

Oracle Banking Digital Experience

**Installer Pre-Requisite Setup Guide
Release 18.3.0.0.0**

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ORACLE®

Installer Pre-Requisite Setup Guide

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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=accandid=info> or visit

<http://www.oracle.com/pls/topic/lookup?ctx=accandid=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 of pre-requisite software's

1.5 Related Information Sources

For more information on Oracle Banking Digital Experience Release 18.3.0.0.0, 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 18.3.0.0.0 Installer.

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

2.1 Software List

| Software Name | Version | Mandatory Software |
|---|------------------|--------------------|
| Operating System | ORACLE LINUX 7.x | Y |
| Oracle Database | 12.2.0.1.0 | Y |
| Oracle Java Development Kit | 1.8.0_172 | Y |
| Oracle Weblogic Infrastructure | 12.2.1.3.0 | Y |
| Oracle HTTP Server | 12.2.1.3.0 | Y |
| Oracle Identity and Access Management Suite (IAM) | 12.2.1.3.0 | N* |
| LDAP (OUD) | 12.2.1.3.0 | N* |
| Oracle Business Intelligence Publisher | 12.2.1.3.0 | N** |
| IBCS | 18.1.1 | N*** |
| Python | 2.7.5 | Y |
| Python Package: cx_Oracle | 5.2.1 | Y |
| Python Package: urwid | 1.3.1 | Y |

| Software Name | Version | Mandatory Software |
|---|----------|------------------------------------|
| Oracle Client | 12.2.0.1 | Y |
| Oracle Outside In | 8.5.4 | Required for MS Excel file uploads |
| <p>* Required if OBDX Native Authentication is not used and OAM is managing Authentication</p> <p>** Required if Integration with Oracle Business Intelligence Publisher is needed.</p> <p>*** Required if OBDX Chat bot Banking Features are used.</p> | | |

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 and Oracle client version by executing the command as shown below:

```
[devops@ ~]$ python -V
Python 2.7.5
[devops@ ~]$
```

```
[root@ ~]# rpm -qa |grep oracle
oraclelinux-release-7.3-1.0.4.el7.x86_64
oracle-logos-70.0.3-4.0.7.el7.noarch
oracle-instantclient12.2-basic-12.2.0.1.0-1.x86_64
```

Note: Below 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.

[Home](#)

3. Installing and Configuring Weblogic Infrastructure 12c

This chapter describes the steps for installing the Weblogic Infrastructure version 12.2.1.3.0:

- Section 3.1, "Installing Stand-alone Weblogic"

3.1 Installing Stand-alone Weblogic Infrastructure

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 Infrastructure"
- 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-8u172-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-8u172-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_172
```

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

3.1.2 Installing Weblogic

- Obtain Weblogic Infrastructure 12.2.1.3.0 zip from the Oracle Fusion Middleware Downloads. Extract the downloaded zip to get **fmw_12.2.1.3.0_infrastructure.jar** file to a directory.
- Now to start the installer, go to the directory where you have extracted the jar file.
- Start the installer from the same directory using the below command:

```
java -jar <Path>/fmw_12.2.1.3.0_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 are 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

The screenshot shows a window titled "Oracle Fusion Middleware 12c Infrastructure Installation" with the Oracle logo and "FUSION MIDDLEWARE" text. The main heading is "Installation Inventory Setup".

Central Inventory Directory
Enter the Central inventory directory for all your oracle installations. The installer will create a new central inventory directory if it does not exist.

Inventory Directory:
Enter the full path for the directory.

Operating System Group :
Specify a group with write permission to the inventory directory

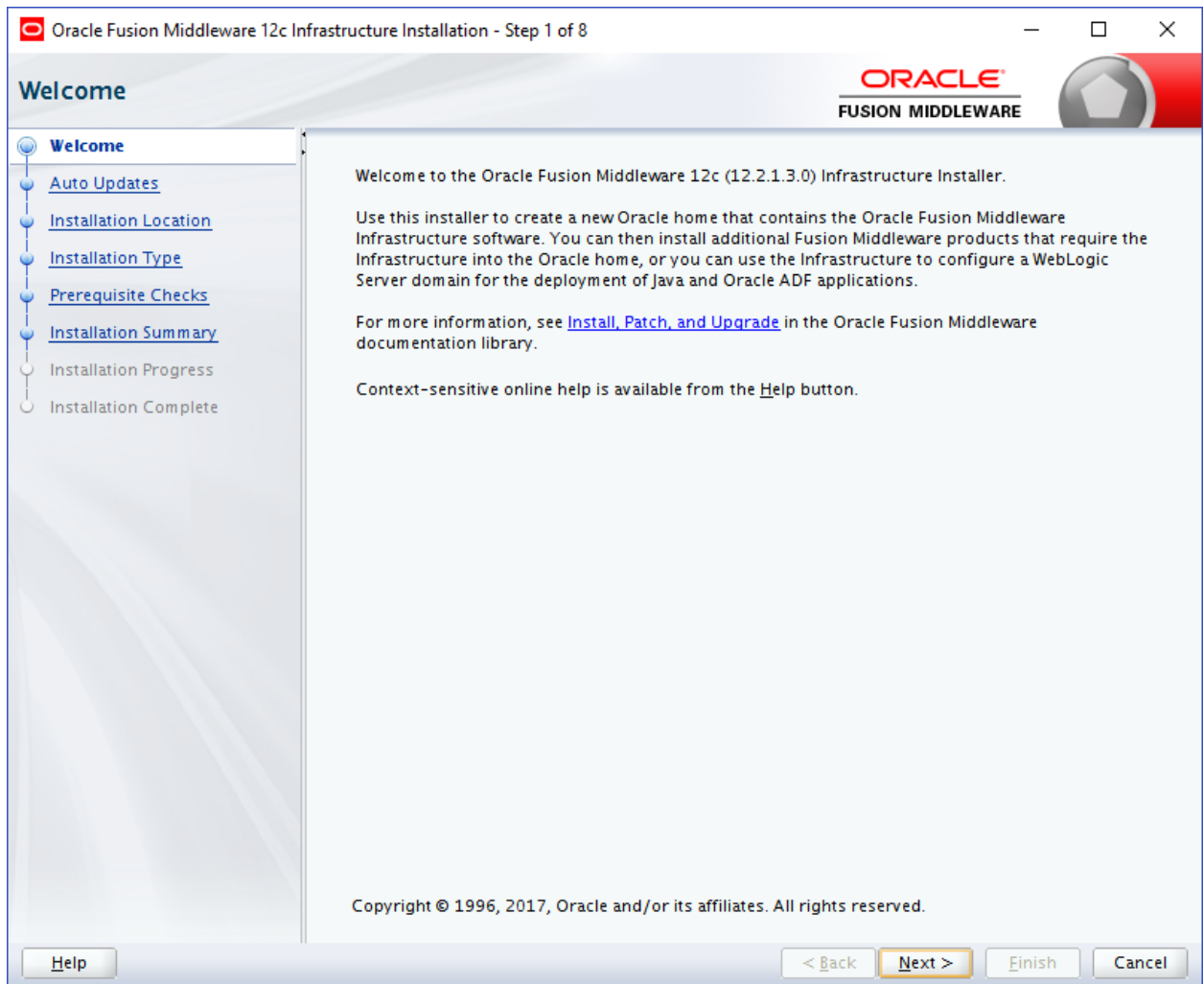
Central Inventory Pointer File
Click OK to create a script (createCentrallInventory.sh) in the inventory directory. Run this script to create a pointer file, which is used to identify the location of the central inventory for future installations and administrative operations, such as patching and upgrade.

Buttons:

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

Oracle Fusion Middleware 12c Infrastructure Installation - Step 2 of 8

Auto Updates

ORACLE
FUSION MIDDLEWARE

Welcome

Auto Updates

Installation Location

Installation Type

Prerequisite Checks

Installation Summary

Installation Progress

Installation Complete

Skip Auto Updates

Select patches from directory

Location:

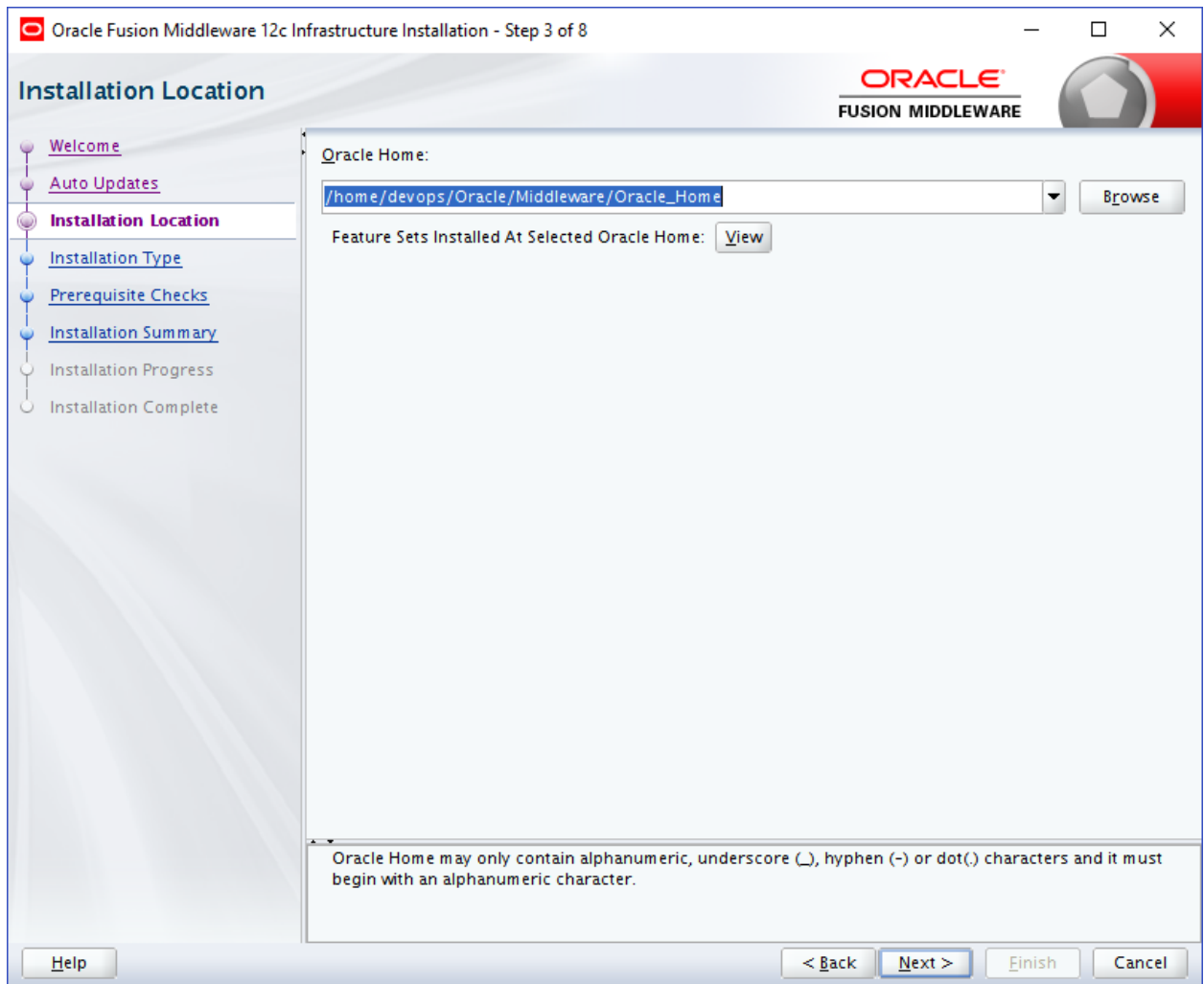
Search My Oracle Support for Updates

Username:

Password:

Select “Skip Auto Updates” option and click Next to continue. (Kindly follow recommended practices regarding updates depending on the setup requirements or usage.)

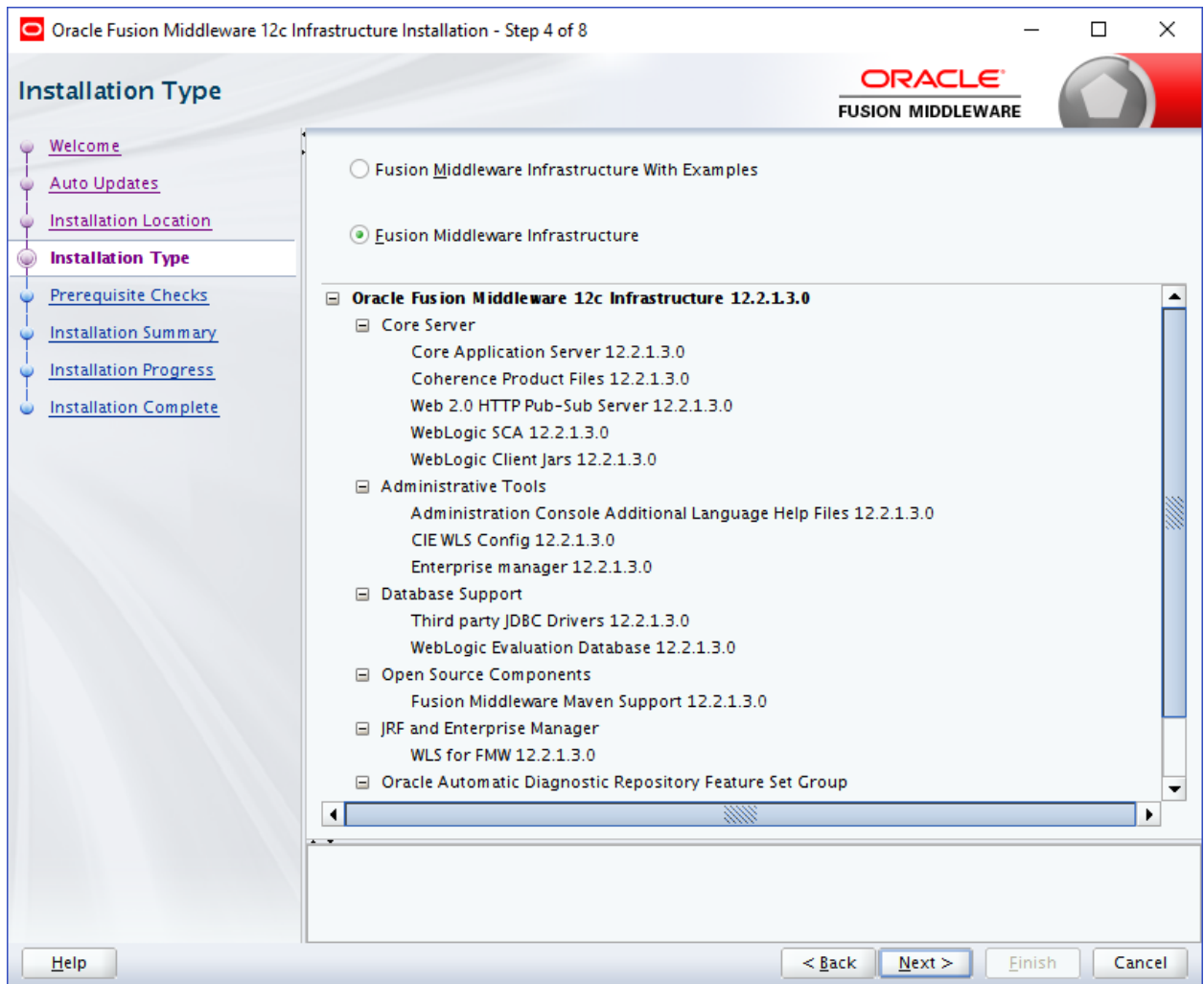
Specify Installation Location Screen



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

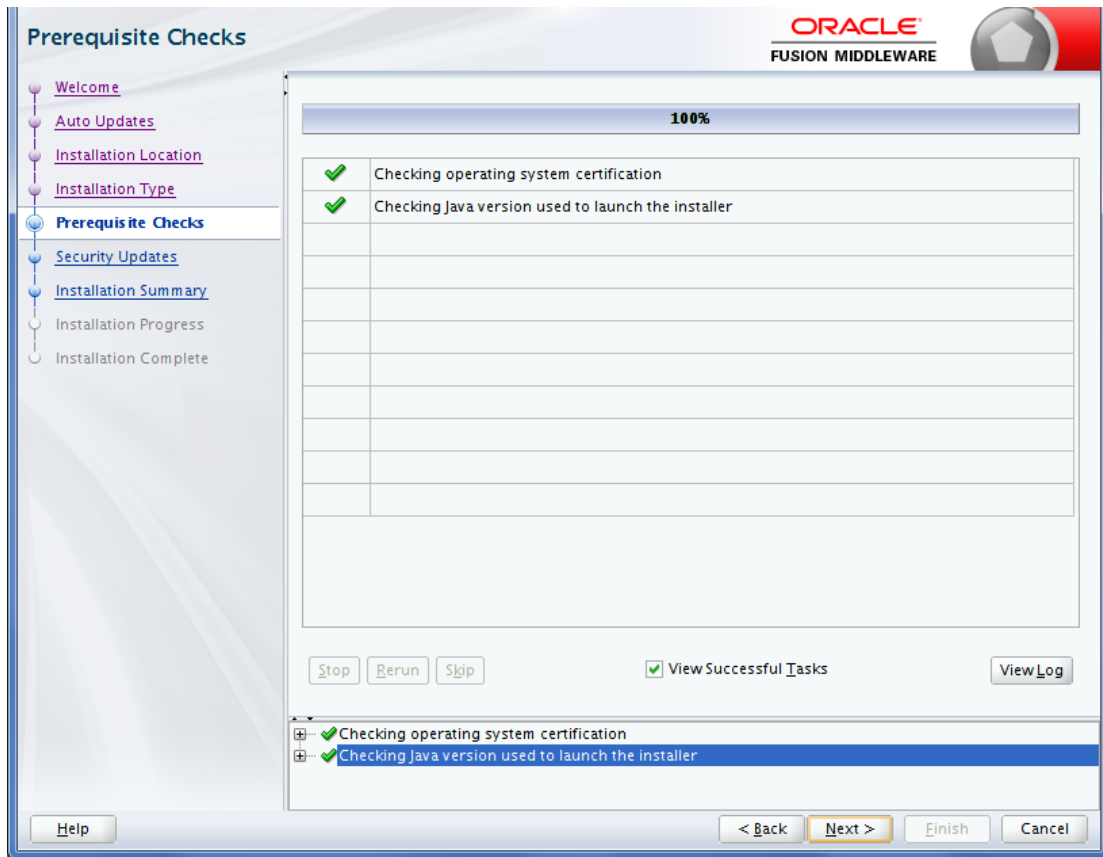


Following are the installation types:

- Fusion Middleware Infrastructure with Examples
- Fusion Middleware Infrastructure

Select Fusion Middleware Infrastructure and Click Next to continue.

Prerequisite Checks Screen

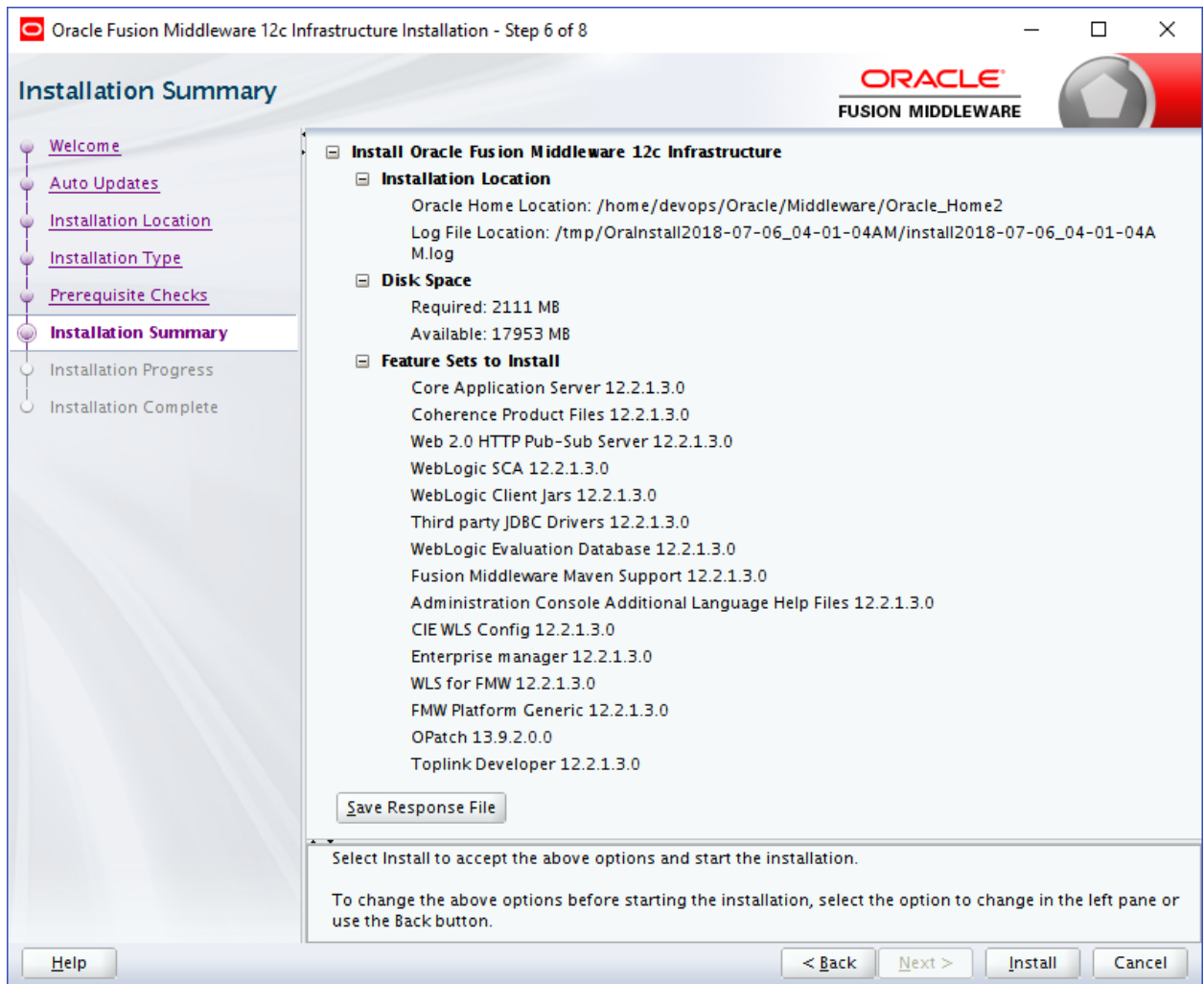


This screen shows whether the system requirements are met in order to install the software.

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.

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.

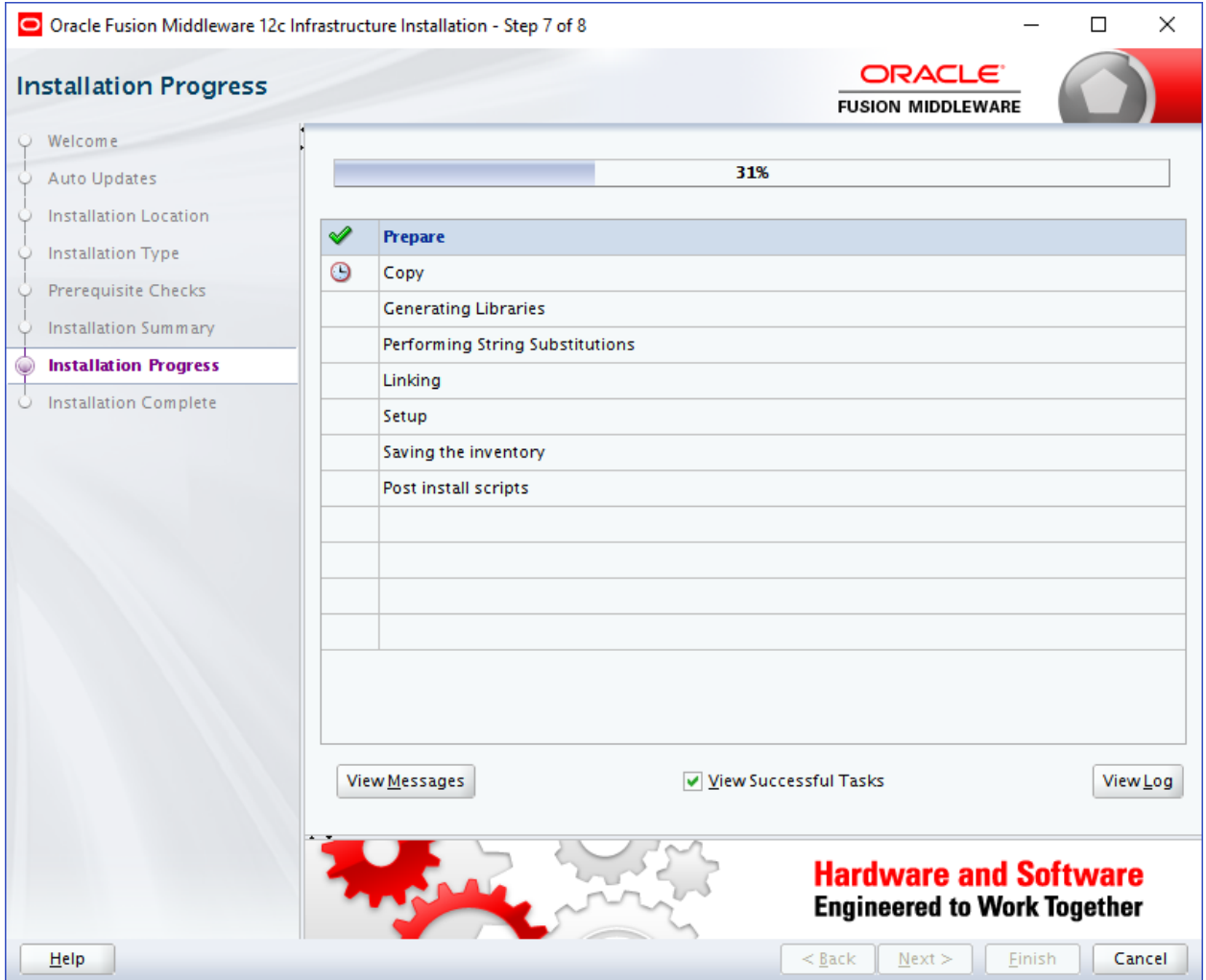
If you want to make any changes to the configuration before starting the installation, use the navigation pane, and select the topic you want to edit.

