

Oracle Banking Digital Experience

**Installer Pre-Requisite Setup Manual
Release 17.2.0.0.0**

Part No. E88573-01

July 2017

ORACLE®

Oracle Banking Digital Experience Installer Pre-Requisite Setup Manual
July 2017

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1. Preface

1.1 Intended Audience

This document is intended for the following audience:

- Customers
- Partners

1.2 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>.

1.3 Access to Oracle Support

Oracle customers 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.

1.4 Structure

This manual is organized into the following categories:

Preface gives information on the intended audience. It also describes the overall structure of the User Manual.

The subsequent chapters describes following details:

- Introduction
- Configuration / Installation.

1.5 Related Information Sources

For more information on Oracle Banking Digital Experience Release 17.2.0.0.0, refer to the following documents:

- Oracle Banking Digital Experience Licensing Guide

2. Introduction

This guide helps you to do the pre-requisite setup required before the execution of OBDX 17.2.0.0.0 Installer.

More details about each task are explained in detail in following sections.

2.1 Software List

Software Name	Version	Mandatory Software
Operating System	RHEL 7.x	Y
Oracle Database	12.2.0.1.0	Y
Oracle Java Development Kit	1.8.0_131	Y
Oracle WebLogic	12.2.1.2.0	Y
Oracle Weblogic Infrastructure	12.2.1.2.0	Y
Oracle Web Tier Suite	11.1.1.9.0	Y
Oracle Webgates Suite	11.1.2.3.0	Y
Oracle Installer – WebLogic	10.3.6.0	Y
Oracle Java Development Kit	1.7	Y
Oracle Identity and Access Management Suite (IAM)	11.1.2.3.0	N
LDAP (OUD)	11.1.2.3.0	N
Oracle Business Intelligence Publisher	12.2.1.0.0	N

Software Name	Version	Mandatory Software
Python	2.7.5	Y
Python Package: cx_Oracle	5.2.1	Y
Python Package: urwid	1.3.1	Y
Oracle Client	12.2.0.1	Y

2.2 Pre-requisite software installation for OBDX Installer

Below steps assume Python 2.7.5 and Oracle Instant client is installed and available on server. You can verify the python version by executing the command as shown below:

```
[devops@obdxwls /]$ python -V
Python 2.7.5
[devops@obdxwls /]$
```

Note: These steps require root login on server where OBDX software pre-requisite are performed (i.e. Server which host Oracle Weblogic)

cx_Oracle

Step 1: Download cx_Oracle from Python packages website.

Note: Kindly ensure correct rpm package is downloaded as per Python (2.7.5) and Oracle database (12c) version.

For .e.g.: cx_Oracle-5.2.1-12c-py27-1.x86_64.rpm for Python 2.7.5 and Oracle 12c

Step 2: Login as root onto the server and install the cx_Oracle rpm package (downloaded in earlier section).

For e.g.: We can use below command for installation

```
# rpm -ivh cx_Oracle-5.2.1-12c-py27-1.x86_64.rpm
```

```
[root@ setup]# rpm -ivh cx_Oracle-5.2.1-12c-py27-1.x86_64.rpm
Preparing...                               ##### [100%]
Updating / installing...
 1:cx Oracle-5.2.1-1                        ##### [100%]
```

Urwid

Step 1: Download Urwid from Urwid (or urwid.org) website.

Note: Support version for Urwid is 1.3.1 (urwid-1.3.1.tar.gz)

Step 2: Extract the tar file as shown below

```
[root@          setup]# tar -zxvf urwid-1.3.1.tar.gz
urwid-1.3.1/urwid/tests/test_container.py
urwid-1.3.1/urwid/tests/test_util.py
urwid-1.3.1/urwid/tests/test_vterm.py
urwid-1.3.1/urwid/tests/test_graphics.py
urwid-1.3.1/urwid/tests/test_listbox.py
urwid-1.3.1/urwid/tests/test_widget.py
urwid-1.3.1/urwid/tests/__init__.py
urwid-1.3.1/urwid/tests/test_doctests.py
```

Step 3: Browse into the extracted directory and run below command

```
# python setup.py build_py
```

```
[root@          urwid-1.3.1]# python setup.py build_py
running build_py
creating build
creating build/lib.linux-x86_64-2.7
creating build/lib.linux-x86_64-2.7/urwid
copying urwid/lcd_display.py -> build/lib.linux-x86_64-2.7/urwid
copying urwid/canvas.py -> build/lib.linux-x86_64-2.7/urwid
copying urwid/escape.py -> build/lib.linux-x86_64-2.7/urwid
copying urwid/signals.py -> build/lib.linux-x86_64-2.7/urwid
copying urwid/main_loop.py -> build/lib.linux-x86_64-2.7/urwid
copying urwid/command_map.py -> build/lib.linux-x86_64-2.7/urwid
copying urwid/old_str_util.py -> build/lib.linux-x86_64-2.7/urwid
```

Note: Ensure Python 2.7.5 version should be available in PATH variable. Above execution should be done using Python 2.7.5.

Step 4: Execute below command to perform Urwid installation

```
# python setup.py install
```

```
[root@          urwid-1.3.1]# python setup.py install
running install
running bdist_egg
running egg_info
writing urwid.egg-info/PKG-INFO
writing top-level names to urwid.egg-info/top_level.txt
writing dependency_links to urwid.egg-info/dependency_links.txt
reading manifest file 'urwid.egg-info/SOURCES.txt'
reading manifest template 'MANIFEST.in'
warning: no files found matching 'CHANGELOG'
writing manifest file 'urwid.egg-info/SOURCES.txt'
installing library code to build/bdist.linux-x86_64/egg
running install_lib
running build_py
running build_ext
```

Note: Ensure Python 2.7.5 version should be available in PATH variable. Above execution should be done using Python 2.7.5.

3. Installing and Configuring Weblogic 12c with JRF

This chapter describes the steps for installing the Weblogic Server version 12.2.1.2.0 along with the components of Java Required Files (JRF) in the following sections respectively:

- Section 3.1, "Installing Stand-alone Weblogic"
- Section 3.2, "Extending the Weblogic environment with JRF"

3.1 Installing Stand-alone Weblogic

Oracle WebLogic Server is a scalable, enterprise-ready Java Platform, Enterprise Edition (Java EE) application server. The WebLogic Server infrastructure supports the deployment of many types of distributed applications

This chapter describes the installation tasks which contains the following sections:

- Section 3.1.1, "Pre-requisite - Installing Java 1.8"
- Section 3.1.2, "Installing Weblogic"
- Section 3.1.3, "Verifying the Installation"

3.1.1 Pre-requisite - Installing Java 1.8

- Obtain the Java tarball pack from the Oracle Java Downloads. Download ***jdk-8u131-linux-x64.tar.gz*** file to a directory.
- Change the directory in which you want to install,

```
cd <Directory_Path>
```

- Unpack the tarball and install Java using the following command:

```
tar zxvf <Path>/jdk-8u131-linux-x64.tar.gz
```

Note: You must enter the absolute path of the folder where the TAR file is located.

- Now, set the path and environment variable for Java as:

```
export JAVA_HOME=<Java_Install_Path>/jdk1.8.0_131
```

```
export PATH=$JAVA_HOME/bin:$PATH
```

3.1.2 Installing Weblogic

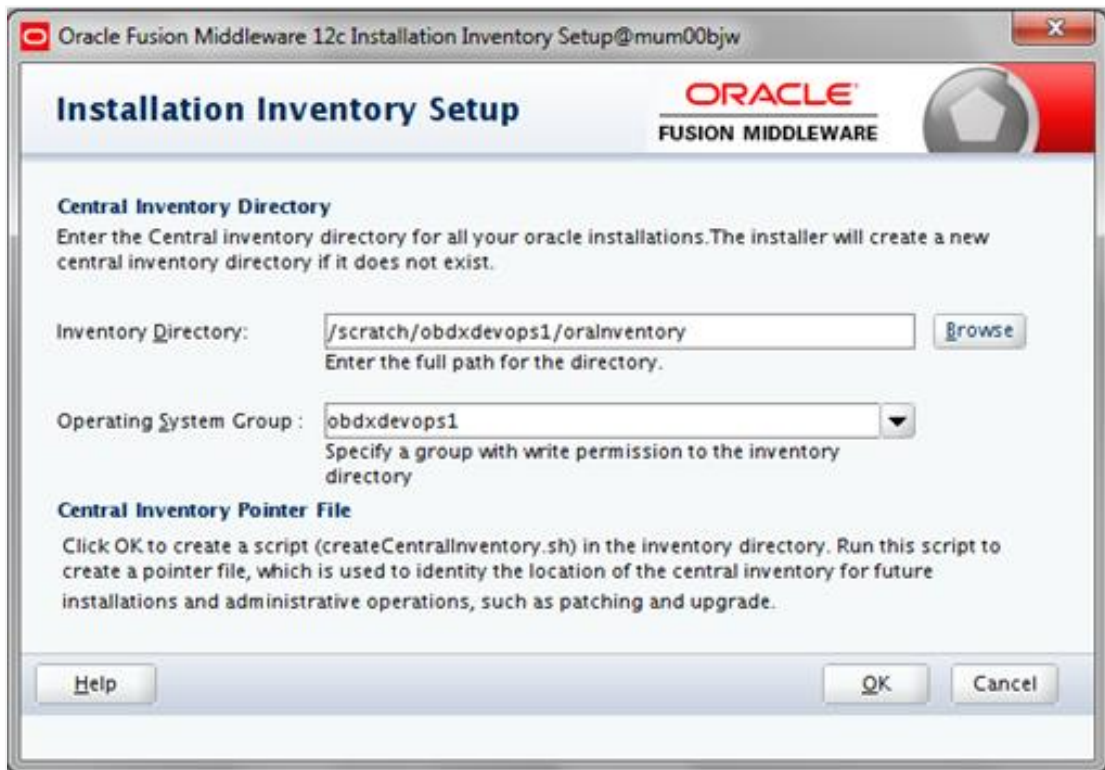
- Obtain Weblogic 12.2.1.2.0 JAR from the Oracle Fusion Middleware Downloads. Download ***fmw_12.2.1.2.0_wls.jar*** file to a directory.
- Now to start the installer, go to the directory where you downloaded the file.
- Start the installer from the same directory using the below command:

```
java -jar <Path>/fmw_12.2.1.2.0_wls.jar
```

Note: You must enter the absolute path of the folder where the JAR file is located.

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

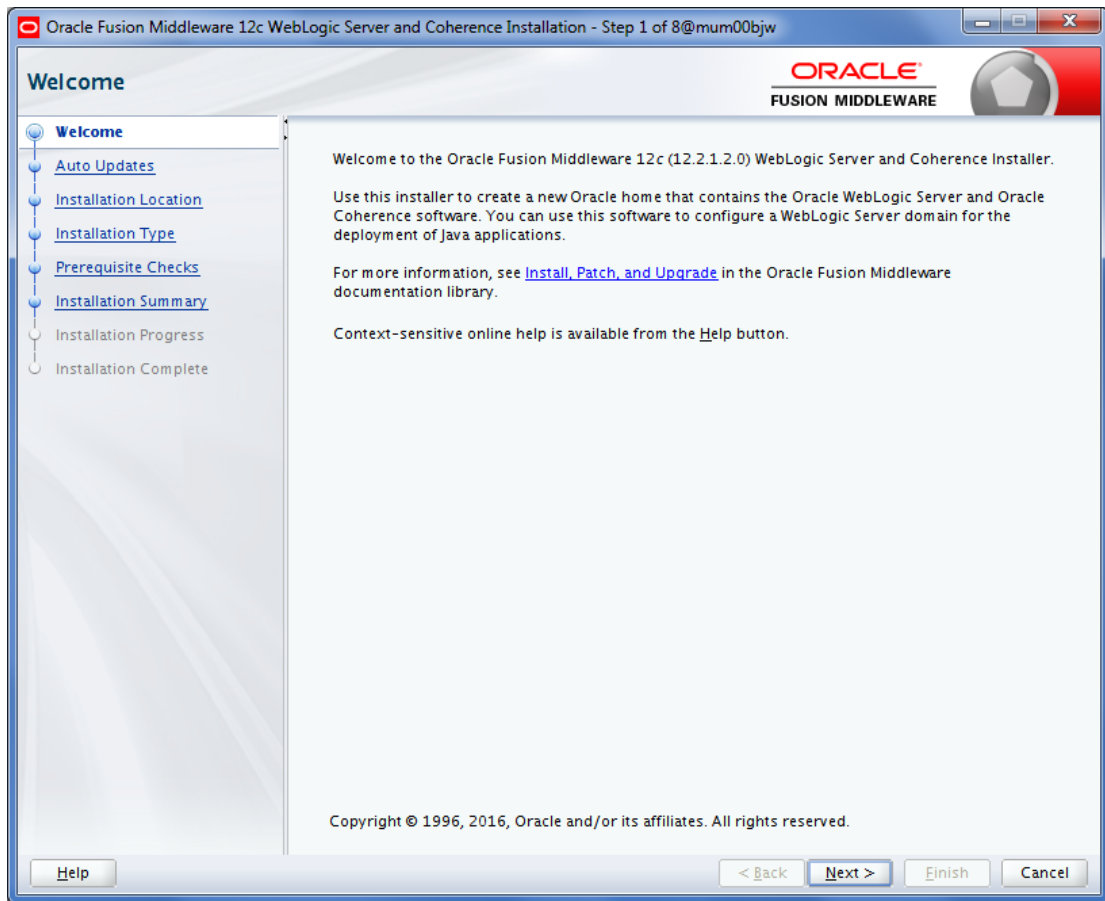
Installation Inventory Setup Screen



Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory.

Click OK to continue.

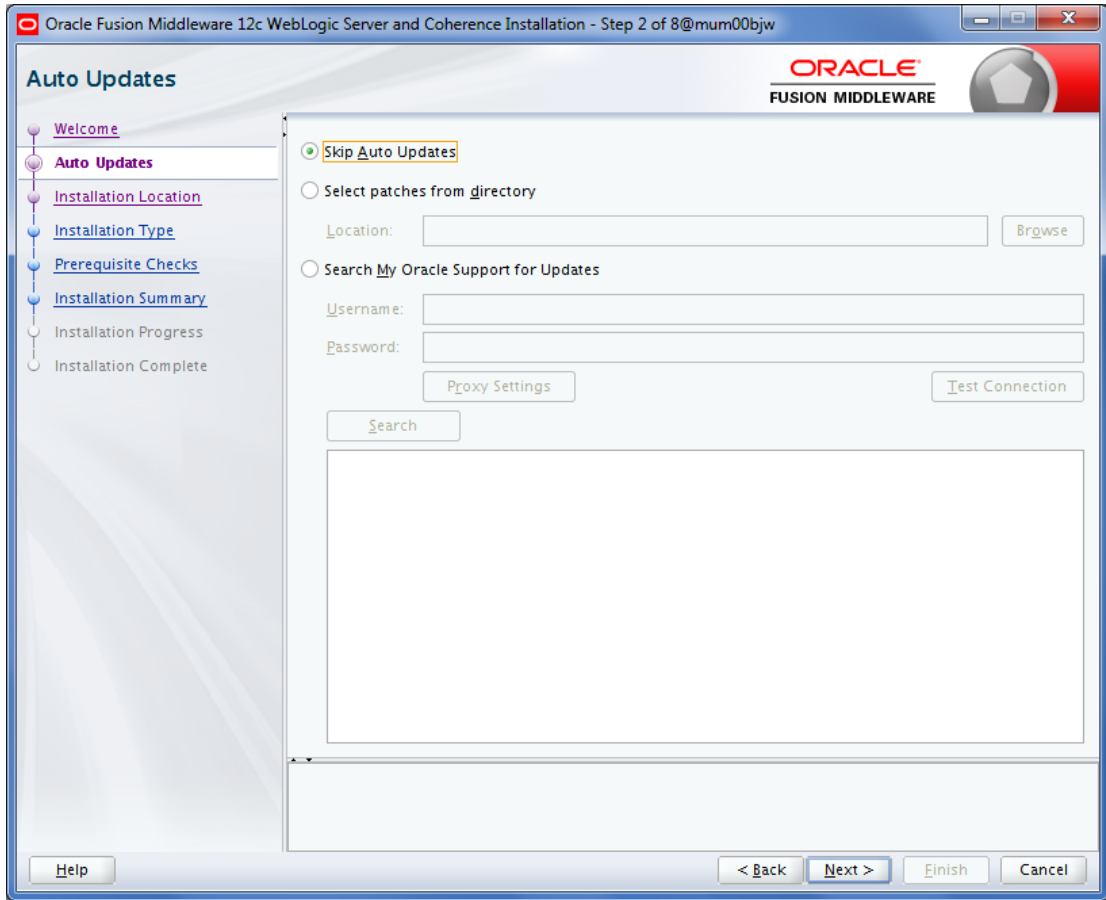
Welcome Screen



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

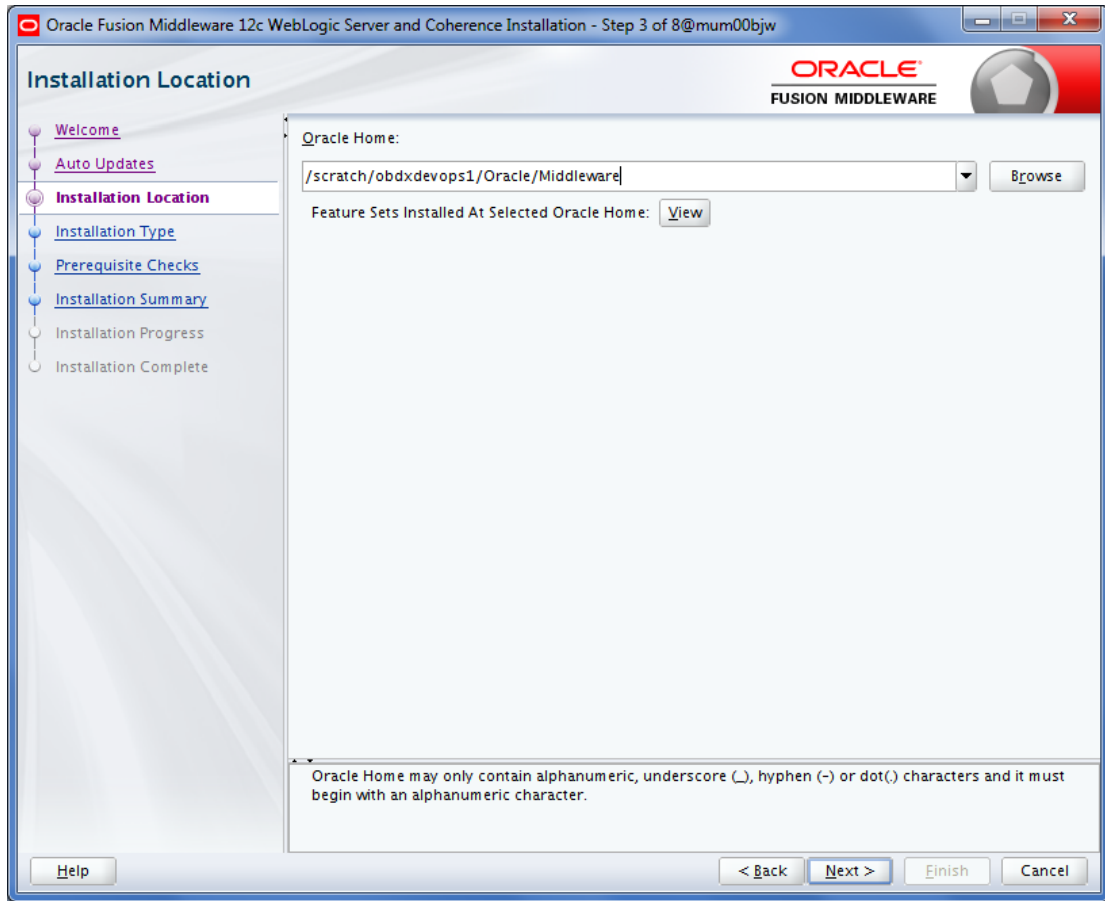
Click Next to continue.

Auto Updates Screen



Select “Skip Auto Updates” option and click Next to continue.

Specify Installation Location Screen



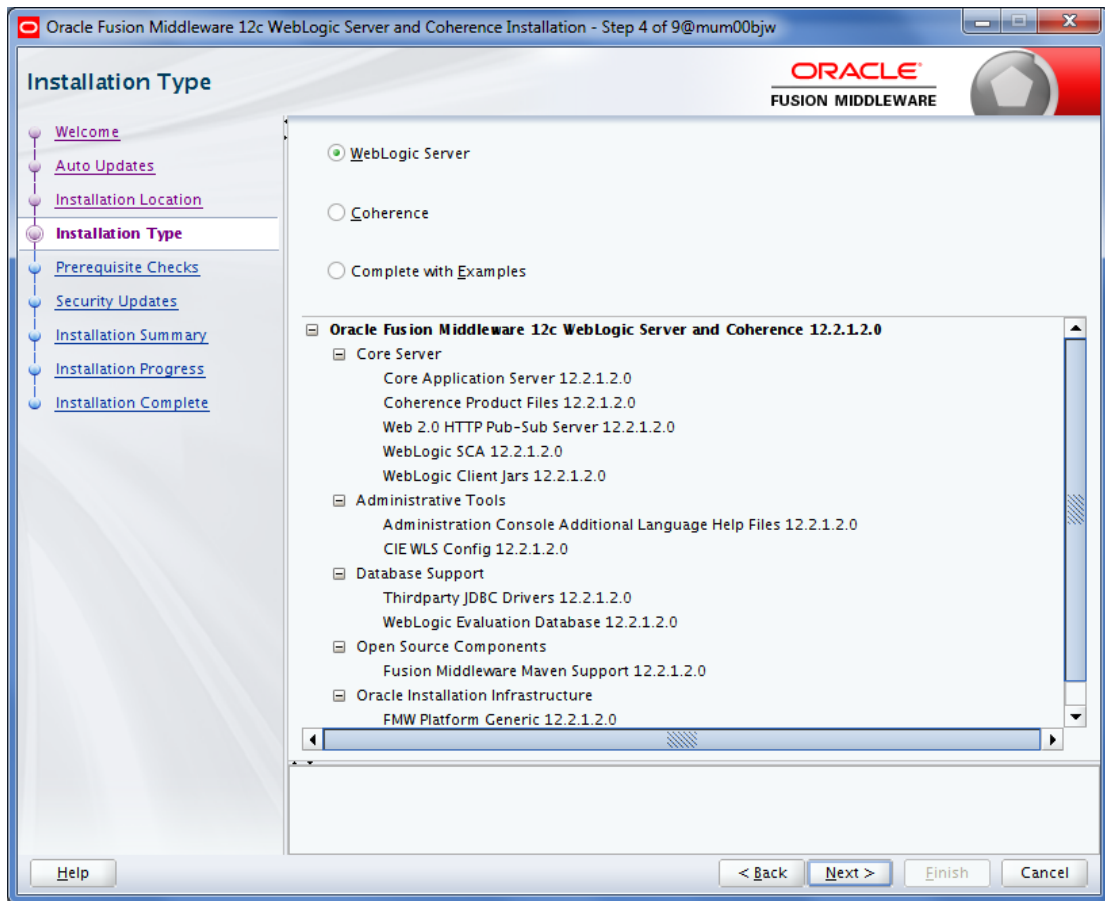
Specify the following installation locations:

- Oracle Middleware Home

This is the absolute path to the directory where the WebLogic Server will be installed.

Click Next to continue.

Specify Installation Type Screen

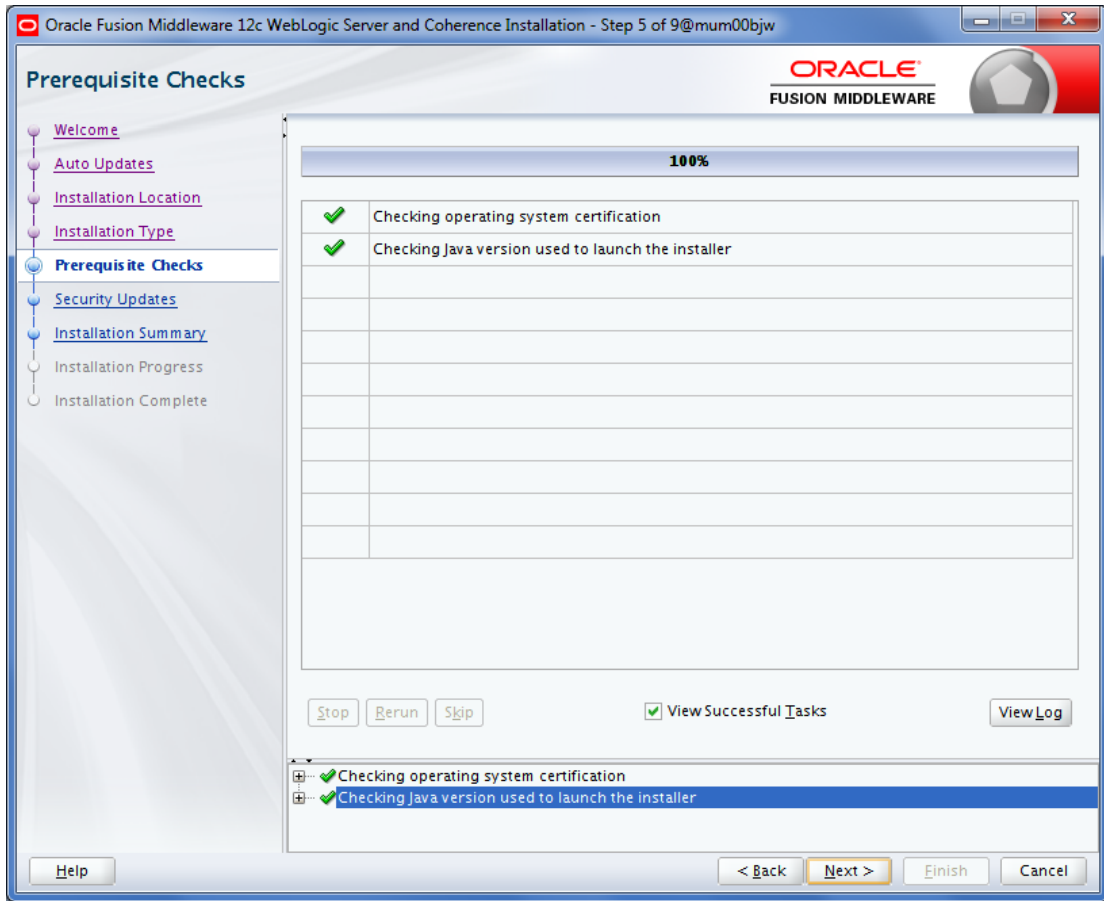


Following are the installation types:

- Weblogic Server
- Coherence
- Complete with Examples

Select Weblogic server and Click Next to continue.

Prerequisite Checks Screen



This screen shows whether the system requirements are met in order to install the software.

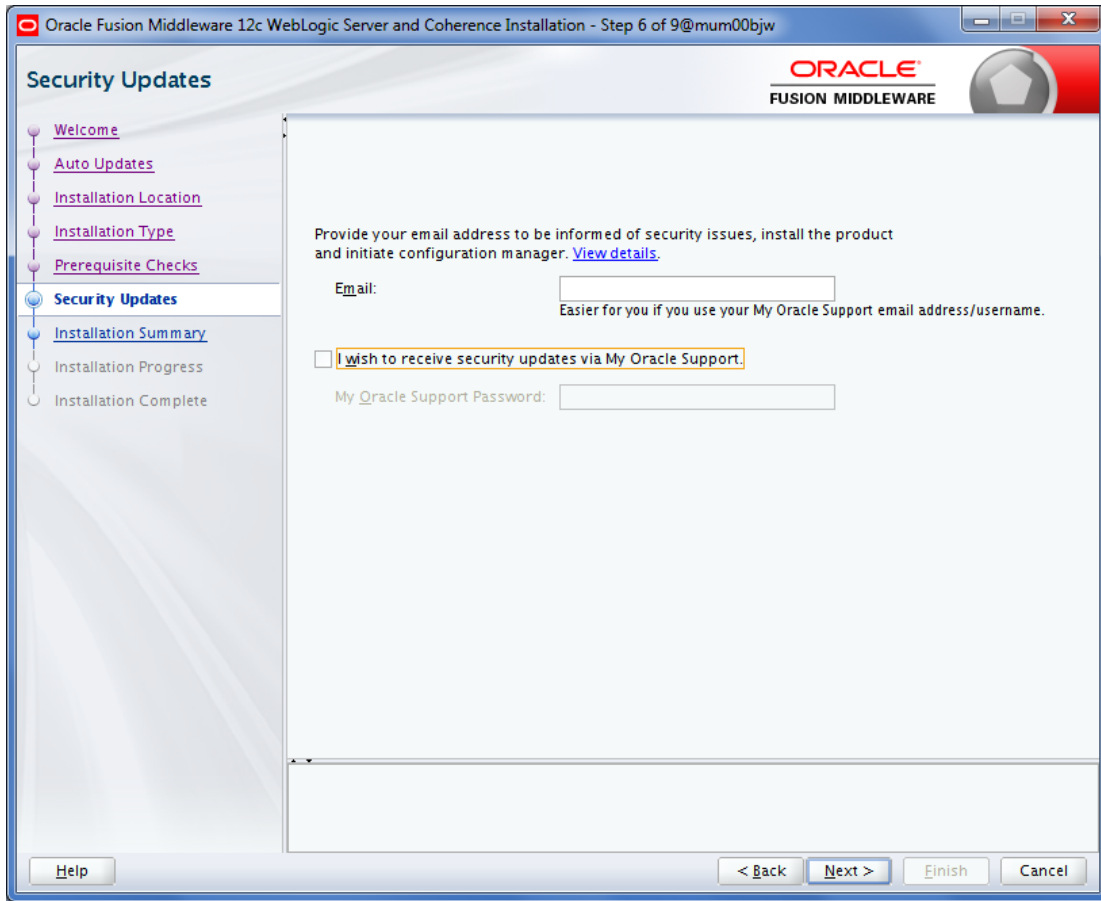
If there is a problem, a short error message appears in the bottom portion of the screen. Fix the error, and click Retry to try again.

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

To stop prerequisite checking for all components, click Abort.

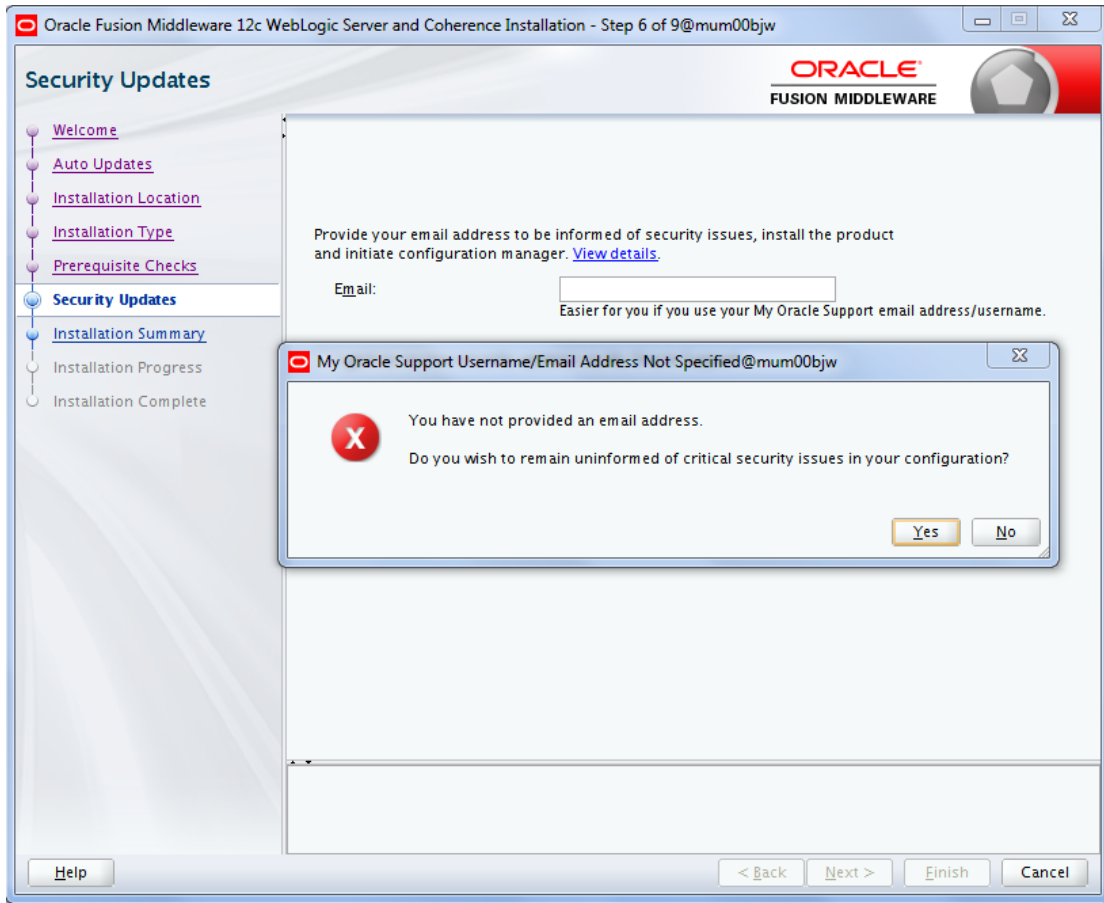
Click Next to continue.

Specify Security Updates Screen



Uncheck the box stating “I wish to receive security updates via My Oracle Support”
Click Next.

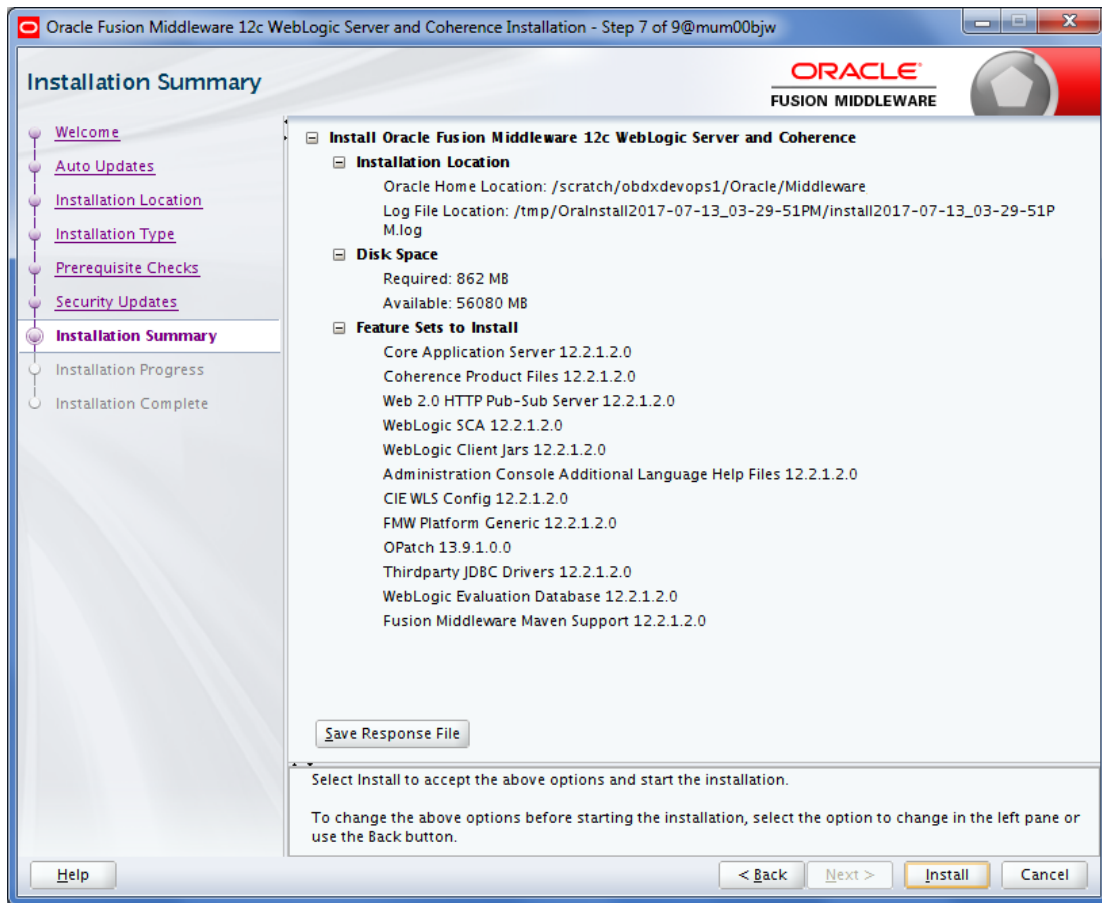
Specify Security Updates Screen



The user will now be prompted “Do you wish remain uninformed of critical security issues in your configuration?”

Select Yes and Click on Next to proceed.

Installation Summary Screen



Review the information on this screen. The operations summarized on this page will be performed when you click Install.

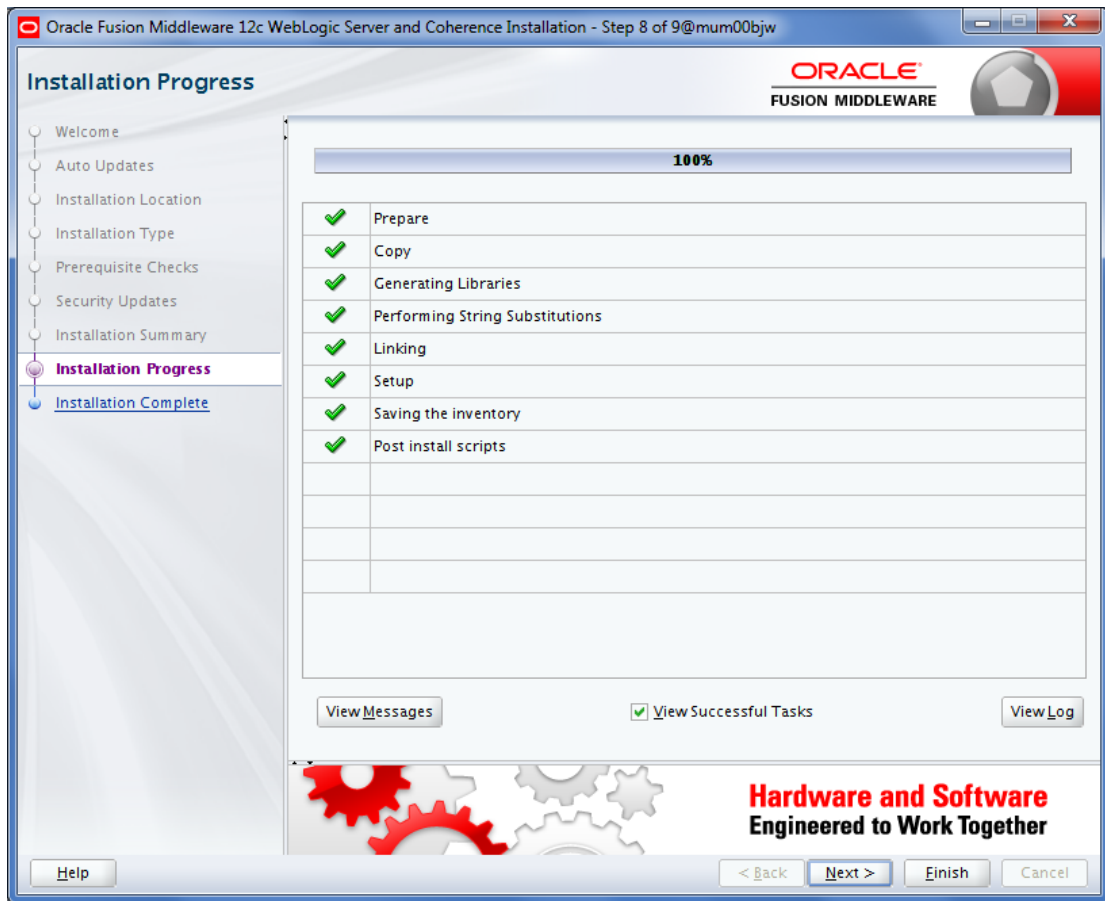
If you want to make any changes to the configuration before starting the installation, use the navigation pane, and select the topic you want to edit.

If you want to save this configuration to a text file (called a response file), click Save. You will be prompted for the location of name of the file you want to create (for example, silent_install.rsp). This file can be used later if you choose to perform the same installation from the command line.

Click Install.

Then screen shows the progress of the installation.

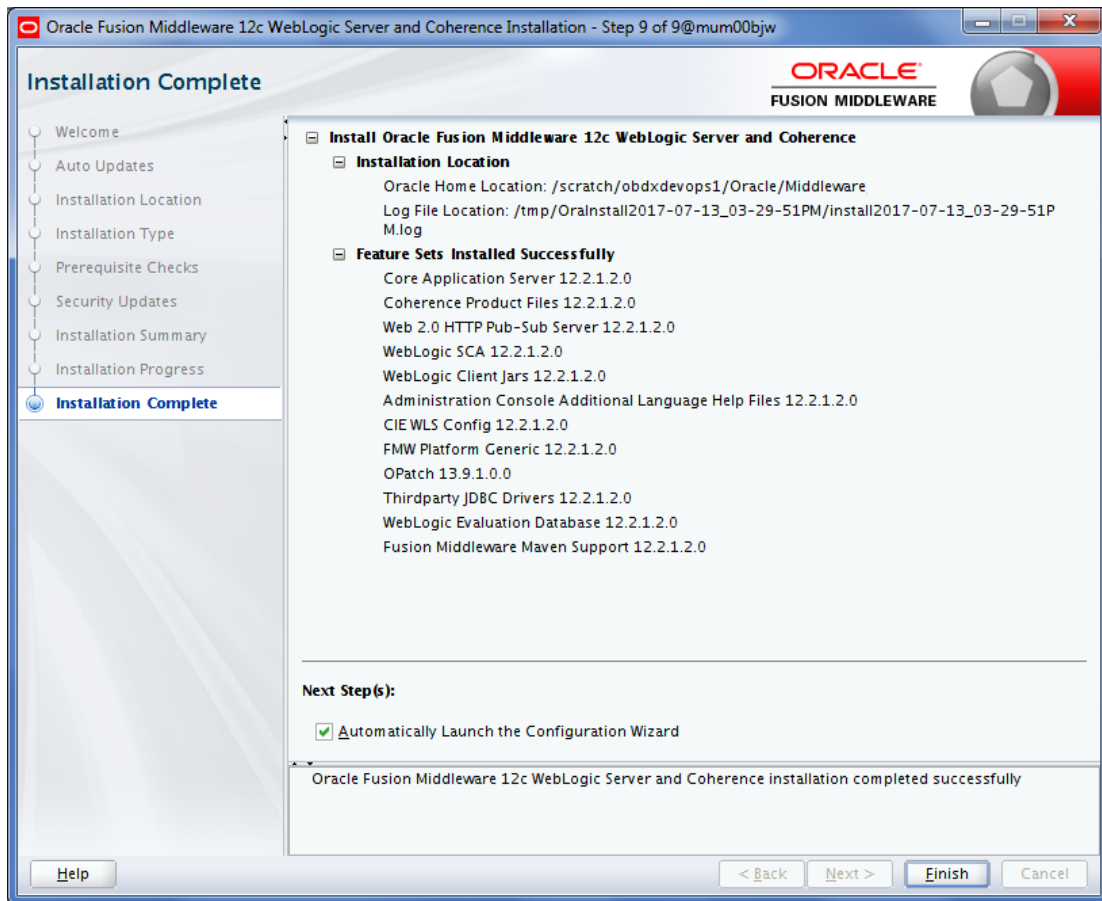
Installation Progress Screen



This screen shows the progress of the installation.

If you want to quit before the installation is completed, click Cancel. Doing so will result in a partial installation; the portion of the software that was installed on your system before you click Cancel will remain on your system, and you will have to remove it manually.

Installation Complete Screen



This screen summarizes the installation that was just completed.

At the end of the summary information, there is a section called Installation Location which states the Oracle Home Location & the Log File Location along with the list of features installed.

Click Finish to dismiss the screen.

3.1.3 Verifying the Installation

You can perform the following tasks to verify that your installation was successful:

- Verifying the Installation Logs: Check for the presence of installation log files in logs directory. The location of the file is shown at the end of installation in the Installation Complete Screen.
- Verifying the Installation Directory: Check if Oracle Home directory is exists or not.

3.2 Extending the Weblogic environment with JRF

Java Required Files (JRF) consists of those components not included in the WebLogic Server installation that provide common functionality for Oracle business applications and application frameworks. It consists of a number of independently developed libraries and applications that are deployed into a common location.

This chapter describes the installation tasks which contains the following sections:

- Section 3.2.1, "Installing JRF components"
- Section 3.2.2, "Verifying the Installation"

3.2.1 Installing JRF Components

Obtain FMW 12.2.1.2.0 Infrastructure JAR from the Oracle Fusion Middleware Downloads. Download *fmw_12.2.1.2.0_infrastructure.jar* file to a directory.

Now to start the installer, go to the directory where you downloaded the file and execute the below command:

```
java -jar <Path>/fmw_12.2.1.2.0_infrastructure.jar
```

Note: You must enter the absolute path of the folder where the JAR file is located.

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

Installation Inventory Setup Screen



Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory.

Click OK to continue.

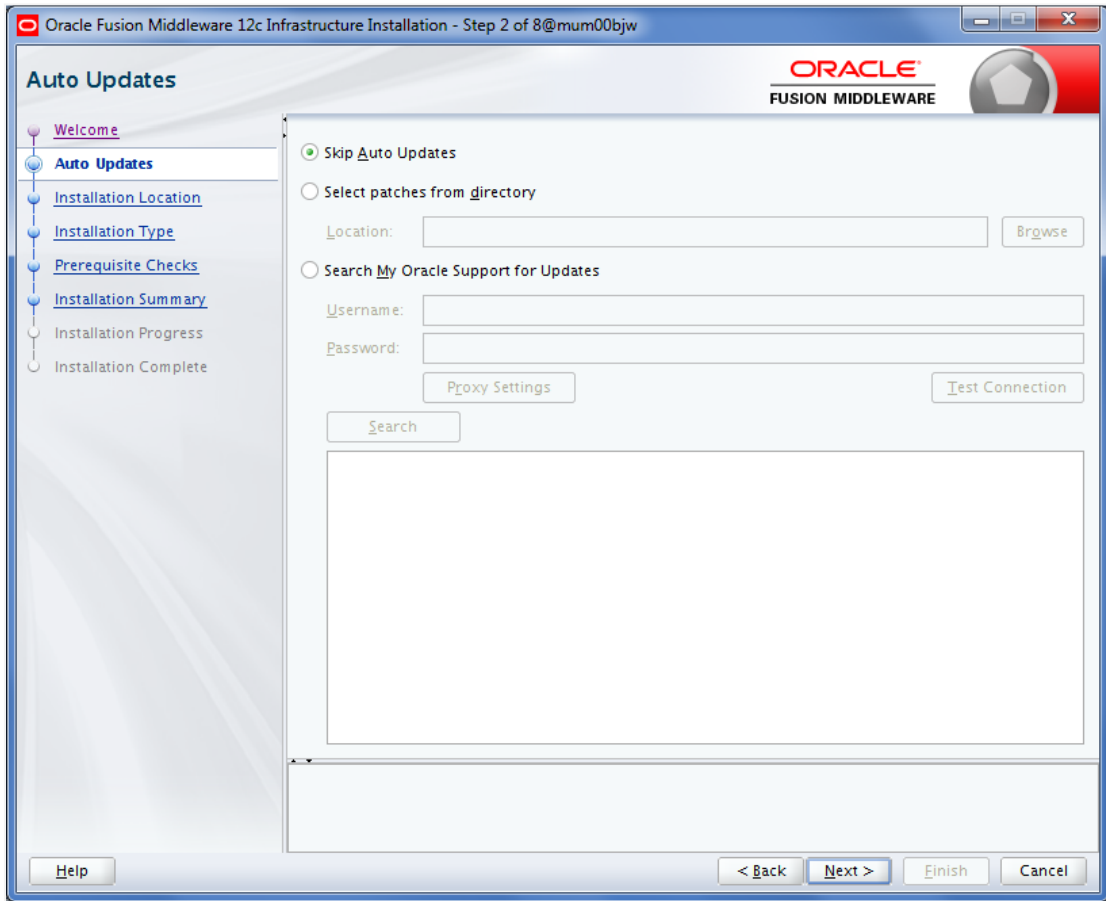
Welcome Screen



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

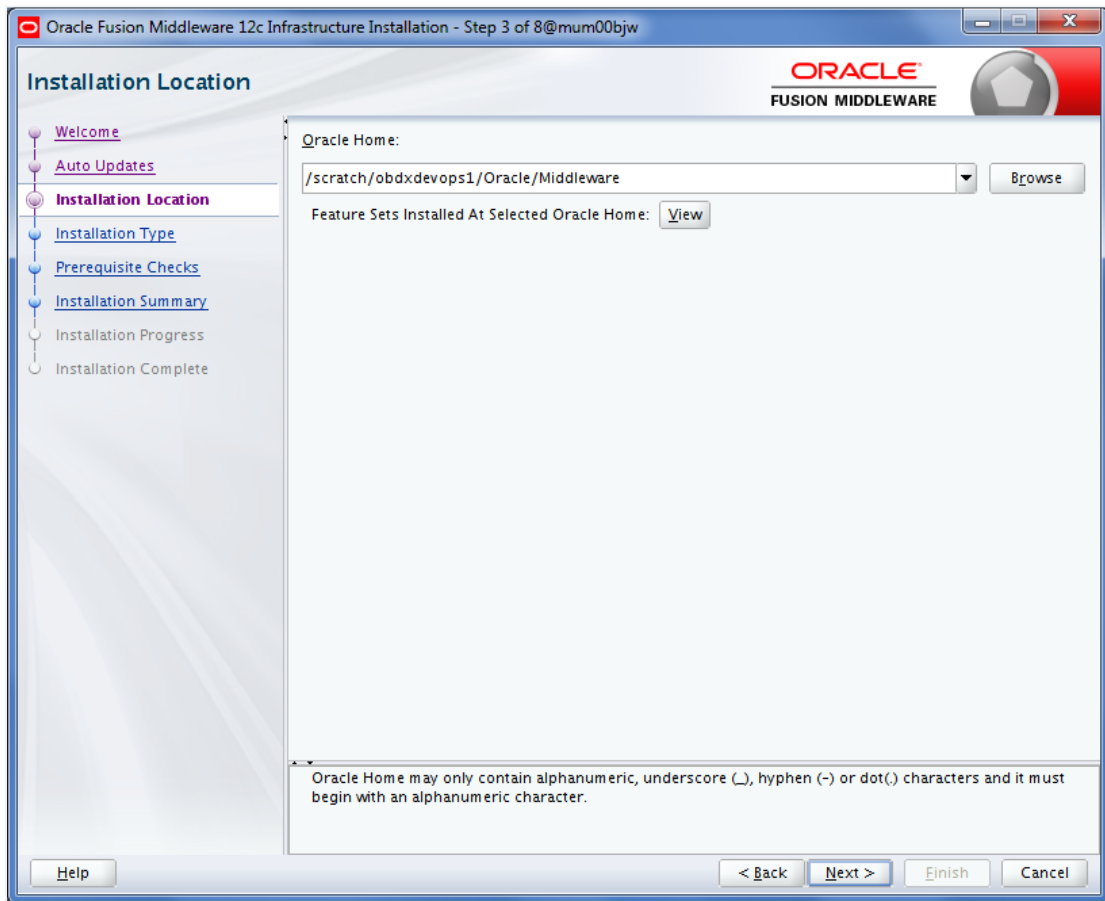
Click Next to continue.

Auto Updates Screen



Select "Skip Auto Updates" option and click Next to continue.

Specify Installation Location Screen



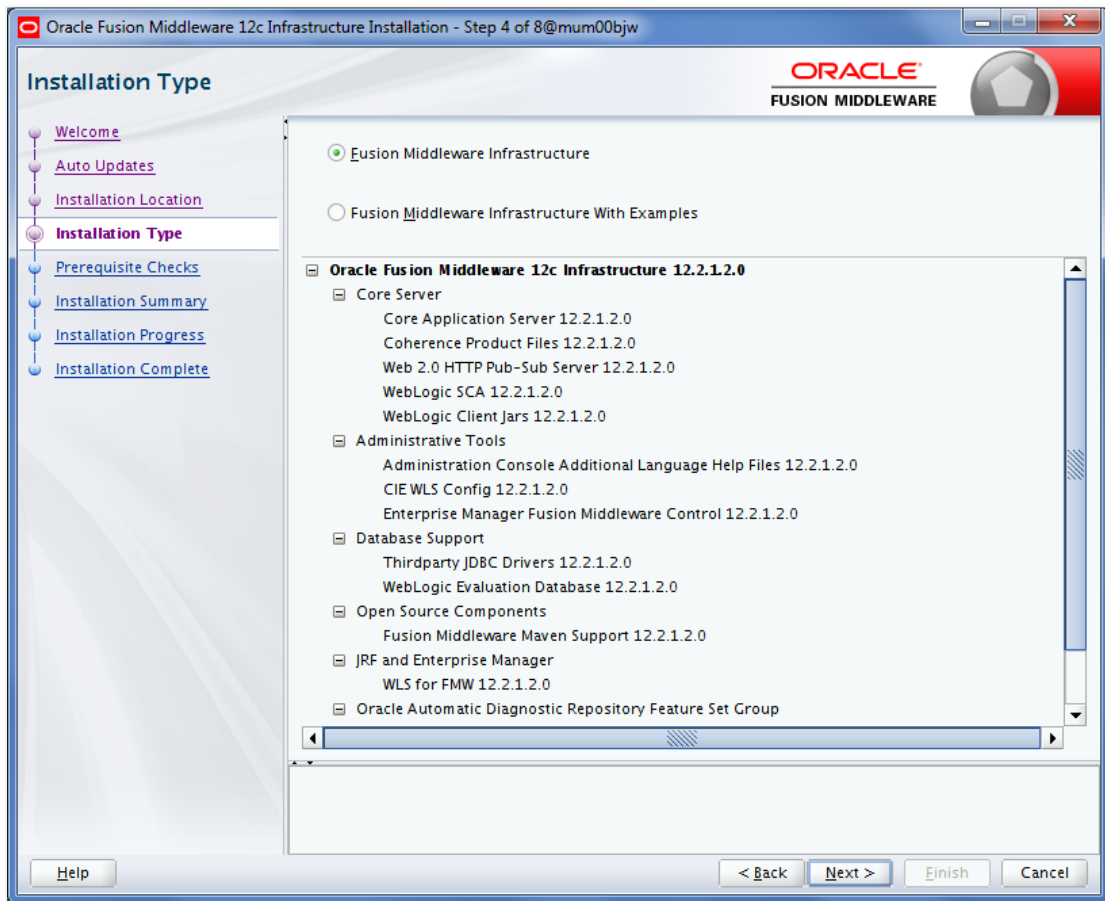
Specify the following installation locations:

- Oracle Middleware Home

The absolute path to the directory where WebLogic Server is already installed

Click Next to continue.

