

Oracle® Fusion Middleware

Installing Oracle Forms and Reports

12c (12.2.1.1)

E71022-02

July 2016

This document describes how to install and configure Oracle Forms and Reports.

Oracle Fusion Middleware Installing Oracle Forms and Reports, 12c (12.2.1.1)

E71022-02

Copyright © 2015, 2016, Oracle and/or its affiliates. All rights reserved.

Primary Author: Arup Roy

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

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

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

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

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

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Preface	vii
Audience	vii
Documentation Accessibility	vii
Related Documents	vii
Conventions	viii
1 Installation and Configuration Overview	
1.1 Oracle Forms and Reports Components	1-1
1.2 Securing Oracle Forms and Reports With Identity Management	1-1
1.2.1 Securing Oracle Forms and Reports With Oracle Access Manager 11g	1-2
1.3 Installation and Configuration Roadmap for Oracle Forms and Reports	1-2
2 Installing and Configuring Oracle Forms and Reports	
2.1 Preparing to Install	2-1
2.1.1 Reviewing System Requirements and Specifications	2-1
2.1.2 Reviewing Certification Information	2-2
2.1.3 Reviewing Interoperability and Compatibility	2-2
2.1.4 Understanding Oracle Fusion Middleware Concepts	2-2
2.1.5 Obtaining the Oracle Fusion Middleware Software	2-2
2.1.6 Installing Oracle Forms and Oracle Reports on Separate Servers	2-2
2.1.7 Installing Oracle Forms and Reports in a New Oracle home	2-3
2.1.8 Installing Oracle Forms and Reports as a Non-Default User	2-3
2.2 Installing Oracle WebLogic Server (FMW Infrastructure)	2-3
2.2.1 Planning Your Oracle Home Location for Oracle Reports (Windows Only)	2-3
2.2.2 Downloading the Correct Installer for Your Operating System	2-4
2.2.3 Finding Oracle WebLogic Server (FMW Infrastructure) Installation Instructions	2-4
2.2.4 Stopping Node Manager Before Installing Oracle Forms and Reports (Windows Only)	2-4
2.3 Installing Oracle Identity and Access Management	2-4
2.4 Installing and Configuring Oracle Forms and Reports	2-5
2.4.1 Running the rootpre.sh Script on IBM AIX Operating Systems	2-5
2.4.2 Starting the Oracle Forms and Reports Installer	2-5
2.4.3 Viewing the Installation Log Files	2-6
2.4.4 Configuring Your Oracle Inventory (UNIX Only)	2-6
2.4.5 Installing Using Oracle Universal Installer	2-6

2.4.6	Repository Creation Utility	2-7
2.4.7	Configuring Forms Using the Configuration Wizard	2-7
2.4.8	Configuring Reports Using the Configuration Wizard	2-10
2.4.8.1	Provisioning a Machine	2-12
2.4.8.2	Configure Reports Builder "Run to web"	2-12
2.4.9	Configuring Form Builder Standalone 12c Using the Configuration Wizard	2-13

3 Verifying Oracle Forms and Reports Installation and Configuration

3.1	Verifying the Installation Logs.....	3-1
3.2	Verifying the Domain Server Logs.....	3-1
3.3	Verifying the Installed Products and Product Versions.....	3-1
3.4	Checking Browser URLs	3-2
3.4.1	Verifying Fusion Middleware Control	3-2
3.5	Performing Basic Administration Tasks.....	3-2

4 Deinstalling Oracle Forms and Reports

4.1	Understanding Deinstallation.....	4-1
4.2	Deinstalling the Software.....	4-3
4.2.1	Removing Oracle Forms and Reports.....	4-3
4.2.1.1	Starting the Deinstaller	4-3
4.2.1.2	Removing Your Managed Oracle Forms and Reports Instances.....	4-3
4.2.1.3	Stopping Oracle Fusion Middleware.....	4-4
4.2.1.4	Removing Your Oracle Forms and Reports Oracle Home	4-4
4.2.2	Removing the Oracle Home Directory Manually	4-5
4.2.3	Removing Oracle WebLogic Server and WebLogic Server Domains	4-5
4.2.3.1	Removing the Oracle home Directory	4-6
4.2.3.2	Removing Your Domains	4-6
4.2.4	Removing the Program Groups (Windows Only)	4-6
4.2.5	Rebooting Your System (Windows Only).....	4-6
4.3	Reinstalling the Software	4-6

5 Upgrading Oracle Forms and Reports

5.1	Planning an Upgrade to Oracle Forms 12c (12.2.1.1)	5-1
5.2	Preparing to Upgrade to Oracle Forms 12c (12.2.1.1) for upgrade from 11g (only).....	5-1
5.3	Upgrading to Oracle Forms 12c (12.2.1.1) from 11g.....	5-2
5.3.1	Re-Configuring the 11g Domain using the WLS Reconfig Wizard	5-2
5.3.2	Running the 12.2.1.1 Upgrade Assistant	5-2
5.4	Upgrading to Oracle Forms 12c (12.2.1.1) from 12c (12.2.1.0)	5-3
5.4.1	Run the 12.2.1.1 Upgrade Assistant and upgrade the Domain Schema	5-3
5.4.2	Re-Configuring the 12.2.1.0 Domain using the WLS Reconfig Wizard	5-3
5.4.3	Run the 12.2.1.1 Upgrade Assistant to upgrade the Forms installation	5-4
5.5	Post-Upgrade Steps After Upgrading to Oracle Forms 12c (12.2.1.1)	5-4
5.6	Planning an Upgrade to Oracle Reports 12c (12.2.1.1)	5-4
5.7	Preparing to Upgrade to Oracle Reports 12c (12.2.1.1).....	5-5
5.8	Upgrading to Oracle Reports 12c (12.2.1.1).....	5-5
5.8.1	Re-Configuring the 11g Domain using the WLS Reconfig Wizard	5-5

5.8.2	Examine Phase	5-6
5.8.3	Running the 12c Upgrade Assistant.....	5-6
5.9	Post-Upgrade Steps After Upgrading to Oracle Reports 12c (12.2.1.1)	5-6

A Integrating Oracle Internet Directory with Oracle Access Manager

A.1	Installing and Setting Up Required Components	A-2
A.2	Defining Authentication in Oracle Access Manager for Oracle Internet Directory	A-3
A.3	Managing Oracle Access Manager Policies that Rely on Your LDAP Store	A-4
A.4	Validating Authentication and Access	A-5

B Troubleshooting

B.1	General Troubleshooting Tips	B-1
B.2	Installation and Configuration Log Files.....	B-2
B.2.1	Installation Log Files	B-2
B.2.2	Configuration Log Files	B-2
B.3	Verifying Environment Variable Lengths for Oracle Reports (Windows Only)	B-3
B.4	Need More Help?	B-3

Preface

This document covers requirements, instructions, and troubleshooting tips for installing and configuring Oracle Forms and Reports.

Audience

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

Documentation Accessibility

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

Access to Oracle Support

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

Related Documents

For additional information, see the following manuals in the Oracle Fusion Middleware 12c documentation library. The information in these books can be useful if you are new to Oracle Fusion Middleware.

- *Planning an Installation of Oracle Fusion Middleware*. This book contains useful information you should read before installing any Oracle Fusion Middleware product.
- *Understanding Oracle Fusion Middleware*. This book introduces the common terms and concepts in an Oracle Fusion Middleware environment.
- *Administering Oracle Fusion Middleware*. This book contains information for managing your Oracle Fusion Middleware environment after installation and configuration is complete.

- *Installation Guide for Oracle Identity Management*. This book contains information about installing and configuring Oracle Identity and Access Management, which can be used with this release of Oracle Forms and Reports to create a more secure environment.

In addition, the *Oracle Fusion Middleware Upgrade Guide for Forms and Reports* describes how to upgrade previous version of Oracle Forms and Reports to the latest version.

Conventions

The following text conventions are used in this document:

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

Installation and Configuration Overview

This chapter provides an overview of the Oracle Forms and Reports installation and configuration.

The following topics are covered:

- [Section 1.1, "Oracle Forms and Reports Components"](#)
- [Section 1.2, "Securing Oracle Forms and Reports With Identity Management"](#)
- [Section 1.3, "Installation and Configuration Roadmap for Oracle Forms and Reports"](#)

1.1 Oracle Forms and Reports Components

The following components are available for installation:

- Oracle Forms
 - Oracle Forms Builder 12.2.1.1.0
 - Oracle Forms Deployment 12.2.1.1.0
- Oracle Reports
 - Oracle Reports 12.2.1.1.0
- Oracle HTTP Server 12.2.1.1.0
- Oracle Common Configuration Infrastructure
 - CIE CAM Shared Config 12.2.1.1.0
 - Enterprise Manager Plugin for Forms 12.2.1.1.0
- Infrastructure
 - Database Client Components 11.2.0.3.0
 - FMW Upgrade 12.2.1.1.0
 - OPatch 13.3.0.0.0

1.2 Securing Oracle Forms and Reports With Identity Management

If you want to have your Oracle Forms and Reports installation protected by an Identity Management tier, you must secure Oracle Forms and Reports with Oracle Access Manager.

Note: Your Oracle Forms and Reports installation can only be secured with Identity Management if you are configuring your components in deployment mode.

1.2.1 Securing Oracle Forms and Reports With Oracle Access Manager 11g

This release of Oracle Forms and Reports supports Oracle Internet Directory 11g (11.1.1.7 & 11.1.1.9) with Oracle Access Manager 11g Release 2 (11.1.2.2) and 11g Release 3 (11.1.2.3).

To install and configure Oracle Internet Directory with Oracle Access Manager, do the following:

1. Install Oracle Identity and Access Management.

If you want to install 11g Release 1, see "Installing Oracle Identity and Access Management" in *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*.

If you want to install 11g Release 2, see "Installing and Configuring Oracle Identity and Access Management" in *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

2. Configure a WebLogic Server domain for Oracle Access Manager.

For 11g Release 1, see "Configuring Oracle Access Manager" in *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*.

For 11g Release 2 or Release 3, see "Configuring Oracle Identity and Access Management Products" in *Oracle Fusion Middleware Installation Guide for Oracle Identity and Access Management*.

3. Integrate Oracle Access Manager with Oracle Internet Directory.

For 11g Release 1, see [Appendix A, "Integrating Oracle Internet Directory with Oracle Access Manager"](#).