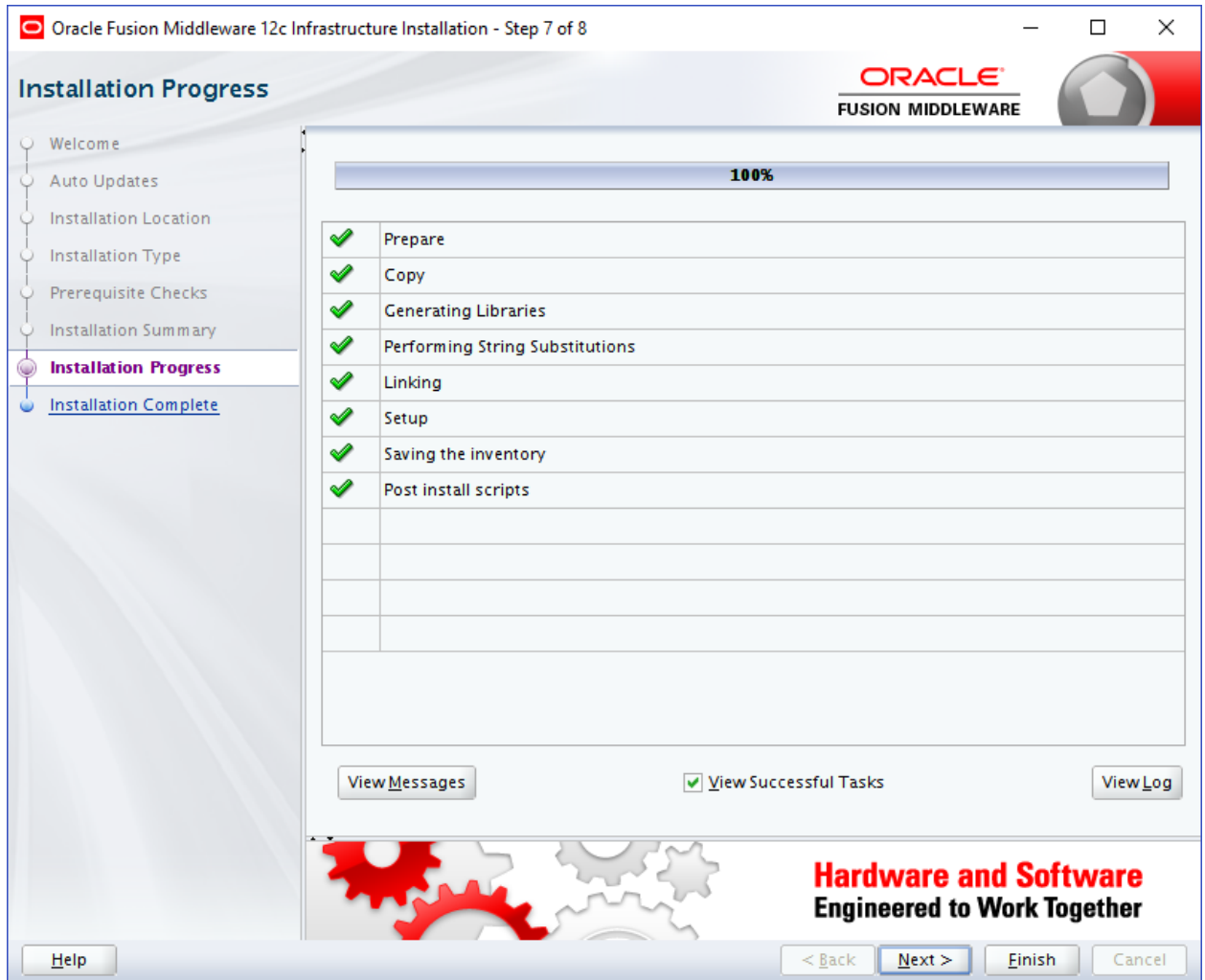
If you want to save this configuration to a text file (called a response file), click Save. You will be prompted for the location of name of the file you want to create (for example, silent_install.rsp). This file can be used later if you choose to perform the same installation from the command line.

Click Install.

Then screen shows the progress of the installation.

Installation Progress Screen

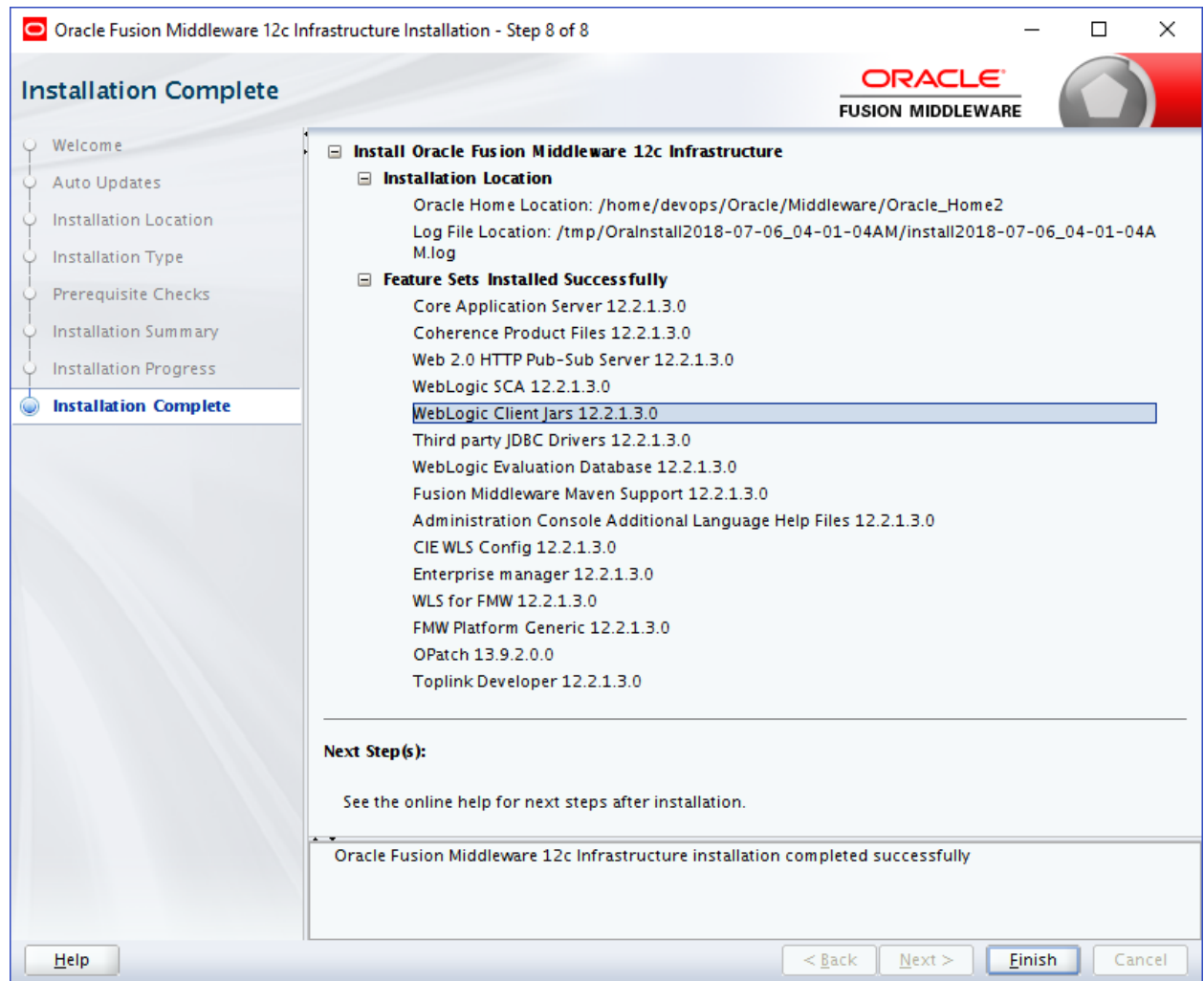




This screen shows the progress of the installation. Click Next.

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

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

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.

[Home](#)

4. Oracle HTTP Server 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"

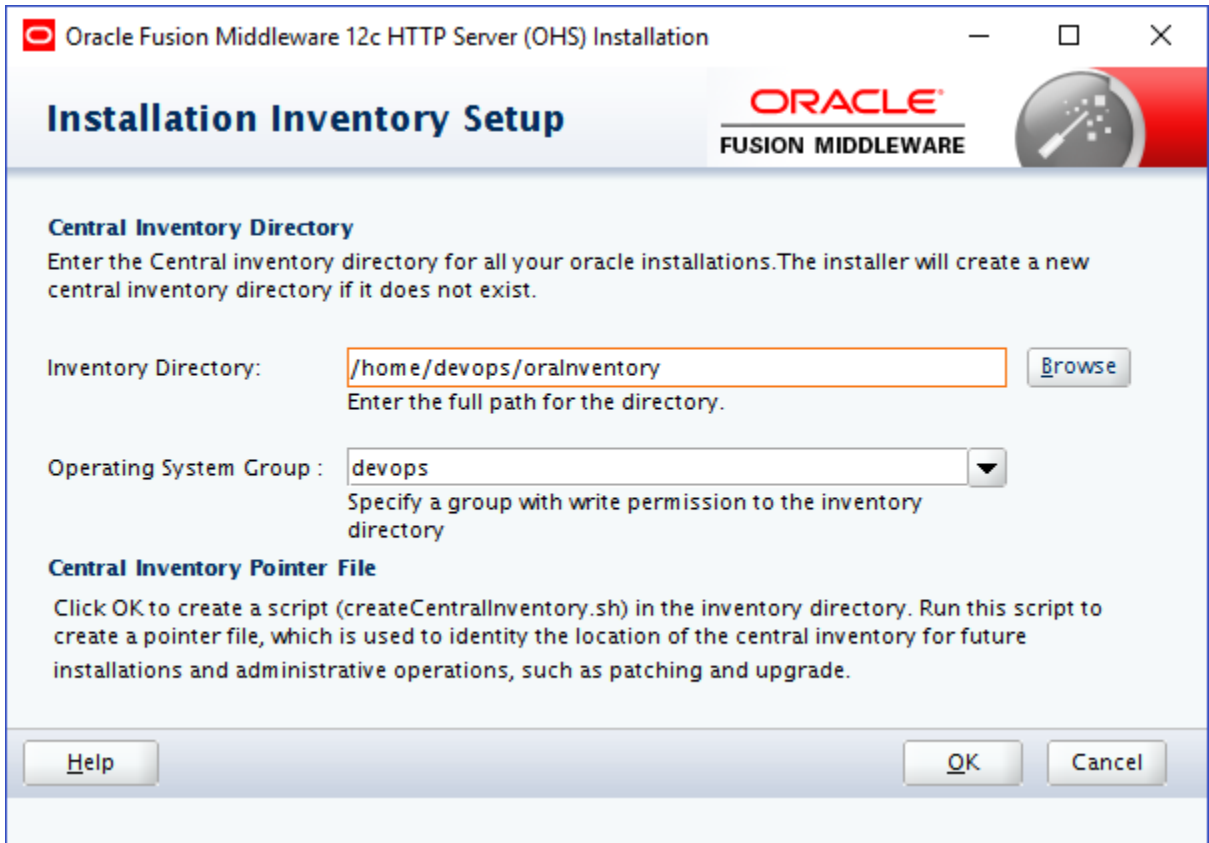
4.1 Installing and Configuring Oracle HTTP Server (OHS)

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.

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

`./fmw_12.2.1.3.0_ohs_linux64.bin` Now, follow the instructions as shown below to install Webtier,

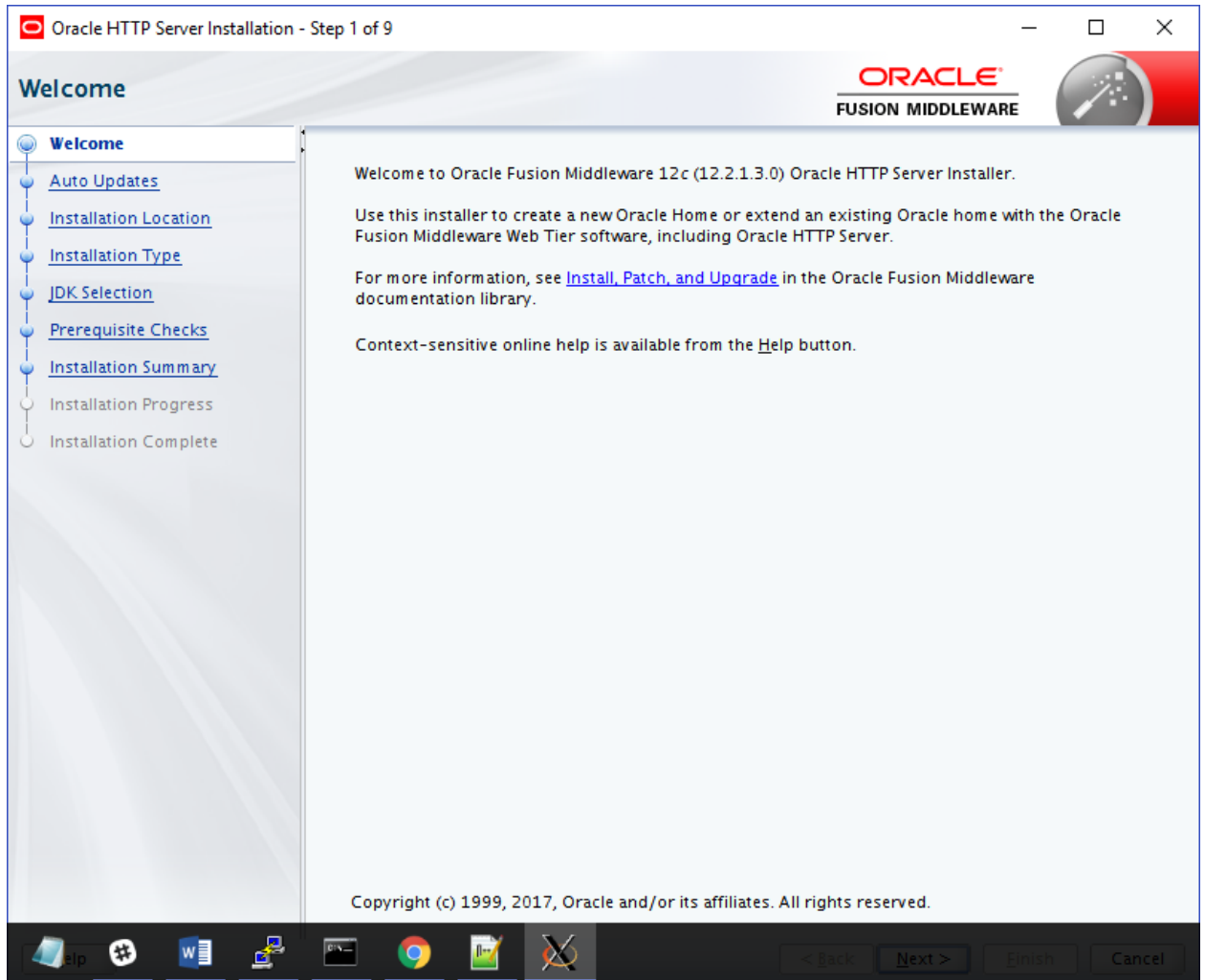
Specify Inventory Directory Screen



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/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.

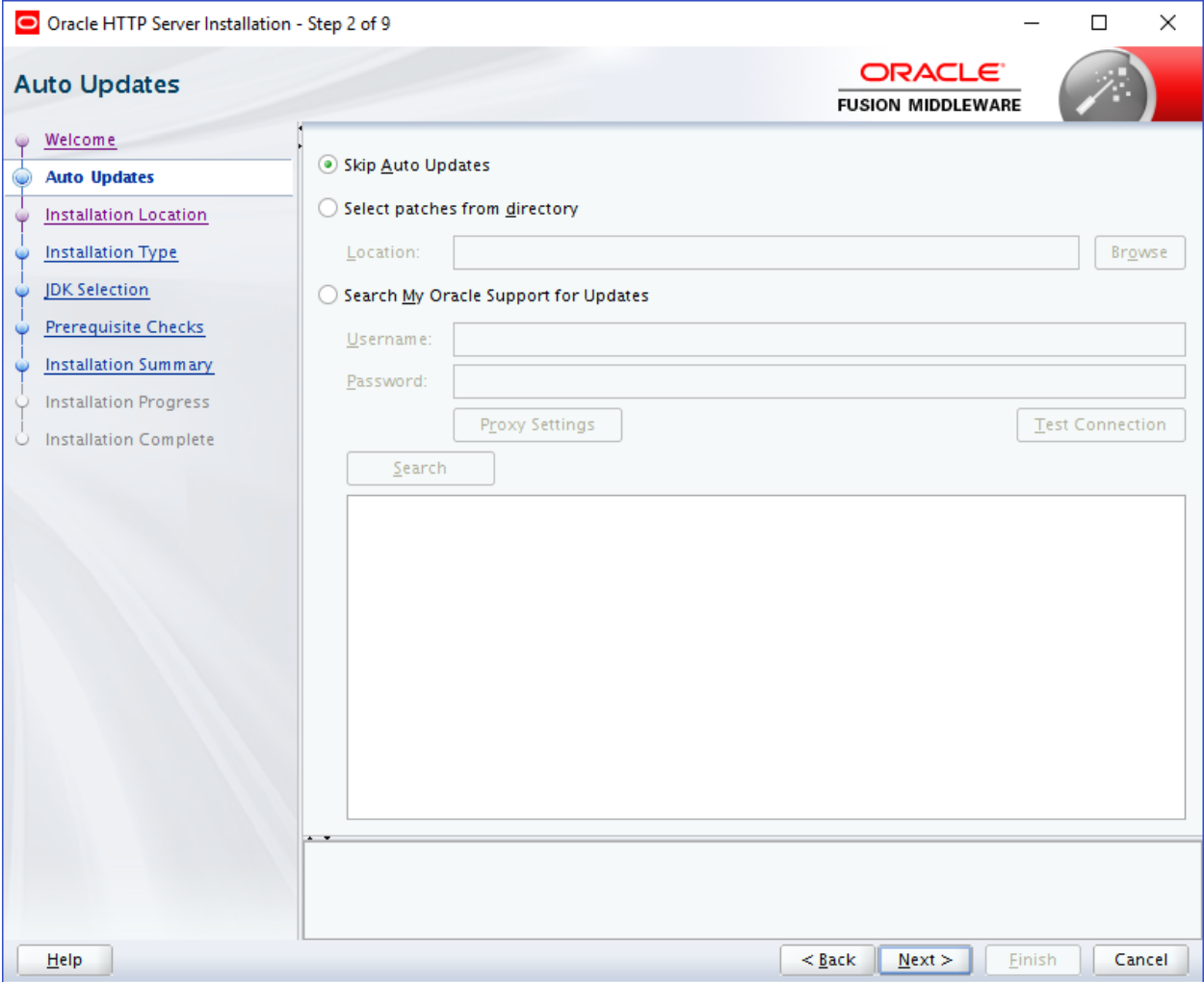
Welcome Screen



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

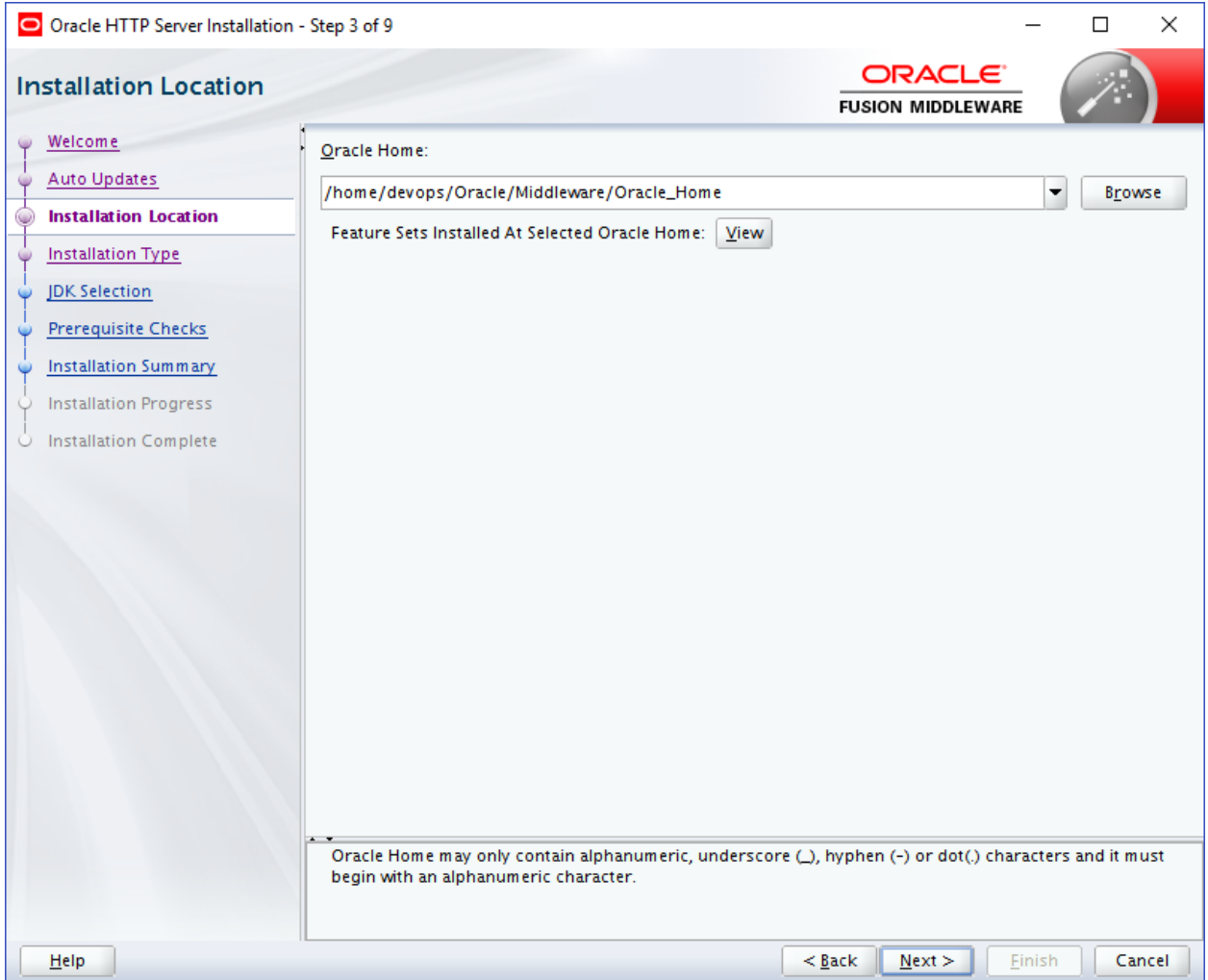
Click Next to continue.

Install Software Updates Screen



Select "Skip Software Updates" and Click Next to continue. (Kindly follow recommended practices regarding updates depending on the setup requirements or usage.)