Specify Installation Type Screen

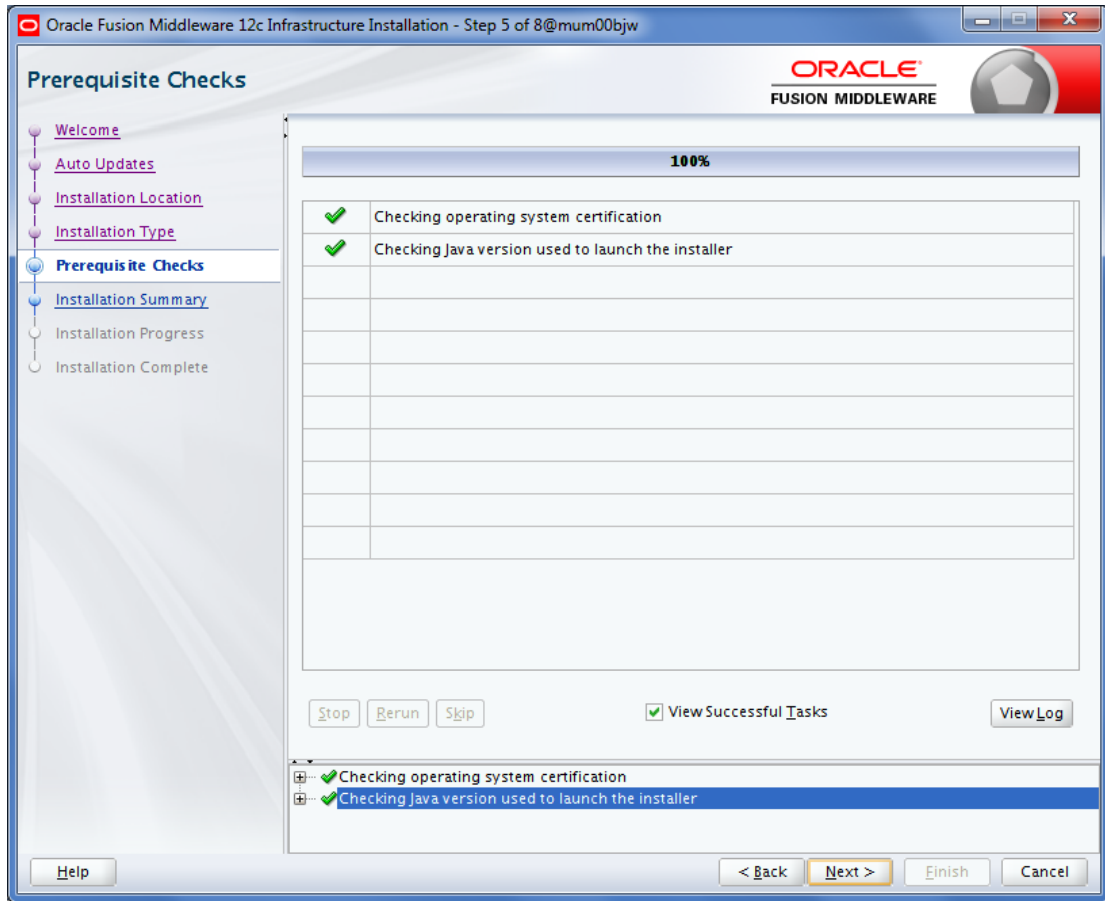


Following are the installation types:

- Fusion Middleware Infrastructure
- Fusion Middleware Infrastructure with Examples

Select Fusion Middleware Infrastructure and Click Next to continue.

Prerequisite Checks Screen



This screen shows whether the system requirements are met in order to install the software.

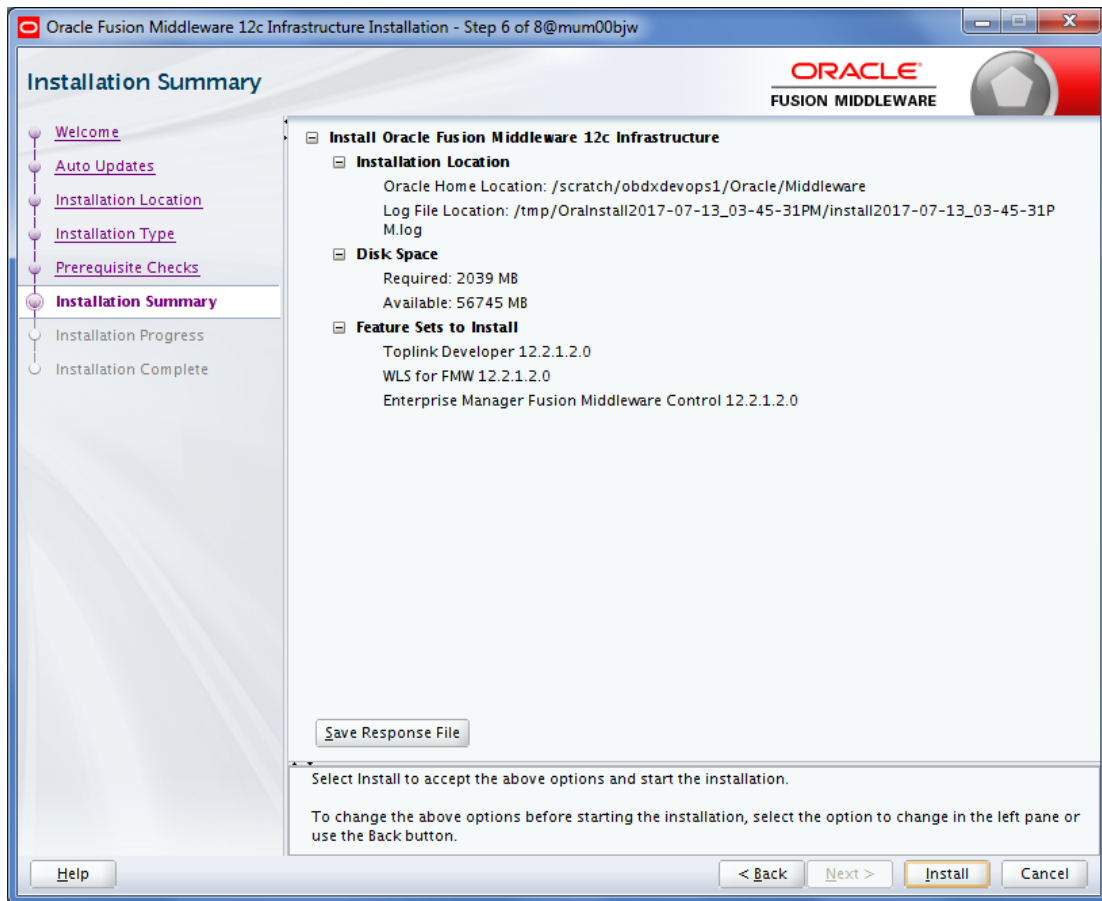
If there is a problem, a short error message appears in the bottom portion of the screen. Fix the error, and click Retry to try again.

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

To stop prerequisite checking for all components, click Abort.

Click Next to continue.

Installation Summary Screen



Review the information on this screen. The operations summarized on this page will be performed when you click Install.

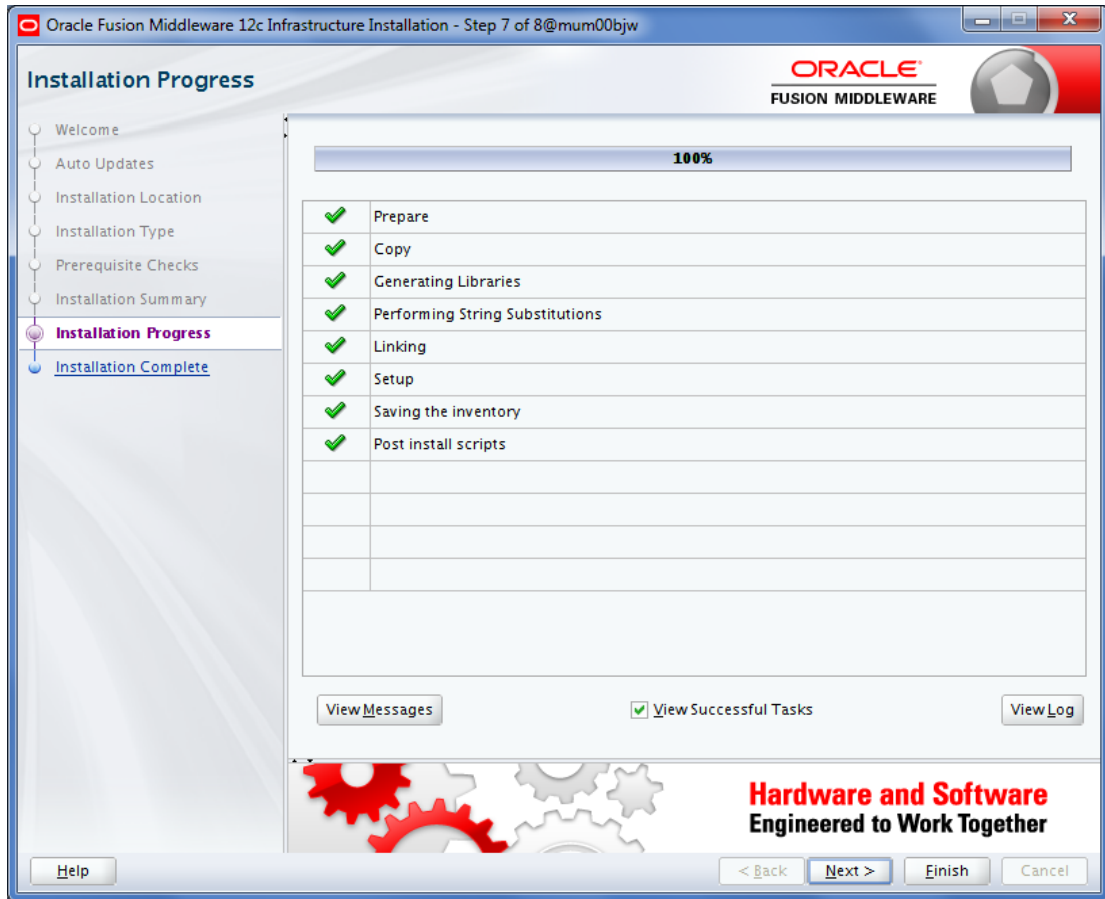
If you want to make any changes to the configuration before starting the installation, use the navigation pane, and select the topic you want to edit.

If you want to save this configuration to a text file (called a response file), click Save. You will be prompted for the location of name of the file you want to create (for example, silent_install.rsp). This file can be used later if you choose to perform the same installation from the command line.

Click Install.

Then screen shows the progress of the installation.

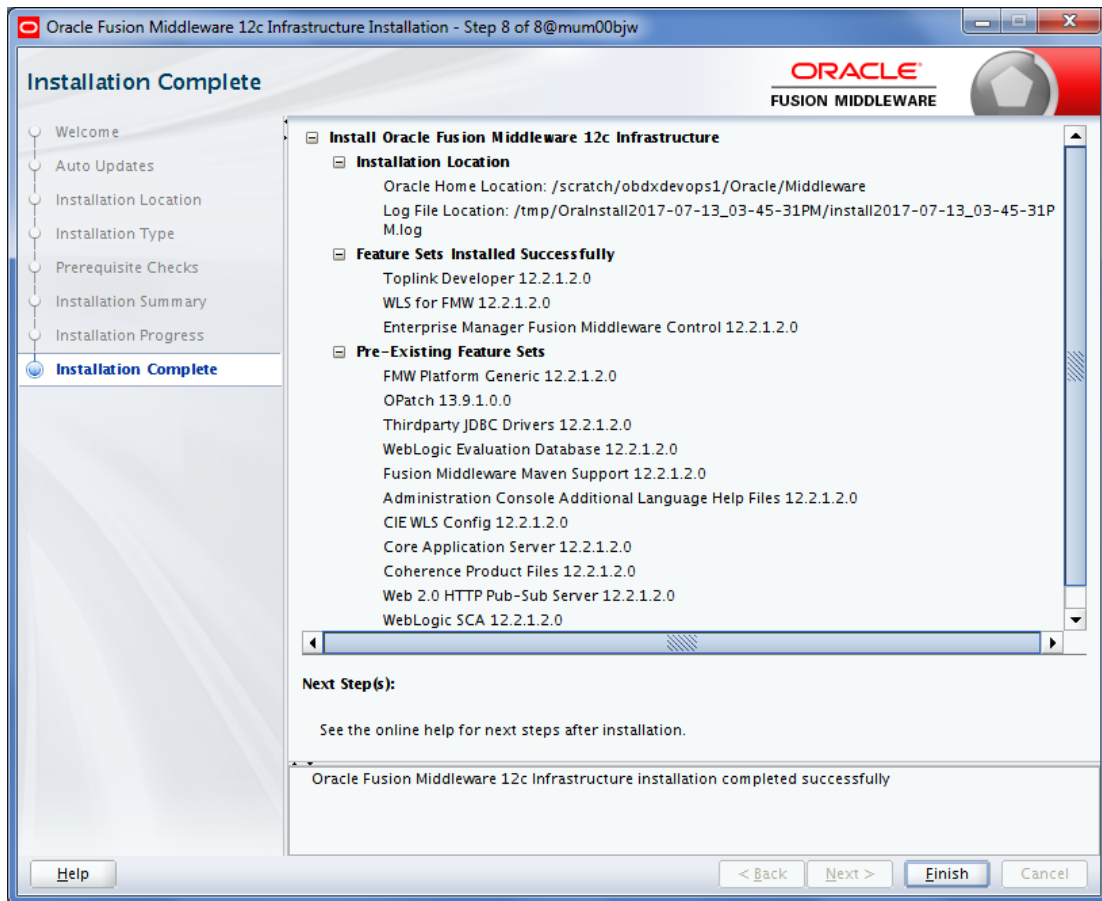
Installation Progress Screen



This screen shows the progress of the installation.

If you want to quit before the installation is completed, click Cancel. Doing so will result in a partial installation; the portion of the software that was installed on your system before you click Cancel will remain on your system, and you will have to remove it manually.

Installation Complete Screen



This screen summarizes the installation that was just completed.

At the end of the summary information, there is a section called Installation Location which states the Oracle Home Location & the Log File Location along with the list of features installed.

Click Finish to dismiss the screen.

3.2.2 Verifying the Installation

You can perform the following tasks to verify that your installation was successful:

- Verifying the Installation Logs: Check for the presence of installation log files in logs directory. The location of the file is shown at the end of installation in the Installation Complete Screen.
- Verifying the Installation Directory: Check if Oracle Home directory exists or not.

4. Oracle Webtier Installation

Oracle Webtier is the Web server component for Oracle Fusion Middleware. The Oracle Web Tier installation gives you the option of installing Oracle HTTP Server and Oracle Web Cache. OPMN is installed, by default, and you do not have the option of deselecting this product.

Together, these products are responsible for managing incoming HTTP requests, caching web messages, and sending XML and HTML back to the client. Also, it provides a listener for Oracle WebLogic Server and the framework for hosting static pages, dynamic pages, and applications over the Web. Oracle Web Tier contains the following components:

- **Oracle HTTP Server:** Oracle HTTP Server 11g includes modules developed specifically by Oracle. The features of single sign-on, clustered deployment, and high availability enhance the operation of the Oracle HTTP Server.
- **Oracle Web Cache:** Oracle Web Cache is a content-aware server accelerator, or reverse proxy, for the Web tier that improves the performance, scalability, and availability of Web sites that run on Oracle HTTP Server. Oracle Web Cache is the primary caching mechanism provided with Oracle Fusion Middleware. Caching improves the performance, scalability, and availability of websites that run on Oracle WebLogic Server by storing frequently accessed URLs in memory.
- **Oracle Process Manager and Notification Server (OPMN):** OPMN provides a command-line interface for you to monitor and manage Oracle Fusion Middleware components and sub-components. The OPMN server should be started as soon as possible, after turning on the computer. OPMN must be running whenever OPMN-managed components are turned on or off.

There are different Methods to install Webtier. An Oracle Web Tier solution can be built in one of the following ways:

- **In stand-alone mode:** Oracle Web Tier is configured without a domain, and administered from the command line. See Section 1.3.1 for an overview of the installation procedure.
- **Using Oracle Enterprise Manager Fusion Middleware Control:** In order to use the Oracle Enterprise Manager Fusion Middleware Control, WebLogic Server domain needs to be configured using both the Enterprise Manager and the Java Required Files (JRF) domain templates.

Here, we install Oracle Web Tier in stand-alone mode and following are the sections lists the steps for it:

- Section 4.1, "Installing and Configuring Oracle HTTP Server (Webtier)"
- Section 4.2, "Verifying the Installation"

4.1 Installing and Configuring Oracle HTTP Server (Webtier)

Obtain Oracle Web Tier from the Oracle Fusion Middleware Downloads. Download webtier.zip file to a directory, and unpack the downloaded archive that contains the installer. By default, this directory is named webtier.

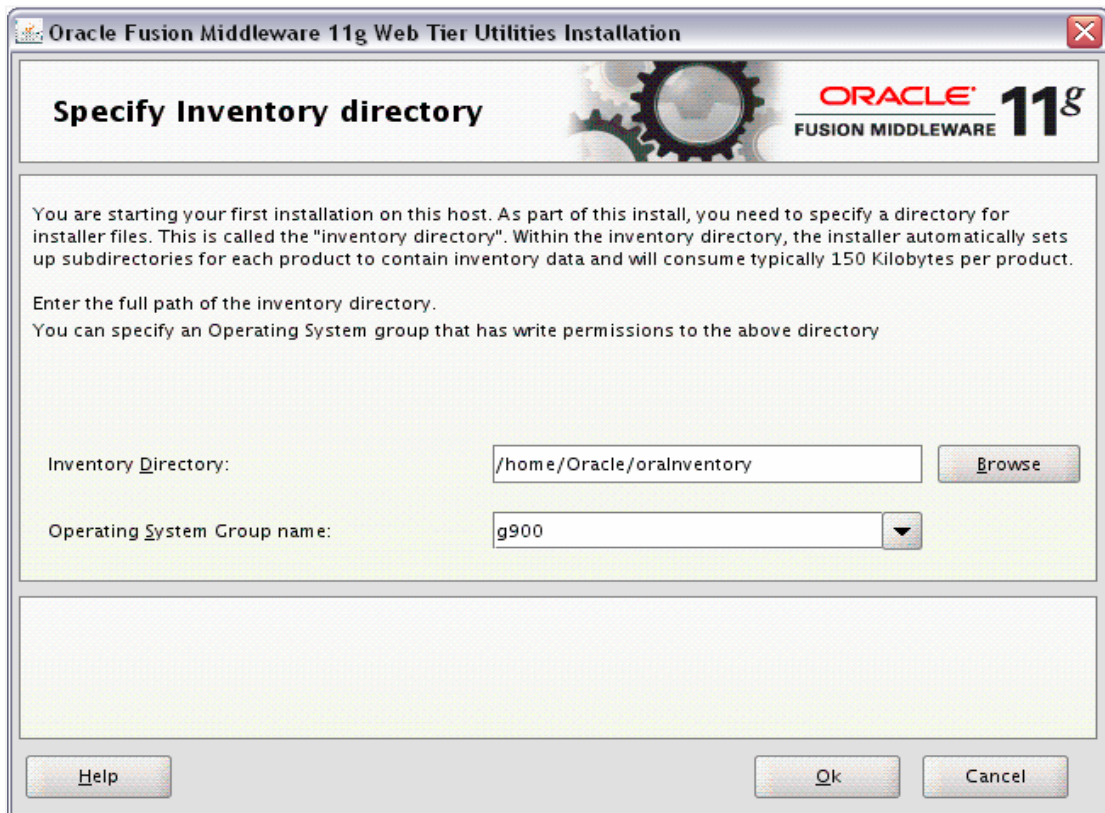
To start the installer, go to the directory where you unpacked the archive file and switch to the Disk1 directory. Now, start the installer using the below command:

```
./runInstaller -jreLoc Java_Home/jdk
```

Note: You must enter the absolute path of the JRE folder located in this JDK when launching the installer.

Now, follow the instructions as shown below to install Webtier,

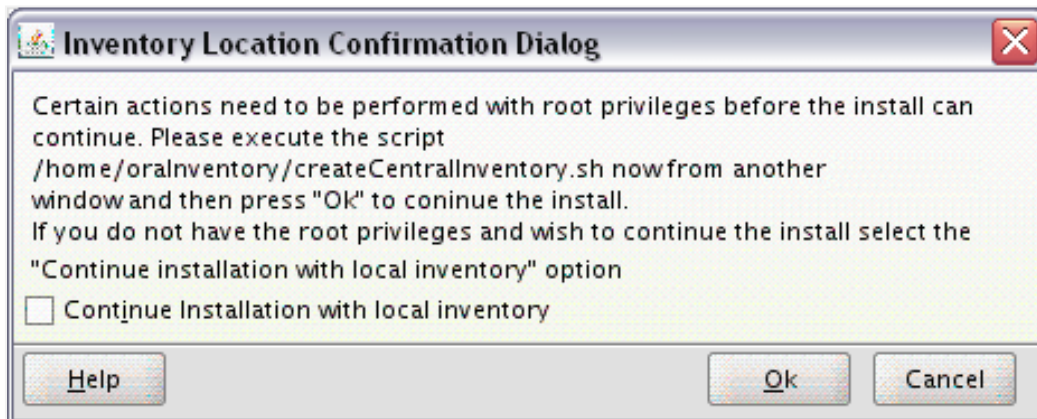
Specify Inventory Directory Screen



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

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

Inventory Location Confirmation Screen

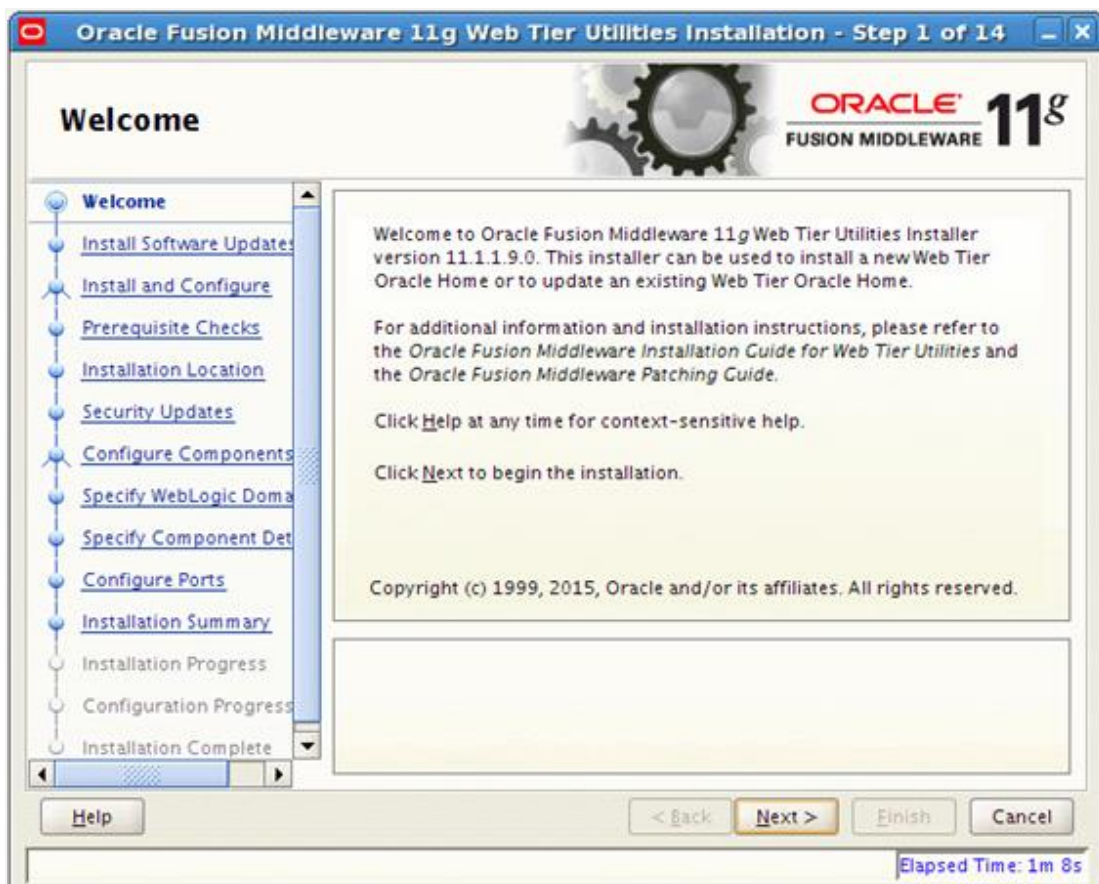


This screen appears for UNIX systems only; you are asked to run the `inventory_directory/createCentralInventory.sh` script as root.

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

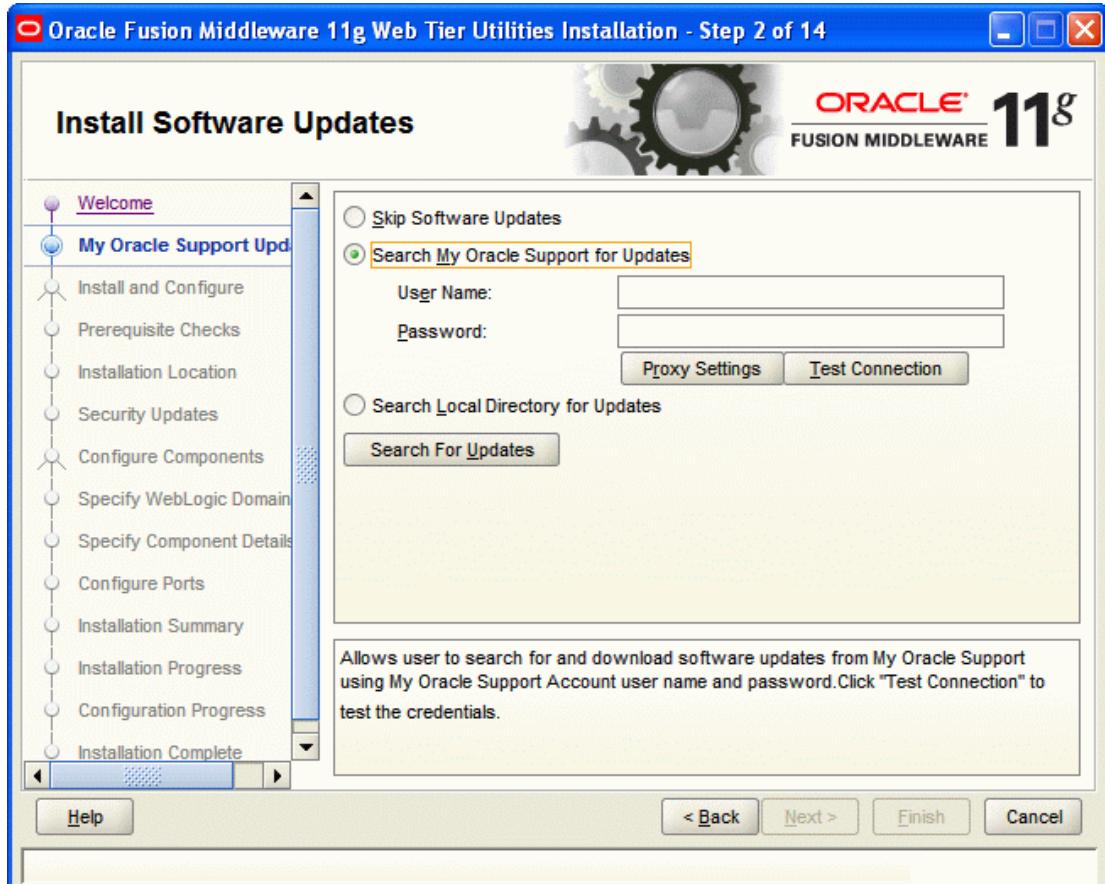
Click Ok to continue.

Welcome Screen



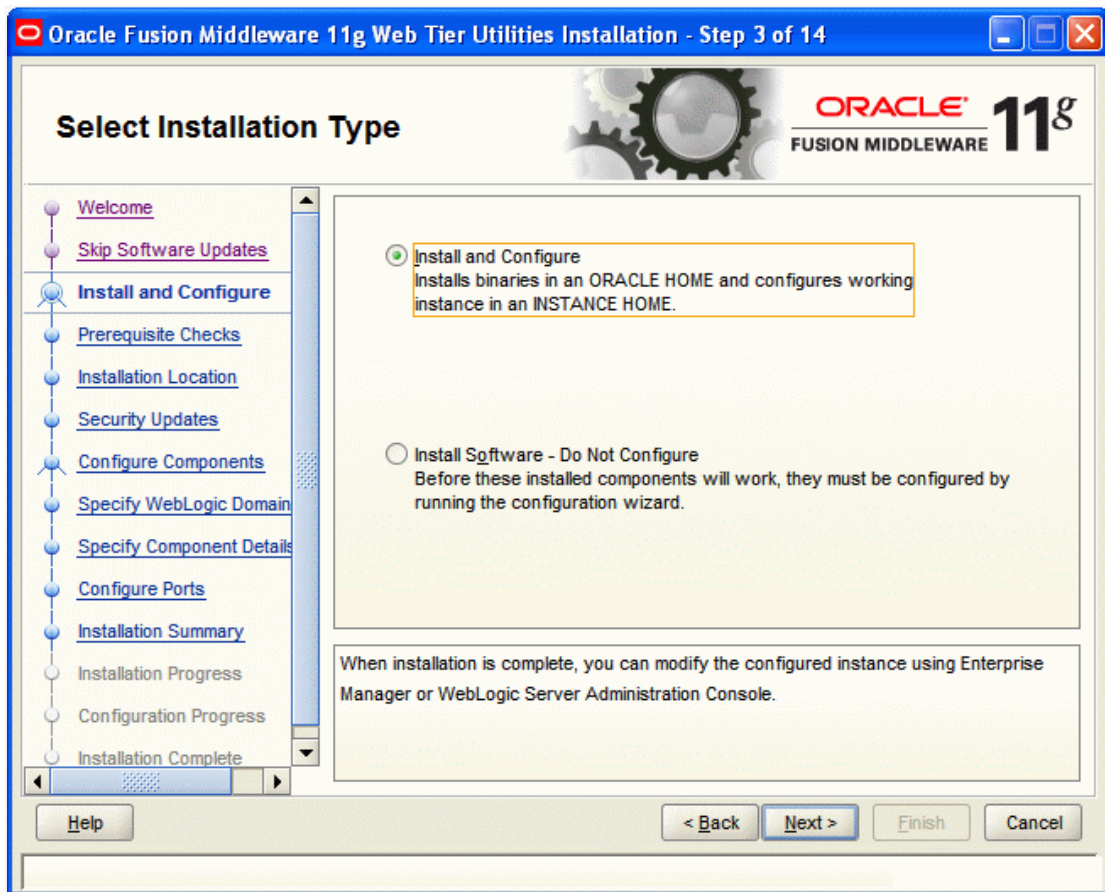
The Welcome screen is displayed each time you start the installer.
Click Next to continue.

Install Software Updates Screen



Select "Skip Software Updates" and Click Next to continue.

Select Installation Type Screen



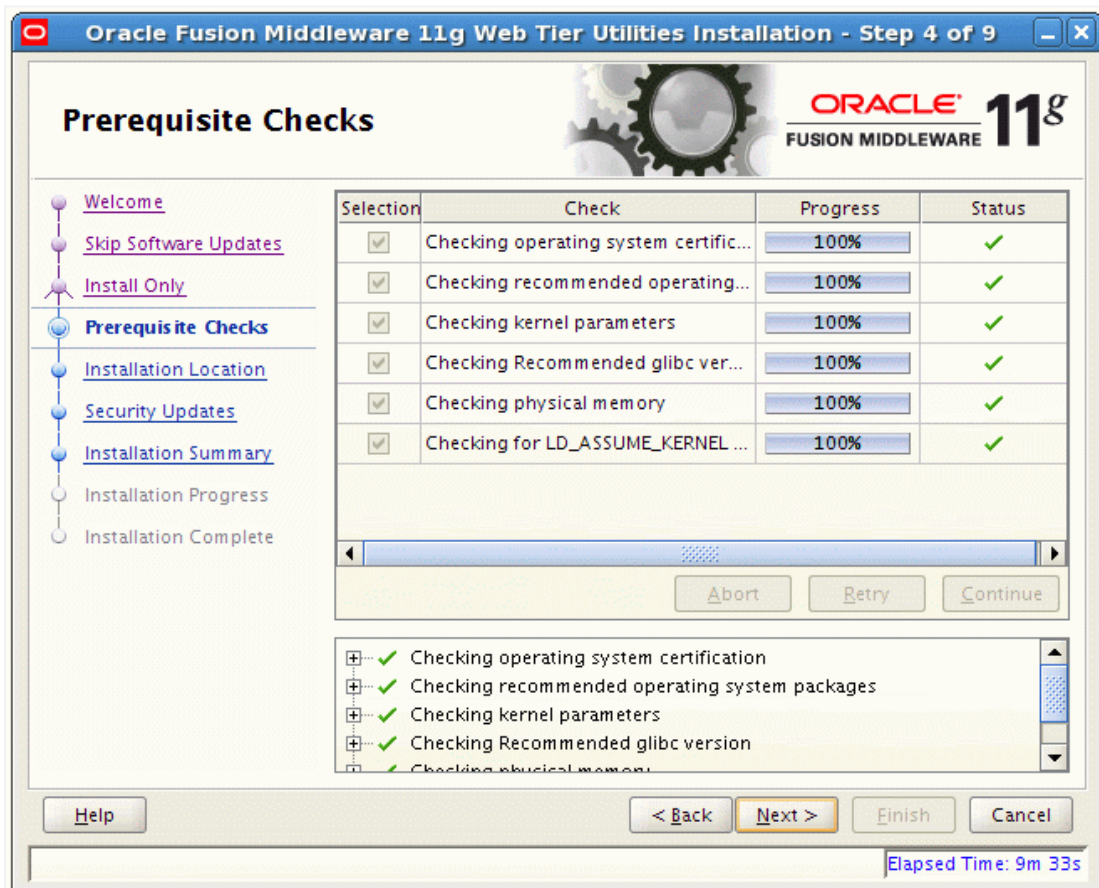
The following are the Installation Types available.

- **Install and Configure:** This option will install the product binaries in an Oracle Home directory, and create and configure a working instance in an Oracle Instance directory.

If you choose to install Oracle Web Tier, and associate it with the Fusion Middleware (EM) Control, then you should be able to begin configuring and managing your products using Enterprise Manager.

- **Install Software - Do Not Configure:** This option only installs the software binaries in an Oracle Home directory. You must then manually run the Configuration Tool from your Web_Tier_ORACLE_HOME/bin directory on UNIX, and Web_Tier_ORACLE_HOME\bin directory on Windows, to configure your products before you can use them. This option can be used to quickly create multiple instances of the software that share a common disk.
- **Select Install and Configure.**
Click Next to continue.

Prerequisite Checks Screen



This screen shows whether the system requirements are met in order to install the software.

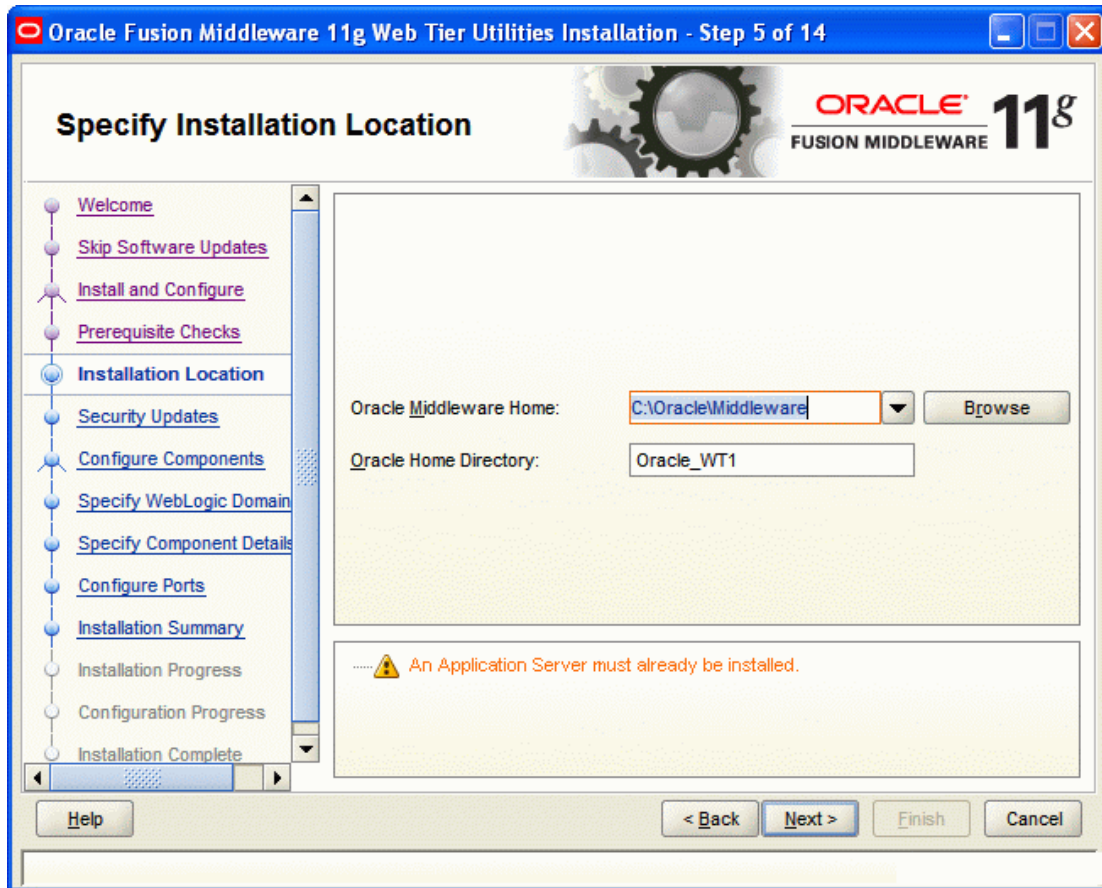
If there is a problem, a short error message appears in the bottom portion of the screen. Fix the error, and click Retry to try again.

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

To stop prerequisite checking for all components, click Abort.

Click Next to continue.

Specify Installation Location Screen



Specify the following installation locations:

- Oracle Middleware Home: The absolute path to the directory where WebTier will be installed.
- Oracle Home Directory: The directory name for your Oracle home:
 - You can specify a pre-existing directory that you want to use as the Oracle home; the directory must be an empty directory.
 - You can specify the name of a new directory that will be created for you inside the Middleware home.

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

Note: The Oracle Middleware Home path should be different from the Weblogic Server installation path, in case where Webtier installation would be done on the same server where Weblogic is installed.

This installation directory will be referred to as Web_Tier_ORACLE_HOME throughout the remainder of this document. If you are performing an installation on a Windows operating system, be sure that your directory paths are valid, and do not contain double backslashes (\\).

Click Next to continue.

Specify Security Updates Screen

Oracle Fusion Middleware 11g Web Tier Utilities Installation - Step 6 of 14

Specify Security Updates

ORACLE 11g
FUSION MIDDLEWARE

Provide your email address to be informed of security issues, install the product and initiate configuration manager. [View details.](#)

Email:

Easier for you if you use your My Oracle Support email address/username.

I wish to receive security updates via My Oracle Support.

My Oracle Support Password:

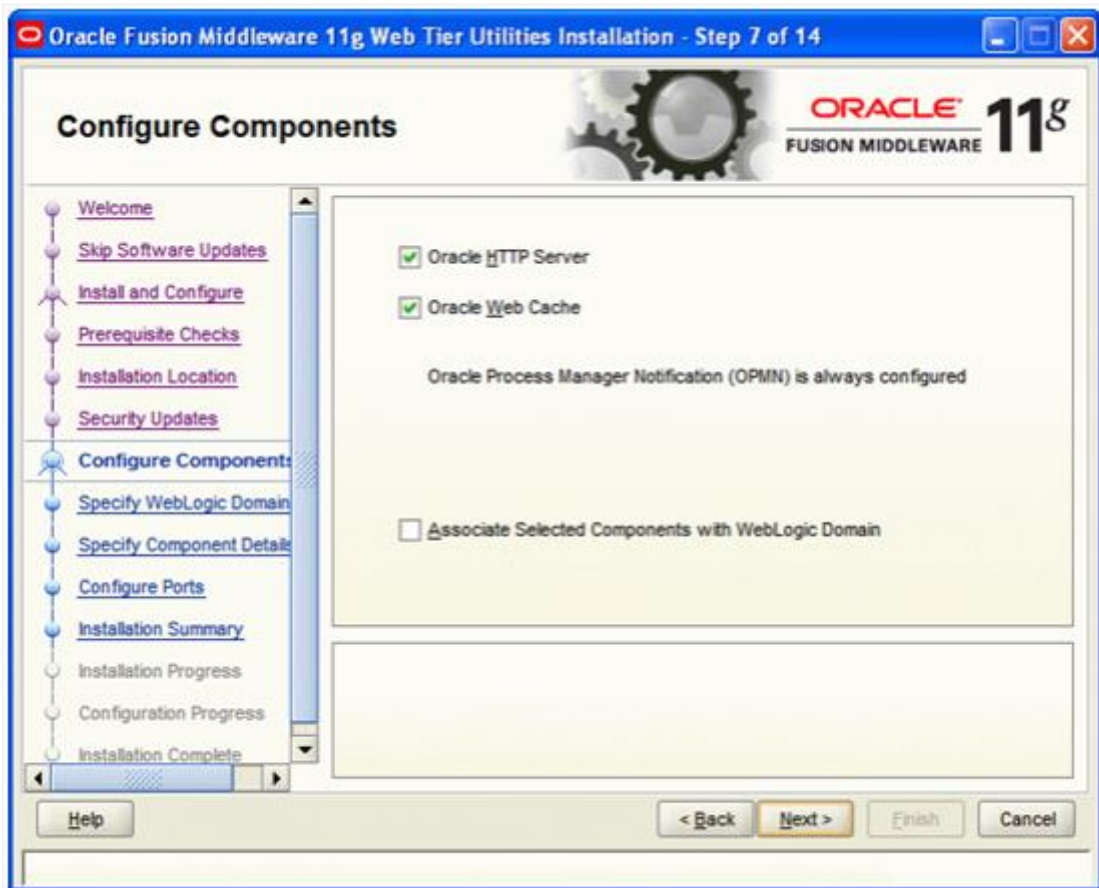
Help < Back Next > Finish Cancel

Enter your E-mail address if you want to receive the latest product information and security updates. If you have a My Oracle account and want to receive updates via this mechanism, select I wish to receive security updates via My Oracle Support, then enter your account password.

If you do not want to register for security updates, leave all the fields on this screen blank. You will be prompted to confirm your selection with the following screen:

Click Yes to confirm that you do not want to register for any security updates.

Configure Components Screen

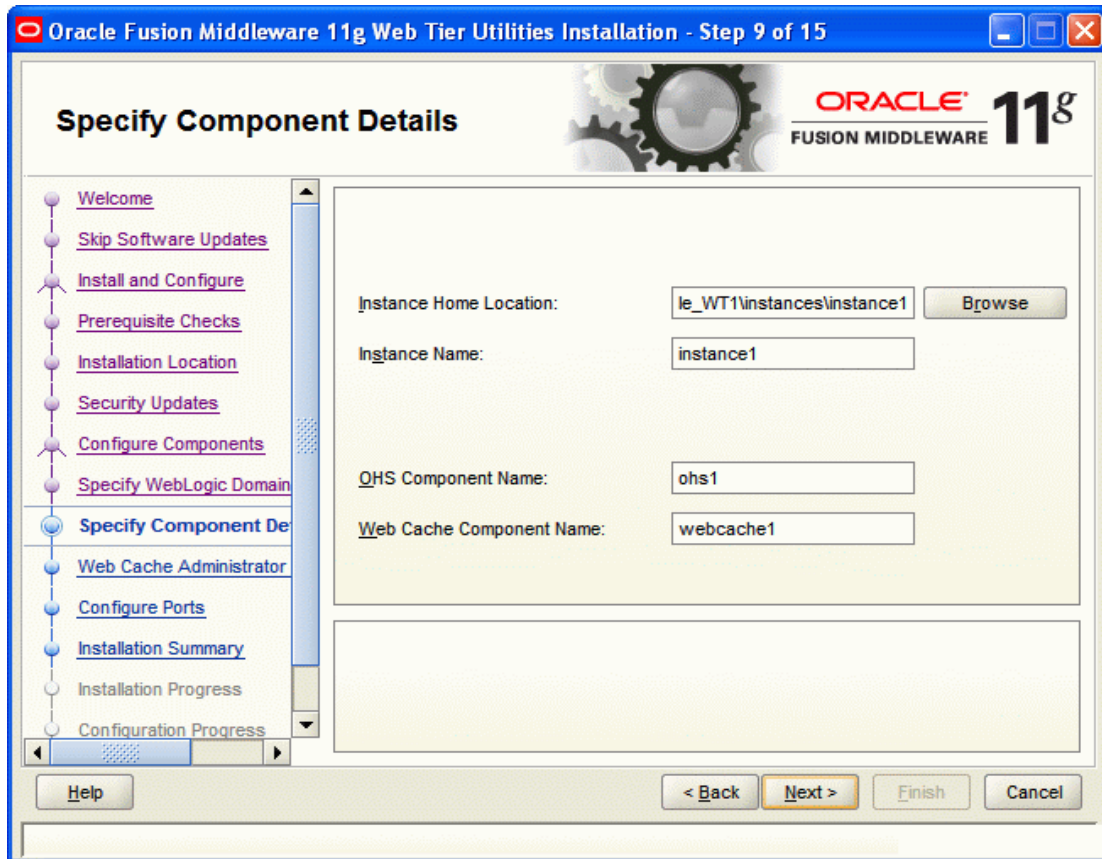


This screen shows the products and components that are available for installation and configuration. Select the component(s) you want to configure. Oracle Process Manager Notification (OPMN) is configured by default.

Uncheck Associate Selected Components with WebLogic Domain.

Click Next to continue.

Specify Component Details Screen



Specify the following component details:

- **Instance Home Location:** The absolute path to the directory where your Oracle Instance will reside. This is where application configuration files reside, and where the application process runs from. Runtime components write only to this location.
- **Instance Name:** Specify the unique name of your Oracle Instance. The Oracle Instance name may only contain alphanumeric and underscore (_) characters, it must begin with an alphabetic (a-z or A-Z) character, and must be 4 to 30 characters in length.
- **OHS Component Name:** Specify the name for your Oracle HTTP Server (OHS) component. This name may only contain alphanumeric and underscore (_) characters, and must be 4 to 30 characters in length.
- **Web Cache Component Name:** Specify the unique name of your Web Cache component. This name may only contain alphanumeric and underscore (_) characters, it must begin with an alphabetic (a-z or A-Z) character, and must be 4 to 30 characters in length.

Click Next to continue.

Web Cache Administrator Password Screen

Oracle Fusion Middleware 11g Web Tier Utilities Installation - Step 10 of 15

Web Cache Administrator Password

[Welcome](#)
[Skip Software Updates](#)
[Install and Configure](#)
[Prerequisite Checks](#)
[Installation Location](#)
[Security Updates](#)
[Configure Components](#)
[Specify WebLogic Domain](#)
[Specify Component Details](#)
Web Cache Administrator
[Configure Ports](#)
[Installation Summary](#)
[Installation Progress](#)
[Configuration Progress](#)

Web Cache Administrator Password:

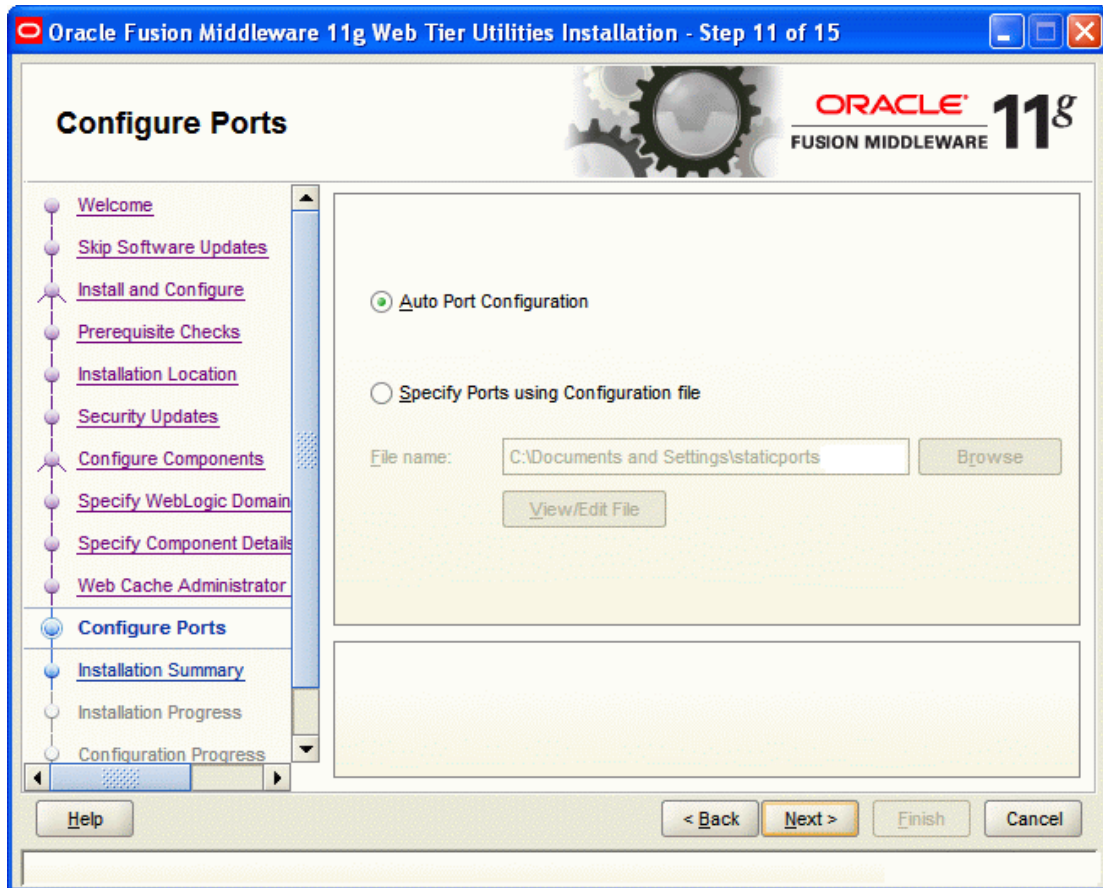
Confirm Password:

Valid passwords are 5 to 30 characters long, must begin with an alphabetic character, use only alphanumeric, underscore (_), dollar (\$) or pound (#) characters and include at least one number.

Specify a new password for your Web Cache administrator. Valid passwords are 5 to 30 characters long, must begin with an alphabetic character, use only alphanumeric, underscore (_), dollar (\$) or pound (#) characters and include at least one number.

Click Next to continue.

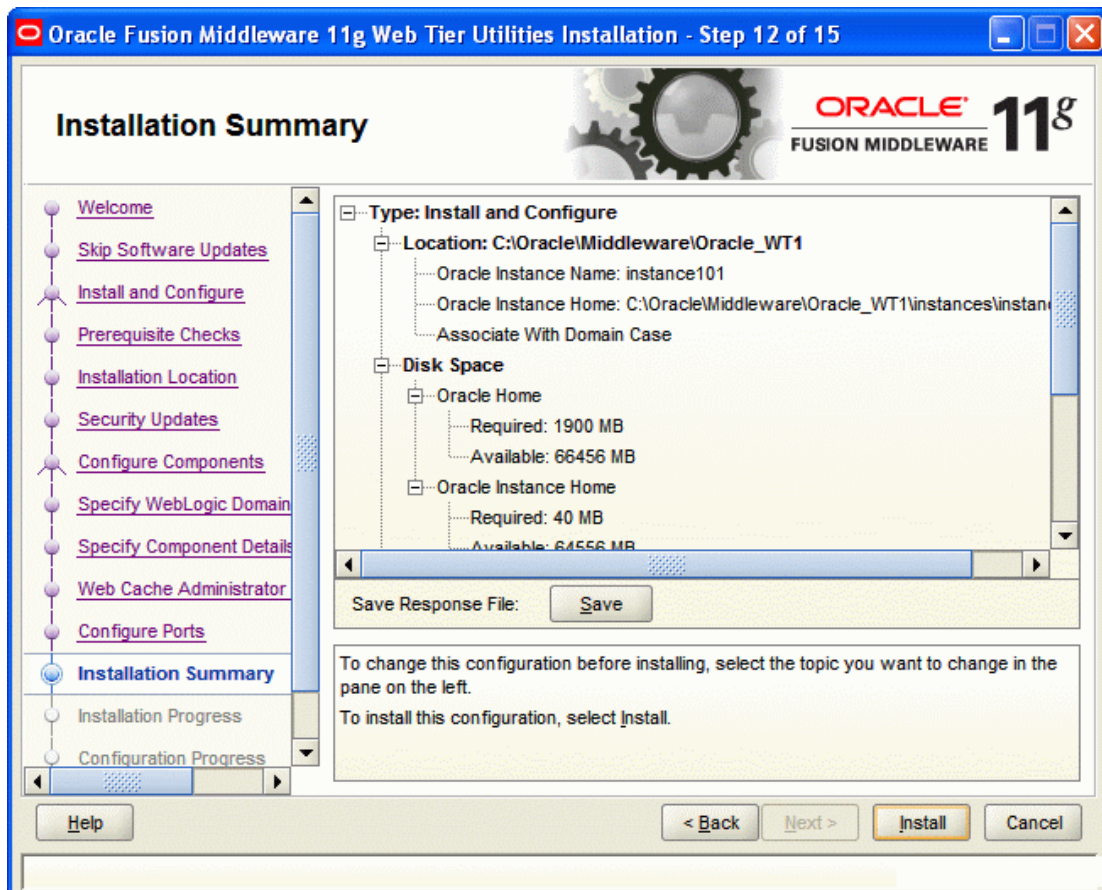
Configure Ports Screen



Select Auto Port Configuration if you want the installer to automatically assign the default ports to the components.

Click Next to continue.

Installation Summary Screen



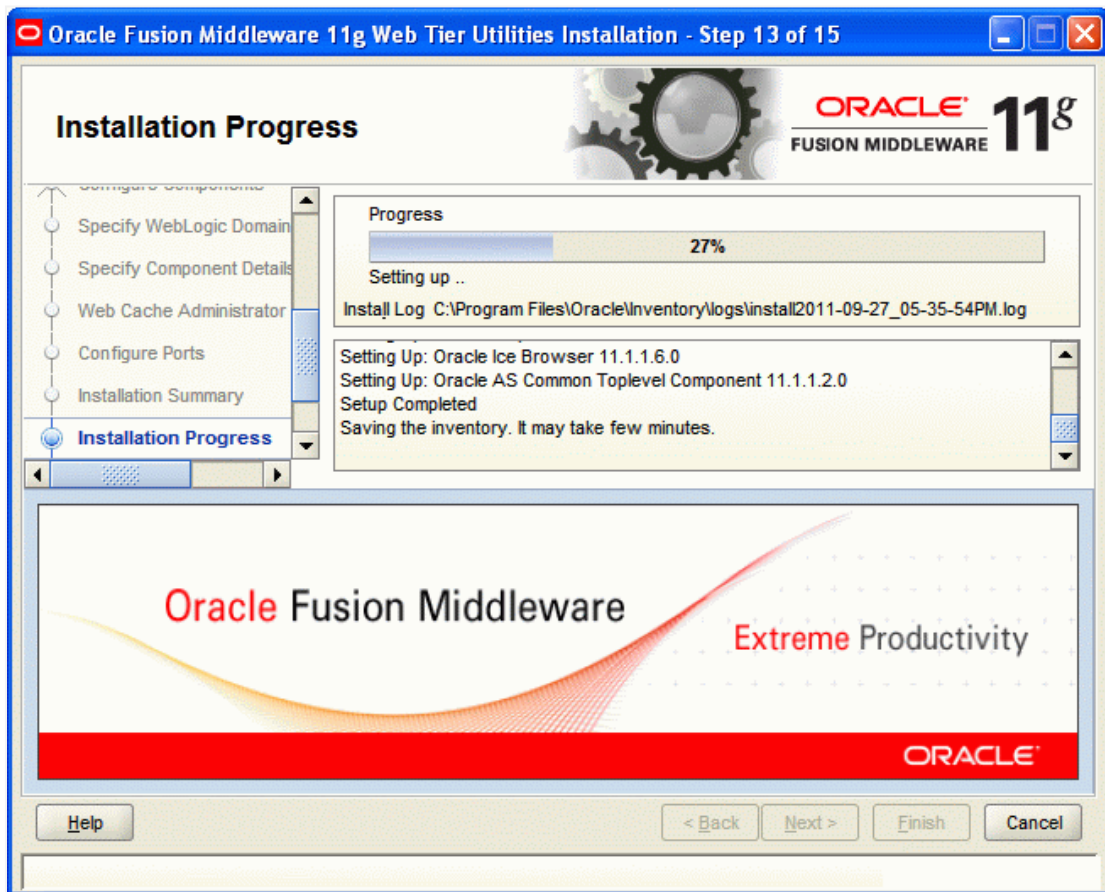
Review the information on this screen. The operations summarized on this page will be performed when you click Install.

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

If you want to save this configuration to a text file (called a response file), click Save. You will be prompted for the location of name of the file you want to create (for example, silent_install.rsp). This file can be used later if you choose to perform the same installation from the command line.

Click Install.