For 11g Release 2 or Release 3, see "Integrating Oracle Internet Directory with Access Manager" in *Oracle Fusion Middleware Integration Guide for Oracle Identity Management Suite*.

If you have an existing Oracle Internet Directory with Oracle Single Sign-On, you can upgrade to Oracle Internet Directory with Oracle Access Manager as described in [Chapter 5, "Upgrading Oracle Forms and Reports"](#).

1.3 Installation and Configuration Roadmap for Oracle Forms and Reports

[Table 1–1, "Tasks in the Oracle Forms and Reports Installation and Configuration Flowchart"](#) shows the flow of a typical Oracle Forms and Reports installation and configuration.

Table 1–1 Tasks in the Oracle Forms and Reports Installation and Configuration Flowchart

Task	Description	Optional	More Information
Verify your system's environment.	Ensure that your system environment meets the general installation requirements for Oracle Fusion Middleware and Oracle Forms and Reports.	No	Make sure you read all of the information in Section 2.1, "Preparing to Install" .
Use Identity Management?	If you want Oracle Forms and Reports to be protected by an Identity Management tier then you must have Oracle Internet Directory up and running. Be sure to choose the Deployment configuration mode and then choose to install Oracle HTTP Server during the installation.	Yes	For more information about installing Oracle Internet Directory with Oracle Access Manager 11g, see Section 1.2.1, "Securing Oracle Forms and Reports With Oracle Access Manager 11g" .
Obtain the software.	Obtain all necessary software to install and configure Oracle Forms and Reports.	No	To see the software required to install Oracle Forms and Reports, see Section 2.1.5, "Obtaining the Oracle Fusion Middleware Software" . For information on which software you should download and where to obtain the software, refer to <i>Oracle Fusion Middleware Download, Installation, and Configuration Readme Files</i> .
Install Oracle WebLogic Server (FMW Infrastructure) and create an Oracle home.	Oracle Forms and Reports requires an Oracle home directory for installation and a WebLogic Server domain during configuration.	No	Only specific versions of Oracle WebLogic Server are supported. Review the Oracle Fusion Middleware certification document on the Oracle Fusion Middleware Supported System Configurations page. For installation instructions, see Section 2.2, "Installing Oracle WebLogic Server (FMW Infrastructure)" .
Start the Oracle Forms and Reports installer.	Start the Oracle Forms and Reports installer to install the software.	No	First, read and understand the following sections: When you are ready to begin, see Section 2.4.2, "Starting the Oracle Forms and Reports Installer" .
Install Oracle Forms and Reports.	Install the components using Oracle Universal Installer.	No	Follow the steps detailed in Section 2.4.5, "Installing Using Oracle Universal Installer" .

Table 1–1 (Cont.) Tasks in the Oracle Forms and Reports Installation and Configuration Flowchart

Task	Description	Optional	More Information
Run Repository Creation Utility	Create Oracle Fusion Middleware database schemas.	No	Follow the steps detailed in Section 2.4.6, "Repository Creation Utility" .
Configure Oracle Forms and Reports Using the Configuration Wizard	Use Configuration Wizard to configure your components.	No	Follow the steps detailed in Section 2.4.7, "Configuring Forms Using the Configuration Wizard" and Section 2.4.9, "Configuring Form Builder Standalone 12c Using the Configuration Wizard" .
Verify your environment.	Verify that your installation and configuration were successful.	No	For more information, see Chapter 3, "Verifying Oracle Forms and Reports Installation and Configuration" .

Installing and Configuring Oracle Forms and Reports

This chapter describes how to install and configure Oracle Forms and Reports.

The following topics are covered:

- [Section 2.1, "Preparing to Install"](#)
- [Section 2.2, "Installing Oracle WebLogic Server \(FMW Infrastructure\)"](#)
- [Section 2.3, "Installing Oracle Identity and Access Management"](#)
- [Section 2.4, "Installing and Configuring Oracle Forms and Reports"](#)

2.1 Preparing to Install

Before you begin, read this section carefully to ensure that your environment and other software needs are met before installing Oracle Forms and Reports.

- [Section 2.1.1, "Reviewing System Requirements and Specifications"](#)
- [Section 2.1.2, "Reviewing Certification Information"](#)
- [Section 2.1.3, "Reviewing Interoperability and Compatibility"](#)
- [Section 2.1.4, "Understanding Oracle Fusion Middleware Concepts"](#)
- [Section 2.1.5, "Obtaining the Oracle Fusion Middleware Software"](#)
- [Section 2.1.6, "Installing Oracle Forms and Oracle Reports on Separate Servers"](#)
- [Section 2.1.7, "Installing Oracle Forms and Reports in a New Oracle home"](#)
- [Section 2.1.8, "Installing Oracle Forms and Reports as a Non-Default User"](#)

2.1.1 Reviewing System Requirements and Specifications

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

The system requirements document covers information such as hardware and software requirements, database schema requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches. This document can be found on the *Oracle Fusion Middleware System Requirements and Specifications* page.

2.1.2 Reviewing Certification Information

Before performing any upgrade or installation you should read the Oracle Fusion Middleware certification document for your particular release. It is located on the *Oracle Fusion Middleware Supported System Configurations* page.

2.1.3 Reviewing Interoperability and Compatibility

Before performing any upgrade or installation you should see *Oracle Fusion Middleware Interoperability and Compatibility Guide for Oracle Forms and Reports*. This document contains important information regarding the ability of Oracle Fusion Middleware products to function with previous versions of other Oracle Fusion Middleware, Oracle, or third-party products. This information is applicable to both new Oracle Fusion Middleware users and existing users who are upgrading their existing environment.

2.1.4 Understanding Oracle Fusion Middleware Concepts

If you are new to Oracle Fusion Middleware, you should see *Understanding Oracle Fusion Middleware* to familiarize yourself with some concepts and terminology you will encounter.

2.1.5 Obtaining the Oracle Fusion Middleware Software

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

To install and configure Oracle Forms and Reports, you will need to download the following software:

- The installer for a certified version of Oracle WebLogic Server (FMW Infrastructure). Make sure you refer to the certification document (see [Section 2.1.2, "Reviewing Certification Information"](#)) to determine which version of Oracle WebLogic Server (FMW Infrastructure) you should obtain.
- The installer for Oracle Forms and Reports.
- If you want to secure your Oracle Forms and Reports installation with Identity Management, you can also download Oracle Internet Directory with Oracle Access Management.

Make a note of the directory where you download each installer; you will need this information when it is time to run the installer for each product.

2.1.6 Installing Oracle Forms and Oracle Reports on Separate Servers

If you choose to install Oracle Forms and Oracle Reports on different servers, you must perform some manual configuration in order for these two products to be able to communicate properly with each other.

The instructions for doing so are available in the "Communication Between Reports and Forms When Installed on Different Instances" section in *Oracle Fusion Middleware Publishing Reports to the Web with Oracle Reports Services*.

2.1.7 Installing Oracle Forms and Reports in a New Oracle home

Oracle Forms and Reports must be installed inside an Oracle home directory, which is created when Oracle WebLogic Server is installed.

Oracle Forms and Reports must be installed in its own Oracle home directory that it does not share with any other Oracle Fusion Middleware products of a different version.

2.1.8 Installing Oracle Forms and Reports as a Non-Default User

On UNIX operating systems, the installation of Fusion Middleware products is owned and controlled as a known user (for example, "oracle"). The file permissions associated with this installation are configured to ensure the highest level of security possible, which by default are 700 (meaning all files are owned and accessible by the owner only).

Changing the default permissions settings will reduce the security of the installation and possibly your system. Therefore, making such a change is not recommended. If other users require access to particular files or executables, the UNIX sudo command (or other similar command) should be considered in lieu of changing file permissions.

Refer to your UNIX operating system Administrator's Guide or contact your operating system vendor if you need further assistance.

On Windows operating systems, the user must be a member of the Windows "Admin" group. This gives the user the proper permissions required to start and stop processes after the installation, including the Builders.

2.2 Installing Oracle WebLogic Server (FMW Infrastructure)

Oracle Forms and Reports requires Oracle WebLogic Server (FMW Infrastructure), which creates the Oracle home directory during installation. This section contains the following topics:

- [Section 2.2.1, "Planning Your Oracle Home Location for Oracle Reports \(Windows Only\)"](#)
- [Section 2.2.2, "Downloading the Correct Installer for Your Operating System"](#)
- [Section 2.2.3, "Finding Oracle WebLogic Server \(FMW Infrastructure\) Installation Instructions"](#)
- [Section 2.2.4, "Stopping Node Manager Before Installing Oracle Forms and Reports \(Windows Only\)"](#)

Make sure you read the Oracle Fusion Middleware certification document for your particular release to determine the minimum version of Oracle WebLogic Server (FMW Infrastructure) that is required. This document is located on the *Oracle Fusion Middleware Supported System Configurations* page.

2.2.1 Planning Your Oracle Home Location for Oracle Reports (Windows Only)

If you are going to install Oracle Reports on a Windows operating system, make sure the path to your Oracle home directory is not too long. For more information, see [Section B.3, "Verifying Environment Variable Lengths for Oracle Reports \(Windows Only\)"](#).

2.2.2 Downloading the Correct Installer for Your Operating System

See [Section 2.1.5, "Obtaining the Oracle Fusion Middleware Software"](#) for information on where to obtain your Oracle WebLogic Server (FMW Infrastructure) installer.

2.2.3 Finding Oracle WebLogic Server (FMW Infrastructure) Installation Instructions

For Oracle WebLogic Server (FMW Infrastructure) installation instructions, see the "Running the Installation Program in Graphical Mode" chapter in *Installing and Configuring Oracle WebLogic Server and Coherence*. The WebLogic Server installation must be completed so that an Oracle home directory is created; you do not have to create a WebLogic Server domain as the Oracle Forms and Reports installer will allow you to do this for your Oracle Forms and Reports products.

If you are installing on a Windows operating system, be sure to read [Section 2.2.4, "Stopping Node Manager Before Installing Oracle Forms and Reports \(Windows Only\)"](#) after your Oracle WebLogic Server (FMW Infrastructure) installation is complete.