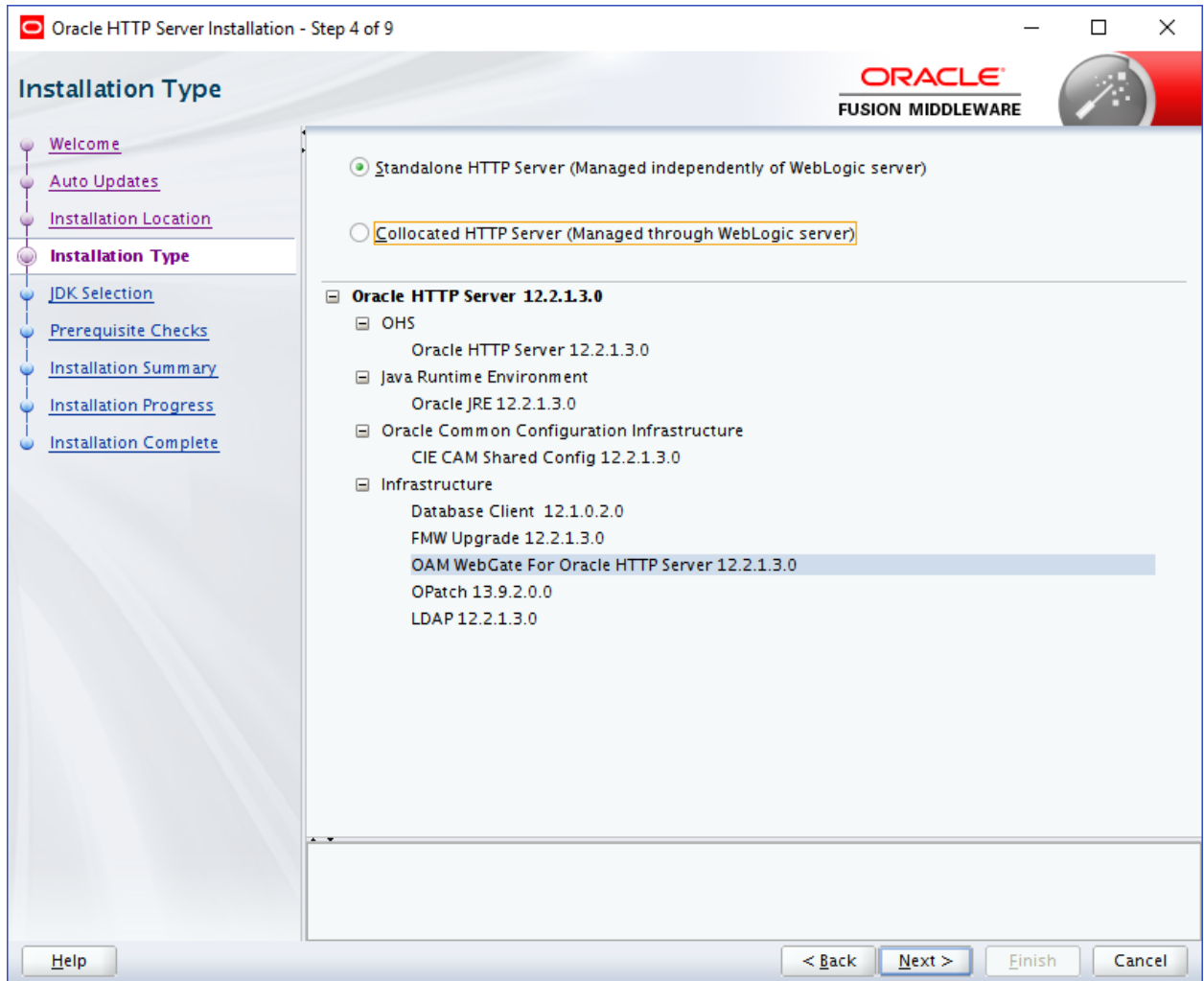
Select Installation Location



Specify the following installation locations:

- Oracle Middleware Home: The absolute path to the directory where Oracle HTTP Server will be installed.

Select Installation Type Screen

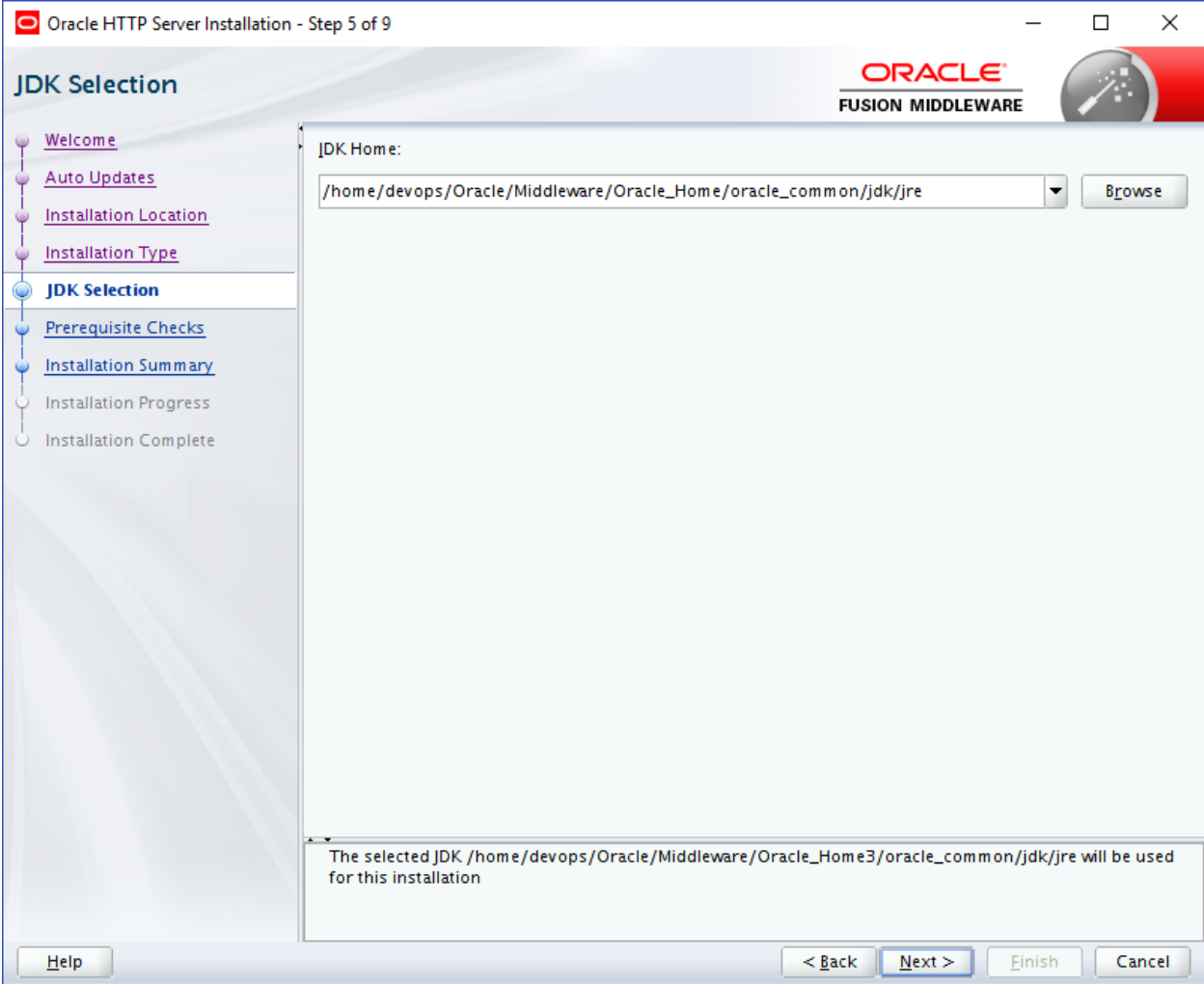


The following are the Installation Types available.

- Standalone HTTP Server (Managed Independently of Weblogic Server) Collocated HTTP Server (Managed through Weblogic server)

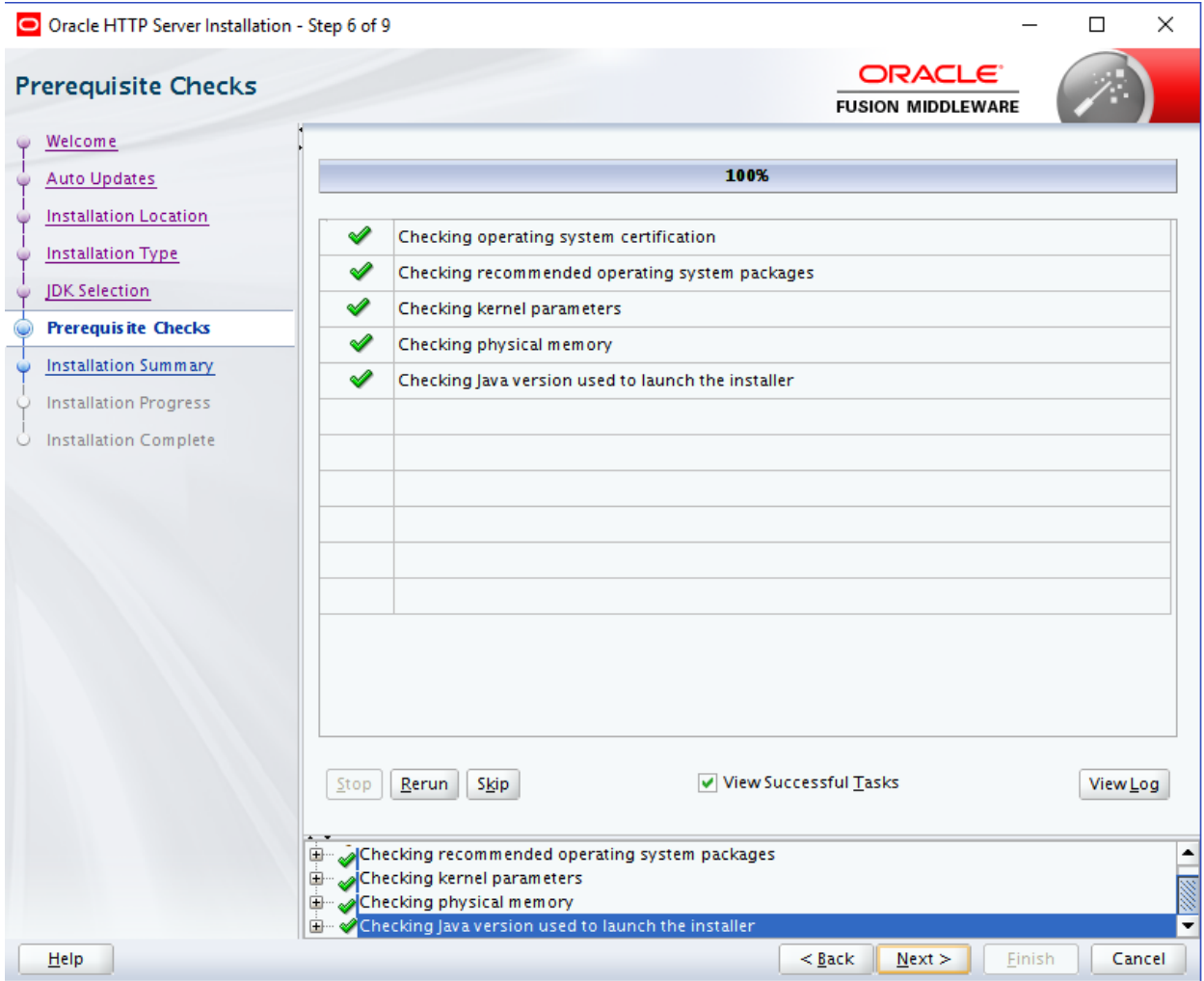
Choose installation type as per requirement. Select Standalone HTTP Server (Managed Independently of Weblogic Server). Click Next to continue.

Select JDK home



Click Next to continue

Prerequisite Checks Screen

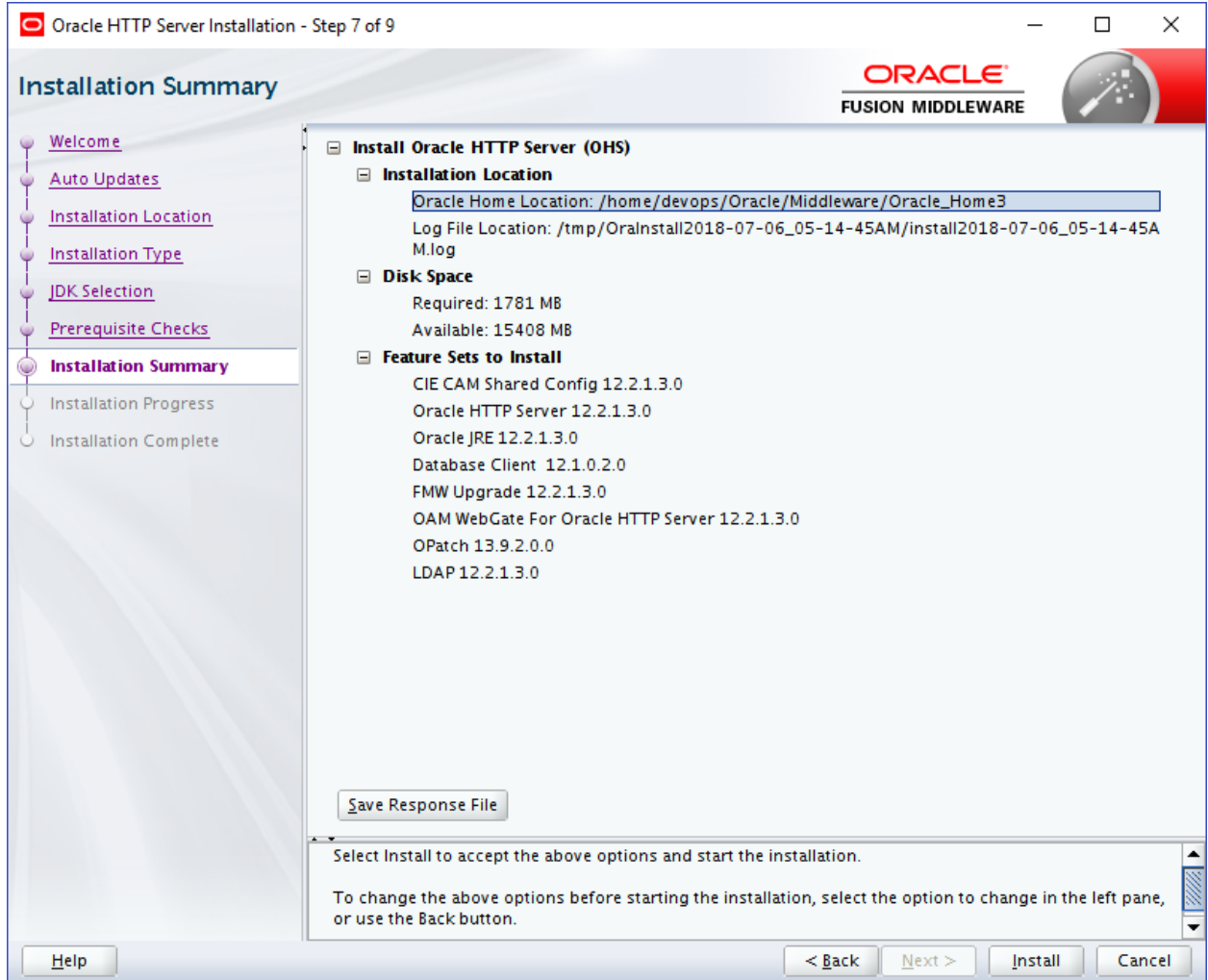


This screen shows whether the system requirements are met in order to install the software.

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.

Click Next to continue.

Installation Summary



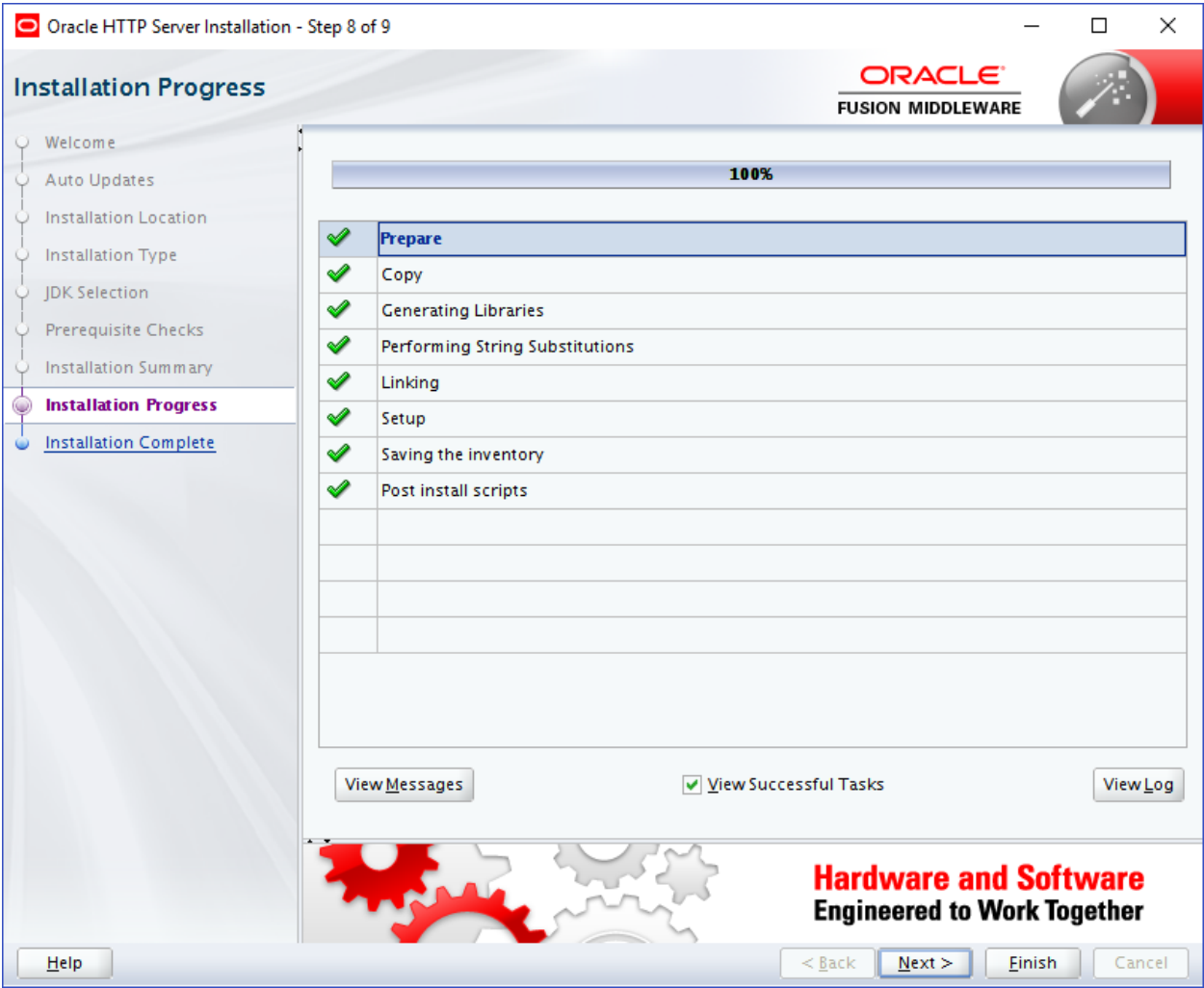
Review the information on this screen. The operations summarized on this page will be performed when you click Install.

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.

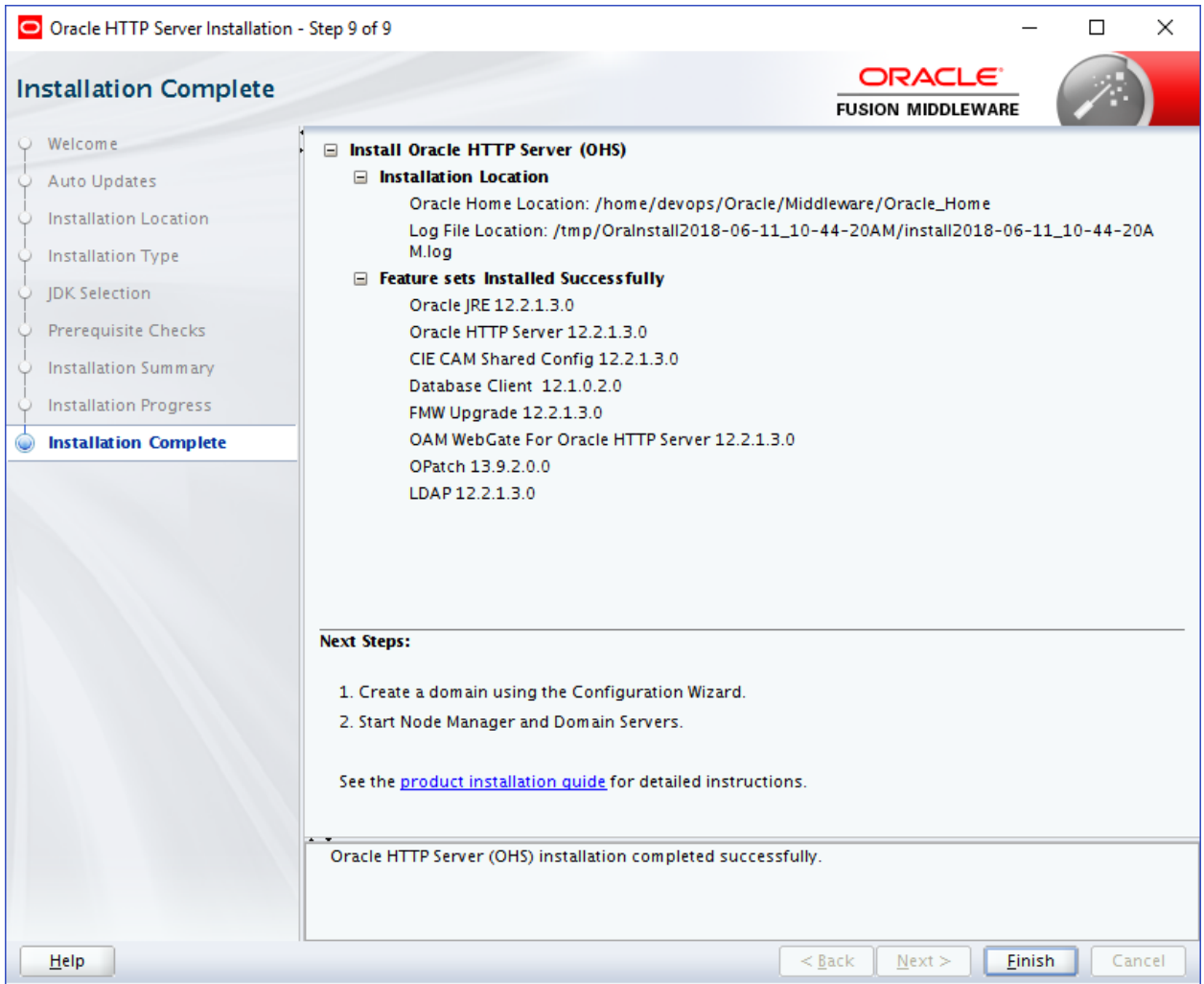
Click Install.

Installation Progress Screen



This screen shows the progress of the installation.
If you want to quit before the installation is completed, click Cancel.
Click Next.

Installation Complete Screen



This screen summarizes the installation that was just completed.

Click Finish to dismiss the screen.

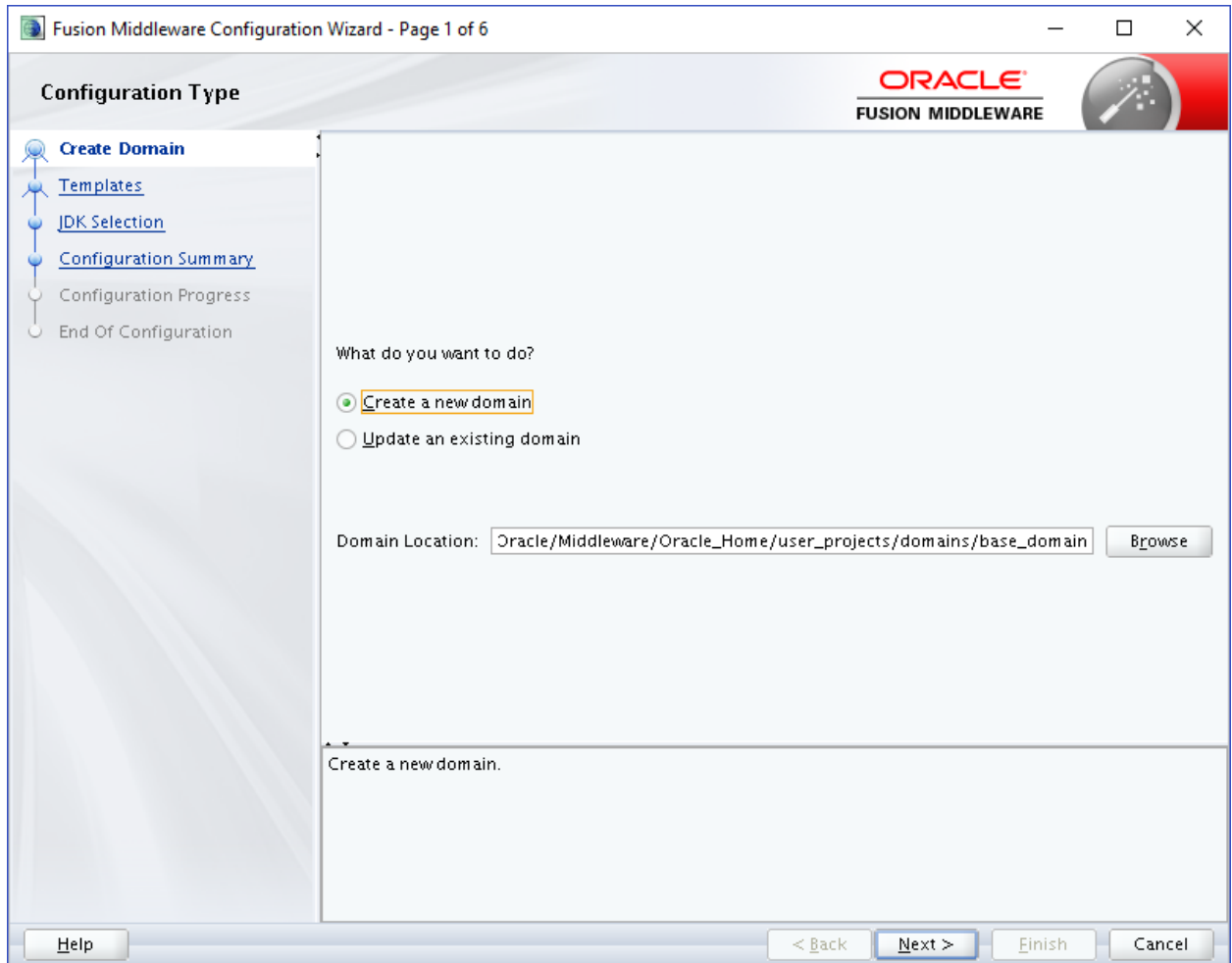
Configure the HTTP server

Follow below steps to configure domain for HTTP server

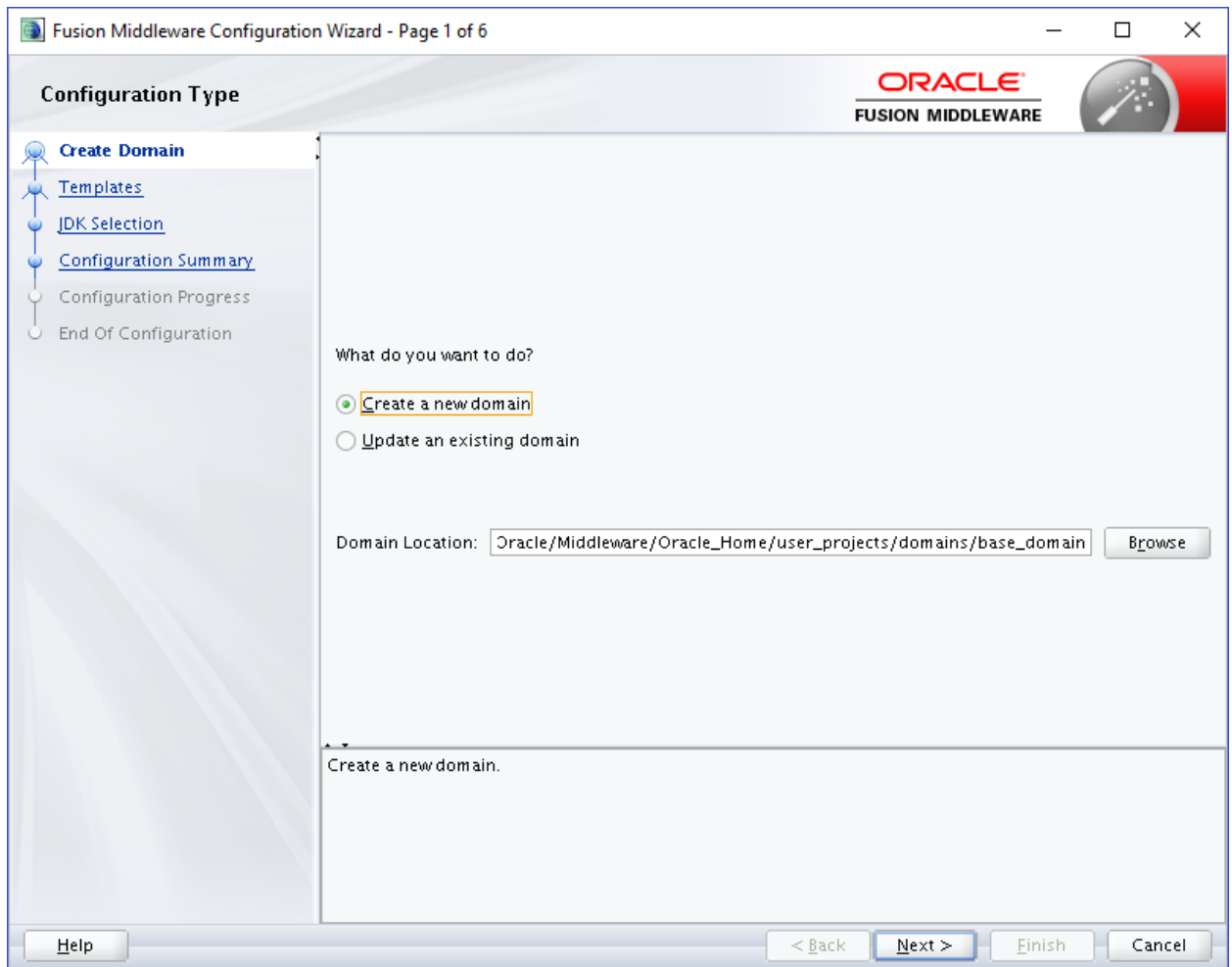
- Browse <Middleware_Home>/oracle_common/common/bin directory
- Execute below command

```
./config.sh
```