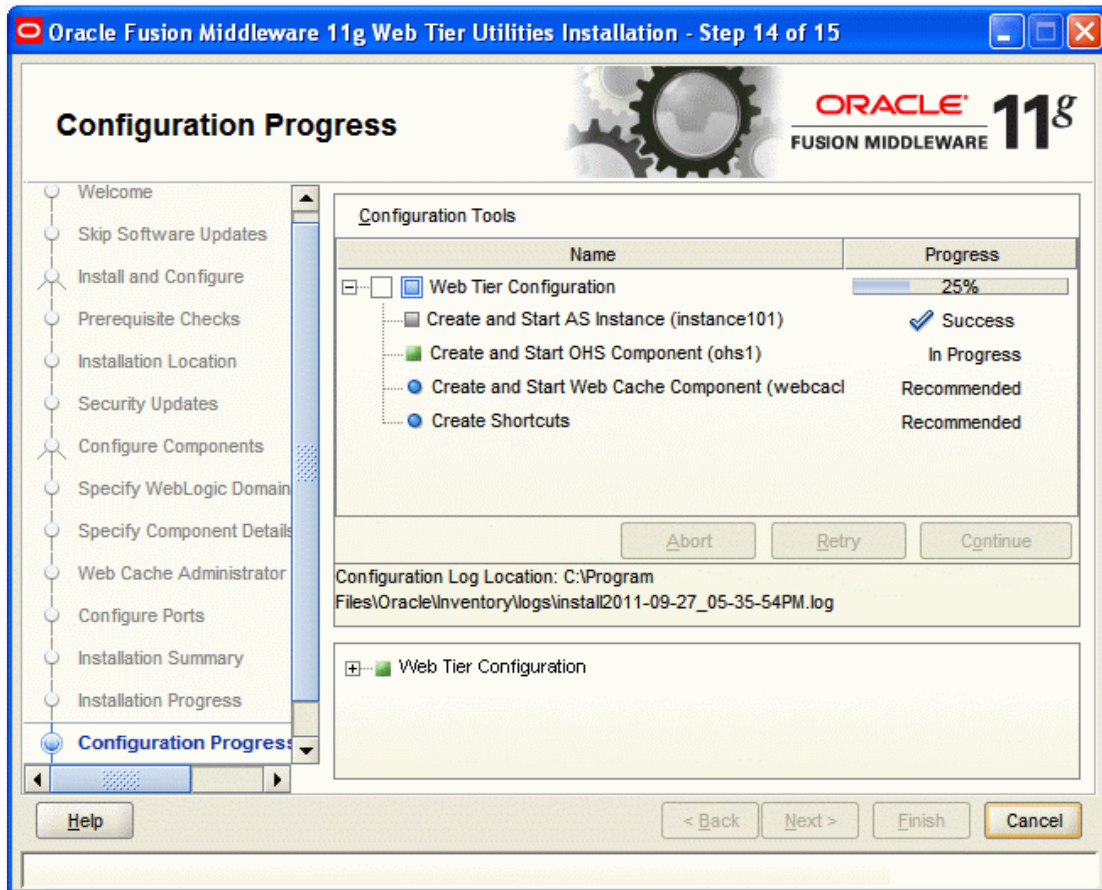
Installation Progress Screen



This screen shows the progress of the installation.

If you want to quit before the installation is completed, click Cancel. Doing so will result in a partial installation; the portion of the software that was installed on your system before you click Cancel will remain on your system, and you will have to remove it manually.

Configuration Progress Screen



This screen shows you the progress of the component configuration.

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

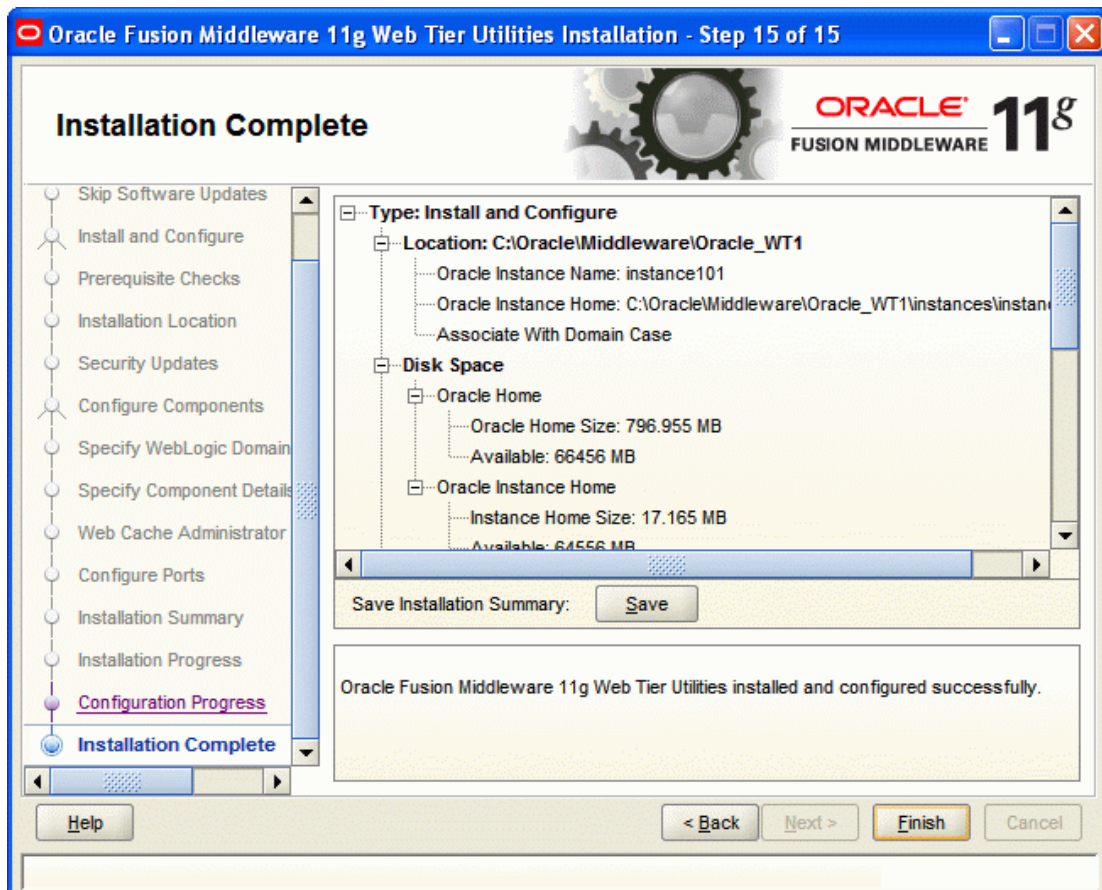
If you want to ignore the error or warning and continue with the configuration, click **Continue**.

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

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

Click **Next** to continue.

Installation Complete Screen



This screen summarizes the installation that was just completed.

At the end of the summary information, there is a section called Accessible URLs which give you the links needed to access the configured Oracle HTTP Server and Oracle Web Cache. You should make a note of these URLs so you can access these pages when you need to.

You can also save this summary information to a file for future reference by clicking Save. You will be prompted to specify a name and location for your summary file.

Click Finish to dismiss the screen.

4.2 Verifying the Installation

You can perform any combination of the following tasks to verify that your installation was successful:

- **Verifying the Installation Logs:** Check for the presence of installation log files in logs directory inside your Oracle Inventory directory. On UNIX systems, if you do not know the location of your Oracle Inventory directory, you can find it in the WebTier_ORACLE_HOME/orainst.loc file.
- **Verifying the Domain Server Logs:** Check the domain server logs, which are located in the servers directory inside the domain home directory. For example:

Web_Tier_ORACLE_HOME/user_projects/domains/domain_name/servers/server_name

- **Verifying the OPMN Status:** Run the opmnctl status command from the INSTANCE_HOME/bin directory on UNIX, in your instance home location. For example:

./opmnctl status

Processes in Instance: instance2

ias-component	process-type	pid	status
webcache1	WebCache-admin	24057	Alive
webcache1	WebCache	24056	Alive
ohs1	OHS	23890	Alive

This information shows the components configured for this installation. The status Alive means that the component is up and running.

Checking the Browser URLs

Run the opmnctl status -l command from the INSTANCE_HOME/bin directory on UNIX, and INSTANCE_HOME\bin directory on Windows, in your instance home location to obtain a list of ports used by the components. For example:

./opmnctl status -l

ias-comp onent	proce ss- type	pid	status	uid	memused	uptime	ports
webca che1	WebC ache- admin	24057	Alive	1067146 469	43712	14:43:29	http_admin: 7799
webca che1	WebC ache	24056	Alive	1067146 468	64072	14:43:29	http_stat:78 00,http_inval idation:7801, https_listen: 7802,http_lis ten:7798
ohs1	OHS	23890	Alive	1067146 467	50260	14:43:39	https:9999,h ttps:4447,htt p:7777

Use the port numbers in this display to point your browser to the appropriate pages. Use the format:

http://system_name:port_number

5. Oracle HTTP Server Webgate Installation and Configuration

A WebGate is a web-server plug-in for Oracle Access Manager (OAM) that intercepts HTTP requests and forwards them to the Access Server for authentication and authorization.

Installing a WebGate for Oracle Access Manager involves the following steps:

- Section 5.1, "Installing and Configuring Oracle Webgate"
- Section 5.2, "Post-Installation Steps for Oracle HTTP Server WebGate"
- Section 5.3, "Verifying the Installation and Configuration of Oracle HTTP Server WebGate"
- Section 5.4, "Registering the New Oracle HTTP Server 11g WebGate"

5.1 Installing and Configuring Oracle HTTP Server WebGate

Obtain Oracle HTTP Server Webgate software from the Oracle Fusion Middleware Downloads. Download webgate.zip file (version 11.1.2.3.0) to a directory, and unpack the downloaded archive that contains the installer. By default, this directory is named webgate.

To start the installation wizard, perform the following steps:

- Extract the contents of the WebGate.zip file to a directory. By default, this directory is named WebGate.
- Go to the Disk1 directory under the WebGate folder.
- Run the following command:

```
./runInstaller -jreLoc Java_Home/jdk
```

Note: You must enter the absolute path of the JRE folder located in this JDK when launching the installer.

After the Installer starts, the Welcome screen is displayed. Proceed with the installation by referring to the section "Installation Flow and Procedure of Oracle HTTP Server 11g WebGate" for installing Oracle HTTP Server 11g WebGate for Oracle Access Manager.

To install Oracle HTTP Server 11g WebGate for Oracle Access Manager, follow the instructions as shown below:

Specify Inventory Directory Screen

Specify Inventory directory

You are starting your first installation on this host. As part of this install, you need to specify a directory for installer files. This is called the "inventory directory". Within the inventory directory, the installer automatically sets up subdirectories for each product to contain inventory data and will consume typically 150 Kilobytes per product.

Enter the full path of the inventory directory.
You can specify an Operating System group that has write permissions to the above directory

Inventory Directory:

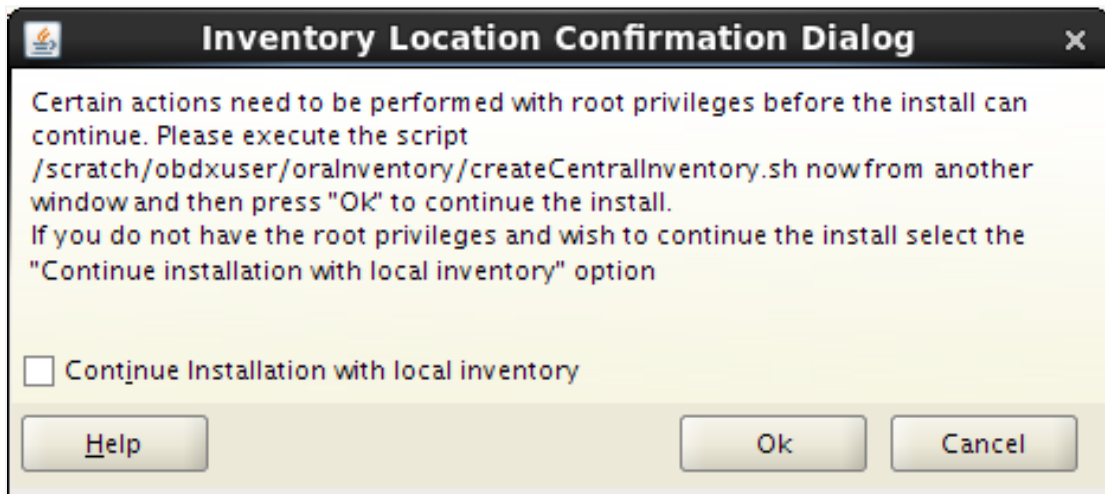
Operating System Group name:

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

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

Click Ok to continue.

Inventory Location Confirmation Screen



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

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

Click Ok to continue.

Welcome Screen



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

Click Next to continue.

Install Software Updates Screen

Oracle Access Manager OHS 11g Webgates Installation - Step 2 of 7

Install Software Updates

ORACLE FUSION MIDDLEWARE 11g

Skip Software Updates
 Search My Oracle Support for Updates
 Search Local Directory for Updates

User Name:

Password:

Proxy Settings Test Connection

Search For Updates

Allows user to search for and download software updates from My Oracle Support using My Oracle Support Account user name and password. Click "Test Connection" to test the credentials.

Help < Back Next > Finish Cancel

Elapsed Time: 0m 23s

If you want to search for and download software updates from My Oracle Support, then do the following:

Select Search My Oracle Support for Updates.

Enter User name and Password.

Click Test Connection.

If you want to search your local directory for updates, then do the following:

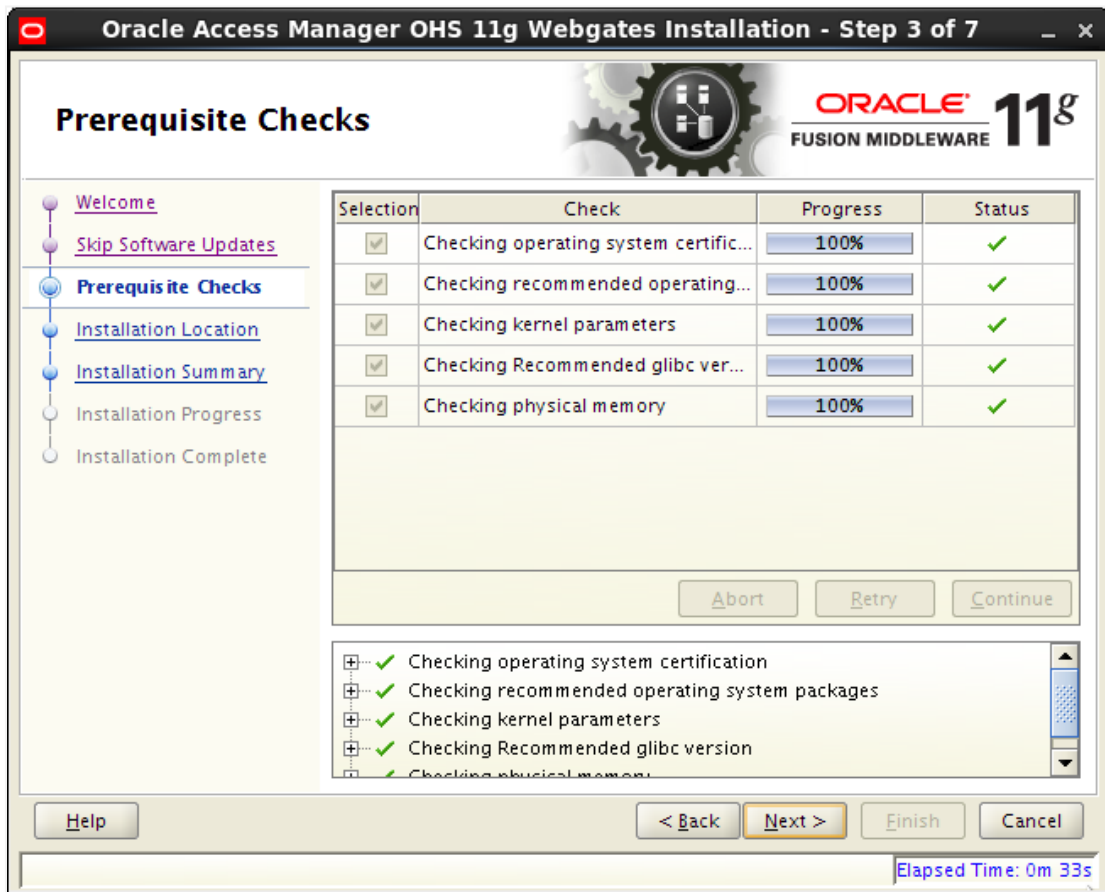
Select Search Local Directory for Updates.

Click Search For Updates.

If you want to skip software updates, then select Skip Software Updates.

Click Next to continue.

Prerequisite Checks Screen



This screen shows whether the system requirements are met in order to install the software.

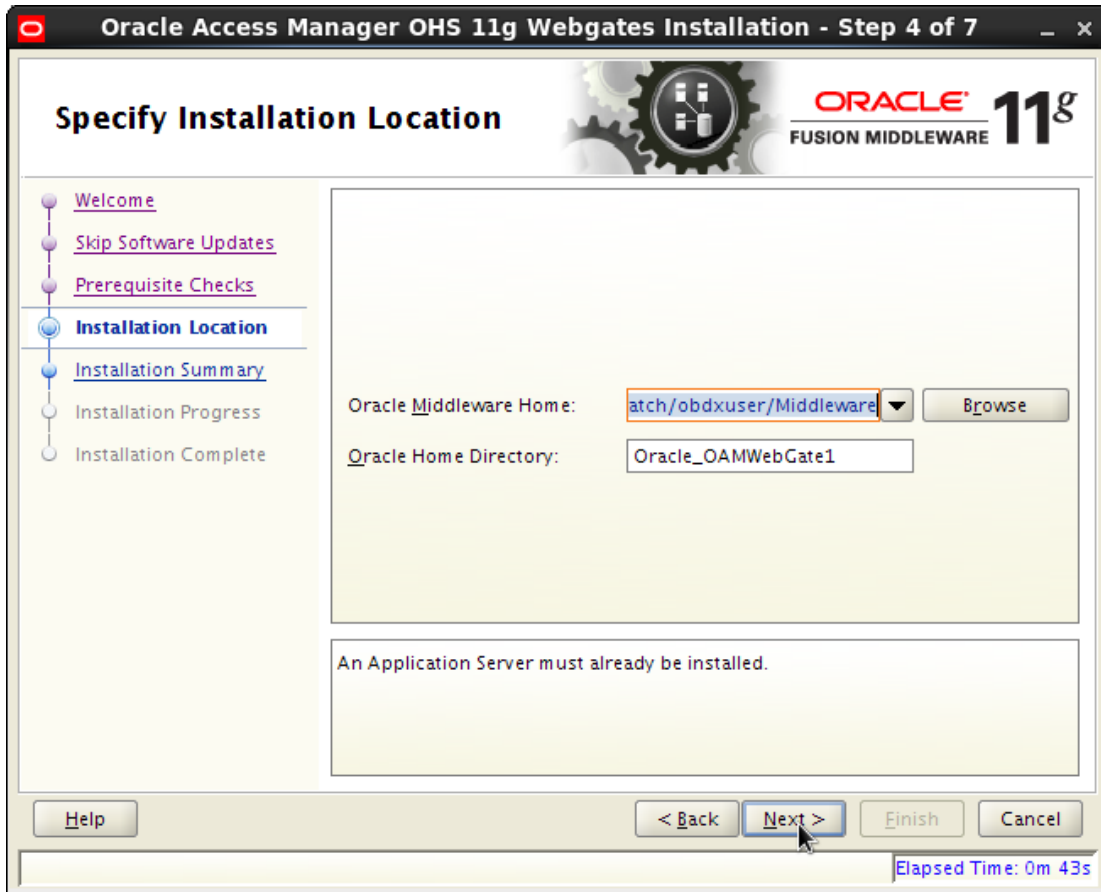
If there is a problem, a short error message appears in the bottom portion of the screen. Fix the error, and click Retry to try again.

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

To stop prerequisite checking for all components, click Abort.

Click Next to continue.

Specify Installation Location Screen



Specify the following installation locations:

- Oracle Middleware Home: The absolute path to the directory where Webgate will be installed.
- Oracle Home Directory: The directory name for your Oracle home:
 - You can specify a pre-existing directory that you want to use as the Oracle home; the directory must be an empty directory.
 - You can specify the name of a new directory that will be created for you inside the Middleware home.

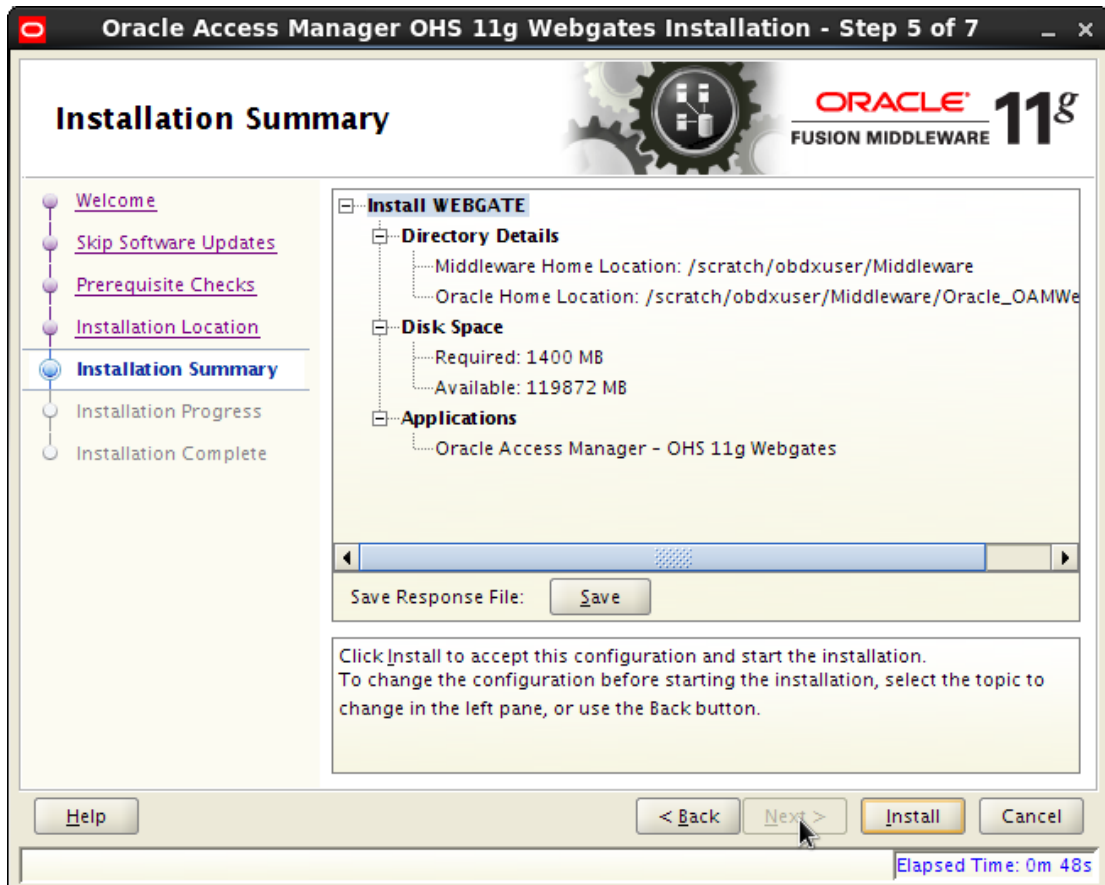
Oracle Home directory is where your products will be installed. All software binaries will reside in this directory, and no runtime process can write to this directory.

Note: The Oracle Middleware Home path should be different from the Weblogic Server installation path, in case where Webgate installation would be done on the same server where Weblogic is installed.

This installation directory will be referred to as Webgate_ORACLE_HOME throughout the remainder of this document. If you are performing an installation on a Windows operating system, be sure that your directory paths are valid, and do not contain double backslashes (\\).

Click Next to continue.

Installation Summary Screen



Review the information on this screen. The operations summarized on this page will be performed when you click Install.

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

If you want to save this configuration to a text file (called a response file), click Save. You will be prompted for the location of name of the file you want to create (for example, silent_install.rsp). This file can be used later if you choose to perform the same installation from the command line.

Click Install.

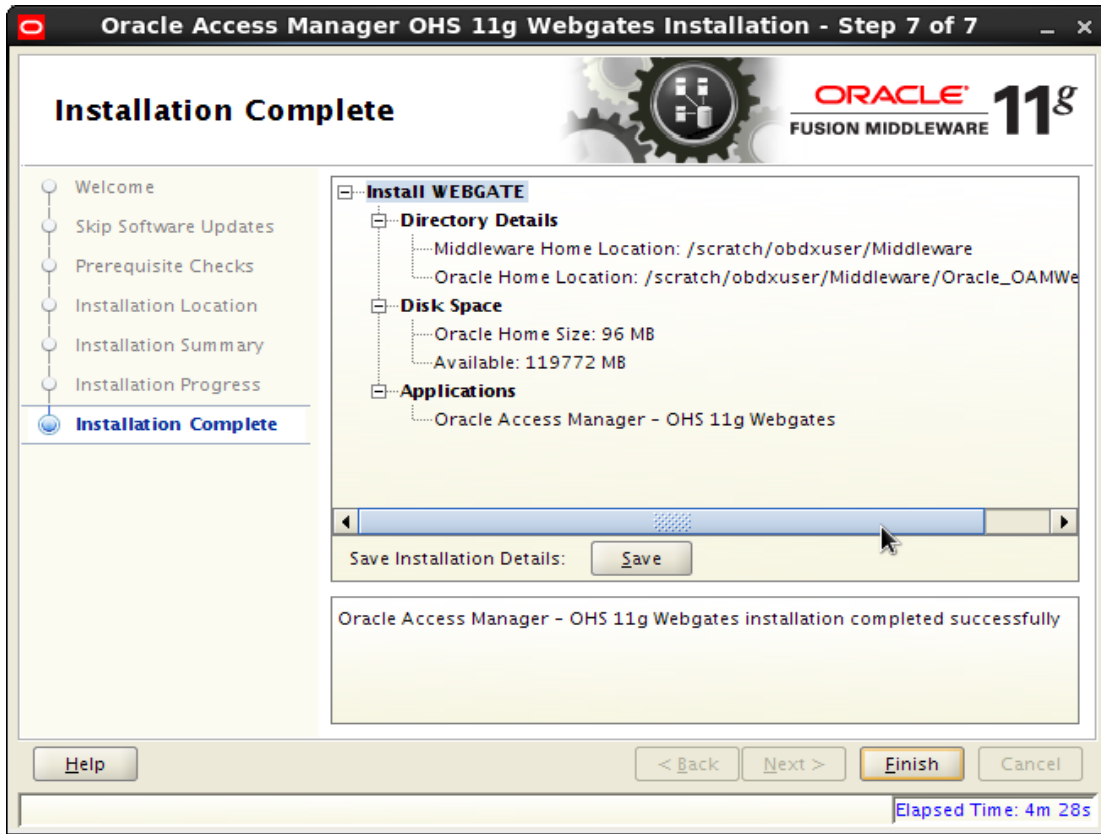
Installation Progress Screen



This screen shows the progress of the installation.

If you want to quit before the installation is completed, click Cancel. Doing so will result in a partial installation; the portion of the software that was installed on your system before you click Cancel will remain on your system, and you will have to remove it manually.

Installation Complete Screen



This screen summarizes the installation that was just completed.

You can save this summary information to a file for future reference by clicking Save. You will be prompted to specify a name and location for your summary file.

Click Finish to dismiss the screen.

5.2 Post-Installation Steps for Oracle HTTP Server WebGate

You must complete the following steps after installing Oracle HTTP Server 11g WebGate for Oracle Access Manager:

- Go to the `WebGate_Home/webgate/ohs/tools/deployWebGate` directory by running the following command:

`cd WebGate_Home/webgate/ohs/tools/deployWebGate`

- Run the following command to copy the required bits of agent from the `WebGate_Home` directory to the `WebGate_Instance` location:

`./deployWebGateInstance.sh -w WebGate_Instance_Directory -oh WebGate_Oracle_Home`

```

Terminal
File Edit View Terminal Tabs Help
[user@ofss310407 ~]$ cd /scratch/Oracle/Middleware/Oracle_OAMWebGate1/webgate/ohs/tools/deployWebGate/
[user@ofss310407 deployWebGate]$ ./deployWebGateInstance.sh -w

```

In this command:

WebGate_Oracle_Home is the directory in which you have installed Oracle HTTP Server WebGate and created it as the Oracle home for WebGate.

Example: MW_HOME/Oracle_OAMWebGate1

WebGate_Instance_Directory is the location of WebGate Instance Home, which is same as the Instance Home of Oracle HTTP Server.

Example:

MW_HOME/Oracle_WT1/instances/instance1/config/OHS/ohs1

Run the following command to ensure that the LD_LIBRARY_PATH variable contains Oracle_Home_for_Oracle_HTTP_Server/lib:

```
export LD_LIBRARY_PATH =
$LD_LIBRARY_PATH:Oracle_Home_for_Oracle_HTTP_Server/lib
```

From your present working directory, move to directory:

```
cd WebGate_Home/webgate/ohs/tools/setup/InstallTools
```

On the command line, run the following command to copy the apache_WebGate.template from the WebGate_Home directory to the WebGate Instance location (re-named to WebGate.conf) and update the httpd.conf file to add one line to include the name of WebGate.conf:

```
./EditHttpConf -w WebGate_Instance_Directory [-oh
WebGate_Oracle_Home] [-o output_file]
```

In this command:

WebGate_Oracle_Home is the directory where you have installed Oracle HTTP Server WebGate for Oracle Access Manager and created as the Oracle Home for WebGate.

Example: MW_HOME/Oracle_OAMWebGate1

WebGate_Instance_Directory is the location of WebGate Instance Home, which is same as the Instance Home of Oracle HTTP Server.

Example: MW_HOME/Oracle_WT1/instances/instance1/config/OHS/ohs1

output_file is the name of the temporary output file used by the tool.

Example: Edithttpconf.log

Note: The -oh WebGate_Oracle_Home and -o output_file parameters are optional.

5.3 Verifying the Installation of Oracle HTTP Server WebGate

After installing Oracle HTTP Server 11g WebGate for Oracle Access Manager, including the post-installation steps, you can examine the install DATE-TIME_STAMP.out log file to verify the installation.

The default location of the log is : **WebGate_Home/oralnst.loc**

5.4 Registering the New Oracle HTTP Server 11g WebGate

Before you can use the new Oracle HTTP Server 11g WebGate agent for Oracle Access Manager, you must register the new WebGate agent with Oracle Access Manager by using the Oracle Access Manager Administration Console.

Refer to the Section 7.1.2 “Post-Installation Tasks” under Oracle Access Management Configuration chapter.

6. Oracle Identity and Access Management Installation and Configuration

Oracle Identity and Access Management (IAM) components enable enterprises to manage the end-to-end lifecycle of user identities across all enterprise resources - both within and beyond the firewall. With IAM, you can deploy applications faster, apply the most granular protection to enterprise resources, automatically eliminate latent access privileges, and much more. Following components are included in IAM:

- Oracle Identity Manager
- Oracle Access Management
- Oracle Adaptive Access Manager
- Oracle Entitlements Server
- Oracle Privileged Account Manager
- Oracle Access Management Mobile and Social
- Oracle Mobile Security Suite

This chapter provides information for installing IAM and includes the following topics:

- Section 6.1, "Pre-requisite - Installing Java 1.7"
- Section 6.2, "Pre-requisite - Installing Weblogic 11g"
- Section 6.3, "Installing Oracle Identity and Access Management (IAM)"

6.1 Pre-requisite - Installing Java 1.7

Obtain the Java tarball pack from the Oracle Java Downloads. Download ***jdk-7u80-linux-x64.tar.gz*** file to a directory.

- Change the directory in which you want to install,

```
cd <Directory_Path>
```

- Unpack the tarball and install Java using the following command:

```
tar zxvf <Path>/jdk-7u80-linux-x64.tar.gz
```

Note : You must enter the absolute path of the folder where the TAR file is located.

- Now, set the path and environment variable for Java as:

```
export JAVA_HOME=<Java_Install_Path>/jdk1.7.0_80
```

```
export PATH=$JAVA_HOME/bin:$PATH
```

6.2 Pre-requisite - Installing Weblogic 11g

Oracle WebLogic Server is a scalable, enterprise-ready Java Platform, Enterprise Edition (Java EE) application server. The WebLogic Server infrastructure supports the deployment of many types of distributed applications.

This chapter describes the installation tasks which contains the following sections:

- Section 6.2.1, "Installing Weblogic"
- Section 6.2.2, "Verifying the Installation"

6.2.1 Installing Weblogic

Obtain Weblogic 10.3.6 JAR from the Oracle Fusion Middleware Downloads. Download **wls1036_generic.jar** file to a directory.

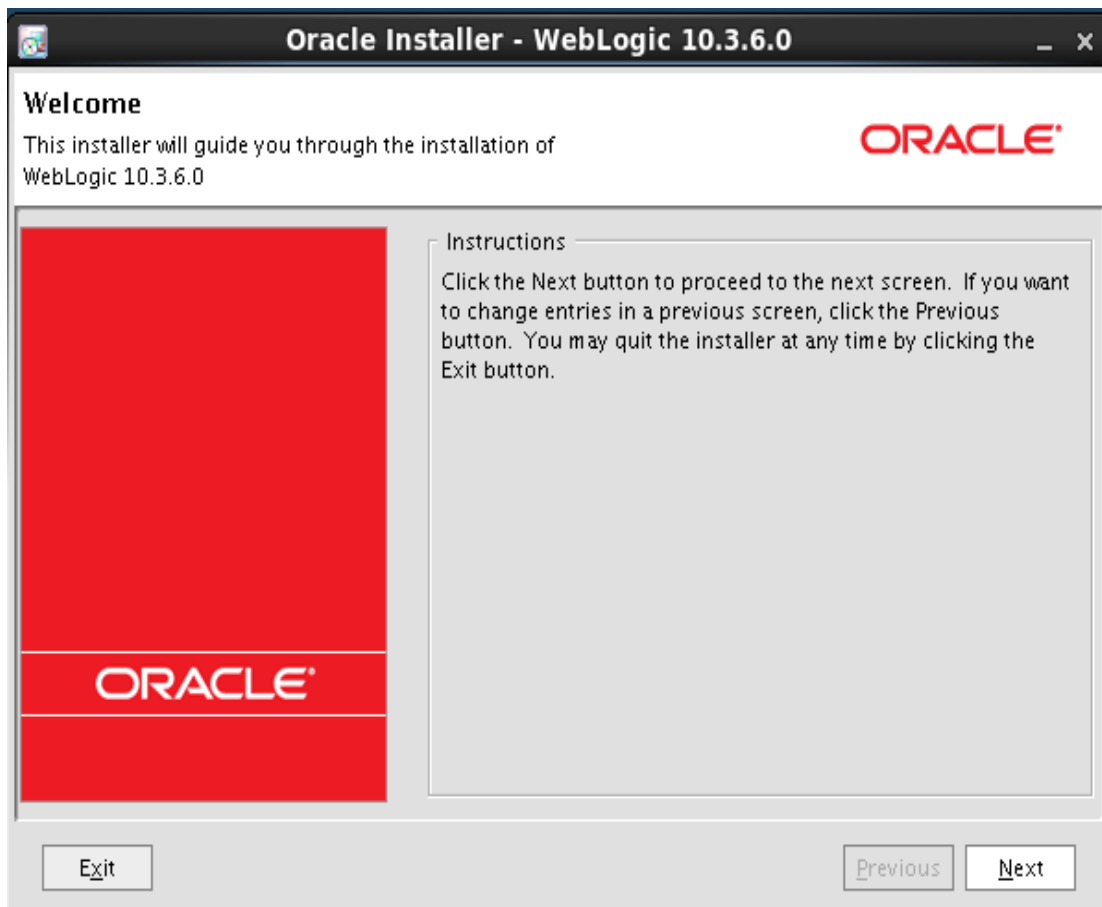
- Now to start the installer, go to the directory where you downloaded the file.
- Start the installer from the same directory using the below command:

```
java -jar <Path>/wls1036_generic.jar
```

Note : You must enter the absolute path of the folder where the JAR file is located.

Follow the instructions as shown below for installation:

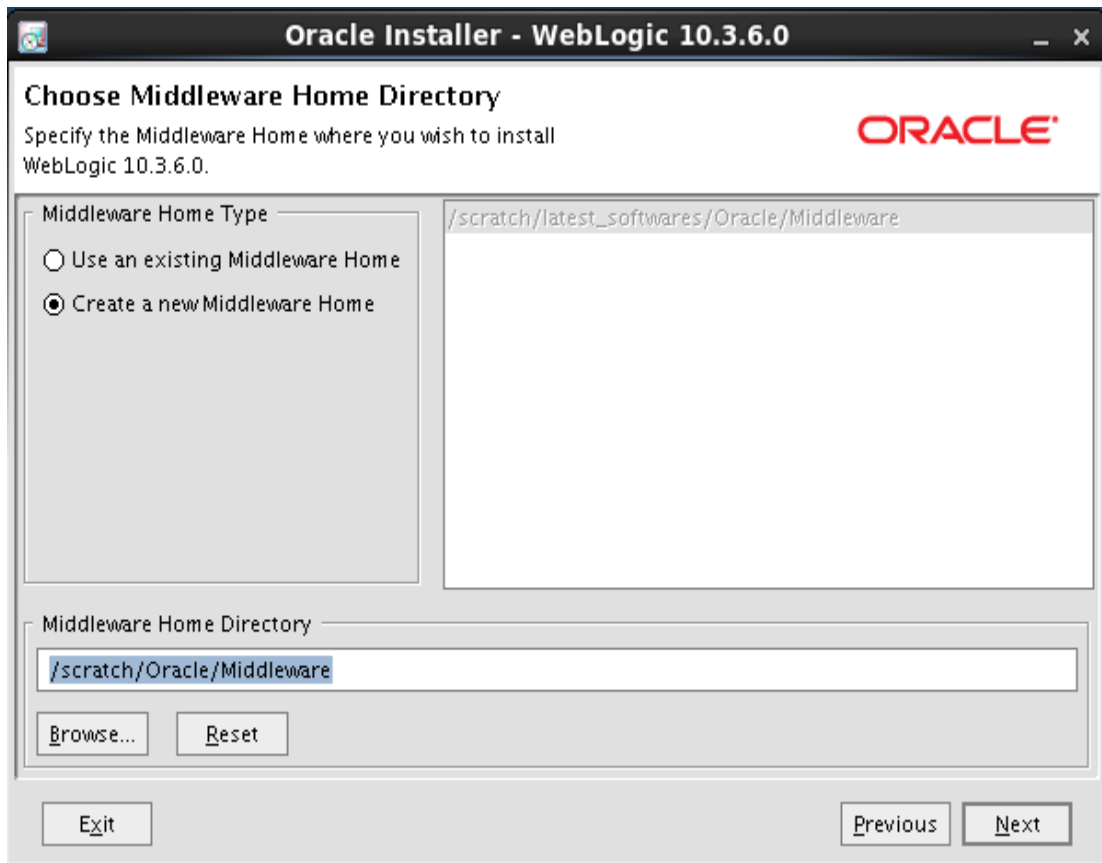
Welcome Screen



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

Click Next to continue.

Specify Middleware Home Screen



Specify the following installation locations:

- Oracle Middleware Home

The absolute path to the directory where WebLogic Server will be installed.

Click Next to continue.

Specify Security Updates Screen

Oracle Installer - WebLogic 10.3.6.0

Register for Security Updates **ORACLE**

Provide your email address for security updates and to initiate configuration manager.

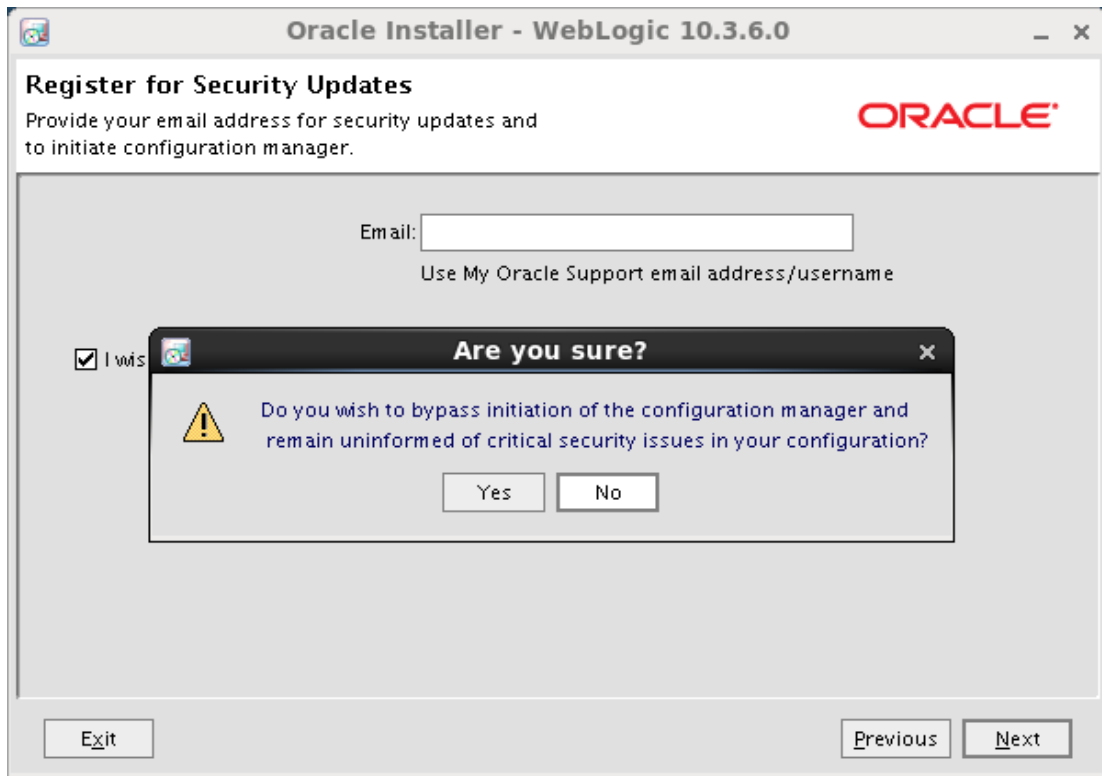
Email:

Use My Oracle Support email address/username

I wish to receive security updates via My Oracle Support

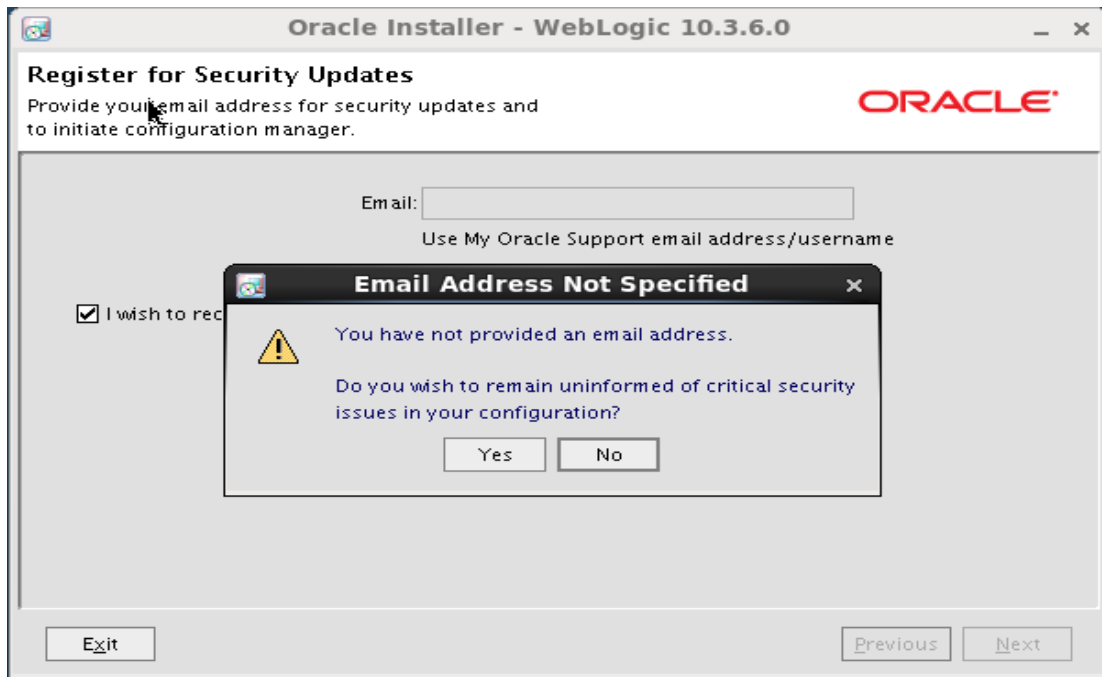
Support Password:

Click to uncheck the box stating “I wish to receive security updates via My Oracle Support” and the user will be prompted “Do you wish to bypass initiation of the configuration manager and remain uninformed of critical security issues in your configuration?”



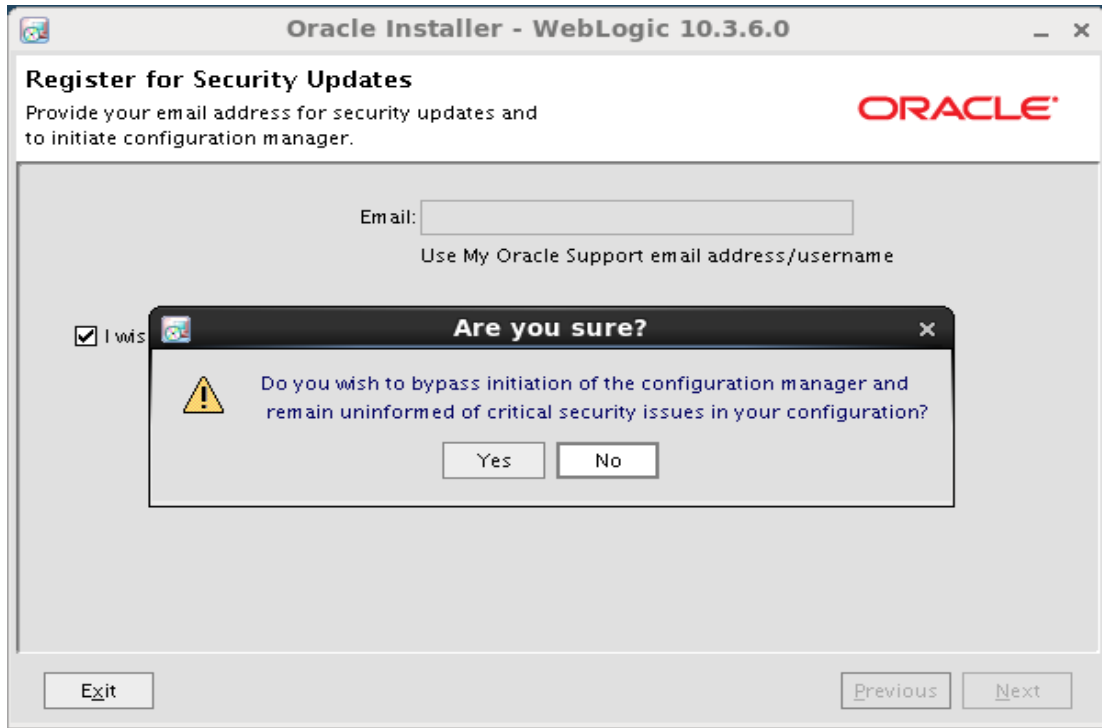
Select Yes and Click on Next.

Specify Security Updates Screen



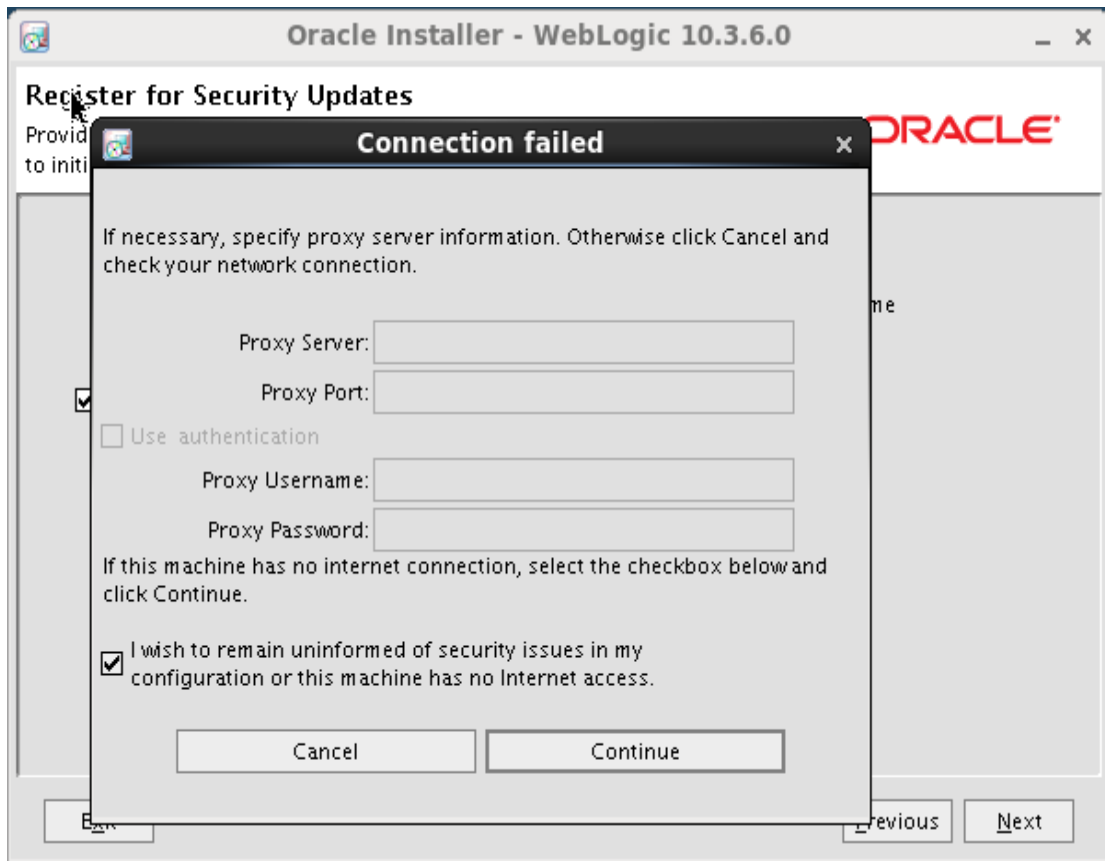
The user will now be prompted “Do you wish remain uninformed of critical security issues in your configuration?”

Select Yes and it will prompt “Do you wish to bypass initiation of the configuration manager and remain uninformed of critical security issues in your configuration?”



Select Yes and Click on Next to proceed.

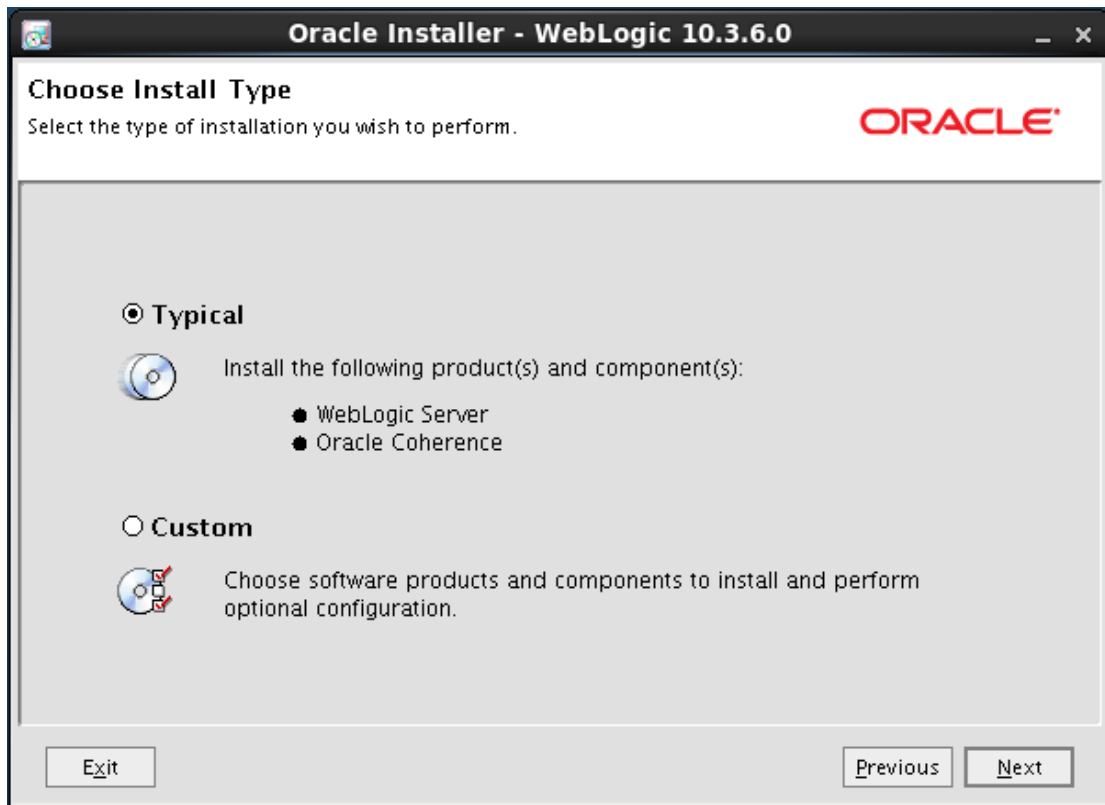
Specify Security Updates Screen



Click to select the checkbox "I wish to remain uninformed of security issues in my configuration or this machine has no Internet access."

Click on Continue to proceed.

Specify Installation Type Screen

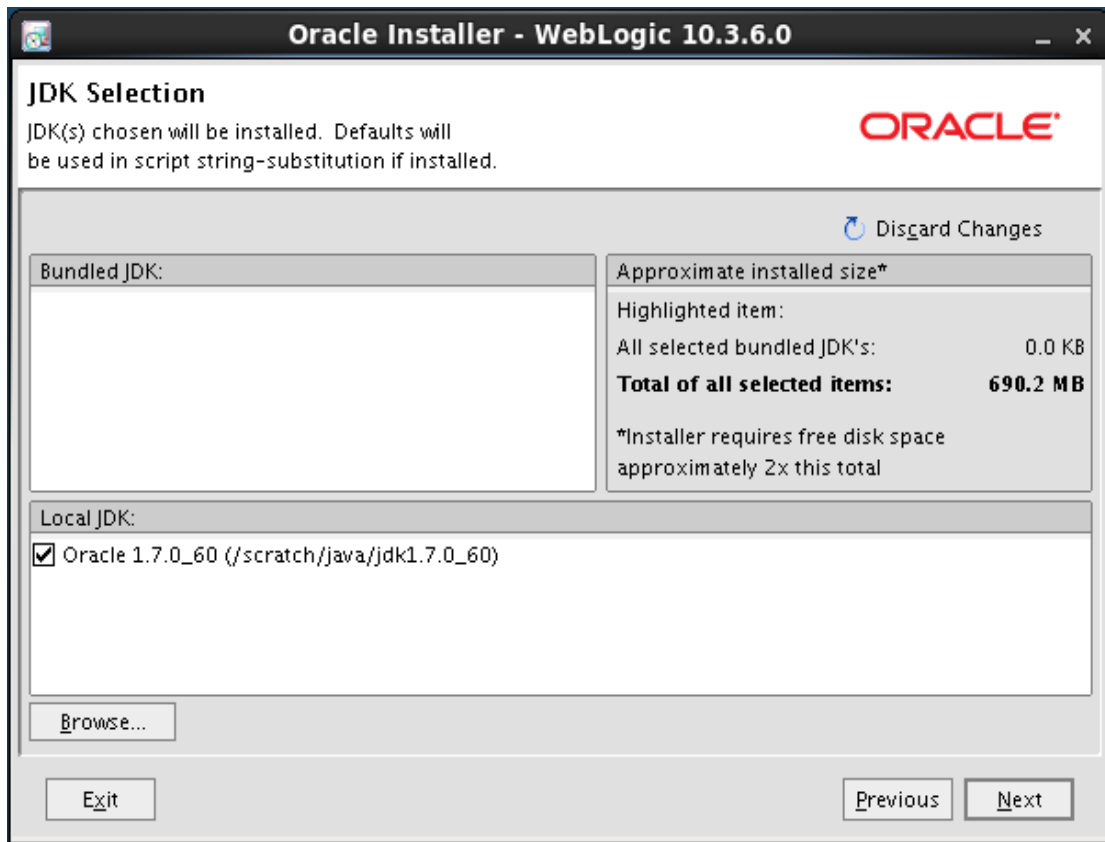


Following are the installation types:

- Typical
- Custom

Select Typical and Click Next to continue.

