_server1 (default value).
- Optional: Configure JMS File Stores, as required.

11. On the Configuration Summary screen, review the domain configuration, and click Extend to start extending the Oracle Identity Manager domain to support Oracle Authorization Policy Manager.

Your existing WebLogic domain with Oracle Identity Manager is extended to support Oracle Authorization Policy Manager.

### 20.5.5 Post-Configuration Steps

You must complete the following steps after configuring Oracle Authorization Policy Manager in an Oracle Identity Manager domain:

1. Browse to the `<Extended_Domain_Home>/config/fmwconfig` directory.
2. Open the `jps-config.xml` file in a text editor. Be sure to back up the file before making any changes.
3. Search for the `jpscontexts` section, with the name `default`, in the file. The section looks like the following:

```xml
<jpsContexts name="default">
  <!-- This is the default JPS context. All the mendatory services and Login Modules must be configured in this default context -->
  <jpsContext name="default">
    <serviceInstanceRef ref="credstore"/>
    <serviceInstanceRef ref="keystore"/>
    <serviceInstanceRef ref="policystore.xml"/>
    <serviceInstanceRef ref="audit"/>
    <serviceInstanceRef ref="idstore.oim"/>
  </jpsContext>
</jpsContexts>
```

**Tip:** Before configuring a machine, use the ping command to verify whether the machine or host name is accessible.
4. Change the last serviceInstance reference entry from `<serviceInstanceRef ref="idstore.oim"/>` to `<serviceInstanceRef ref="idstore.ldap"/>`.

5. Copy the entire `jpscontexts` section and paste it after the default `jpscontexts` section. Modify the default entry and the serviceInstance reference entry in the new section as follows:

```xml
<jpsContexts default="oim">
    <!-- This is the default JPS context. All the mendatory services and Login Modules must be configured in this default context -->
    <jpsContext name="default">
        <serviceInstanceRef ref="credstore"/>
        <serviceInstanceRef ref="keystore"/>
        <serviceInstanceRef ref="policystore.xml"/>
        <serviceInstanceRef ref="audit"/>
        <serviceInstanceRef ref="idstore.oim"/>
    </jpsContext>
</jpsContexts>
```

6. Save the `jps-config.xml` file after making the changes.

7. Open the Oracle Enterprise Manager MBean browser after logging in to Oracle Enterprise Manager.

8. Open the domain `oracle.as.soainfra.config`.

9. Select on the following in order:

   - WorkflowIdentityConfig -> human-workflow ->
   - WorkflowIdentityConfig.ConfigurationType -> jazn.com ->
   - WorkflowIdentityConfig.ConfigurationType.ProviderType -> JpsProvider ->
   - WorkflowIdentityConfig.ConfigurationType.ProviderType.PropertyType -> jpsContextName

10. Change the value of the `jpsContextName` property to the `oim` context created in the `jps-config.xml` file, as in Step 5. Click the `setValue` operation, and change the value to `oim`.

11. Restart the Administration Server and all Managed Servers for the changes to take effect, as described in Starting the Servers.

### 20.6 OAPM in a Domain Containing OIM, OAM, OAAM, and OIN

This topic describes how to configure Oracle Authorization Policy Manager (OAPM) in an existing Oracle Identity Management domain that contains Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), and Oracle Identity Navigator (OIN).

It includes the following sections:

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

Perform the configuration in this topic if you want to install Oracle Authorization Policy Manager in an environment where Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator are installed and configured.

20.6.2 Components Deployed

Performing the configuration in this section deploys the Oracle Authorization Policy Manager application on the existing WebLogic Administration Server.

20.6.3 Dependencies

The configuration in this section depends on the following:

- Oracle WebLogic Server.
- Installation of the Oracle Identity Management 11g software.
- Installation of the latest version of Oracle SOA Suite (required by Oracle Identity Manager.
- Database schema for Oracle Authorization Policy Manager and Metadata Services (MDS) schema. For more information about schemas specific to Oracle Authorization Policy Manager, see Creating Database Schema Using the Repository Creation Utility (RCU).

20.6.4 Procedure

To configure Oracle Authorization Policy Manager in an existing WebLogic domain that contains Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator, complete the following steps:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). (`<Oracle_IDM2>/common/bin/config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

3. Create a new WebLogic domain to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator. For more information, see Simultaneous configuration of OIN, OAPM, OAAM, OAM, and OIM.

   **Note:** On the Select Domain Source screen, do not select the Oracle Authorization Policy Manager - 11.1.1.3.0 [Oracle_IDM2] option.

4. Ensure that the WebLogic domain with Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator is configured correctly. After the domain configuration is complete, on the Creating Domain screen, click Done to dismiss the Oracle Fusion Middleware Configuration Wizard.

   A new WebLogic domain to support Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator is created in the `<Middleware_Home>/user_projects/domains` directory (on
5. Run the `<Oracle_IDM2>/common/bin/config.sh` script (on UNIX). `<Oracle_IDM2>/common\bin\config.cmd` on Windows). The Oracle Fusion Middleware Configuration Wizard appears.

6. On the Welcome screen, select the **Extend an existing WebLogic domain** option. Click **Next**.

7. On the Select a WebLogic Domain Directory screen, browse to the `<Middleware_Home>/user_projects/domains` directory where you created the domain with Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator. Click **Next**.

   The Select Extension Source screen appears.

8. On the Select Extension Source screen, ensure that the **Extend my domain automatically to support the following products**; option is selected. Select **Oracle Application Authorization Policy Manager - 11.1.1.3.0** [Oracle_IDM2]. Click **Next**. The Configure JDBC Component Schema screen appears.

9. On the Configure JDBC Component Schema screen, select a component schema that you want to modify.

   The screen lists the following component schemas:
   - SOA Infrastructure
   - OAAM Admin Schema
   - OAAM Server Schema
   - User Messaging Service
   - APM MDS Schema
   - APM Schema
   - OAAM Admin MDS Schema
   - OIM MDS Schema
   - OWSM MDS Schema
   - SOA MDS Schema
   - OIM Schema

   You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port. Click **Next**. The Test JDBC Component Schema screen appears. After the test succeeds, the Select Optional Configuration screen appears.

10. On the Select Optional Configuration screen, you can configure **Managed Servers, Clusters, and Machines, Deployments and Services**, and **JMS File Store**. Select the relevant check boxes, and Click **Next**.

    - Optional: Configure Managed Servers, as required.
    - Optional: Configure Clusters, as required.
    - Optional: Assign Managed Servers to Clusters, as required.
Reassociating WebLogic Server with LDAP

- Optional: Configure Machines, as needed. This step is useful when you want to run the Administration Server on one machine and Managed Servers on another physical machine.

  **Tip:** Before configuring a machine, use the `ping` command to verify whether the machine or host name is accessible.

- Optional: Assign the Administration Server to a machine.
- Optional: Select Deployments, such as applications and libraries, and Services to target them to a particular cluster or server, such as `oam_server1` (default value).
- Optional: Configure JMS File Stores, as required.

11. On the Configuration Summary screen, review the domain configuration, and click **Extend** to start extending the existing domain, which contains Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator, to support Oracle Authorization Policy Manager.

### 20.7 Starting the Servers

After installing and configuring Oracle Authorization Policy Manager, you must run the Oracle WebLogic Administration Server, as described in Starting or Stopping the Oracle Stack.

### 20.8 Reassociating WebLogic Server with LDAP

After installing and configuring Oracle Authorization Policy Manager, you must reassociate Oracle WebLogic Server with LDAP as follows:

1. Ensure that the WebLogic Administration Server is up and running. For information about starting the WebLogic Administration Server, see Starting or Stopping the Oracle Stack.

2. Use an LDAP browser or client, such as JXplorer, to add a new node on the LDAP server that Oracle WebLogic Server is going to associate with:

   a. On the **File** menu in your LDAP browser, click **Connect** to connect to your LDAP server. The Open LDAP/DSML Connection screen appears.

   ![Connecting to an LDAP Server](image)

   b. In the **Host** text box, enter the host name of your LDAP server.
c. In the Port text box, enter the port number.

d. On the Level drop-down list, choose the User + Password option.

e. In the User DN text box, enter the base distinguished name of the directory to which you want to connect.

f. In the Password text box, enter the password. Click OK. If the connection is successful, a list of entries in the Directory Information Tree is displayed in the left navigation pane.

g. Select the parent entry. From the Edit menu, choose New. The Set Entry Object Classes screen appears.

h. Select the Suggest Classes check box if you want to view the compulsory object classes for the new entry.

i. Verify that the Distinguished Name of the parent entry in the Parent DN text box is correct.

j. In the Enter RDN text box, enter the Relative Distinguished Name of the new entry. For example, to add apm_test_name to the new entry, enter cn=apm_test_name. JXplorer displays the compulsory object classes for the new entry in the Selected Classes pane. Click OK.

k. If the information about the new entry is correct, click Submit.

3. Change the association of Oracle WebLogic Server to the new node by using WebLogic Scripting Tool (WLST) or Enterprise Manager:

Using WLST

a. At the command prompt, change your present working directory to the <Middleware_Home>/oracle_common/common/bin directory.

b. Run the wlst.sh script.

c. At the WLS prompt, use the WLST command reassociateSecurityStore as follows:

\[
\text{wls} > \text{reassociateSecurityStore(} \text{domain="domainName"}, \text{admin="cnSpecification"}, \text{password="passWord"}, \text{ldapurl="hostAndPort"}, \text{servertype="ldapSrvrType"}, \text{jpsroot="cnSpecification" [,join="trueOrfalse"]})
\]

Where

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>domain</td>
<td>Specifies the name of the domain where the reassociation occurs.</td>
</tr>
<tr>
<td>admin</td>
<td>Specifies the user name of the administrator on the LDAP server. The format is cn=usrName.</td>
</tr>
<tr>
<td>password</td>
<td>Specifies the password for the administrator on the LDAP server.</td>
</tr>
<tr>
<td>ldapurl</td>
<td>Specifies the Uniform Resource Identifier (URI) of the LDAP server. The format is ldap://:host:port.</td>
</tr>
<tr>
<td>servertype</td>
<td>Specifies the type of the target LDAP server. The only valid types are Oracle Internet Directory and Oracle Virtual Directory.</td>
</tr>
</tbody>
</table>
Example Usage

```java
reassociateSecurityStore(domain="myDomain", admin="cn=adminName", password="myPass", ldapurl="ldap(s)://myhost.example.com:3060", servertype="OID", jpsroot="cn=testNode")
```

If you want a domain other than `myDomain`, such as `yourDomain`, to share the policy store in `myDomain`, then you must run the command as follows:

```java
reassociateSecurityStore(domain="yourDomain", admin="cn=adminName", password="myPass", ldapurl="ldap(s)://myhost.example.com:3060", servertype="OID", jpsroot="cn=testNode", join="true")
```

Using Enterprise Manager

a. Log in to Oracle Enterprise Manager.
b. Navigate to your WebLogic domain.
d. Click Change Association.
e. On the Set Security Provider page, in the LDAP Server Details section, select the LDAP server type, host name, port number, connection string, and password.
f. In the LDAP Root Node Details section, enter a distinguished name for the JPS root.
g. Select the Create New Domain option if you want to create a new policy and credential domain on LDAP.

**Note:** To join a specified existing domain, do not select the Create New Domain option.

h. In the Domain Name text box, enter a name for the domain.
i. Click OK.

**Note:** After the reassociation, CredentialStore, SystemPolicy and apm are migrated to the node. You can verify them through an LDAP management tool, such as JXplorer.
20.9 Verifying the OAPM Installation

After completing the installation and configuration of Oracle Authorization Policy Manager (OAPM), including the post-installation steps, you can verify the installation as follows:


2. After you log in, the Authorization Policy Manager Console is displayed. The home page should display three tabs: Authorization Management, System Configuration, and Policy Upgrade Management.

3. On the home page, ensure that the Authorization Management tab is active. Click Search - External Roles in the Global section on the home page. The Search - External Roles page is displayed.

These results indicate that your installation of Oracle Authorization Policy Manager was successful.

20.10 Getting Started with OAPM After Installation

After installing Oracle Authorization Policy Manager (OAPM), refer to the “Getting Started with Oracle Authorization Policy Manager” chapter in the Oracle Fusion Middleware Authorization Policy Manager Administrator’s Guide.
This chapter describes how to set up integration between Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

It includes the following topics:

- Overview
- Important Notes Before You Begin
- Prerequisites
- Introduction to WebLogic Server Domain Agent
- Setting Up Integration Between OIM and OAM Using the Domain Agent
- Verifying the Configuration
- Using Oracle HTTP Server 10g Webgate for Oracle Access Manager 11g

### 21.1 Overview

For an overview of Oracle Identity Management suite-level integration scenarios, see the guide *Oracle Fusion Middleware Integration Overview for Oracle Identity Management Suite*.

This chapter describes how to set up the integration using the WebLogic Server Domain Agent.

**Note:** However, you can migrate from the Domain Agent to Oracle HTTP Server 10g Webgate for Oracle Access Manager if you wish to protect partner applications outside of the WebLogic domain.

See chapter Migrating from Domain Agent to Oracle HTTP Server 10g Webgate for OAM for more information.

### 21.2 Important Notes Before You Begin

Before you start installing and configuring Oracle Identity Management products in any of the scenarios discussed in this chapter, keep the following points in mind:

- It is assumed that you are installing Oracle Internet Directory, Oracle Virtual Directory, Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, and Oracle Identity Navigator on the same machine.
Important Notes Before You Begin

Note: In this chapter, two IDM_Home directories are mentioned in the descriptions and procedures. For example, the first one, Oracle_IDM1 can be the IDM_Home directory for Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation. The second one, Oracle_IDM2 can be the IDM_Home directory for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

However, note that Oracle_IDM1 and Oracle_IDM2 are used as examples in this document. You can specify any name for either of your IDM_Home directories. In addition, you can install the two Oracle Identity Management suites (one containing Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, and Oracle Identity Federation; another containing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator) in any order on your machine.

If you choose to use the default names, the first installation creates an Oracle_IDM1 directory, and the second installation creates an Oracle_IDM2 directory.

If you have not installed Oracle Internet Directory, Oracle Virtual Directory, Oracle Directory Services Manager, Oracle Directory Integration Platform, or Oracle Identity Federation on the same machine where you are installing Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, then you will see a single IDM_Home directory, such as Oracle_IDM1, under your Middleware_Home directory.

For more information, see Overview and Structure of Oracle Identity Management 11g Release 1 (11.1.1.3.0) Installation.

By performing the domain configuration procedures described in this chapter, you can create Managed Servers on a local machine (the machine on which the Administration Server is running). However, you can create and start Managed Servers for Oracle Identity Management components on a remote machine. For more information, see the “Creating and Starting a Managed Server on a Remote Machine” topic in the guide Oracle Fusion Middleware Creating Templates and Domains Using the Pack and Unpack Commands.