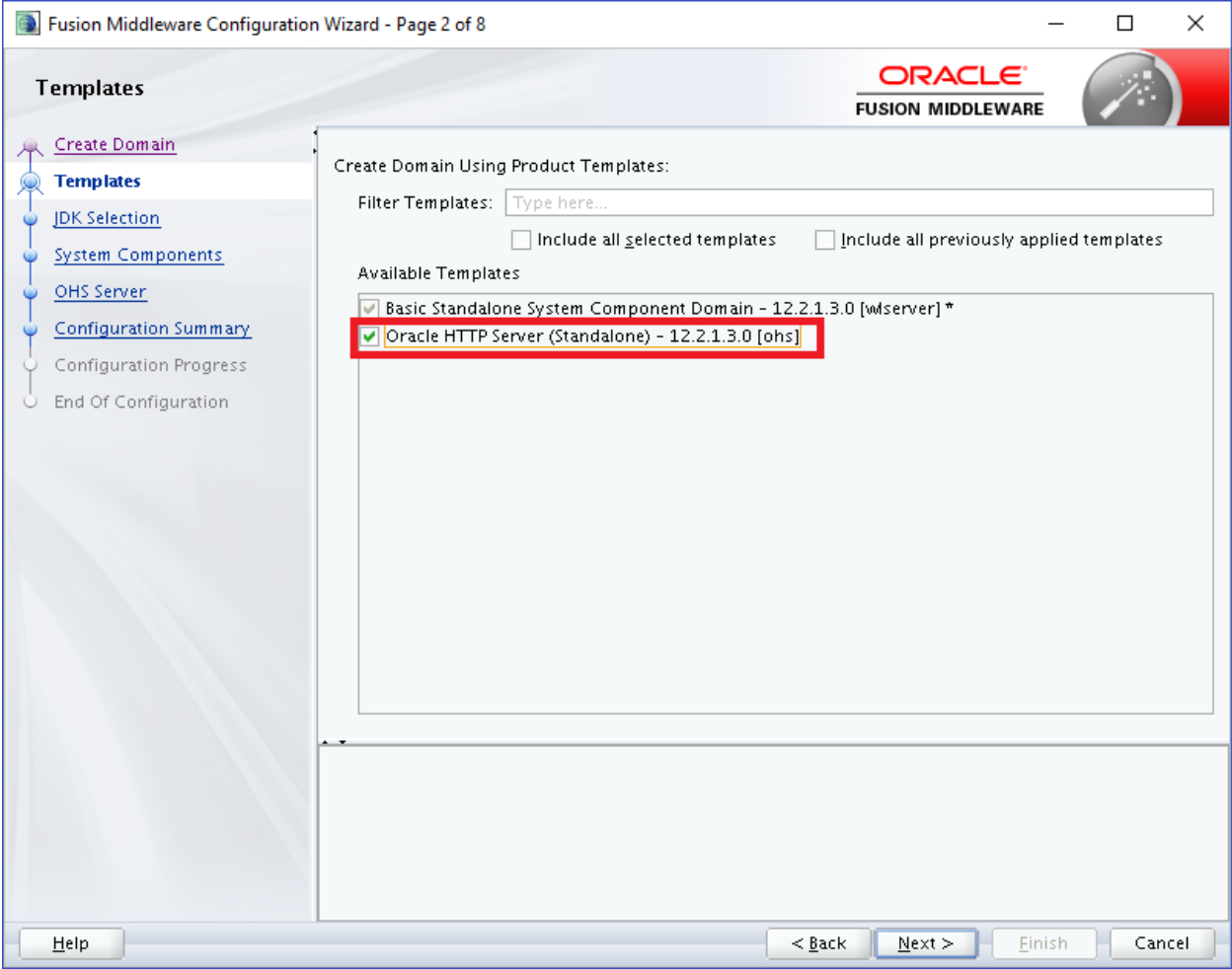
Below screen will be displayed



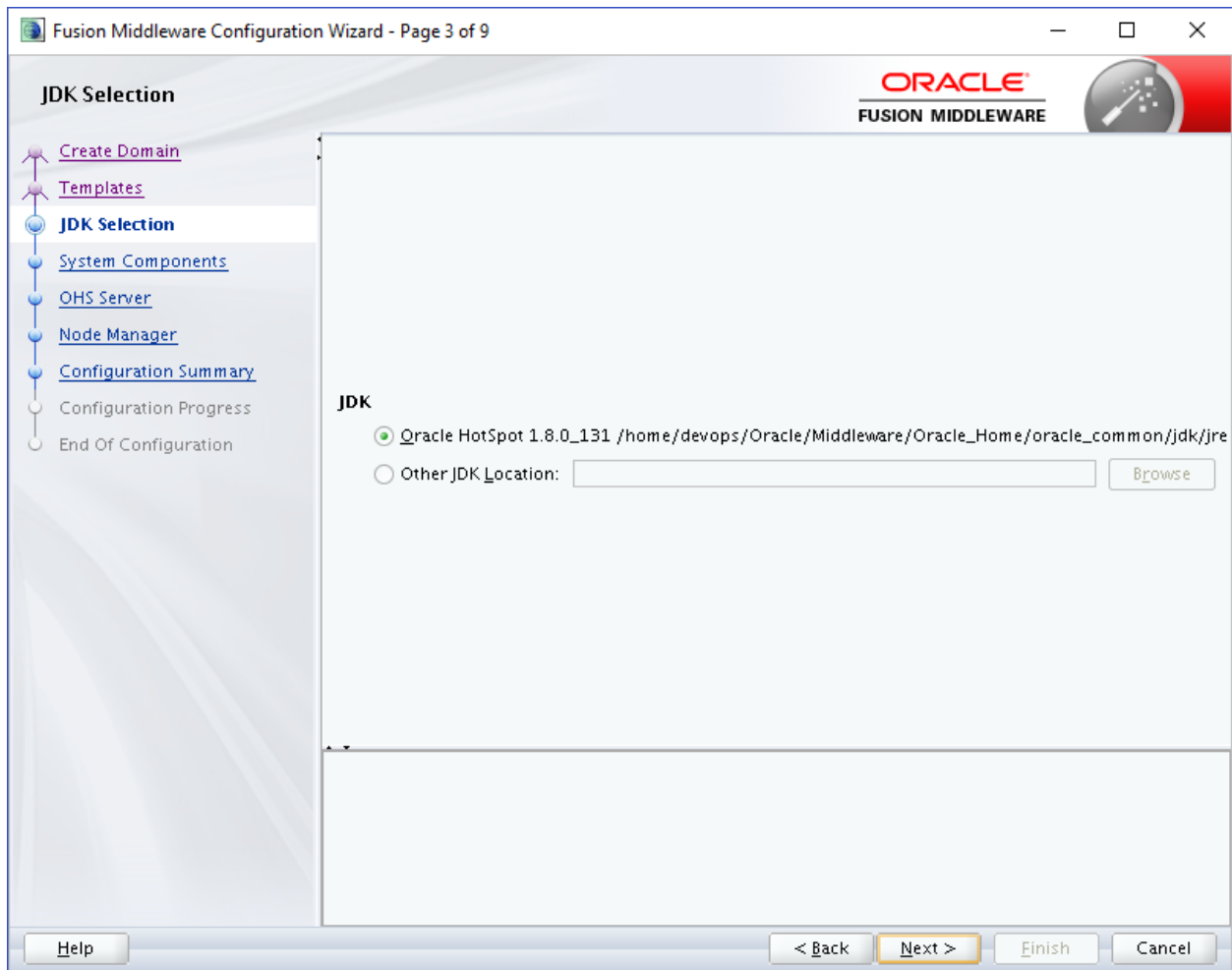
- Select "Create a new domain" option and select Domain location. Click Next



- Select Oracle HTTP Server option and click Next



➤ Click Next



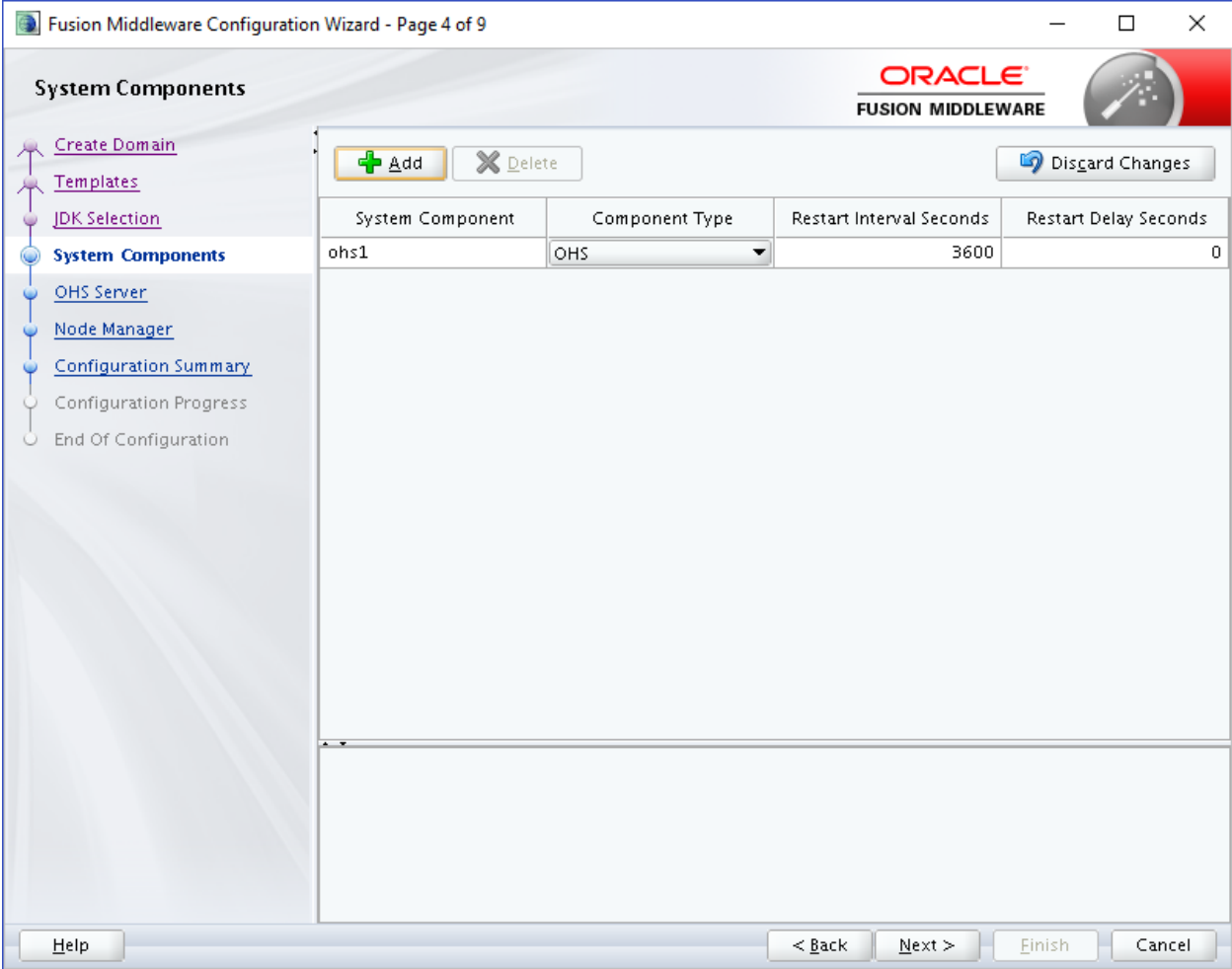
- Enter below details and click Next

System Component: Set the Instance name

Component Type: Should be OHS

Restart Interval Seconds: Set as per requirement. Defaults to 3600

Restart Delay Seconds: Set as per requirement. Defaults to 0



➤ Configure Admin Host; Port; Listen Address and click Next

Fusion Middleware Configuration Wizard - Page 5 of 9

OHS Server

ORACLE
FUSION MIDDLEWARE

System Component: ohs1

Admin Host: obdxohs.in.oracle.com

Admin Port: 9999

Listen Address: obdxohs.in.oracle.com

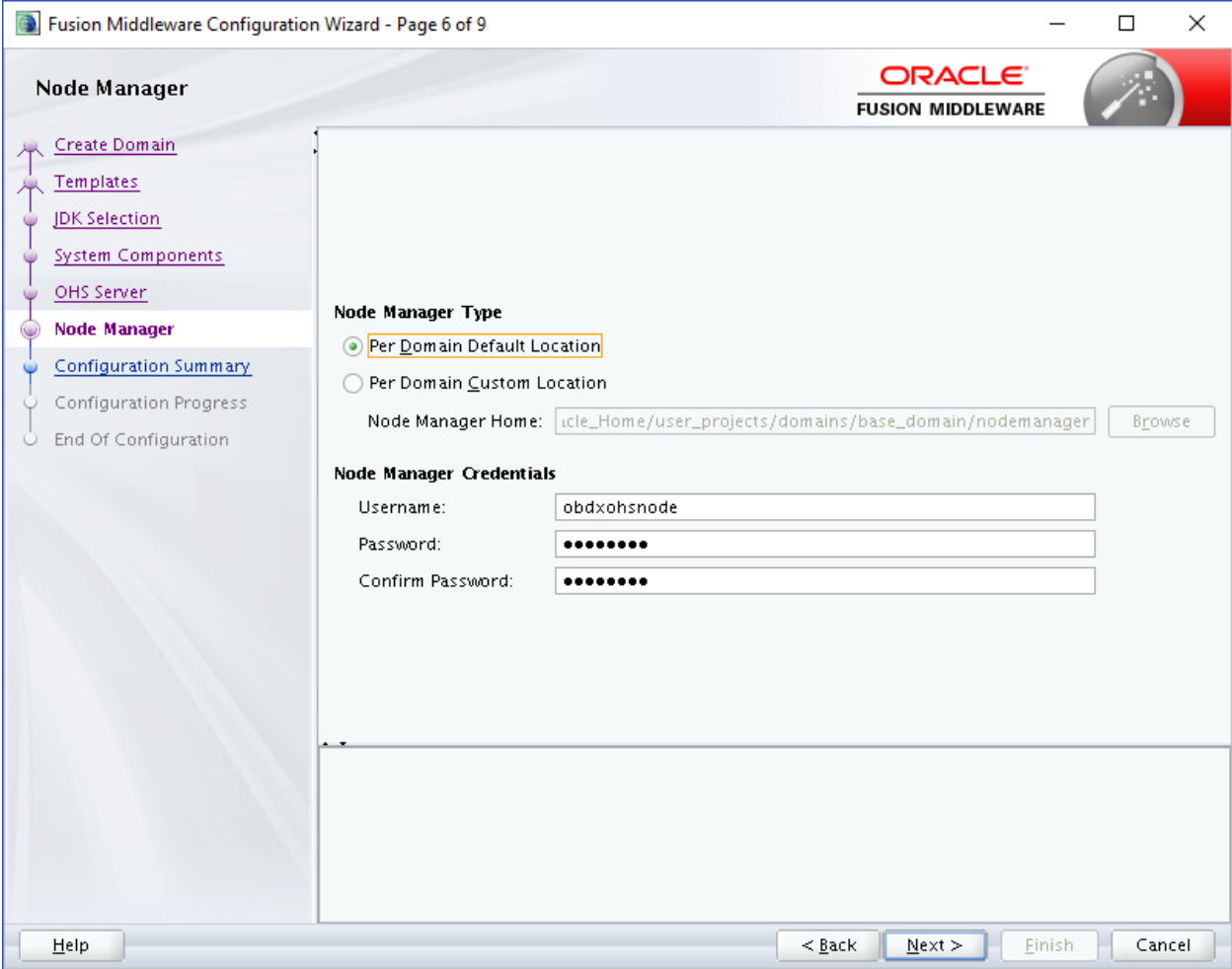
Listen Port: 7777

SSL Listen Port: 4443

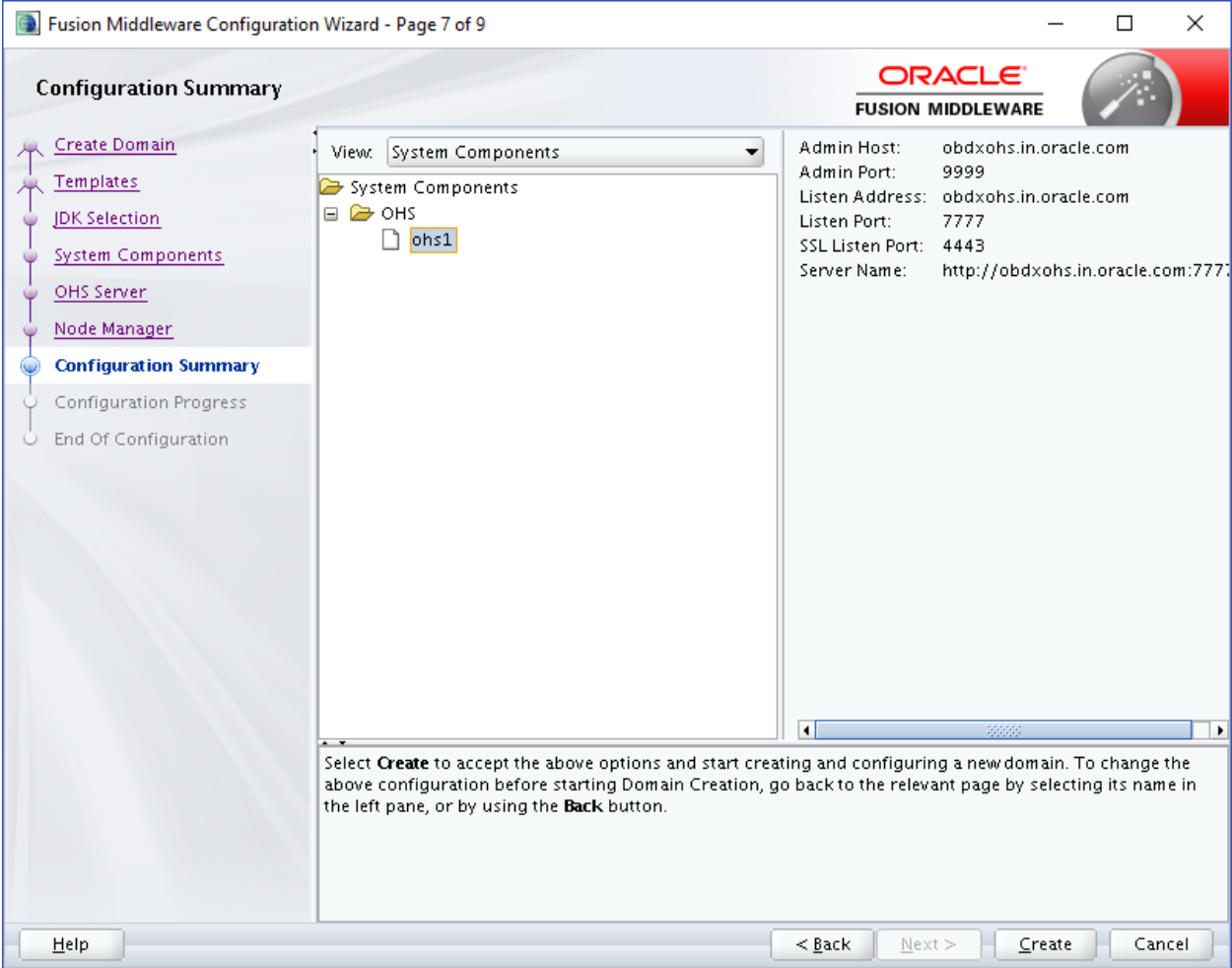
Server Name: http://obdxohs.in.oracle.com:7777

Help < Back Next > Finish Cancel

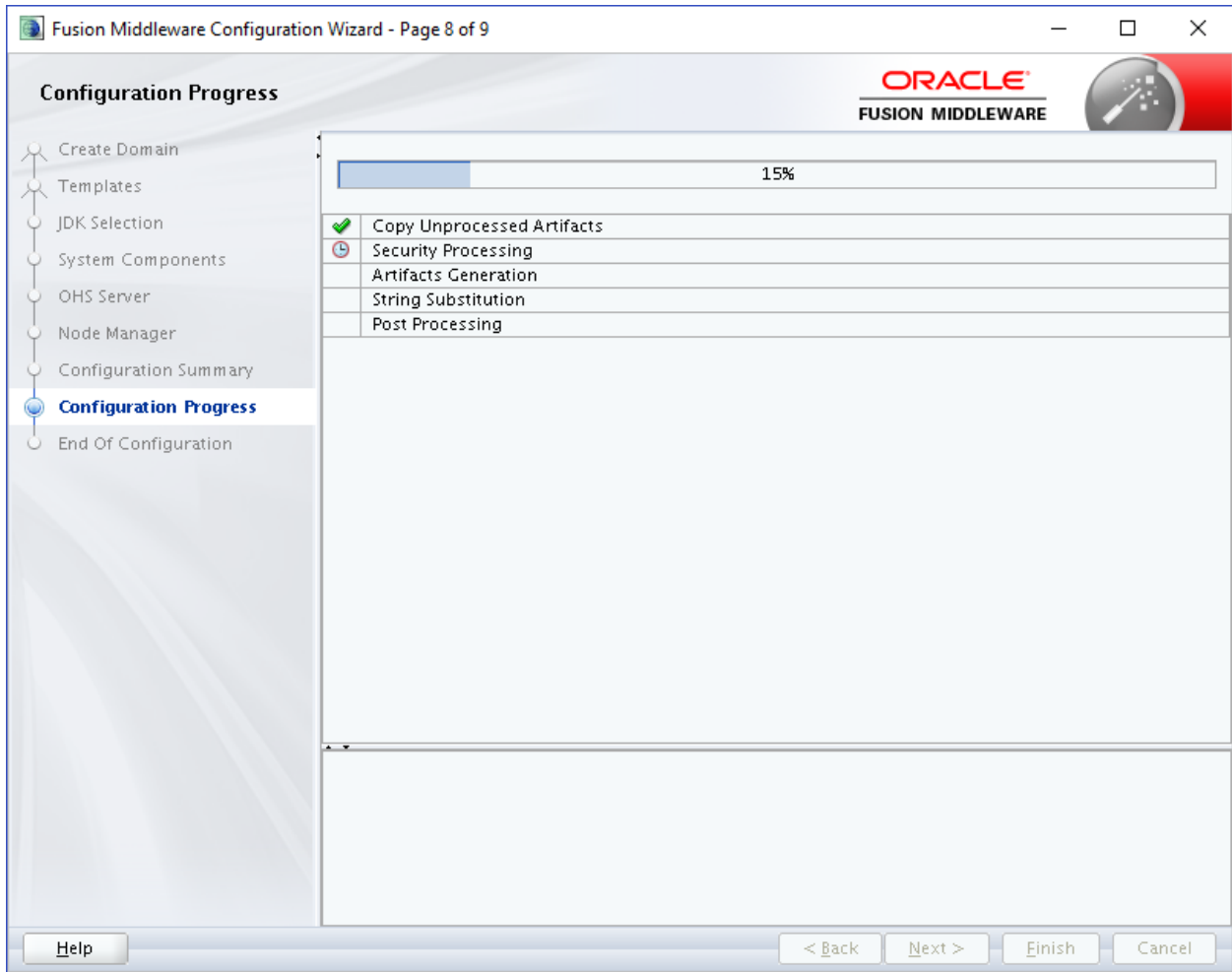
- Select appropriate Node Manager Type; and enter Node Manager Credentials. Click Next.