Specify JDK Selection Screen

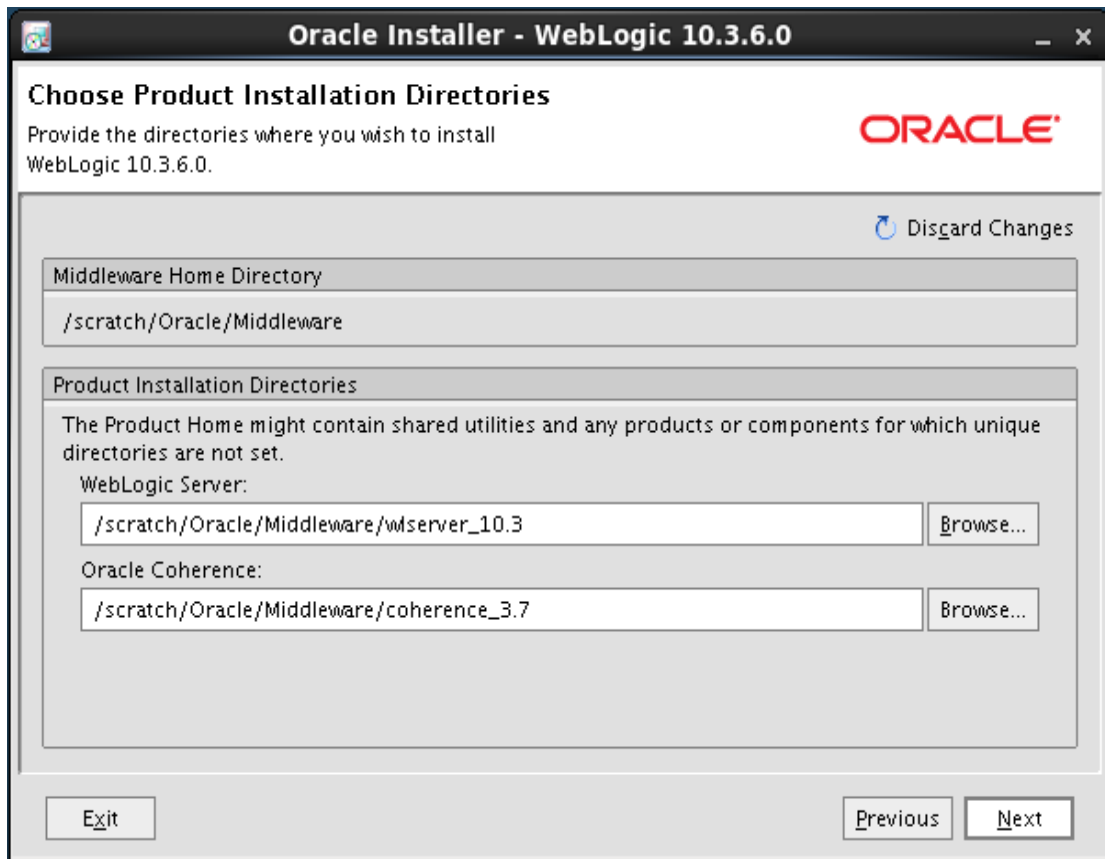


Check if the JDK Path listed is correct.

If the user wants to change the path, the user can do so by clicking on the Browse button and selecting the path where JDK is installed.

Once done, Click Next to continue.

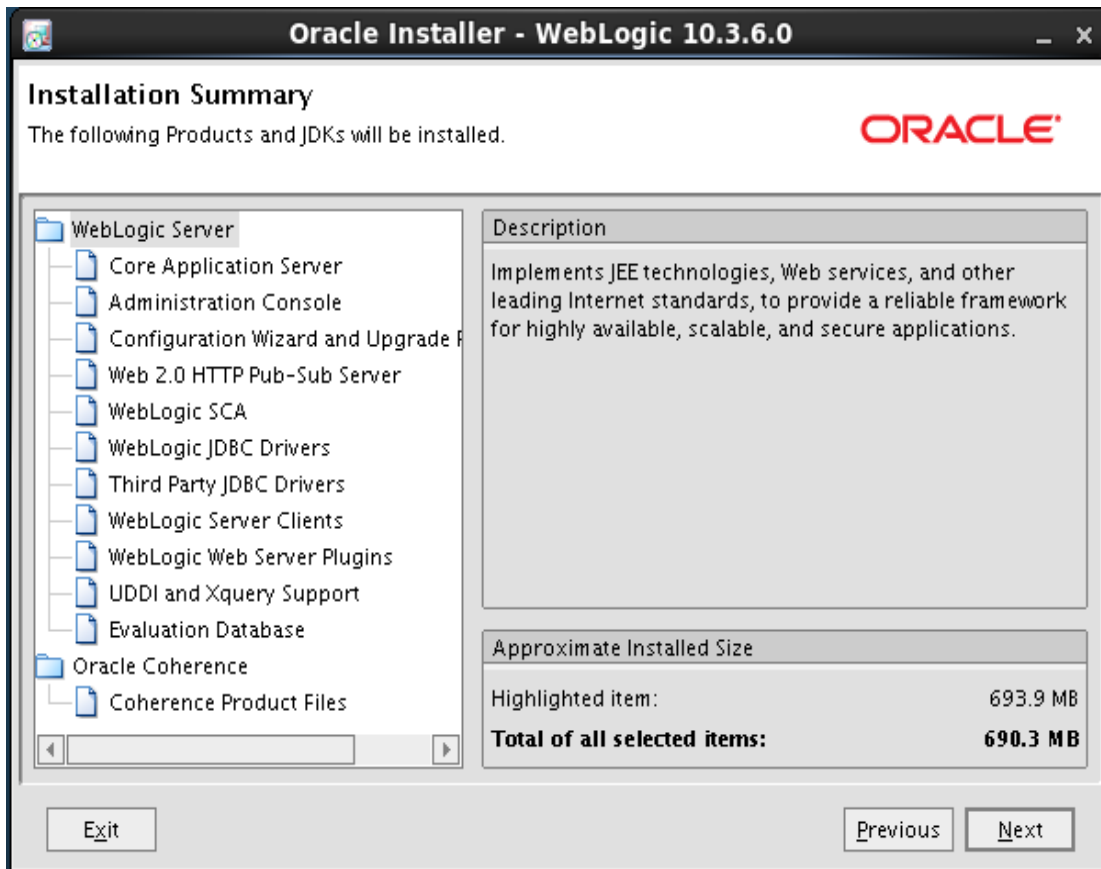
Choose Product Installation Directories Screen



This screen shows the Middleware Home location and the Weblogic Server and Oracle Coherence Product home directories.

The user should verify the path and Click Next to continue.

Installation Summary Screen



Review the information on this screen. The operations summarized on this page will be performed when you click Next.

If you want to make any changes to the configuration before starting the installation, click Previous option to navigate to the screen where you want to edit the data.

Click Next.

Then screen shows the progress of the installation.

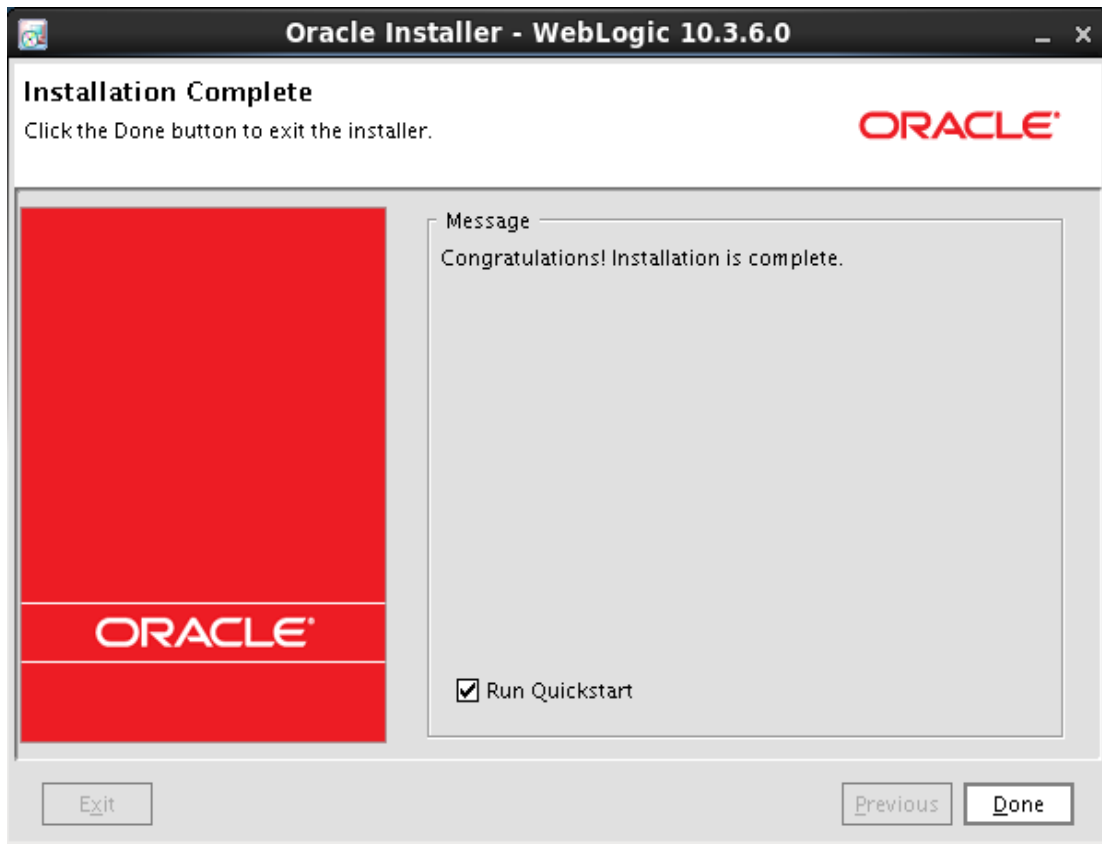
Installation Progress Screen



This screen shows the progress of the installation.

If you want to quit before the installation is completed, click Exit. Doing so will result in a partial installation; the portion of the software that was installed on your system before you click Exit will remain on your system, and you will have to remove it manually.

Installation Complete Screen



This screen summarizes the installation that was just completed with a message “Congratulations! Installation is complete.”

Click Done to dismiss the screen.

6.2.2 Verifying the Installation

You can perform the following tasks to verify that your installation was successful:

- **Verifying the Installation Directory**
Check if Oracle Home directory exists or not.

6.3 Installing Oracle Identity and Access Management

This chapter describes the installation tasks which contains the following sections:

- Section 6.3.1, "Installing and Configuring Oracle Identity and Access Management"
- Section 6.3.2, "Verifying the Installation"

6.3.1 Installing and Configuring Oracle Identity and Access Management

Obtain IAM installer version 11.1.2.3.0 from the Oracle Fusion Middleware Downloads. Download the zip file to a directory, and unpack the downloaded archive that contains the installer.

- Now to start the installer, go to the directory where you unpacked the archive file and switch to the Disk1 directory.
- Start the installer from the Disk1 directory

./runInstaller -jreLoc Java_Home/jdk

Note: You must enter the absolute path of the JRE folder located in this JDK when launching the installer.

- If you are installing on a UNIX system, and if this is the first time any Oracle product is being installed on your system with the Oracle Universal Installer, you will be asked to provide the location of an inventory directory. This is where the installer sets up subdirectories and maintains inventory data for each Oracle product that is installed on this system.
- Follow the instructions in the below table to configure the inventory directory information. For more help, click on the screen name in the table below, or click the Help button in the GUI.

Table: Inventory Directory and Group Screens

Screen	Description and Action Required
Specify Inventory Directory Screen (UNIX Only)	Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory. Click OK to continue.
Inventory Location Confirmation Screen (UNIX Only)	Run the createCentrallInventory.sh script as root. Click OK to continue.

Now, perform the steps as shown below to install and configure OUD after you start the OUD installer.

Welcome Screen



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

Click Next to continue.

Install Software Updates Screen

If you want to search for and download software updates from My Oracle Support, then do the following:

Select Search My Oracle Support for Updates.

Enter User name and Password.

Click Test Connection.

If you want to search your local directory for updates, then do the following:

Select Search Local Directory for Updates.

Click Search For Updates.

If you want to skip software updates, then select Skip Software Updates.

Click Next to continue.

Prerequisite Checks Screen



This screen shows whether the system requirements are met in order to install the software.

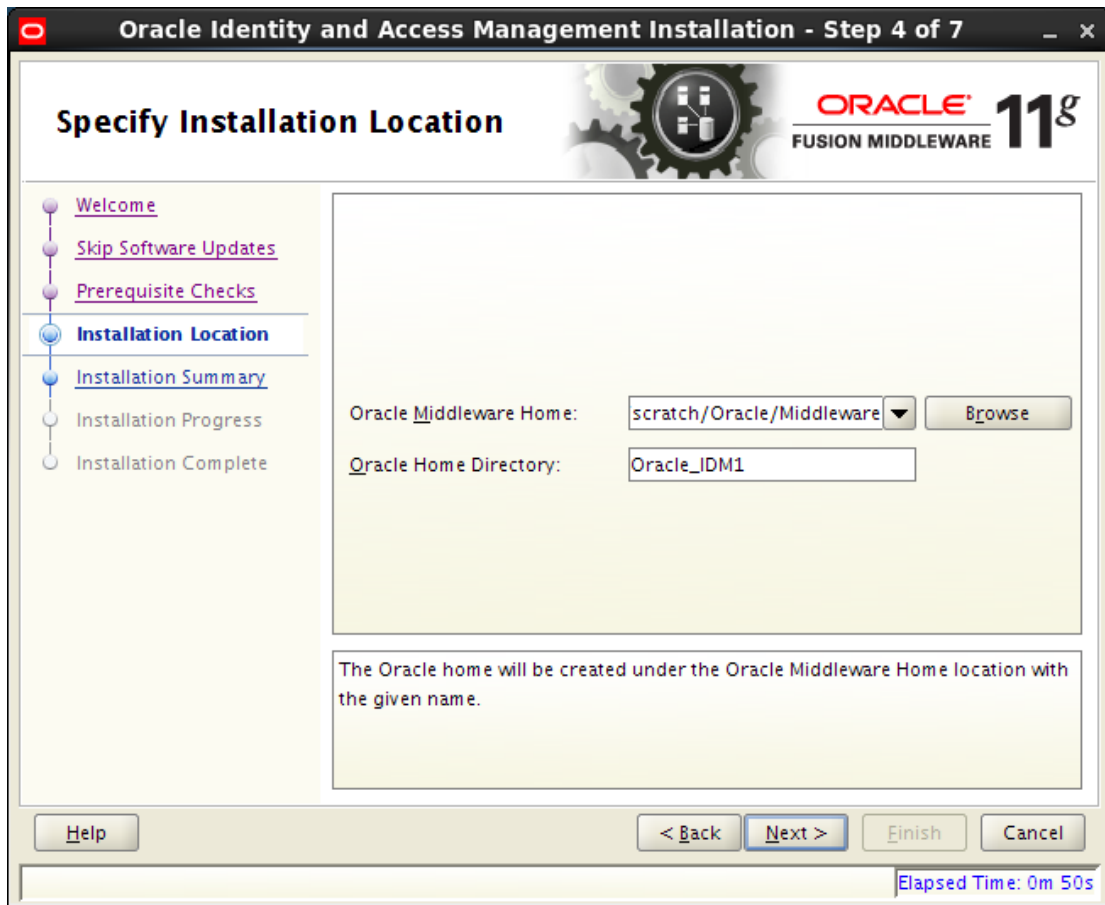
If there is a problem, a short error message appears in the bottom portion of the screen. Fix the error, and click Retry to try again.

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

To stop prerequisite checking for all components, click Abort.

Click Next to continue.

Specify Installation Location Screen



Specify the following installation locations:

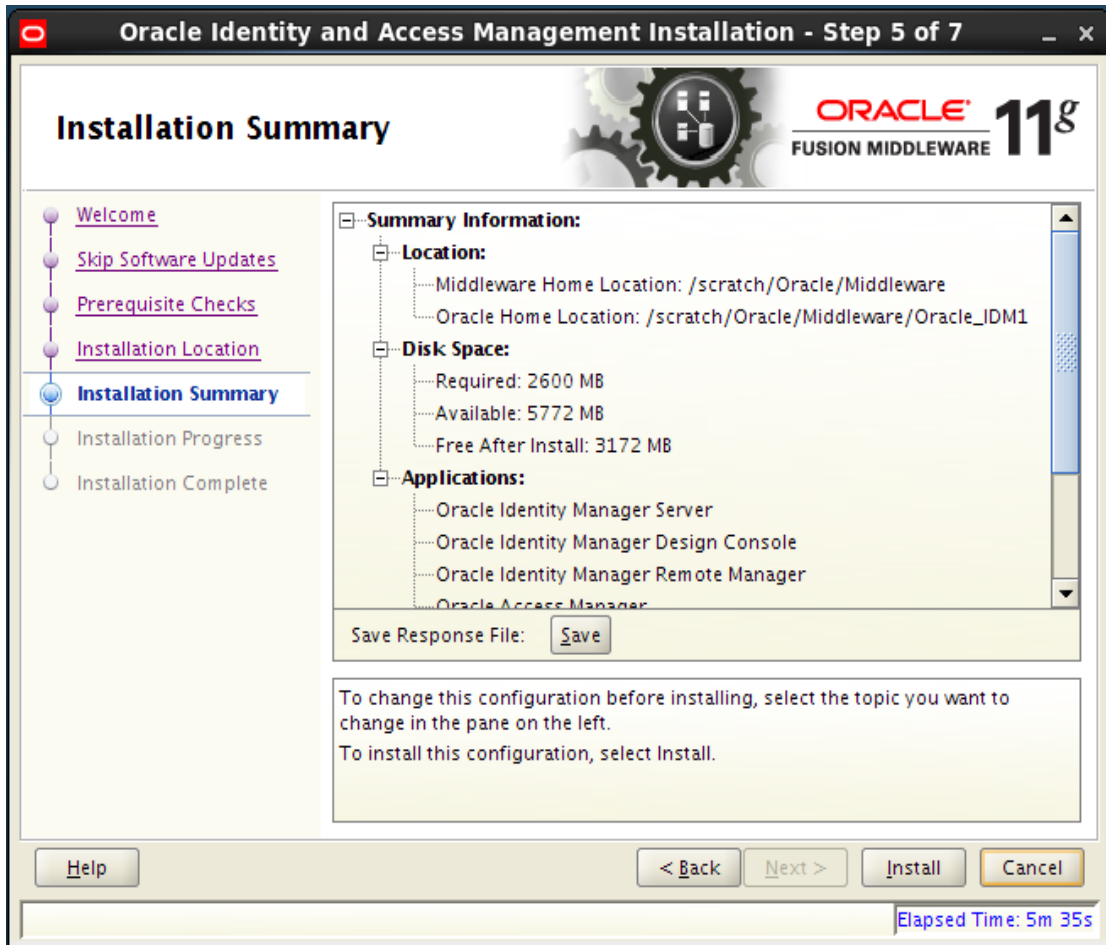
- Oracle Middleware Home
 - The absolute path to the directory where WebLogic Server was installed.
- Oracle Home Directory: The directory name for your Oracle home:
 - You can specify a pre-existing directory that you want to use as the Oracle home; the directory must be an empty directory.
 - You can specify the name of a new directory that will be created for you inside the Middleware home.

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

Note: This installation directory will be referred to as `IDM_ORACLE_HOME` throughout the remainder of this document. If you are performing an installation on a Windows operating system, be sure that your directory paths are valid, and do not contain double backslashes (`\\`).

Click Next to continue.

Installation Summary Screen



Review the information on this screen. The operations summarized on this page will be performed when you click Install.

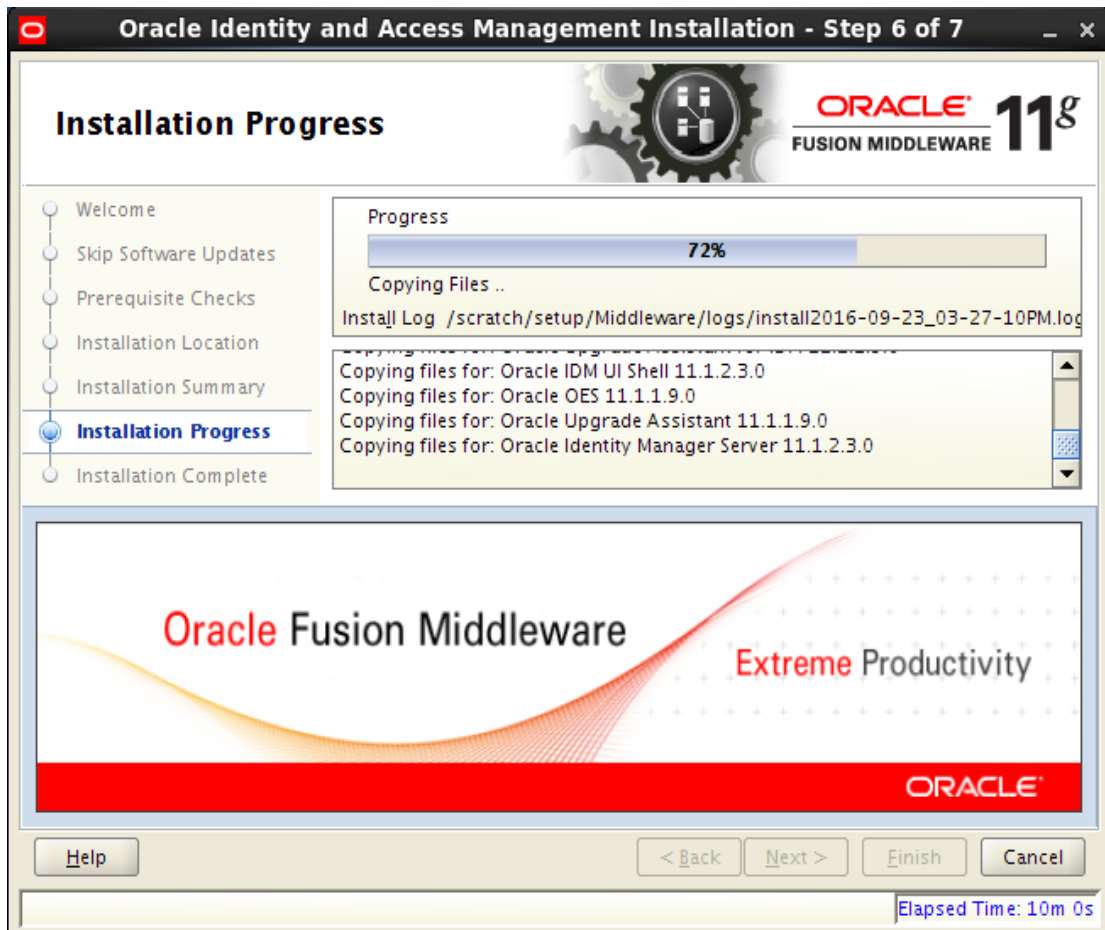
If you want to make any changes to the configuration before starting the installation, use the navigation pane, and select the topic you want to edit.

If you want to save this configuration to a text file (called a response file), click Save. You will be prompted for the location of name of the file you want to create (for example, silent_install.rsp). This file can be used later if you choose to perform the same installation from the command line.

Click Install.

Then screen shows the progress of the installation.

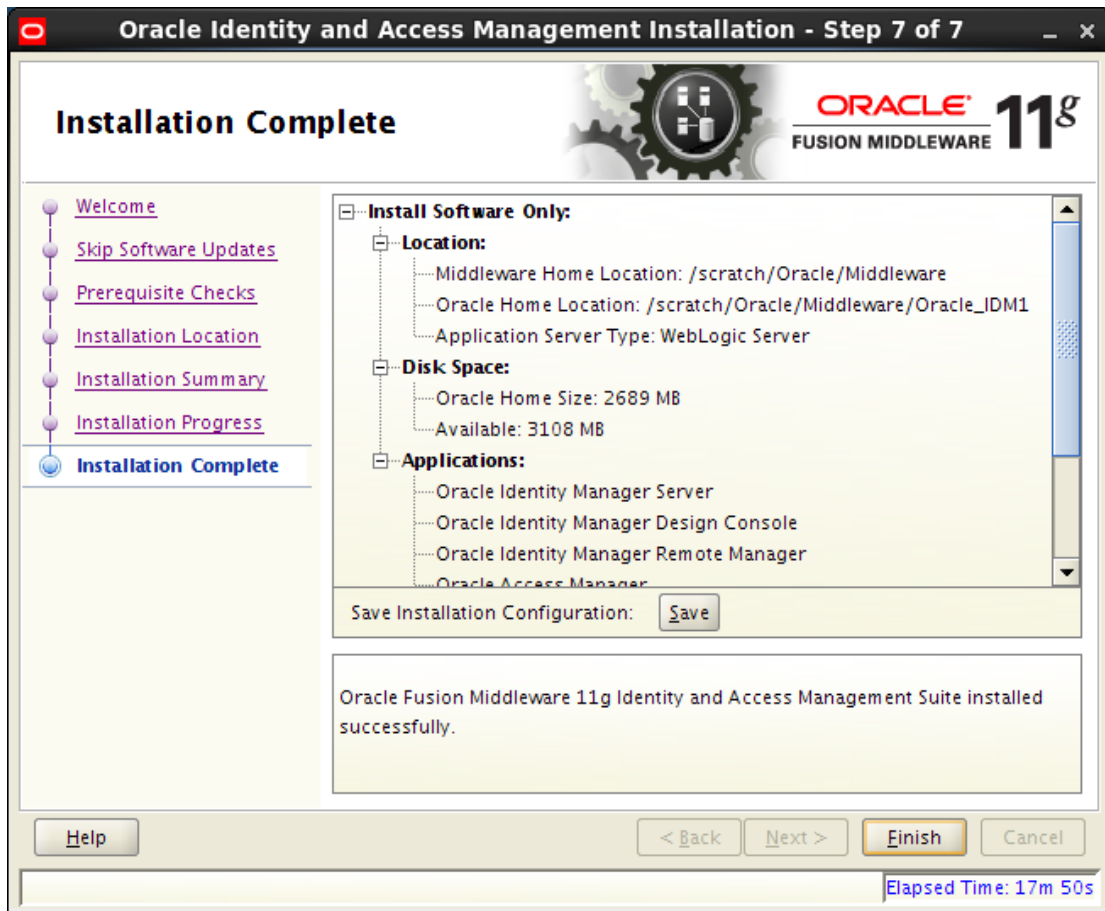
Installation Progress Screen



This screen shows the progress of the installation.

If you want to quit before the installation is completed, click Cancel. Doing so will result in a partial installation; the portion of the software that was installed on your system before you click Cancel will remain on your system, and you will have to remove it manually.

Installation Complete Screen



This screen summarizes the installation that was just completed.

You can also save this summary information to a file for future reference by clicking Save. You will be prompted to specify a name and location for your summary file.

Click Finish to dismiss the screen.

6.3.2 Verifying the Installation

You can perform any combination of the following tasks to verify that your installation was successful:

- **Verifying the Installation Logs:** Check for the presence of installation log files in logs directory inside your Oracle Inventory directory.
- **Verifying the IDM Home Directory:** Check for the presence of IDM Home directory. For example, <Oracle_Home>/Oracle_IDM1

7. Oracle Access Management Installation and Configuration

Oracle Access Management includes components like Oracle Access Manager, Oracle Access Management Security Token Service, Oracle Access Management Identity Federation, Oracle Access Management Mobile and Social.

Following topics in this chapter provides detailed information on installing and configuring Oracle Access Management after installing Oracle Identity and Access Management:

- Section 7.1, "Creating Weblogic Domain for Oracle Access Manager"
- Section 7.2, "Post-Installation Tasks"
- Section 7.3, "Verifying the Installation"

7.1 Creating Weblogic Domain for Oracle Access Manager

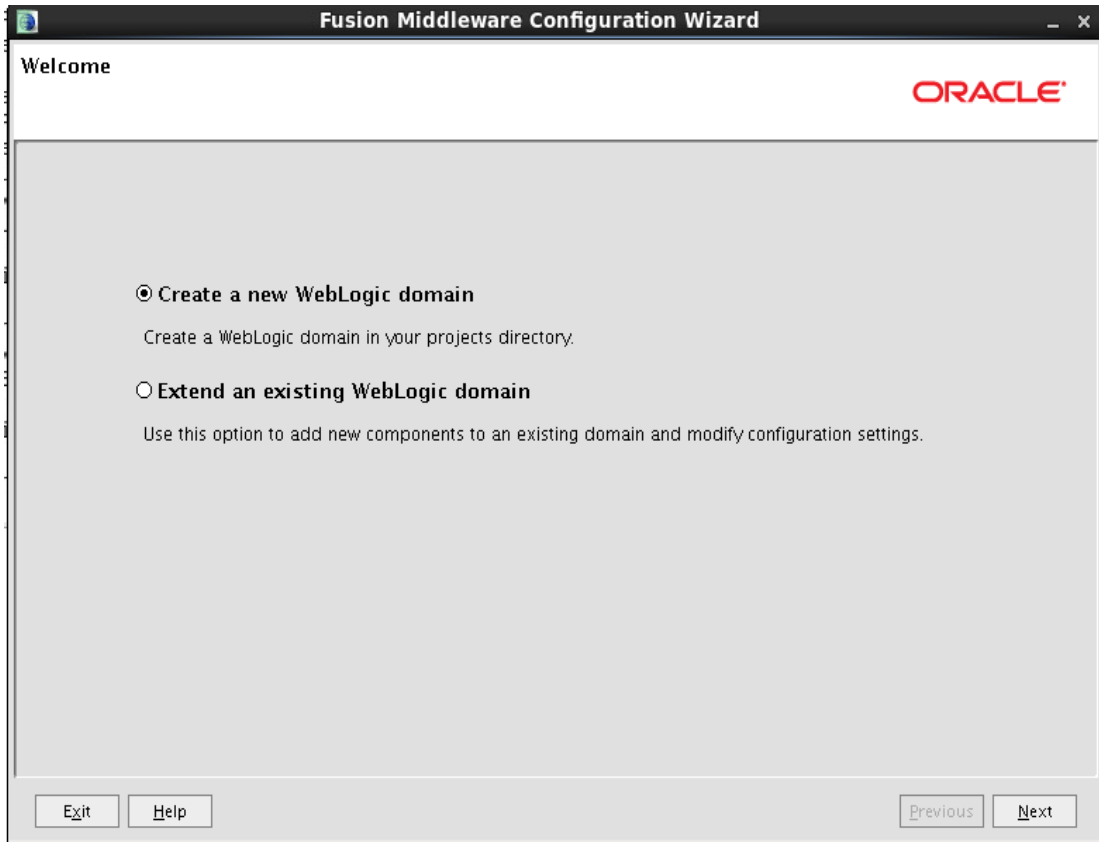
- Before you start configuring Oracle Access Management, note that the **IDM HOME** is the path provided during IDM installation and is used to refer to the Oracle home directory.
- Execute the below command, to launch the Weblogic Configuration Wizard:

```
<Oracle_Home>/wlserver_10.3/common/bin/config.sh
```

Note: Oracle_Home is the Middleware Home, which is the absolute path where Weblogic Server is installed.

- Follow the instructions as shown below for installation:

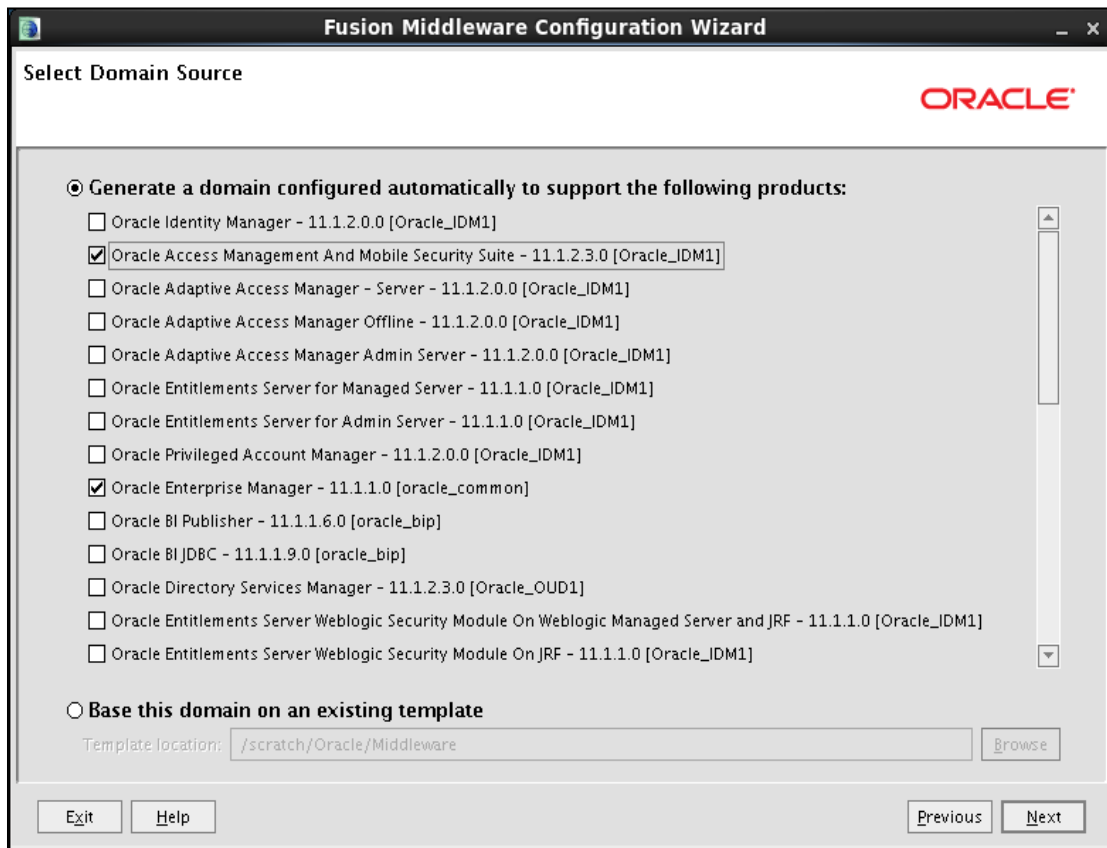
Welcome Screen



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

Click Next to continue.

Select Domain Source Screen



Use this screen to select the components that you want to configure.

For Oracle Access Manager, select the **Oracle Access Management And Mobile Security Suite - 11.1.2.3.0 [IDM_HOME]**

Click Next to continue.

Note: On selecting Oracle Access Management and Mobile Security Suite option, few options like Oracle Enterprise Manager, Oracle WSM Policy Manager, Oracle JRF, Oracle Platform Security Service and Oracle OPSS Metadata for JRF gets selected by-default.

Specify Domain Name and Location Screen

Fusion Middleware Configuration Wizard

Specify Domain Name and Location

ORACLE

Enter the name and location for the domain and its applications:

Domain name:

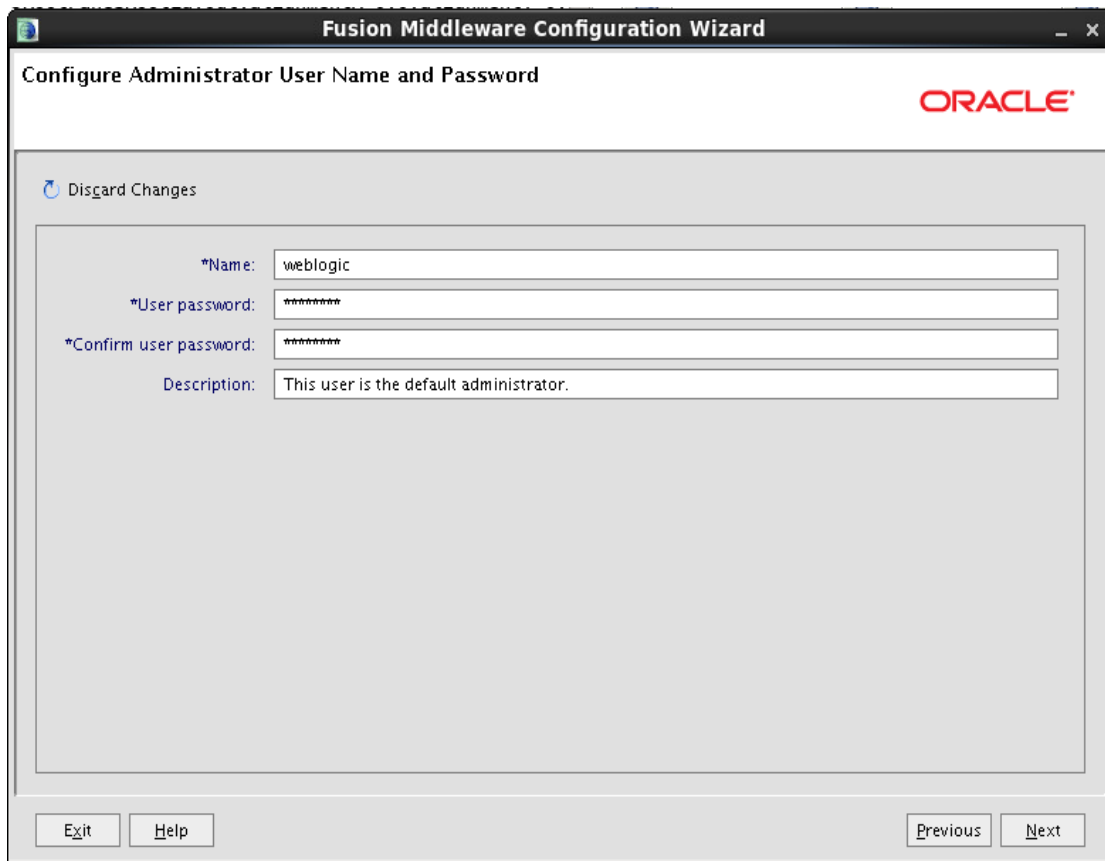
Domain location:

Application location:

Specify the following locations:

- Domain name
Specify the name of the domain.
- Domain location
The default locations for the domain home is
<Oracle_HOME>/user_projects/domains
However, the domain home directory can also be created outside of Oracle home.
- Application location
The default locations for the domain home is
<Oracle_HOME>/user_projects/applications
However, the domain home directory can also be created outside of Oracle home.
Here, Oracle Home directory is where the Weblogic Server is installed.
Click on Next.

Configure Administrator User Name and Password Screen



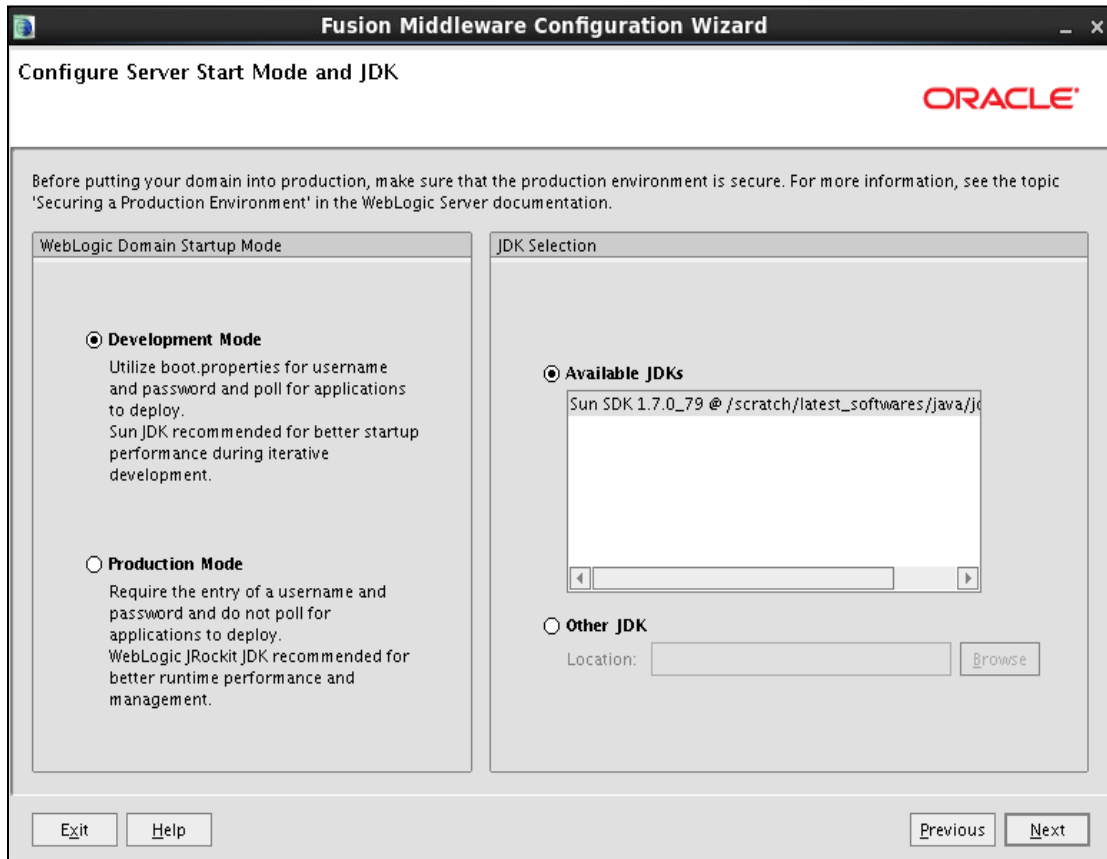
The screenshot shows a window titled "Fusion Middleware Configuration Wizard" with a sub-header "Configure Administrator User Name and Password" and the Oracle logo. A "Disgard Changes" link is present. The form contains four fields: "*Name:" with the value "weblogic", "*User password:" with masked characters, "*Confirm user password:" with masked characters, and "Description:" with the text "This user is the default administrator." At the bottom, there are "Exit", "Help", "Previous", and "Next" buttons.

This screen is to provide the username and password for the Weblogic Administrator.

The default username is **weblogic**. The user can provide a different username.

Then, Click on Next.

Configure Server Start Mode and JDK Screen



- Choose a JDK from the Available JDKs.
- Select a mode under the Weblogic Domain Startup Mode.

Click Next.

Configure JDBC Component Schema Screen

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

Vendor: Oracle | DBMS/Service: INST
 Driver: *Oracle's Driver (Thin) for Service connections; Versions:9.0.1 | Host Name: 10.180.7.88
 Schema Owner: Varies among component schemas | Port: 1521
 Schema Password: *****

RAC configuration for component schemas:
 Convert to GridLink Convert to RAC multi data source Don't convert

	Component Schema	DBMS/Service	Host Name	Port	Schema Owner	Schema Password
<input checked="" type="checkbox"/>	OAM MDS Schema	INST	10.180.7.88	1521	DEV1_MDS	*****
<input checked="" type="checkbox"/>	OWSM MDS Schema	INST	10.180.7.88	1521	DEV1_MDS	*****
<input checked="" type="checkbox"/>	OAM Infrastructure	INST	10.180.7.88	1521	DEV1_OAM	*****
<input checked="" type="checkbox"/>	OMSM Schema	INST	10.180.7.88	1521	DEV1_OMSM	*****
<input checked="" type="checkbox"/>	OPSS Schema	INST	10.180.7.88	1521	DEV1_OPSS	*****

Exit Help Previous Next

This screen displays a list of the following component schemas:

- OAM MDS Schema
- OWSM MDS Schema
- OAM Infrastructure
- OMSM Schema
- OPSS Schema

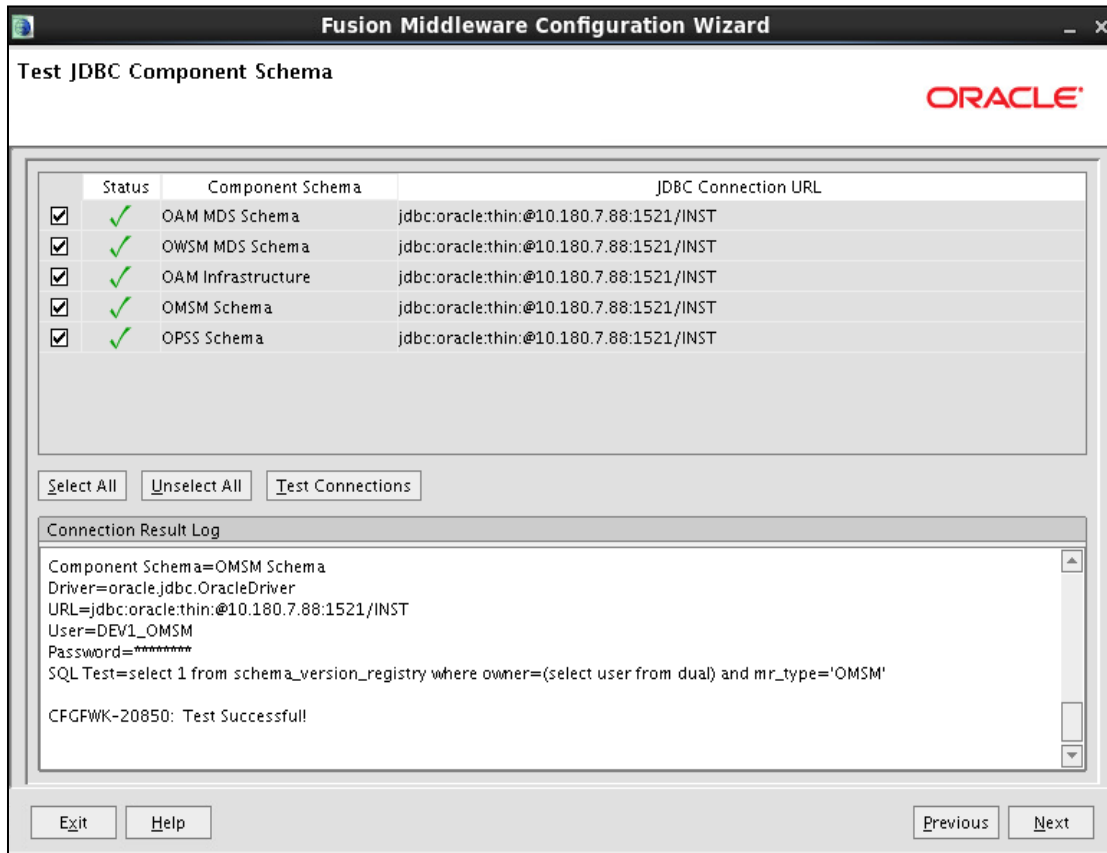
Select a component schema, such as the **OAM Infrastructure Schema** or the **OPSS Schema**, that you want to modify.

You can set values for Schema Owner, Schema Password, Database and Service, Host Name, and Port.

Click Next.

Note: The schemas listed in this screen should be created before starting the configuration using Oracle Repository Creation Utility. Refer to the chapter “Oracle Repository Creation Utility for Schema Creation” for detailed information.

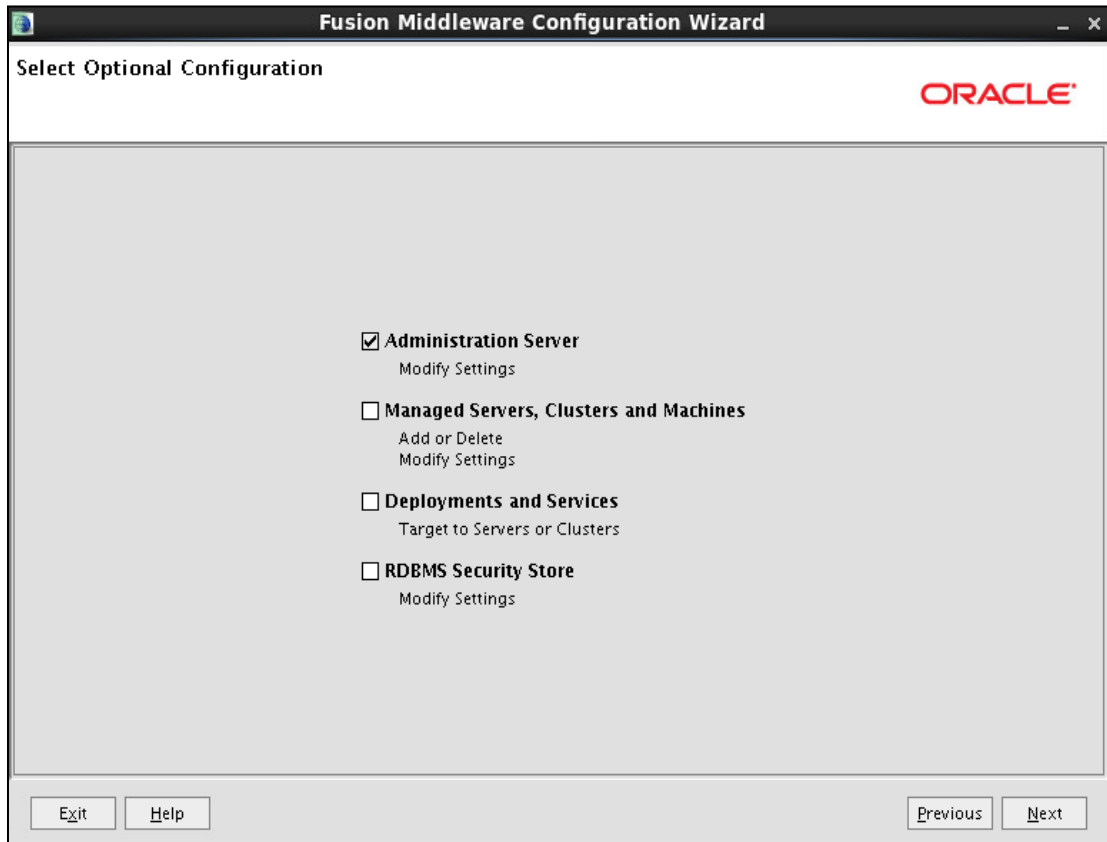
Test JDBC Component Schema Screen



This screen displays the status of the DB Schema Test Connection.

- If the test fails, click Previous, correct the issue, and try again.
- After the test succeeds, click on Next.

Select Optional Configuration Screen

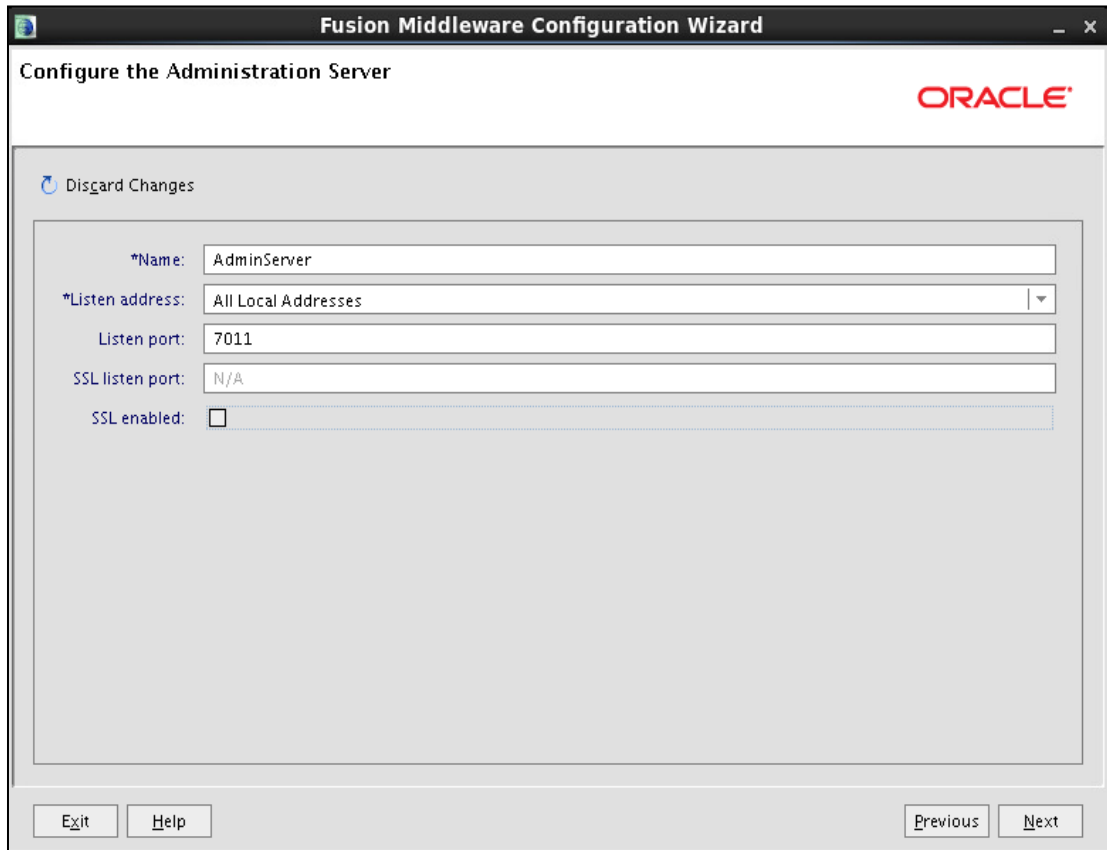


Choose the options to configure from the following list:

- Administration Server
- Managed Servers, Clusters and Machines
- Deployments and Services
- RDBMS Security Store

Select Administration Server and Click on Next.

Configure the Administrator Server Screen



The screenshot shows the 'Configure the Administration Server' screen within the Fusion Middleware Configuration Wizard. The window title is 'Fusion Middleware Configuration Wizard'. The screen displays the Oracle logo in the top right corner. Below the title bar, there is a 'Disgard Changes' button with a circular arrow icon. The main configuration area contains the following fields:

- *Name: AdminServer
- *Listen address: All Local Addresses (dropdown menu)
- Listen port: 7011
- SSL listen port: N/A
- SSL enabled:

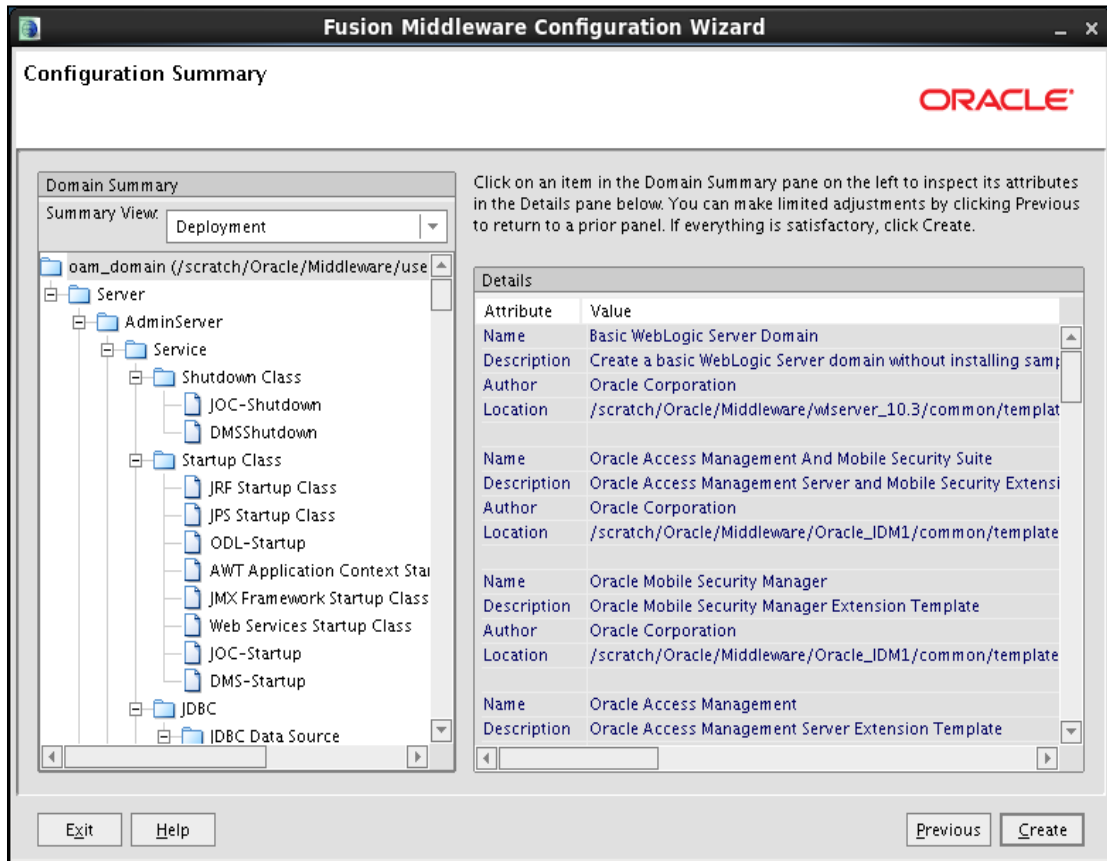
At the bottom of the screen, there are four buttons: 'Exit', 'Help', 'Previous', and 'Next'.