2.2.4 Stopping Node Manager Before Installing Oracle Forms and Reports (Windows Only)

If you are installing Oracle Forms and Reports on a Microsoft Windows operating system, you must ensure that the Node Manager utility that was installed with Oracle WebLogic Server is stopped before you begin the installation:

1. Verify the Oracle WebLogic Server Node Manager utility is stopped. If it is running, end the process.
2. Determine if the `nodemanager.properties` file is present in the `WebLogic_Home\common\nodemanager` directory.
 - a. If the `nodemanager.properties` file is not present, continue installing Oracle Forms and Reports.
 - b. 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
```

2.3 Installing Oracle Identity and Access Management

Your Oracle Forms and Reports installation can be protected with Identity Management (see [Section 1.2, "Securing Oracle Forms and Reports With Identity Management"](#)). If you choose to secure your Oracle Forms and Reports with Oracle Internet Directory and Oracle Access Manager, you must download and install these products if you do not already have them.

Oracle Identity and Access Management must be installed in a separate Oracle home directory from your Oracle Forms and Reports installation (see [Section 2.1.7, "Installing Oracle Forms and Reports in a New Oracle home"](#)). For performance reasons, Oracle recommends that Oracle Forms and Reports is installed on a separate machine from your Oracle Identity Management product.

Installation instructions for Oracle Identity and Access Management can be found in the "Installing and Configuring Oracle Identity and Access Management" chapter in *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*.

2.4 Installing and Configuring Oracle Forms and Reports

This section contains information and instructions for installing Oracle Forms and Reports. The following topics are covered:

- [Section 2.4.1, "Running the rootpre.sh Script on IBM AIX Operating Systems"](#)
- [Section 2.4.2, "Starting the Oracle Forms and Reports Installer"](#)
- [Section 2.4.3, "Viewing the Installation Log Files"](#)
- [Section 2.4.4, "Configuring Your Oracle Inventory \(UNIX Only\)"](#)
- [Section 2.4.5, "Installing Using Oracle Universal Installer"](#)
- [Section 2.4.6, "Repository Creation Utility"](#)
- [Section 2.4.7, "Configuring Forms Using the Configuration Wizard"](#)
- [Section 2.4.8, "Configuring Reports Using the Configuration Wizard"](#)
- [Section 2.4.9, "Configuring Form Builder Standalone 12c Using the Configuration Wizard"](#)

2.4.1 Running the rootpre.sh Script on IBM AIX Operating Systems

If you are installing on an IBM AIX operating system, you must run the `rootpre.sh` script as the `root` user from the `Disk1` directory before you start the installer. The `rootpre.sh` script should be run only once on a system, to load the right kernel extensions required for Oracle Database or Oracle Fusion Middleware.

Once the installer is started on IBM AIX, the following message appears:

```
Answer 'y' if root has run 'rootpre.sh' so you can proceed with Oracle
installation.
Answer 'n' to abort installation and then ask root to run 'rootpre.sh'.
```

```
Has 'rootpre.sh' been run by root? [y/n] (n)
```

```
Answer 'y', if root has run 'rootpre.sh' so that you can proceed with Oracle
installation.
Answer 'n', to abort installation and then ask root to run 'rootpre.sh'.
```

To skip this message on systems where `rootpre.sh` has run before, set the `SKIP_ROOTPRE` environment variable to `TRUE`.

2.4.2 Starting the Oracle Forms and Reports Installer

To start the installer, go to the directory where you downloaded the Oracle Forms and Reports installer and unpacked the archive file. Switch to the `Disk1` directory.

On Windows operating systems, double-click `setup.exe` file in the `Disk1` directory.

On UNIX operating systems, use the `runInstaller` command:

```
cd unpacked_archive_directory/Disk1
./runInstaller
```

2.4.3 Viewing the Installation Log Files

The installer writes logs files to the *Oracle_Inventory_Location/log* (on UNIX operating systems) or *Oracle_Inventory_Location\logs* (on Windows operating systems) directory. See [Section B.2.1, "Installation Log Files"](#) for more information about the log files and their contents.

2.4.4 Configuring Your Oracle Inventory (UNIX Only)

If you are installing on a UNIX operating 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.

Use the inventory screens in [Table 2–1](#) to configure the inventory directory and group information. For more help, select the screen name in the table, or click the **Help** button in the GUI.

Table 2–1 Inventory Directory and Group Screens

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

If you do not want to use the Oracle central inventory, you can create a file called `oraInst.loc` and in this file, include the full path of the inventory directory of your choice. For example, a typical `oraInst.loc` file would contain the following:

```
inventory_loc=/home/username/oraInventory
inst_group=group
```

Then, you can start the installer and point to the `oraInst.loc` file. For example:

```
./runInstaller -invPtrLoc location_of_oraInst.loc_file
```

2.4.5 Installing Using Oracle Universal Installer

Follow these instructions to install Oracle Forms and Reports using Oracle Universal Installer. After invoking Oracle Universal Installer as described in [Section 2.4.2, "Starting the Oracle Forms and Reports Installer"](#):

1. *Welcome* page. This page welcomes you to the installation. Click **Next**.
2. The *Auto Updates* page appears. This page enables you to choose to automatically receive software updates for your components from Oracle Corporation. Make your choices, then click **Next**.
3. The *Installation Location* page appears. Specify the Oracle home location into which you want to install the product(s). Click **Next**.
4. The *Installation Type* page appears. You can select *Standalone Forms Builder* if you want only that functionality, or choose *Forms and Reports Deployment* to install all of the products. Click **Next**.
5. The *Prerequisites Checks* page appears. This page shows you the progress of the system checking the prerequisites on your system before installation. If you are

lacking any prerequisites, a message will appear telling you so. You do not need to take any actions on this page, though you can view the log from here. Click **Next**.

6. The *Installation Summary* page appears, showing you what components and features are about to be installed. If you need to make changes, click **Back**, otherwise, click **Install** to start the installation.
7. The *Installation Progress* page appears. This page shows you the progress of the installation, and will warn you if there are any problems. You can view messages and logs from this page, but typically no action is required here. When progress is complete, click **Next** (go to a *Summary* page). Alternatively, you can click **Finish**.
8. If you clicked **Next**, the *Installation Complete* page appears, showing you the components that have been installed. Click **Finish**.

2.4.6 Repository Creation Utility

Before proceeding to the next tasks, use the Repository Creation Utility (RCU). RCU is available with the Oracle Fusion Middleware Infrastructure distribution. Follow these steps.

1. Run `$FMW_HOME/oracle_common/bin/rcu.sh`
2. The *Welcome* page appears. Click **Next**.
3. The *Create Repository* page appears. Select *CreateRepository*, and *System Load and Product Load* (default). Click **Next**.
4. The Database Connection Details page appears. Enter the RCU DB connection information. Click **Next**.
5. The *Checking Prerequisites* box pops up. It shows the progress of prerequisites checking. When it is complete, click **OK**.
6. The *Select Components* page appears. Select the *Create new prefix* radio button and provide a schema prefix (such as DEMO). Select the following components: *Oracle Platform Security Services*, *Audit Services*, *Audit Services Append* and *Audit Services Viewer*. Click **Next**.
7. The *Checking Prerequisites* box pops up. It shows the progress of prerequisites checking. When it is complete, click **OK**.
8. The *Schema Passwords* page appears. Leave the default *Use same passwords for all schemas* radio button selected, and enter the password in the *Password* field. Click **Next**.
9. The *Map Tablespaces* page appears. No action is required. Click **Next**.
10. A *Repository Creation Utility* box pops up, requiring your confirmation. Click **OK**.
11. A *Creating Tablespaces* pop up appears, showing the progress of tablespace creation. Click **OK**, then **Next**.
12. The *Summary* page appears, showing your actions and choices. Click **Create**.
13. A *System Load* progress box appears, showing progress. The box will disappear when complete.
14. Click **Close**.

2.4.7 Configuring Forms Using the Configuration Wizard

This section describes using the Configuration Wizard to configure Oracle Forms.

Note: To complete the configuration, Windows DOS shells must be run with Administrator permissions and Unix shells must be owned by the same user who performed the installation (for example, *oracle*). Failure to follow this instruction may result in the configuration failing silently.:

Follow these steps to configure Oracle Forms using the Configuration Wizard.

1. Run the Configuration Wizard using *config.sh* (config.cmd on Windows) located in the `ORACLE_HOME/oracle_common/common/bin` directory.
2. Choose *Create a new domain*, and enter the desired domain home path.
3. Click **Next**. The *Templates* screen appears. Keep the default selection (*Create Domain using Product Templates*), and select *Oracle Forms – 12.2.1.1.0 [forms]*. Any dependent templates will be automatically selected. Additional templates can be selected based on the components desired. Refer to those individual component documents for more details.
4. Click **Next**. The *Application Location* screen appears. Keep the default value for Application location.
5. Click **Next**. The *Administrator Account* screen appears. Enter the desired WebLogic Domain administration username and password. This information will be needed to access WebLogic Server Control and Fusion Middleware Control.
6. Click **Next**. The *Domain Mode and JDK* screen appears. Select the *Domain Mode* (either **Development** or **Production**). To ensure the highest degree of security, selecting **Production** is recommended. Leave the default JDK selection as it appears, unless using another version of the JDK desired.
7. Click **Next**. The *Database Configuration Type* screen appears. Enter the RCU DB connection information. This information was created when running the Repository Creation Utility (RCU) in an earlier step. After entering the requested information, click **Get RCU Configuration**. Verify that a successful message is presented in the Results Log panel. If an indication of success is not indicated, check the databases entries made in this step. Mostly it will only be necessary to enter data for *DBMS/Service*, *Host Name*, *Port*, *Schema Owner*, and *Schema Password*. Other entries can remain as the default value.
8. Click **Next**. The *JDBC Component Schema* screen appears. These instructions assume each Repository schema uses the same password. If not, enter the correct schema passwords.
9. Click **Next**. The *JDBC Component Schema Test* screen appears. If any tests fail, it may be necessary to go back and make corrections.
10. Click **Next**. The *Advanced Configuration* screen appears. Select *Topology* and *System Components*. Depending on the level of customization desired, other selections may be used.
11. Click **Next**. The *Managed Servers* screen appears. Verify that the Server Groups is set to *FORMS-MAN-SVR* (for Forms). This screen can also be used to add additional managed servers if desired.
12. Click **Next**. The *Clusters* screen appears. Default entries will be acceptable mostly, unless adding new clusters is desirable.

13. Click **Next**. The *Assign Servers to Clusters* screen appears. The default values will be appropriate for most cases. However, if new managed servers were added in the previous step, they should be added to the cluster here.
14. Click **Next**. The *Coherence Clusters* screen appears. The default values will be appropriate for most cases.
15. Click **Next**. The *Machines* screen appears. Use this screen to override the machine name or add additional machine names for extend domain scenarios (add remote Forms nodes).
16. Click **Next**. The *Assign Servers to Machines* screen appears. Move the AdminServer to the AdminServerMachine by clicking the > button.
17. Click **Next**. The *Virtual Targets* screen appears. Used with WebLogic Server Partitions. Refer to the WebLogic Server documentation for details.
18. Click **Next**. The *Partitions screen* appears. Use this screen to add Weblogic Partitions if desired. Refer to the WebLogic Server documentation for details on how to use Partitions.
19. Click **Next**. The *System Components* screen appears. The default values will be appropriate for most cases. You can add additional Forms or other System Component instances on this screen (for example, extending a domain). If Oracle HTTP Server (OHS) was selected to be included in an earlier step, the OHS component would need to be added here.
20. Click **Next**. The *Assign System Components* screen appears. The default values will be appropriate for most cases. If OHS added previously, move it to the *Machines* column under the Admin Server using the > button.

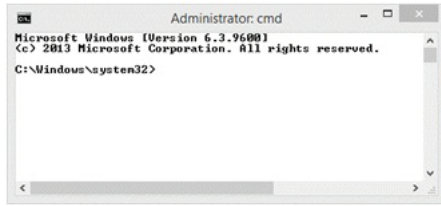
Note: In case of extend domain scenario; assign the Forms System Component to the relevant Machine.

21. Click **Next**. The *Configuration Summary* screen appears.
22. Click **Create**. The *Configuration Progress* screen appears.
23. Depending on the location and performance of the Repository database, this process may take a few minutes. Click **Finish**. The *End of Configuration* screen appears.

To complete the Configuration, Node Manager and the Admin Server must be successfully started.

On Unix/Linux platforms, the shell used to start these servers the first time, must be the installation owner's (for example, *oracle*).

On Microsoft Windows, the DOS shell used to start these servers the first time must have Administrator permissions. To enable an Administrator shell session, right-click the Command Prompt shortcut and select **Run as Administrator**. The shell that opens will indicate that it has Administrator privileges in its title bar, as shown in the following figure.



2.4.8 Configuring Reports Using the Configuration Wizard

This section describes using the Configuration Wizard to configure Oracle Reports.

Note: To complete the configuration, Windows DOS shells must be run with Administrator permissions and Unix shells must be owned by the same user who performed the installation (for example, *oracle*). Failure to follow this instruction may result in the configuration failing silently.

Follow these steps to configure Oracle Reports using the Configuration Wizard.

1. Run the Configuration Wizard using `config.sh` located in the Run the Configuration Wizard using `config.sh` located in the `ORACLE_HOME/oracle_common/common/bin` directory.
2. In the *Create Domain* page, choose *Create a new domain*, and enter the desired domain home path.
3. Click **Next**. The *Templates* screen appears. Select *Reports Server*, *Reports Tools*, *Reports Bridge*, *Reports Application*, and *OHS*. Skip *Reports Upgrade Only Template*; this is only used for upgrades.
4. Click **Next**. The *Application Location* screen appears. Keep the default value for Application location.
5. Click **Next**. The *Administrator Account* screen appears. Enter the WebLogic Domain administration username and password. This information will be needed to access WebLogic Server Control and Fusion Middleware Control.
6. Click **Next**. The *Domain Mode and JDK* screen appears. Select the Domain Mode (either **Development** or **Production**). For our purposes, select **Production**. Leave the default JDK selection as it appears, unless using another version of the JDK desired.
7. Click **Next**. The *Database Configuration Type* screen appears. Enter the RCU DB connection information.
 - Select Vendor and *Driver* from the drop-down lists.
 - Enter *DBMS/Service*, *Host Name* and *Port*.
Enter the *Schema Owner* and *Schema Password*. *Schema Owner* value refers to the schemas created while running the Repository Creation Utility (RCU) in a previous step of the installation process. The trailing `_STB` should be included along with the prefix value chosen at the time RCU was run previously. For example, if the prefix you provided during the Repository creation was *DEMO* then the entry for Schema Owner will be *DEMO_STB*.

Click **Get RCU Configuration**. You should receive a success message.

8. Click **Next**. The *JDBC Component Schema* screen appears. These instructions assume each Repository schema uses the same password. If not, enter the correct schema passwords.
9. Click **Next**. The *JDBC Component Schema Test* screen appears. The tests are run and the results given.
10. Click **Next**. The *Advanced Configuration* screen appears. Select *Administration Server, Node Manager, Managed Servers, Clusters and Deployment and Services*.
11. Click **Next**. The *Administration Server* screen appears. The default values will be appropriate for most cases.
12. Click **Next**. The *Managed Servers* screen appears. Create WLS_REPORTS. Verify that the Server Groups is set to REPORTS-APP-SERVERS. The Listen address is All Local Addresses. Add WLS_REPORTS to reports_cluster.
13. Click **Next**. The *Clusters* screen appears. Default entries will be acceptable mostly, unless adding new clusters is desirable.
14. Click **Next**. The *Assign Servers to Clusters* screen appears. The default values will be appropriate for most cases. However, if new managed servers were added in the previous step, they should be added to the cluster here.
15. Click **Next**. The *Coherence Clusters* screen appears. The default values will be appropriate for most cases.
16. Click **Next**. The *Machines* screen appears. Add a machine, for example: *AdminServerMachine* (default).
17. Click **Next**. The *Assign Servers to Machines* screen appears. Add AdminServer and WLS_REPORTS to *AdminServerMachine* by clicking the > button. The Reports App is targeted to WLS_REPORTS by default.

Development Configuration can be used for development mode where sufficient system resources are not available. To perform this configuration, follow these steps:

1. In the *Admin Server* screen, in **Server groups** drop down list, select *REPORTS-APP-SVR* as one of the groups. This will configure AdminServer with reports.
2. The rest of the steps are the same as before.

Note: One ReportsTools component is compulsory. Reports Server and Reports Bridge are optional.

This configuration is not supported for use with production, multiuser environments. It is further not recommended in cases where sufficient system resources are available. This configuration should only be used on development environments where adequate resources such as system memory are limited.

Oracle Forms is not supported for use in this configuration.

18. Click **Next**. The *System Components* screen appears. The default values will be appropriate for most cases. You can add additional Forms or other System Component instances on this screen (for extend domain scenario). For example, if adding OHS, it would appear here.

19. Click **Next**. The *Assign System Components* screen appears. The default values will be appropriate for most cases.

Note: In case of extend domain scenario; assign the Forms System Component to the relevant Machine.

20. Click **Next**. The *Deployment Targeting* screen appears.
21. Click **Next**. The *Service Targeting* screen appears.
22. Click **Next**. The *Configuration Summary* screen appears.
23. Click **Create**. The *Configuration Progress* screen appears.

2.4.8.1 Provisioning a Machine

Follow these steps to provision a machine for Oracle Reports.

1. Start Node manager

```
$DOMAIN_HOME/bin/startNodeManager.sh
```

2. Start Adminserver

```
$DOMAIN_HOME/bin/startWebLogic.sh
```

3. Use WLST to create Reports Components

- Create a reports tools targeted to machine 'AdminServerMachine' - <reportsToolsName>
- Create a reports server targeted to machine 'AdminServerMachine' - <reportsServerName> (optional)

give credentials of adminserver to connect

```
connect("weblogic", "welcome1", "localhost:7001")
```

```
createReportsToolsInstance(instanceName='<reportsToolsName>', machine='AdminServerMachine')
```

```
createReportsServerInstance(instanceName='<reportsServerName>', machine='AdminServerMachine')
```

```
exit()
```

4. Start WLS_REPORTS

```
$DOMAIN_HOME/bin/startManagedWebLogic.sh WLS_REPORTS (Inprocess server starts)
```

Create a reports tools targeted to machine 'AdminServerMachine' - reptools1

Create a reports server targeted to machine 'AdminServerMachine' - repsvr_<hostname>

2.4.8.2 Configure Reports Builder "Run to web"

To configure Reports Builder as "Run to web", follow these steps.

1. Locate the directory.

```
$DOMAIN_HOME/servers/WLS_REPORTS/tmp/_WL_user/reports_12.2.1/<random_number>/war
```

2. Add it to builder config file (below element, <pluginParam> as shown below.


```

$DOMAIN_
HOME/config/fmwconfig/components/ReportsToolsComponent/reptool
s1/rwbuilder.conf

</pluginParam>

<webLayout port="9002" docroot="/scratch/rrpai/wls2/user_
projects/domains/test1/servers/WLS_REPORTS/tmp/_WL_
user/reports_12.2.1/5ah7s6/war"/>

```

The port is the OHS port. If OHS is not there, it should be the WLS_REPORTS port.

2.4.9 Configuring Form Builder Standalone 12c Using the Configuration Wizard

Note: To complete the configuration, Windows DOS shells must be run with Administrator permissions and Unix shells must be owned by the same user who performed the installation (for example, *oracle*). Failure to follow this instruction may result in the configuration failing silently.

This process assumes that the Forms/Reports software has been successfully installed.

1. Install the Form Builder Standalone 12c software.
2. Launch the Form Builder Configuration assistant using one of the following methods:
 - Choose to run it after the Form Builder Standalone software installation (by checking the box after the installation that offers to launch the Configuration Assistant), Or
 - Launch the configuration tool later from the location `$FMW_HOME/forms/common/bin/config_builder.sh` (`config_builder.bat` for MS Windows).



3. In the first screen of the Configuration Wizard, enter the Form Builder Instance path and click **Next**.
4. Upon successful completion of the configuration, the configuration succeeded screen appears. Click **Next**.
5. Click **Finish**. The *End of Configuration* screen appears.

Verifying Oracle Forms and Reports Installation and Configuration

This chapter contains information to help you verify your Oracle Forms and Reports installation and configuration.

After you have successfully run the installer and configuration wizard, you can verify the status of your installation by performing any combination of the following:

- [Section 3.1, "Verifying the Installation Logs"](#)
- [Section 3.2, "Verifying the Domain Server Logs"](#)
- [Section 3.3, "Verifying the Installed Products and Product Versions"](#)
- [Section 3.4, "Checking Browser URLs"](#)
- [Section 3.5, "Performing Basic Administration Tasks"](#)

3.1 Verifying the Installation Logs

Check for the presence of installation log files in `logs` directory inside your Oracle Inventory directory.

On UNIX operating 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 Windows operating systems, the location for the inventory directory is `C:\Program Files\Oracle\Inventory\logs`.

For more information about the installation log files, refer to [Section B.2.1, "Installation Log Files"](#).

3.2 Verifying the Domain Server Logs

Check the domain server logs, which are located in the `servers` directory inside the domain home directory. For example, on UNIX operating systems:

```
DOMAIN_HOME/servers/server_name
```

On Windows operating systems:

```
DOMAIN_HOME\servers\server_name
```

3.3 Verifying the Installed Products and Product Versions

Check the products and product version numbers by running the `opatch lsinventory -detail` command from the `ORACLE_HOME/OPatch` directory.

3.4 Checking Browser URLs

The Installation Complete screen contains URLs that can be used to access your installed and configured products, as shown in [Table 3–1](#):

Table 3–1 Oracle Forms and Reports Product URLs

Product or Component	URL
Administration Server Console	<code>http://host:port/console</code>
Enterprise Manager Console	<code>http://host:port/em</code>
Oracle Forms	<code>http://host:port/forms/frmservlet</code>
Oracle Reports	<code>http://host:port/reports/rwservlet</code>

Note that if you installed in development mode, there would not be an Enterprise Manager Console URL to verify, and your Oracle Forms and Reports URLs would use the Administration Server port. In deployment mode, Enterprise Manager Console and EM Agent would use the Administration Server port, while Oracle Forms and Reports could be verified using their respective Managed Server ports or the Oracle HTTP Server port number.

Additionally, if your Oracle Forms and Reports are protected by Oracle Identity Management, then you will be prompted to provide login credentials when you attempt to access the Oracle Forms and Oracle Reports URLs.

3.4.1 Verifying Fusion Middleware Control

After installation and configuration, connect to Oracle Fusion Middleware Control to manage your domains.

For more information about using the Administration Console, see "Overview of WebLogic Server System Administration" in *Oracle Fusion Middleware Understanding Oracle WebLogic Server*.

3.5 Performing Basic Administration Tasks

After running the installer and configuration tool, all of your system components, the Administration Server, and Managed Servers should be up and running; the configuration tool does all of this automatically.

In the event that some of your servers or components are stopped unexpectedly, you can restart your Oracle Fusion Middleware environment by using the instructions in "Starting an Oracle Fusion Middleware Environment" in *Administering Oracle Fusion Middleware*.

Your Oracle Fusion Middleware environment can also be stopped as described in "Stopping an Oracle Fusion Middleware Environment" in *Administering Oracle Fusion Middleware*.

Deinstalling Oracle Forms and Reports

This chapter describes how to remove Oracle Forms and Reports from your system.

You should always use the instructions provided in this chapter for removing the software. If you try to remove the software manually, you may experience problems when you try to reinstall the software again at a later time. Following the procedures in this chapter will ensure that the software is properly removed. See [Section 4.3, "Reinstalling the Software"](#) for more information.

Note: If you need to remove a particular product component, you must remove the entire domain containing the component. It is not possible to remove a single product from a domain containing multiple products. Instructions for removing a domain are provided in [Section 4.2.3, "Removing Oracle WebLogic Server and WebLogic Server Domains"](#).

The following topics are covered:

- [Section 4.1, "Understanding Deinstallation"](#)
- [Section 4.2, "Deinstalling the Software"](#)
- [Section 4.3, "Reinstalling the Software"](#)

4.1 Understanding Deinstallation

The Oracle Forms and Reports deinstaller gives you the following software removal options, which should be performed in the order shown:

- **Deinstall Unmanaged ASInstances**

This option removes instances of your system components not associated with a WebLogic domain.

Note: This option is not applicable to Oracle Forms and Reports since all components must be associated with a WebLogic Server domain.

- **Deinstall ASInstances managed by WebLogic Domain**

This option removes instances of your WebLogic domain managed system components. The Administration Server must be up and running to remove

managed instances; you will need to specify the credentials to access your WebLogic domain.

You should choose this option if you have configured any Oracle Forms and Reports components, either by using the installer or the configuration tool.

■ **Deinstall Oracle Home**

This option removes everything under the Oracle home from which the deinstaller is started and also gives you the option to remove the Oracle home directory. Be sure that you have removed all unmanaged and managed instances of your system components and also stopped all the servers before you remove the Oracle home. The deinstaller only removes the Oracle home directory from where it was started and does not remove any associated managed instances.

You should choose this option:

- If you have configured any Oracle Forms and Reports components, have already removed all managed instances of those components, have stopped all the servers, and are ready to remove the software in the Oracle home.
- If you have performed a software-only installation and want to remove the installed software. For this scenario, since you did not configure any Oracle Forms and Reports components, you do not need to select the **Deinstall ASInstances managed by WebLogic Domain** option; you can start the deinstaller and go directly to the **Deinstall Oracle Home** option.

There are two Oracle home directories that need to be removed: the Oracle Forms and Reports Oracle home and also the Oracle Common home. Each Oracle home contains its own deinstaller; you must start the deinstaller separately for each Oracle home as the deinstaller only removes the Oracle home from where it is started.

If you want to also remove Oracle WebLogic Server from your system, you must run the Oracle WebLogic Server uninstaller to do so. Refer to the instructions in [Section 4.2.3, "Removing Oracle WebLogic Server and WebLogic Server Domains"](#).

[Table 4-1](#) provides additional information for each task listed in the flowchart.

Table 4-1 Oracle Forms and Reports Deinstallation Tasks

Task	Description
Stop Oracle Fusion Middleware.	Stop the Administration Server. See Section 4.2.1.3, "Stopping Oracle Fusion Middleware" for more information.
Start the Oracle Universal Installer.	Start the Oracle Universal Installer and remove your managed instances. Make sure the Administration Server is up before removing your managed instances. See Section 4.2.1.1, "Starting the Deinstaller" and Section 4.2.1.2, "Removing Your Managed Oracle Forms and Reports Instances" .
Restart the Oracle Forms and Reports deinstaller.	Start the Oracle Forms and Reports deinstaller again and remove your Oracle Forms and Reports Oracle home directory. See Section 4.2.1.1, "Starting the Deinstaller" and Section 4.2.1.4, "Removing Your Oracle Forms and Reports Oracle Home" .
Remove Oracle WebLogic Server and WebLogic Server domains.	See Section 4.2.3, "Removing Oracle WebLogic Server and WebLogic Server Domains" .

Table 4–1 (Cont.) Oracle Forms and Reports Deinstallation Tasks

Task	Description
Perform Optional Tasks?	<p>Read the following to see if they are applicable to your environment:</p> <ul style="list-style-type: none"> ▪ Section 4.2.4, "Removing the Program Groups (Windows Only)" ▪ Section 4.2.5, "Rebooting Your System (Windows Only)"

4.2 Deinstalling the Software

This section contains information and instructions for removing Oracle Forms and Reports. This procedure involves the following:

- [Removing Oracle Forms and Reports](#)
- [Removing Oracle WebLogic Server and WebLogic Server Domains](#)
- [Removing the Program Groups \(Windows Only\)](#)
- [Rebooting Your System \(Windows Only\)](#)

4.2.1 Removing Oracle Forms and Reports

Follow the instructions in this section to deinstall Oracle Forms and Reports.

- [Starting the Deinstaller](#)
- [Removing Your Managed Oracle Forms and Reports Instances](#)
- [Stopping Oracle Fusion Middleware](#)
- [Removing Your Oracle Forms and Reports Oracle Home](#)

4.2.1.1 Starting the Deinstaller

Go to the `ORACLE_HOME/oui/bin` (on UNIX operating systems) or `ORACLE_HOME\oui\bin` (on Windows operating systems) directory and start the deinstaller.

On UNIX operating systems:

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

On Windows operating systems:

```
setup.exe -deinstall
```

On Windows systems, you can also start the deinstaller from the Start menu by selecting **Programs > Oracle Home - Home1 > Uninstall**.

4.2.1.2 Removing Your Managed Oracle Forms and Reports Instances

All managed Oracle Instances must be removed from the system before you remove the Oracle home. Start the deinstaller ([Section 4.2.1.1, "Starting the Deinstaller"](#)), then follow the instructions in [Table 4–2](#) to remove your managed instances (these are instances that are associated with a WebLogic Domain):

Note: To remove a managed instance, the Administration Server must be up and running.

Note: If you want to remove an Oracle instance which is registered with a WebLogic domain, make sure to launch the deinstaller from the Oracle home directory that is associated with the Oracle instance you are removing.

The deinstaller will list all instances associated with same WebLogic domain; make sure you choose to remove only those instances that are associated with the Oracle home from where you launched the deinstaller.

Table 4–2 Deinstallation Screens for Removing Managed Oracle Instances

Screen	When This Screen Appears	Description
Welcome	Always	The installer displays this screen when you are about to deinstall one or more Oracle Fusion Middleware software components.
Select Deinstallation Type	Always	Select the type of deinstallation you want to perform. In this case, select Deinstall ASInstances managed by WebLogic Domain .
Specify WebLogic Domain	Always	Specify the credentials to connect to your WebLogic Domain.
Select Managed Instance	Always	Select the managed Oracle instance you want to deinstall.
Deinstallation Summary (Managed Instance)	Always	Verify the Oracle Instance that is about to be removed.
Deinstallation Progress	Always	This screen shows the progress and status of the deinstallation.
Deinstallation Complete	Always	This screen summarizes the deinstallation that was just completed. Click Finish to dismiss the screen.

4.2.1.3 Stopping Oracle Fusion Middleware

After you have removed all managed instances of your system components, you should stop all servers and processes before proceeding to remove the Oracle home.

For more information about stopping Oracle Fusion Middleware, refer to "Stopping an Oracle Fusion Middleware Environment" in *Administering Oracle Fusion Middleware*.

4.2.1.4 Removing Your Oracle Forms and Reports Oracle Home

After you have removed your managed instances and stopped the Administration Server, start the deinstaller again (Section 4.2.1.1, "Starting the Deinstaller") and follow the instructions in Table 4–3 to remove your Oracle Forms and Reports Oracle home.

Table 4–3 Deinstallation Screens for Removing Your Product Oracle Home

Screen	When This Screen Appears	Description and Action Required
Welcome	Always	The installer displays this screen when you are about to deinstall one or more Oracle Fusion Middleware software components.
Select Deinstallation Type	Always	Select the type of deinstallation you want to perform. In this case, select Deinstall Oracle Home .
Deinstall Oracle Home	Always	Verify the Oracle home directory that is about to be deinstalled. Click Deinstall to continue. On the Warning screen, select whether or not you want the deinstaller to remove the Oracle home directory in addition to removing the software. Click Yes to have the deinstaller remove the software and Oracle home, No to remove only the software, or Cancel to return to the previous screen. If you select No , go to Section 4.2.2, "Removing the Oracle Home Directory Manually" for instructions on how to manually remove your Oracle home directory.
Deinstallation Progress	Always	This screen shows the progress and status of the deinstallation.
Deinstallation Complete	Always	This screen summarizes the deinstallation that was just completed. Click Finish to dismiss the screen.

4.2.2 Removing the Oracle Home Directory Manually

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

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

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

4.2.3 Removing Oracle WebLogic Server and WebLogic Server Domains

Refer to "Uninstalling the Software" in *Installing and Configuring Oracle WebLogic Server and Coherence* for instructions on how to remove Oracle WebLogic Server. The uninstall program does not remove the home directory associated with the installation (the Oracle home), the JDK, or any user-created WebLogic domains for Oracle Forms and Reports. Only the components that were installed by the installation program are removed.

After the uninstall program is finished, perform the following:

- [Removing the Oracle home Directory](#)
- [Removing Your Domains](#)

4.2.3.1 Removing the Oracle home Directory

After the uninstall program is finished, you must manually remove the Oracle home directory. For example, if your Oracle home directory was `/home/Oracle/Middleware` on a UNIX operating system:

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

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

4.2.3.2 Removing Your Domains

After the uninstall program is finished, you must manually remove your Domain home directory; this directory was specified in the Domain Location field on the Select Domain screen during installation.

Use your normal operating system commands to remove your Domain home directory. For example, if your Domain home directory was `/home/Oracle/Domains/FRDomain` on a UNIX operating system:

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

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

4.2.4 Removing the Program Groups (Windows Only)

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

- Oracle FMW 12c Domain - name_domain
- Oracle - name_home
- Oracle WebLogic

4.2.5 Rebooting Your System (Windows Only)

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

4.3 Reinstalling the Software

The installer does not allow reinstallation of Oracle Forms and Reports in a directory that already contains an Oracle instance. To reinstall Oracle Forms and Reports in the same directory as before, you must:

1. Follow the instructions in [Section 4.2.1.2, "Removing Your Managed Oracle Forms and Reports Instances"](#) to remove all Oracle instances from the directory.
2. Follow the instructions in [Chapter 2, "Installing and Configuring Oracle Forms and Reports"](#) to reinstall the software.

Upgrading Oracle Forms and Reports

This chapter describes how to upgrade from Oracle Forms or Reports 11g / Oracle Forms and Reports 12c (12.2.1.0) to Oracle Forms and Reports 12c (12.2.1.1).

The following topics are covered:

- [Section 5.1, "Planning an Upgrade to Oracle Forms 12c \(12.2.1.1\)"](#)
- [Section 5.2, "Preparing to Upgrade to Oracle Forms 12c \(12.2.1.1\) for upgrade from 11g \(only\)"](#)
- [Section 5.3, "Upgrading to Oracle Forms 12c \(12.2.1.1\) from 11g"](#)
- [Section 5.4, "Upgrading to Oracle Forms 12c \(12.2.1.1\) from 12c \(12.2.1.0\)"](#)
- [Section 5.5, "Post-Upgrade Steps After Upgrading to Oracle Forms 12c \(12.2.1.1\)"](#)
- [Section 5.6, "Planning an Upgrade to Oracle Reports 12c \(12.2.1.1\)"](#)
- [Section 5.7, "Preparing to Upgrade to Oracle Reports 12c \(12.2.1.1\)"](#)
- [Section 5.8, "Upgrading to Oracle Reports 12c \(12.2.1.1\)"](#)
- [Section 5.9, "Post-Upgrade Steps After Upgrading to Oracle Reports 12c \(12.2.1.1\)"](#)

5.1 Planning an Upgrade to Oracle Forms 12c (12.2.1.1)

If you are running any of the following software versions, you can use the instructions in this guide to upgrade to Oracle Forms 12.2.1.1:

- Oracle FMW 11g (Release 1) Forms to Oracle Forms 12c (12.2.1.1).
- Oracle FMW 11g (Release 2) Forms to Oracle Forms 12c (12.2.1.1).
- Oracle FMW 12c (12.2.1.0) Forms to Oracle Forms 12c (12.2.1.1).

5.2 Preparing to Upgrade to Oracle Forms 12c (12.2.1.1) for upgrade from 11g (only)

Before you begin to upgrade to Oracle Forms 12.2.1.1 from 11g, you must run the Forms upgrade extension script on the remote Forms nodes to extract Forms configuration residing on the remote nodes.

Note: You are required to perform these steps only if you have any remote Forms nodes, which you may have added using extend domain or expand cluster scenario.

To run Forms upgrade extension on the remote Forms nodes:

1. Run the `forms-upgrade-ext.sh` (`forms-upgrade-ext.bat`) script on each remote node and pass it **collect** option. It will extract and package Forms configuration files on that remote node.

The `forms-upgrade-ext.sh` is installed in the following directory:

```
$FORACLE_HOME/forms/plugins/upgrade
```

2. Copy the artifacts from all the remote nodes to the Admin Server node.
3. Run the `forms-upgrade-ext.sh` (`forms-upgrade-ext.bat`) script on the Admin Server node and pass it the **apply** option. It will extract the Forms configuration from the remote node artifacts and apply it to the Domain.

5.3 Upgrading to Oracle Forms 12c (12.2.1.1) from 11g

The process of upgrading to Oracle Forms 12c (12.2.1.1) from Oracle Forms 11g includes the following two steps:

- [Re-Configuring the 11g Domain using the WLS Reconfig Wizard](#)
- [Running the 12.2.1.1 Upgrade Assistant](#)

5.3.1 Re-Configuring the 11g Domain using the WLS Reconfig Wizard

Note: In 11g, Forms did not require the RCU schemas, but starting with 12c all the WLS 12c domains require RCU schemas to be setup. Hence, before you perform these steps, ensure that you create the required schemas (refer to the Installation Guide for details) in RCU before you run the WLS Reconfig wizard.

To re-configuring the 11g Domain using the WLS 12c Reconfig wizard:

1. Run the Reconfig wizard from the following location:

```
$FORACLE_HOME/oracle_common/common/bin/reconfig.sh
```
2. Provide the location of the 11g FMW Domain for upgrade.
3. Enter the RCU schema information.
4. Select only the Topology option in the *Advanced Configuration* in the Reconfig wizard.

Do not select the system components option. Those will be automatically configured/upgraded by the Upgrade Assistant.
5. Leave the default selections on the Node Manager screen. Enter user name and password if needed.
6. Select JRF-MAN-SVR and FORMS-MAN-SVR server groups for all the Forms managed servers, including the default Forms managed servers WLS_FORMS, WLS_FORMS1, etc. and any other Forms managed servers users that may have been added after the 11g installation.
7. Click **Next** until you get to the last screen of the Reconfig wizard.

5.3.2 Running the 12.2.1.1 Upgrade Assistant

Run the 12.2.1.1 Upgrade Assistant to complete the upgrade.

To run the Upgrade Assistant:

1. Run the 12.2.1.1 Upgrade Assistant from the following location:
`$FORACLE_HOME/oracle_common/upgrade/bin/ua`
2. Select the *All Configuration Used by the Domain* option.
3. Provide the location of the reconfigured 12c domain.
4. Select the prerequisite check boxes and click **Upgrade**.

5.4 Upgrading to Oracle Forms 12c (12.2.1.1) from 12c (12.2.1.0)

The process of upgrading to Oracle Forms 12.2.1.1 from 12.2.1.0 includes the following three steps:

- [Run the 12.2.1.1 Upgrade Assistant and upgrade the Domain Schema](#)
- [Re-Configuring the 12.2.1.0 Domain using the WLS Reconfig Wizard](#)
- [Run the 12.2.1.1 Upgrade Assistant to upgrade the Forms installation](#)

Note: Running `forms-upgrade-ext.sh` on remote nodes is **not required** when upgrading from 12.2.1.0

5.4.1 Run the 12.2.1.1 Upgrade Assistant and upgrade the Domain Schema

Run the 12.2.1.1 Upgrade Assistant to complete the upgrade.

To run the Upgrade Assistant:

1. Run the 12.2.1.1 Upgrade Assistant from the following location:
`$FORACLE_HOME/oracle_common/upgrade/bin/ua`
2. Select the *All Schemas Used by the Domain* option.
3. Select the Schema components to Upgrade.
4. Provide the location of the reconfigured 12c domain.
5. Select the prerequisite check boxes
6. Provide the RCU Database connection information.
7. Click **Next**.
8. Click **Finish**.

5.4.2 Re-Configuring the 12.2.1.0 Domain using the WLS Reconfig Wizard

To re-configuring the 12.2.1.0 Domain using the WLS Reconfig wizard:

1. Run the Reconfig wizard from the following location:
`$FORACLE_HOME/oracle_common/common/bin/reconfig.sh`
2. Provide the location of the 12.2.1.0 FMW Domain for upgrade.
3. Enter the RCU schema information.
4. Select only the Topology option in the *Advanced Configuration* in the reconfig wizard.

Do not select the System Components option. Those will be automatically configured/upgraded by the Upgrade Assistant.

5. Leave the default selections on the *Node Manager* screen. Enter user name and password if needed.
6. Select JRF-MAN-SVR and FORMS-MAN-SVR server groups for all the Forms managed servers, including the default Forms managed servers WLS_FORMS, WLS_FORMS1, etc., and any other Forms managed servers users that may have been added after the 11g installation.
7. Click **Next** until you get to the last screen of the Reconfig wizard.

5.4.3 Run the 12.2.1.1 Upgrade Assistant to upgrade the Forms installation

Run the 12.2.1.1 Upgrade Assistant to complete the upgrade.

To run the Upgrade Assistant:

1. Run the 12.2.1.1 Upgrade Assistant from the following location:
`$ORACLE_HOME/oracle_common/upgrade/bin/ua`
2. Select the *All Configuration Used by the Domain* option.
3. Provide the location of the reconfigured 12.2.1.1 domain.
4. Select the prerequisite check boxes.
5. Click **Upgrade**.

5.5 Post-Upgrade Steps After Upgrading to Oracle Forms 12c (12.2.1.1)

Review the following list of post-upgrade tasks you might have to perform after using the Upgrade Assistant to upgrade to Oracle Forms 12.2.1.1:

- When upgrading from 11g Forms, regenerate the Forms application files: fmx's, mmx's, and plx's to run on Oracle Forms Services 12.2.1.1. This is not required when upgrading from Oracle Forms 12.2.1.0.
- If you deployed the Oracle Forms Services J2EE custom application ear file (`formsapp.ear`) file to override the context root or Forms servlet alias, you should perform similar steps in the 12.2.1.1 Oracle WebLogic Server domain.

For more information, see the "Custom Deployment of Forms Java EE Application" section in *Oracle Fusion Middleware Forms Services Deployment Guide*.

- Manually copy any customizations to the shell scripts in the source Oracle home to the equivalent shell scripts that reside in Oracle Fusion Middleware 12c (12.2.1.1) Oracle instance directory.
- Oracle Fusion Middleware 12c (12.2.1.1) does not support Java Runtime Environment (JRE) 1.6 or older. If necessary, upgrade your client JRE to 7u55 or 8u77 to run Oracle Forms 12.2.1.1.

5.6 Planning an Upgrade to Oracle Reports 12c (12.2.1.1)

If you are running any of the following software versions, you can use the instructions in this guide to upgrade to Oracle Reports 12c (12.2.1.1):

- Oracle FMW 11g (Release 1) Reports to Oracle Reports 12c (12.2.1.1).
- Oracle FMW 11g (Release 2) Reports to Oracle Reports 12c (12.2.1.1).

5.7 Preparing to Upgrade to Oracle Reports 12c (12.2.1.1)

Before you begin to upgrade to Oracle Reports 12c (12.2.1.1), you must run Reports upgrade extension on the remote Reports nodes to extract Reports configuration residing on the remote nodes.

Note: You are required to perform these steps only if you have any remote Reports nodes, which you may have added using extend domain or expand cluster scenario.

To run Reports upgrade extension on the remote Reports nodes:

1. Run the `reports-upgrade-ext.sh` (`reports-upgrade-ext.bat`) script on each remote node in **extract** mode. It will extract and package Reports configuration files on that remote node.

The `forms-upgrade-ext.sh` script is installed in the following directory:

```
$ORACLE_HOME/reports/plugins/upgrade
```

2. Copy the artifacts from all the remote nodes to the Admin Server node.
3. Run the `reports-upgrade-ext.sh` (`reports-upgrade-ext.bat`) script on the Admin Server node in **apply** mode. It will extract the Reports configuration from the remote node artifacts and apply it to the Domain.
4. Run the Upgrade Assistant in readiness mode and ensure that it is working properly.

```
$ORACLE_HOME/oracle_common/upgrade/bin/ua -readiness
```

5.8 Upgrading to Oracle Reports 12c (12.2.1.1)

The process of upgrading to Oracle Reports 12c (12.2.1.1) includes the following two steps:

- [Re-Configuring the 11g Domain using the WLS Reconfig Wizard](#)
- [Examine Phase](#)
- [Running the 12.2.1.1 Upgrade Assistant](#)

5.8.1 Re-Configuring the 11g Domain using the WLS Reconfig Wizard

Note: In 11g, Reports did not require the RCU schemas, but starting with 12c all the WLS 12c domains require RCU schemas to be setup. Hence, before you perform these steps, ensure that you create the required schemas (refer to the Installation Guide for details) in RCU before you run the WLS Reconfig wizard.

To re-configuring the 11g Domain using the WLS Reconfig wizard:

1. Run the Reconfig wizard from the following location:
`$ORACLE_HOME/oracle_common/common/bin/reconfig.sh`
2. Provide the location of the 11g FMW Domain for upgrade.
3. Enter the RCU schema information.
4. Select only the Managed Servers in the wizard.

Do not select the system components option. Those will be automatically configured/upgraded by the Upgrade Assistant.

5. Leave the default selections on the Node Manager screen. Enter user name and password if needed.
6. Select JRF-MAN-SVR and REPORTS-MAN-SVR server groups for all the Reports managed servers, including the default Reports managed servers WLS_REPORTS, WLS_REPORTS1, etc. and any other Reports managed servers users that may have been added after the 11g installation.
7. Click **Next** until you get to the last screen of the Reconfig wizard.

5.8.2 Examine Phase

Follow these manual steps to complete the Examine phase.

1. In the Examine screen for reports, you will see information about components in 11g but missing in 12c, or undeployed reports. Make a note of the component names and types.
2. Cancel the upgrade now, and create component/deploy reports 12c app.
3. Create reports components in 11g on to 12c using WLST commands: Start node manager, *AdminServer*.
4. Use WLST commands to create reports tools, reports servers, reports bridges. Use the same names available in the above step. See [Section 2.4.8.1, "Provisioning a Machine"](#) for more information on Provisioning.
5. Start Reports managed servers. This will cause reports 12c app to be deployed automatically.
6. Shutdown Nodemanager/Adminserver/Reports managed servers.

5.8.3 Running the 12c Upgrade Assistant

Run the 12c Upgrade Assistant to complete the upgrade.

To run the Upgrade Assistant:

1. Run the 12c Upgrade Assistant from the following location:
\$FORACLE_HOME/oracle_common/upgrade/bin/ua
2. Provide the location of the reconfigured 12c domain.
3. Select the prerequisite check boxes and click **Upgrade**.

5.9 Post-Upgrade Steps After Upgrading to Oracle Reports 12c (12.2.1.1)

Note: To start Oracle Reports server and components after upgrading to 12c, see the "Starting and Stopping Oracle Reports Services" section in *Publishing Reports to the Web with Oracle Reports Services*.

These steps are only required for Oracle Reports when 11g domains span multiple machines.

Review the following list of post-upgrade tasks you might have to perform after using the Upgrade Assistant to upgrade to Oracle Reports 12c (12.2.1.1):

- For WLS:
 - Pack/Unpack domain for Remote machines.
 - Start remote managed servers, so that reports 12c app gets deployed there.
 - Shutdown remote managed servers.
- For Reports:
 - In AdminServer machine--Extract reports upgraded files meant to be on remote machines.

```
$ORACLE_HOME/reports/plugins/upgrade/reports-upgrade-ext.sh  
extractRemote <domainHome> <wlsName> <jarFileName>
```
 - Repeat for each reports managed server which is targeted to remote machine.
 - Copy the respective jars to remote machine where that managed server is targeted.

```
$ORACLE_HOME/reports/plugins/upgrade/reports-upgrade-ext.sh  
applyRemote <domainHome> <instanceHome> <wlsName> <jarFileName>
```
- Regenerate the Reports application files: rep's and rdf's (optional), to run on Oracle Reports Server 12c (12.2.1.1).
- Manually copy any customizations to the shell scripts in the source Oracle home to the equivalent shell scripts that reside in Oracle Fusion Middleware 12c (12.2.1.1) Oracle instance directory.

Integrating Oracle Internet Directory with Oracle Access Manager

This appendix describes postinstallation enablement of a centralized LDAP store for use with Oracle Access Manager. Oracle Internet Directory is featured in this discussion. However, tasks are the same regardless of your chosen LDAP provider.

Oracle Access Manager addresses each user population and LDAP directory store as an identity domain. Each identity domain maps to a configured LDAP User Identity Store that is registered with Oracle Access Manager. Multiple LDAP stores can be used with each one relying on a different supported LDAP provider.

During initial WebLogic Server domain configuration, the Embedded LDAP is configured as the one and only User Identity Store for Oracle Access Manager. Within the Embedded LDAP, the Administrators group is created, with `weblogic` seeded as the default Administrator:

- Only the User Identity Store designated as the System Store is used to authenticate Administrators signing in to use the Oracle Access Manager Console, remote registration, and custom administrative commands in WLST.
- Users attempting to access an OAM-protected resource can be authenticated against any store, not necessarily the only one designated as the Default User Identity Store.
- Oracle Security Token Service uses only the Default User Identity Store. When adding User constraints to a Token Issuance Policy, for instance, the identity store from which the users are to be chosen must be Default User Identity Store.

After registering a User Identity Store with Access Manager, administrators can reference the store in one or more authentication modules, which form the basis for Oracle Access Manager Authentication Schemes and Policies. When you register a partner (either using the Oracle Access Manager Console or the remote registration tool), an application domain can be created and seeded with a policy that uses the designated default Authentication Scheme. When a user attempts to access an Oracle Access Manager-protected resource, she is authenticated against the store designated by the authentication module.

The following topics are covered:

- [Section A.1, "Installing and Setting Up Required Components"](#)
- [Section A.2, "Defining Authentication in Oracle Access Manager for Oracle Internet Directory"](#)
- [Section A.3, "Managing Oracle Access Manager Policies that Rely on Your LDAP Store"](#)

- [Section A.4, "Validating Authentication and Access"](#)

A.1 Installing and Setting Up Required Components

The following overview identifies various tasks required when integrating Oracle Internet Directory 11.1.1.5 with Oracle Access Manager 11.1.1.5.

See Also: Oracle Fusion Middleware Administrator's Guide for Oracle Access Management.

Task overview: Integrating Oracle Internet Directory 11.1.1.5 with Oracle Access Manager 11.1.1.5

1. Prepare your environment for this integration:
 - a. Install Oracle Internet Directory 11.1.1.5, as described in the "Installing Oracle Identity and Access Management (11.1.1.5.0)" chapter in *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*.
 - b. Install and set up Oracle Access Manager with the desired LDAP directory, as described in *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*. (see also "Configuring Oracle Internet Directory").
 - c. Extend the LDAP directory schema for Access Manager, and create Users and Groups in the LDAP directory as described in *Oracle Fusion Middleware Installation Guide for Oracle Identity Management*.
2. Create Authentication Providers for your LDAP provider and Configure WebLogic Server to use them to avoid multiple login pages when accessing the Oracle Access Manager Console:.

Whether you authenticate through Oracle Access Manager Console or directly through the WebLogic Server Administration Console, confirm that all authentication providers are set to SUFFICIENT for single sign-on:

- a. Click **Security Realms**, *myrealm*, then click **Providers**.
- b. Click **New**, enter a name, and select a type. For example:
Name: *OID Authenticator*
Type: *OracleInternetDirectoryAuthenticator*
OK
- c. In the Authentication Providers table, click the newly added authenticator.
- d. On the Settings page, click the **Common** tab, set the Control Flag to **SUFFICIENT**, then click Save.
- e. Click the **Provider Specific** tab, then specify the following values for your deployment:
Host: LDAP host. For example: *example*
Port: LDAP host listening port. *3060*
Principal: LDAP administrative user. For example: *cn=******
Credential: LDAP administrative user password. *******
User Base DN: Same search base as the LDAP user.
All Users Filter: For example: *(&(uid=*)(objectclass=person))*

User Name Attribute: Set as the default attribute for username in the LDAP directory. For example: uid.

Group Base DN: The group searchbase (same as User Base DN)

Note: Do not set the All Groups filter; the default works fine as is.

Save.

3. Set DefaultIdentityAsserter:

- a. From **Security Realms**, *myrealm*, **Providers**, click **Authentication**, click **DefaultIdentityAsserter** to see the configuration page.
- b. Click the **Common** tab and set the Control Flag to **SUFFICIENT**.
- c. **Save**.

4. Reorder Providers:

- a. On the Summary page where providers are listed, click the **Reorder** button
- b. On the **Reorder Authentication Providers** page, select a provider name and use the arrows beside the list to order the providers as follows:

WebLogic Provider
 IAMSuiteAgent
 OracleInternetDirectoryAuthenticator
 DefaultIdentityAsserter

- c. Click OK to save your changes

5. Activate Changes: In the Change Center, click **Activate Changes**, then Restart Oracle WebLogic Server.

6. Proceed with [Section A.2, "Defining Authentication in Oracle Access Manager for Oracle Internet Directory"](#).

A.2 Defining Authentication in Oracle Access Manager for Oracle Internet Directory

The following procedure guides as you set up an LDAP Authentication Method that points to your registered User Identity Store and an Authentication Scheme that uses this LDAP module for Form or Basic authentication. *OAMAdminConsoleScheme* is used in this example on the presumption that you designated your new LDAP store as the System Store. Your environment might be different.

Prerequisites

[Section A.1, "Installing and Setting Up Required Components"](#)

Ensure that the designated User Identity Store contains any user credentials required for authentication.

To use your identity store for authentication with Access Manager

1. **Register Oracle Internet Directory** with Oracle Access Manager, as described in the "Managing User Identity Stores" section in *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*.

2. **Define Authentication Modules and Plug-ins:** From System Configuration tab, Access Manager Settings section, expand the Authentication Modules node.
 - a. **LDAP Modules:** Open **LDAP Authentication** module, select your User Identity Store, and click **Apply**.
 - b. **Custom Authentication Modules:** In `LDAPPlugin Steps (stepUI, UserIdentificationPlugIn)`, specify your `KEY_IDENTITY_STORE_REF`, and click **Apply**. For example:

```
Authentication Modules
  Custom Authentication module
    LDAPPlugin
      Steps tab
        stepUI UserIdentificationPlugIn
```

Repeat this step for the `stepUA UserAuthenticationPlugIn` plug-in, and Apply your changes, as shown here:

See Also: *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*

3. **Define Authentication Scheme Challenge Methods:** Form and Basic Challenge Methods require a reference to the LDAP Authentication Module or Plug-in that points to your User Identity Store. For example:

```
Oracle Access Manager Console
  Policy Configuration tab
    Shared Components node
      Authentication Schemes node
        DesiredScheme (OAMAdminConsoleScheme or any Form or Basic scheme)
```

- a. Confirm that the Authentication Module references the LDAP module or plug-in that points to your Identity Store.
- b. Click **Apply** to submit the changes (or close the page without applying changes).
- c. Dismiss the Confirmation window.

See Also: *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*

4. Proceed to [Section A.3, "Managing Oracle Access Manager Policies that Rely on Your LDAP Store"](#).

A.3 Managing Oracle Access Manager Policies that Rely on Your LDAP Store

Oracle Access Manager policies protect specific resources. The policies and resources are organized in an Application Domain.

This section describes how to configure authentication policies to use the Authentication Scheme that points to your User Identity Store.

Prerequisites

[Section A.2, "Defining Authentication in Oracle Access Manager for Oracle Internet Directory"](#)

To create an application domain and policies that use LDAP authentication

1. From the Oracle Access Manager Console, open:
 - Oracle Access Manager Console
 - Policy Configuration tab
 - Application Domains node
2. Locate and open the desired Application Domain (or click the Create (+) button, enter a unique name, and save it).
3. **Define Resources and Policies:** Define (or edit) the following elements for your application domain and environment, as described in *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*:
 - **Resource Definitions:** Before you can add a resource to a policy, you must define the resource within the Application Domain. See "Adding and Managing Resource Definitions for Use in Policies".
 - **Authentication Policies:** On the Policy page, select the scheme that references the LDAP module or plug-in that points to your registered Oracle Internet Directory User Identity Store. Add specific resources and complete the policy for your environment. See "Defining Authentication Policies for Specific Resources".
 - **Authorization Policies:** Create or modify an Authorization Policy for specific resources and include any Responses and Constraints you need. See the "Defining Authorization Policies for Specific Resources" section in *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*.
 - **Token Issuance Policies:** Choose the desired User Identity Store when setting Identity Conditions in Token Issuance Policies. See the "Managing Token Issuance Policies and Constraints with Oracle Access Manager" in the *Oracle Fusion Middleware Administrator's Guide for Oracle Access Management*.
4. Proceed to [Section A.4, "Validating Authentication and Access"](#).

A.4 Validating Authentication and Access

The procedure here provides several methods for confirming that Agent registration and authentication and authorization policies are operational. The procedures are nearly identical for both OAM Agents and OSSO Agents (`mod_osso`). However, OSSO Agents use only the authentication policy and not the authorization policy.

To verify authentication and access

1. Using a Web browser, enter the URL for an application protected by the registered Agent to confirm that the login page appears (proving that the authentication redirect URL was specified appropriately). For example:

```
http://myWebserverHost.example.com:8100/resource1.html
```

2. Confirm that you are redirected to the login page.
3. On the Sign In page, enter a valid username and password when asked, and click Sign In.
4. Confirm that you are redirected to the resource and proceed as follows:
 - **Success:** If you authenticated successfully and were granted access to the resource; the configuration is working properly.

- **Failure:** If you received an error during login or were denied access to the resource, check the following:
 - **Authentication Failed:** Sign in again using valid credentials.
 - **Access to URL... denied:** This userID is not authorized to access this resource.
 - **Resource not Available:** Confirm that the resource is available.
 - **Wrong Redirect URL:** Verify the redirect URL in the Oracle Access Manager Console.

Troubleshooting

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

- [Section B.1, "General Troubleshooting Tips"](#)
- [Section B.2, "Installation and Configuration Log Files"](#)
- [Section B.3, "Verifying Environment Variable Lengths for Oracle Reports \(Windows Only\)"](#)
- [Section B.4, "Need More Help?"](#)

B.1 General Troubleshooting Tips

If you encounter an error during installation:

- To complete the configuration, Windows DOS shells must be run with Administrator permissions and Unix shells must be owned by the same user who performed the installation (for example, *oracle*). Failure to follow this instruction may result in the configuration failing silently.
- Read the *Oracle Fusion Middleware Release Notes* for the latest updates. The most current version of the release notes is available on Oracle Technology Network in the *Oracle Fusion Middleware Documentation* page.

Select the documentation library for your specific product release to view the release notes.

- Verify that your computer meets the requirements specified in the *Oracle Fusion Middleware System Requirements and Specifications* document.

Select the document that is applicable for your release.

- If you entered incorrect information on one of the installation screens, return to that screen by clicking **Back** until you see the screen, or by using the navigation pane on the left side of the screen.
- If an error occurred while the installer is copying or linking files:
 1. Note the error and review the installation log files.
 2. Remove the failed installation by following the steps in [Chapter 4, "Deinstalling Oracle Forms and Reports"](#).
 3. Correct the issue that caused the error.
 4. Restart the installation.

B.2 Installation and Configuration Log Files

This section contains information about the log files that are created when running the Oracle Forms and Reports installer and the configuration tool. Log files contain information that can help you troubleshoot problems with your installation or configuration.

B.2.1 Installation Log Files

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

- Linux: */etc/oraInst.loc*
- HP-UX and Solaris: */var/opt/oracle/oraInst.loc*

On Windows operating systems, the location for the inventory directory is *C:\Program Files\Oracle\Inventory\logs*.

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

- *installdate-time-stamp.log*
This is the main log file.
- *installdate-time-stamp.out*
This log file contains the output and error streams during the installation.
- *installActionsdate-time-stamp.log*
This file is used by the installer GUI to keep track of internal information.
- *installProfiledate-time-stamp.log*
This log file contains the overall statistics like time taken to complete the installation, also configuration, memory and CPU details.
- *oraInstalldate-time-stamp.log*
This log file contains the output stream of the copy session.

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

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

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

B.2.2 Configuration Log Files

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

On UNIX operating systems:

```
% ./config.sh -log=log_filename
```

On Windows operating systems:

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

If you specify an absolute path with your *log_filename* then your log file will be created there. If you only specify a file name with no path, then the log files are created in the *ORACLE_HOME/common/bin* (on UNIX operating systems) or *ORACLE_HOME\common\bin* (on Windows operating systems) directory.

B.3 Verifying Environment Variable Lengths for Oracle Reports (Windows Only)

If an environment variable used by `startManagedWebLogic.cmd` (for example, *PATH* or *CLASSPATH*) contains too many characters, Oracle Reports will generate errors when you try to start its Managed Server.

To work around this issue, you can try to convert all directory names longer than eight characters to the Windows short name format. For example, `C:\Oracle11g\Middleware` can be converted to `C:\Oracle~1\Middle~1` wherever you define your environment variables that use this path.

You can also reinstall Oracle WebLogic Server to a location where the directory path is shorter than its current location.

For more information about the character limits of the environment variables on your Windows system, refer Article 830473 on the Microsoft Support website (<http://support.microsoft.com/kb/830473>), or refer to your operating system documentation.

B.4 Need More Help?

If this appendix does not solve the problem you encountered, try looking for a solution on My Oracle Support (formerly OracleMetaLink):

<https://support.oracle.com/>

If you are unable to find a solution for your problem, open a service request.