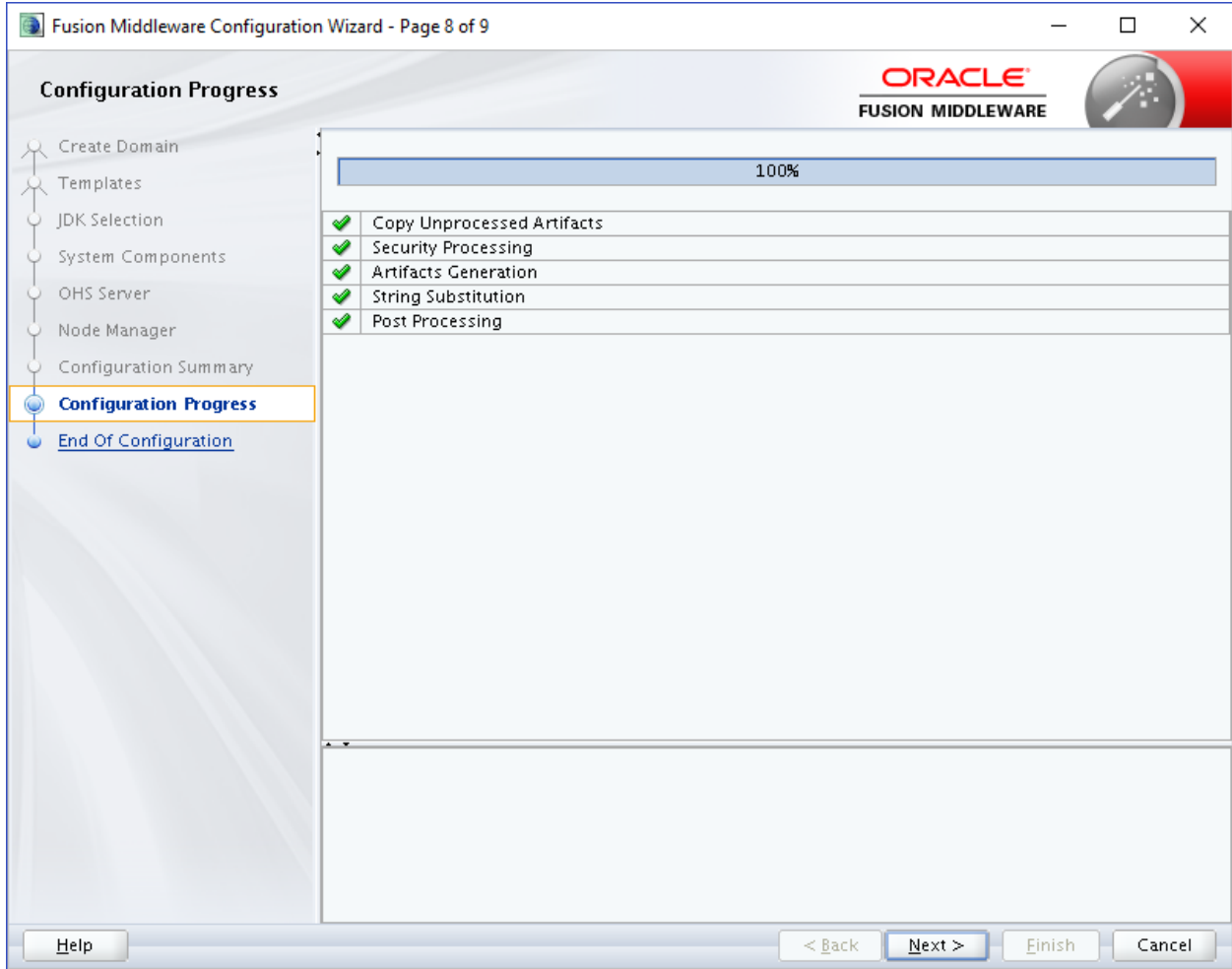


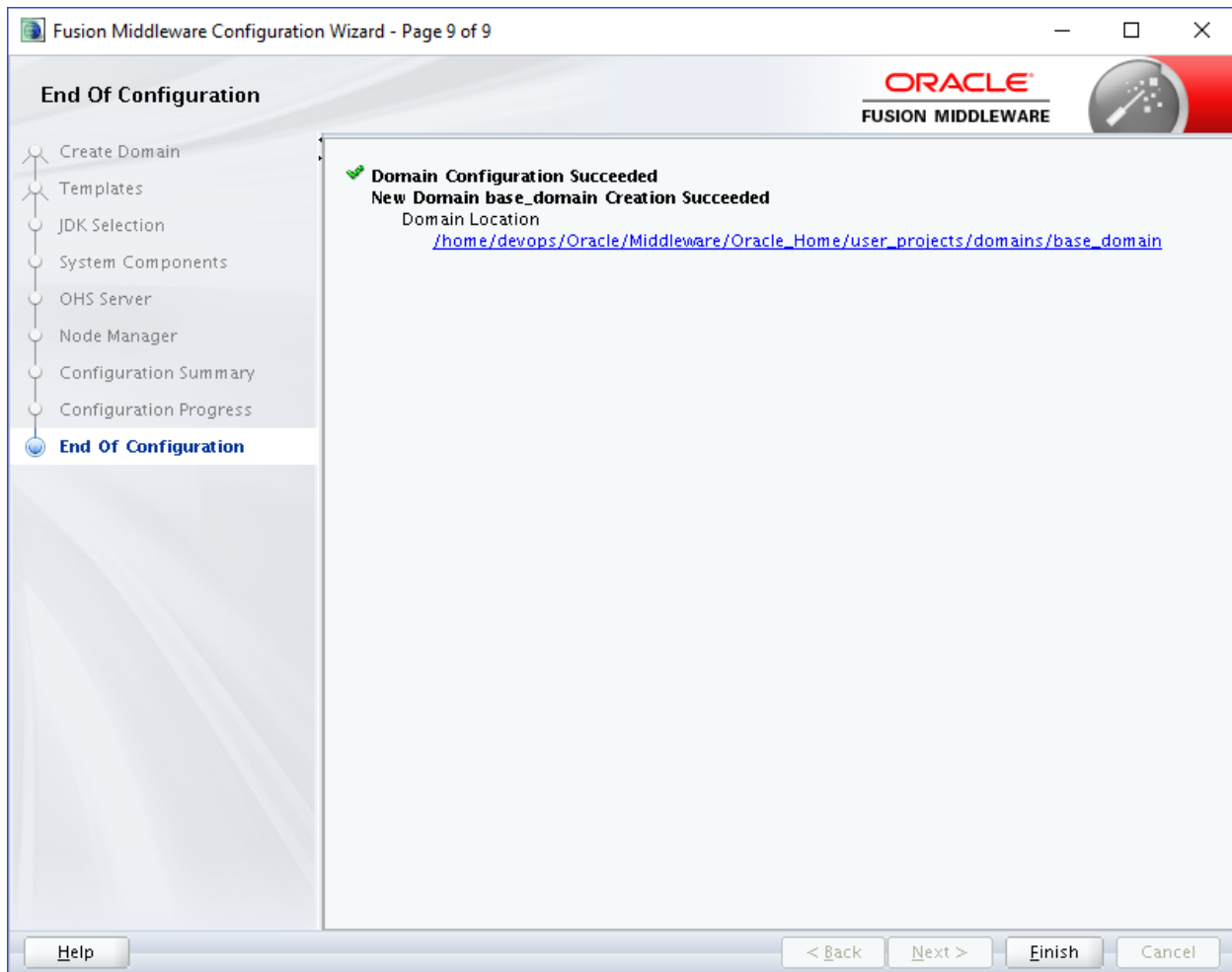
➤ Review summary and click Create



➤ Below installation progress can be seen







4.2 Verifying the Installation

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

- **Verifying the Installation Logs:** Verify the installation logs using the Log file location available in installation complete screen (or <User home dir>/oralnventory/logs).

Verifying the OPMN Status: Run the below commands from the <Domain_directory>/bin directory on UNIX, in your instance home location. For example:

- Start NodeManager

```
cd
/home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/bin
./startNodeManager.sh
```

- Start component

```
./startComponent.sh ohs1
```

Use the listen port number to point your browser to the HTTP server to test installation. Use the format:

http://<HTTPSERVERHOSTNAME>:<HTTPSERVERLISTENPORT>

The screenshot shows the Oracle HTTP Server 12c website. At the top, it says "ORACLE Oracle HTTP Server 12c". Below this, a paragraph states: "Oracle HTTP Server 12c is based on the proven, open source Apache HTTP Server technology, and provides the framework for hosting static, dynamic web pages and for front-ending Oracle Fusion Middleware Applications." A central diagram illustrates the architecture, showing components like Local Content, OHS, Load Balancing, Fusion Middleware Applications, Authentication, Authorization, Audit Control, Identity Management, and FMW Lifecycle Tools. Below the diagram, there are sections for "Features" and "Administration / Monitoring".

Features

- Content Serving / Reverse Proxy**
 - Cloud Deployment / Virtual Server Support**
Thousands of virtual application containers served from a single web server instance. Each virtual server can have its own configuration files, IP addresses, port, document root, preferences, log files, and more.
 - Protection From Common Threats**
Built-in ModSecurity module provides the ability to configure rules to introspect and protect applications from common attacks including SQL/Command injection, Cross Site Scripting vulnerabilities and other vulnerabilities.
 - FastCGI Support**
Efficient way to serve dynamic content web pages within OHS by using scripting languages such as PHP or Python, without incurring a significant performance penalty.
 - Integrated Reverse Proxy**

Administration / Monitoring

- Server Administration**
Leverage WebLogic 12c administration interfaces to provide a simple, consistent and distributed administration model for administering Oracle HTTP Server, Oracle WebLogic Server and the rest of the Fusion Middleware Stack.
For more information, please refer to [Understanding the OHS Administration Model](#) section.
- Monitoring**
Integration with Oracle Enterprise Manager allows customers to monitor HTTP traffic by using the Oracle Enterprise Management console.
- Robust Migration Tool**
Integrated migration tools make it easy to migrate existing Oracle HTTP Server 11g deployments to Oracle HTTP Server 12c.

[Home](#)

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, "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 12c WebGate"

5.1 Configuring Oracle Webgate

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

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

```
cd
/home/devops/Oracle/Middleware/Oracle_Home/webgate/ohs/tools/deployWebGate
```

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

```
./deployWebGateInstance.sh -w OHS_Master_Config_Directory -
oh Oracle_Home For .e.g:

./deployWebGateInstance.sh -w
/home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/bas
e_domain/config/fmwconfig/components/OHS/ohs1 -oh
/home/devops/Oracle/Middleware/Oracle_Home
```

```
[devops@      deployWebGate]$ ./deployWebGateInstance.sh -w /home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/
fmwconfig/components/OHS/ohs1 -oh /home/devops/Oracle/Middleware/Oracle_Home
Copying files from WebGate Oracle Home to WebGate Instancedir
```

In this command:

Oracle_Home is the directory in which you have installed Oracle HTTP Server WebGate.
Example: `/home/devops/Oracle/Middleware/Oracle_Home`

OHS_Master_Config_Directory is the location of the directory where the main Oracle HTTP Server configuration files are kept. Example:

`/home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/fmwconfig/components/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/lib
```

From your present working directory, move to directory:

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

```
cd
```

```
/home/devops/Oracle/Middleware/Oracle_Home/webgate/ohs/tools/setup/InstallTools/ On the command line, run the following command to copy the apache_webgate.template file from the Oracle_Home directory to the main Oracle HTTP Server configuration directory (re-named to webgate.conf) and update the httpd.conf file to add one line to include the name of webgate.conf:
./EditHttpConf -w OHS_Master_Config_Directory [-oh Oracle_Home] [-o output_file]
```

For e.g.:

```
./EditHttpConf -w /home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/fmwconfig/components/OHS/ohs1 -oh /home/devops/Oracle/Middleware/Oracle_Home
```

```
[devops@ Oracle_Home/InstallTools]$ ./EditHttpConf -w /home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/fmwconfig/components/OHS/ohs1 -oh /home/devops/Oracle/Middleware/Oracle_Home
The web server configuration file was successfully updated
/home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/fmwconfig/components/OHS/ohs1/httpd.conf has been backed up as /home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/fmwconfig/components/OHS/ohs1/httpd.conf.ORIG
```

In this command:

Oracle_Home is the directory in which you have installed Oracle HTTP Server WebGate for Oracle Access Manager. Example: */home/devops/Oracle/Middleware/Oracle_Home*

OHS_Master_Config_Directory is the location of the directory where the main Oracle HTTP Server configuration files are kept. Example: */home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/fmwconfig/components/OHS/ohs1*

output_file is the name of the WebGate configuration file generated by the tool. A default *webgate.conf* file is generated if you do not specify this option. Example: *webgate.conf*

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

5.2 Verifying the configuration of Oracle HTTP Server 12c WebGate

After installing Oracle HTTP Server 12c WebGate for Oracle Access Manager and completing the configuration steps, you can examine the *installDATE-TIME_STAMP.out* log file to verify the installation. The default location of the log are as follows: The default location of the log is : *Oracle_Home/oraInst.loc*

5.3 Registering the New Oracle HTTP Server 12c WebGate

Before you can use the new Oracle HTTP Server 12c 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 8.1 “Creating WebGate Agent on OAM Console” under Oracle Access Management Configuration chapter.

[Home](#)

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 1.8"
- Section 6.2, "Pre-requisite - Installing Weblogic 12.2.1.3"
- Section 6.3, "Installing Oracle Identity and Access Management (IAM)"

6.1 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
```

6.2 Pre-requisite - Installing Weblogic 12.2.1.3

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 12.2.1.3 JAR from the Oracle Fusion Middleware Downloads. Download *fmw_12.2.1.3.0_infrastructure.jar* file to a directory.

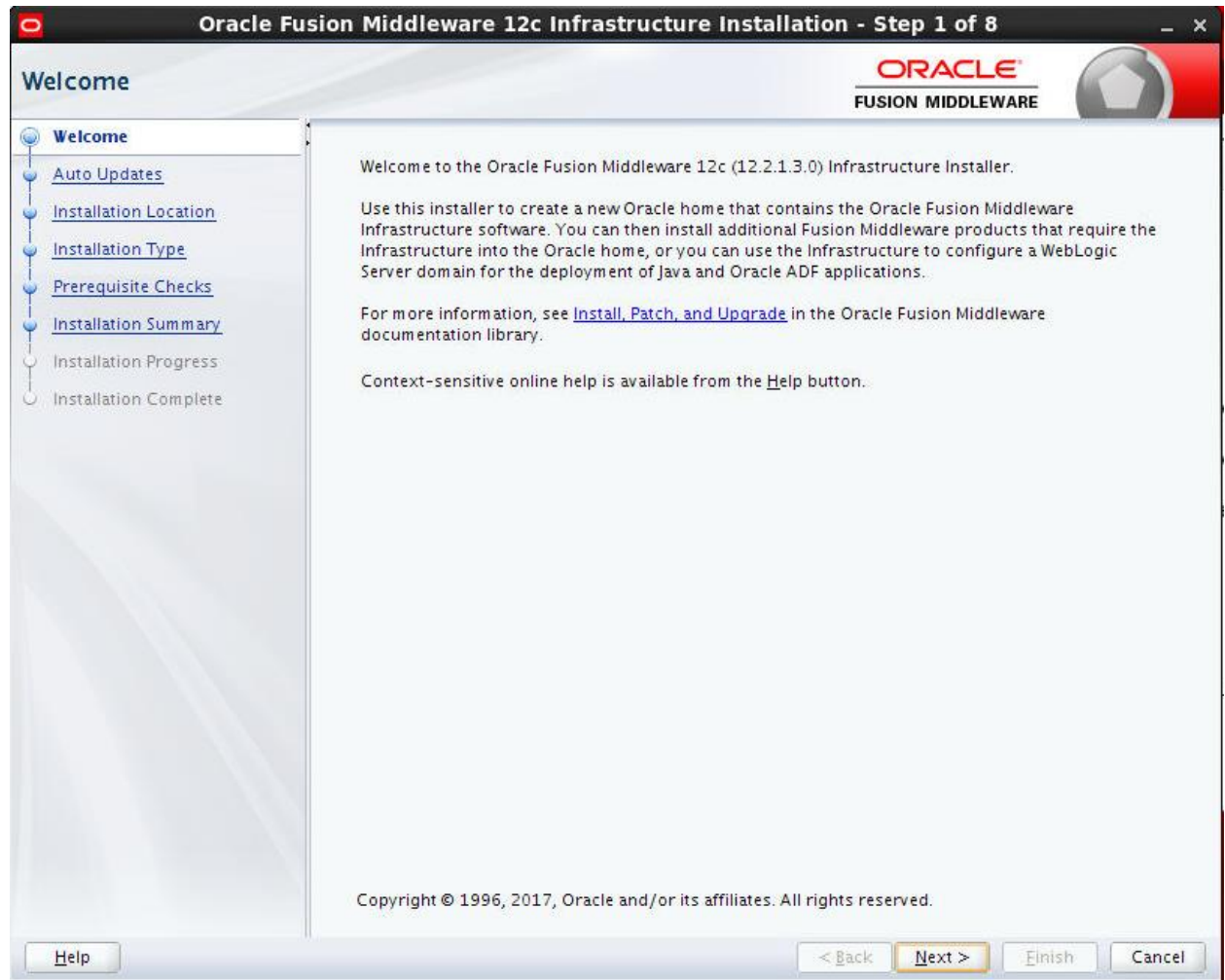
- Now to start the installer, go to the directory where you downloaded the file.
- Start the installer from the same directory using the below command:

```
java -jar <Path>/fmw_12.2.1.3.0_infrastructure.jar
```

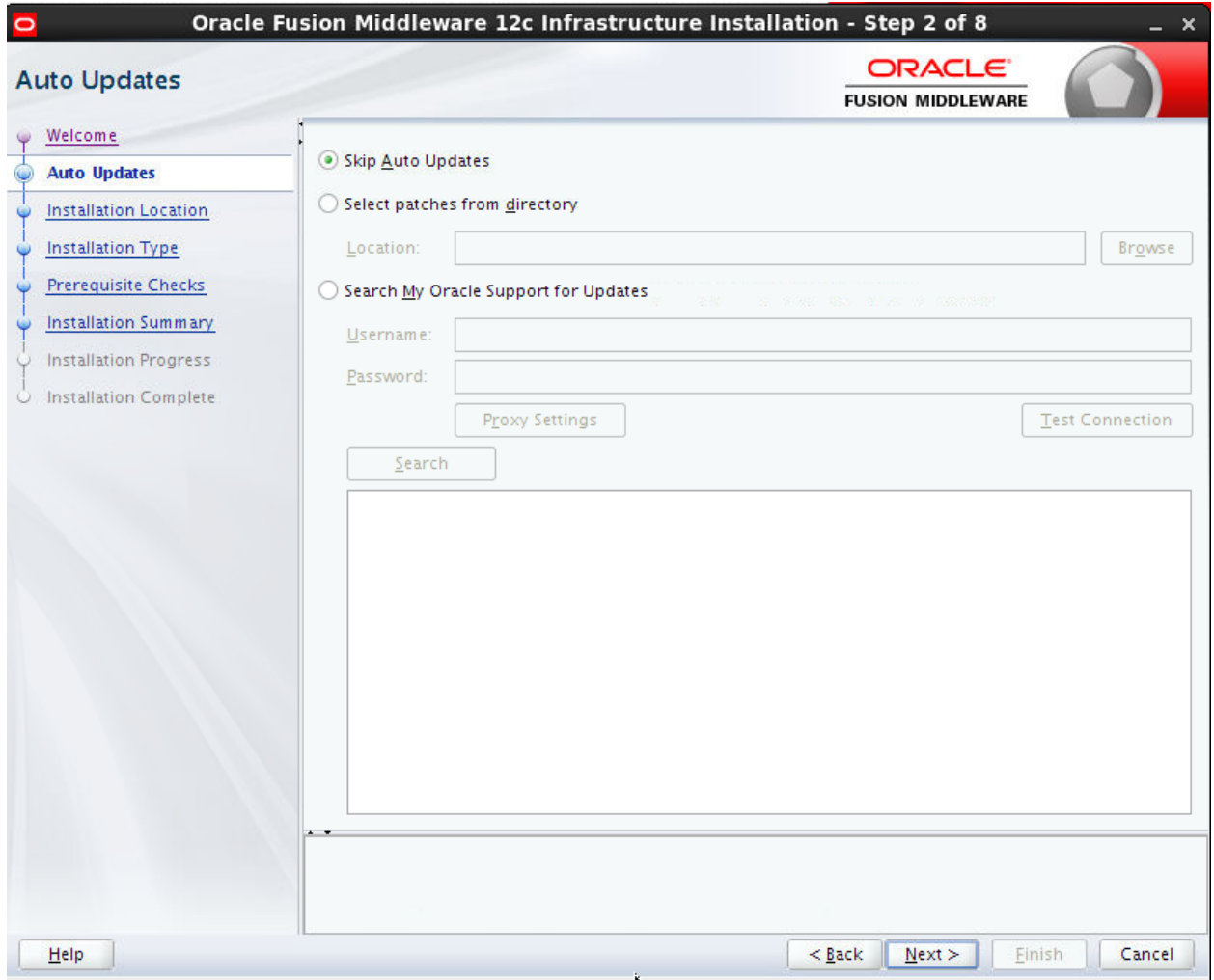
Note : You must enter the absolute path of the folder where the JAR file is located.

Follow the instructions as shown below for installation:

Welcome Screen



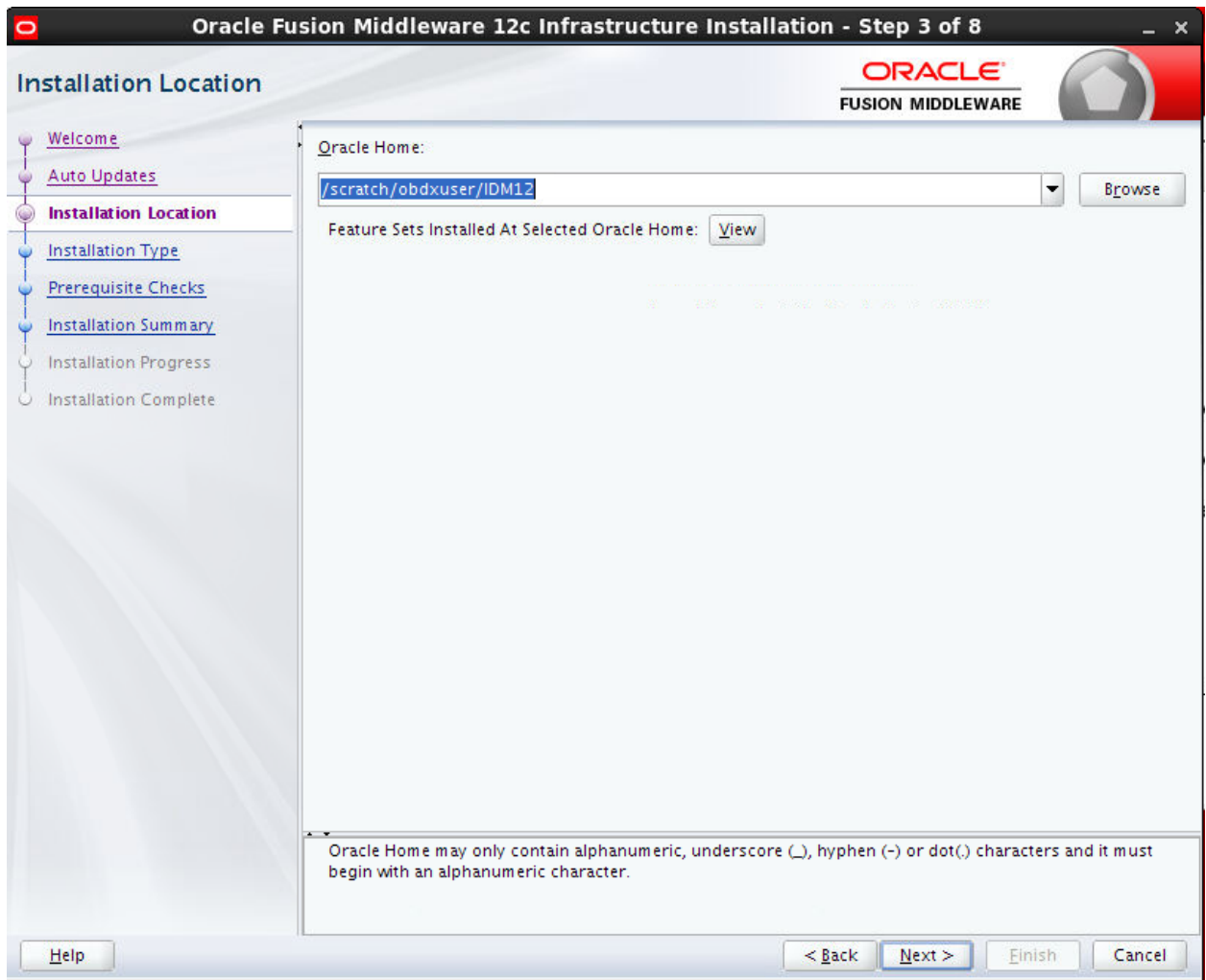
The Welcome screen is displayed each time you start the installer.