You must use the Oracle Identity Manager Configuration Wizard to configure only Oracle Identity Manager Server, Oracle Identity Manager Design Console (on Windows only), and Oracle Identity Manager Remote Manager.

You must complete this additional configuration for Oracle Identity Manager components after configuring Oracle Identity Manager in a new or existing WebLogic administration domain. For more information, see OIM Domain Configuration Scenarios.

If you are configuring Oracle Identity Manager Server, you must run the Oracle Identity Manager configuration wizard on the machine where the Administration Server is running. For configuring the Server, you can run the wizard only once.
during the initial setup of the Server. After the successful setup of Oracle Identity Manager Server, you cannot run the Oracle Identity Manager Configuration Wizard again to modify the configuration of Oracle Identity Manager Server. For such modifications, you must use Oracle Enterprise Manager.

Note that Oracle Identity Manager requires Oracle SOA Suite 11g (11.1.1.3.0), which should be exclusive to Oracle Identity Management. You must install Oracle SOA Suite before configuring Oracle Identity Manager. If you are setting up integration between Oracle Identity Manager and Oracle Access Manager, ensure that Oracle Identity Manager, Oracle Access Manager, and Oracle SOA Suite are configured in the same domain.

21.3 Prerequisites

You must complete the following prerequisites for setting up integration between Oracle Identity Manager and Oracle Access Manager:

1. Install a supported version of Oracle Database, as described in Installing Oracle Database.

2. Create and load database schemas, as described in Creating Database Schema Using the Repository Creation Utility (RCU).

3. Install Oracle WebLogic Server 10.3.3 and create a Middleware Home, as described in Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home.

4. Ensure that the Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) are installed, as described in Installing the Latest Version of Oracle Identity Management.

An IDM_Home directory, such as Oracle_IDM1, is created. This directory is the Oracle Home for Oracle Internet Directory (OID), Oracle Virtual Directory (OVD), and Oracle Directory Services Manager (ODSM).

For more information, see Important Notes Before You Begin.

5. Configure Oracle Internet Directory (OID) and Oracle Virtual Directory (OVD) in a WebLogic administration domain, as described in OID and OVD with ODSM in a New WebLogic Domain.

6. On the command line, use the cd command to move from your present working directory to the following directory:
   On UNIX: <WL_HOME>/server/lib
   On Windows: <WL_HOME>\server\lib

   Note: WL_HOME is the path to the wlserver_10.3 directory under the directory where you have installed Oracle WebLogic Server 10.3.3 before installing Oracle Identity Manager.

7. At the command prompt, run the following command:

   java -jar wljarbuilder.jar

   This command generates a library, which is required by all WebLogic Server application clients.
8. Install Oracle Identity Management 11g Release 1 (11.1.1.3.0) suite containing Oracle Identity Manager (OIM) and Oracle Access Manager (OAM), as described in Installing the Oracle Identity Management 11g Software.

An IDM_Home directory, such as Oracle_IDM2, is created. This directory is the Oracle Home for Oracle Identity Manager (OIM) and Oracle Access Manager (OAM).

For more information, see Important Notes Before You Begin.

9. Configure Oracle Identity Manager (OIM) and Oracle Access Manager (OAM) in a new or existing WebLogic administration domain, as described in OIM with LDAP Sync, and OAM. Note that Oracle Identity Manager and Oracle Access Manager must be in the same WebLogic domain. By default, this domain is located in the <Middleware_Home>/user_projects/domains directory (on Windows). On UNIX, the domain is created in the <Middleware_Home>/user_projects/domains directory. The path to this domain directory is referred to as DOMAIN_HOME in this chapter.

However, do not set up LDAP Sync for Oracle Identity Manager at this stage. In addition, do not run the Oracle Identity Manager Configuration Wizard to configure Oracle Identity Manager Server at this stage.

21.4 Introduction to WebLogic Server Domain Agent

The WebLogic Server Domain Agent, referred to as Domain Agent in this chapter, provides out-of-the-box access protection for applications deployed in a WebLogic administration domain. This agent is enabled, by default. The agent is suitable for Oracle Identity Management environments where access protection of external applications or partners is not necessary.

The out-of-the-box agent provides the following features for applications deployed in a WebLogic domain:

- Authentication policy enforcement
- Authorization policy enforcement
- Front-channel authentication
- Identity assertion
- Back-channel anonymous authentication
- Session validation
- Logout

21.5 Setting Up Integration Between OIM and OAM Using the Domain Agent

After completing the prerequisites, you can set up integration between Oracle Identity Manager (OIM) and Oracle Access Manager (OAM) as follows:

1. Ensure that all the prerequisites, listed in Prerequisites, are satisfied. In addition, see Important Notes Before You Begin.

2. Ensure that the WL_HOME environment variable is set to the wlserver_10.3 directory under your Middleware Home. On UNIX, it is the <Middleware_Home>/wlserver_10.3 directory. On Windows, it is the <Middleware_
Home>\wlserver_10.3 directory. In addition, set the JAVA_HOME environment variable to the directory where the JDK is installed on your machine.

3. Open the ldapconfig.props file in a text editor. This file is located in the server/ldap_config_util directory under Oracle_IDM2, which is your IDM_Home for Oracle Identity Manager and Oracle Access Manager.

4. In the ldapconfig.props file, set values for the following parameters:
   - OIMProviderURL - Specify the URL for the OIM provider in the format: t3://localhost:8003
   - OIDURL - Specify the URL for the OID instance.
   - OIDAdminUsername - Specify the OID Administrator’s user name, such as cn=orcladmin.
   - OIDSearchBase - Specify the OID search base, such as ou=people,dc=com.
   - UserContainerName - Specify the name of the user container, which is used as a default container of roles in the LDAP directory. For example, cn=Users and cn=Groups.
   - RoleContainerName - Specify the name of the user container, which is used as a default container of users in the LDAP directory.
   - ReservationContainerName - Specify the name of the user reservation container, which is used to reserve users while waiting for user creation approvals in Oracle Identity Manager. When the user creation is approved, users are moved from the reservation container to the actual user container.

5. On the command line, run the LDAP configuration pre-setup script (LDAPConfigPreSetup.bat on Windows, and LDAPConfigPreSetup.sh on UNIX). The files are located in the same server/ldap_config_util directory under your IDM_Home for Oracle Identity Manager and Oracle Access Manager.

6. When prompted, enter the OID administrator’s password and the OIM administrator’s password.

   **Tip:** After executing the LDAPConfigPreSetup script, you can run the following ldapsearch commands on the command line to verify that the necessary schema is created in Oracle Internet Directory:

   ```
   ldapsearch -p <OIDPORT> -D cn=orcladmin -w <ORCLADMIN_PASSWORD> -h <OIDHOST> -b "cn=subschemasubentry" -s base "objectclass=" attributetypes | grep ob
   ldapsearch -p <OIDPORT> -D cn=orcladmin -w <ORCLADMIN_PASSWORD> -h <OIDHOST> -b "cn=subschemasubentry" -s base "objectclass=" objectclasses | grep OIM
   ```

   The above ldapsearch commands should return rows if the LDAPConfigPreSetup script was successfully executed.

7. Configure Oracle Virtual Directory using Oracle Directory Services Manager to add adapters for users and changelog, as described in Task 2: Configuring OVD and OID for OIM.
8. Start the WebLogic Administration Server in the domain that manages Oracle Identity Manager and Oracle Access Manager. For information about starting the Administration Server, see Starting the Stack.

9. Update the Single Sign-On (SSO) provider configuration as follows:
   a. On the command line, use the `cd` command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. Oracle_IDM2 is the example IDM_Home directory for Oracle Identity Manager and Oracle Access Manager. For more information, see Important Notes Before You Begin.
   b. Use the WebLogic Scripting Tool (WLST) interface to add Oracle Access Manager Single Sign-On service instance and required properties as follows:
      
      On UNIX: Run `./wlst.sh` on the command line.
      
      On Windows: Run `wlst.cmd`.
      
      At the WLST command prompt (`wls:/offline>`), type the following:
      
      ```
      connect()
      ```
      
      You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.
      
      Run the `addOAMSSOProvider` WLST Online command that adds an OAM SSO provider.
      
      ```
      addOAMSSOProvider(loginuri="/${app.context}/adfAuthentication", logouturi="/oamsso/logout.html", autologinuri="/obrar.cgi")
      ```

### Table 21–1  WLST addOAMSSOProvider Command Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>loginuri</td>
<td>Specifies the URI of the login page. Required.</td>
</tr>
<tr>
<td>logouturi</td>
<td>Specifies the URI of the logout page. Optional. If unspecified, defaults to logouturi=NULL. Set to &quot;&quot; to ensure that ADF security calls the OPSS logout service, which uses the implementation of the class OAMSSOServiceImpl to clear the cookie ObSSOCookie.</td>
</tr>
<tr>
<td>autologinuri</td>
<td>Specifies the URI of the autologin page. Optional. If unspecified, it defaults to autologin=NULL.</td>
</tr>
</tbody>
</table>
Tip: To verify the configuration the Single Sign-On (SSO) provider, complete the following steps:

1. From your present working directory, move to the following directory:
   `<DOMAIN_HOME>/config/fmwconfig`

2. Open the `jps-config.xml` file in a text editor.

3. In this file, you should see the following sets of entries, in addition to the existing entries:
   ```xml
   <propertySet name="props.auth.uri.0">
     <property value="/oamsso/logout.html" name="logout.url"/>
     <property value="/obrar.cgi" name="autologin.url"/>
     <property value="/${app.context}/adfAuthentication" name="login.url.BASIC"/>
     <property value="/${app.context}/adfAuthentication" name="login.url.ANONYMOUS"/>
     <property value="/${app.context}/adfAuthentication" name="login.url.FORM"/>
   </propertySet>
   <serviceInstance provider="sso.provider.0" name="sso.inst.0">
     <property value="oracle.security.wls.oam.providers.sso.OAMSSOServiceProviderImpl" name="sso.provider.class"/>
   </serviceInstance>
   ```

   **Note:** If you have more than one host in the Oracle Identity Management domain, you must update the default value of the primaryAccessServer configuration parameter of the Domain Agent to the actual values.

10. Log in to My Oracle Support website ([http://support.oracle.com](http://support.oracle.com)), and search for the Single Sign-On Server **Patch 9824531**. Install this patch, as described in the readme file that is included in the patch.

11. Rewire Oracle Access Manager (OAM) to Oracle Internet Directory (OID) by running the `createUserIdentityStore` WLST command:
   ```
   On the command line, use the cd command to move from your present working directory to the `Oracle_IDM2/common/bin` directory. Oracle_IDM2 is the example IDM_Home directory for Oracle Identity Manager and Oracle Access Manager. For more information, see **Important Notes Before You Begin**.
   Use the WebLogic Scripting Tool (WLST) interface to add Oracle Access Manager Single Sign-On service instance and required properties as follows:
   On UNIX: Run `./wlst.sh` on the command line.
   On Windows: Run `wlst.cmd`.
   ```
At the WLST command prompt (wls:/offline>), type the following:

```java
connect()
```

You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the createUserIdentityStore WLST Online command to configure Oracle Access Manager to use Oracle Internet Directory as its LDAP provider, as in the following example:

```java
createUserIdentityStore(name="OAMOIDIdStoreForOIM",principal="cn=orcladmin", credential="testing1", type="LDAP", roleSecAdmin="OAMAdministrators", userAttr="uid", ldapProvider="OID", userSearchBase="cn=Users,dc=us,dc=acme,dc=com", ldapUrl="ldap://<oid host>:<oid port>", isPrimary="true", userIDProvider="OracleUserRoleAPI", groupSearchBase="cn=Groups,dc=us,dc=acme,dc=com")
```

**Note:** Users that are members of the group specified in the roleSecAdmin attribute are allowed access to the Oracle Access Manager Administration Console. This group must exist under the Directory Information Tree (DIT) specified in the groupSearchBase attribute. If the group is not available, you can specify the user name, such as orcladmin, who will have access to the Oracle Access Manager Administration Console. Note that only the user specified in this attribute will have access to the Oracle Access Manager Administration Console.

If orcladmin is specified as roleSecAdmin, you may encounter permission problems when you run the RREG tool to register the Oracle HTTP Server 10g Webgate agent instead of the Domain Agent. Therefore, you must provide an appropriate group in Oracle Internet Directory user identity store in order to be able to run RREG to register the Oracle HTTP Server 10g Webgate agent.

You can also use the Oracle Access Manager Administration Console, deployed on the Administration Server, to configure Oracle Internet Directory as an LDAP provider for Oracle Access Manager. For more information, see the "Managing User-Identity Store and OAM Administrator Registrations" topic in the guide Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

**Tip:** To verify whether Oracle Access Manager is using Oracle Internet Directory as its LDAP provider, complete the following steps:

1. Open the oam-config.xml file in a text editor to verify whether the file contains an entry with the name specified in the createUserIdentityStore WLST command. The XML file is located in the `<DOMAIN_HOME>/config/fmwconfig` directory.

2. If this entry is present, verify whether value of the property IsPrimary for this entry is set to true.

12. Set up an OID authenticator as follows:
a. Log in to the WebLogic Administration Console.

b. In the Domain Structure section on the left navigation pane, click Security Realms. The Summary of Security Realms page is displayed.

c. In the Change Center section on the left navigation pane, click Lock & Edit.

d. On this page, click a default realm, such as myrealm. The Settings for myrealm page is displayed.

e. On this page, click the Providers tab.

f. Under Authentication Providers, click New. The Create a New Authentication Provider page is displayed.

g. On this page, enter a name for the provider in the Name text box. For example, test.

h. Select OracleInternetDirectoryAuthenticator from the Type drop-down list.

i. Click OK. The new provider test is listed on the Settings for myrealm page.

j. On this page, click the newly created authentication provider. The Settings for test page is displayed.

k. On this page, select SUFFICIENT as the Control Flag. Click Save to save the settings.

l. Exit the WebLogic Administration Console.

13. Configure Oracle Access Manager (OAM) for Oracle Identity Manager (OIM) integration as follows:

On the command line, use the cd command to move from your present working directory to the Oracle_IDM2/common/bin directory. Oracle_IDM2 is the example IDM_Home directory for Oracle Identity Manager and Oracle Access Manager. For more information, see Important Notes Before You Begin.

Use the WebLogic Scripting Tool (WLST) interface to add Oracle Access Manager Single Sign-On service instance and required properties as follows:

On UNIX: Run ./wlst.sh on the command line.

On Windows: Run wlst.cmd.