Specify the following details of the Administration Server in this screen:

- Name
- Listen address
- Listen port
- SSL listen port (Only if SSL is enabled)
- SSL enabled

After entering the details, click on Next.

Configuration Summary Screen



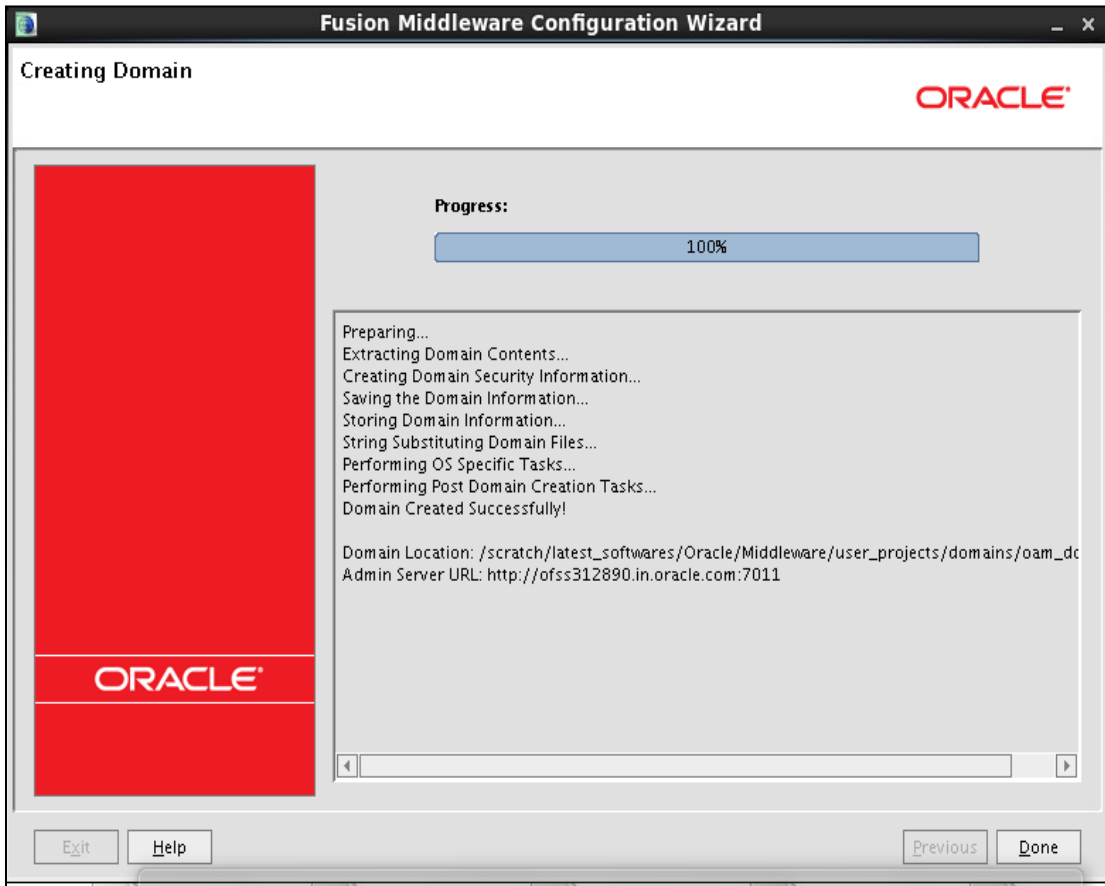
Review the domain configuration on this screen.

If you want to make any changes to the configuration before creating the domain, click Previous to navigate to the selected screen where you want to edit the details.

Click Create to start creating the domain.

By default, a new Weblogic Domain to support Oracle Access Management is created in the <Oracle_Home>/user_projects/domains directory.

Creating Domain Screen



This screen summarizes the domain creation information that was just completed.

Click Done to dismiss the screen.

- After configuring Oracle Access Management in a Weblogic Administration Domain and before starting the Admin Server, you must configure the Database Security Store by executing the below command:

```
<Oracle_Home>/oracle_common/common/bin/wlst.sh  
<IDM_HOME>/common/tools/configureSecurityStore.py -d  
<Oracle_Home>/user_projects/domains/<OAM_domain>/ -c IAM -p  
<opss_schema_password> -m create
```

- Now, start the Admin Server using the following command to check if the Security Store is configured correctly.

```
<Oracle_Home>/user_projects/domains/<OAM_domain>/bin/startWeblogic.sh
```

Note: Oracle_Home is the Middleware Home, which is the absolute path where Weblogic Server is installed & IDM_HOME is the absolute path of the Oracle_IDM directory.

7.2 Post-Installation Tasks

After installing and configuring Oracle Access Management, the user can perform the following steps:

- Configure your own LDAP to use instead of the default embedded LDAP, which comes with Oracle Weblogic Server.
- To do this, ensure that the Admin Server is running. Login to the Weblogic Console using the following URL:

http://<hostname>:<oam_admin_port>/console

- Now, go to Security Realms > myrealm > Providers
- Click on ‘DefaultAuthenticator’ provider and change the Control Flag to SUFFICIENT and Save the changes.
- Now, click on New and enter the below details and click Save.

Name : OUDAuthenticator

Type : IPlanetAuthenticator

Control Flag : SUFFICIENT

- Click on the new OUDAuthenticator Provider and under Provider Specific tab and set the details of LDAP where the server should point. Refer to the following table for more information:

Property	Value
Host	This is the LDAP Server (OUD) Hostname
Port	This is the LDAP Server (OUD) Port. E.g. 1389
Principal	This is the Administrator Account name. E.g. cn=orcladmin
Credential	This is the Administrator Account password.
UserBase DN	This is the OUD user search base cn=Users, dc=in,dc=oracle,dc=com
GroupBase DN	This is the OUD group search base cn=Groups, dc=in,dc=oracle,dc=com

- Click on Save to update the changes.
- Click on Save and reorder the providers so that LDAP Provider gets highest priority followed by DefaultAuthenticator.
- Click Save to apply the changes and shutdown the Admin Server for restart.
- Now, again start the Admin Server using the command,
<Oracle_Home>/user_projects/domains/<OAM_domain>/bin/startWeblogic.sh
- Also, start the OAM Managed Server (by default it is ‘oam_server1’) as mentioned below:


```
<Oracle_Home>/user_projects/domains/<OAM_domain>/bin/startManagedWeblogic.s
h oam_server1
```

(Only if Managed Server Start Fails)

- In-case Managed Server startup fails with the below error
 - <Info> <Security> <BEA-090065> <Getting boot identity from user.>
Enter username to boot WebLogic server:Error: Failed to get value from Standard Input
Enter password to boot WebLogic server:
<Info> <Management> <BEA-141107> <Version: WebLogic Server 10.3.6.0 Tue Nov 15 08:52:36 PST 2011 1441050 >
<Error> <Configuration Management> <BEA-150021> <The admin server failed to authenticate the identity of the user starting the managed server. The reason for the error is .>
 - or
 - <Error> <Security> <BEA-090783> <Server is Running in Development Mode and Native Library(terminalio) to read the password securely from command line is not found.>
- To fix the above problem, either create a file “boot.properties” in <OAM_domain>/servers/oam_server1/security or copy it from <OAM_domain>/servers/AdminServer/security
- If creating a new file, add the username and password as given below:


```
username=<domain_username>
password=<domain_password>
```
- After setting the values in the file, try starting the Managed Server once again.

7.3 Verifying the Installation

- You can perform any combination of the following tasks to verify that your installation was successful:
 - Ensure that the Administration Server and Managed Servers are up and running.
 - Verifying the installation for Oracle Access Management
- Log in to the Administration Console for Oracle Access Management using the following URL:

```
http://<hostname>:<oam_admin_port>/oamconsole
```

- You will be redirected to:

```
http://<hostname>:<oamserver_port>/oam/server
```

When you access this Administration Console running on the Administration Server, you are prompted to enter a user name and password. Note that you must have Administrator's role and privileges.

- Verifying the installation for Weblogic Server Administration Console

If the installation and configuration of Oracle Access Management are successful, this console shows the Administration Server in running mode.

8. Configuring OBDX Application and Mobile Banking using OAM and Weblogic

Following topics in this chapter provides detailed information on configuring OBDX Application and Mobile Banking:

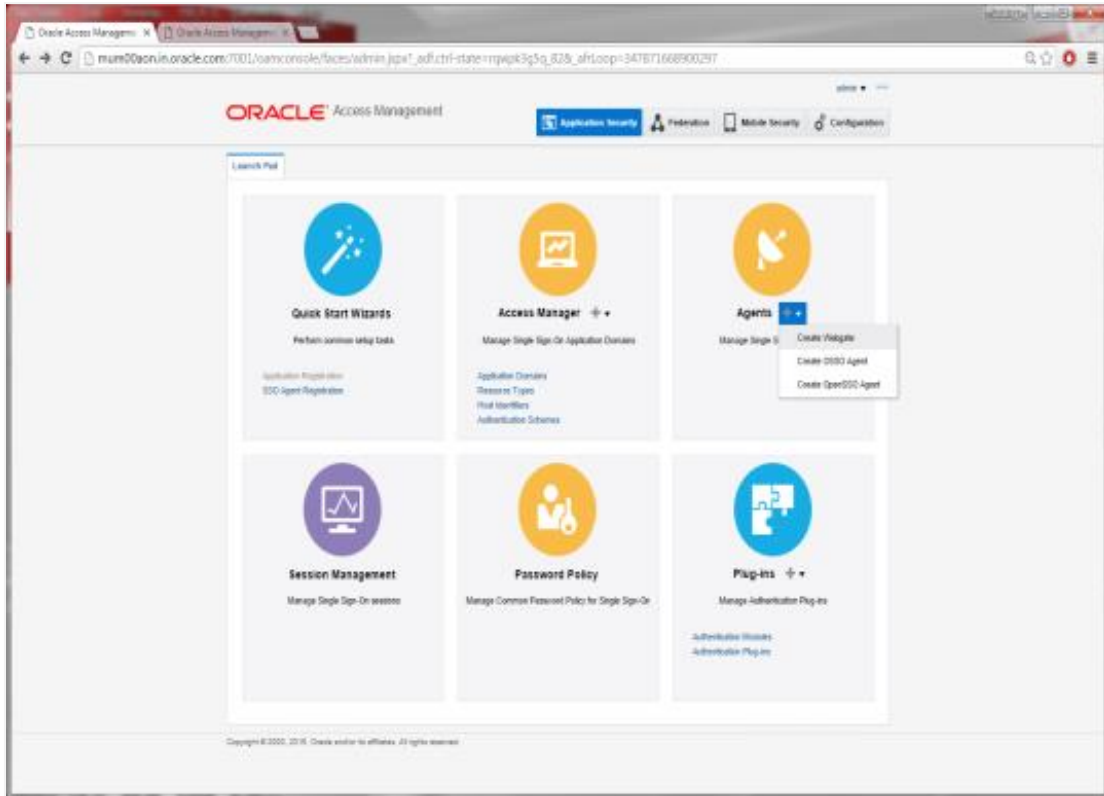
- Section 8.1, "Creating WebGate Agent on OAM Console"
- Section 8.2, "Manage Application Domain and Resources"
- Section 8.3, "Creating Custom Login Scheme"
- Section 8.4, "Add the Login Scheme to Authentication Policy"
- Section 8.5, "Manage User Identity Stores"
- Section 8.6, "Enabling OIC in OAM (For Mobile Banking)"
- Section 8.7, "Finger Print Authentication"
- Section 8.8, "Add OBDXJWTAsserter to Weblogic"
- Section 8.9, "Copying the artifacts generated after registering Webgate"

8.1 Creating WebGate Agent on OAM Console

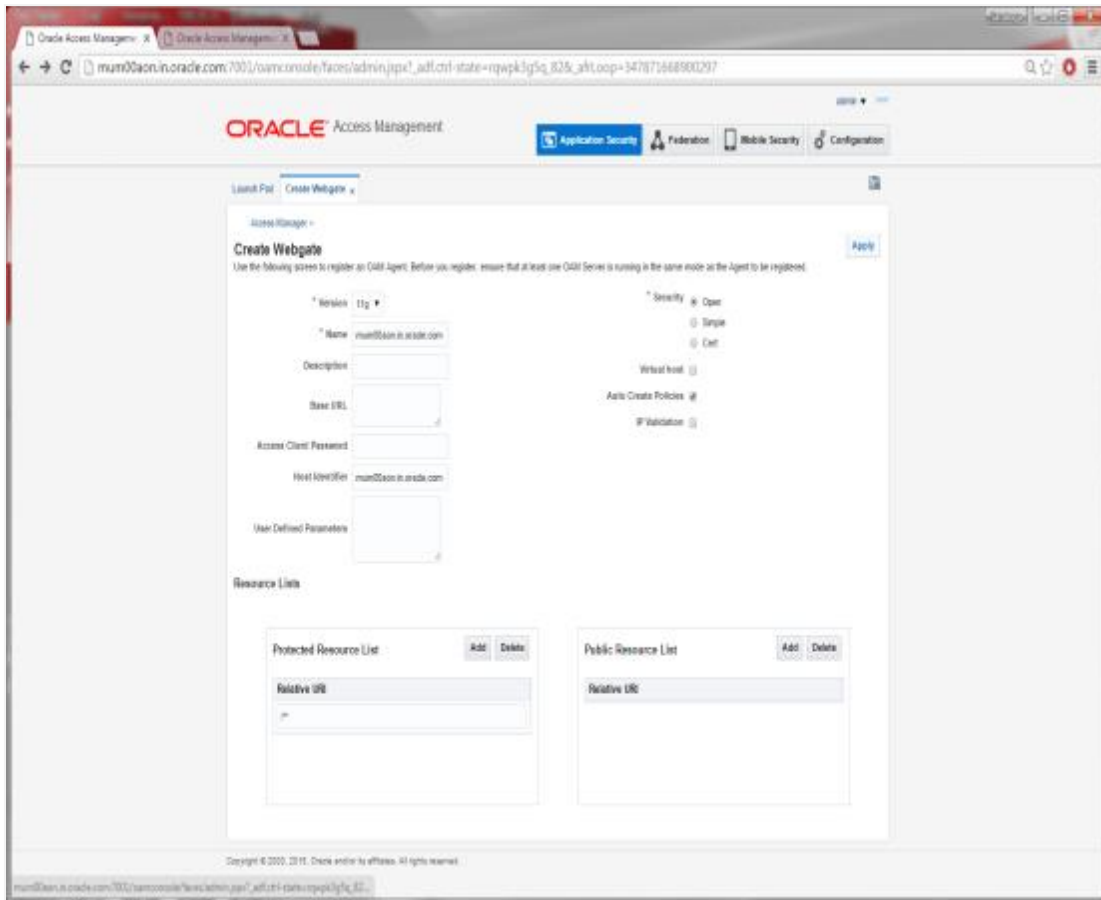
Before you can use the new Oracle HTTP Server 11g WebGate agent for Oracle Access Manager, you must register the new WebGate agent with Oracle Access Manager by using the Oracle Access Manager Administration Console. Following are the steps to register a WebGate Agent:

Login to OAM Console.

E. g. ***http://<hostname>:<oam_admin_port>/oamconsole***



In the **Agents** block, Click the **+** and choose **Create Webgate**.

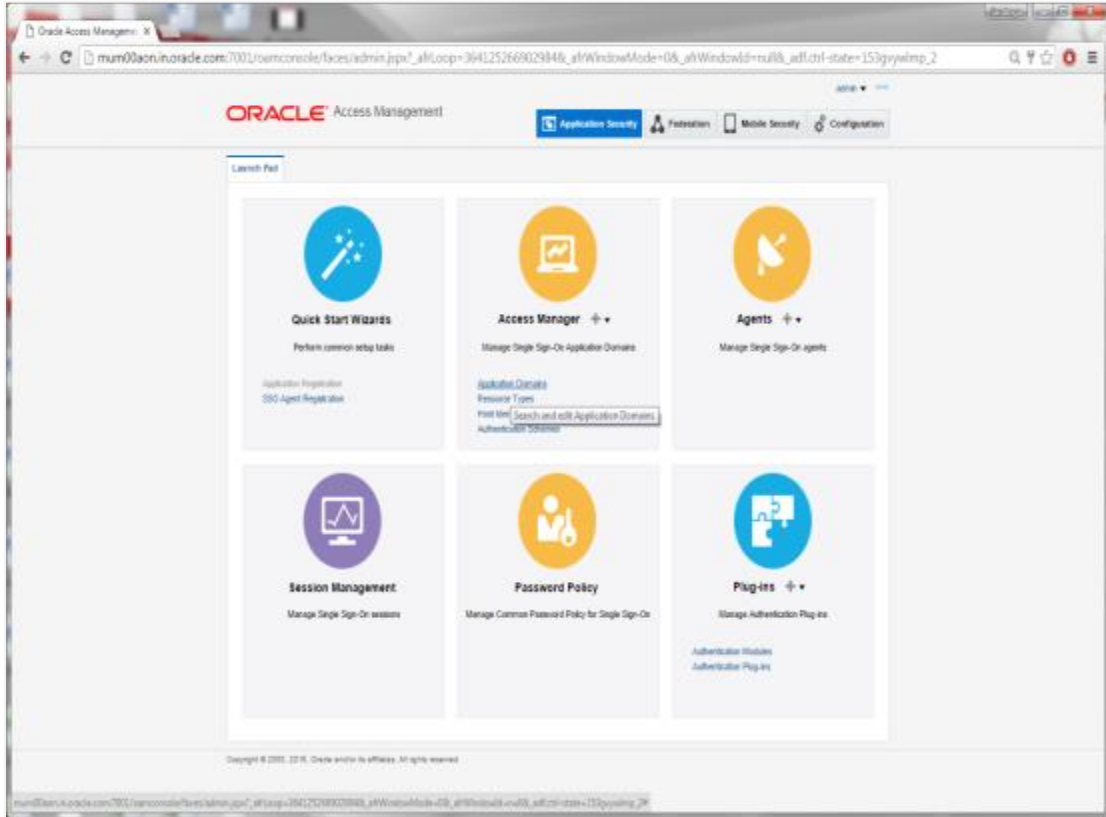


- Select the Version as 11g
- Enter the hostname in Name field
- Click on Apply

This creates the 11g Webgate Agent for OAM.

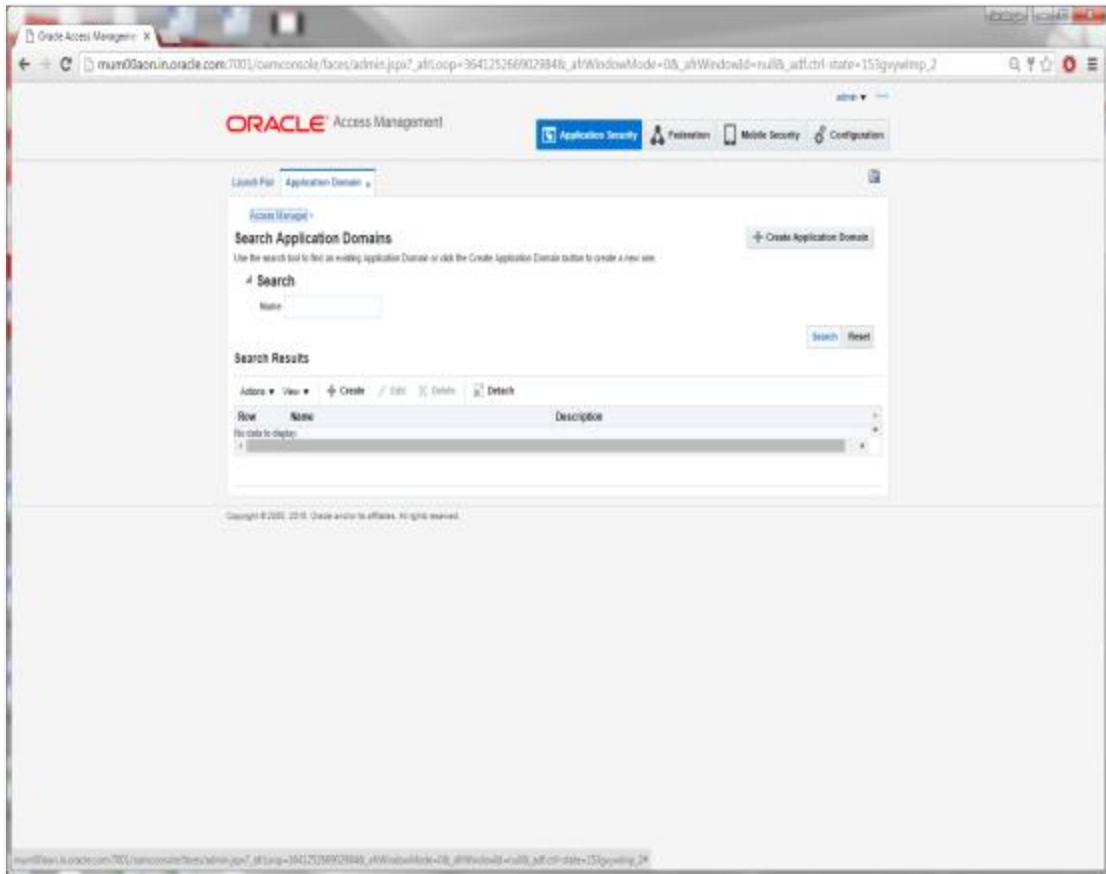
Note: The hostname here will be the fully qualified hostname of the server where Webgate is installed.

8.2 Manage Application Domain and Resources

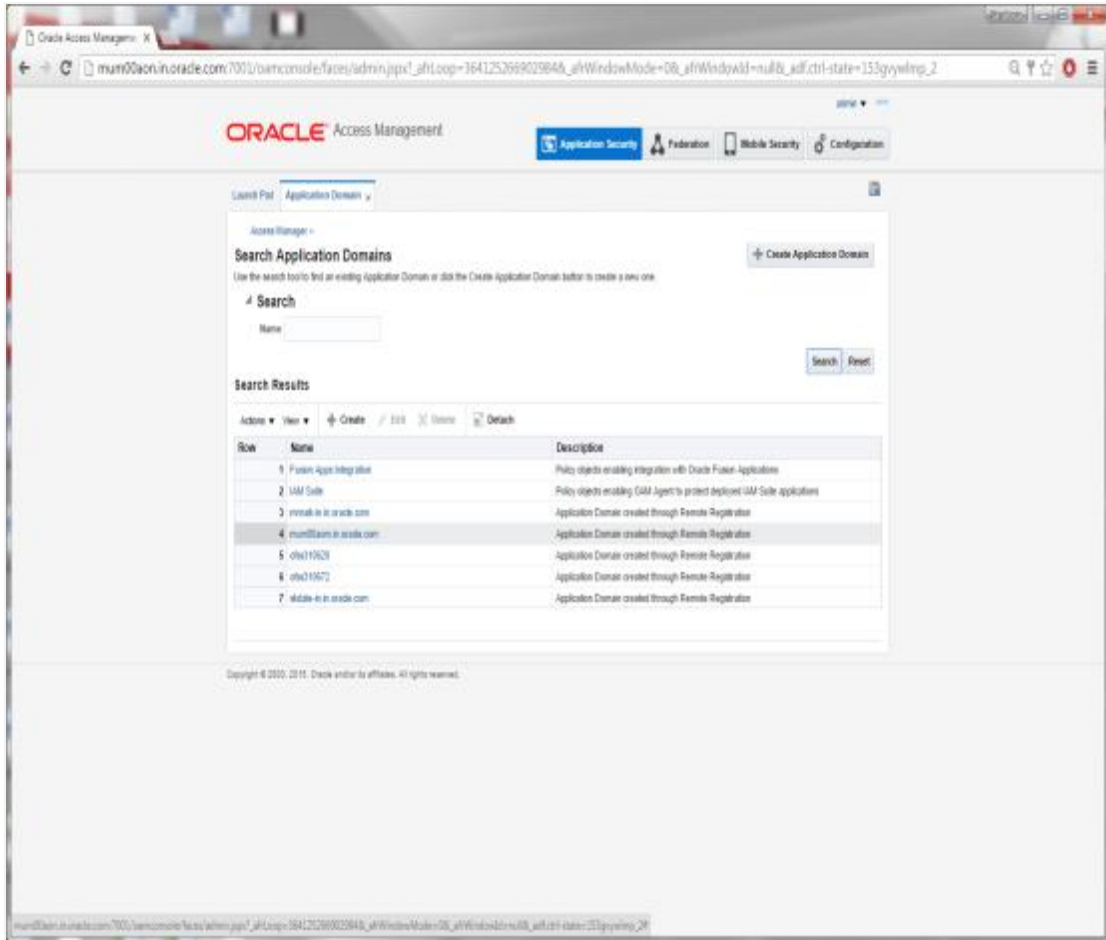


Go to **Launch Pad** and search for an application domain.

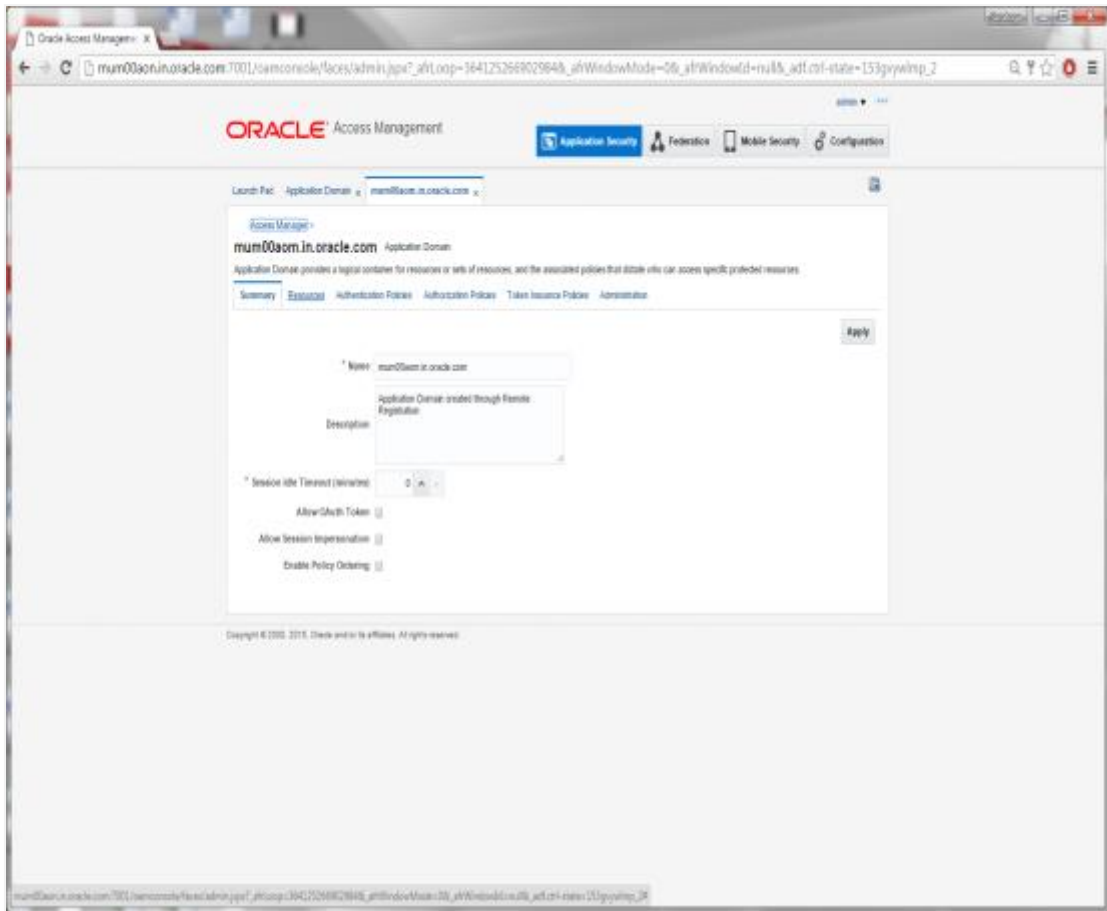
Click on **Applications Domain** in the Access Manager tab.



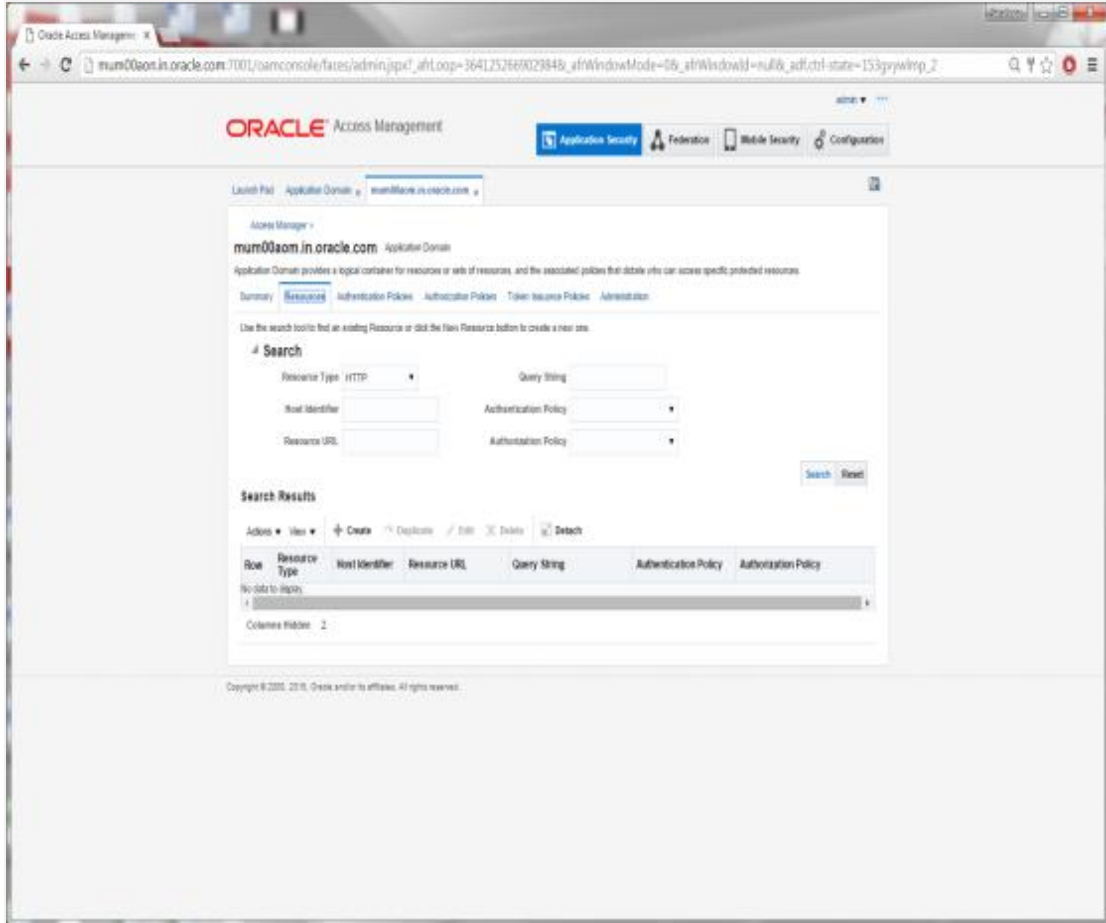
Click on **Search**



Click on the Domain Name you want to configure.



Click on the Resources Tab



Click on Search

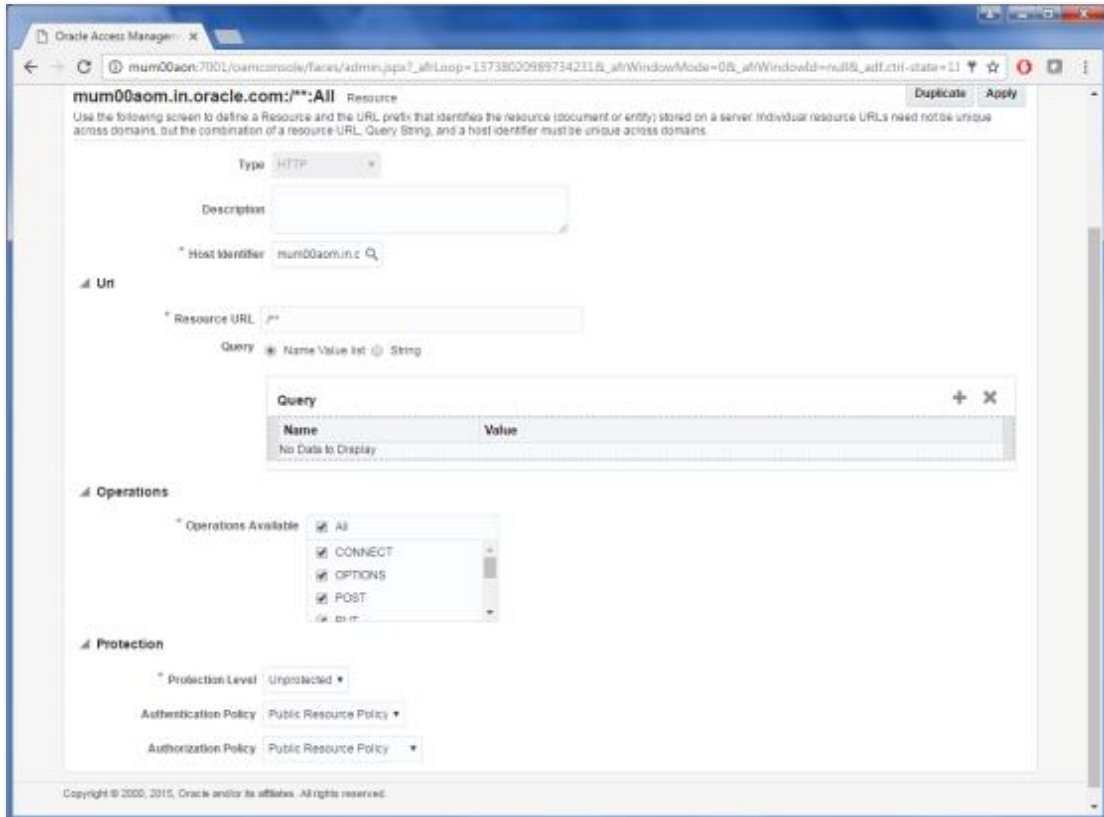
Search Results

Actions View Create Duplicate Edit Delete Detach

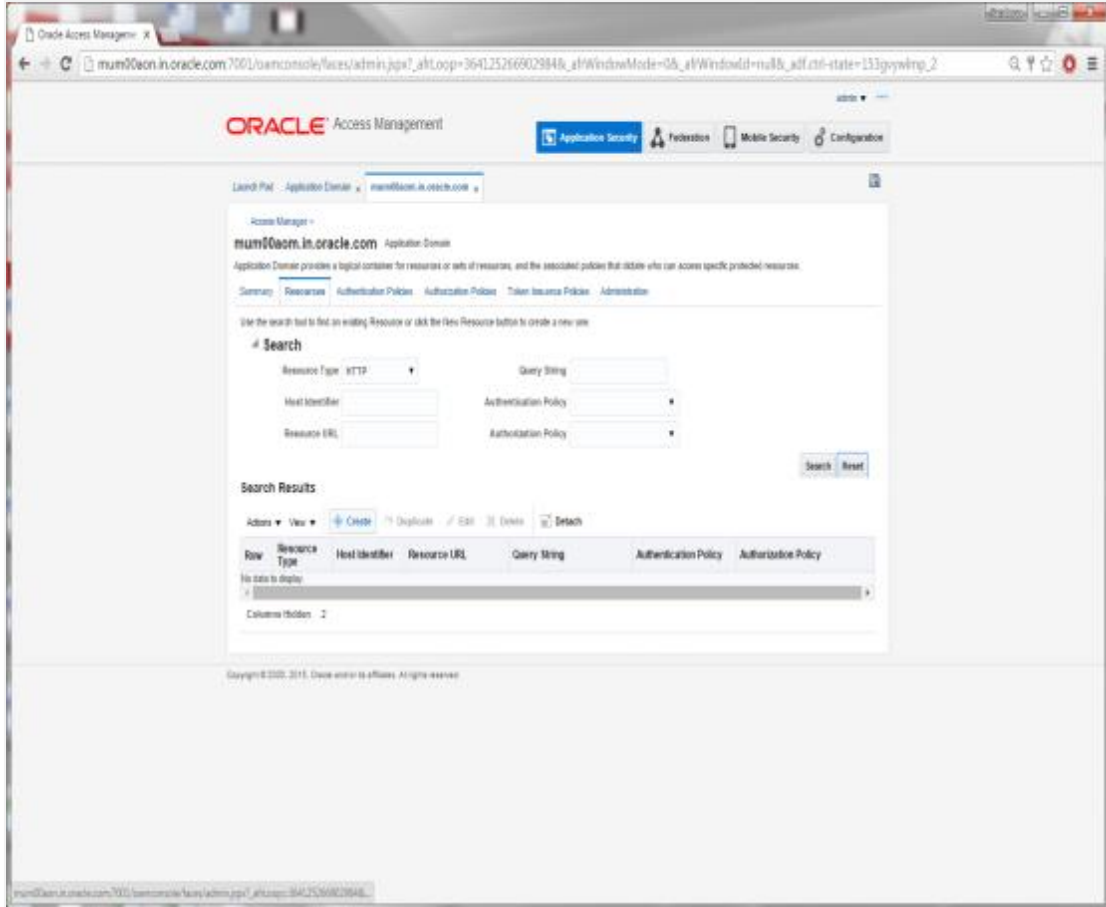
Row	Resource Type	Host Identifier	Resource URL	Query String	Authentication Policy	Authorization Policy
1	HTTP	mum00aom.in...	/*		Protected Resource Policy	Protected Resource Policy

Columns Hidden: 2

Search Results will show an entry for Resource URL as /* which is Protected.
 Select the Resource entry and Click the Edit option.



Modify the values of Protection Level, Authentication & Authorization Policy as shown. Click on Apply to save the changes.



Click on the Create Icon

The screenshot shows the 'Create Resource' form in the Access Manager interface. At the top left, there is a breadcrumb 'Access Manager >'. The main title is 'Create Resource' with a sub-label 'Resource'. An 'Apply' button is in the top right. Below the title is a descriptive paragraph: 'Use the following screen to define a Resource and the URL prefix that identifies the resource (document or entity) stored on a server. Individual resource URLs need not be unique across domains, but the combination of a resource URL, Query String, and a host identifier must be unique across domains.' The form fields are:

- * Type: A dropdown menu.
- Description: A text input field.
- * Host Identifier: A search input field with a magnifying glass icon.
- Uri: A section header with a triangle icon, followed by * Resource URL: a text input field.
- Operations: A section header with a triangle icon, followed by Operations Available: a table with a checked 'All' entry and an empty row below it.
- Protection: A section header with a triangle icon, followed by * Protection Level: a dropdown menu, Authentication Policy: a dropdown menu, and Authorization Policy: a dropdown menu.

Specify the following values for each of the fields respectively:

- **Type:** The HTTP type is the default; it covers resources that are accessed using either the HTTP or HTTPS protocol. Policies that govern a particular resource apply to all operations.
Select Type **HTTP**
- **Description:** An optional unique description for this resource.
- **Host Identifier:** A list of host identifiers is available, which contains all identifiers that were defined as a shared component. You must search and choose a host identifier to assign this resource.
- **Resource URL:** The URL value must be expressed as a single relative URL string that represents a path component of a full URL. For example, */pages/**
- **Operations:** Select the required Operation from the table.
- **Protection Level:** Select the Protection Level from the dropdown as per the table.
- **Authentication Policy:** Select the required value from the dropdown.
- **Authorization Policy:** Select the required value from the dropdown.

Click on Apply to add the resource.

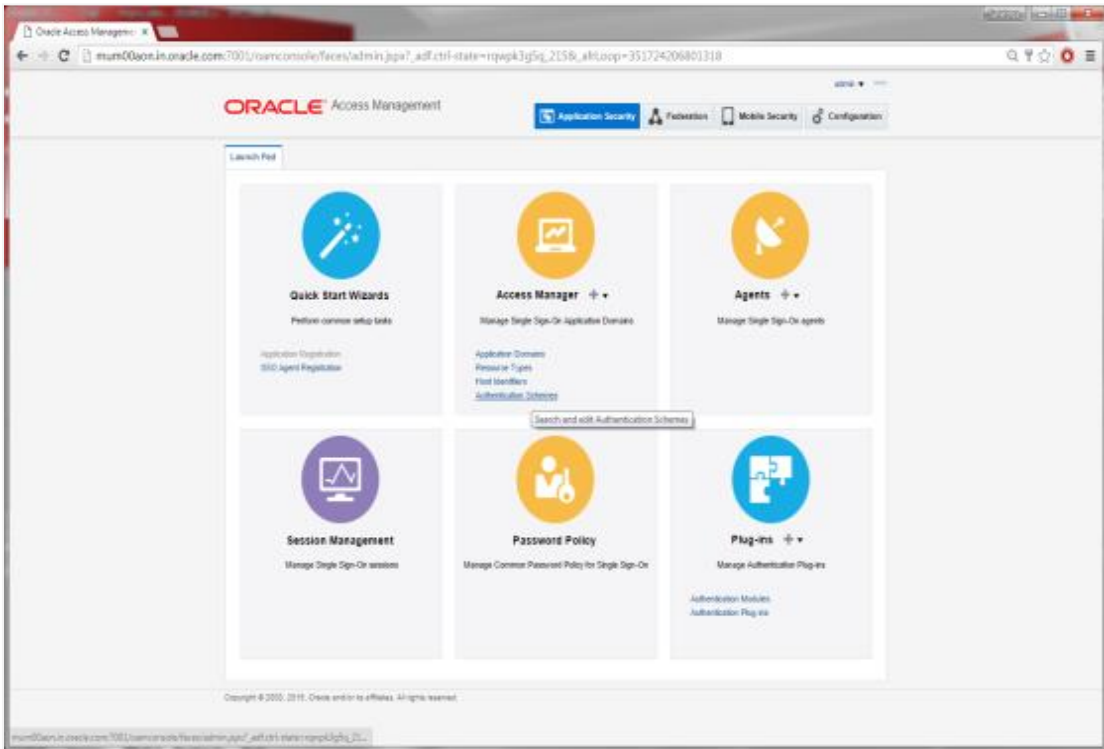
Perform the above steps to add the URLs listed in the table below:

Resource URLs	Operations	Protection Level	Authentication Authorization Policy
/**	ALL	Unprotected	Public Resource Policy
/pages/*	ALL	Protected	Protected Resource Policy
/*/pages/*	ALL	Protected	Protected Resource Policy
/digx/v1/locations/branches/*	GET	Excluded	-
/digx/v1/locations/atms/*	GET	Excluded	-
/digx/v1/locations*	GET	Excluded	-
/digx/v1/mobileClient/verify	ALL	Excluded	-

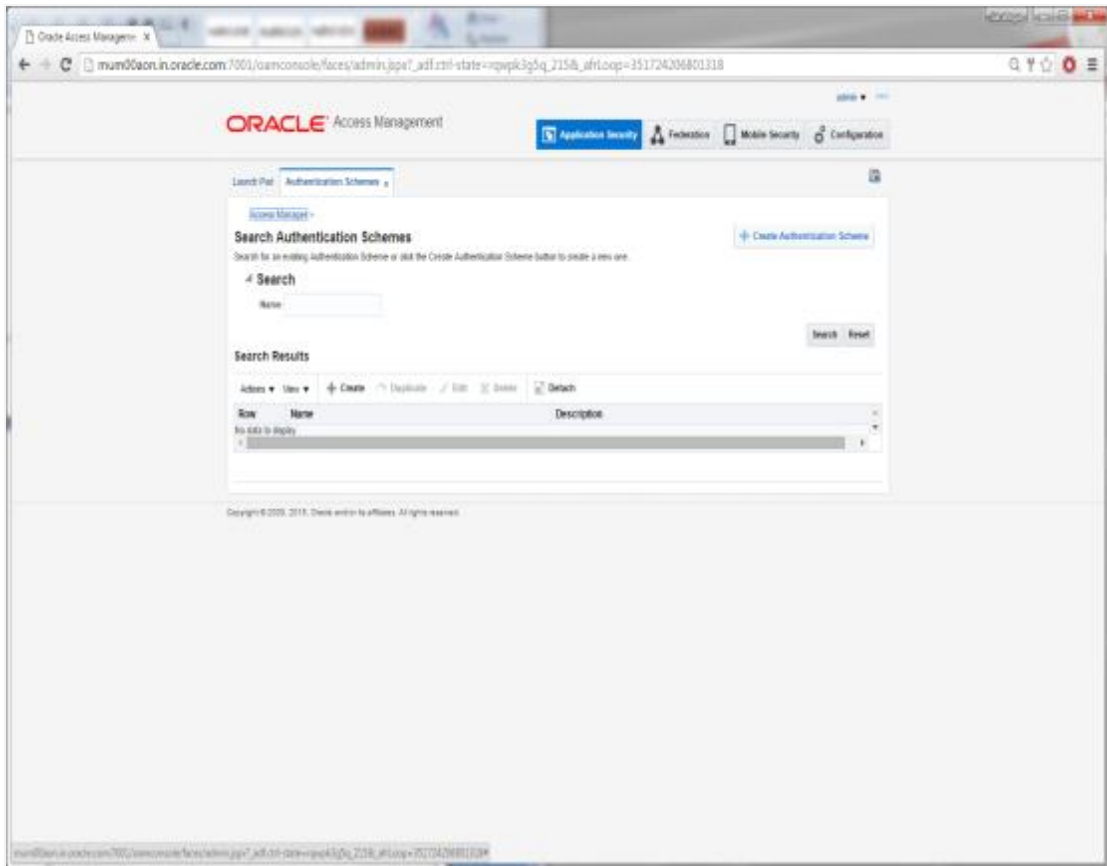
Actions ▾ View ▾ + Create ↻ Duplicate ✎ Edit ✕ Delete 📄 Detach						
Row	Resource Type	Host Identifier	Resource URL	Query String	Authentication Policy	Authorization Policy
1	HTTP	ofss310655	/pages/*		Protected Resource Policy	Protected Resource Policy
2	HTTP	ofss310655	/digx/v1/locations/branche...			
3	HTTP	ofss310655	/digx/v1/locations/atms/*			
4	HTTP	ofss310655	/digx/v1/locations*			
5	HTTP	ofss310655	/digx/v1/mobileClient/verify			
6	HTTP	ofss310655	/*/pages/*		Protected Resource Policy	Protected Resource Policy
7	HTTP	ofss310655	/**		Public Resource Policy	Public Resource Policy

8.3 Creating Custom Login Scheme

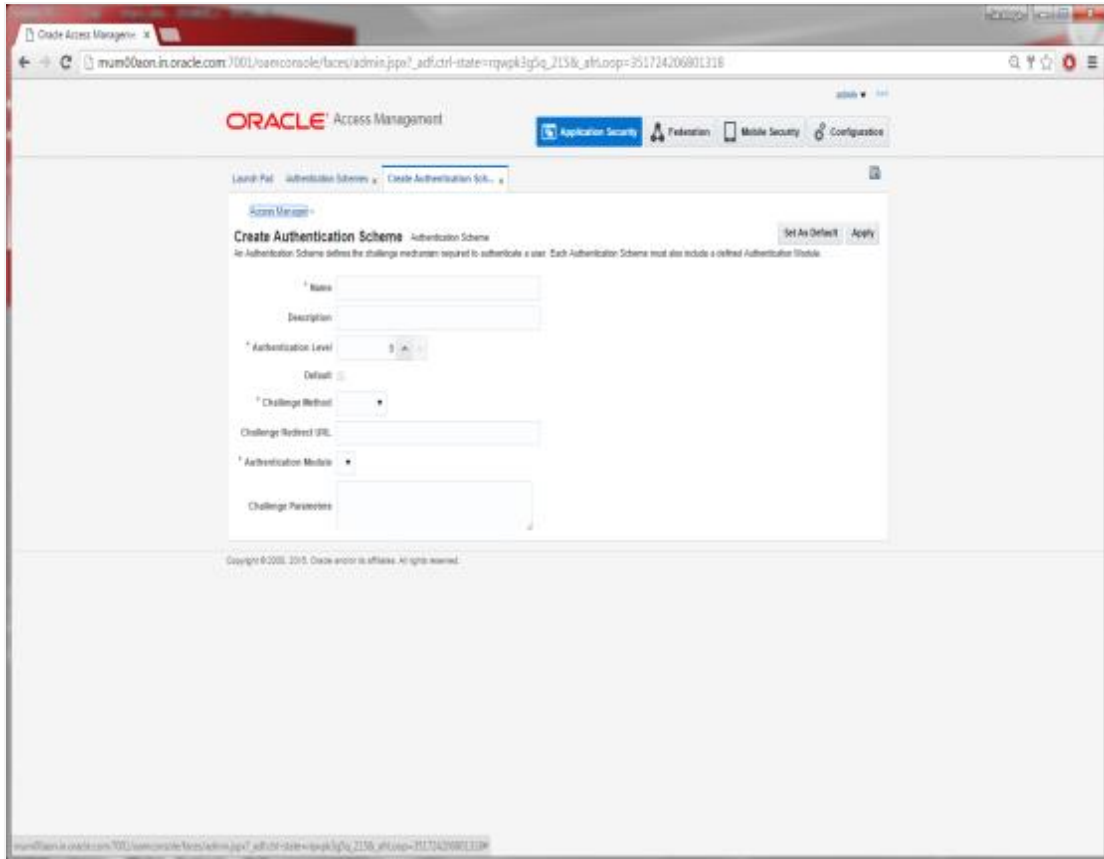
To add a Custom Login Page, go to Launch Pad on oamconsole.



Click on Authentication Schemes from the Access Manager block.



Click on Create Authentication Scheme



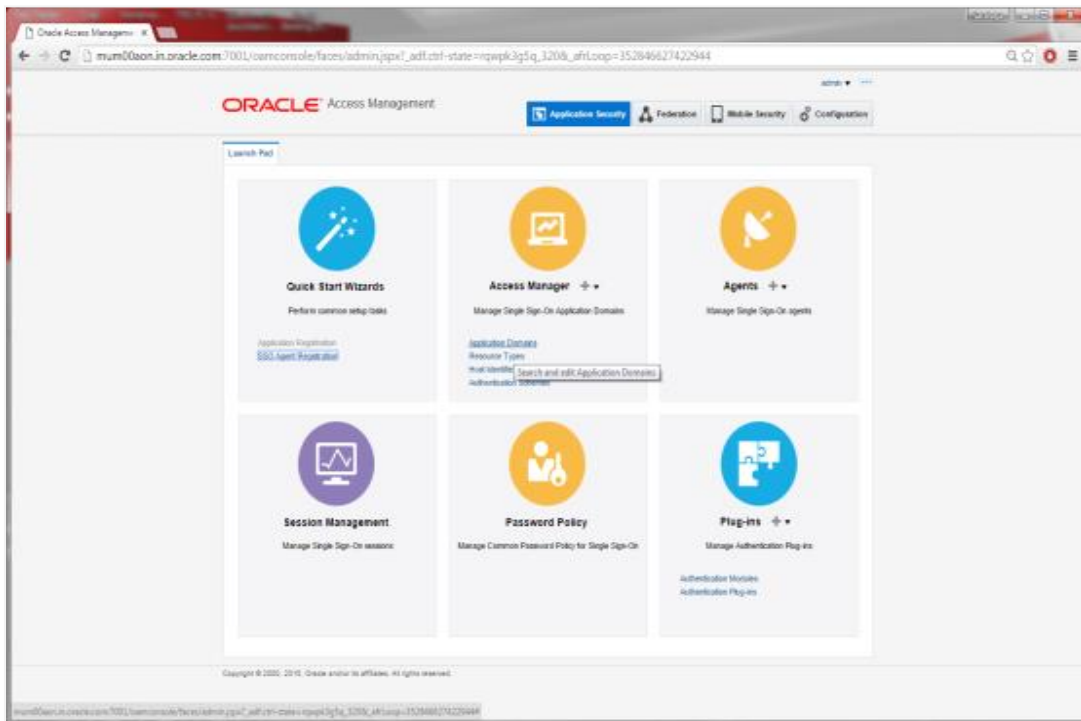
Specify the following details:

- Provide a name for the Scheme. E.g. OBDXLoginScheme
- Select the authentication level as 2.
- Choose the Challenge Method as FORM
- Enter the Challenge Re-direct URL. E.g. /oam/server
- Select the Authentication Module as LDAP
- Enter the Challenge URL which is the actual URL of the login page.
- Select the Context Type as External

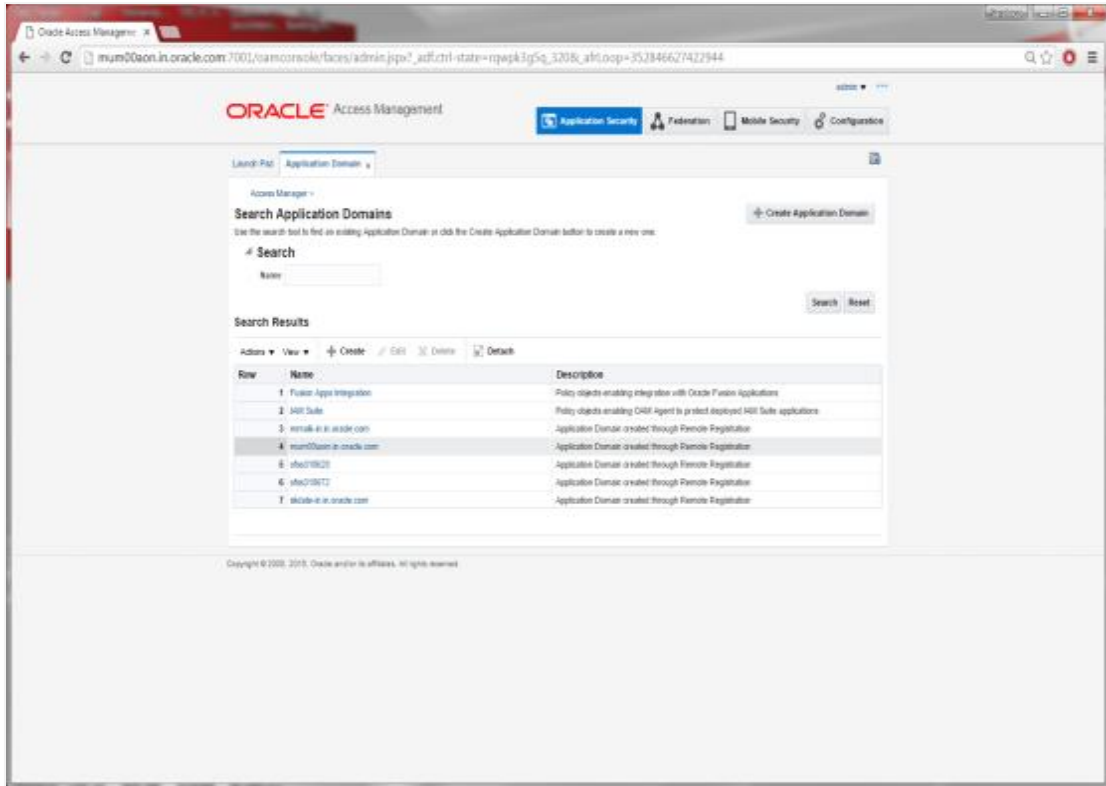
Click on Apply to save the Scheme.

8.4 Add the Login Scheme to Authentication Policy

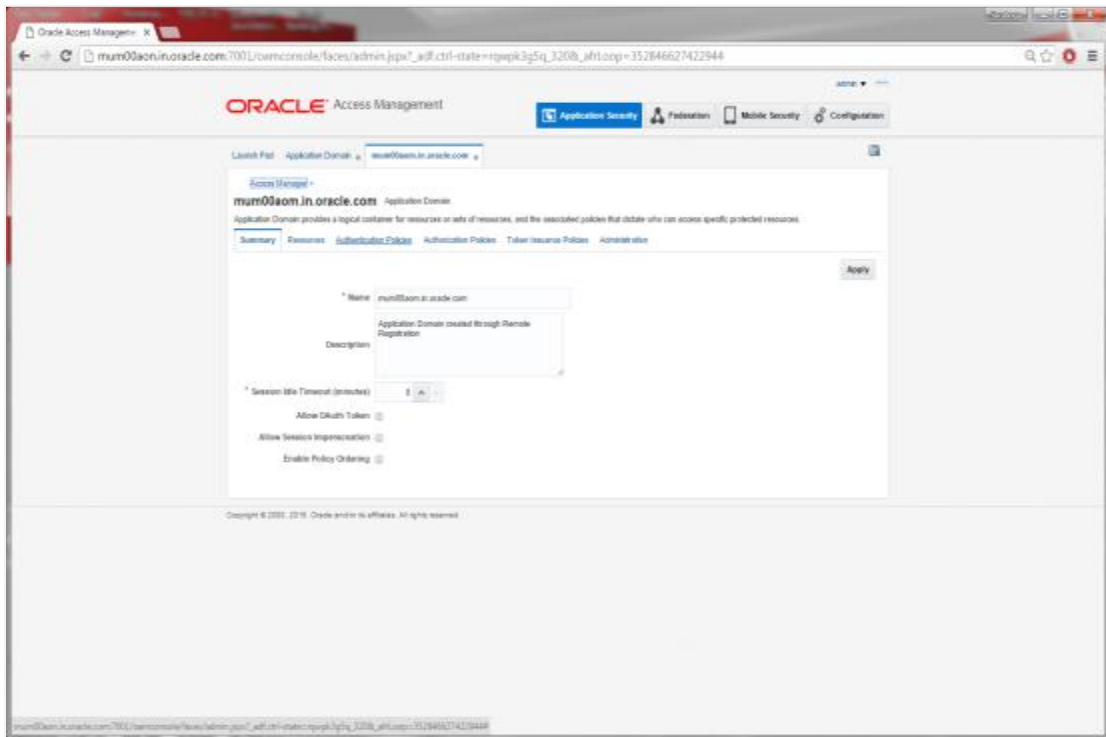
Go to the Launch Pad.