Click “Skip Auto Updates” (Kindly follow recommended practices regarding updates depending on the setup requirements or usage.)

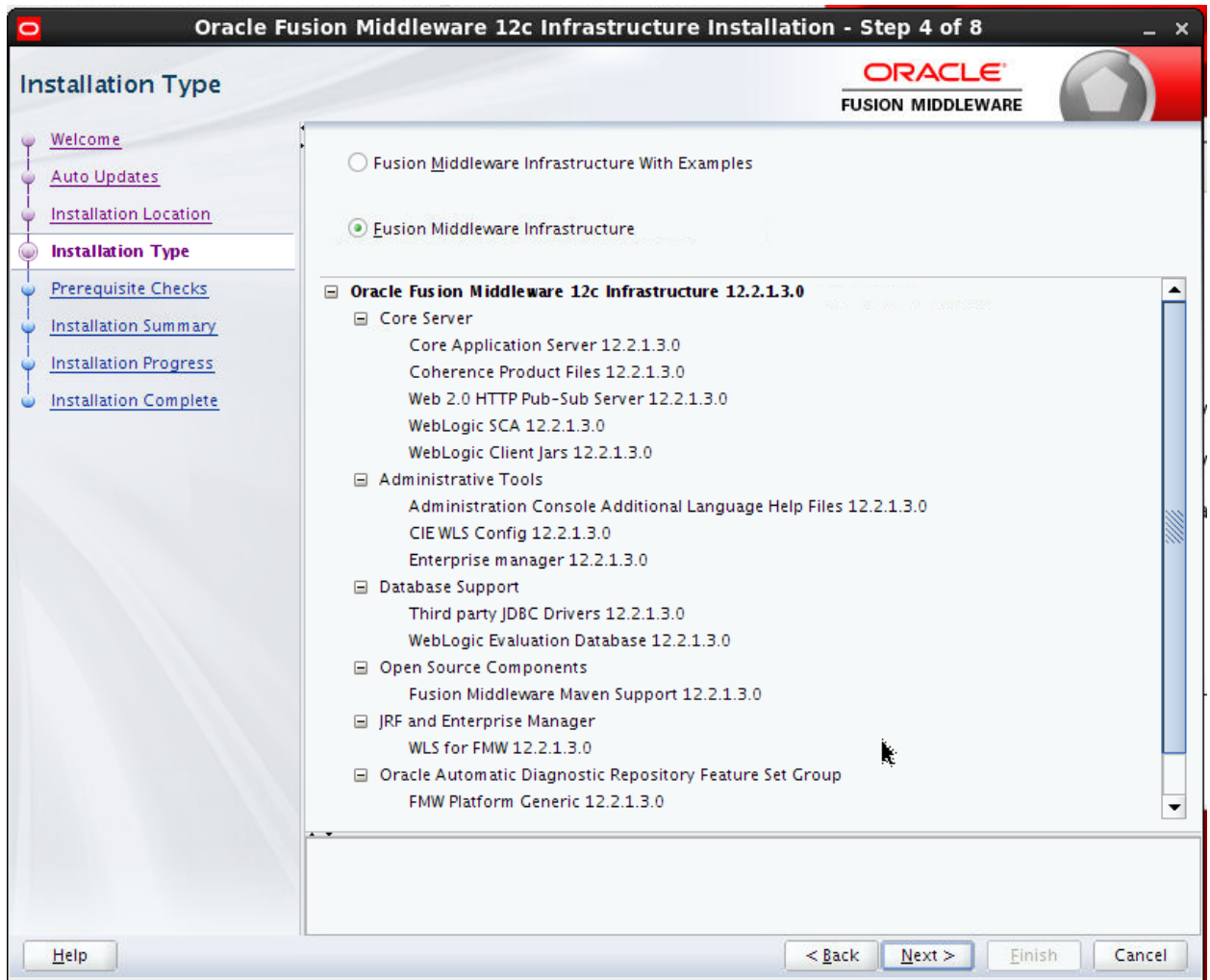
Click Next to continue.

Specify Middleware Home Screen



Specify the following installation locations:

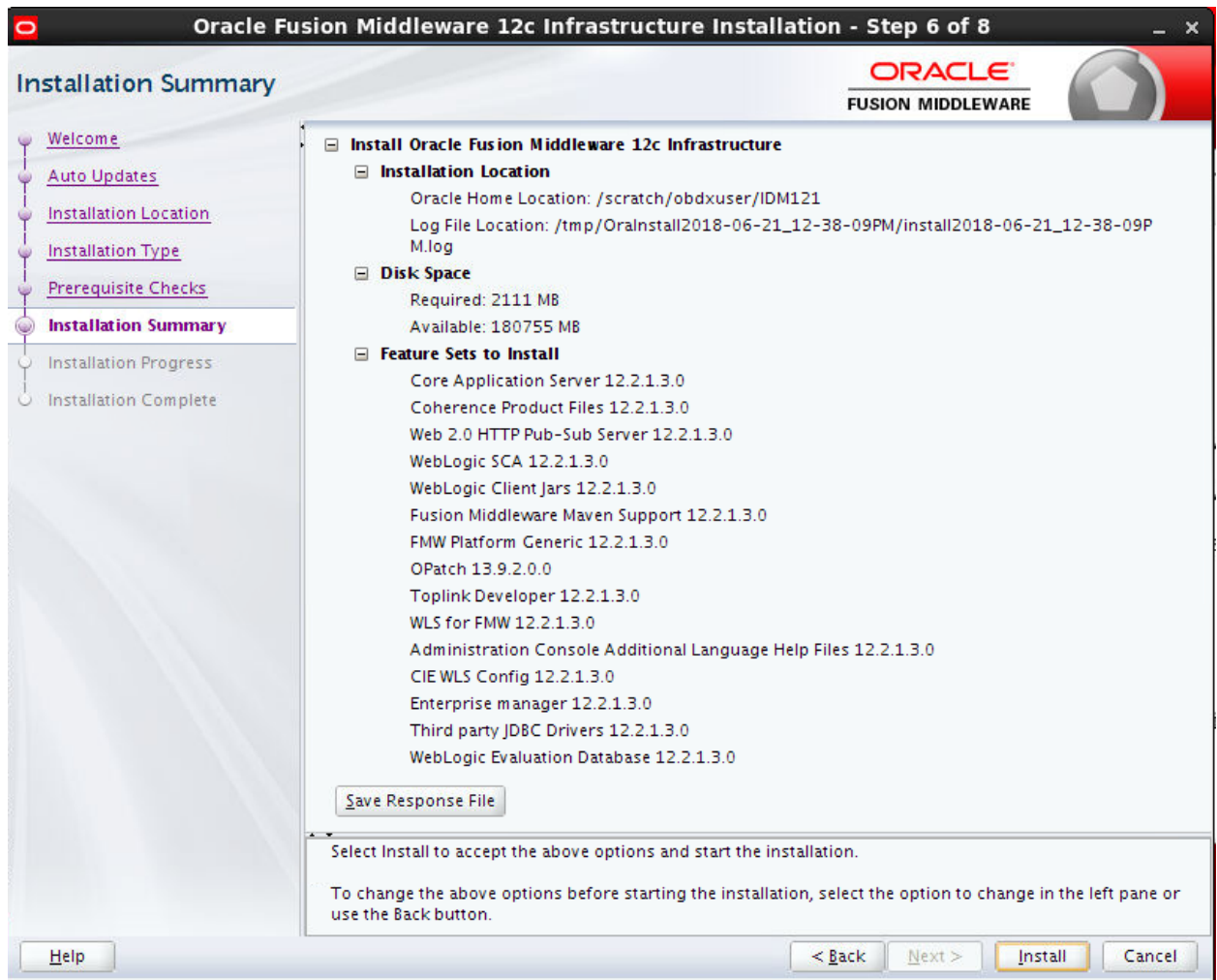
- Oracle Middleware Home
The absolute path to the directory where WebLogic Server will be installed.
Click Next to continue.



Click next to continue

Select Yes and Click on Next.

Click Next on “Prerequisite Check” screen.



Click Install to finish Weblogic Server installation

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 12.2.1.3.0 from the Oracle Fusion Middleware Downloads. Download the zip file's (respective installation files) to a directory, and unpack the downloaded archive that contains the installer.

- Now to start the installer, Start the installer. `./java -jar fmw_12.2.1.3.0_oud.jar`
- 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

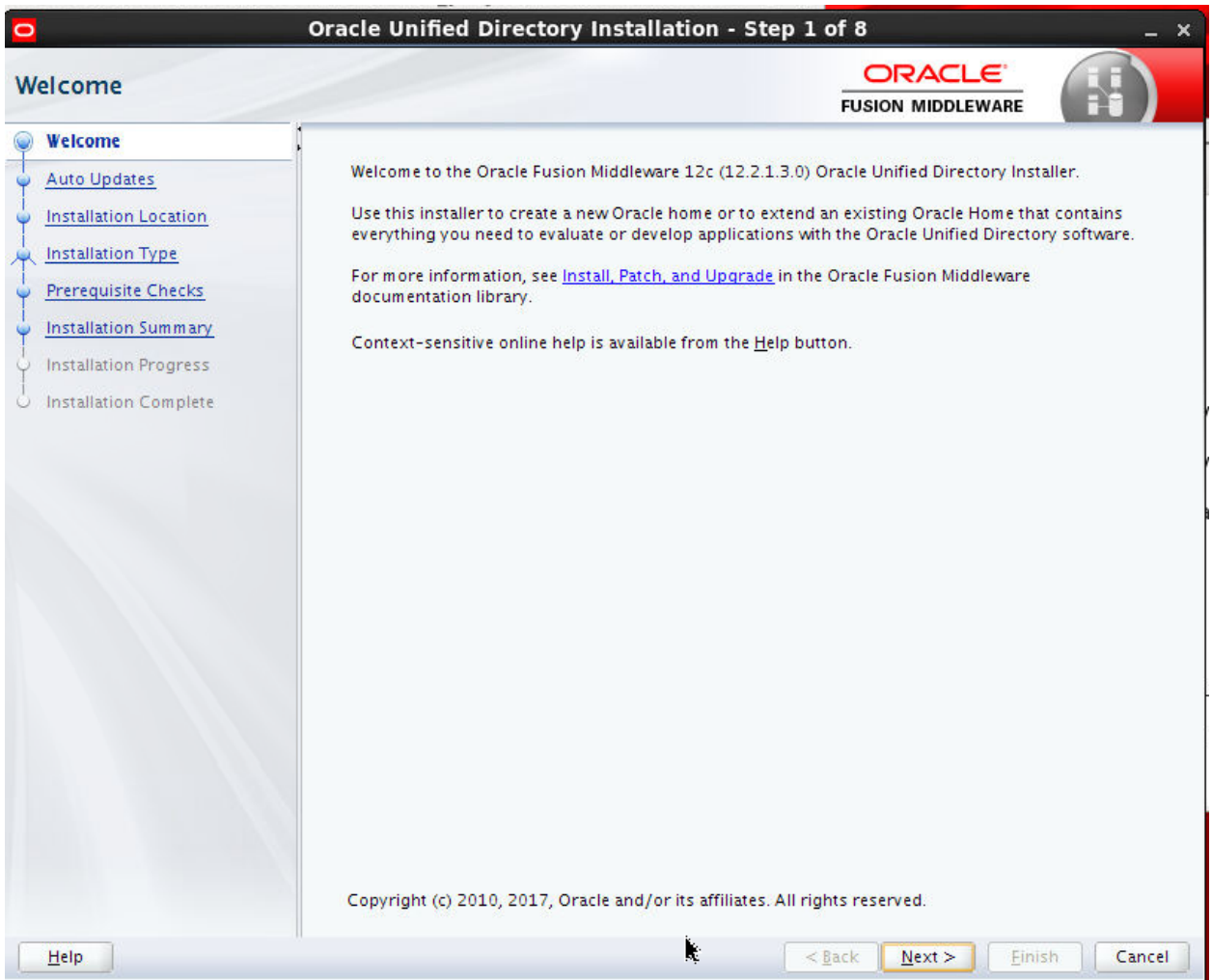
| Screen | Description and Action Required |
|---|--|
| Specify Inventory Directory Screen (UNIX Only) | Specify the Oracle inventory directory and group permissions for that directory. The group must have write permissions to the Oracle inventory directory. Click OK to continue. |
| Inventory Location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

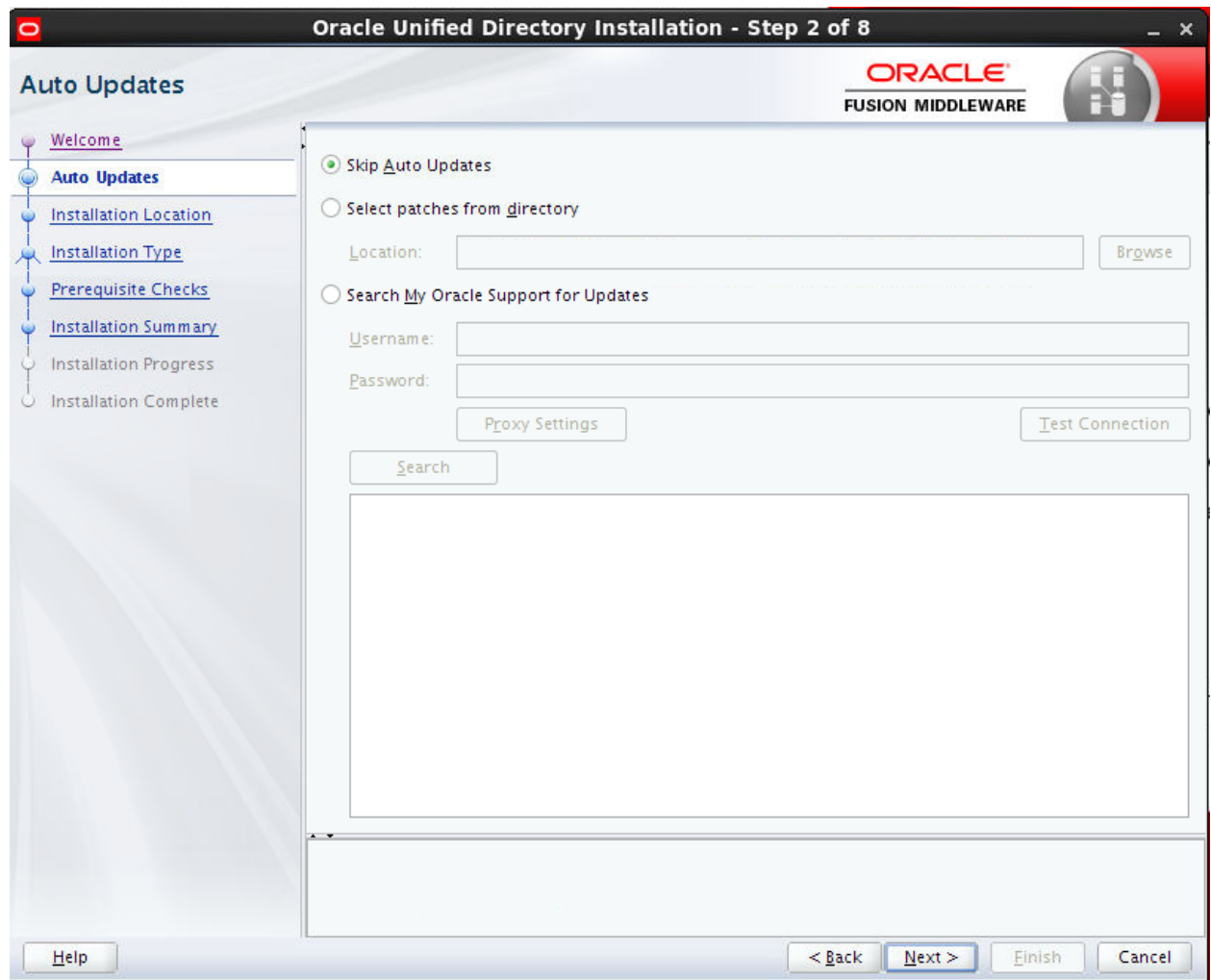


The Welcome screen is displayed each time you start the installer.



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:

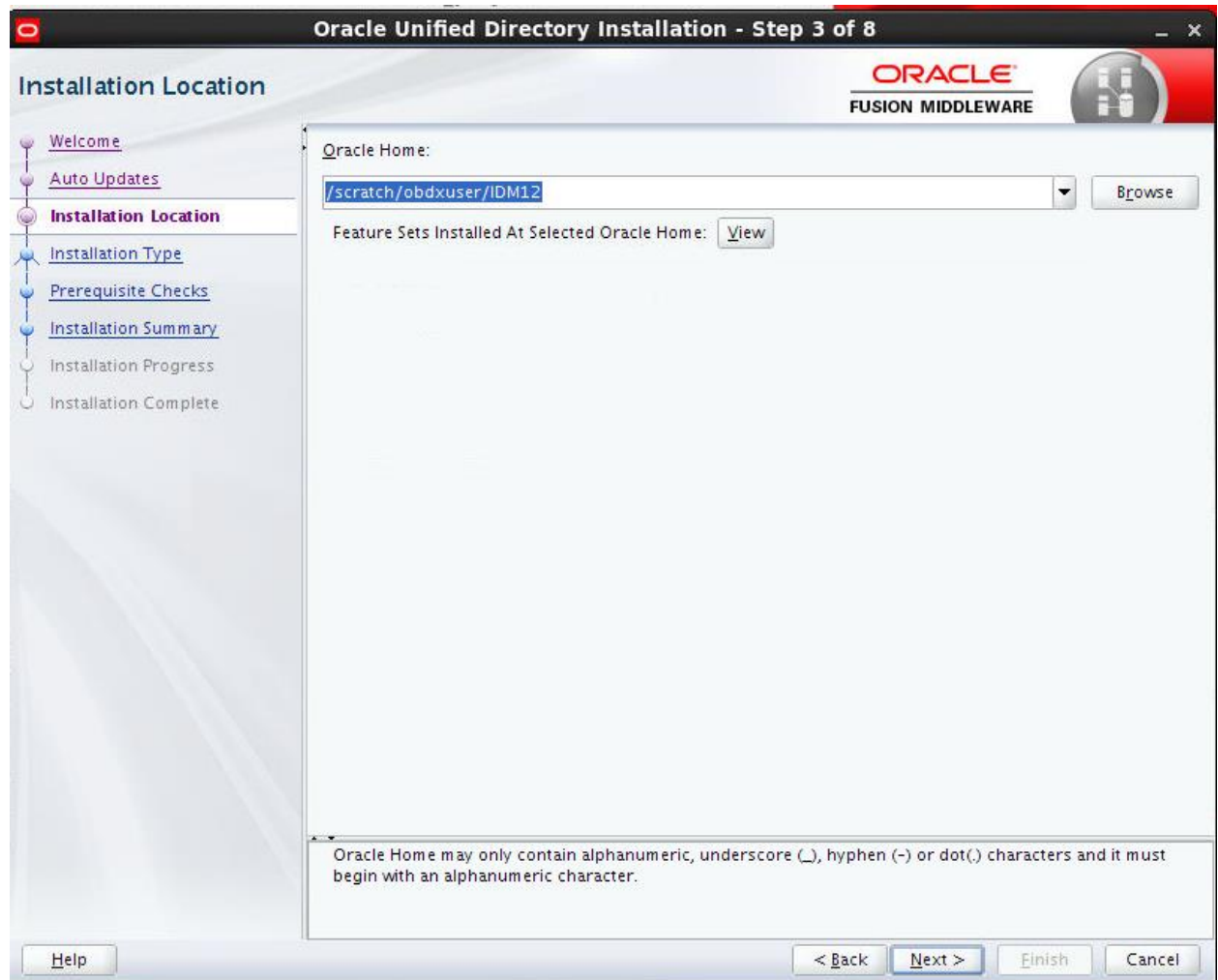
Select Search Local Directory for Updates.

Click Search For Updates.

If you want to skip software updates, then select Skip Software Updates. (Kindly follow recommended practices regarding updates depending on the setup requirements or usage.)

Click Next to continue.

Specify Installation Location Screen



Specify the following installation locations:

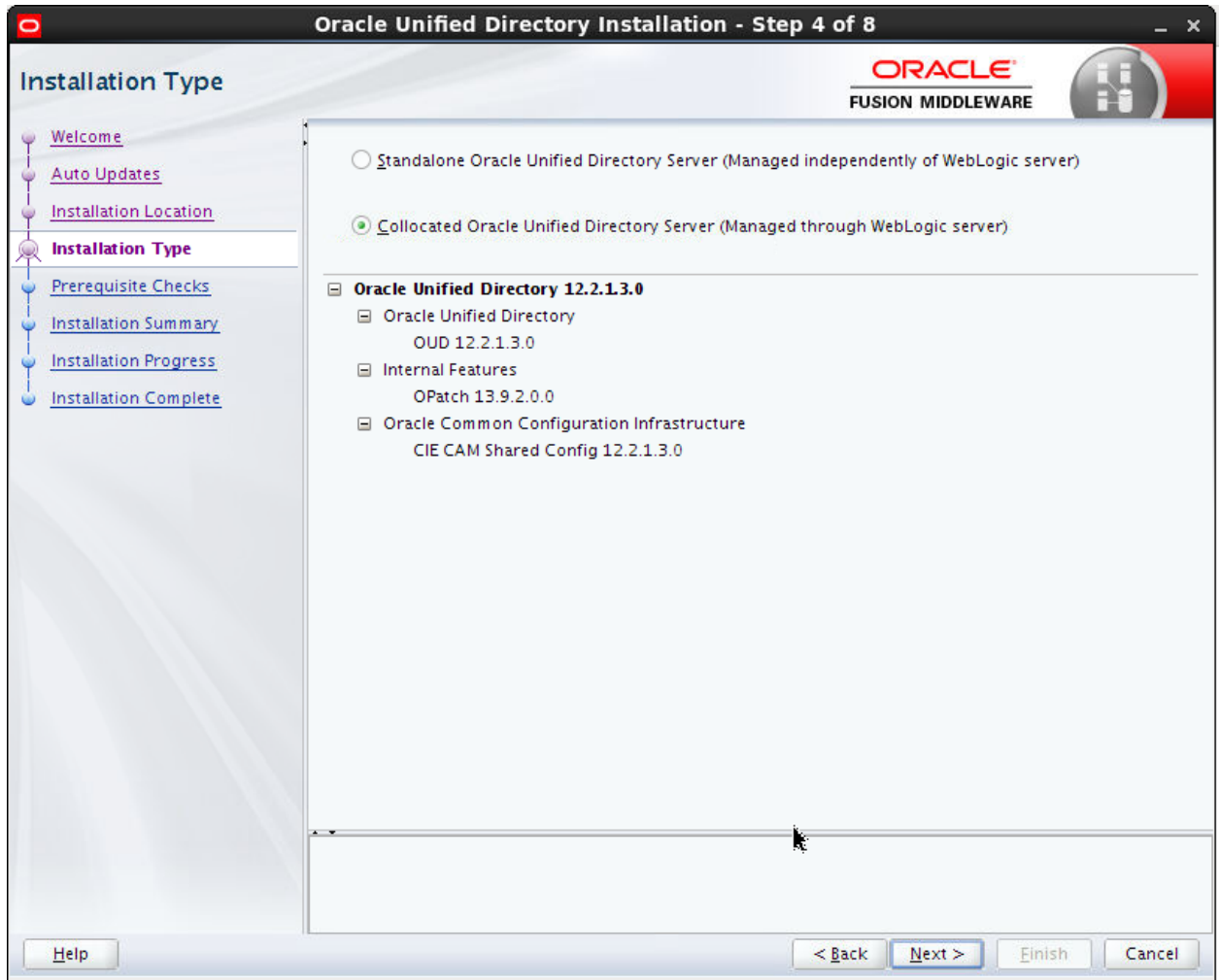
- Oracle Home
 - The absolute path to the directory where WebLogic Server was installed.

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.