At the WLST command prompt (wls:/offline>), type the following:

c:connect()

You are prompted to enter the WebLogic Administration Server user name, password, and URL. For more information about using the WLST interface, see the topic "Using the WebLogic Scripting Tool" in the guide Oracle Fusion Middleware Oracle WebLogic Scripting Tool.

Run the configureOIM WLST Online command to configure Oracle Access Manager for OIM integration.

```configureOIM(oimHost = "<OIM_Host>", oimPort = "<OIM_Port>", oimSecureProtocolEnabled = "false", oimAccessGatePwd = "<Password>", oimCookieDomain = "<cookie_domain>")```

"<OIM_Host>" and "<OIM_Port>" parameters in this WLST command refer to the Oracle Identity Manager Managed Server of Oracle Identity Manager when you are using the Oracle Identity Management domain agent and a single Oracle Identity Manager instance OIM. If you set secureProtocol to false, HTTP is used. If you set it to true, HTTPS is used.
14. Run the Oracle Identity Manager Configuration Wizard to configure Oracle Identity Manager Server. To start the wizard, go to the bin directory under Oracle_IDM2 (your IDM Home for Oracle Identity Manager and Oracle Access Manager) and run the following command on the command line:

- On Windows:
  
  `config.bat`

- On UNIX:

  `./config.sh`

15. Use the Oracle Identity Manager Configuration Wizard to configure Oracle Identity Manager, as described in Configuring OIM Server. While configuring Oracle Identity Manager Server, ensure that you select the Enable Identity Administration Integration with OAM option on the LDAP Sync and OAM screen.

Note that you must enter the same values oimAccessGatePwd password and oimCookieDomain, specified in the configureOIM WLST command, as input to fields Password of Access Gate and Domain of Cookie on the LDAP Sync and OAM screen.

When you choose to enable Identity Administration Integration with OAM using the Oracle Identity Manager Configuration Wizard, the Enable LDAP Sync option for OIM is selected, by default.
Proceed to complete the configuration of Oracle Identity Manager Server. When prompted, enter the OIM administrator’s password and the xelsysadm password.

**Tip:** To verify the configuration of Oracle Identity Manager, complete the following steps:

1. Check authenticator configuration as follows:
   1) Restart the WebLogic Administration Server. Log in to the WebLogic Server Administration Console.
   2) Click **Security Realms > myrealm > Providers**.
   3) Verify whether OAM Identity Asserter and OID Authenticator are listed. In addition, click the **Users and Groups** tab. Verify if OID users are populated.

2. Download the `oim-config.xml` file and verify the Single Sign-On (SSO) configuration information as follows:
   1) Start the Oracle Identity Manager Managed Server.
   2) Log in to Oracle Enterprise Manager using your WebLogic Server administrator credentials.
   3) Click **Identity and access > oim > oim(version)**. Right-click and select **System MBean Browser**. The System MBean Browser page is displayed.
   4) Under Application Defined MBeans, select `oracle.iam > Server:oim_server1 > Application: oim > XMLConfig > XMLConfig.SSOConfig > SSOConfig`. OAM’s access server information used in OIM is displayed. Validate and verify the information.

16. Shut down the WebLogic Administration Server, as described in **Stopping the Stack**.

17. Log in to My Oracle Support website (http://support.oracle.com), and search for the Single Sign-On Server **Patch 9449855**. Install this patch, as described in the readme file that is included in the patch.

18. Retart the Administration Server and the Managed Servers (OIM, SOA, and OAM). For information about stopping the servers and then starting the servers, see **Stopping the Stack** and **Starting the Stack**.

19. On the command line, run the LDAP configuration post-setup script (`LDAPConfigPostSetup.bat` on Windows, and `LDAPConfigPostSetup.sh` on UNIX). The files are located in the `server/ldap_config_util` directory under your IDM_Home (`Oracle_IDM2`) for Oracle Identity Manager and Oracle Access Manager.

The integration between Oracle Identity Manager and Oracle Access Manager using the out-of-the-box Domain Agent is now complete.

### 21.6 Verifying the Configuration

After completing the configuration, you can verify the integration between Oracle Identity Manager and Oracle Access Manager as follows:
1. Access the Oracle Access Manager Administration Console (http://<admin server host>:<admin server port>/oamconsole).
   
   You should be redirected to Oracle Access Manager runtime environment. When you log in as a valid administrator, you must be able to access the console. The credential collector URL should be the URL of the Oracle Access Manager Managed Server. This page should contain links to Forgot Password, Self Register, and Track Registration.

   
   The Oracle Access Manager login page from the Oracle Access Manager Managed Server should be displayed. This page should contain links to Forgot Password, Self Register, and Track Registration.

3. Log in as xelsysadm.
   
   You should be able to access the Oracle Identity Manager administration page.

4. Create a new user in the Oracle Identity Manager administration page.
   
   Log off the Oracle Identity Manager administration page and try to log in again using the newly created user name. When you provide valid credentials, you are prompted to reset the password and to set answers to challenge questions during first login. After this successful operation, you are redirected to the requested resource.

21.7 Using Oracle HTTP Server 10g Webgate for Oracle Access Manager 11g

If you wish to use Oracle HTTP Server 10g Webgate for Oracle Access Manager to protect the applications, the ones previously protected by the Domain Agent, you must migrate from the Domain Agent to Oracle HTTP Server 10g Webgate for Oracle Access Manager, as described in the chapter Migrating from Domain Agent to Oracle HTTP Server 10g Webgate for OAM.
Migrating from Domain Agent to Oracle HTTP Server 10g Webgate for OAM

This chapter describes how to migrate from the Domain Agent to Oracle HTTP Server 10g Webgate for Oracle Access Manager (OAM) to protect applications by using the same policy domain used by the Domain Agent. By default, applications deployed in an Oracle Identity Management 11.1.1.3.0 domain are protected by the Domain Agent.

**Note:** Read this chapter only if you want to use Oracle HTTP Server 10g Webgate for Oracle Access Manager after setting up integration between Oracle Identity Manager and Oracle Access Manager, as described in the chapter Integration Between OIM and OAM.

This chapter discusses the following topics:

- Installing and Configuring Oracle HTTP Server 11g (11.1.1.3.0)
- Provisioning Oracle HTTP Server 10g Webgate for OAM Profile
- Installing Oracle HTTP Server 10g Webgate for OAM
- Configuring mod_weblogic
- Optional: Configuring Host Identifier
- Updating OIM Server Configuration
- Optional: Disabling Domain Agent
- Optional: Updating Oracle Identity Manager Configuration

### 22.1 Installing and Configuring Oracle HTTP Server 11g (11.1.1.3.0)

If you do not have an existing Oracle HTTP Server 11g (11.1.1.3.0) installation, you can install Oracle HTTP Server 11.1.1.2.0 and patch it to the latest version 11.1.1.3.0.

Oracle HTTP Server 11.1.1.2.0 is included in the Oracle Web Tier 11g Installer, you must download the Oracle Web Tier 11g (11.1.1.2.0) Installer from the Oracle Technology Network (OTN):


Alternatively, you can download the latest Oracle Fusion Middleware 11g software from the following website:

http://edelivery.oracle.com/
Note: For information about installing and configuring Oracle HTTP Server 11g (11.1.2.0), see the "Installing Oracle Web Tier" topic in the Oracle Fusion Middleware Installation Guide for Oracle Web Tier. For information about patching Oracle HTTP Server 11.1.2.0 to 11.1.3.0 using the Patch Set Installer, see the "Applying the Latest Oracle Fusion Middleware Patch Set" topic in the Oracle Fusion Middleware Patching Guide.

After you install and configure Oracle HTTP Server, a working instance of Oracle HTTP Server is configured in an Instance Home.

22.2 Provisioning Oracle HTTP Server 10g Webgate for OAM Profile

For information about provisioning a profile for Oracle HTTP Server 10g Webgate for use with Oracle Access Manager 11g server, see the "Provisioning a 10g WebGate for Use with OAM 11g" topic in the Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

Note: Ensure that the hostIdentifier parameter is set to IDMDomain and the autoCreatePolicy parameter is set to false when you are provisioning Oracle HTTP Server 10g Webgate to replace Domain Agent for OAM-OIM integration.

22.3 Installing Oracle HTTP Server 10g Webgate for OAM

For information about installing Oracle HTTP Server 10g Webgate for Oracle Access Manager (OAM), see the "Locating and Installing the Latest OAM 10g WebGate for OAM 11g" topic in the Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager.

22.4 Configuring mod_weblogic

After installing Oracle HTTP Server 10g Webgate for Oracle Access Manager, you must configure the Web server to forward requests to the applications deployed on the WebLogic Server.

Open the mod_wl_ohs.conf, which is located in <OHS_Instance_Home>/config/OHS/<Instance_Name>, in a text editor and add appropriate entries, as in the following example:

```xml
<IfModule weblogic_module>
  <Location /oamconsole>
    SetHandler weblogic-handler
    WebLogicHost adcdaal3.us.oracle.com
    WebLogicPort 6162
  </Location>
  <Location /apmconsole>
    SetHandler weblogic-handler
    WebLogicHost adcdaal3.us.oracle.com
    WebLogicPort 6162
  </Location>
</IfModule>
```
Add similar Location entries for all the URIs for all the applications that were previously accessed directly on WebLogic Server.

After making the changes, restart Oracle HTTP Server. You can use the OPMN command-line tool to start or stop your Oracle HTTP Server instance. If any instances are running, run the following command on the command-line to stop all running instances:

```
<Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl stopall
```

To restart the Oracle HTTP Server instance, run the following commands on the command line:

1. `<Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl start`
2. `<Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl startproc ias-component=<Oracle_HTTP_Server_Instance_Name>

### 22.5 Optional: Configuring Host Identifier

This task is required only if you have set up integration between Oracle Identity Manager and Oracle Access Manager.

To configure host identifiers for auto-login functionality, complete the following steps:

1. Launch the Oracle Access Manager Administration Console (http://<oamserverhost>:<adminport>/oamconsole).
2. Click the **Policy Configuration** tab.
3. On the left navigation pane, click **Host Identifiers > IDMDomain**. The Host Identifier page is displayed.
4. In the **Operations** section on the Host Identifier page, all the host name and port number combinations are listed. Verify whether the section includes the host name and port number of the web server on which the Oracle HTTP Server 10g Webgate is configured.

   If it is not listed, add an entry as follows:

   a. On the **Operation** section, click the + icon. A new blank row is added to the Operations section.
   b. In the **Host Name** field, enter the host name of the web server on which the Oracle HTTP Server 10g Webgate is configured.
   c. In the **Port** field, enter the port number.
   d. Click **Apply**.

### 22.6 Updating OIM Server Configuration

Update the Oracle Identity Manager (OIM) configuration in the `oam-config.xml` file (located in the `<DOMAIN_HOME>/config/fmwconfig` directory) to ensure that the Host and Port attributes of the IdentityManagement element in the file point to the Oracle HTTP Server on which the Oracle HTTP Server Webgate 10g is configured:

1. Open the `oam-config.xml` file in a text editor.
2. Update the entries as follows:

   ```xml
   <Setting Name="IdentityManagement" Type='htf:map'>
   <Setting Name="ServerConfiguration" Type='htf:map'>
   <Setting Name="OIM-SERVER-1" Type='htf:map'>
   ```
22.7 Optional: Disabling Domain Agent

Domain Agent, which runs on the Administration Server and all Managed Servers in the Oracle Identity Management domain, automatically detects the existence of a Webgate in the request flow. You do not need to disable the Domain Agent. However, if you want to disable the out-of-the-box Domain Agent, you can complete the following steps:

1. From your present working directory, move to the `<Middleware_Home>/user_projects/domains/<name_of_your_WebLogic_domain>` directory (On UNIX). On Windows, move to the `<Middleware_Home>\user_projects\domains\<name_of_your_WebLogic_domain>` directory.

2. To disable the Domain Agent running on the Administration Server, start the WebLogic Administration Server on the command line as follows:
   
   On UNIX:
   
   ```bash
   ./startWebLogic.sh -DWLSAGENT_DISABLED=true
   ```
   
   On Windows:
   
   ```bash
   startWebLogic.cmd -DWLSAGENT_DISABLED=true
   ```

3. From your present working directory, move to the `<Middleware_Home>/user_projects/domains/<name_of_your_WebLogic_domain>/bin` directory (On UNIX). On Windows, move to the `<Middleware_Home>\user_projects\domains\<name_of_your_WebLogic_domain>\bin` directory.

4. To disable the Domain Agent running on Managed Servers in the domain, start the Managed Servers on the command line as follows:
   
   On UNIX:
   
   ```bash
   ./startManagedWebLogic.sh <name_of_your_Managed_Server> -DWLSAGENT_DISABLED=true
   ```
   
   On Windows:
   
   ```bash
   startManagedWebLogic.cmd <name_of_your_Managed_Server> -DWLSAGENT_DISABLED=true
   ```

22.8 Optional: Updating Oracle Identity Manager Configuration

You can update the `<OHS_Instance_Home>/config/OHS/<ohs_name>/mod_wl_ohs.conf` to front-end Oracle Identity Manager URLs with Oracle HTTP Server.

To do so, complete the following steps:

Open the `mod_wl_ohs.conf` file in a text editor and add appropriate entries, as in the following example:

```xml
<IfModule weblogic_module>
  WebLogicHost OIM_MANAGED_SERVER_HOST
  WebLogicPort OIM_MANAGED_SERVER_PORT
  MatchExpression /oim*
  MatchExpression /admin*
</IfModule>
```
Replace the values of `OIM_MANAGED_SERVER_HOST` and `OIM_MANAGED_SERVER_PORT` with the values of Oracle Identity Manager Managed Server’s host and port.

After making the changes, restart Oracle HTTP Server. You can use the OPMN command-line tool to start or stop your Oracle HTTP Server instance. If any instances are running, run the following command on the command-line to stop all running instances:

```
<Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl stopall
```

To restart the Oracle HTTP Server instance, run the following commands on the command line:

1. `<Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl start`
2. `<Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl startproc ias-component=<Oracle_HTTP_Server_Instance_Name>`

### Updating the OIM Configuration When the OAM URL or Agent Profile Changes

You can update the Oracle Identity Manager configuration when the name of the agent profile is modified or the OAM URL is modified.

To update Oracle Identity Manager configuration, complete the following steps:

1. Log in to Oracle Enterprise Manager using your WebLogic Server administrator credentials.
2. Click `Identity and access > oim > oim(version)`. Right-click and select `System MBean Browser`. The System MBean Browser page is displayed.
4. Update `webgateType` to `ohs10gWebgate` as follows:
   a. Under `XMLConfig` MBean, move to `XMLConfig.SSOConfig`.
   b. Specify `ohsWebgate10g` as the `webgateType` in the MBean.
   c. Click `Apply`.
5. Replace the front-end URL with the URL of Oracle HTTP Server. This should be the same Oracle HTTP Server that was used before installing Oracle HTTP Server 10g Webgate for Oracle Access Manager. Complete the following steps:
   a. Under `XMLConfig` MBean, move to `XMLConfig.DiscoveryConfig`.
   b. Update `OimFrontEndURL` with the URL of Oracle HTTP Server.
   c. Click `Apply`. 

---

Optional: Updating Oracle Identity Manager Configuration
This chapter describes how to install and configure Oracle HTTP Server 11g Webgate for Oracle Access Manager.

It discusses the following topics:

- **Installation Overview**
- **Preparing to Install Oracle HTTP Server 11g Webgate for Oracle Access Manager**
- **Installing Oracle HTTP Server 11g Webgate for Oracle Access Manager**
- **Post-Installation Steps**
- **Verifying the Oracle HTTP Server 11g Webgate for Oracle Access Manager**
- **Getting Started with a New Oracle HTTP Server 11g Webgate Agent for Oracle Access Manager**

---

**Note:** Oracle HTTP Server 11g Webgate for Oracle Access Manager is not intended for use in Oracle Identity Management environments where you want to set up integration among Oracle Identity Management components.

---

### 23.1 Installation Overview

Installing Oracle HTTP Server 11g Webgate for Oracle Access Manager involves the following steps:

1. **Installing Oracle HTTP Server 11.1.1.2.0, which is included in the Oracle Web Tier 11.1.1.2.0 Installer**

   **Note:** If you have an existing Oracle HTTP Server 11.1.1.3.0 installation, which you patched from Oracle HTTP Server 11.1.1.2.0, you can use the same Oracle HTTP Server 11.1.1.3.0 installation.

   Oracle HTTP Server 11g Webgate for Oracle Access Manager requires either Oracle HTTP Server 11.1.1.2.0 or Oracle HTTP Server 11.1.1.3.0.

2. **On Linux and Solaris operating systems: Installing third-party GCC libraries**

3. **Running the Oracle HTTP Server Webgate Installer to install Oracle HTTP Server 11g Webgate for Oracle Access Manager**
4. Verifying the installation of Oracle HTTP Server 11g Webgate for Oracle Access Manager

5. Completing post-installation configuration steps

6. Registering the new Webgate agent

The following figure illustrates the process of installing Oracle HTTP Server 11g Webgate for Oracle Access Manager.

**Figure 23–1 Oracle HTTP Server 11g Webgate Installation Process**

As a standard practice, complete the following prerequisites for installing Oracle Fusion Middleware software:

1. Review Oracle Fusion Middleware certification information.


2. Review the system requirements.

3. Satisfy all dependencies, such as installing Oracle HTTP Server, which is included in the Oracle Web Tier Installer.

4. Perform the installation procedure for the appropriate component.

5. Verify the installation.

   Table 23–1 lists the Installers and tools used to install and configure Oracle HTTP Server 11g Webgate for Oracle Access Manager at different stages of the installation and configuration process.
Preparing to Install Oracle HTTP Server 11g Webgate for Oracle Access Manager

23.2 Preparing to Install Oracle HTTP Server 11g Webgate for Oracle Access Manager

Oracle HTTP Server 11g Webgate for Oracle Access Manager requires Oracle HTTP Server 11g (11.1.1.2.0 or 11.1.1.3.0), which is included in the Oracle Web Tier 11g Installer.

You must run the Oracle Web Tier 11g Installer to install Oracle HTTP Server 11.1.1.2.0 and create an Oracle Home for Oracle Web Tier under a Middleware Home. If you have an existing Oracle HTTP Server 11.1.1.3.0 installation, which you patched from Oracle HTTP Server 11.1.1.2.0, you can use the same Oracle HTTP Server 11.1.1.3.0 installation.

In addition, if you are using the Linux or Solaris operating system, you must install third-party GCC libraries on your machine before installing Oracle HTTP Server 11g Webgate for Oracle Access Manager.

This section discusses the following topics:

- Oracle Fusion Middleware Certification
- Installing and Configuring OAM 11g
- Installing and Configuring Oracle HTTP Server 11g (11.1.1.2.0 or 11.1.1.3.0)
- Installing Third-Party GCC Libraries (Linux and Solaris Operating Systems Only)
- Prerequisites for 64-Bit Oracle HTTP Server 11g Webgates on Windows 2003 and Windows 2008 64-Bit Platforms

23.2.1 Oracle Fusion Middleware Certification

The Oracle Fusion Middleware Supported System Configurations document provides certification information for Oracle Fusion Middleware, including supported installation types, platforms, operating systems, databases, JDKs, and third-party products related to Oracle Identity Management 11g Release 1 (11.1.1).

You can access the Oracle Fusion Middleware Supported System Configurations document by searching the Oracle Technology Network (OTN) web site:


23.2.2 Installing and Configuring OAM 11g

For information about installing Oracle Access Manager (OAM), see Installing the Oracle Identity Management 11g Software. For information about configuring Oracle
Access Manager in a new or existing WebLogic administration domain, see Configuring Oracle Access Manager (OAM).

In addition, see the "Securing Communication Between OAM 11g Servers and WebGates" topic in the Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager for information about configuring Oracle Access Manager in Open, Simple, or Cert mode.

23.2.3 Installing and Configuring Oracle HTTP Server 11g (11.1.1.2.0 or 11.1.1.3.0)

Oracle HTTP Server 11g Webgate for Oracle Access Manager is supported on both Oracle HTTP Server 11.1.1.2.0 and Oracle HTTP Server 11.1.1.3.0. Therefore, if you have an existing Oracle HTTP Server 11.1.1.3.0 installation, you do not need to install or patch any new version of Oracle HTTP Server.

If you wish to install Oracle HTTP Server 11.1.1.2.0, which is included in the Oracle Web Tier 11g Installer, you must download the Oracle Web Tier 11g (11.1.1.2.0) Installer from the Oracle Technology Network (OTN):


Alternatively, you can download the latest Oracle Fusion Middleware 11g software from the following website:

http://edelivery.oracle.com/

---

**Note:** For information about installing and configuring Oracle HTTP Server 11g (11.1.1.2.0), see the "Installing Oracle Web Tier" topic in the Oracle Fusion Middleware Installation Guide for Oracle Web Tier. For information about patching Oracle HTTP Server 11.1.1.2.0 to 11.1.1.3.0 using the Patch Set Installer, see the "Applying the Latest Oracle Fusion Middleware Patch Set" topic in the Oracle Fusion Middleware Patching Guide.

After you install and configure Oracle HTTP Server, a working instance of Oracle HTTP Server is configured in an Instance Home.

---

23.2.4 Installing Third-Party GCC Libraries (Linux and Solaris Operating Systems Only)

If you are installing Oracle HTTP Server 11g Webgate for Oracle Access Manager on a Linux or Solaris operating system, you must download and install third-party GCC libraries on your machine. See Table 23–2 for more information.

You can download the appropriate GCC library from the following third-party website:

http://gcc.gnu.org/

---

**Note:** You must download sources from this website and compile them to obtain the GCC libraries.

For some operating systems, the required libraries may be available as installable packages from the support websites of operating system vendors.
23.2.5 Prerequisites for 64-Bit Oracle HTTP Server 11g Webgates on Windows 2003 and Windows 2008 64-Bit Platforms

If you are using Windows 2003 or Windows 2008 64-bit operating systems, you must install Microsoft Visual C++ 2005 libraries on the machine hosting the Oracle HTTP Server 11g Webgate for Oracle Access Manager.

These libraries are included in the Microsoft Visual C++ 2005 SP1 Redistributable Package (x64), which can be downloaded from the following website:


23.3 Installing Oracle HTTP Server 11g Webgate for Oracle Access Manager

This section discusses the following topics:

- Launching the Installer
- Installation Flow and Procedure

23.3.1 Launching the Installer

The Installer program for Oracle HTTP Server 11g Webgate for Oracle Access Manager is included in the webgate.zip file.

Perform the following steps to start the installation wizard:

1. Extract the contents of the webgate.zip file to a directory. By default, this directory is named webgate.
2. Move to the Disk1 directory under the webgate folder.
3. Start the Installer by executing one of the following commands:

   **UNIX:** <full path to the runInstaller directory>./runInstaller -jreLoc <WebTier_Home>/jdk

   **Windows:** <full path to the setup.exe directory>\ setup.exe -jreLoc <WebTier_Home>\jdk

---

### Table 23–2  Versions of GCC Third-Party Libraries for Linux and Solaris

<table>
<thead>
<tr>
<th>Operating System</th>
<th>Architecture</th>
<th>GCC Libraries</th>
<th>Required Library Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux 32-bit</td>
<td>x86</td>
<td>libgcc_s.so.1</td>
<td>3.3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>libstdc++.so.5</td>
<td></td>
</tr>
<tr>
<td>Linux 64-bit</td>
<td>x64</td>
<td>libgcc_s.so.1</td>
<td>3.4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>libstdc++.so.6</td>
<td></td>
</tr>
<tr>
<td>Solaris 64-bit</td>
<td>SPARC</td>
<td>libgcc_s.so.1</td>
<td>3.3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>libstdc++.so.5</td>
<td></td>
</tr>
</tbody>
</table>
Note: When you install Oracle HTTP Server, the jdk directory is created under the <WebTier_Home> directory. You must enter the absolute path of the JRE folder located in this JDK when launching the installer. For example, on Windows, if the JDK is located in \oracle\Oracle_WT1\jdk, then launch the installer from the command prompt as follows:

D:\setup.exe -jreLoc D:\oracle\Oracle_WT1\jdk

After the Installer starts, the Welcome screen appears. Continue by referring to the section Installation Flow and Procedure for installing Oracle HTTP Server 11g Webgate for Oracle Access Manager.

23.3.2 Installation Flow and Procedure

Follow the instructions in Table 23-3 to install Oracle HTTP Server 11g Webgate for Oracle Access Manager.

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

Table 23–3  Installation Flow

<table>
<thead>
<tr>
<th>No.</th>
<th>Screen</th>
<th>Description and Action Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome Screen</td>
<td>Click Next to continue.</td>
</tr>
<tr>
<td>2</td>
<td>Prerequisite Checks Screen</td>
<td>Click Next to continue.</td>
</tr>
<tr>
<td>3</td>
<td>Specify Installation Location Screen</td>
<td>Specify the Middleware Home and Oracle Home locations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note that the Middleware Home should contain an Oracle Home for Oracle Web Tier. Oracle WebLogic Server is not a prerequisite for installing Oracle HTTP Server Webgate. However, Oracle HTTP Server, which is a component of Oracle Web Tier, requires only the directory structure for the Middleware home. For more information about these directories, see &quot;Oracle Fusion Middleware Directory Structure and Concepts&quot; in Oracle Fusion Middleware Installation Planning Guide.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Click Next to continue.</td>
</tr>
<tr>
<td>4</td>
<td>On selected UNIX operating systems only (Linux 32- and 64-bit, and Solaris 64-bit): Specify GCC Library Screen</td>
<td>Specify the directory that contains the GCC libraries. Click Next to continue.</td>
</tr>
<tr>
<td>5</td>
<td>Installation Summary Screen</td>
<td>Verify the information on this screen. Click Install to begin the installation.</td>
</tr>
<tr>
<td>6</td>
<td>Installation Progress Screen</td>
<td>If you are installing on a UNIX system, you may be asked to run the ORACLE_HOME/oracleRoot.sh script to set up the proper file and directory permissions. Click Next to continue.</td>
</tr>
<tr>
<td>7</td>
<td>Installation Complete Screen</td>
<td>Click Finish to dismiss the installer.</td>
</tr>
</tbody>
</table>

23.4 Post-Installation Steps

You must complete the following steps after installing Oracle HTTP Server 11g Webgate for Oracle Access Manager:
1. Move to the following directory under your Oracle Home for Webgate:
   On UNIX operating systems:
   `<Webgate_Home>/webgate/ohs/tools/deployWebGate`
   On Windows operating systems:
   `<Webgate_Home}\webgate\ohs\tools\deployWebGate`

2. On the command line, run the following command to copy the required bits of agent from the Webgate_Home directory to the Webgate Instance location:
   On UNIX operating systems:
   `./deployWebgateInstance.sh -w <Webgate_Instance_Directory> -oh <Webgate_Oracle_Home>`
   On Windows operating systems:
   `deployWebgateInstance.bat -w <Webgate_Instance_Directory> -oh <Webgate_Oracle_Home>`

   Where `<Webgate_Oracle_Home>` is the directory where you have installed Oracle HTTP Server Webgate and created as the Oracle Home for Webgate, as in the following example:
   `<MW_HOME>/Oracle_OAMWebGate1`

   The `<Webgate_Instance_Directory>` is the location of Webgate Instance Home, which is same as the Instance Home of Oracle HTTP Server, as in the following example:
   `<MW_HOME>/Oracle_WT1/instances/instance1/config/OHS/ohs1`

   Note that an Instance Home for Oracle HTTP Server is created after you configure Oracle HTTP Server. This configuration is performed after installing Oracle HTTP Server 11.1.1.2.0 or patching to Oracle HTTP Server 11.1.1.3.0.

3. Run the following command to ensure that the `LD_LIBRARY_PATH` variable contains `<Oracle_Home_for_Oracle_HTTP_Server>/lib`:
   On UNIX (depending on the shell):
   `export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:<Oracle_Home_for_Oracle_HTTP_Server>/lib`
   On Windows:
   Set the `<Webgate_Installation_Directory>\webgate\ohs\lib` location and the `<Oracle_Home_for_Oracle_HTTP_Server>\bin` location in the `PATH` environment variable. Add a semicolon (`;`) followed by this path at the end of the entry for the `PATH` environment variable.

4. From your present working directory, move up one directory level:
   On UNIX operating systems, move to:
   `<Webgate_Home>/webgate/ohs/tools/setup/InstallTools`
   On Windows operating systems, move to:
   `<Webgate_Home>\webgate\ohs\tools\EditHttpConf`

5. On the command line, run the following command to copy the `apache_webgate.template` from the Webgate_Home directory to the Webgate Instance location (renamed to `webgate.conf`) and update the `httpd.conf` file to add one line to include the name of `webgate.conf`: 
On UNIX operating systems:

```
./EditHttpConf -w <Webgate_Instance_Directory> [-oh <Webgate_Oracle_Home>] [-o <output_file>]
```

On Windows operating systems:

```
EditHttpConf.exe -w <Webgate_Instance_Directory> [-oh <Webgate_Oracle_Home>] [-o <output_file>]
```

---

**Note:** The `-oh <WebGate_Oracle_Home>` and `-o <output_file>` parameters are optional.

Where `<Webgate_Oracle_Home>` is the directory where you have installed Oracle HTTP Server Webgate for Oracle Access Manager and created as the Oracle Home for Webgate, as in the following example:

```
<MW_HOME>/Oracle_OAMWebGate1
```

The `<Webgate_Instance_Directory>` is the location of Webgate Instance Home, which is same as the Instance Home of Oracle HTTP Server, as in the following example:

```
<MW_HOME>/Oracle_WT1/instances/instance1/config/OHS/ohs1
```

The `<output_file>` is the name of the temporary output file used by the tool, as in the following example:

```
Edithttpconf.log
```

Note that an Instance Home for Oracle HTTP Server is created after you configure Oracle HTTP Server. This configuration is performed after installing Oracle HTTP Server 11.1.1.2.0 or patching to Oracle HTTP Server 11.1.1.3.0.

### 23.5 Verifying the Oracle HTTP Server 11g Webgate for Oracle Access Manager

After completing the installation of Oracle HTTP Server 11g Webgate for Oracle Access Manager, including the post-installation steps, you can examine the `installDATE-TIME_STAMP.out` log file to verify the installation.

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

On Microsoft Windows systems, the default location for the inventory directory is `C:\Program Files\Oracle\Inventory\logs`.

### 23.6 Getting Started with a New Oracle HTTP Server 11g Webgate Agent for Oracle Access Manager

Before you can get started with the new Oracle HTTP Server 11g Webgate agent for Oracle Access Manager, you must complete the following tasks:

1. **Register the New Webgate Agent**
2. **Copy Generated Files and Artifacts to the Webgate Instance Location**
3. **Restart the Oracle HTTP Server Instance**
23.6.1 Register the New Webgate Agent

You can register the new Webgate agent with Oracle Access Manager by using the Oracle Access Manager Administration Console. For more information, see the "Registering Partners (Agents and Applications) by Using the Console" topic in the Oracle Fusion Middleware Administrator's Guide for Oracle Access Manager.

Alternatively, you can use the RREG command-line tool to register a new Webgate agent. The tool can be run in two modes: In-Band mode, and Out-Of-Band mode.

Setting Up the RREG Tool

1. After installing and configuring Oracle Access Manager, navigate to the following location:
   
   On UNIX operating systems:
   
   `<IDM_Home>/oam/server/rreg/client`
   
   On Windows operating systems:
   
   `<IDM_Home>\oam\server\rreg\client`

2. On the command line, untar the RREG.tar.gz file using `gunzip`, as in the following example:

   ```sh
gunzip RREG.tar.gz
tar -xvf RREG.tar
   ```

   The tool used to register the agent is located in the following location:

   On UNIX operating systems:

   `<RREG_Home>/bin/oamreg.sh`

   On Windows operating systems:

   `<RREG_Home>\bin\oamreg.bat`

   __Note:__ `<RREG_Home>` is the directory where you extracted the contents of RREG.tar.gz/rreg to.

   Set the following environment variables in the `oamreg.sh` or `oamreg.bat` script:

   - `OAM_REG_HOME` - Set this variable to the absolute path to the directory where you extracted the contents of RREG.tar/rreg.
   - `JDK_HOME` - Set this variable to the absolute path to the directory where Java/JDK is installed on your machine.

Updating the OAM11gRequest.xml File

You must update the agent parameters, such as `agentName`, in the OAM11gRequest.xml file located in the `<RREG_Home>/input` directory on the Windows operating system. On the UNIX operating system, the file is located in the `<RREG_Home>/input` directory.

__Note:__ The OAM11gRequest.xml file or the short version OAM11gRequest_short.xml is used as a template. You can copy this template file and use.
**In-Band Mode**

If you run the RREG tool once after updating the Webgate parameters in the OAM11GRequest.xml file, the files and artifacts required by Webgate are generated in the following directory:

On UNIX operating systems:

```
<RREG_Home>/output/<agent_name>
```

On Windows operating systems:

```
<RREG_Home>\output\<agent_name>
```

---

**Note:** You can run RREG either on a client machine or on the server machine. If you are running it on the server machine, you must manually copy the artifacts back to the client machine.

Complete the following steps:

1. Open the OAM11GRequest.xml file, which is located in the input directory (``<RREG_Home>/input/`` on UNIX, and ``<RREG_Home>\input\`` on Windows). `<RREG_Home>` is the directory where you extracted the contents of RREG.tar.gz/rreg to. Edit this XML file and fill in parameters for the new Oracle HTTP Server Webgate for Oracle Access Manager.

2. Run the following command on the command line:

   On UNIX operating systems:
   
   ```
   ./<RREG_Home>/bin/oamreg.sh inband input/OAM11GRequest.xml
   ```

   On Windows operating systems:
   
   ```
   <RREG_Home>\bin\oamreg.bat inband input\OAM11GRequest.xml
   ```

**Out-Of-Band Mode**

If you are an end-user with no access to the server, you can email your updated OAM11GRequest.xml file to the system administrator, who can run RREG in the Out-Of-Band mode. You can collect the generated `<AgentID>_Response.xml` file from the system administrator and run RREG on this file to obtain the Webgate files and artifacts you require.

After you receive the generated `<AgentID>_Response.xml` file from the administrator, you must manually copy the file to the input directory on your machine.

Complete the following steps:

1. If you are an end-user with no access to the server, open the OAM11GRequest.xml file, which is located in the input directory (``<RREG_Home>/input/`` on UNIX, and ``<RREG_Home>\input\`` on Windows). `<RREG_Home>` is the directory where you extracted the contents of RREG.tar.gz/rreg to. Edit this XML file and fill in parameters for the new Oracle HTTP Server Webgate for Oracle Access Manager. Send the updated file to your system administrator.

2. If you are an administrator, copy the updated OAM11GRequest.xml file to the input directory on your machine (``<RREG_Home>/input/`` on UNIX, and ``<RREG_Home>\input\`` on Windows). This is the file you received from the
end-user. Move to your (administrator’s) RREG_Home directory and run the
following command on the command line:

On UNIX operating systems:

./<RREG_Home>/bin/oamreg.sh outofband input/OAM11GRequest.xml

On Windows operating systems:

<\RREG_Home>\bin\oamreg.bat outofband input\OAM11GRequest.xml

An <Agent_ID>_Response.xml file is generated in the output directory on the
administrator’s machine (<RREG_Home>/output/ on UNIX, and <RREG_ Home>output\ on Windows). Send this file to the end-user who sent you the
updated OAM11GRequest.xml file.

3. If you are an end-user, copy the generated <Agent_ID>_Response.xml file to
your input directory (<RREG_Home>/input/ on UNIX, and <RREG_ Home>input\ on Windows). This is the file you received from the administrator.
Move to your (client’s) RREG home directory and run the following command on
the command line:

On UNIX operating systems:

./<RREG_Home>/bin/oamreg.sh outofband input/<Agent_ID>_Response.xml

On Windows operating systems:

<\RREG_Home>\bin\oamreg.bat outofband input\<Agent_ID>_Response.xml

**Note:** If you register the Webgate agent using the Oracle Access
Manager Administration Console, as described in the "Registering
Partners (Agents and Applications) by Using the Console" topic in the
Oracle Fusion Middleware Administrator’s Guide for Oracle Access
Manager, you must manually copy the files and artifacts generated
after the registration from the server machine (the machine where
Oracle Access Manager Administration Console is running) to the
client machine. The files and artifacts are generated in the
<Middleware_Home>/user_projects/domains/<name_of_the_WebLogic_domain_for_OAM>/output/<Agent_ID>
directory.

---

**Files and Artifacts Generated by RREG**

Regardless of the method or mode you use to register the new Webgate agent, the
following files and artifacts are generated in the <RREG_Home>/output/<Agent ID>
directory:

- **cwallet.sso**
- **ObAccessClient.xml**
- In the **SIMPLE** mode, RREG generates:
  - **password.xml**, which contains the obfuscated global passphrase to encrypt
    the private key used in SSL. This passphrase can be the same as the
    passphrase used on the server.
  - **aaa_key.pem**
  - **aaa_cert.pem**
In the CERT mode, RREG generates:

`password.xml`, which contains the obfuscated global passphrase to encrypt the private key used in SSL. This passphrase can be different than the passphrase used on the server.

Note: You can use these files generated by RREG to generate a certificate request and to get it signed by a third-party Certification Authority. To install an existing certificate, you must use the existing `aaa_cert.pem` and `aaa_chain.pem` files along with `password.xml` and `aaa_key.pem`.

### 23.6.2 Copy Generated Files and Artifacts to the Webgate Instance Location

After RREG generates these files and artifacts, you must manually copy them (`cwallet.sso, ObAccessClient.xml, password.xml, aaa_key.pem, aaa_cert.pem`, based on the security mode you are using) from the `<RREG_Home>/output/<Agent_ID>` directory to the `<Webgate_Instance_Home>` directory.

In OPEN mode, copy the following files from the `<RREG_Home>/output/<Agent_ID>` directory to the `<Webgate_Instance_Home>/webgate/config` directory:

- `ObAccessClient.xml`
- `cwallet.sso`

In SIMPLE mode, copy the following files from the `<RREG_Home>/output/<Agent_ID>` directory to the `<Webgate_Instance_Home>/webgate/config` directory:

- `ObAccessClient.xml`
- `cwallet.sso`
- `password.xml`

In addition, copy the following files from the `<RREG_Home>/output/<Agent_ID>` directory to the `<Webgate_Instance_Home>/webgate/config/simple` directory:

- `aaa_key.pem`
- `aaa_cert.pem`

In CERT mode, copy the following files from the `<RREG_Home>/output/<Agent_ID>` directory to the `<Webgate_Instance_Home>/webgate/config` directory:

- `ObAccessClient.xml`
- `cwallet.sso`
- `password.xml`

After copying the files, you must either generate a new certificate or migrate an existing certificate.

**Generating a New Certificate**

You can generate a new certificate as follows:

1. From your present working directory, move to the `<Webgate_Home>/webgate/ohs/tools/openssl` directory.
2. On the command line, create a certificate request as follows:

   ./openssl req -utf8 -new -nodes -config openssl_silent_ohs11g.cnf -keyout aaa_key.pem -out aaa_req.pem -rand <Webgate_Home>/webgate/ohs/config/random-seed

3. Self-sign the certificate as follows:

   ./openssl ca -config openssl_silent_ohs11g.cnf -policy policy_anything -batch -out aaa_cert.pem -infiles aaa_req.pem

4. Copy the following generated certificates to the <Webgate_Instance_Home>/webgate/config directory:
   
   ■ aaa_key.pem
   ■ aaa_cert.pem
   ■ cacert.pem located in the simpleCA directory

   **Note:** After copying the cacert.pem file, you must rename the file to aaa_chain.pem.

**Migrating an Existing Certificate**

If you want to migrate an existing certificate (aaa_key.pem, aaa_cert.pem, and aaa_chain.pem), be sure to remember the passphrase that you used to encrypt aaa_key.pem. You must enter the same passphrase during the RREG registration process. If you do not use the same passphrase, the password.xml file generated by RREG does not match the passphrase used to encrypt the key.

If you enter the same passphrase, you can copy these certificates as follows:

1. From your present working directory, move to the <Webgate_Instance_Home>/webgate/config directory.

2. Copy the following certificates to the <Webgate_Instance_Home>/webgate/config directory:
   
   ■ aaa_key.pem
   ■ aaa_cert.pem
   ■ aaa_chain.pem

**23.6.3 Restart the Oracle HTTP Server Instance**

You can use the OPMN command-line tool to start or stop your Oracle HTTP Server instance. If any instances are running, run the following command on the command-line to stop all running instances:

<Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl stopall

To restart the Oracle HTTP Server instance, run the following commands on the command line:

1. <Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl start
2. <Oracle_Home_for_Oracle_HTTP_Server>/opmn/bin/opmnctl startproc ias-component=<Oracle_HTTP_Server_Instance_Name>
This chapter explains how to address situations where a lifecycle change event occurs for an Oracle Identity Management component that is integrated with one or more components.

Topics include:

- How Lifecycle Events Impact Integrated Components
- LCM for Oracle Identity Manager
- LCM for Oracle Access Manager
- LCM for Oracle Adaptive Access Manager
- LCM for Oracle Identity Navigator
- References

### 24.1 How Lifecycle Events Impact Integrated Components

Following are ways in which certain lifecycle events, sometimes referred to as rewiring, affect a component that is already integrated with others:

- **Reassociation**
  - The hostname or port of an integrated component is reassociated. For example, the hostname of an OVD server changes.

- **Test to Production**
  - When entities in a test or pilot environment are migrated into a pre-installed production environment, this can affect dependent components. For example, moving Oracle Identity Manager Navigator to a new production environment.

---

**Note:** For some components, “rewiring” to achieve Test to Production is not feasible, and it is advisable to simply create a new production instance of the server. Oracle Identity Federation is an example of a server that is freshly installed in the production environment rather than changing the test configuration.

---

### 24.2 LCM for Oracle Identity Manager

Lifecycle management events for Oracle Identity Manager include:

- reassociation when the host or port changes for these components:
  - Oracle Virtual Directory
moving metadata from a test environment to a production environment

Refer to the following sources for lifecycle management procedures relating to OIM:

■ "Oracle Virtual Directory Host and Port Changes" in the Oracle Fusion Middleware System Administrator’s Guide for Oracle Identity Manager
■ "Changing OVD Password" in the Oracle Fusion Middleware System Administrator’s Guide for Oracle Identity Manager
■ "SPML Client Host and Port Changes" in the Oracle Fusion Middleware System Administrator’s Guide for Oracle Identity Manager
■ "SOA Host and Port Changes" in the Oracle Fusion Middleware System Administrator’s Guide for Oracle Identity Manager
■ "Oracle Identity Manager Database Host and Port Changes" in the Oracle Fusion Middleware System Administrator’s Guide for Oracle Identity Manager
■ "Oracle Identity Manager (OIM) Rewiring with Existing Oracle Adaptive Access Manager (OAAM)" in the Oracle Fusion Middleware Developer’s Guide for Oracle Adaptive Access Manager
■ "Changing Oracle Identity Manager Database Password" in the Oracle Fusion Middleware System Administrator’s Guide for Oracle Identity Manager
■ "Configuring LDAP Adapters" in the Oracle Fusion Middleware Administrator’s Guide for Oracle Virtual Directory
■ "Adding a Component Link to the Product Launcher by Using Product Discovery" in the Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator
■ "Editing Adapter Plug-Ins" in the Oracle Fusion Middleware Administrator’s Guide for Oracle Virtual Directory
■ "Move Oracle Identity Manager to a New Production Environment" in the Oracle Fusion Middleware Administrator’s Guide
■ "Move Oracle Identity Manager to an Existing Production Environment" in the Oracle Fusion Middleware Administrator’s Guide

24.3 LCM for Oracle Access Manager

Lifecycle events for Oracle Access Manager include replicating the policy configuration information from the test system into production.

Refer to the following sources for lifecycle management procedures relating to OAM:

■ "Adding a Component Link to the Product Launcher by Using Product Discovery" in the Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator
■ "Moving OAM 11g Data from a Test to a Production Deployment" in the Oracle Fusion Middleware Administrator’s Guide for Oracle Access Manager

24.4 LCM for Oracle Adaptive Access Manager

Lifecycle events for Oracle Adaptive Access Manager include reassociation when the host or port changes for the following components:

■ Oracle Virtual Directory
References

- Oracle Internet Directory
- Oracle Database
- Oracle Identity Manager

Refer to the following sources for lifecycle management procedures relating to OAAM:

- “Adding a Component Link to the Product Launcher by Using Product Discovery” in the Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator
- “OID Rewiring with Existing OAAM (in Cases without OVD)” in the Oracle Fusion Middleware Developer’s Guide for Oracle Adaptive Access Manager
- “Database Rewiring with Existing OAAM” in the Oracle Fusion Middleware Developer’s Guide for Oracle Adaptive Access Manager
- “Move Oracle Adaptive Access Manager to a New Production Environment” in the Oracle Fusion Middleware Administrator’s Guide
- “Move Oracle Adaptive Access Manager to an Existing Production Environment” in the Oracle Fusion Middleware Administrator’s Guide

24.5 LCM for Oracle Identity Navigator

Lifecycle events for Oracle Identity Navigator include migrating from test to production, and rewiring the integration with Oracle Business Intelligence Publisher.

Refer to the following sources for lifecycle management procedures relating to OIN:

- “Migrating Oracle Identity Navigator from Test to Production” in the Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator.
- “Configuring Oracle Business Intelligence Publisher” in the Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator.
- “Adding a Component Link to the Product Launcher by Using Product Discovery” in the Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator
- “Migrating Oracle Identity Navigator from Test to Production” in the Oracle Fusion Middleware Administrator’s Guide for Oracle Identity Navigator

24.6 References

For additional information about lifecycle management in Oracle Fusion Middleware, see “Part V Advanced Administration: Expanding Your Environment” in the Oracle Fusion Middleware Administrator’s Guide.
Part III
Appendixes

Part III contains the following appendixes:

- Appendix A, "Starting or Stopping the Oracle Stack"
- Appendix B, "Performing Silent Installations"
- Appendix C, "Deinstalling and Reinstalling Oracle Identity Management"
- Appendix D, "Troubleshooting the Installation"
- Appendix E, "OAAM Partition Schema Reference"
- Appendix F, "Oracle Identity Management Software Installation Screens"
- Appendix G, "WebLogic Domain Configuration Screens"
- Appendix H, "Oracle Identity Manager Configuration Screens"
- Appendix I, "Software Deinstallation Screens"
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, wls_ods1, or oam_server1.
- 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.

A.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:

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

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:

- `oam_server1` (Oracle Access Manager Server)
- `oim_server1` (Oracle Identity Manager Server)

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