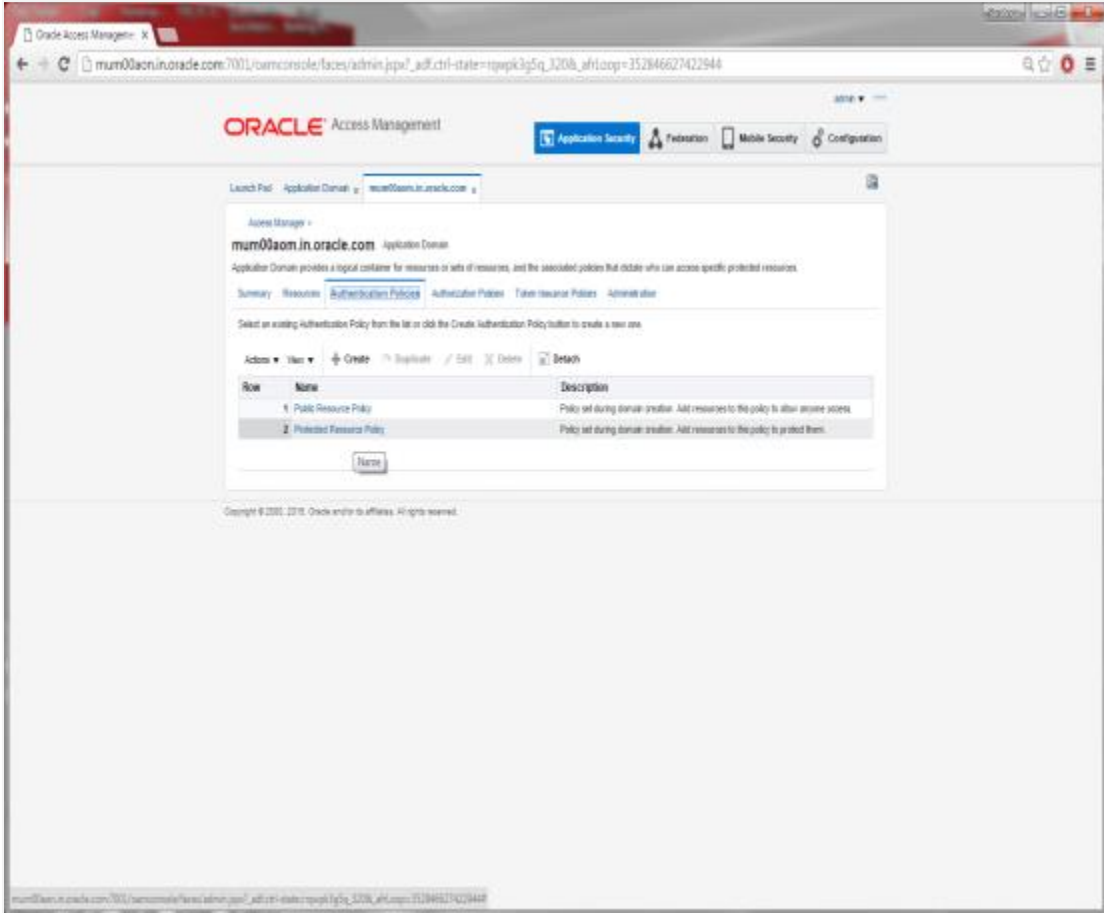
Click on Application Domain.



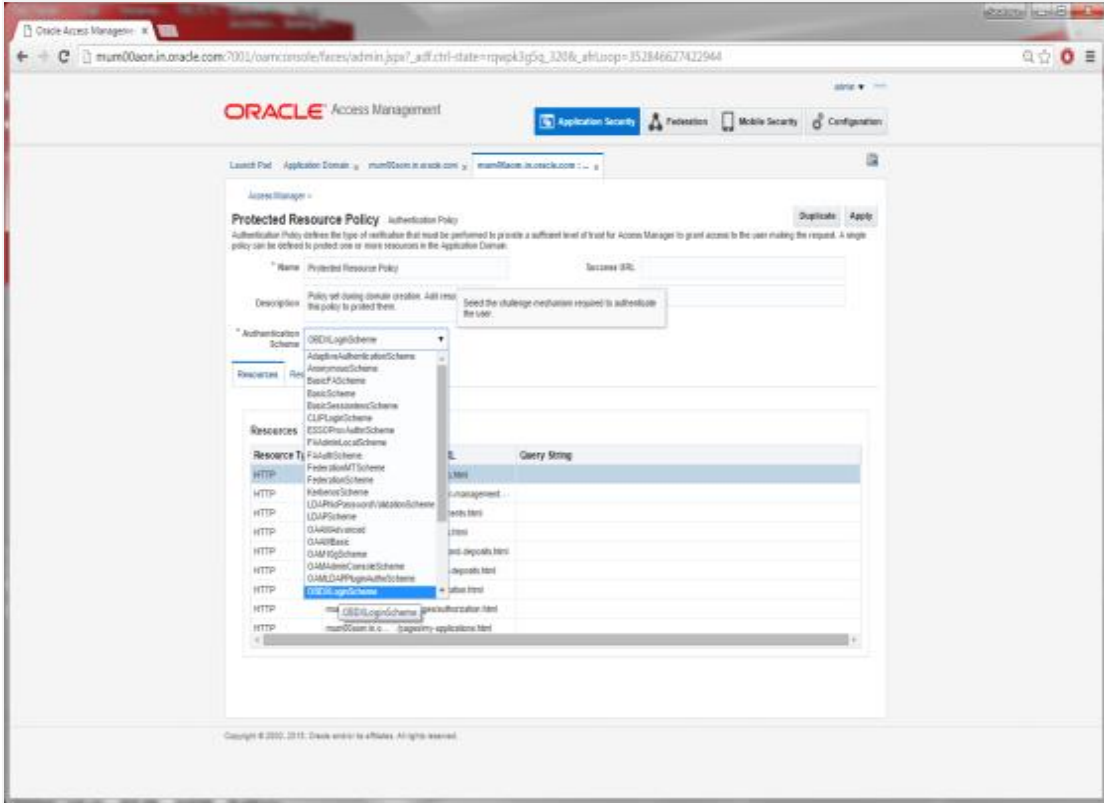
Click on Search and Select the Domain Name.



Click on Authentication Policies Tab



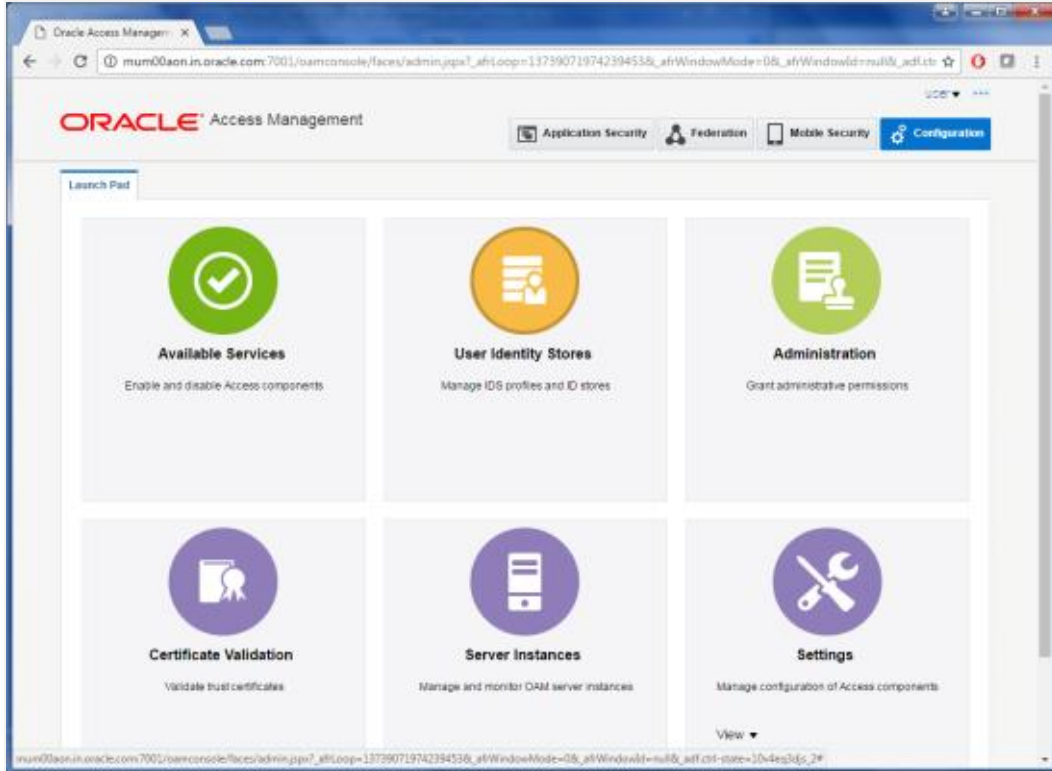
Click on Protected Resource Policy



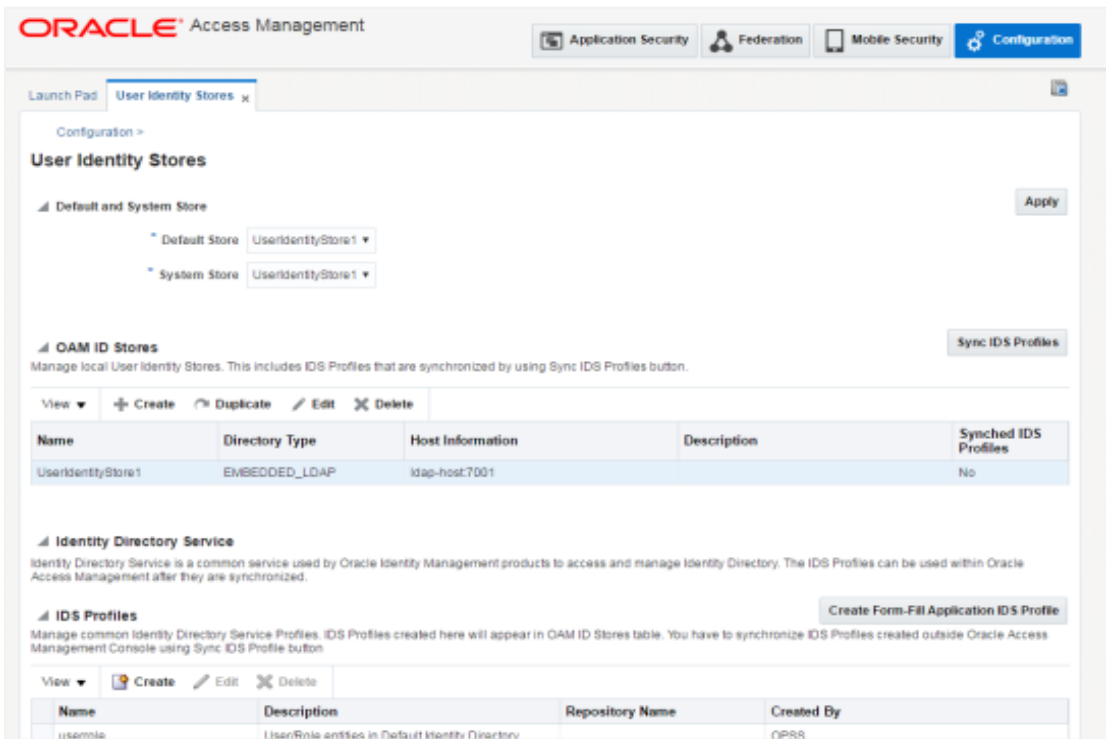
Select the Scheme create for Login from the Authentication Scheme drop-down.
Click on Apply to save the changes.

8.5 Manage User Identity Stores

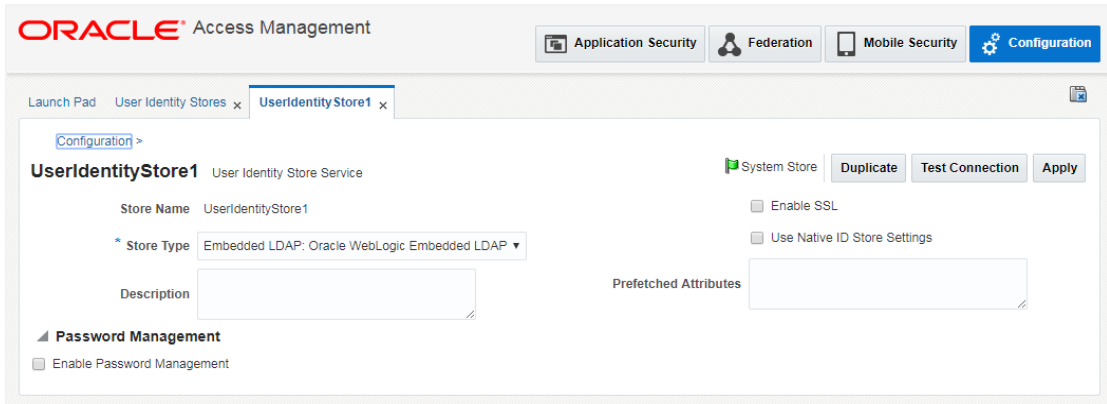
For modifying the OAM Identity Store to store LDAP details, click on Configuration button available on the top-right corner.



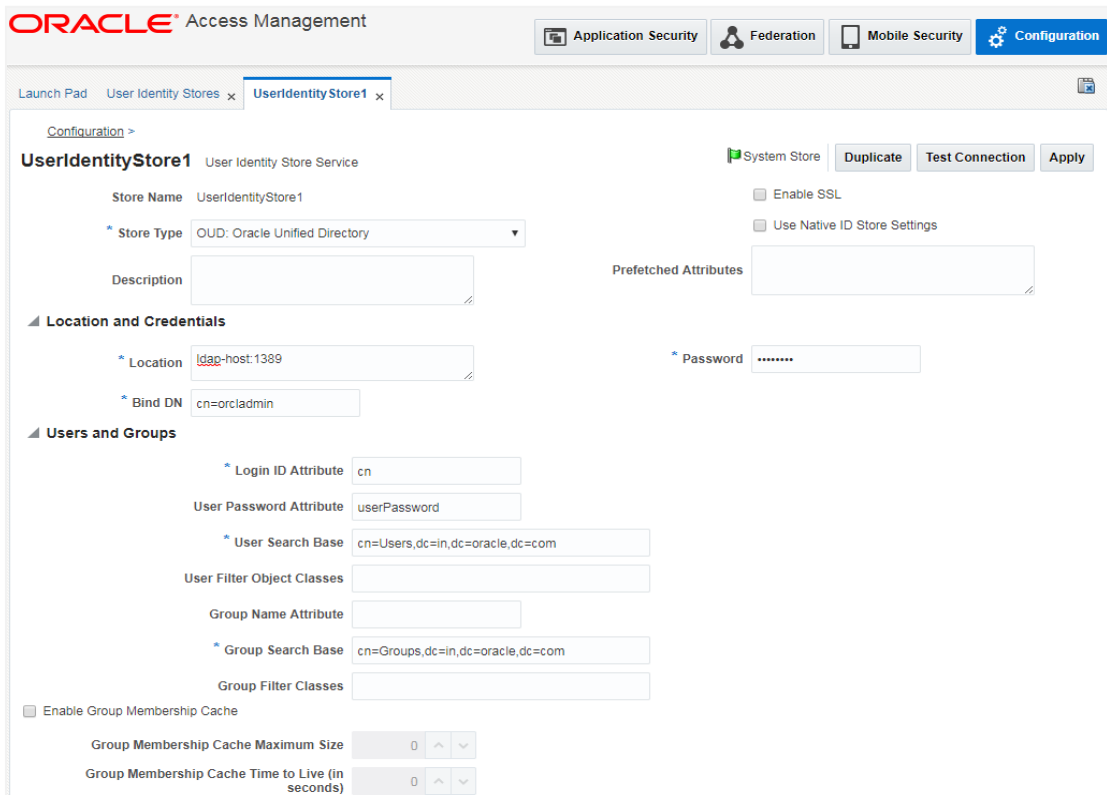
Click on User Identity Stores.



Select the entry UserIdentityStore1, under OAM ID Stores and Click the Edit option.



Now, Select the Store Type depending on the LDAP to be used and you will be shown additional fields to provide further details as shown below.



Enter the values against the mandatory field on the page:

Location: Provide LDAP hostname & port in the following form:
<ldap_hostname>:<port>

Base DN: This will be the LDAP username e.g. **cn=orcladmin**

Password: Enter the LDAP user's password.

User Search Base: Provide the user search hierarchy e.g.
cn=Users,dc=in,dc=oracle,dc=com

Group Search Base: Provide the group search hierarchy e.g.
cn=Groups,dc=in,dc=oracle,dc=com

Then, check the **Enable Password Management** checkbox at the end and provide the details in the fields as shown below.

The screenshot displays the configuration interface for LDAP settings. It includes the following fields and options:

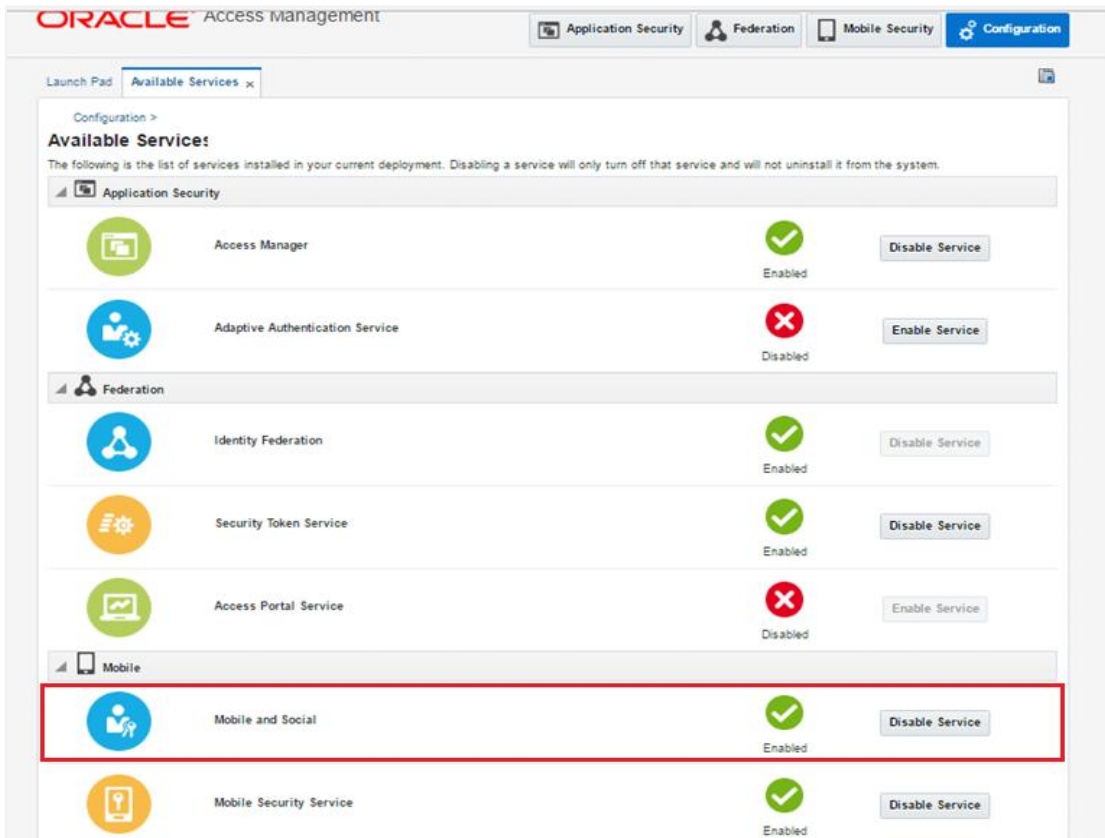
- User Password Attribute:** userPassword
- * User Search Base:** cn=Users,dc=in,dc=oracle,dc=com
- User Filter Object Classes:** (empty)
- Group Name Attribute:** (empty)
- * Group Search Base:** cn=Groups,dc=in,dc=oracle,dc=com
- Group Filter Classes:** (empty)
- Enable Group Membership Cache
- Group Membership Cache Maximum Size:** 0
- Group Membership Cache Time to Live (in seconds):** 0
- Connection Details:**
 - Minimum Pool Size:** 0
 - Maximum Pool Size:** 0
 - Wait Timeout (in seconds):** 0
 - Inactivity Timeout (in seconds):** 0
 - Results time limit (in seconds):** 0
 - Retry Count:** 0
 - Referral Policy:** (dropdown menu)
- Password Management:**
 - Enable Password Management
 - Use Oblix User Schema
 - * Global Common ID Attribute:** uid
 - First Name Attribute:** cn
 - Last Name Attribute:** sn
 - Email Address Attribute:** (empty)

Click Apply to save the changes.

Note : After mapping the LDAP server details in OAM ID Store, login to the oamconsole will be only allowed using the LDAP admin user credentials. The user details can be found in the usergroup.Idif file attached in the Section 9.4 “Creating Attributes, Object Class, Users, Groups and Adding Optional Attributes on LDAP Server” of this document.

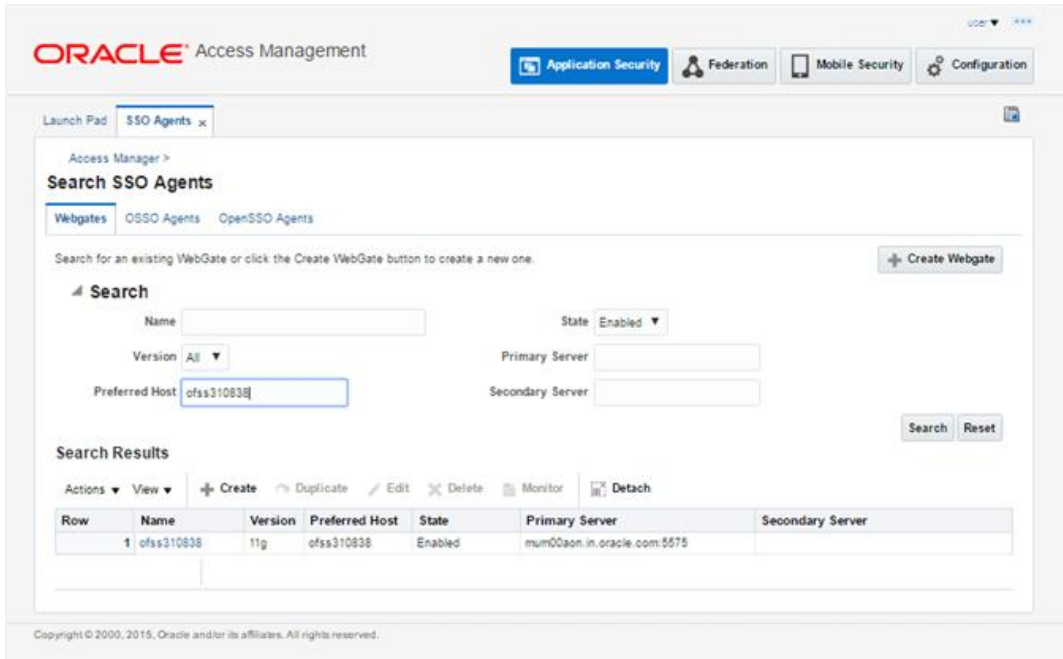
8.6 Enabling OIC in OAM (For Mobile Banking)

OBDX uses Oracle Identity Connect (OIC) API's. Below are the steps to enable OIC in OAM

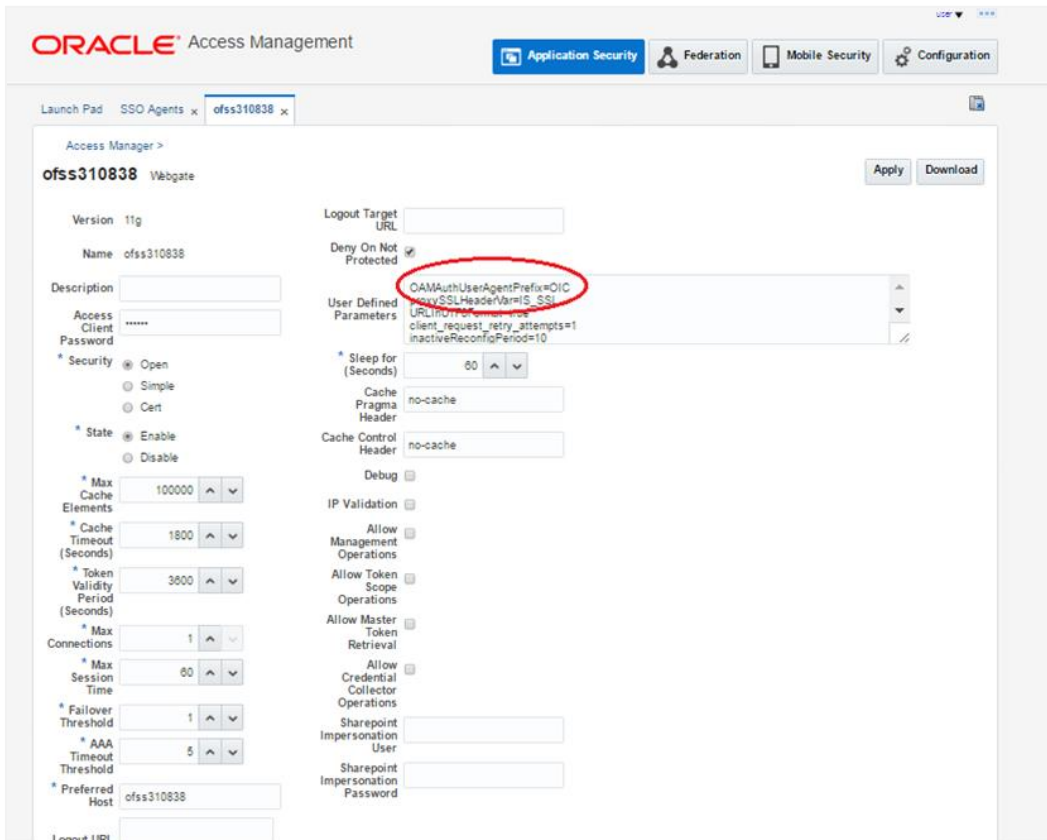


Navigate to Configuration > Available Services

Enable Mobile and Social Service.



Now, go to Application Security Tab > Agents
 Select the WebGate for which OIC is to be enabled.

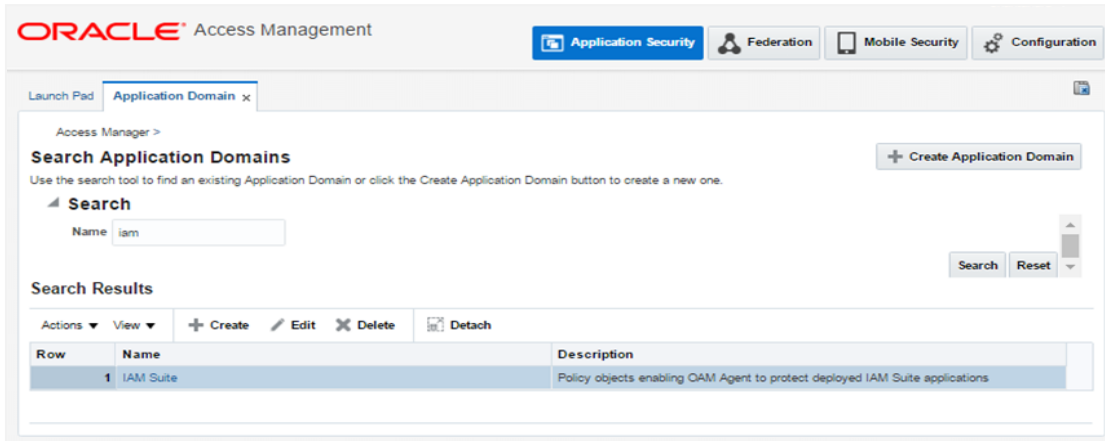


Add the below parameters in User Defined Parameters as shown and save changes.

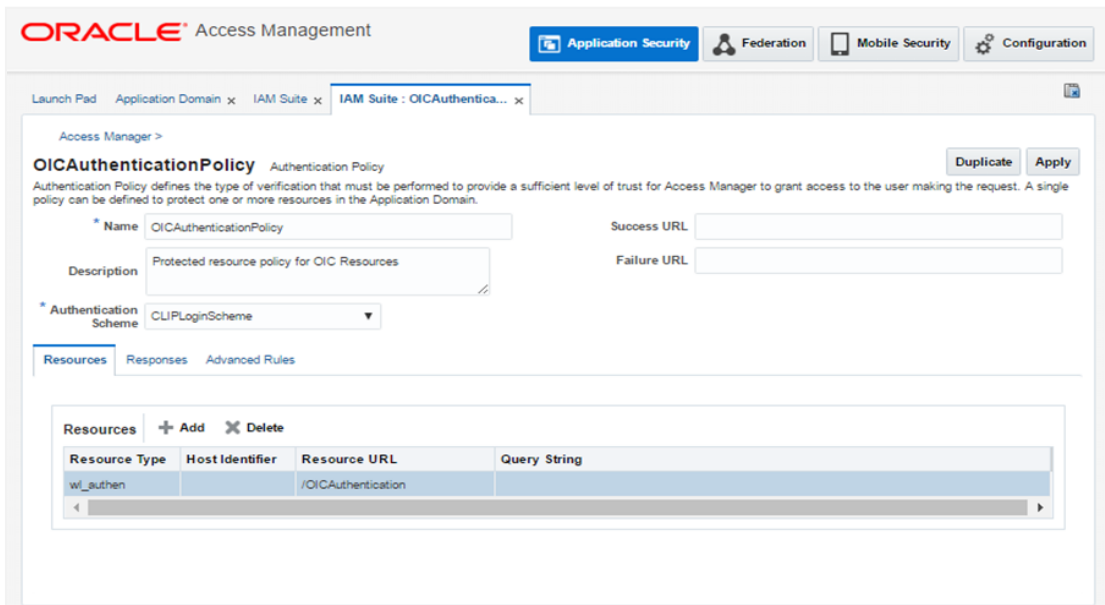
OAMAuthUserAgentPrefix=OIC

OAMAuthAuthenticationServiceLocation=http://<OAM Host>:14100/oic_rest/rest/oamauthentication

Note : The below step is required if using non-default identity store in OAM. In such a case map the identity store to an authentication scheme and then the authentication scheme to OIC.



From Launch Pad, go to Application Domain > IAM Suite > Authentication Policies > OICAuthenticationPolicy

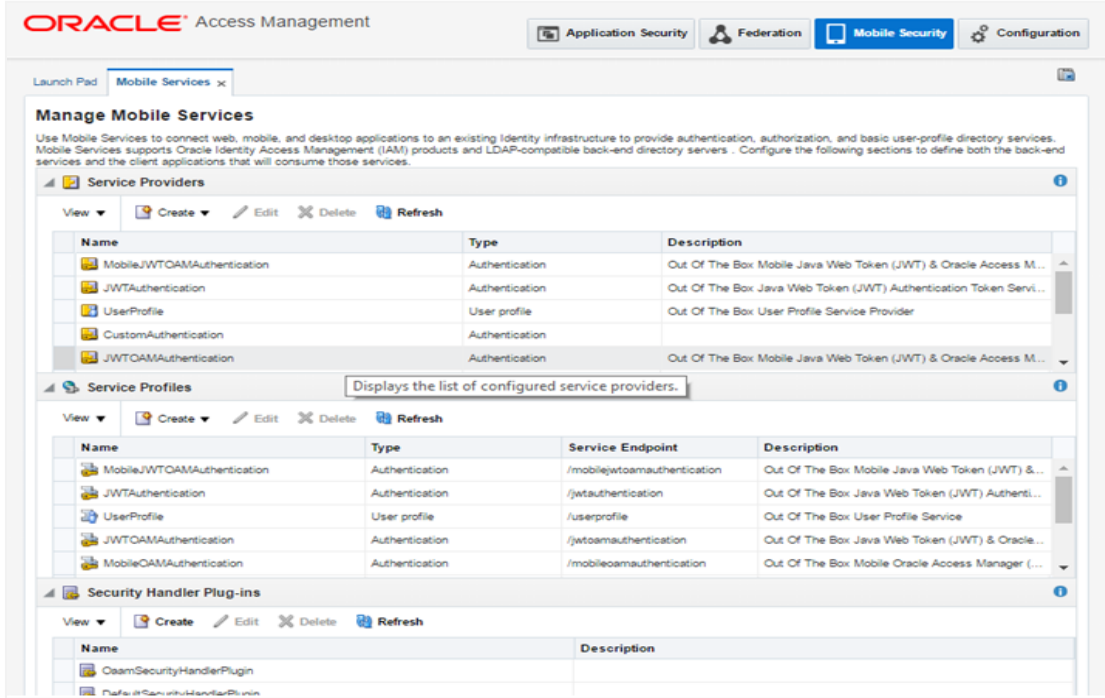


Select the OBDX Authentication Scheme created previously and click Apply.

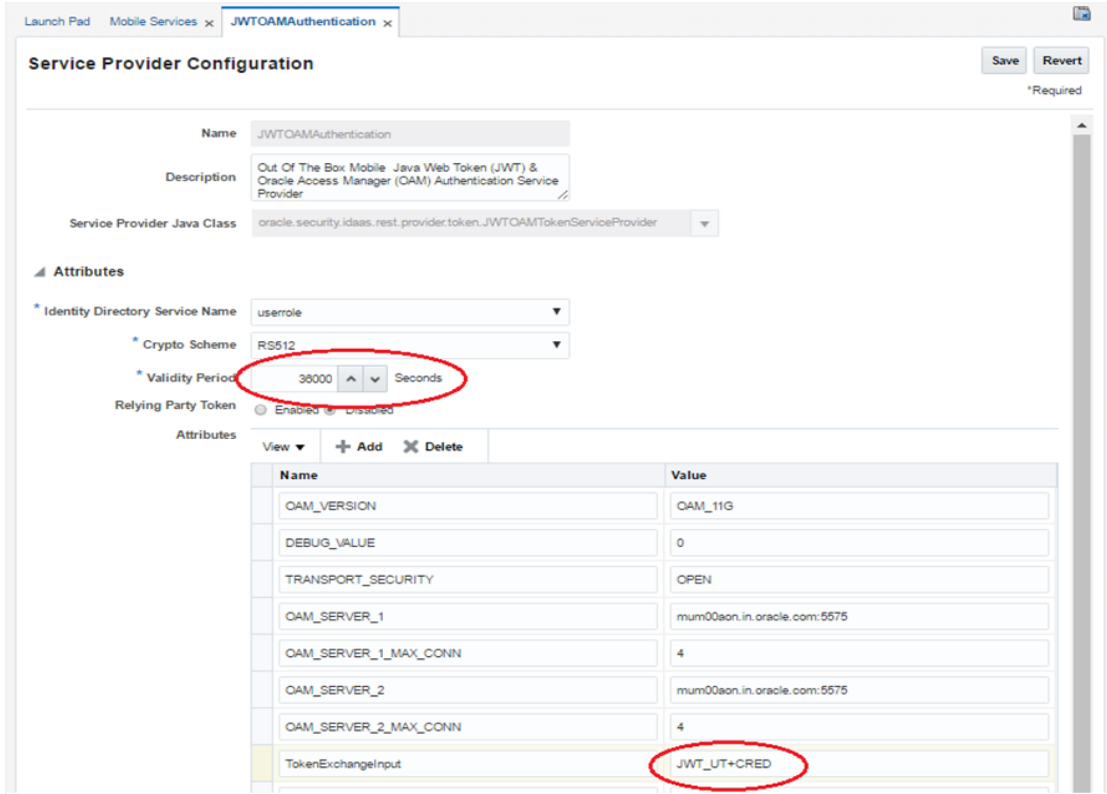
Now, refer Section 5 in **OpenLDAP-Configuration.docx** to configure Mobile Banking using Weblogic Managed Authentication.

8.7 Finger Print Authentication

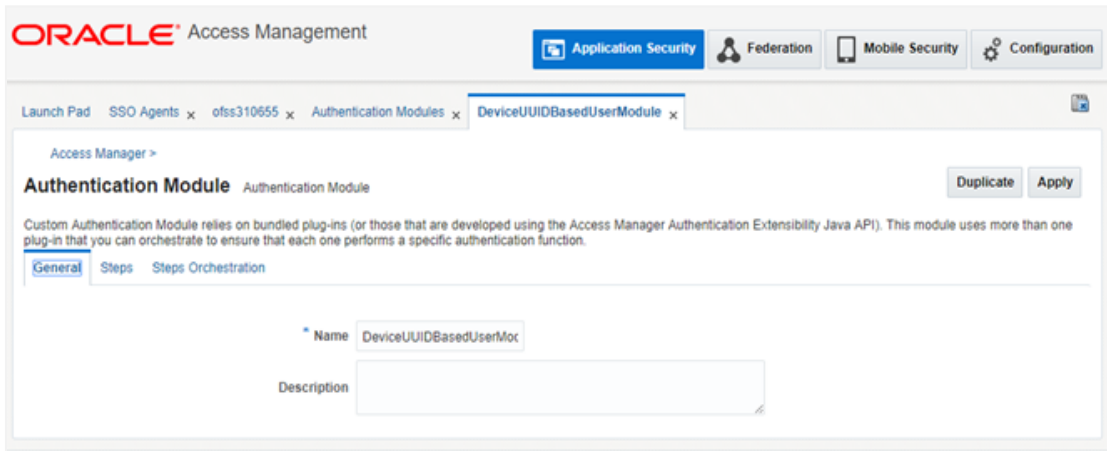
Finger print authentication in OBDX mobile banking is achieved using JSON Web Tokens (JWT). JWT Tokens are validated along with mobile device UUID. Below configurations are required in OAM:



Navigate to Mobile Security Tab > Mobile & Social Services > Service Providers > JWTOAMAuthentication

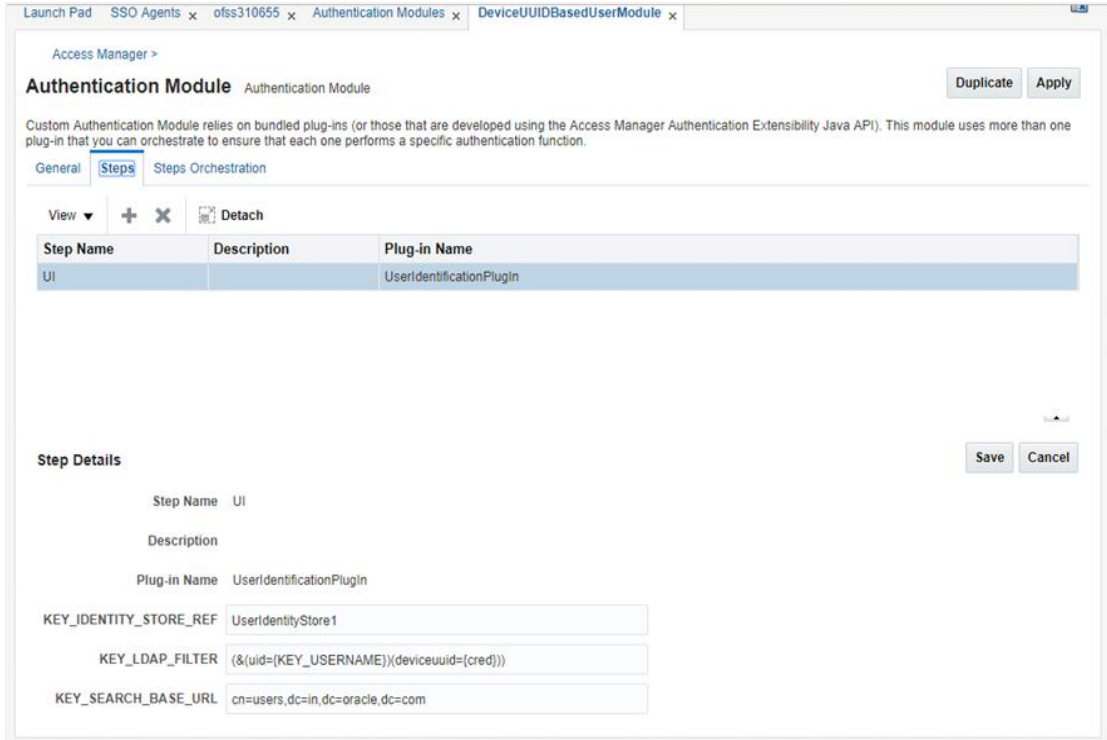


Click Edit and Change value of TokenExchangeInput to **JWT_UT+CRED**. Also set the validity of the token as required in seconds and Save the changes.

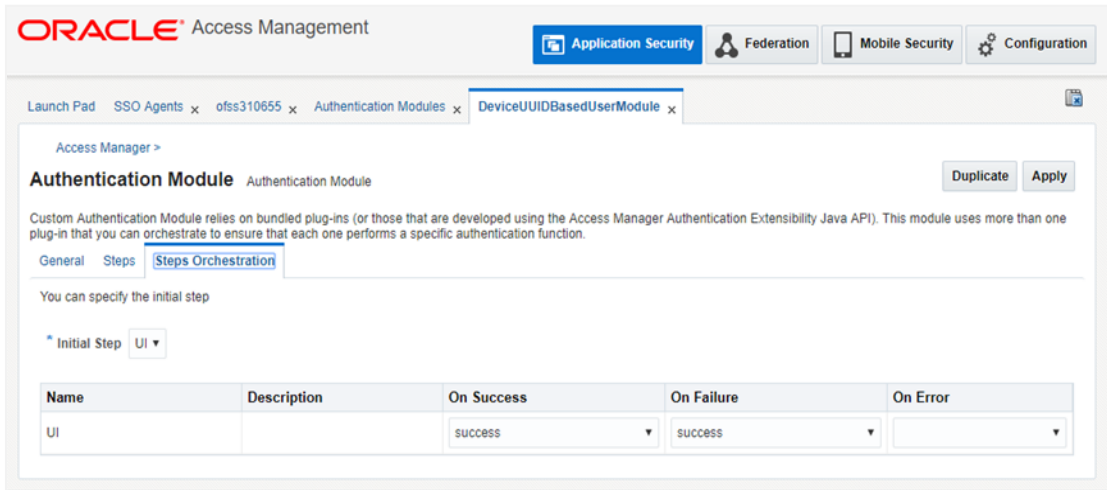


Now, Navigate to Application Security Tab > Authentication Modules Tab > Create Custom Authentication Module

Give Name eg. **DeviceUIDBasedUserModule**



Now, configure the Steps tab as shown above.



Now, configure the Step Orchestration tab as shown. Click on Apply to save the Module. After creating the module, Navigate to Launch Pad > Authentication Scheme > Create.

ORACLE Access Management

Application Security | Federation | Mobile Security | Configuration

Launch Pad | Authentication Schemes x | DeviceUIDBasedUserAuthNS... x

Access Manager >

DeviceUIDBasedUserAuthNScheme Authentication Scheme Set As Default Duplicate Apply

An Authentication Scheme defines the challenge mechanism required to authenticate a user. Each Authentication Scheme must also include a defined Authentication Module.

* Name: DeviceUIDBasedUserAuthNScheme

Description: [Empty]

* Authentication Level: 3

Default:

* Challenge Method: FORM

Challenge Redirect URL: [Empty]

* Authentication Module: DeviceUIDBasedUserModule

* Challenge URL: /pages/login.jsp

* Context Type: default

* Context Value: ctx

Challenge Parameters: [Empty]

Create a new authentication scheme as shown and map the previously created module.

ORACLE Access Management

Application Security | Federation | Mobile Security | Configuration

Launch Pad | Authentication Modules x | DeviceUIDBasedUserPlugin x | Application Domain x | IAM Suite x

Access Manager >

IAM Suite Application Domain

Application Domain provides a logical container for resources or sets of resources, and the associated policies that dictate who can access specific protected resources.

Summary | Resources | Authentication Policies | Authorization Policies | Token Issuance Policies | Administration

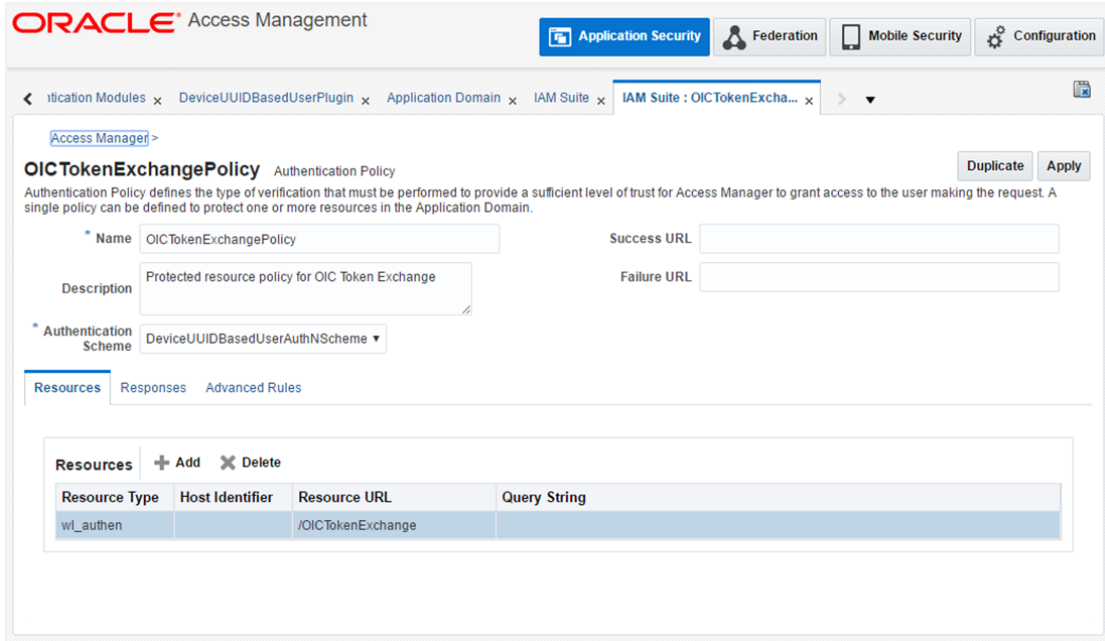
Select an existing Authentication Policy from the list or click the Create Authentication Policy button to create a new one.

Actions View Create Duplicate Edit Delete Detach

Row	Name	Description
1	LocalAuthnFederationFAAuthScheme	Policy Component created for Local Authentication in IdP mode - Do not modify
2	LocalAuthnFederationLDAPScheme	Policy Component created for Local Authentication in IdP mode - Do not modify
3	LocalAuthnFederationBasicFAScheme	Policy Component created for Local Authentication in IdP mode - Do not modify
4	LocalAuthnFederationBasicScheme	Policy Component created for Local Authentication in IdP mode - Do not modify
5	ESSOAuthnPolicy	Authentication policy for ESSO resources
6	Federation SSO Protected Policy	Federation SSO Protected Policy for SP Service
7	TAP Response Protected Policy	TAP Response Protected Authentication Policy for OAMAgent
8	Public Policy	Protected Authentication Policy for OAMAgent
9	Protected LowerLevel Policy	Protected Authentication Policy for OAMAgent
10	OAM System Resource Policy	Protected Internal Resources for OAM Server
11	Protected HigherLevel Policy	Protected Authentication Policy for OAMAgent
12	OICTokenExchangePolicy	Protected resource policy for OIC Token Exchange
13	OICAuthenticationPolicy	Protected resource policy for OIC Resources
14	OAM Admin Console Policy	Protected resource policy for OAM Administration Console

/oamconsole/faces/admin.jspx?_afLoop=5909106988165184&_afWindowMode=0&_afWindowId=null&_adf.ctrl-state=9dqjk8c5s_2#

Then, go to Launch Pad > Application Domains > IAM Suite > Authentication Policies > OICTokenExchangePolicy



Map the DeviceUID scheme here from the Authentication scheme dropdown.

Click Apply to save the changes.

8.8 Copying the artifacts generated after registering Webgate

Registering the new WebGate agent will generate the following files and artifacts either in **<IDM_HOME>/oam/server/rreg/client/rreg/output/Agent_ID** directory or else in **<Oracle_Home>/user_projects/domains/<oam_domain>/output/Agent_ID** directory:

- cwallet.sso
- ObAccessClient.xml

The user should copy the files from the above mentioned location to the **<WebTier_Instance_Home>/config/OHS/ohs1/webgate/config** directory and restart OHS server instance.

9. LDAP Installation and Configuration

This chapter describes the different ways of installing the Lightweight Directory Access Protocol (LDAP) server in the following sections respectively:

- Section 9.1, "Using Oracle Unified Directory"
- Section 9.2, "Creating Weblogic Domain for Oracle Unified Directory"
- Section 9.3, "Creating Attributes, Object Class, Users, Groups and Adding Optional Attributes on LDAP Server"

9.1 Using Oracle Unified Directory

Oracle Unified Directory is a comprehensive next generation directory service. It is designed to address large deployments and to provide high performance, and is highly extensive. Oracle Unified Directory is easy to deploy, manage, and monitor.

This chapter describes the installation tasks which contains the following sections:

- Section 9.1.1, "Installing and Configuring Oracle Unified Directory"
- Section 9.1.2, "Verifying the Installation"

9.1.1 Installing and Configuring Oracle Unified Directory

- Obtain OUD from the Oracle Fusion Middleware Downloads. Download OUD.zip file to a directory, and unpack the downloaded archive that contains the installer. By default, this directory is named OUD.
- Now to start the installer, go to the directory where you unpacked the archive file and switch to the Disk1 directory.

Start the installer from the Disk1 directory (On UNIX)

```
./runInstaller -jreLoc Java_Home/jdk
```

Note : You must enter the absolute path of the JRE folder located in this JDK when launching the installer.

- If you are installing on a UNIX system, and if this is the first time any Oracle product is being installed on your system with the Oracle Universal Installer, you will be asked to provide the location of an inventory directory. This is where the installer sets up subdirectories and maintains inventory data for each Oracle product that is installed on this system.
- Follow the instructions in the below table to configure the inventory directory information. For more help, click on the screen name in the table below, or click the Help button in the GUI.

Table: Inventory Directory and Group Screens

Screen	Description and Action Required
Specify Inventory Directory Screen (UNIX Only)	Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory. Click OK to continue.
Inventory Location Confirmation Screen	Run the createCentrallInventory.sh script as root. Click OK to continue.

Screen	Description and Action Required
(UNIX Only)	

Now, perform the steps as shown below to install and configure OUD after you start the OUD installer.

Welcome Screen



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

Click Next to continue.

Install Software Updates Screen

If you want to search for and download software updates from My Oracle Support, then do the following:

Select Search My Oracle Support for Updates.

Enter User name and Password.

Click Test Connection.

If you want to search your local directory for updates, then do the following:

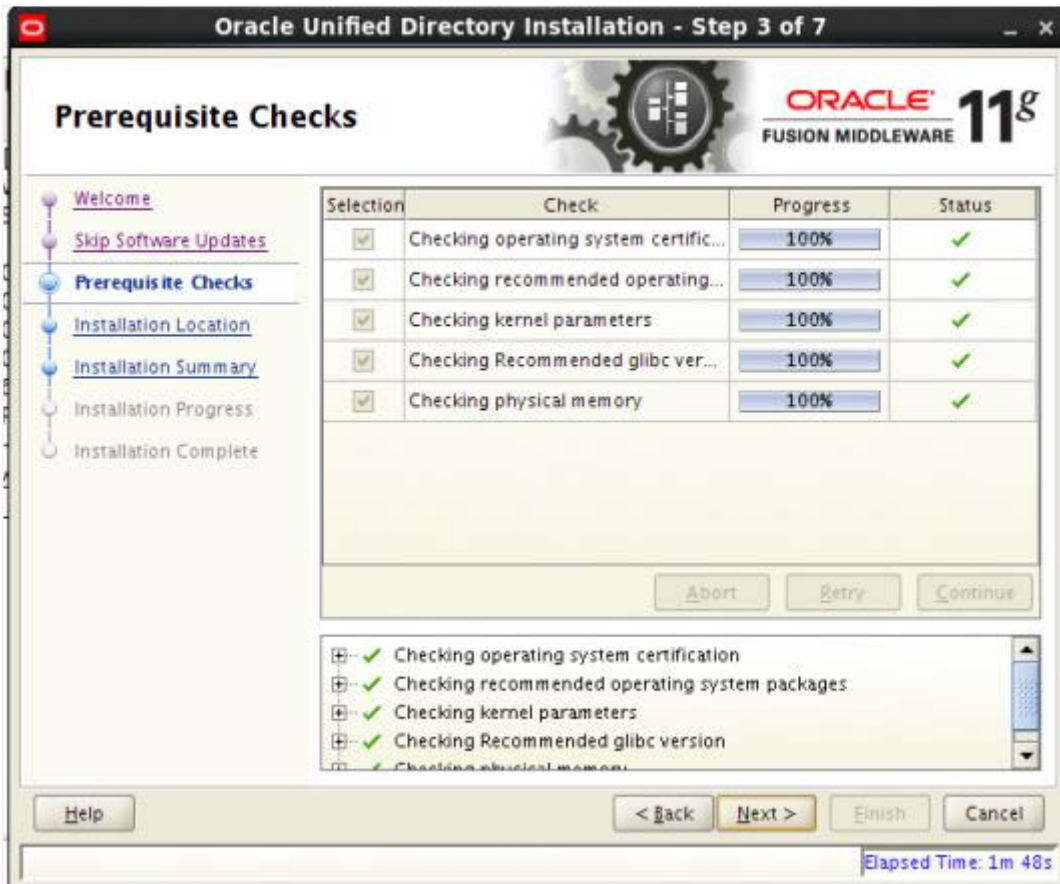
Select Search Local Directory for Updates.

Click Search For Updates.

If you want to skip software updates, then select Skip Software Updates.

Click Next to continue.

Prerequisite Checks Screen



This screen shows whether the system requirements are met in order to install the software.

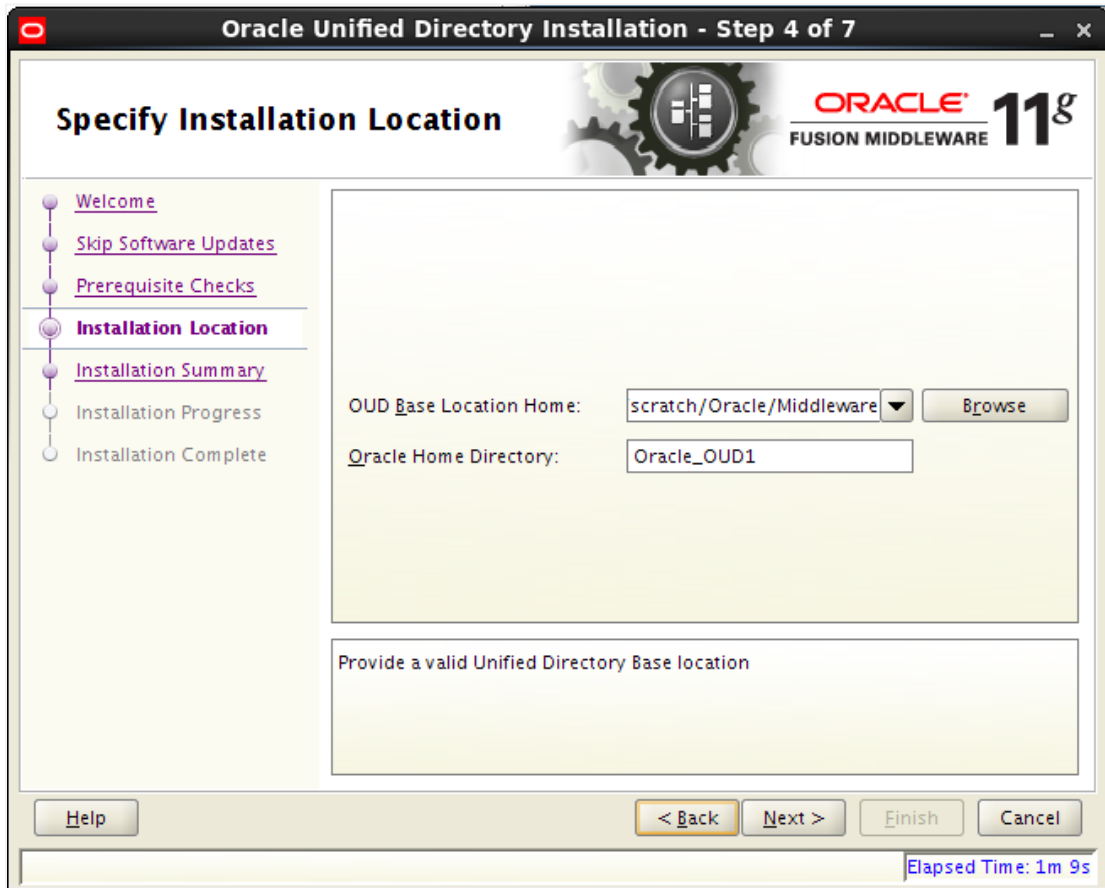
If there is a problem, a short error message appears in the bottom portion of the screen. Fix the error, and click Retry to try again.