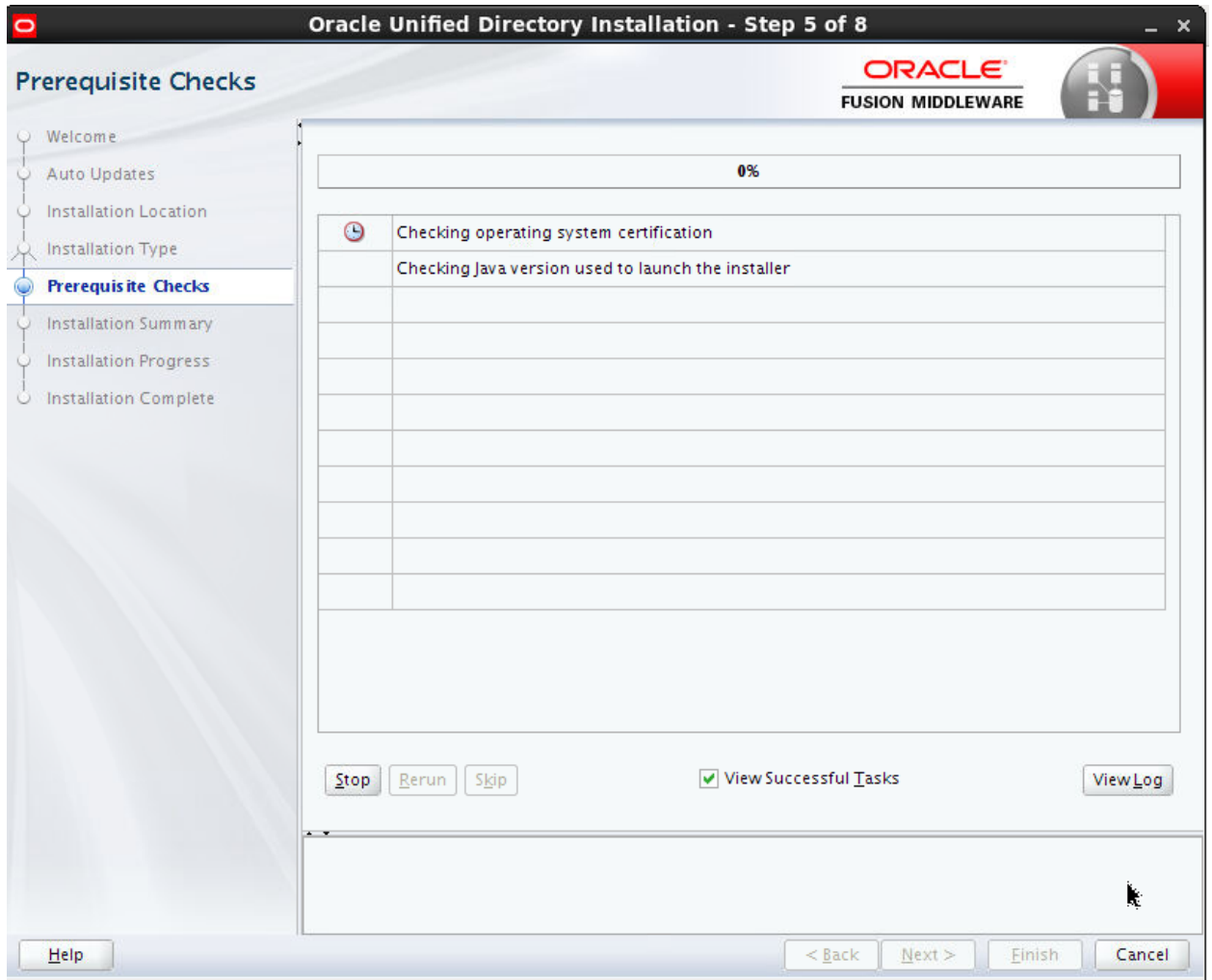
Note: This installation directory will be referred to as `IDM_ORACLE_HOME` throughout the remainder of this document. If you are performing an installation on a Windows operating system, be sure that your directory paths are valid, and do not contain double backslashes (`\\`).

Click Next to continue.

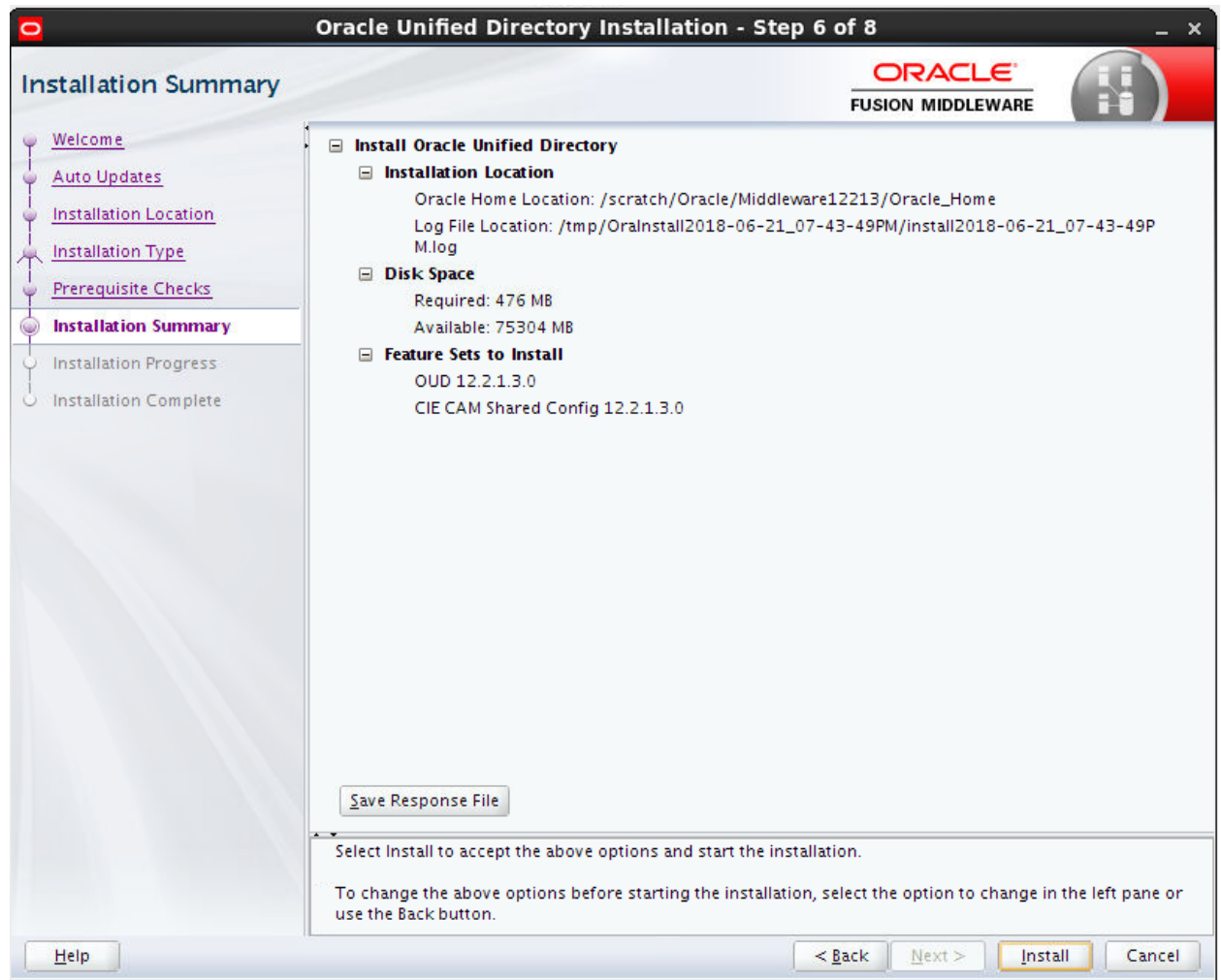
Installation Type Screen



Select Collocated Oracle Unified Directory Server > Next



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.

Click Install.

Then screen shows the progress of the installation and exit after installation is completed.

Installation Progress Screen

Installation Complete Screen

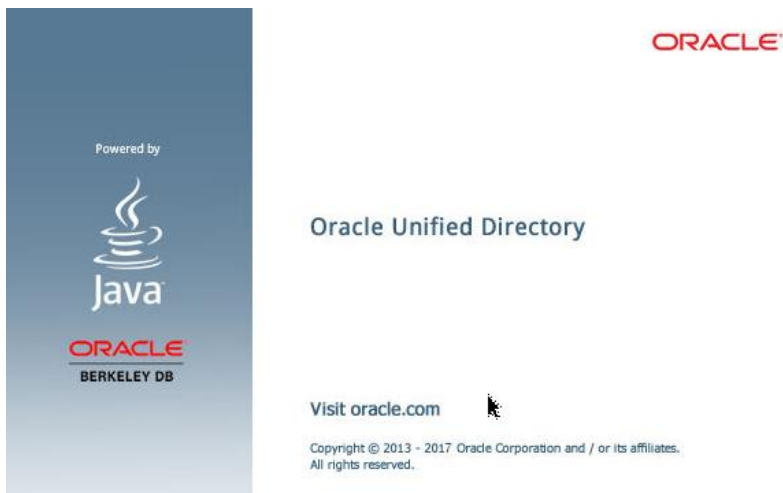
6.3.2 Verifying the Installation

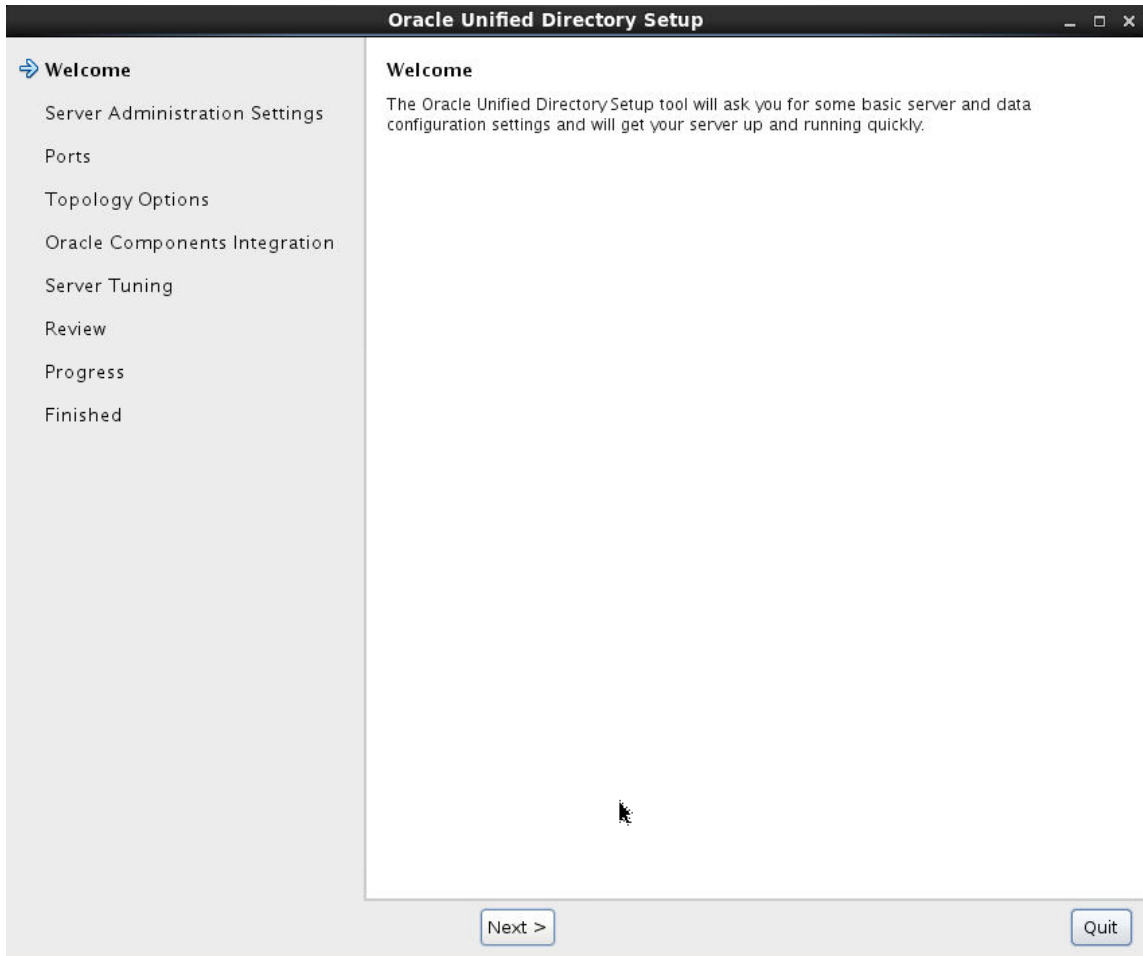
You can perform any combination of the following tasks to verify that your installation was successful:

- 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. Configuring OUD

From <ORACLE_HOME>/oud start below command

```
./oud-setup
```





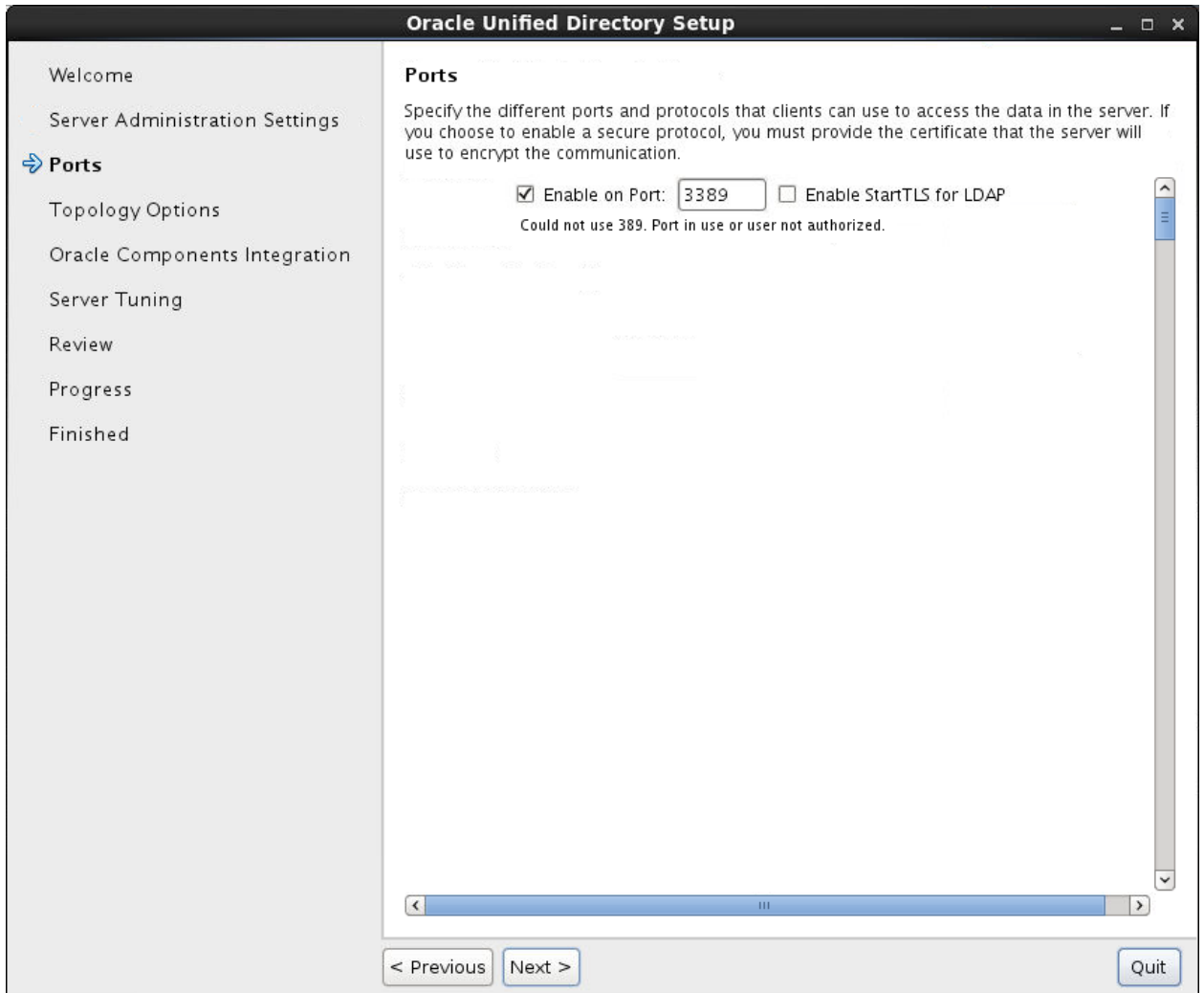
Click Next

The screenshot shows the 'Oracle Unified Directory Setup' window. On the left is a navigation pane with the following items: Welcome, **Server Administration Settings** (highlighted with a blue arrow), Ports, Topology Options, Oracle Components Integration, Server Tuning, Review, Progress, and Finished. The main area is titled 'Server Administration Settings' and contains the following fields and options:

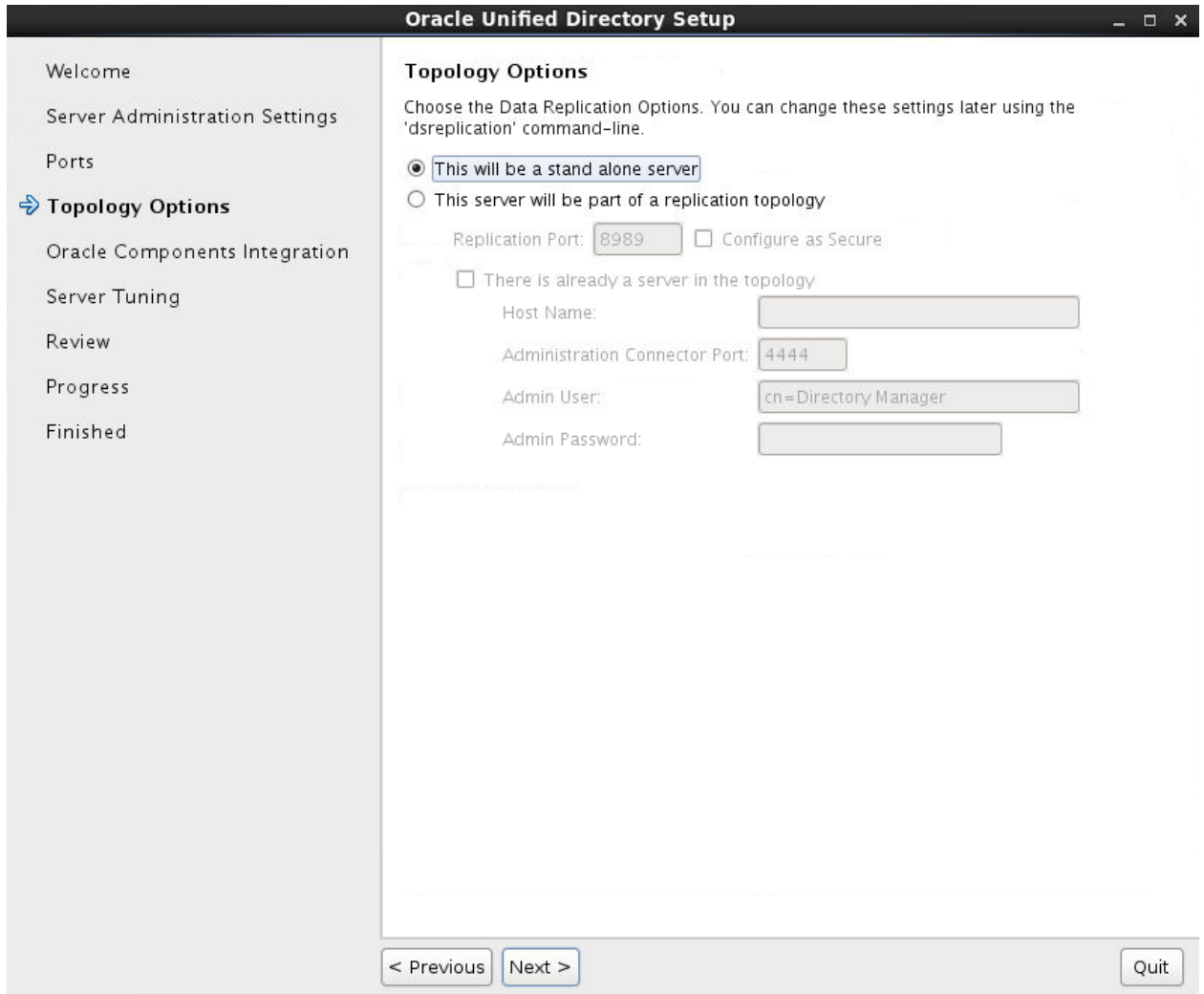
- Instance Path:** A text box containing '/scratch/obdxuser/IDM12/asinst_2/OU' and a 'Browse...' button.
- Host Name:** A text box containing 'mum00aon.in.oracle.com'.
- Administration Port(s):** A dropdown menu set to 'Enable Administration only with LDAP'.
- LDAP Port:** A text box containing '6444'. Below it, a message reads: 'Could not use 4444. Port in use or user not authorized.'
- Root User DN:** A text box containing 'cn=orcladmin'.
- Password:** A text box containing '*****'.
- Password (confirm):** A text box containing '*****'.

At the bottom of the window are three buttons: '< Previous', 'Next >', and 'Quit'.

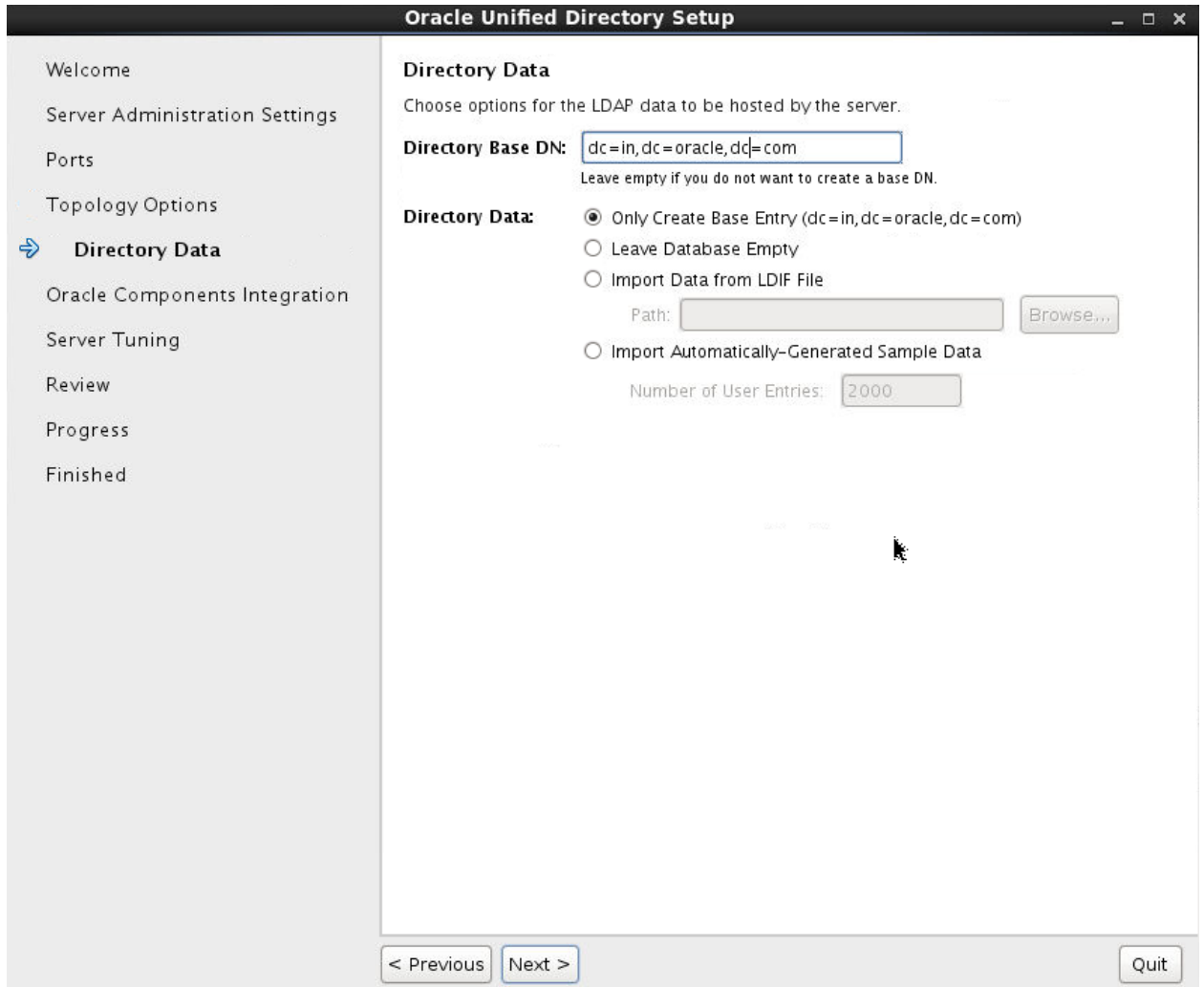
Enter the details and OUD password > Next