```
MW_HOME/user_projects/domains/domain_name/bin/startManagedWebLogic.sh oam_server1
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\bin\startManagedWebLogic.cmd oam_server1
```

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 oam_server1 http://host:admin_server_port
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\bin\startManagedWebLogic.cmd oam_server1 http://host:admin_server_port
```

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

On UNIX systems:

```
MW_HOME/user_projects/domains/domain_name/bin/startManagedWebLogic.sh oam_server1 http://host:admin_server_port -Dweblogic.management.username=user_name -Dweblogic.management.password=password
```

On Windows systems:

```
MW_HOME\user_projects\domains\domain_name\bin\startManagedWebLogic.cmd oam_server1 http://host:admin_server_port -Dweblogic.management.username=user_name -Dweblogic.management.password=password
```
server1 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 *Oracle Fusion Middleware 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.

### A.2 Stopping the Stack

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

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

1. Stop WebLogic managed components, such as Oracle Directory Integration Platform, Oracle Identity Federation, Oracle Directory Services Manager, Oracle Access Manager, Oracle Identity Manager, and Oracle Adaptive Access 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`
A.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.
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

B.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.

B.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

B.2.1 UNIX Systems: Creating the oraInst.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 oraInst.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:

1. Log in as the root user.
2. Using a text editor such as vi or emacs, create the oraInst.loc file in any directory. The contents of the file consist of the following two lines:
Creating Response Files

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.

3. 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.

---

**B.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

**B.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 11.1.1.3.0 software Installer for Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, complete the following steps:

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

**Creating Response Files for Oracle Identity Manager Configuration**

When you use the Oracle Identity Manager Configuration Wizard to configure Oracle Identity Manager Server, Design Console, or Remote Manager for the first time, you can save a summary of your configuration in a response file.

To create this response file, complete the following steps:
1. On the Configuration Summary screen in the installation wizard, click **Save** in the **Save Response File** field.

2. When prompted, save the file to a local directory.

### B.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.

### B.3.2 OIM, OAM, OAAM, OAPM, and OIN

The following is a list of the default response files included in the installation media for the Oracle Identity Management Suite containing Oracle Identity Manager (OIM), Oracle Access Manager (OAM), Oracle Adaptive Access Manager (OAAM), Oracle Authorization Policy Manager (OAPM), and Oracle Identity Navigator (OIN):

- **iamsuite_install_only.rsp**: Use this response file to install Oracle Identity Management components without configuring them.
- **iamsuite_config_only.rsp**: Use this response file with the Oracle Identity Manager 11g Release 1 (11.1.1) Configuration Wizard (config.sh script or config.bat) in `ORACLE_HOME/bin/` to configure Oracle Identity Manager Server, Design Console, and Remote Manager.
- **deinstall_oh.rsp**: Use this response file with the Oracle Identity Management 11g Release 1 (11.1.1) Deinstaller to deinstall installed components.

### B.3.3 Securing Your Silent Installation

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

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

### B.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

### B.5 Installer Command Line Parameters

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Installation Modes - Only One Mode Can be Specified</strong></td>
<td></td>
</tr>
<tr>
<td>-i</td>
<td>-install</td>
</tr>
<tr>
<td>-silent</td>
<td>Install in silent mode. The Installer must be passed either a response file or command line variable value pairs.</td>
</tr>
<tr>
<td>-d</td>
<td>-deinstall</td>
</tr>
<tr>
<td>-p</td>
<td>-prerequisite</td>
</tr>
<tr>
<td>-v</td>
<td>-validate</td>
</tr>
<tr>
<td>-sv</td>
<td>-silentvalidate</td>
</tr>
<tr>
<td><strong>Installation Options</strong></td>
<td></td>
</tr>
<tr>
<td>-help</td>
<td>--help</td>
</tr>
<tr>
<td>-invPtrLoc file</td>
<td>Pointer to the inventory location file. Replace file with the full path and name of the oraInst.loc file.</td>
</tr>
<tr>
<td>-response file</td>
<td>Pointer to the response file. Replace file with the full path and name of the response file.</td>
</tr>
<tr>
<td>-responseFile file</td>
<td></td>
</tr>
<tr>
<td>-jreLoc location</td>
<td>Pointer to the location where Java Runtime Environment (JRE) is installed. Replace location with the full path to the jre directory where your JRE is installed.</td>
</tr>
</tbody>
</table>
Performing Silent Installations

**Table B-1  (Cont.) Installer Command Line Parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-logLevel level</td>
<td>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:</td>
</tr>
<tr>
<td></td>
<td>■ severe</td>
</tr>
<tr>
<td></td>
<td>■ warning</td>
</tr>
<tr>
<td></td>
<td>■ info</td>
</tr>
<tr>
<td></td>
<td>■ config</td>
</tr>
<tr>
<td></td>
<td>■ fine</td>
</tr>
<tr>
<td></td>
<td>■ finer</td>
</tr>
<tr>
<td></td>
<td>■ finest</td>
</tr>
<tr>
<td>-debug</td>
<td>Obtain debug information from the Installer.</td>
</tr>
<tr>
<td>-force</td>
<td>Allow the silent installation to proceed in a non-empty directory.</td>
</tr>
<tr>
<td>-printdiskusage</td>
<td>Log debugging information pertaining to disk usage.</td>
</tr>
<tr>
<td>-printmemory</td>
<td>Log debugging information pertaining to memory usage.</td>
</tr>
<tr>
<td>-printtime</td>
<td>Log debugging information pertaining to time usage. This command causes the timeTakenTimestamp.log file to be created.</td>
</tr>
<tr>
<td>-waitforcompletion</td>
<td>Windows only - the Installer will wait for completion instead of spawning the Java engine and exiting.</td>
</tr>
<tr>
<td>-noconsole</td>
<td>Messages will not be displayed to the console window.</td>
</tr>
<tr>
<td>-ignoreSysPrereqs</td>
<td>Ignore the results of the system prerequisite checks and continue with the installation.</td>
</tr>
<tr>
<td>-executeSysPrereqs</td>
<td>Execute the system prerequisite checks only, then exit.</td>
</tr>
<tr>
<td>-paramFile file</td>
<td>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.</td>
</tr>
<tr>
<td>-novalidation</td>
<td>Disables all validation checking performed by the Installer.</td>
</tr>
<tr>
<td>-nodefaultinput</td>
<td>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.</td>
</tr>
</tbody>
</table>

**Command Line Variables**

**Installer Variables**

Installer variables are specified using `varName=value`. For example:

```
ORACLE_HOME=/scratch/install/Oracle_IDM1
```

**Session Variables**

Session variables are specified using `session:varName=value`
Deinstalling and Reinstalling Oracle Identity Management

This appendix provides information about deinstalling and reinstalling Oracle Identity Management 11g Release 1 (11.1.1.3.0). It contains the following topics:

- Deinstalling Oracle Identity Management 11g Release 1 (11.1.1.3.0)
- Reinstalling Oracle Identity Management 11g Release 1 (11.1.1.3.0)

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 11g Release 1 (11.1.1.3.0)

This topic contains procedures for deinstalling Oracle Identity Management 11g Release 1 (11.1.1.3.0) and 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 oraInventory is required for removing instances and Oracle Home.

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:

1. Verify your Oracle Identity Management Oracle Home is not in use by an existing domain.
2. Stop all processes that use the Oracle Identity Management Oracle Home.
3. Open a command prompt and move (cd) into the \IDENTITY_MANAGEMENT_\ORACLE_HOME\oui\bin directory (UNIX) or the \IDENTITY_MANAGEMENT_\ORACLE_HOME\oui\bin directory (Windows).
4. Invoke the Deinstaller from command line using the -deinstall option. For example:
   On UNIX:
   ./runInstaller -deinstall
   On Windows:
   setup.exe -deinstall
   The Welcome screen appears.
5. Click Next.
   - 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>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deinstall Oracle Home</td>
<td>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.</td>
</tr>
<tr>
<td>Deinstall ASInstances managed by WebLogic Domain - Applicable to Oracle Internet Directory and Oracle Virtual Directory only.</td>
<td>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.</td>
</tr>
<tr>
<td>DeInstall Unmanaged ASInstances - Applicable to Oracle Internet Directory and Oracle Virtual Directory only.</td>
<td>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.</td>
</tr>
</tbody>
</table>
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.

- If you are deinstalling Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator, the Deinstall Oracle Home screen appears.

In the Deinstall Oracle Home screen, you can save a response file that contains the deinstallation settings before deinstalling. Click Deinstall. The Deinstall Progress screen appears. This screen shows the progress and status of the deinstallation.

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 Java Required Files (JRF). Before you deinstall the ORACLE_COMMON_HOME directory, ensure that no other Oracle Fusion Middleware software, such as Oracle SOA Suite, depends on ORACLE_COMMON_HOME. You cannot deinstall the ORACLE_COMMON_HOME directory until all software that depends on it has been deinstalled.

Perform the following steps to deinstall the ORACLE_COMMON_HOME directory:

1. Stop all processes that use the ORACLE_COMMON_HOME directory.

2. Deinstall your Oracle Identity Management Oracle Home by performing the steps in Deinstalling the Oracle Identity Management Oracle Home.

3. Open a command prompt and move (cd) into the ORACLE_COMMON/oui/bin/ directory (on UNIX) or the ORACLE_COMMON_HOME\oui\bin\ directory (on Windows).

4. Invoke the Deinstaller from command line using the -deinstall option and the -jreLoc option, which identifies the location where Java Runtime Environment (JRE) is installed. For example:

   On UNIX:
   
   ./runInstaller -deinstall -jreLoc FULL_PATH_TO_JRE_DIRECTORY

   On Windows:
   
   setup.exe -deinstall -jreLoc FULL_PATH_TO_JRE_DIRECTORY

   The Welcome screen appears.

5. Click Next. The Select Deinstallation Type screen appears.

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

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

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

8. Click Yes on the Warning dialog box to confirm you want to remove the `ORACLE_COMMON_HOME` directory. The deinstallation begins.

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

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

### C.1.3 Deinstalling Applications Registered with Oracle Single Sign-On 10g 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:


### C.2 Reinstalling Oracle Identity Management 11g Release 1 (11.1.1.3.0)

Perform the following steps to reinstall Oracle Identity Management 11g Release 1 (11.1.1.3.0):

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 Release 1 (11.1.1.3.0) in a directory that contains an existing Oracle Identity Management instance.

   Reinstall Oracle Identity Management as if it was the first installation by performing the steps in the appropriate procedure in this guide.
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
- Configuring OIM Against an Existing OIM 11g Schema
- Need More Help?

### D.1 General Troubleshooting Tips

If you encounter an error during installation:

- Consult the Oracle Fusion Middleware 11g Release 1 (11.1.1). 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/technology/documentation](http://www.oracle.com/technology/documentation)

- Verify your system and configuration is certified. See System Requirements and Certification for more information.

- Verify your system meets the minimum system requirements. See 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 11g Release 1 (11.1.1.3.0)" on page C-1 for more information.
  3. Correct the issue that caused the error.
  4. Restart the installation.

- If an error occurred while configuring Oracle Identity Manager using the Oracle Identity Manager Configuration Wizard:
  1. Note the error and review the configuration log files.
2. Verify whether the dependencies are met. For example, Administration Server and Database should be up and running.