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

To stop prerequisite checking for all components, click Abort.

Click Next to continue.

Specify Installation Location Screen



Specify the following installation locations:

- Oracle Middleware Home
The absolute path to the directory where WebLogic Server was installed.
- Oracle Home Directory
The directory name for your Oracle home:
- You can specify a pre-existing directory that you want to use as the Oracle home; the directory must be an empty directory.
- You can specify the name of a new directory that will be created for you inside the Middleware home.

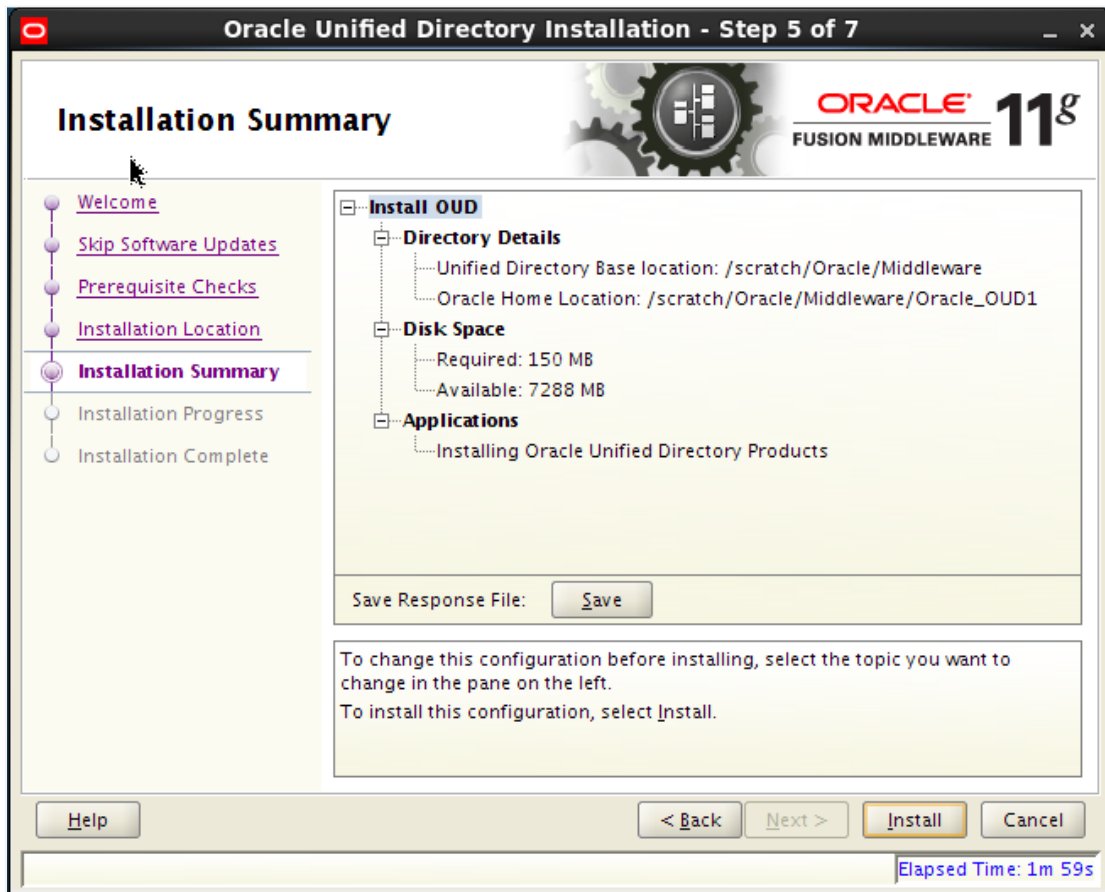
Oracle Home directory is where your products will be installed. All software binaries will reside in this directory, and no runtime process can write to this directory.

Note: This installation directory will be referred to as OUD_ORACLE_HOME throughout the remainder of this document.

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

Click Next to continue.

Installation Summary Screen



Review the information on this screen. The operations summarized on this page will be performed when you click Install.

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

If you want to save this configuration to a text file (called a response file), click Save. You will be prompted for the location of name of the file you want to create (for example, silent_install.rsp). This file can be used later if you choose to perform the same installation from the command line.

Click Install.

Then screen shows the progress of the installation.

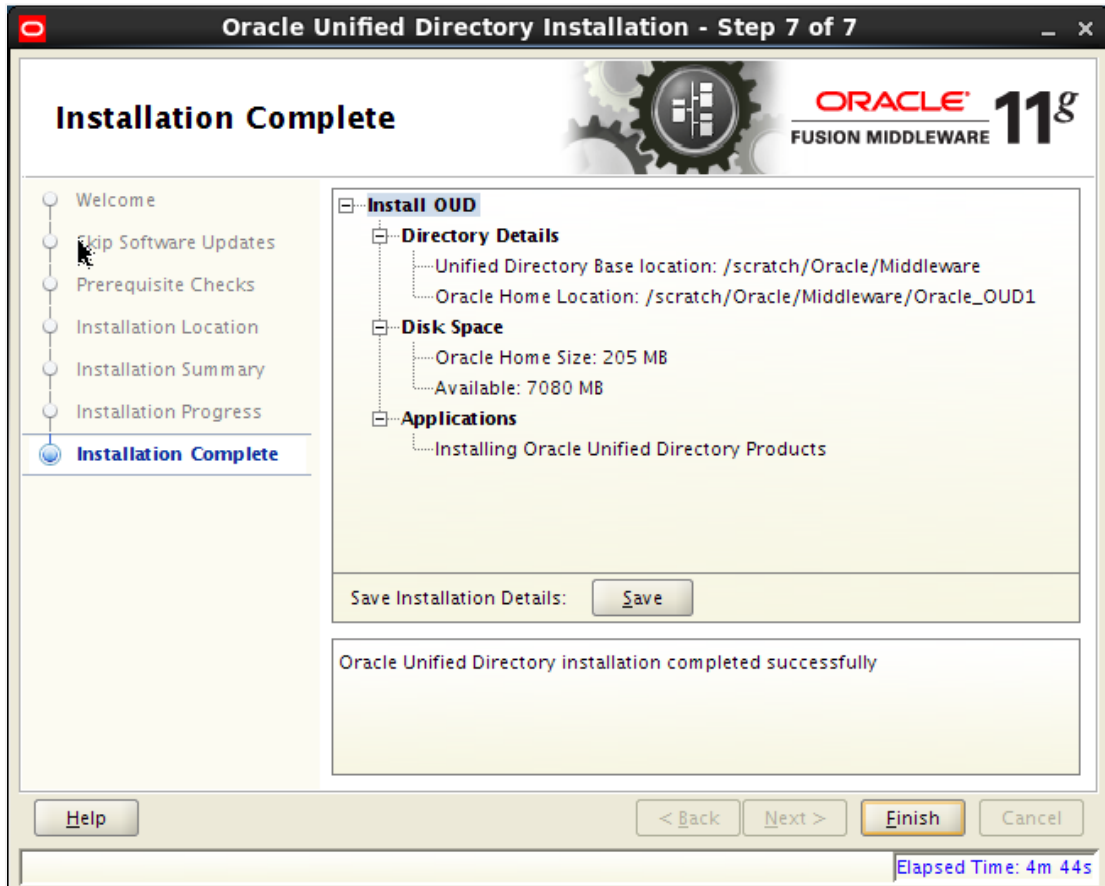
Installation Progress Screen



This screen shows the progress of the installation.

If you want to quit before the installation is completed, click Cancel. Doing so will result in a partial installation; the portion of the software that was installed on your system before you click Cancel will remain on your system, and you will have to remove it manually.

Installation Complete Screen



This screen summarizes the installation that was just completed.

You can also save this summary information to a file for future reference by clicking Save. You will be prompted to specify a name and location for your summary file.

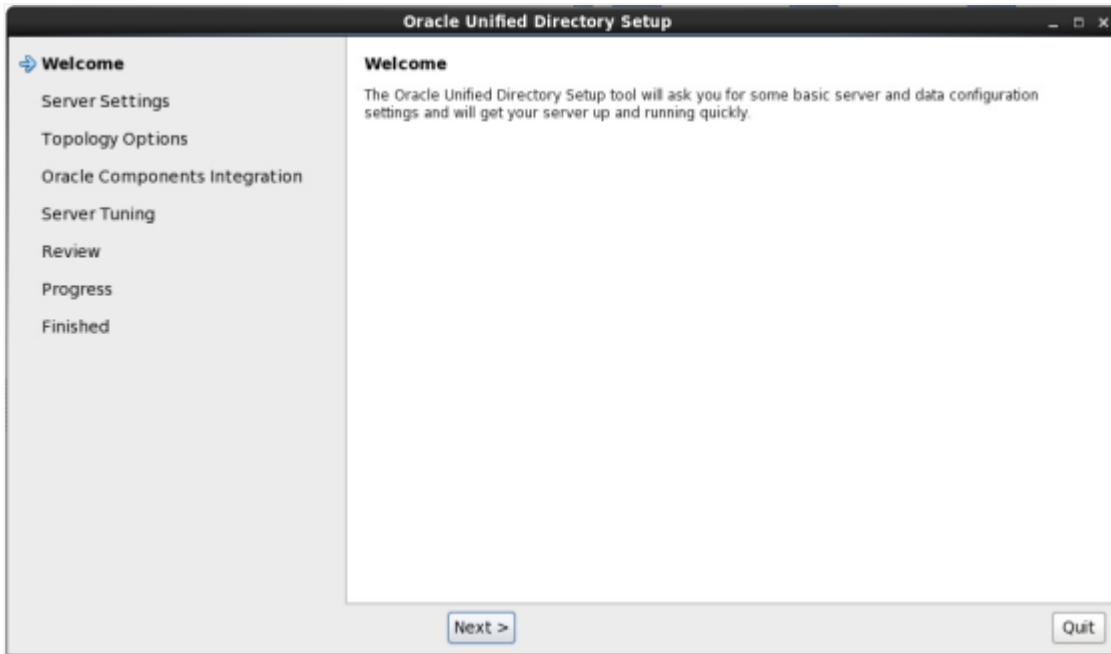
Click Finish to dismiss the screen.

- After the installation of OUD, go to the OUD_Oracle_Home directory and start the oud-setup.sh as follows,

```
cd /ORACLE_HOME/Oracle_OUD1/
```

```
./oud-setup
```

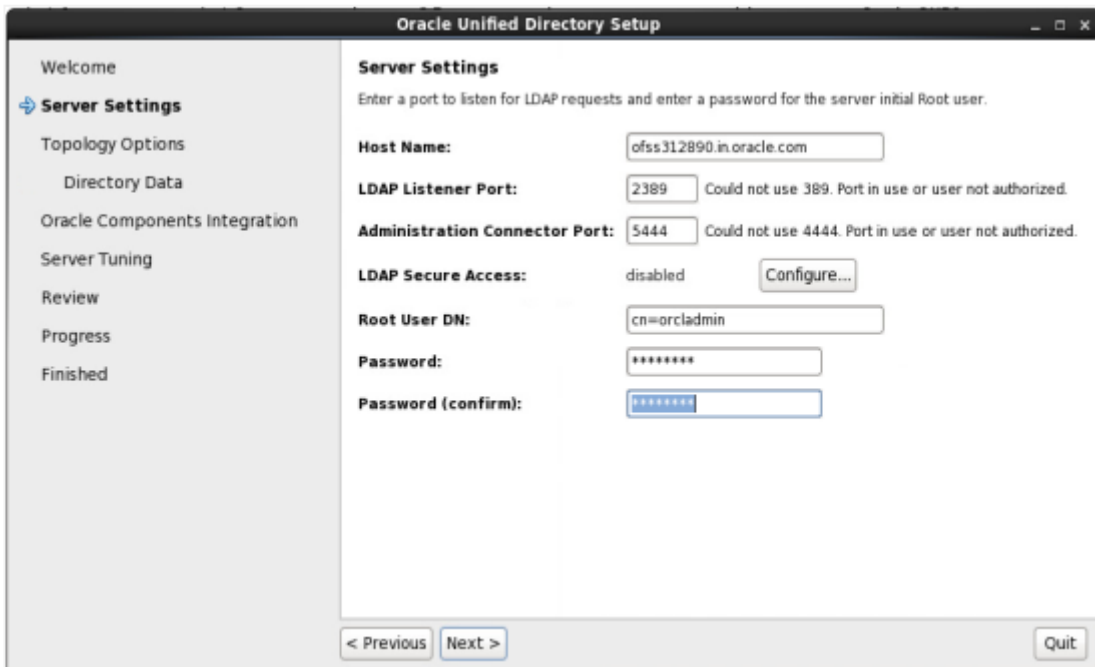
- After starting the oud-setup, follow the steps as shown below:



Welcome Screen

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

Server Settings Screen



Enter the details as shown in the figure below: Host Name: Enter the directory server's host name or IP address.

LDAP Listener Port: Enter the LDAP port for the directory server.

Administration Connector Port: Enter the port that will be used for administration traffic.

The default administration port is 4444.

Topology Options Screen

Select This will be a stand alone server.

Click Next.

Directory Data Screen

Specify how to load data into your directory

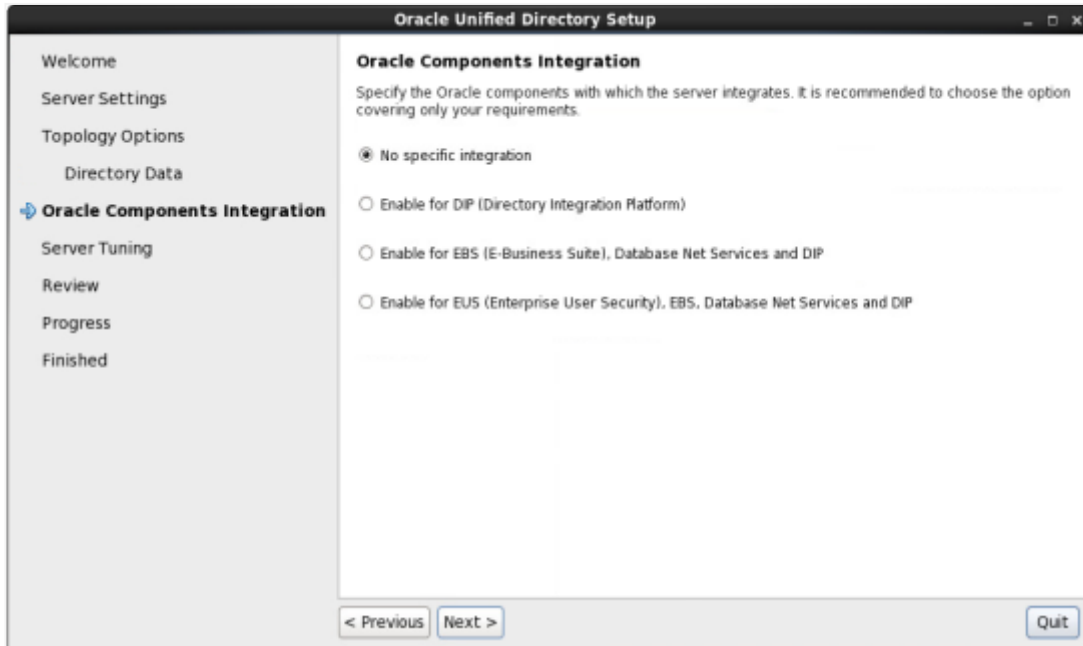
Directory Base DN: Enter the base DN for your directory.

dc=in,dc=oracle,dc=com

Directory Data: Select the following data option: Only Create Base Entry: Creates an entry with the base DN specified previously.

Click Next.

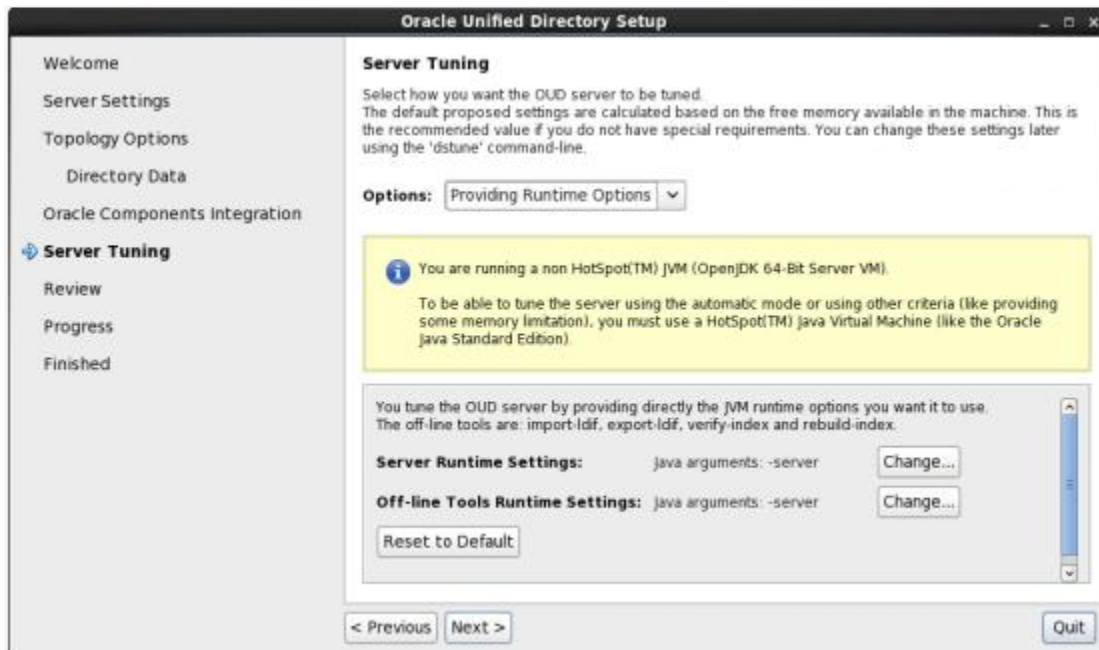
Oracle Components Integration Screen



Select No specific integration as we want a standard installation. This is the default option.

Click Next.

Server Tuning Screen



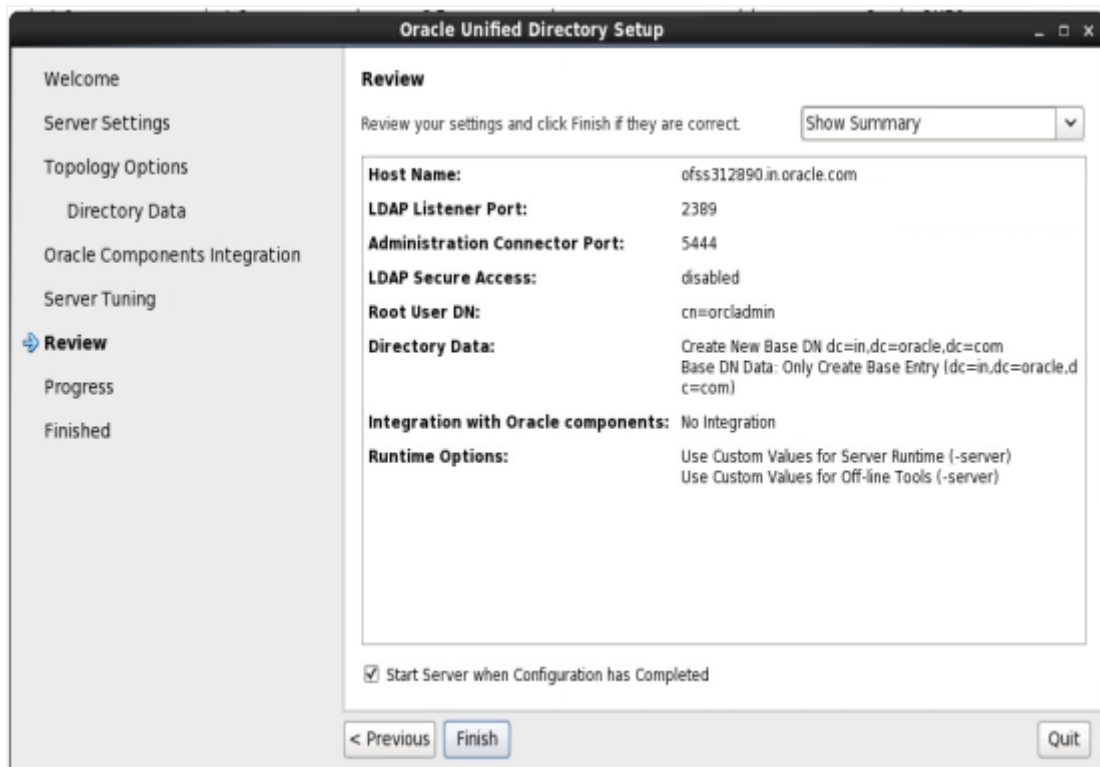
The Server Tuning screen enables you to tune Oracle Unified Directory server by selecting one of these options: Providing the specific memory to be dedicated to the server.

Explicitly providing the run-time settings (JVM arguments) to be used by the server and the off-line tools (import-ldif, export-ldif, verify-index, and rebuild-index).

To reset any changes to the default values, click Reset to Default.

Click Next.

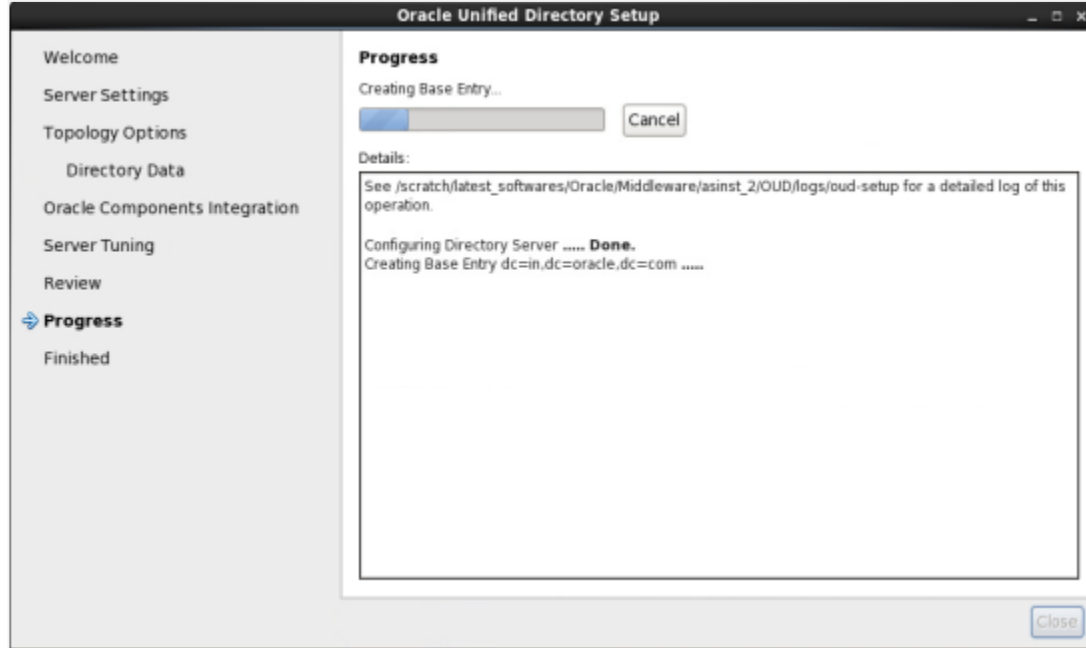
Review Screen



Review your configuration and Select Start Server when Configuration has Completed to start the server after the directory server has been configured.

Click Finish.

Configuration Done Screen



After the processing is done i.e., after creating directory server is done and starting directory is done click close.

9.1.2 Verifying the Installation

You can perform any combination of the following tasks to verify that your installation was successful:

- Verifying the Installation Logs
 - Check for the presence of installation log files in logs directory inside your Oracle Inventory directory. On UNIX systems, if you do not know the location of your Oracle Inventory directory, you can find it in the OUD_ORACLE_HOME/orainst.loc file.
- Checking the Browser URLs
 - Use the port numbers of OUD provided during configuration, by default UserDN port is 1389 and Admin Connector Port is 4444. Check if there is any process running on the port. Use the following command:

```
netstat -tulpn | grep <port_number>
```

- To check the URLs, use the format:

```
http://system_name:port_number/odsm
```

9.2 Creating Weblogic Domain for Oracle Unified Directory

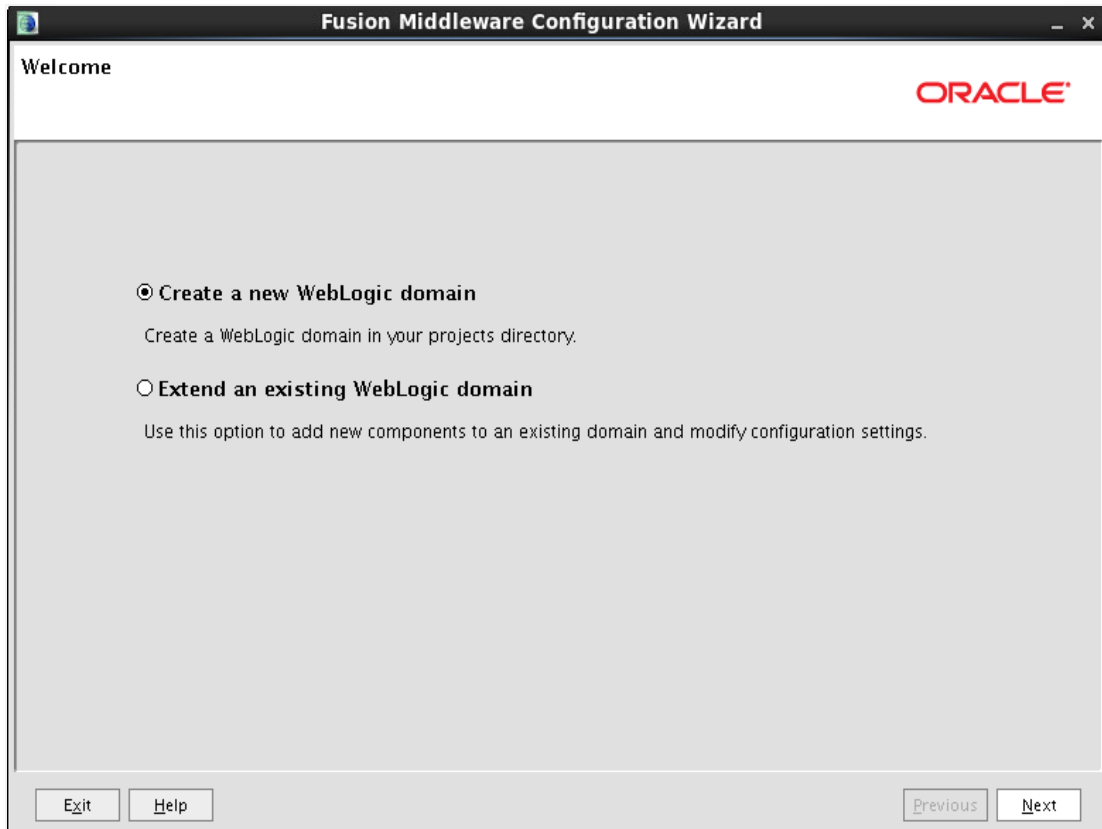
- Start the Weblogic Configuration Wizard, by executing the below command:

```
<Oracle_Home>/wlserver_10.3/common/bin/config.sh
```

Note: Oracle_Home is the Middleware Home, which is the absolute path where Weblogic Server is installed.

- Follow the instructions as shown below for installation:

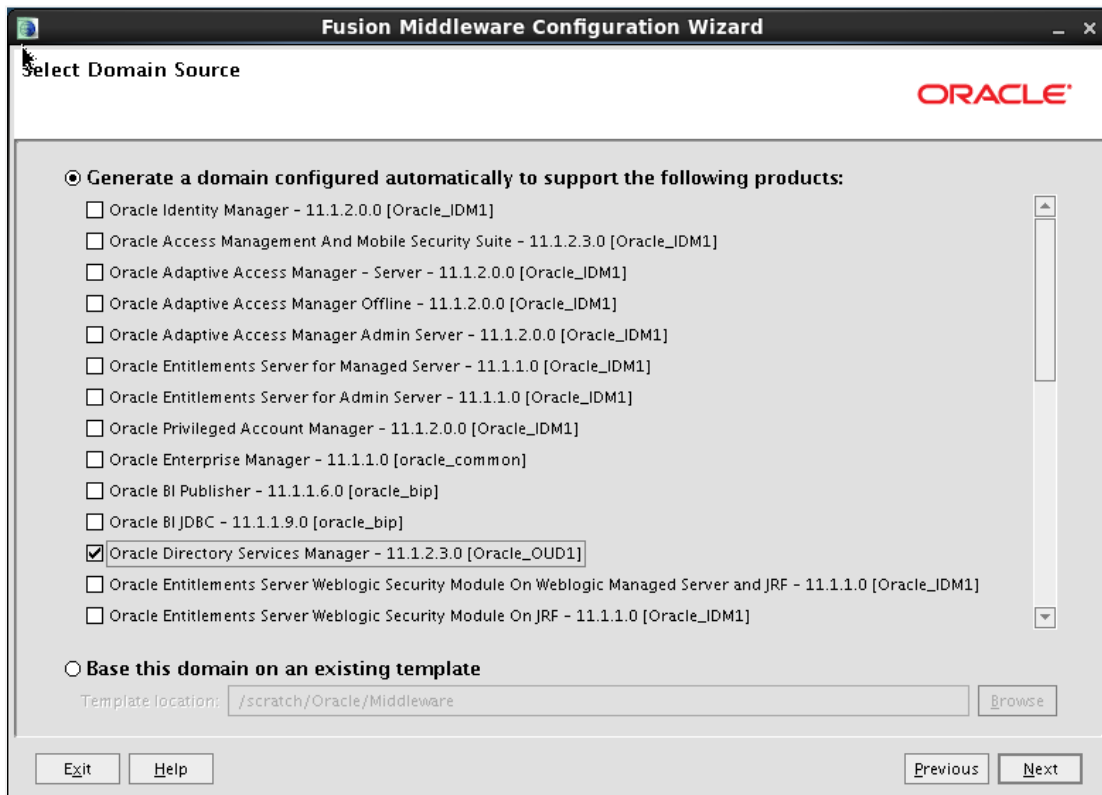
Welcome Screen



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

Click Next to continue.

Select Domain Source Screen



Use this screen to select the components that you want to configure.

For Oracle Access Manager, select the **Oracle Directory Services Manager - 11.1.2.3.0 [OUD_HOME]**

Click Next to continue.

Note : On selecting Oracle Entitlement Server option, Oracle JRF option gets selected by-default.

Specify Domain Name and Location Screen

Fusion Middleware Configuration Wizard

Specify Domain Name and Location

ORACLE

Enter the name and location for the domain:

Domain name:

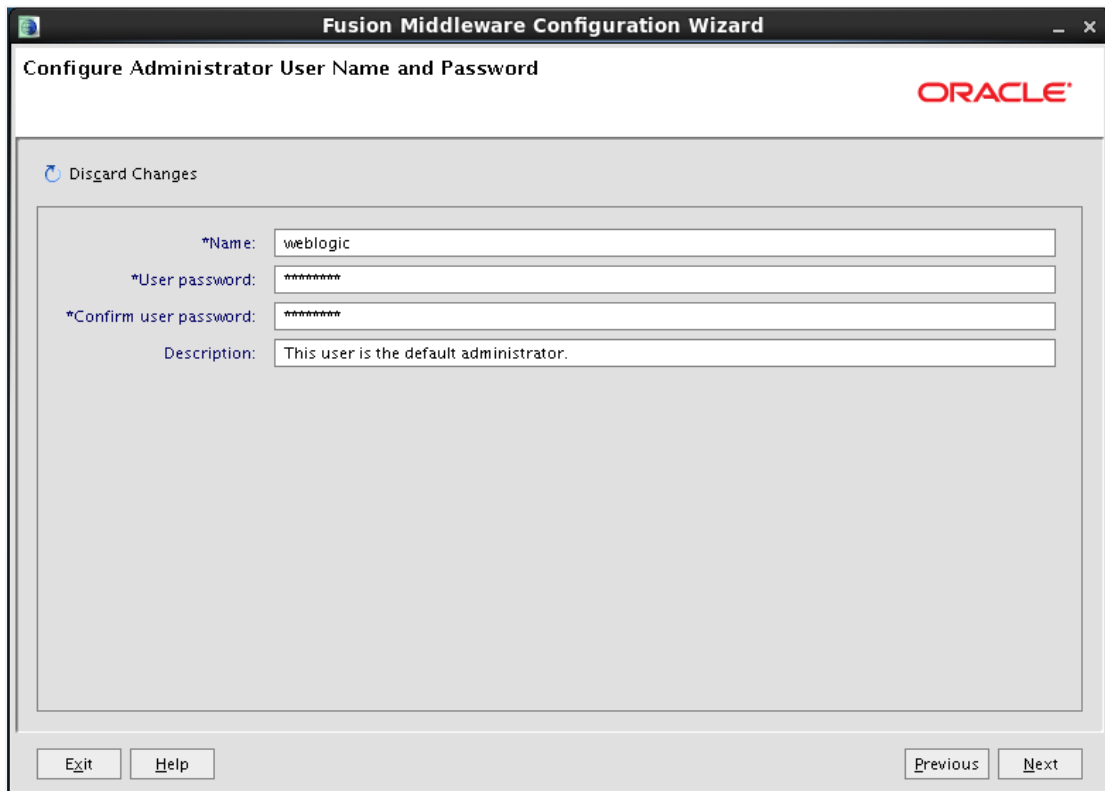
Domain location:

Specify the following locations:

- Domain name
Specify the name of the domain.
- Domain location
The default locations for the domain home is
<Oracle_HOME>/user_projects/domains
However, the domain home directory can also be created outside of Oracle home.
Here, Oracle Home directory is where the Weblogic Server is installed.

Click on Next.

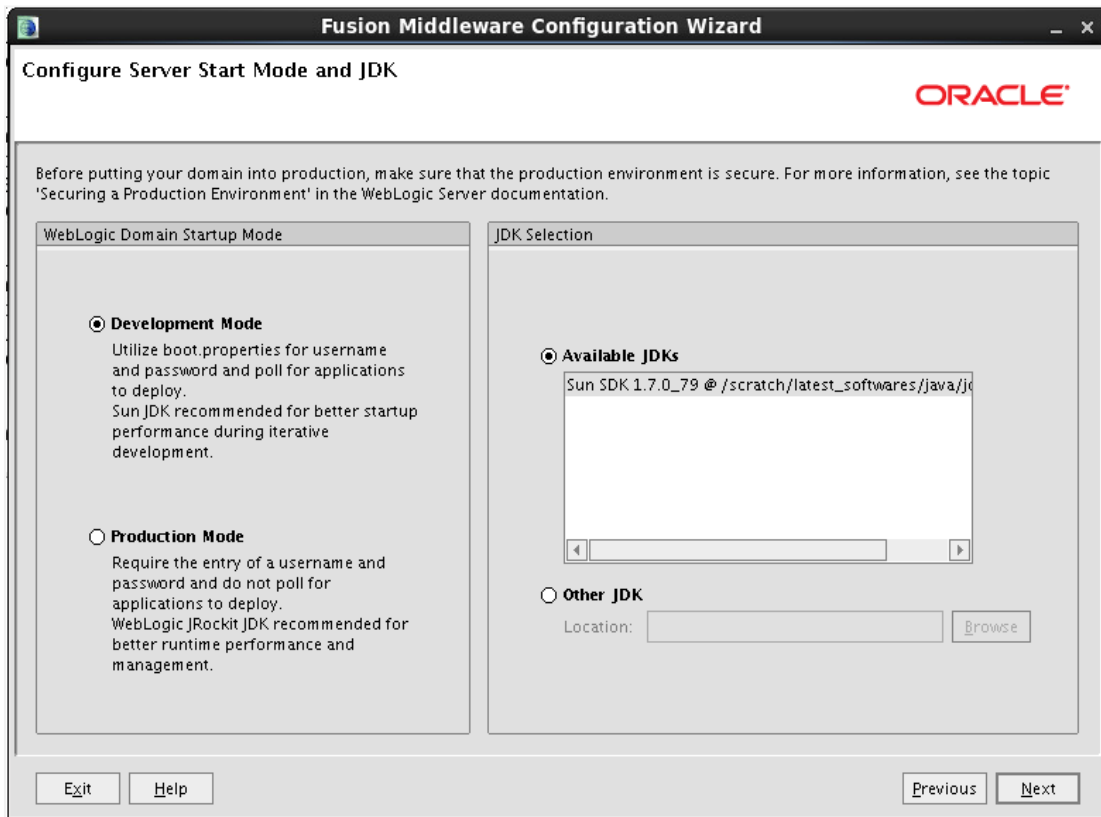
Configure Administrator User Name and Password Screen



The screenshot shows a window titled "Fusion Middleware Configuration Wizard" with the subtitle "Configure Administrator User Name and Password". The Oracle logo is in the top right corner. A "Disgard Changes" button is in the top left. The main area contains four input fields: "*Name:" with the value "weblogic", "*User password:" with masked characters "*****", "*Confirm user password:" with masked characters "*****", and "Description:" with the text "This user is the default administrator.". At the bottom, there are "Exit", "Help", "Previous", and "Next" buttons.

This screen is to provide the username and password for the Weblogic Administrator. The default username is **weblogic**. The user can provide a different username. Then, Click on Next.

Configure Server Start Mode and JDK Screen

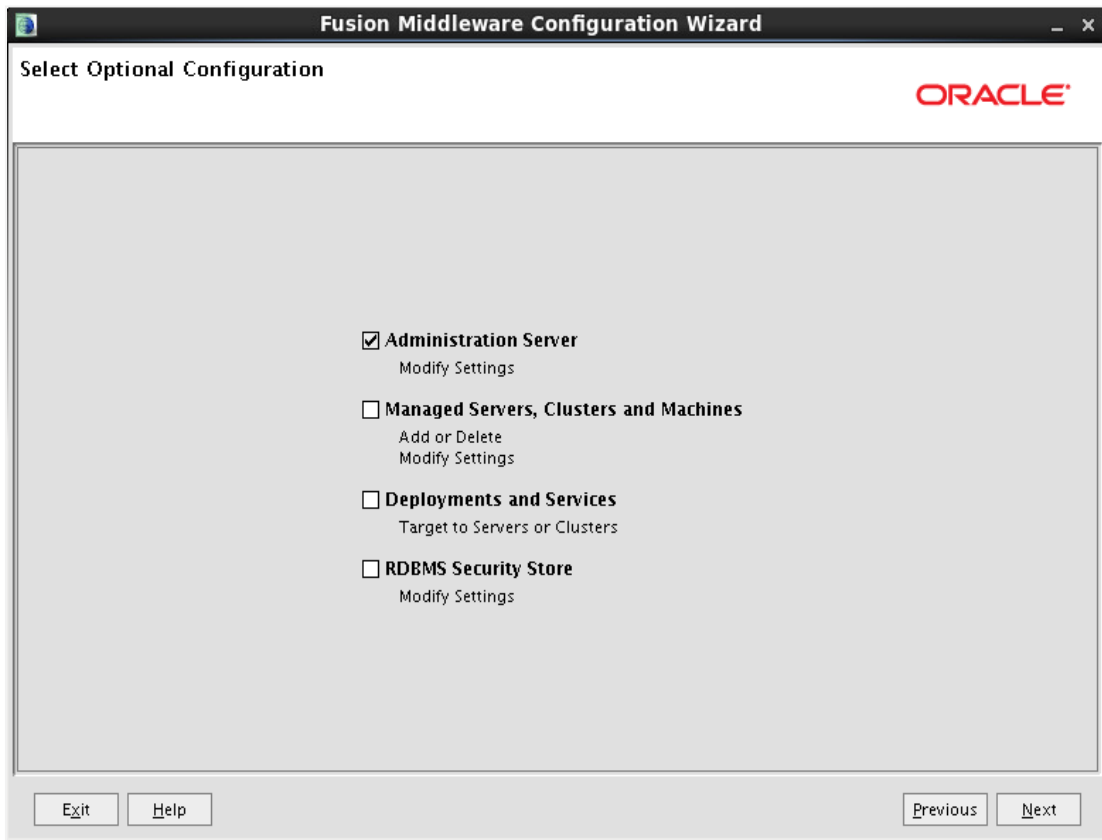


Choose a JDK from the Available JDKs.

Select a mode under the Weblogic Domain Startup Mode.

Click Next.

Select Optional Configuration Screen

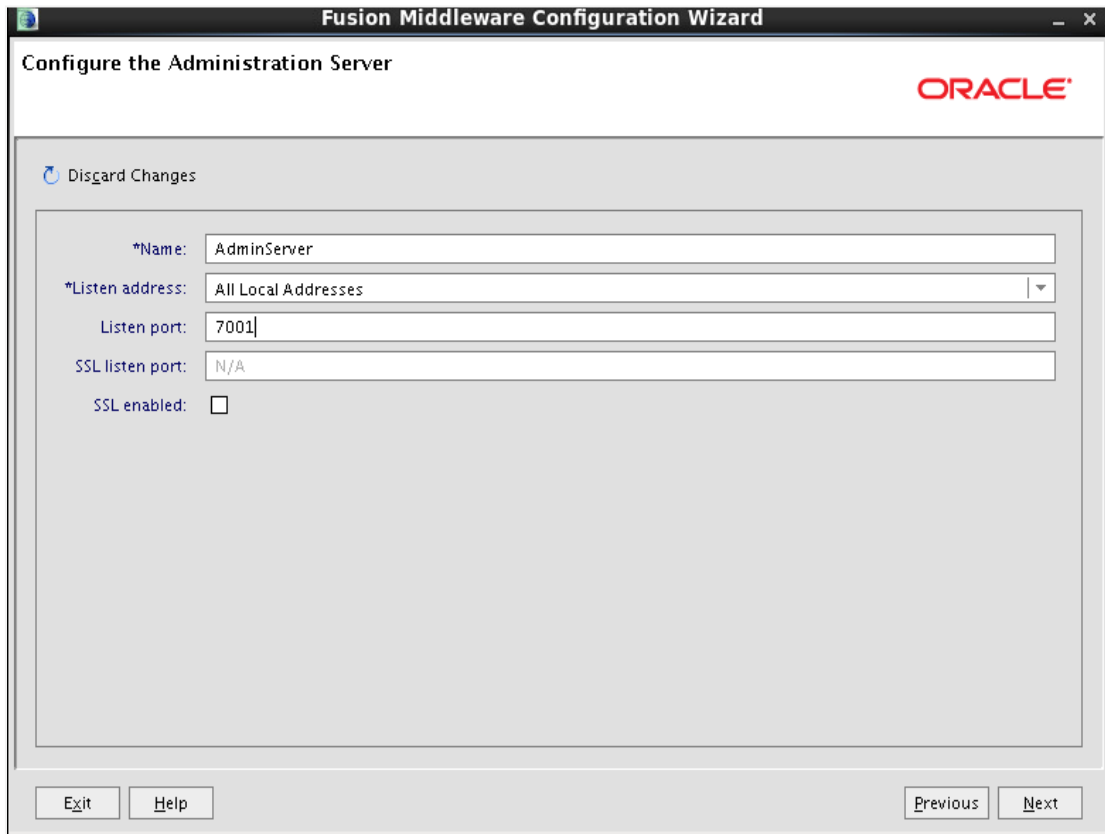


Choose the options to configure from the following list:

- Administration Server
- Managed Servers, Clusters and Machines
- Deployments and Services
- RDBMS Security Store

Select Administration Server and Click on Next.

Configure the Administrator Server Screen



The screenshot shows the 'Configure the Administration Server' screen within the Fusion Middleware Configuration Wizard. The window title is 'Fusion Middleware Configuration Wizard' and the Oracle logo is in the top right corner. Below the title bar, there is a 'Disgard Changes' button with a circular arrow icon. The main configuration area contains the following fields:

- *Name: AdminServer
- *Listen address: All Local Addresses (dropdown menu)
- Listen port: 7001
- SSL listen port: N/A
- SSL enabled:

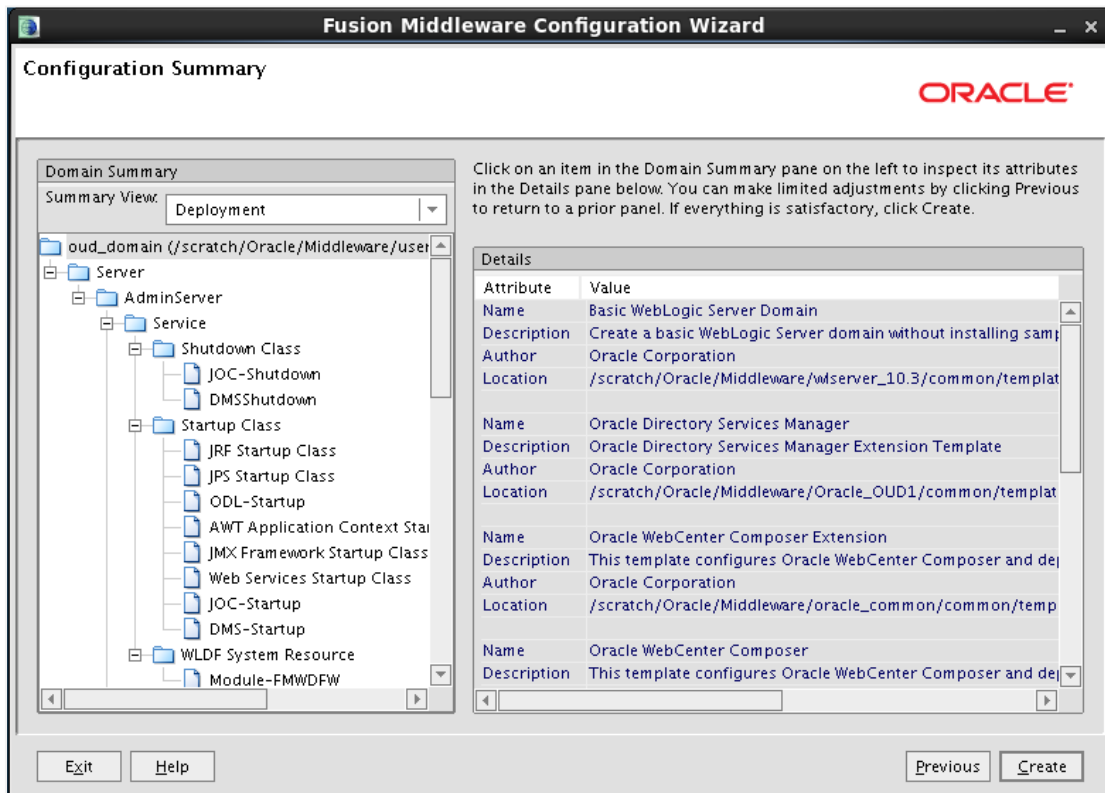
At the bottom of the window, there are four buttons: 'Exit', 'Help', 'Previous', and 'Next'.

Specify the following details of the Administration Server in this screen:

- Name
- Listen address
- Listen port
- SSL listen port (Only if SSL is enabled)
- SSL enabled

After entering the details, click on Next.

Configuration Summary Screen



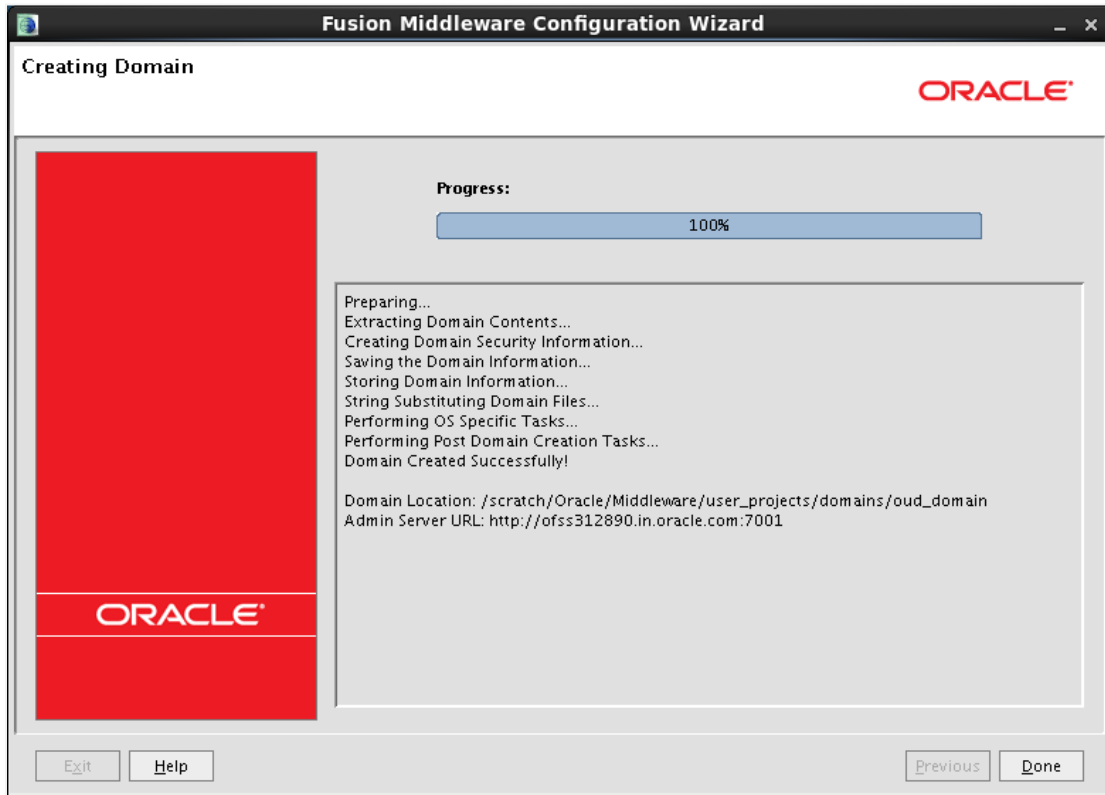
Review the domain configuration on this screen.

If you want to make any changes to the configuration before creating the domain, click Previous to navigate to the selected screen where you want to edit the details.

Click Create to start creating the domain.

By default, a new Weblogic Domain to support Oracle Unified Directory is created in the <Oracle_Home>/user_projects/domains directory.

Creating Domain Screen



This screen summarizes the domain creation information that was just completed.

Click Done to dismiss the screen.

After configuring Oracle Unified Directory in a Weblogic Administration Domain, the Admin Server should be started to access the Directory Service on browser using the URL http://<ldap_hostname>:<ldap_port>/odsm

9.3 Creating the Attributes, Object Class, Users, Groups and Adding Optional Attributes on LDAP Server

1. To create Attributes

- Copy the “attributes.ldif” file from **OBDX_Installer/installables/oud** directory to a location on the server where OUD is installed and switch to the following directory:

```
cd <Oracle_Home>/Oracle_OUD1/bin
```

- Now, execute the below command:

```
./ldapmodify -h localhost -p <ldap_port> -D "ldap_user" -w <ldap_password> -a -f <file_location>/attributes.ldif
```

- Login to ODSM Console. E.g. <http://<hostname>:<port>/odsm> and under the **Schema** tab check if the following attributes are created:
 - accountType

- businessUnit
- deviceuuid
- fbld
- fcManager
- fcRoleId
- fcUserType
- homeBranch
- otpseed
- partyId
- partyName
- targetUnit

2. To create a Object Class

- Copy the “objectclass.ldif” file from `<Installer_Home>/installables/oud` directory to a location on the server where OUD is installed and switch to the following directory:

```
cd <Oracle_Home>/Oracle_OUD1/bin
```

- Now, execute the below command:

```
./ldapmodify -h localhost -p <ldap_port> -D "ldap_user" -w  
<ldap_password> -a -f <file_location>/objectclass.ldif
```

- Login to ODSM Console. E.g. `http://<hostname>:<port>/odsm` and under the **Schema** tab check if the ‘fcPerson’ and ‘fcRole’ object class is created.

3. To create Groups

- Copy the “usergroup.ldif” file from `<Installer_Home>/installables/oud` directory to a location on the server where OUD is installed and switch to the following directory:

```
cd <Oracle_Home>/Oracle_OUD1/bin
```

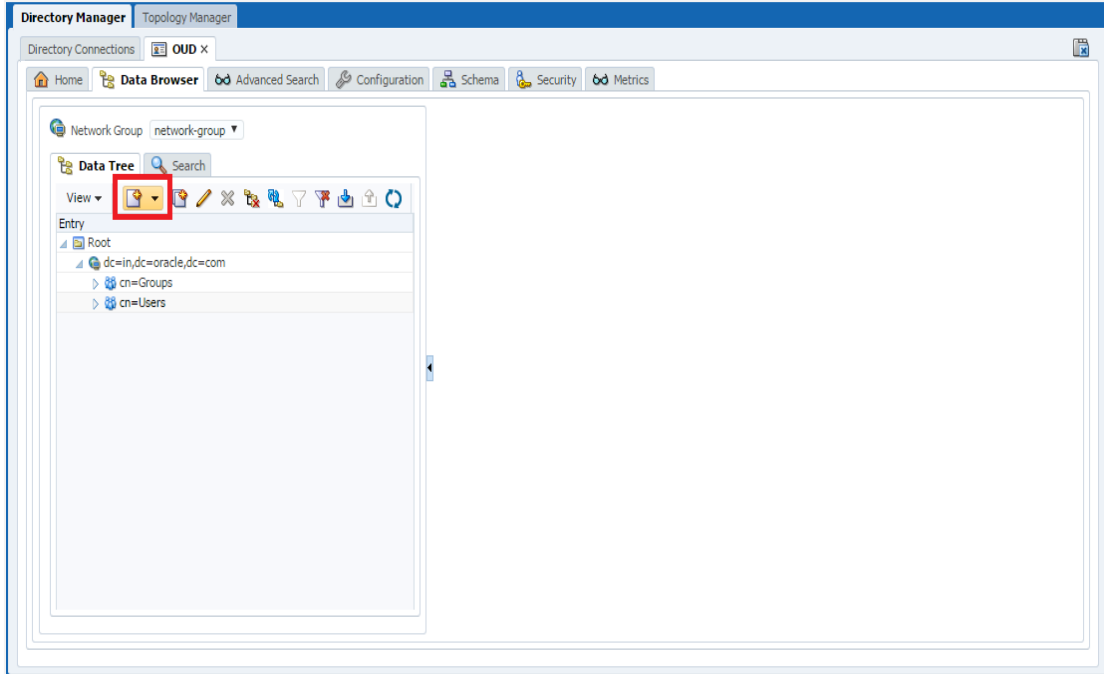
- Now, execute the below command:

```
./ldapmodify -h localhost -p <ldap_port> -D "ldap_user" -w  
<ldap_password> -a -f <file_location>/usergroup.ldif
```

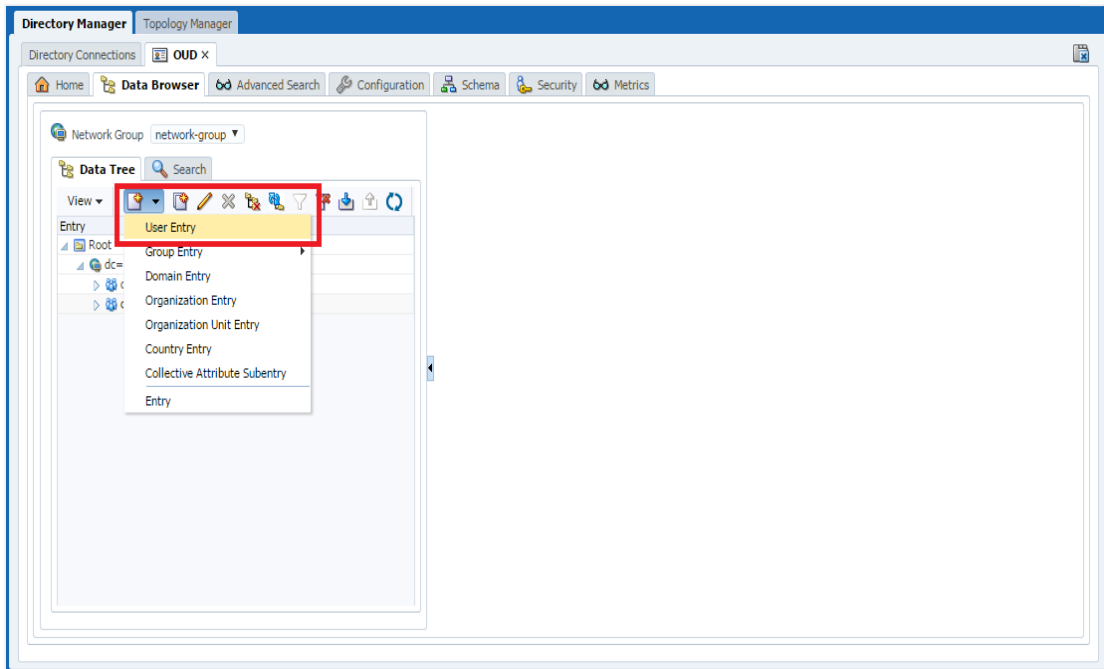
- Login to ODSM Console. E.g. `http://<hostname>:<port>/odsm` and under the **Data Browser** tab check if the groups are created.