3. Correct the issue that caused the error.

4. Restart the Oracle Identity Manager Configuration Wizard.

D.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
- installActions\DATE-TIME_STAMP.log
- installProfile\DATE-TIME_STAMP.log
- oraInstall\DATE-TIME_STAMP.err
- oraInstall\DATE-TIME_STAMP.log

D.3 Configuring OIM Against an Existing OIM 11g Schema

In this scenario, you have created and loaded the appropriate Oracle Identity Manager (OIM) schema, installed and configured Oracle Identity Manager in a new or existing WebLogic domain. During domain configuration, you have configured JDBC Component Schemas by using the Oracle Fusion Middleware Configuration Wizard.

If you want to configure Oracle Identity Manager in a second WebLogic domain against the existing Oracle Identity Manager 11g schemas, you must complete the following steps when you try to configure Oracle Identity Manager using the Oracle Identity Manager Configuration Wizard:

1. When prompted, you must copy the .xldatabasekey file from the first WebLogic domain directory (/<Middleware_Home>/user_projects/domains/<name_of_your_first_oim_domain>/config/fmwconfig/) to the second WebLogic domain directory (/<Middleware_Home>/user_projects/domains/<name_of_your_second_oim_domain>/config/fmwconfig/). Proceed with the Oracle Identity Manager configuration.

2. After configuring Oracle Identity Manager using the Oracle Identity Manager Configuration Wizard, copy the cwallet.so, default_keystore.jks, and xlserver.crt files from the first WebLogic domain directory (/<Middleware_Home>/user_projects/domains/<name_of_your_first_oim_domain>/config/fmwconfig/) to the second domain Home directory.
(/<Middle ware_Home>/user_projects/domains/<name_of_your_second_oim_domain>/config/fmwconfig/).

3. After copying the files, start the Oracle Identity Manager Managed Server, as described in Starting the Stack.

D.4 Need More Help?

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

If you cannot find a solution to your problem, open a service request.
This appendix provides information about tables and stored procedures used with Oracle Adaptive Access Manager (OAAM) with Partition support. It contains the following topics:

- Overview
- Partition Add Maintenance
- Partition Maintenance Scripts

E.1 Overview

Database tables in the Oracle Adaptive Access Manager database are divided into the following categories:

- Static partition tables
- Transactional partition tables
- Non-partitioned tables

Note: All the tables contain the composite partition (RANGE, HASH). The Range partition is created using CREATE_TIME while the HASH key is defined based on application logic.

lists the Oracle Adaptive Access Manager (OAAM) partition tables. All the other tables are non-partitioned.
After the initial Oracle Adaptive Access Manager repository setup, the following stored procedures are set up as dbms_jobs to maintain the partitions on a regular basis:

- **Sp_Oaam_Add_Monthly_Partition**
- **Sp_Oaam_Add_Weekly_Partition**

### E.2 Partition Add Maintenance

<table>
<thead>
<tr>
<th>Table Type</th>
<th>Frequency</th>
<th>Table Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static Partition</td>
<td>Monthly</td>
<td>V_USER_QA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>V_USER_QA_HIST</td>
</tr>
<tr>
<td>Transactional Partition</td>
<td>Monthly</td>
<td>VCRYPT_TRACKER_NODE_HIST</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VCRYPT_TRACKER_USERNODE_LOGS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VCRYPT_TRACKER_NODE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VT_USERDEVICE_MAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>V_MONITOR_DATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VT_SESSION_ACTION_MAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VT_ENTITY_ONE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VT_ENTITY_ONE_PROFILE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VT_USER_ENTITY1_MAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VT_ENT_TRX_MAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VT_TRX_DATA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VT_TRX_LOGS</td>
</tr>
<tr>
<td>Transactional Partition</td>
<td>Weekly</td>
<td>VR_POLICYSET_LOGS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VR_POLICY_LOGS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VR_RULE_LOGS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VR_MODULE_LOGS</td>
</tr>
</tbody>
</table>

### E.2.1 Sp_Oaam_Add_Monthly_Partition

This stored procedure adds partitions for tables with the monthly frequency.

The script runs at the end of each month to create partitions for the following month. To simultaneously add partitions for subsequent months, the partitions are added based on the partition of the previous month.

If this stored procedure fails to execute (if your monthly partition is missing), you may see database errors, "ORA-14400 and ORA-14401," forcing the Oracle Adaptive Access Manager application to stop.

### E.2.2 Sp_Oaam_Add_Weekly_Partition

This stored procedure adds partitions for tables with the weekly frequency.

The script runs at the end of each week to create partitions for the following week. To simultaneously add partitions for subsequent weeks, the partitions are added based on the partition of the previous week.
If this stored procedure fails to execute (if your weekly partition is missing), you may see database errors, "ORA-14400" and "ORA-14401," forcing the Oracle Adaptive Access Manager application to stop.

### E.3 Partition Maintenance Scripts

After the initial Oracle Adaptive Access Manager repository setup, use the following scripts with purging or archiving maintenance scripts to maintain the partitions on a regular basis:

- `drop_monthly_partition_tables.sql`
- `drop_weekly_partition_tables.sql`
- `add_monthly_partition_tables.sql`
- `add_weekly_partition_tables.sql`

**Note:** You do not have to execute partition add scripts. You should only use them to create partitions manually because other automated `dbms_jobs` create partitions at regular intervals.

#### E.3.1 drop_monthly_partition_tables.sql

You can use this script to drop partitions for tables with the monthly frequency. You should run this script at the end of each month to drop partitions older than sixth months, based on the requirements of the Oracle Adaptive Access Manager application. Note that these tables will have six partitions at a given time.

#### E.3.2 drop_weekly_partition_tables.sql

You can use this script to drop partitions for tables with the weekly frequency. You should run this script either at the end of every fourteenth day or at the end of third week from the day the Oracle database was created to the dropping of partitions older than two weeks, based on the requirements of the Oracle Adaptive Access Manager application.

#### E.3.3 add_monthly_partition_tables.sql

You can use this script to add partitions for tables with the monthly frequency. You should run this script at the end of each month to create partitions for the following month. To add partitions for subsequent months at the same time, run this script multiple times. When you run the script multiple times, partitions are added based on the previous month’s partition.

#### E.3.4 add_weekly_partition_tables.sql

You can use this script to add partitions for tables with the weekly frequency. You should run this script at the end of each month to create partitions for the following week. To add partitions for subsequent weeks at the same time, run this script multiple times. When you run the script multiple times, partitions are added based on the previous week’s partition.
Oracle Identity Management Software Installation Screens

This appendix describes the screens of the Oracle Identity Management 11g software Installation Wizard that enables you to install Oracle Identity Manager, Oracle Access Manager, Oracle Adaptive Access Manager, Oracle Authorization Policy Manager, and Oracle Identity Navigator.

It contains the following topics:

- Welcome
- Prerequisite Checks
- Specify Installation Location
- Installation Summary
- Installation Progress

F.1 Welcome

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

Figure F–1 Welcome Screen

Click Next to continue.
F.2 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. For more information about prerequisite checks performed by the Installer, see Prerequisite Checks Performed by the Oracle Identity Management Installer.

Figure F–2 Prerequisite Checks Screen

![Prerequisite Checks Screen](image)

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.

F.3 Specify Installation Location

In this screen, you enter a location for the new Oracle Identity Management 11g software being installed.
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 *Installing Oracle WebLogic Server 10.3.3 and Creating the Oracle Middleware Home*, before running the Oracle Identity Management Installer.

---

**Note:** If you do not specify a valid Middleware Home directory on the Specify Installation Location screen, the Installer displays a message and prompts you to confirm whether you want to proceed with the installation of only Oracle Identity Manager Design Console and Oracle Identity Manager Remote Manager. These two components of Oracle Identity Manager do not require a Middleware Home directory.

If you want to install only Oracle Identity Manager Design Console or Remote Manager, you do not need to install Oracle WebLogic Server or create a Middleware Home directory on the machine where Design Console or Remote Manager is being configured.

---

Click **Next** to continue.

**F.4 Installation Summary**

This screen displays a summary of your Oracle Identity Management 11g installation.
Review the contents of this screen, and click **Install** to start installing the Oracle Identity Management 11g software.

**F.5 Installation Progress**

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

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.
F.6 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**.

*Figure F–6  Installation Complete Screen*

Click **Finish** to complete the installation process.
Installation Complete
This appendix describes the screens of the Oracle Fusion Middleware Configuration Wizard that enables you to create or extend a WebLogic administration domain. This appendix contains the following topics:

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

G.1 Welcome

The Welcome screen is displayed each time you start the Oracle Fusion Middleware Configuration Wizard.
Select a WebLogic Domain Directory

**Figure G–1 Welcome Screen**

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

Select **Extend an existing WebLogic domain** if you want to add applications and services, or to override existing database access (JDBC) and messaging (JMS) settings.

Click **Next** to continue.

**G.2 Select a WebLogic Domain Directory**

This screen is displayed only if you choose to extend an existing WebLogic domain to support the new products.

**Figure G–2 Select a WebLogic Domain Directory Screen**
Select the WebLogic Domain directory to which you want to add your applications, or services, or both.

Click Next to continue.

G.3 Select Domain Source

The Select Domain Source screen enables you to select a domain source from which you want to create a new domain.

*Figure G–3  Select Domain Source Screen*

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

Select **Base this domain on an existing template** to create your domain based on an existing domain template. By default, domain templates for Oracle Identity Management 11g components are located in your Oracle_Home\common\templates\applications directory. Click Browse to navigate your directories to find an existing template.

Click Next to continue.

G.4 Select Extension Source

This screen is displayed only if you choose to extend an existing WebLogic domain to support the new products.
**G.5 Specify Domain Name and Location**

In this screen, you enter a name and location for the new WebLogic domain being created.
Enter a name for the new WebLogic domain, and select the location where the new domain must be created.

Click **Next** to continue.

**G.6 Configure Administrator User Name and Password**

This screen is displayed only if you choose to create a new WebLogic domain.

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

- **User name** - Specify the user name.
Configure Server Start Mode and JDK

- **User password** - Specify the password for the user.
- **Confirm user password** - Re-enter the user password.
- **Description** - Enter a description for the user. This field is optional.

Click Next to continue.

G.7 Configure Server Start Mode and JDK

This screen is displayed only if you choose to create a new WebLogic domain.

*Figure G–7 Configure Server Start Mode and JDK Screen*

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

- **Development Mode**
  
  In this mode, `boot.properties` is used for user names and passwords, and polling is used for application deployment. Sun JDK is the default for this mode.

- **Production Mode**
  
  In this mode, user names and passwords are required, and polling is not used for application deployment. WebLogic JRockit JDK is the default for this mode.

In the JDK Selection section, select a JDK from the list of available JDKs, or select **Other JDK** and click **Browse** to find another JDK on your system.

Click Next to continue.

G.8 Configure JDBC Component Schema

This screen is displayed only if you choose to extend an existing WebLogic domain to support a new product.
Use this screen to edit the configuration information for each JDBC data source. A data source contains a pool of database connections. Your application uses a data source by looking it up in the JNDI tree, requesting a connection, using the connection, and then returning the connection to the data source.

Click **Next** to continue.

**G.9 Test Component Schema**

This screen displays the test results.

**Figure G–9  Test Component Schema Screen**
G.10 Select Optional Configuration

This screen provides you with options to configure and customize any of the server or cluster settings listed.

Figure G–10  Select Optional Configuration Screen

G.11 Configure the Administration Server

This screen is displayed only if you choose to create a new WebLogic domain.

Figure G–11  Configure the Administration Server Screen

Each WebLogic Server domain must have one Administration Server, which hosts the Administrative Console used to perform administration tasks.

Click Next to continue.
G.12 Configure Managed Servers

This screen enables you to configure Managed Servers. A Managed Server is an instance of Oracle WebLogic Server used to host enterprise applications. A typical production environment has at least one Managed Server.

Figure G–12 Configure Managed Servers Screen

Use this screen to add or delete Managed Servers. For each Managed Server, specify:

- **Name**
  Name of the Managed Server.

- **Listen Address**
  Select an address from the drop-down list; the server will listen on the specified addresses.

- **Listen Port**
  Listen port number.

- **SSL Listen Port**
  Port number for SSL connections - this column is only active if the corresponding "SSL enabled" check box in the same row is selected.

Click **Next** to continue.

G.13 Configure Clusters

This screen enables you to configure clusters. A cluster contains multiple WebLogic Server instances running simultaneously and working together for scalability and reliability. To clients, a cluster appears as a single WebLogic Server instance.
Assign Servers to Clusters

Use this screen to add or delete configuration information for clusters.
For more information about configuring clusters for Oracle Identity Management
products, see the "Configuring High Availability for Identity Management
Components" topic in the guide Oracle Fusion Middleware High Availability Guide.
Click Next to continue.

G.14 Assign Servers to Clusters
This screen enables you to assign a Managed Server to the cluster. This screen is
required only if you choose to use Node Manager.

Figure G–13  Configure Clusters Screen

Figure G–14  Assign Servers to Clusters Screen
Select a cluster in the right pane, and select a Managed Server in the left pane. Assign the Managed Server to the cluster by clicking the right arrow button.

Click **Next** to continue.

### G.15 Configure Machines

This screen enables you to configure machines that host WebLogic Servers.

*Figure G–15 Configure Machines Screen*

Use this screen to add or delete machines.

The Administration Server and Node Manager use the machine definition on this screen to start remote servers.

Click **Next** to continue.

### G.16 Assign Servers to Machines

This screen enables you to assign each WebLogic Server instance to the corresponding machine on which it runs.
**Figure G–16 Assign Servers to Machines Screen**

Select a machine in the right pane, and select a server in the left pane. Assign the server to the machine by clicking the right arrow button.

Click **Next** to continue.

**G.17 Target Deployments to Clusters or Servers**

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

**Figure G–17 Target Deployments to Clusters or Servers**

Select clusters or servers in the left pane, and select the check boxes corresponding to applications in the right pane to target them to the selected clusters or servers.
Click **Next** to continue.

**G.18 Target Services to Clusters or Servers**
This screen enables you to target your services (for example, JMS, JDBC, startup and shutdown classes) to servers or clusters. Doing so enables your applications to use these services. It is an optional task.

*Figure G–18  Target Services to Clusters or Servers Screen*

Select clusters or servers in the left pane, and select the check boxes corresponding to services in the right pane to target them to the selected clusters or servers.

Click **Next** to continue.

**G.19 Configure RDBMS Security Store Database**
This screen enables you to configure an RDBMS security store database.
Figure G–19 Configure RDBMS Security Store Database

Make changes to your RDBMS. Make sure that your RDBMS tables are created prior to booting your domain. The scripts used by the DBA are located in the WebLogic Server server/lib directory.

After entering information in the fields, click Next to continue.

G.20 Configure JMS File Stores

This screen is displayed only if you choose to extend an existing WebLogic domain to support the new product.

Figure G–20 Configure JMS File Stores Screen

In this screen, you can configure a JMS file store. In addition, you can select a synchronous write policy: Cache-Flush, Direct-Write, or Disabled.
Click Next to continue.

G.21 Configuration Summary
This screen displays a summary of your domain configuration.

Figure G–21 Configuration Summary Screen

Review the contents of your domain. Click Create to start configuring your domain.
This appendix describes the screens of the Oracle Identity Manager 11g Configuration Wizard that enables you to configure Oracle Identity Manager Server, Oracle Identity Manager Design Console, and Oracle Identity Manager Remote Manager.

This appendix contains the following topics:

- Welcome
- Components to Configure
- Database
- WebLogic Admin Server
- OIM Server
- LDAP Sync and OAM
- LDAP Server
- LDAP Server Continued
- OIM Server Host and Port
- Remote Manager
- KeyStore Password
- Configuration Summary

**H.1 Welcome**

The Welcome screen is displayed each time you start the Oracle Identity Manager Configuration Wizard.
Figure H–1 Welcome Screen

You can use the Oracle Identity Manager Configuration Wizard only once during initial setup for configuring Oracle Identity Manager Server. After configuring Oracle Identity Manager Server using this wizard, you cannot re-run this wizard to modify the configuration of Oracle Identity Manager. You must use Oracle Enterprise Manager to make such modifications. However, you can run this wizard on other machines, where Design Console Console or Remote Manager is configured, as and when needed.

Ensure that you have configured Oracle Identity Manager in a new or existing WebLogic domain before launching the Oracle Identity Manager Configuration Wizard to configure Oracle Identity Manager Server, Design Console on Windows, and Remote Manager.

If you are configuring Server, you must run this wizard on the machine where the WebLogic Administration Server is running (the Administration Server for the domain in which Oracle Identity Manager is deployed). Ensure that the Administration Server is up and running before you start configuring Oracle Identity Manager Server.

If you are configuring only Design Console, you must run this wizard on the Windows machine where Design Console should be configured. If you are configuring only Remote Manager, you must run this wizard on the machine where Remote Manager is being configured. Note that the Oracle Identity Manager Server should be configured before you can configure Design Console or Remote Manager.

Click Next to continue.

H.2 Components to Configure

Use this screen to select the Oracle Identity Manager components that you want to configure. Oracle Identity Manager components include Server, Design Console, and Remote Manager.

Before configuring Oracle Identity Manager Server, Design Console or Remote Manager, ensure that you have configured Oracle Identity Manager in a new or existing WebLogic domain using the Oracle Fusion Middleware Configuration Wizard.
Table H–1 describes the Oracle Identity Manager components that you can choose.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configure all components on this screen</td>
<td>To configure Oracle Identity Manager Server, Design Console, and Remote Manager simultaneously on the same machine, select the <strong>Oracle Identity Manager</strong> option.</td>
</tr>
<tr>
<td>Configure only Oracle Identity Manager Server</td>
<td>To configure only Oracle Identity Manager Server, select the <strong>OIM Server</strong> option. This option is selected, by default. Note that WebLogic Administration Server for the domain (the domain in which Oracle Identity Manager is deployed) should be up and running.</td>
</tr>
<tr>
<td>Configure only Oracle Identity Manager Design Console</td>
<td>To configure only Oracle Identity Manager Design Console, select the <strong>OIM Design Console</strong> option. However, note that Oracle Identity Manager Server must be configured either on the local machine or on a remote machine before you can run Design Console on development machines. Design Console is supported on Windows operating systems only.</td>
</tr>
<tr>
<td>Configure only Oracle Identity Manager Remote Manager</td>
<td>To configure only Oracle Identity Manager Remote Manager, select the <strong>OIM Remote Manager</strong> option. However, note that Oracle Identity Manager Server must be configured either on the local machine or on a remote machine before you can run Remote Manager.</td>
</tr>
</tbody>
</table>

**Note:** You can also select any combination of two of the three Oracle Identity Manager components.

**H.3 Database**

In this screen, you specify the database and schema information. Note that you should have created and loaded Oracle Identity Manager schemas using the Repository Creation Utility (RCU) before configuring Oracle Identity Manager Server. For information about creating and loading Oracle Identity Manager schemas, see *Creating Database Schema Using the Repository Creation Utility (RCU)*.
You can use the same database or different databases for creating the Oracle Identity Manager schema and the Metadata Services schema.

Table H–2 describes the database connection information that you must specify.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| Connect String                | Enter the full path, listen port, and service name for your Oracle database. For a single host instance, the format of connect string is hostname:port:servicename.  
  
  For example, if the hostname is aaa.bbb.com, port is 1234, and the service name is xxx.bbb.com, then you must enter the connect string for a single host instance as follows:
  
  aaa.bbb.com:1234:xxx.bbb.com  
  
  If you are using a Real Application Cluster database, the format of the database connect string is as follows:
  
  hostnamel:port1:instancename1^host2:port2:instancename2@servicename |
| OIM Schema User Name          | Enter the name of the schema user that you created for Oracle Identity Manager using the Repository Creation Utility.  
  
  If you upgraded your existing Oracle Identity Manager schema to 11g Release 1 (11.1.1), enter the user name for your existing schema. |
| OIM Schema Password           | Enter the password for the Oracle Identity Manager schema user that you set while creating the schema using the Repository Creation Utility (RCU).  
  
  If you upgraded your existing Oracle Identity Manager schema to 11g Release 1 (11.1.1), enter the password for your existing schema. |
| Select different database for MDS schema | Select this check box if you want to use a different database for the Metadata Services (MDS) schema. |
After entering information in the fields, click Next to continue.

### H.4 WebLogic Admin Server

In this screen, you specify the t3 URL, user name and password for the WebLogic administration domain in which the Oracle Identity Manager application is deployed. Ensure that the Administration Server is up and running.

**Figure H-4 WebLogic Admin Server Screen**

![WebLogic Admin Server Screen](image)

In the WebLogic Admin Server URL text box, enter the t3 URL of the Administration Server for the WebLogic domain in the following format:

t3://hostname:port

In the UserName text box, enter the WebLogic Administrator user name.

In the Password text box, enter the WebLogic Administrator password.

After entering information in the fields, click Next to continue.
H.5 OIM Server

Use this screen to set a password for the system administrator (xelsysadm).

Figure H–5 OIM Server Screen

Table H–3 describes the Oracle Identity Manager Server parameters that you can configure.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| OIM Administrator Password | Enter a new password for the administrator.  
A valid password contains at least six characters, begins with an alphabetic character, and includes at least one number, one uppercase letter and one lowercase letter. The password cannot contain first name, last name, or login name of Oracle Identity Manager.  
Note that you are not prompted to enter this password in upgrade scenarios. You must set a password only if you are performing a new 11g installation. |
| Confirm Password     | Enter the new password again to confirm.                                                                                                                                                                    |
| OIM HTTP URL         | Enter the http URL that front-ends the Oracle Identity Manager application. For example, http://localhost:7002. By default, this field contains the URL of the Oracle Identity Manager Managed Server.                                 |
| KeyStore Password    | Enter new password for the keystore.  
A valid password can contain 6 to 30 characters, begin with an alphabetic character, and use only alphanumeric characters and special characters like Underscore (_), Dollar ($), Pound (#). The password must contain at least one number. |
| Confirm KeyStore Password | Enter the new password again to confirm.                                                                                                                                                                    |

After entering information in the fields, click Next to continue.
H.6 LDAP Sync and OAM

In this screen, you can perform the following optional tasks:

■ Enable synchronization of Oracle Identity Manager roles, users, and their hierarchy to an LDAP directory
■ Enable Identity Administration Integration with Oracle Access Manager (OAM)
■ Configure Oracle Identity Manager to use Oracle BI Publisher by specifying the BI publisher URL

Figure H–6 LDAP Sync and OAM Screen

Enabling OIM-LDAP Synchronization
If you want to enable LDAP sync, you must first set up LDAP Sync for Oracle Identity Manager (OIM) before selecting the Enable LDAP Sync option on this screen. For information about setting up OIM-LDAP Sync, see Setting Up LDAP Synchronization. After setting up LDAP Synchronization, select the Enable LDAP Sync option.

If you do not want to perform the other optional tasks, click Next to continue.

Enabling Identity Administration Integration with Oracle Access Manager (OAM)
You must set up integration between OIM and OAM before enabling identity administration integration with OAM on this screen. For information about setting up the integration, see the chapter Integration Between OIM and OAM. After setting up the integration, select the Enable Identity Administration Integration with OAM option, and enter the following:

■ Password of Access Gate - Enter the access gate password for Oracle Identity Manager. This is the same password you provided with the oimAccessGatePwd parameter for the configureOIM WLST command during the OIM-OAM integration setup.

■ Domain of Cookie - Enter the domain in which Oracle Access Manager is installed. For example, *.us.acme.com*. This is the same cookie domain you provided with the oimCookieDomain parameter for the configureOIM WLST command during the OIM-OAM integration setup. Note that the period (.) at the beginning of the string is mandatory.
If you do not want to configure Oracle BI Publisher, click Next to continue.

**Configuring Oracle Identity Manager to Use Oracle BI Publisher**

Ensure that Oracle BI Publisher is installed on your local or remote machine.

To configure Oracle Identity Manager to use Oracle BI Publisher, select the **Configure BI Publisher** option, and enter the BI Publisher URL in the **BI Publisher URL** text box.

The URL is of the format: http://hostname:port/xmlpserver, where hostname and port are the host name and the port on which the Oracle BI Publisher server is running.

After entering information in the fields, click Next to continue.

**H.7 LDAP Server**

This screen is displayed only if you select the **Enable LDAP Sync** option on the LDAP Sync and OAM screen. In the LDAP Server screen, you should specify the authentication information for the Oracle Virtual Directory server, as you want to synchronize Oracle Identity Manager roles, users, and their hierarchy to an LDAP directory.

**Figure H–7 LDAP Server Screen**

Table H–4 describes the Oracle Virtual Directory Server parameters that you must specify.

**Table H–4 LDAP Server Information**

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDAP URL</td>
<td>Enter the LDAP URL in the format: ldap://ovd_host:ovd_port</td>
</tr>
</tbody>
</table>
After entering information in the fields, click **Next** to continue.

**H.8 LDAP Server Continued**

This screen is a continuation of the LDAP Server screen.

*Figure H–8  LDAP Server Continued Screen*

Table H–5 describes the LDAP parameters that you must specify.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDAP User</td>
<td>Enter the user name for the Oracle Virtual Directory administrator.</td>
</tr>
<tr>
<td>LDAP Password</td>
<td>Enter the password for the Oracle Virtual Directory administrator.</td>
</tr>
<tr>
<td>LDAP SearchDN</td>
<td>Enter the Distinguished Names (DN).</td>
</tr>
<tr>
<td></td>
<td>For example, dc=acme, dc=com</td>
</tr>
<tr>
<td></td>
<td>This is the top-level container for users and roles in LDAP that is</td>
</tr>
<tr>
<td></td>
<td>used for Oracle Identity Manager for reconciliation purposes.</td>
</tr>
<tr>
<td>LDAP RoleContainer</td>
<td>Enter a name for the container that will be used as a default container of roles in the LDAP directory.</td>
</tr>
<tr>
<td>LDAP RoleContainer Description</td>
<td>Type a description for the role container.</td>
</tr>
<tr>
<td>LDAP UserContainer</td>
<td>Enter a name for the container that will be used as a default container of users in the LDAP directory.</td>
</tr>
<tr>
<td>LDAP UserContainer Description</td>
<td>Type a description for the user container.</td>
</tr>
</tbody>
</table>
H.9 OIM Server Host and Port

This screen is displayed only if you choose to configure Oracle Identity Manager Design Console on the Components to Configure screen, on Windows operating systems. Note that you must configure Oracle Identity Manager (OIM) Server on a local machine or a remote machine before running Design Console. In the OIM Server Host and Port screen, you must specify the host name and port information for the Oracle Identity Manager Server.

Table H–5 (Cont.) LDAP Server Continued Information

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Reservation</td>
<td>Enter a name for the container that will be used for reserving user</td>
</tr>
<tr>
<td>Container</td>
<td>names in the LDAP directory while their creation is being approved in Oracle</td>
</tr>
<tr>
<td></td>
<td>Identity Manager. When the user names are approved, they are moved from</td>
</tr>
<tr>
<td></td>
<td>the reservation container to the user container in the LDAP directory.</td>
</tr>
</tbody>
</table>

After entering information in the fields, click Next to continue.

H.10 Remote Manager

Use this screen to configure the Oracle Identity Manager Remote Manager. Note that you must configure Oracle Identity Manager Server on the local machine or a remote machine before running Remote Manager.
Table H–6 describes the Oracle Identity Manager Remote Manager parameters that you can configure.

Table H–6  Remote Manager Configuration

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Name</td>
<td>Enter the service name for the Remote Manager.</td>
</tr>
<tr>
<td>RMI Registry Port</td>
<td>Enter the port number on which RMI registry should be started. The default value is 12345.</td>
</tr>
<tr>
<td>Listen Port (SSL)</td>
<td>Enter the SSL port number. On this port number, a secure socket is opened to listen to client requests. The default value is 12346.</td>
</tr>
</tbody>
</table>

After entering information in the fields, click Next to continue.

H.11 KeyStore Password

This screen is displayed if you choose to configure only Remote Manager on a remote machine (a machine where Oracle Identity Manager Server is not configured).
Table H–7 describes the keystore password requirements.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KeyStore Password</td>
<td>Enter a new password for the keystore. A valid password can contain 6 to 30 characters, begin with an alphabetic character, and use only alphanumeric characters and special characters like Underscore (_), Dollar ($), Pound (#). The password must contain at least one number.</td>
</tr>
<tr>
<td>Confirm KeyStore Password</td>
<td>Enter the new password again to confirm.</td>
</tr>
</tbody>
</table>

After entering information in the fields, click **Next** to continue.

**H.12 Configuration Summary**

This screen displays a list of the applications or components you have selected for configuration. It includes the following information:

- Location of your installation
- Disk space that will be used for the installation
- Applications or components you have selected for configuration
- Configuration choices you made on different screens in the Oracle Identity Manager Configuration Wizard
Figure H–12 Configuration Summary Screen

Review this summary screen.

Additionally, you can select to create a response file from your installation selections by clicking on the Save button in the Save Response File field. A response file can be used for silent or non-interactive installations of software requiring no or very little user input.

Click Configure to start configuring the selected Oracle Identity Manager components.
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
- Deinstall Oracle Home

### I.1 Welcome

This screen is displayed each time you start the Oracle Fusion Middleware 11g Deinstallation Wizard.

*Figure I–1  Deinstallation Welcome Screen*

Click Next to continue.

### I.2 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.
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.