4. To create User and mapping it to the Group

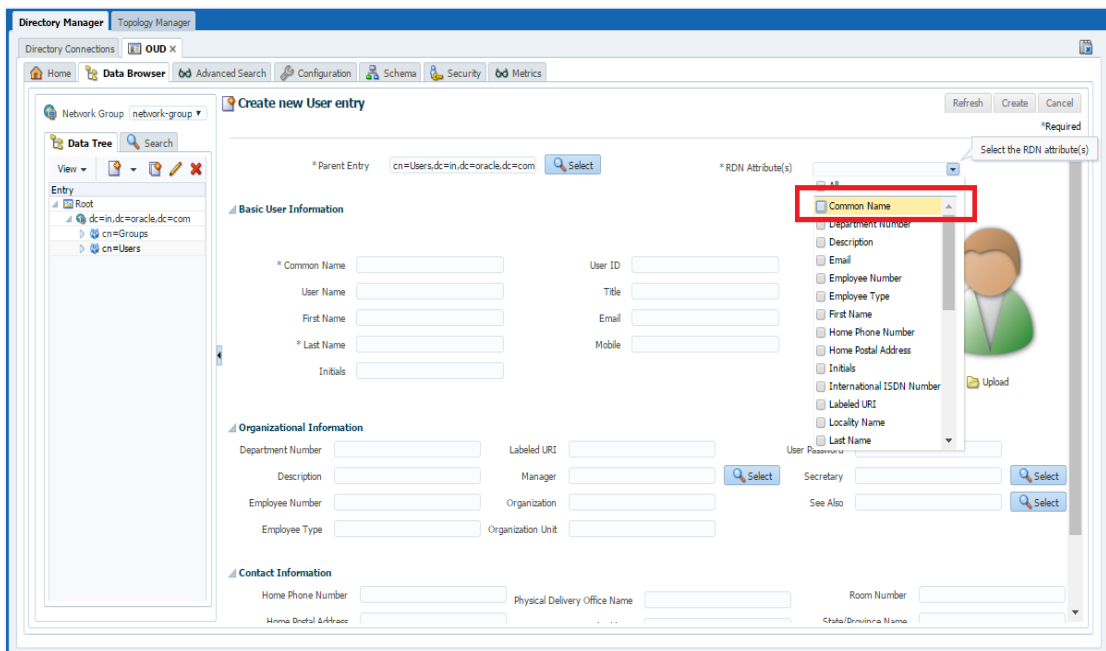
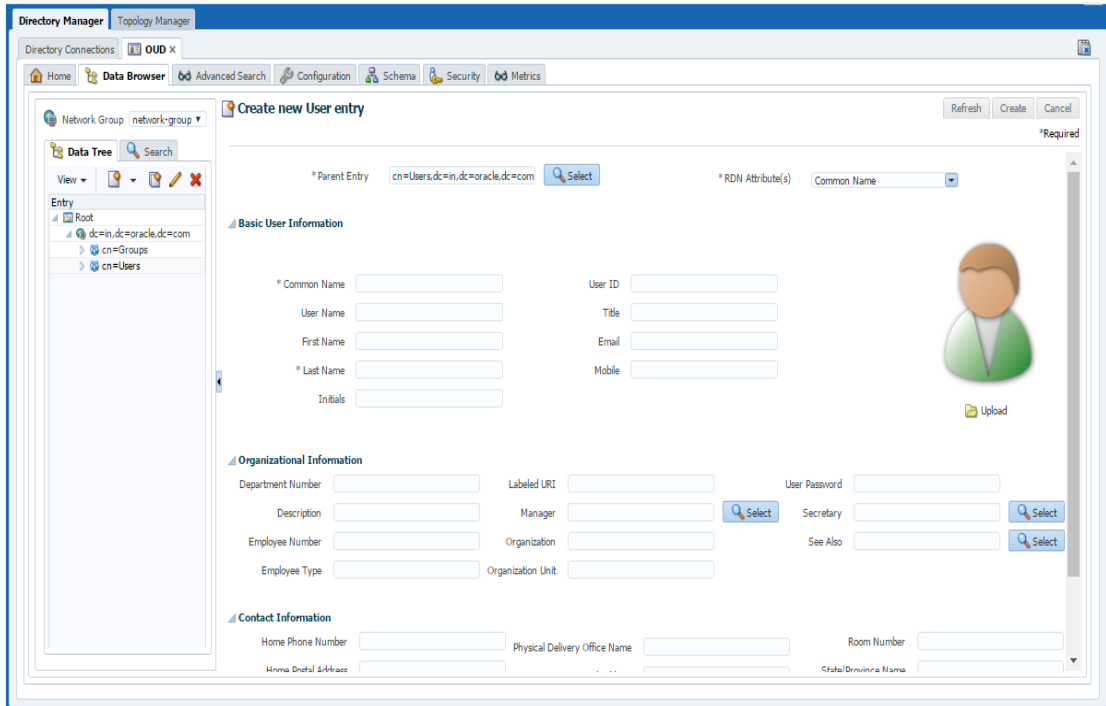
- Login to ODSM Console. E.g. `http://<hostname>:<port>/odsm`.



- Under the Data Browser tab, click on the Add icon



- Select **User Entry** from the list.



- Now, uncheck **Common Name** from the **RDN Attributes** dropdown list.

Directory Manager | Topology Manager

Directory Connections | OUD X

Home | Data Browser | Advanced Search | Configuration | Schema | Security | Metrics

Network Group: network-group

Data Tree

Entry: Root, dc=in,dc=oracle,dc=com, cn=Groups, cn=Users

Create new User entry

Parent Entry: cn=Users,dc=in,dc=oracle,dc=com

RDN Attribute(s): User ID

Basic User Information

Common Name, User Name, First Name, Last Name, Initials, User ID, Title, Email, Mobile

Organizational Information

Department Number, Description, Employee Number, Employee Type, Labeled URI, Manager, Organization, Organization Unit

Contact Information

Home Phone Number, Physical Delivery Office Name, Room Number, Home Postal Address, Other/Division Name

- And, Check the **User ID** Attribute checkbox.

Directory Manager | Topology Manager

Directory Connections | OUD X

Home | Data Browser | Advanced Search | Configuration | Schema | Security | Metrics

Network Group: network-group

Data Tree

Entry: Root, dc=in,dc=oracle,dc=com, cn=Groups, cn=Users

Create new User entry

Parent Entry: cn=Users,dc=in,dc=oracle,dc=com

RDN Attribute(s): User ID

Information

You have unsaved changes.

Basic User Information

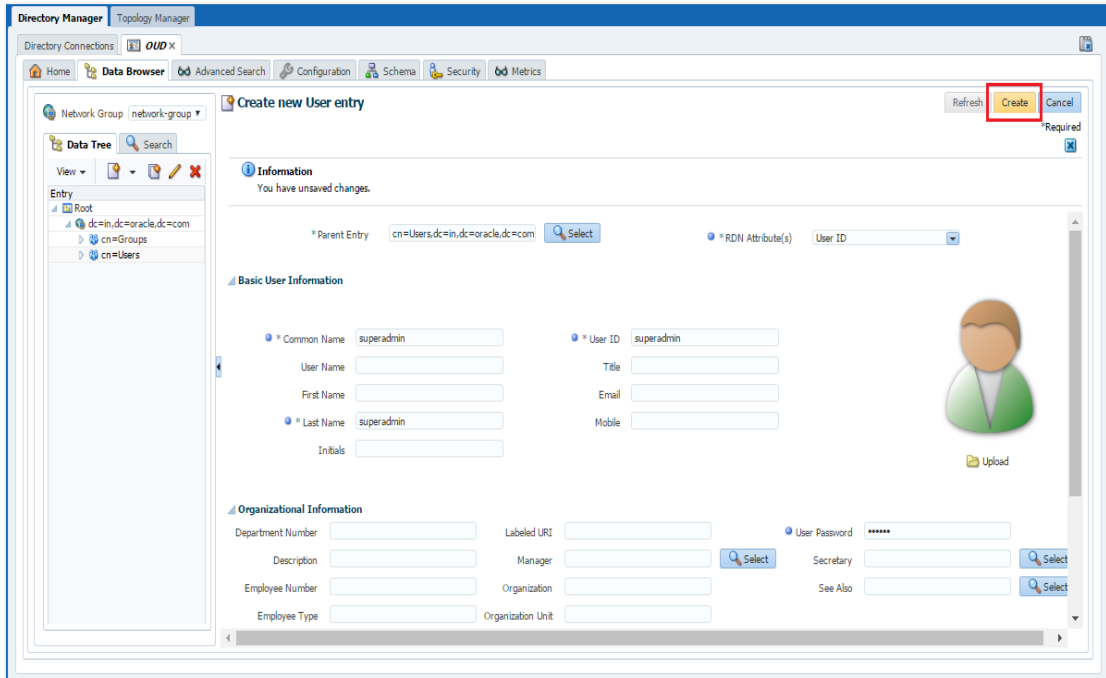
Common Name: superadmin, User ID: superadmin

Last Name: superadmin

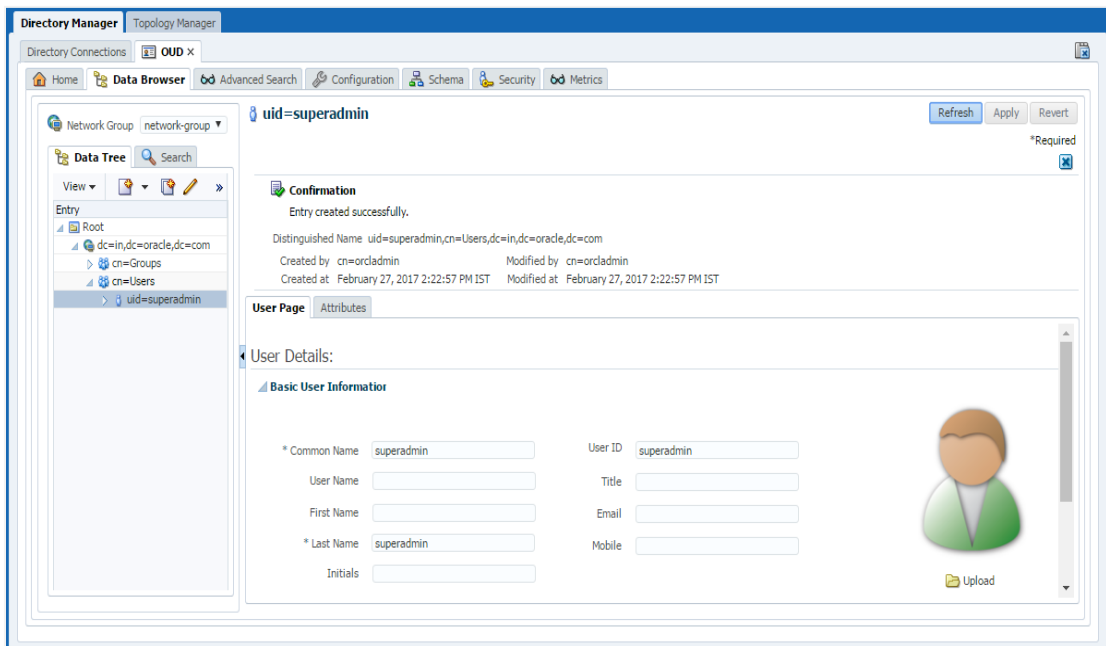
Organizational Information

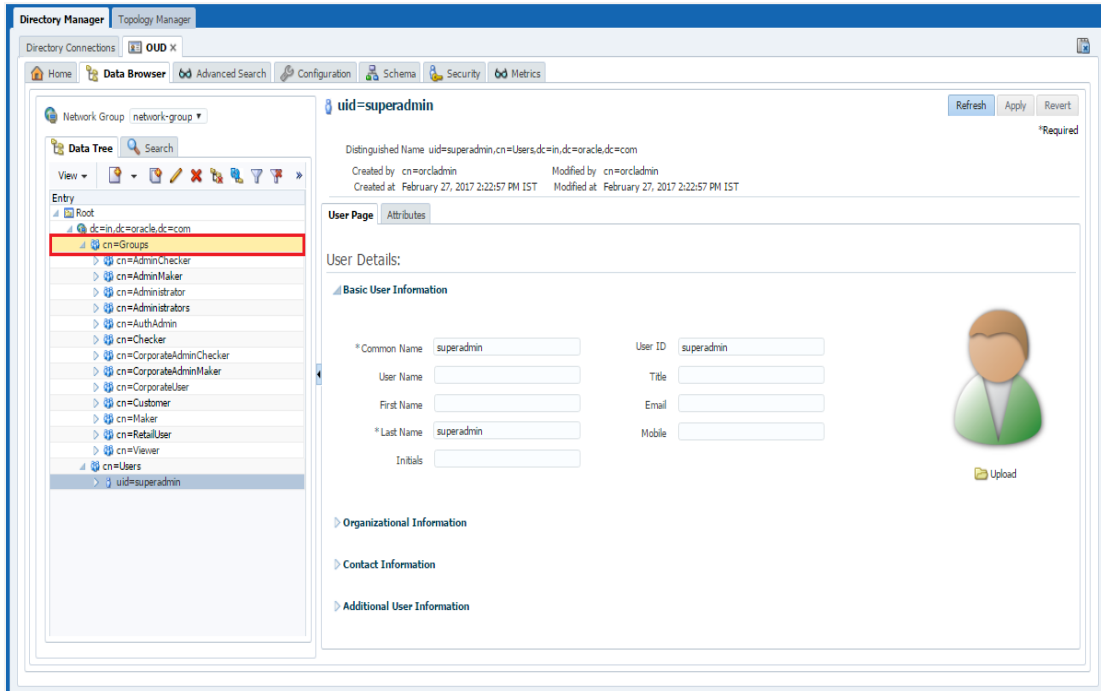
User Password: *****

- Add the values in the mandatory fields **Common Name**, **Last Name**, **User ID** and **User Password**.

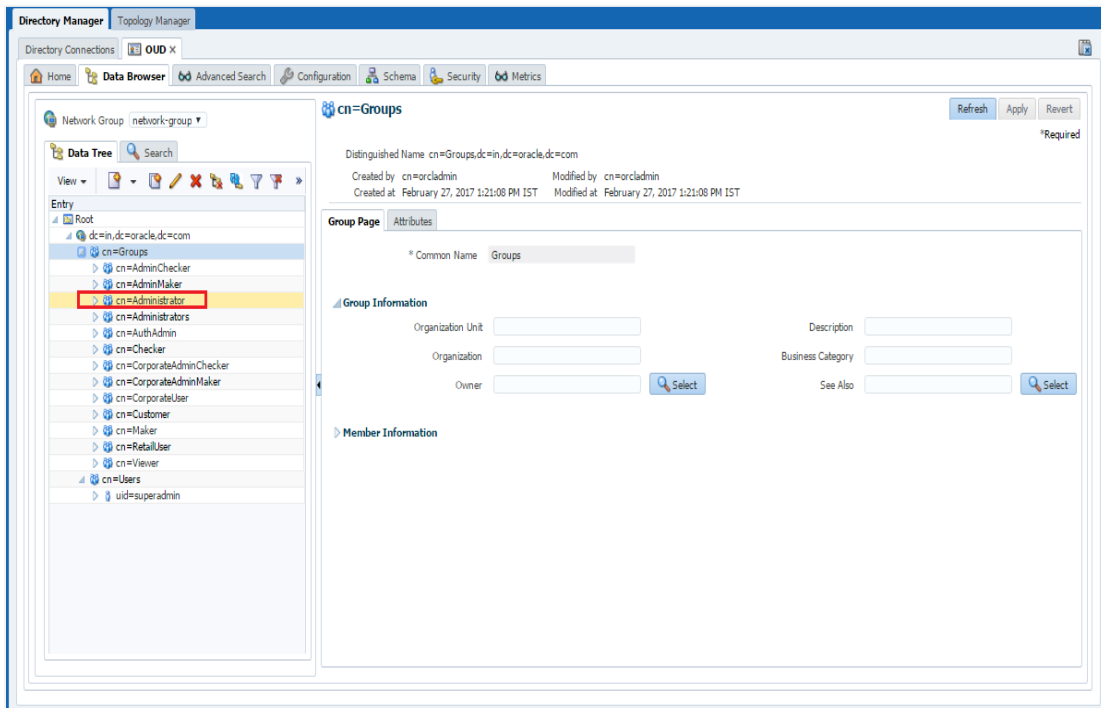


- Click on **Create** and the user entry will be created.

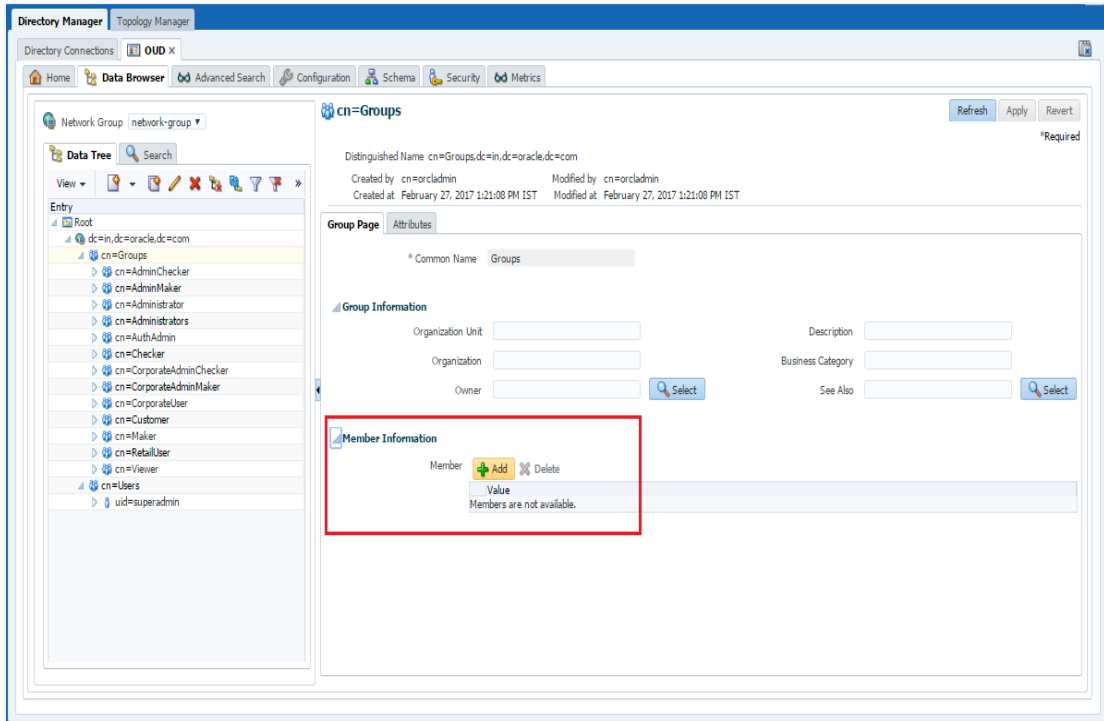




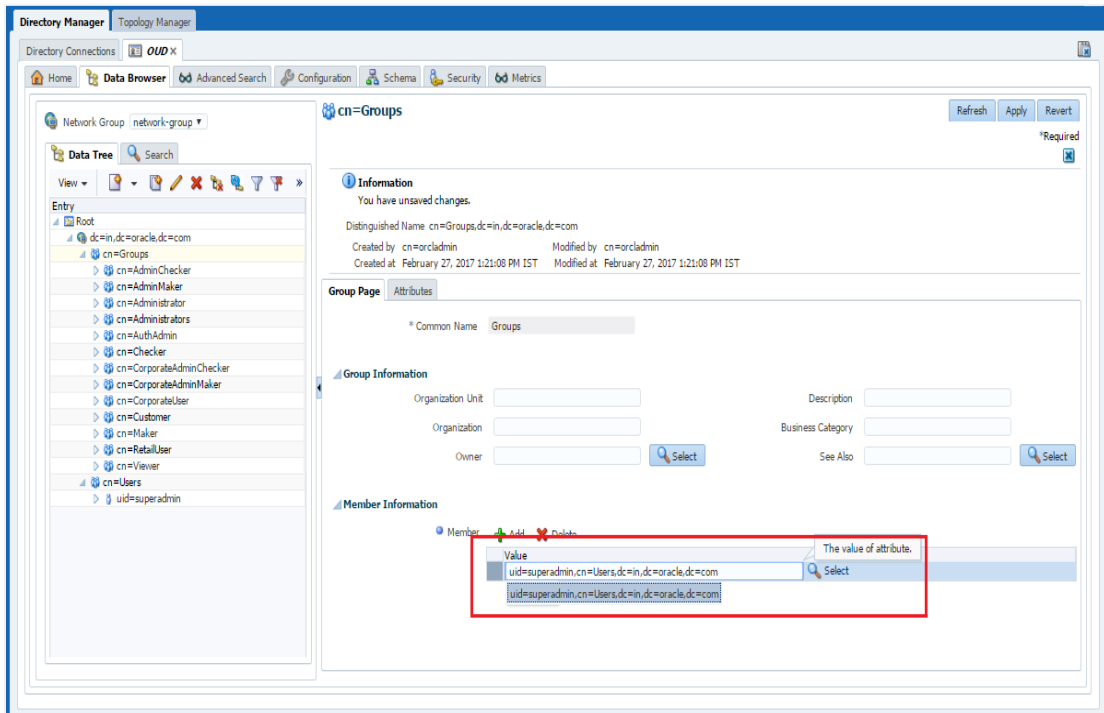
- Now, expand the Groups tab.



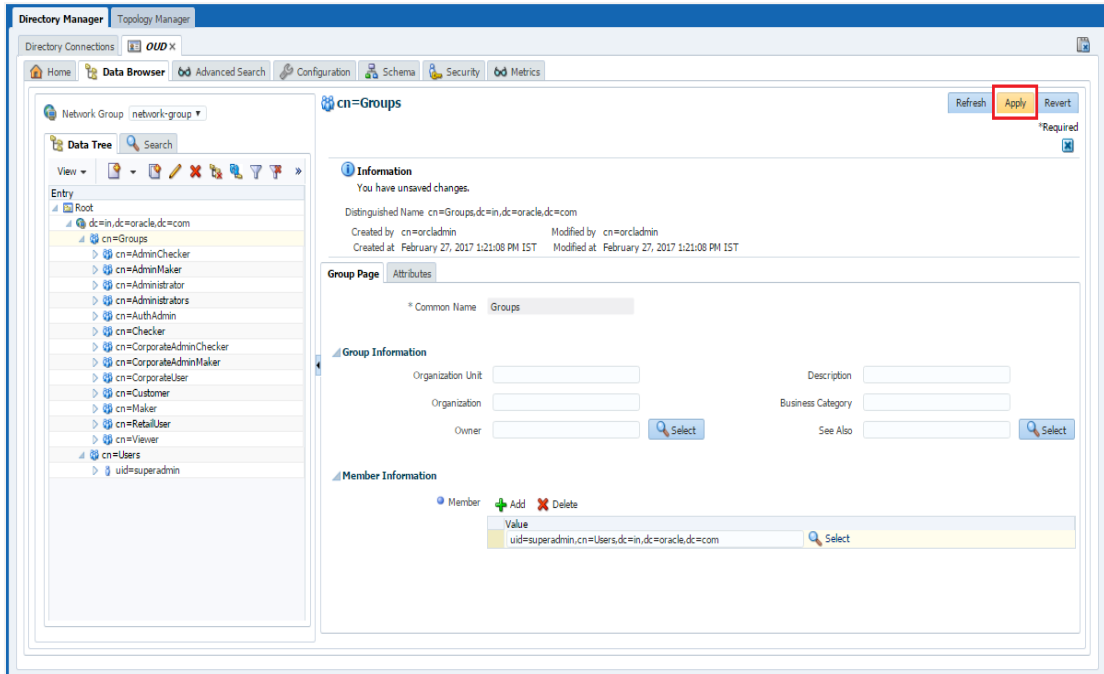
- Select **Administrator** Group.



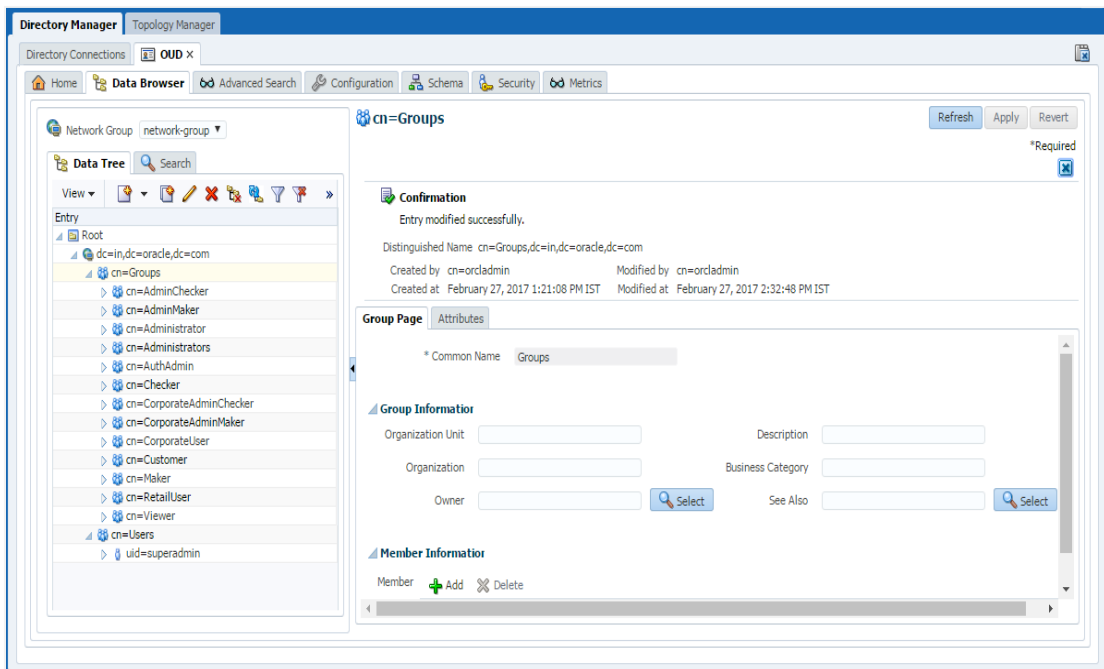
- Expand **Member Information** and click on **Add** button.



- Enter the entry of the user created in the previous steps.

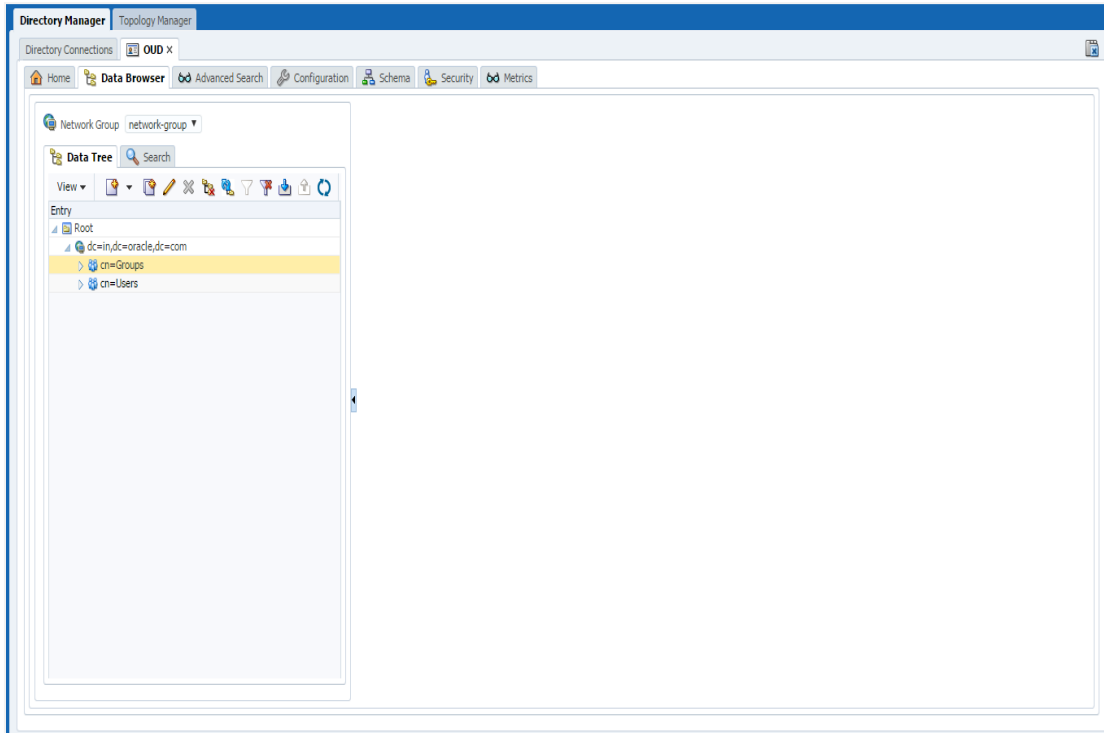


- Click on Apply to save the changes.

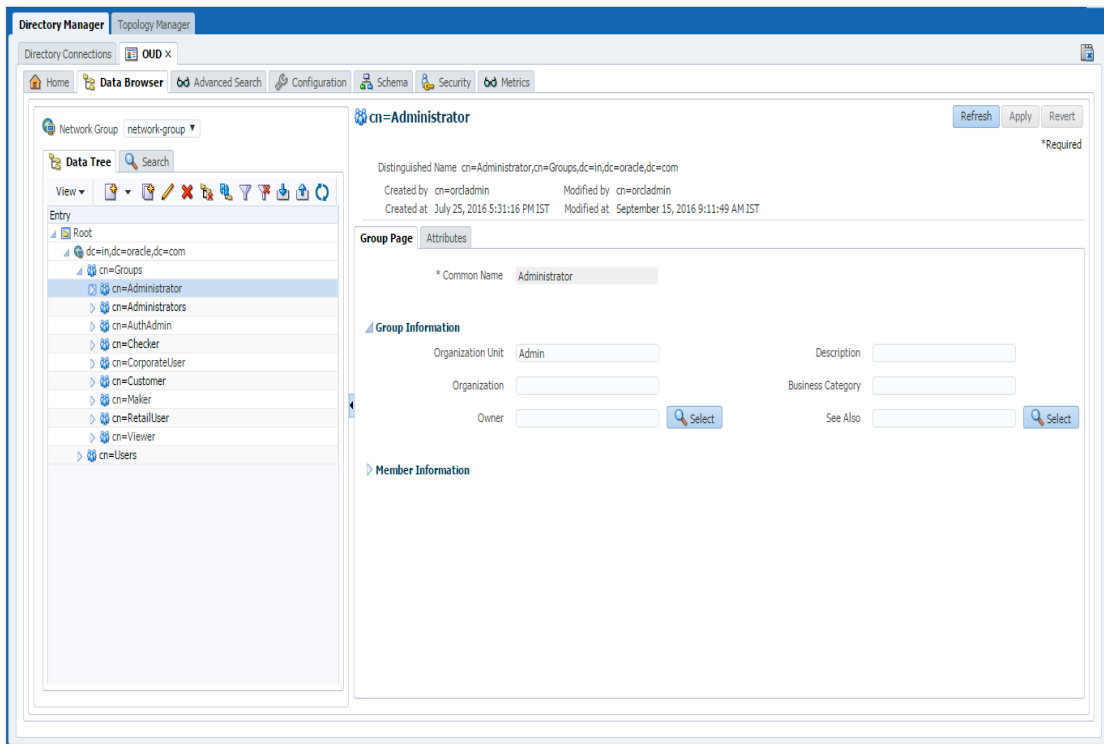


5. Adding Optional Attributes

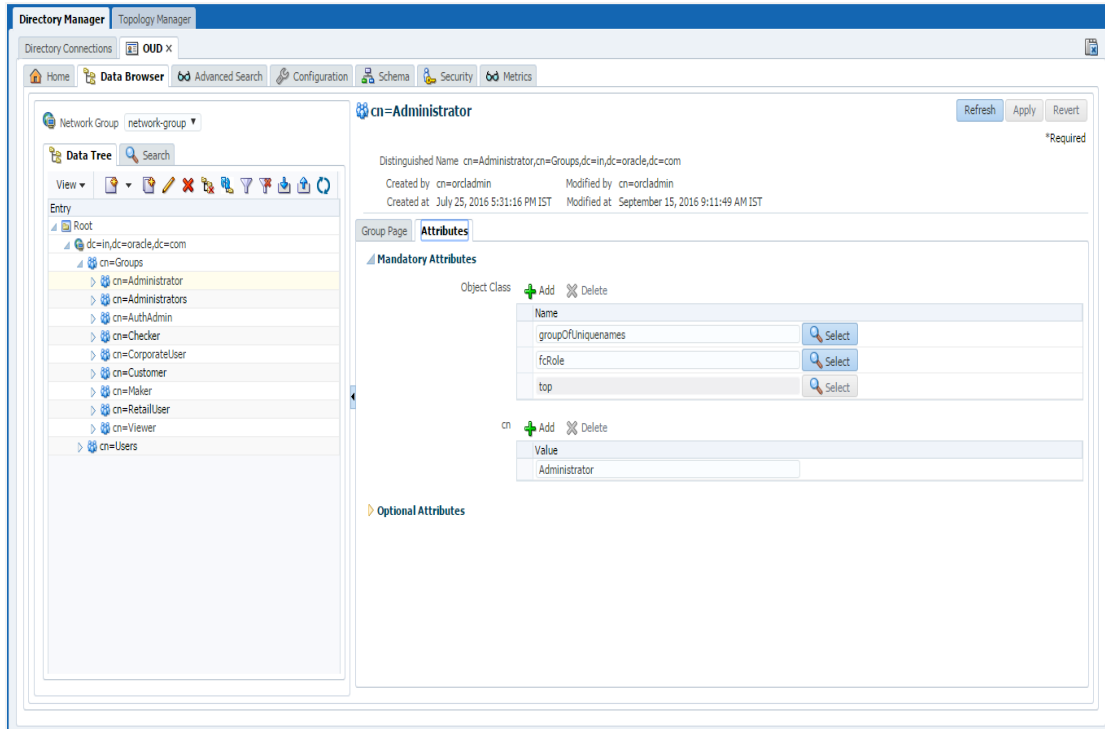
- Login to ODSM Console. E.g. ***http://<hostname>:<port>/odsm***.



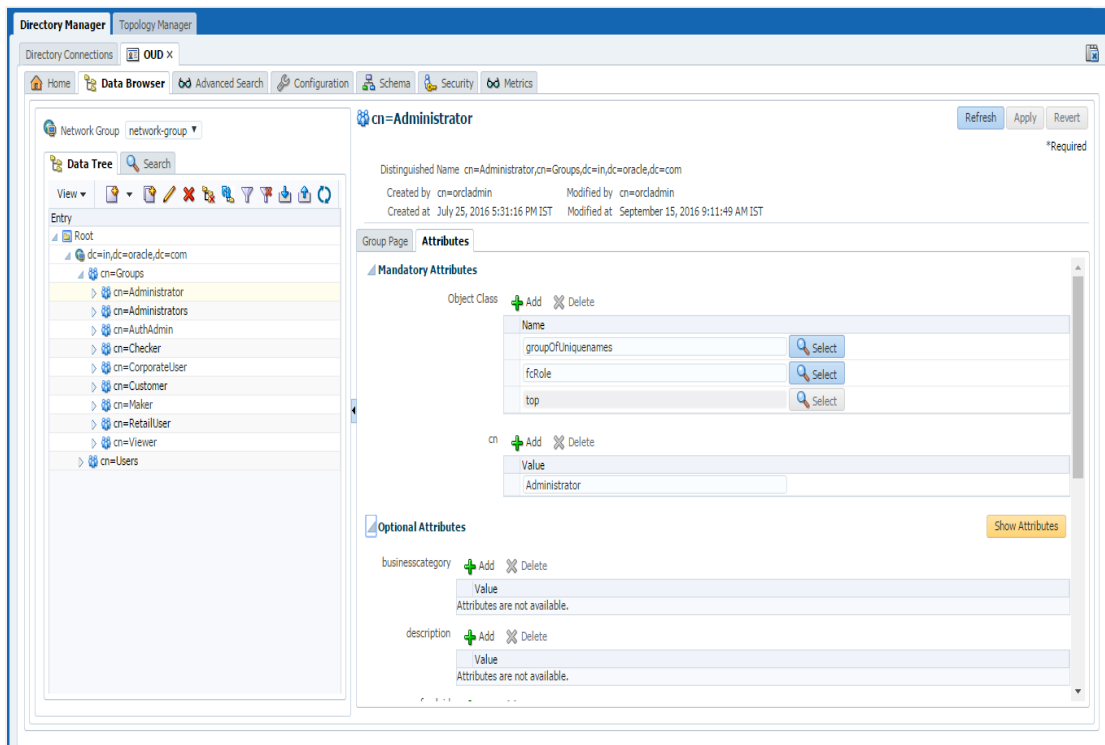
- Under the Data Browser tab, expand the Groups



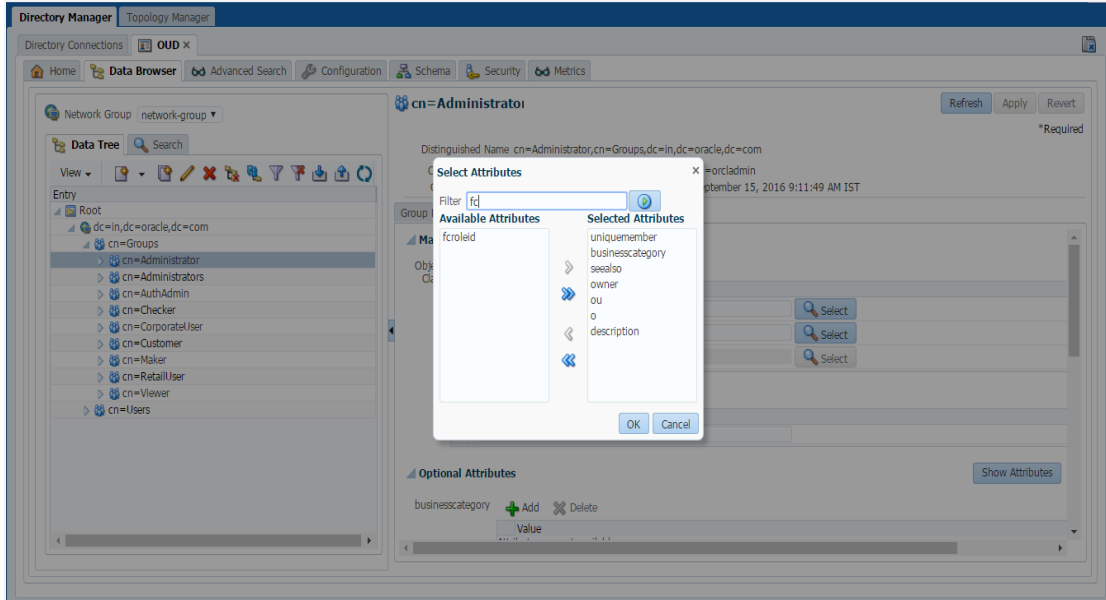
- Select a particular group, e.g. **cn=Administrator**.



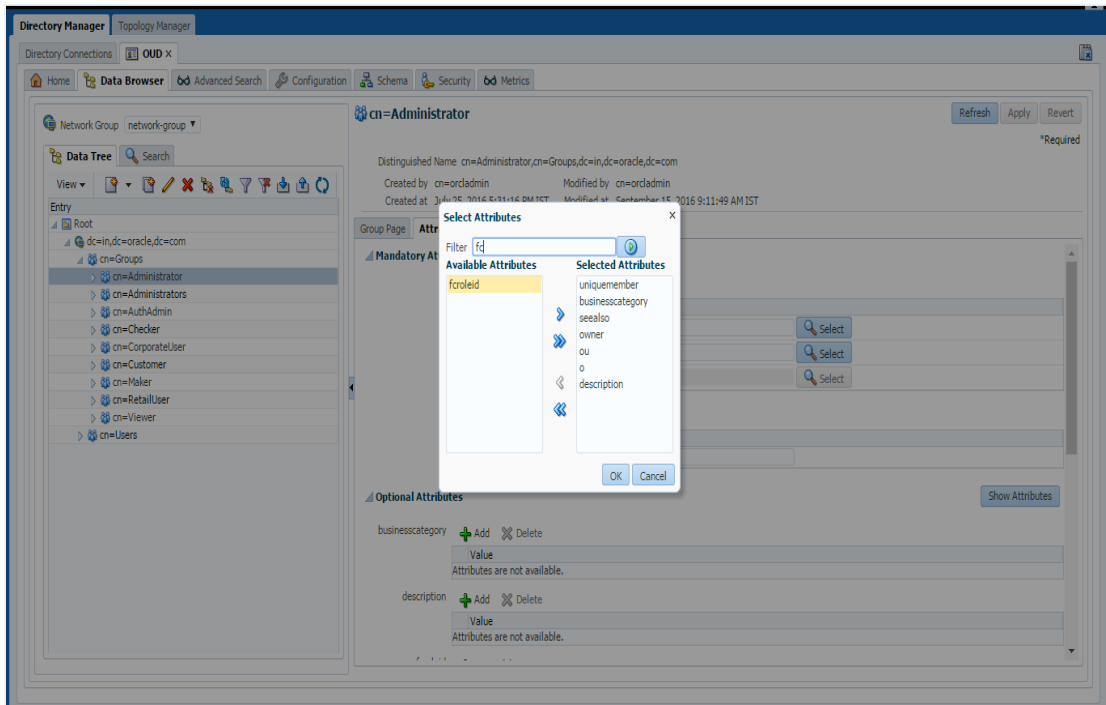
- Now, under the Attributes tab, expand the Optional Attributes.



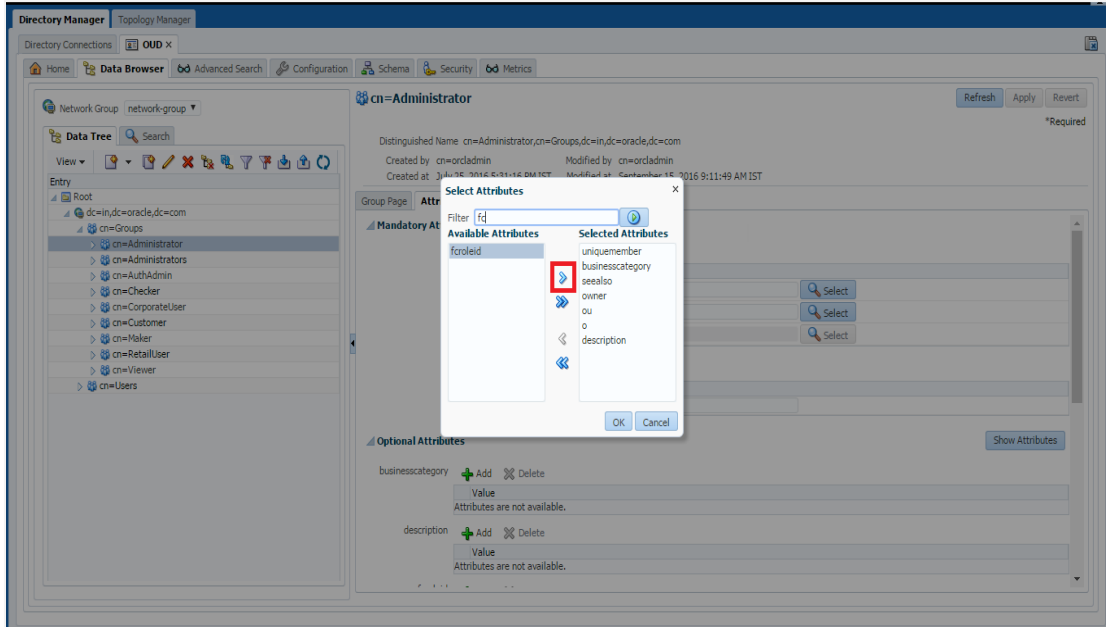
- Click on Show Attributes button.



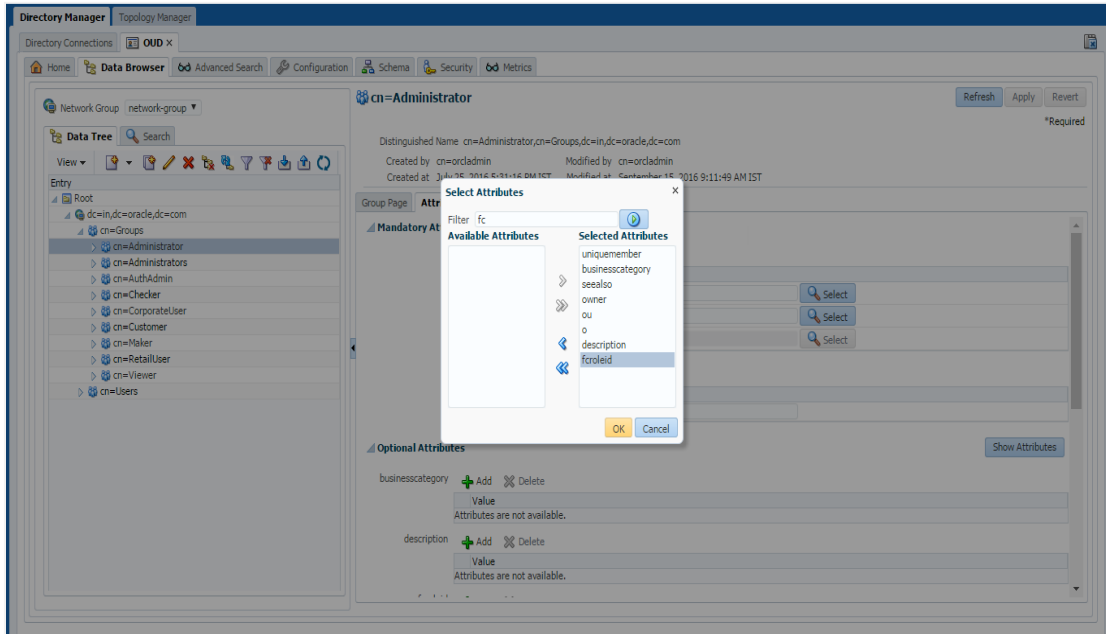
- In the Filter type “fc” and click on Search button. It will show a entry for “fcroleid”.



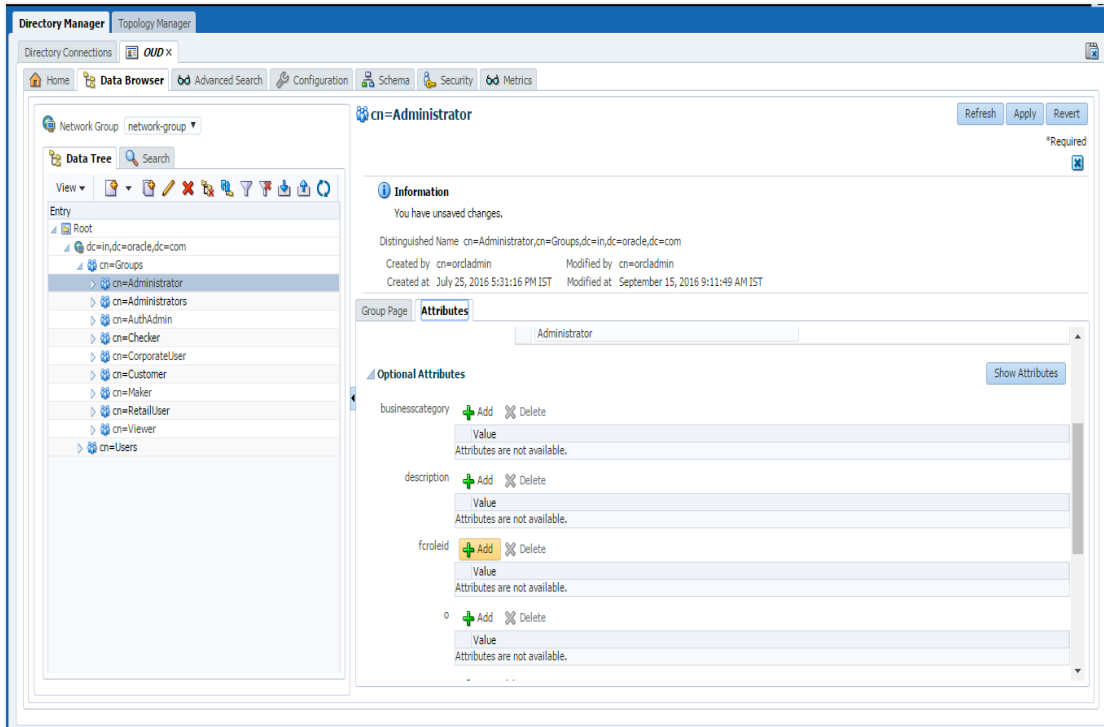
- Select the entry “fcroleid”.



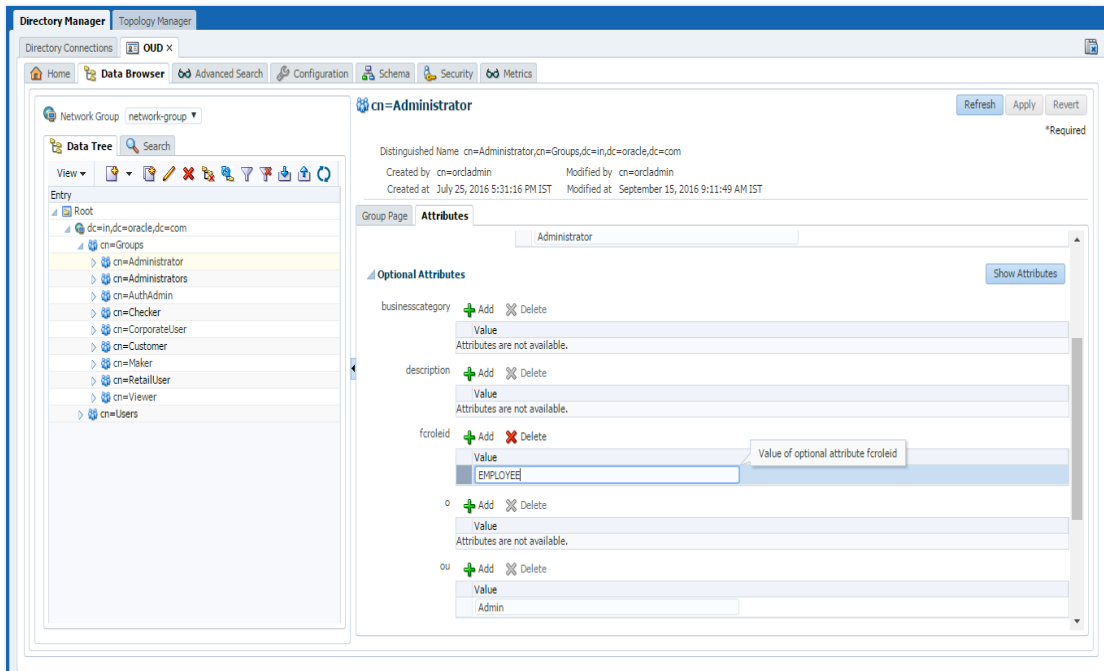
- Click on the arrow to move the entry on right side.



- Click Ok and the attribute will be added to the Optional Attribute list.

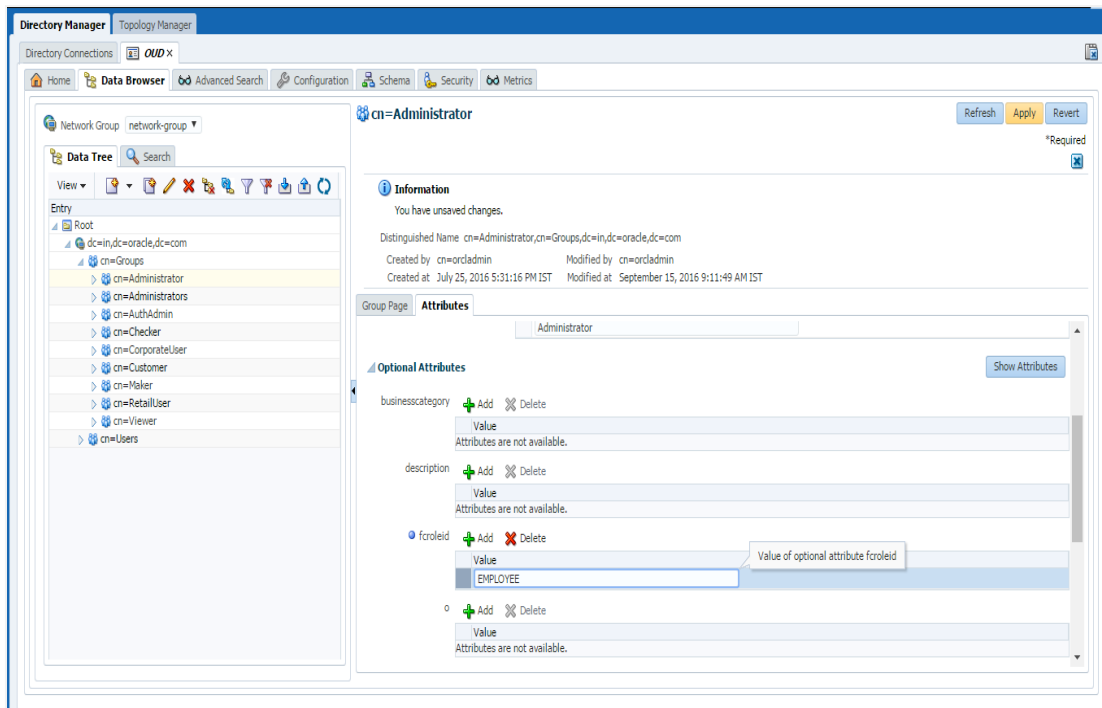


- Now, Click on the '+ Add' button of "froleid" attribute.



- Refer to the table below and enter the value mentioned for the respective Group which is being modified. E.g. for "cn=Administrator" group the value is "EMPLOYEE".

Groups	Value for 'froleid' Attribute
cn=Adminstartor	EMPLOYEE
cn=AuthAdmin	EMPLOYEE
cn=Checker	CORPORATE
cn=CorporateUser	CORPORATE
cn=Customer	RETAIL
cn=Maker	CORPORATE
cn=RetailUser	RETAIL
cn=Viewer	CORPORATE
cn=AdminChecker	EMPLOYEE
cn=AdminMaker	EMPLOYEE
cn=CorporateAdminChecker	CORPORATE
cn=CorporateAdminMaker	CORPORATE



- Click on Apply to save the changes.

10. Oracle Business Intelligence Publisher Installation

To install Oracle Business Intelligence Installation click [here](#).