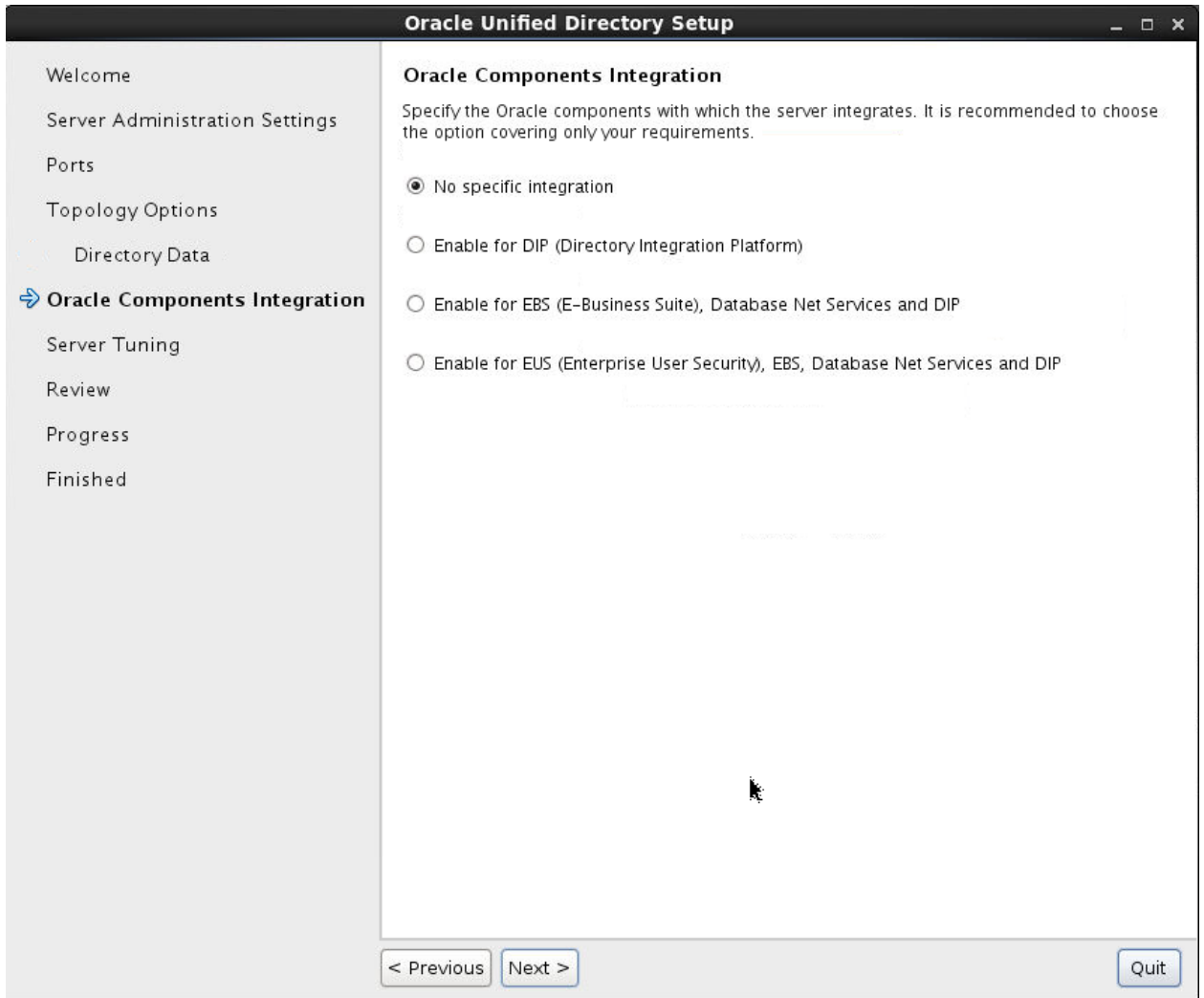
Enter the LDAP Port > Next



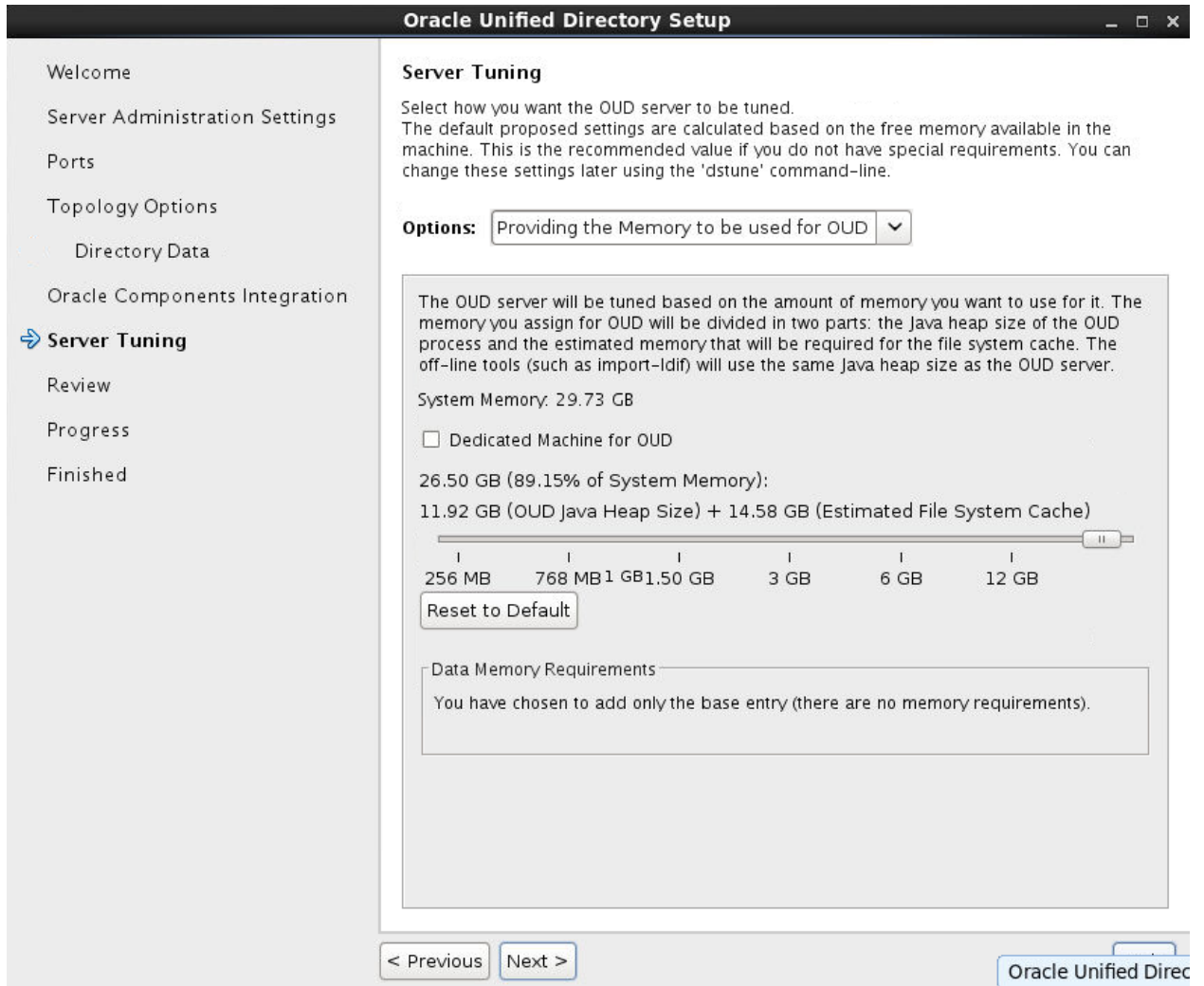
Select standalone server > Next



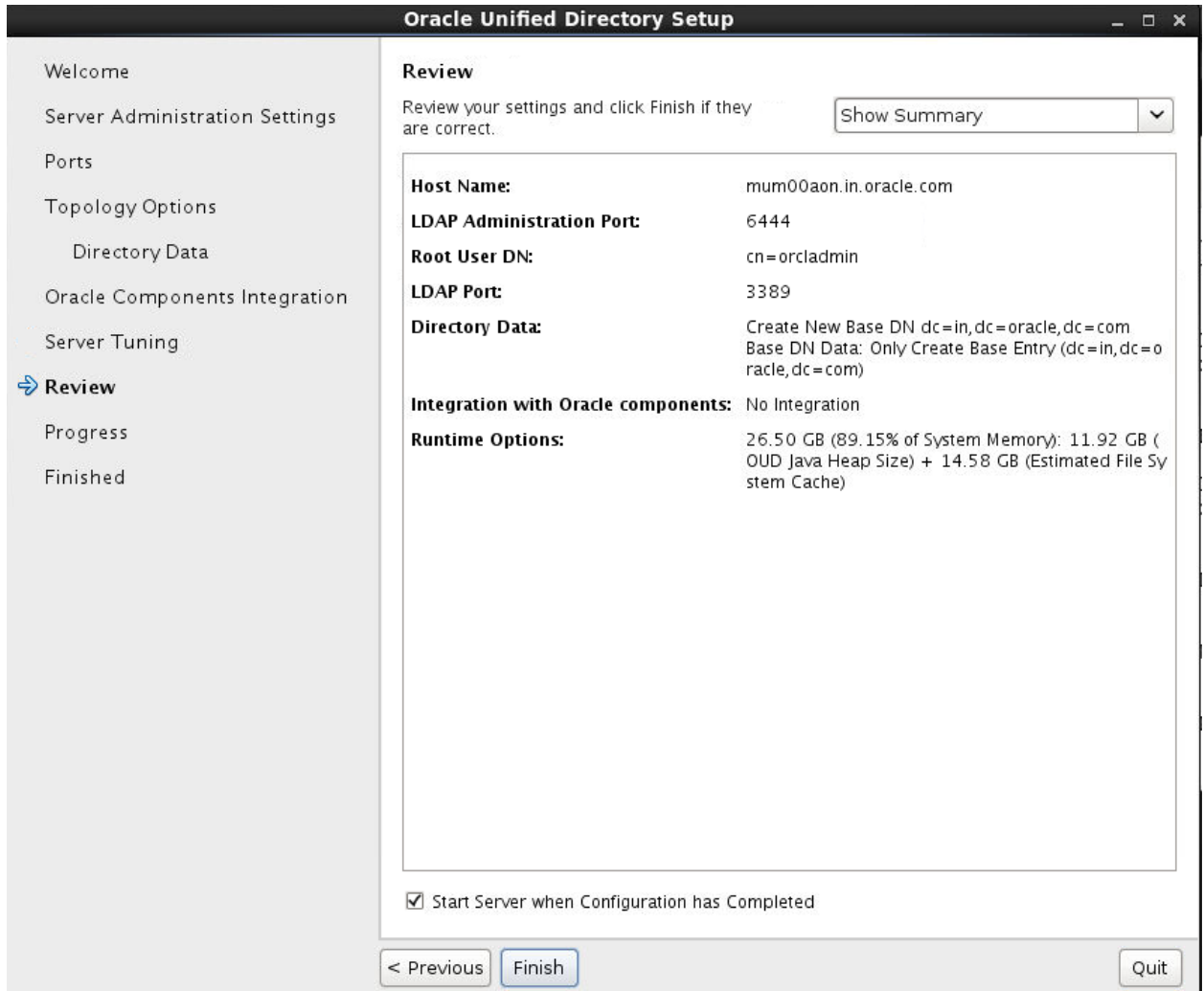
Add base DN > Next



Next >



Add sizing parameters > Next



Click Finish to complete the configuration

[Home](#)

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:

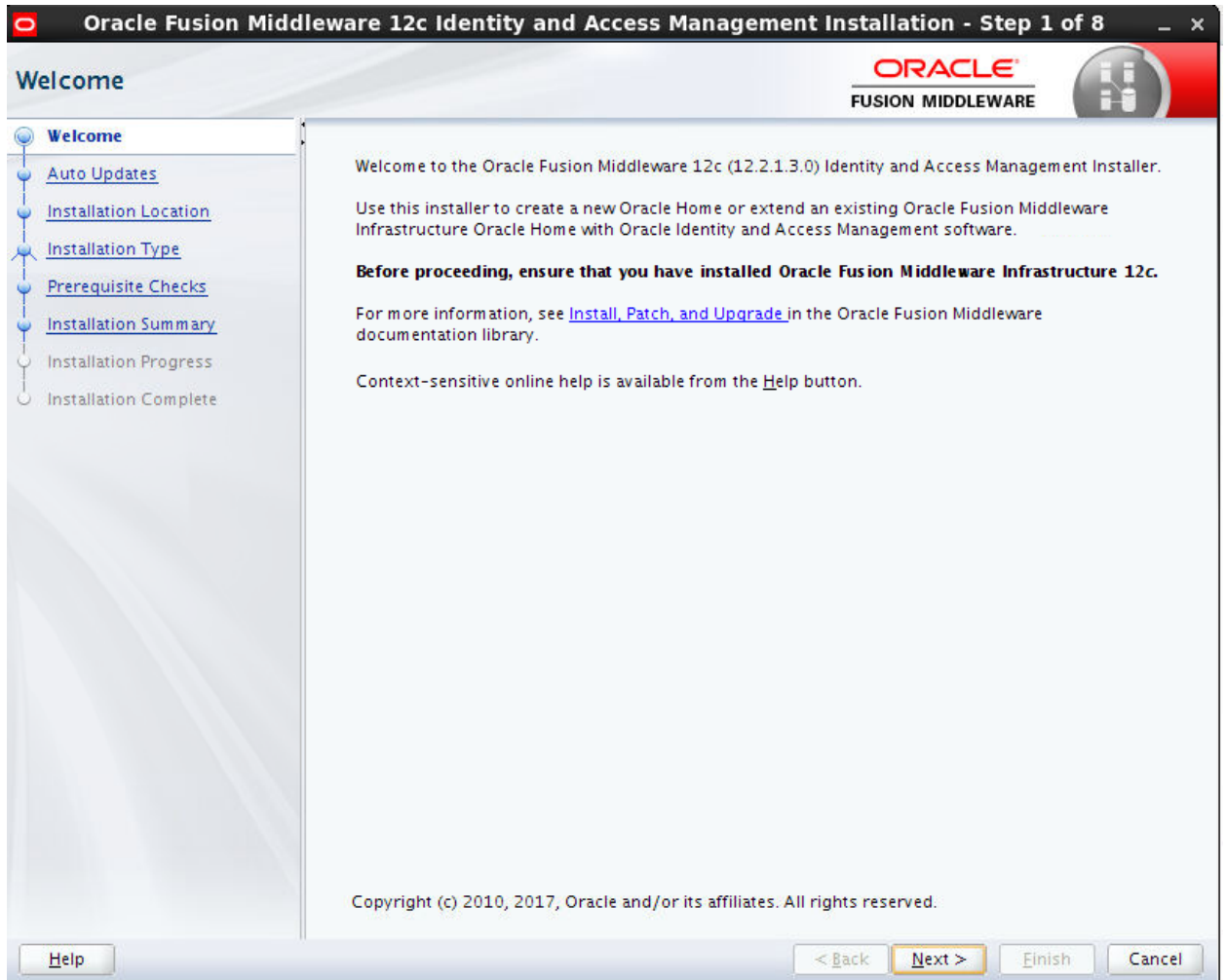
- Section 7.1, "Installing Oracle Access Manager"
- Section 7.2, "Post-Installation Tasks"
- Section 7.3, "Verifying the Installation"

7.1 Installing Oracle Access Manager

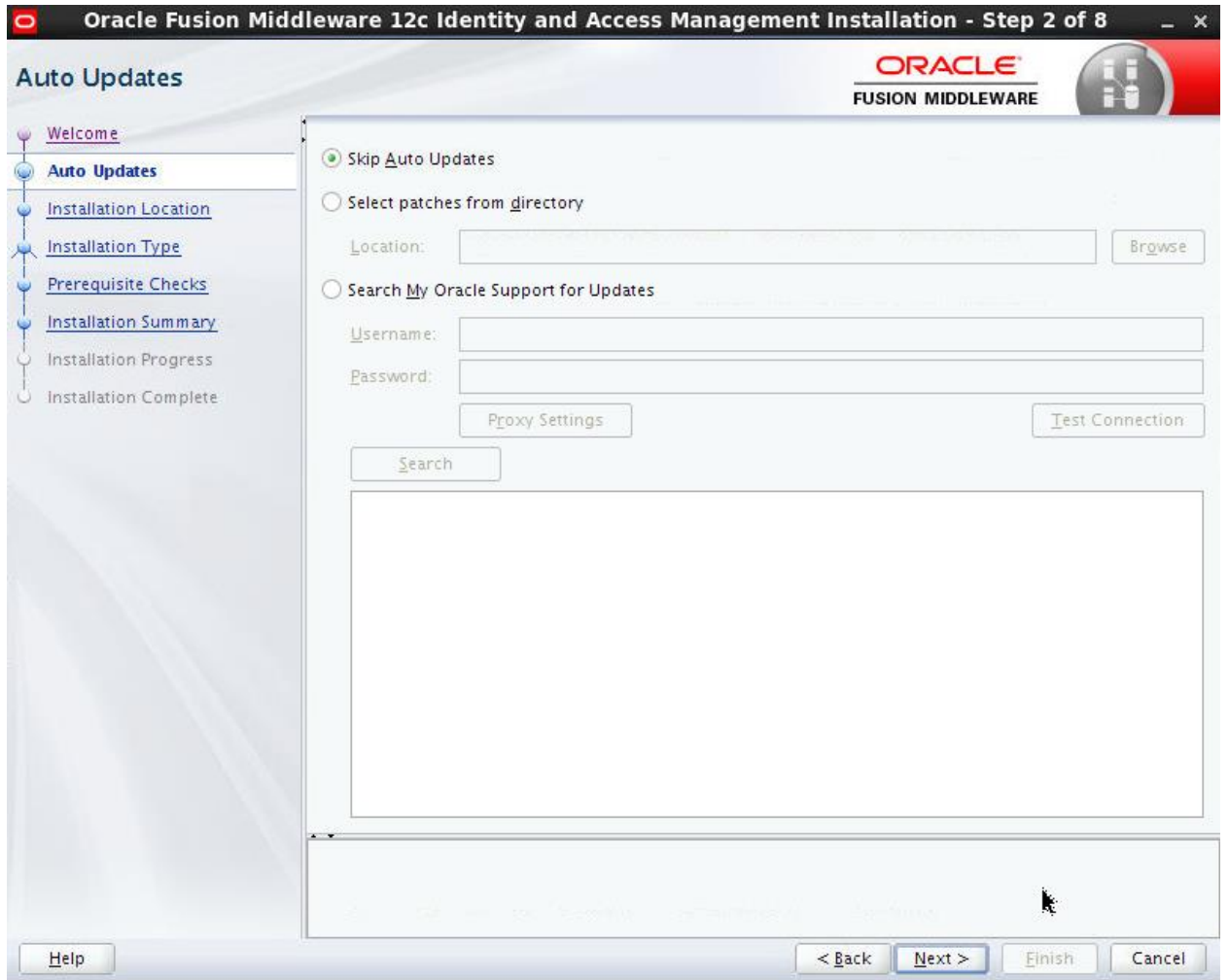
- Before you start configuring Oracle Access Management, note that the **IDM_HOME** is the path provided during IDM installation and is used to refer to the Oracle home directory.
- Run below command to start installation

```
java -jar fmw_12.2.1.3.0_idm.jar
```

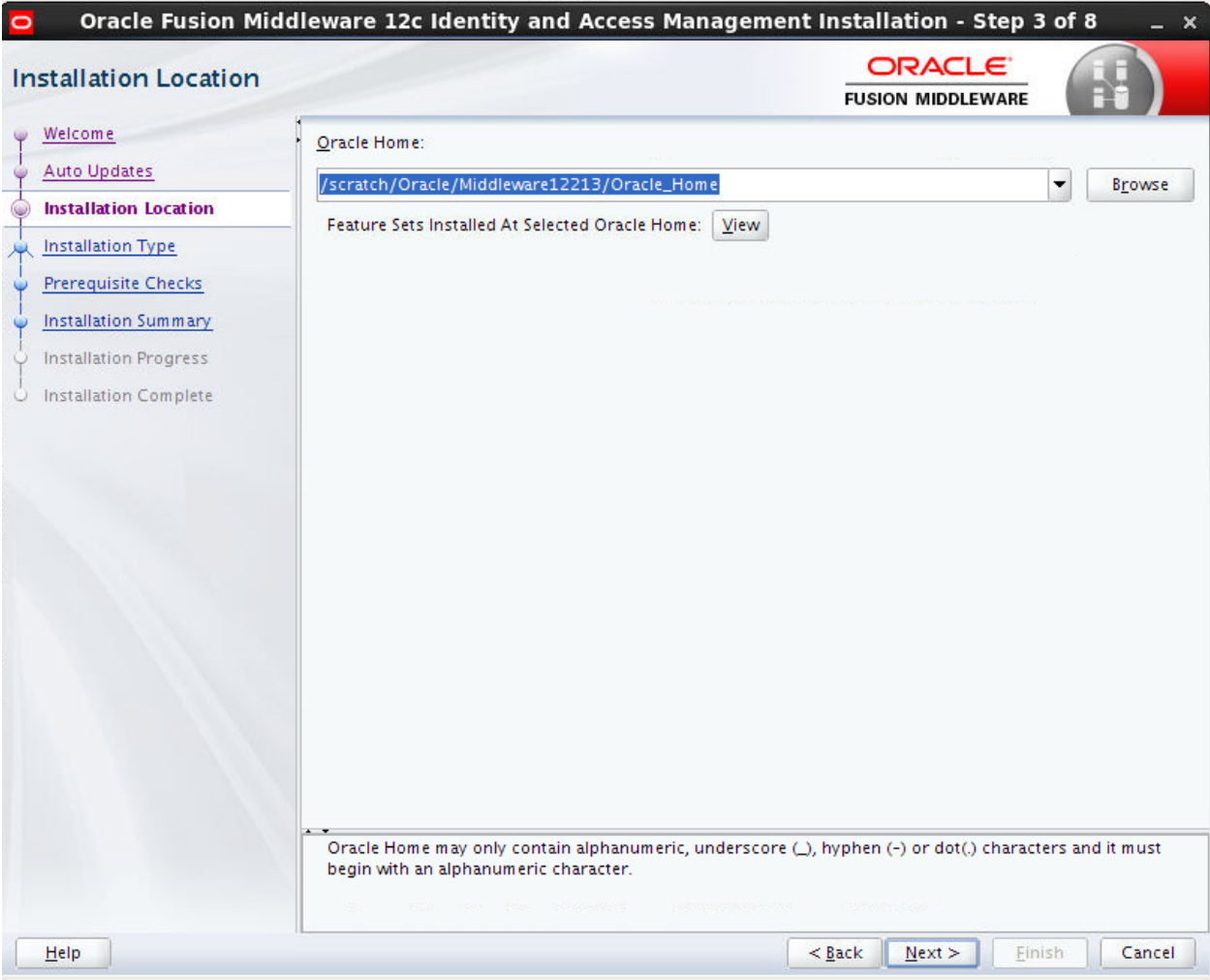




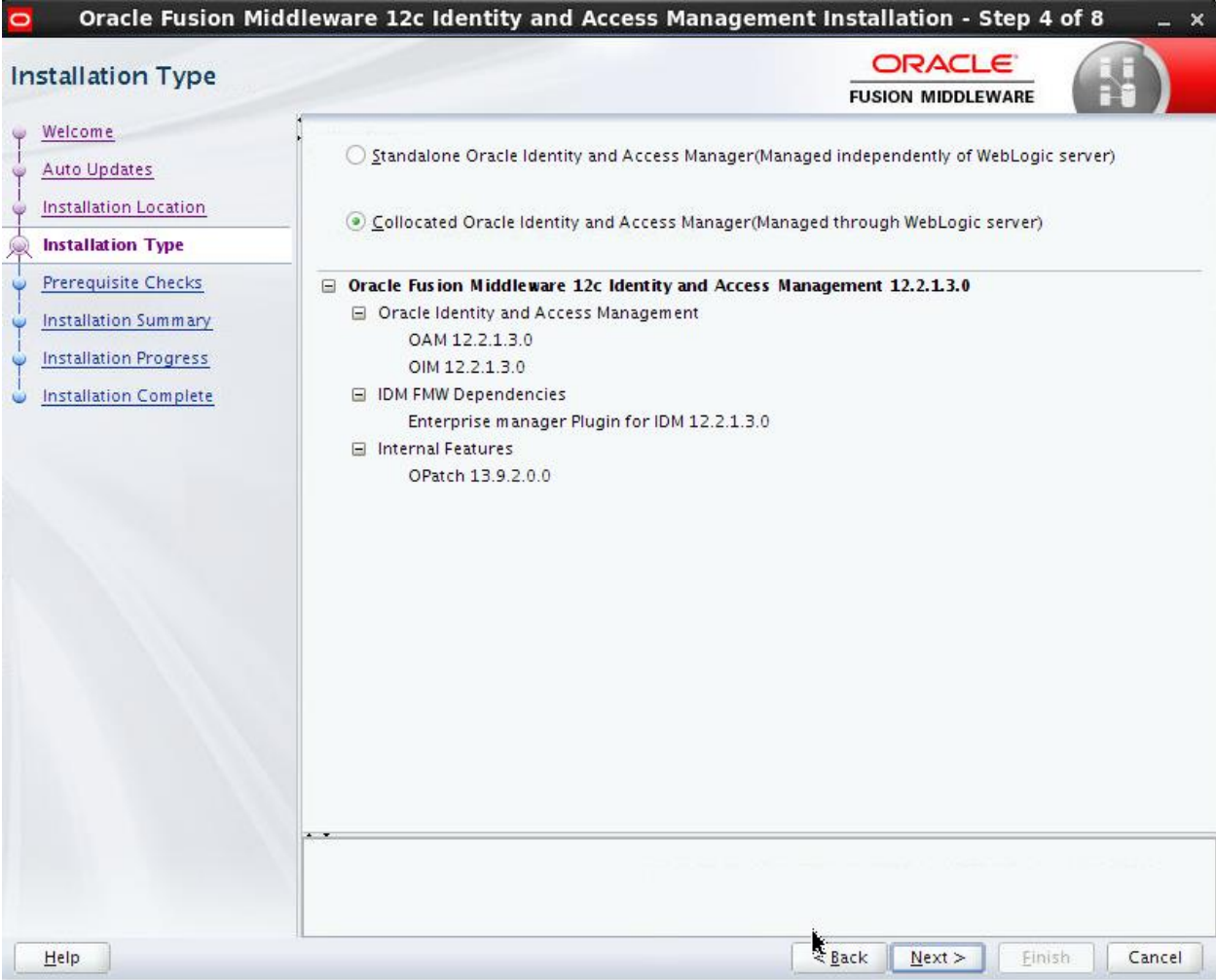
Next >



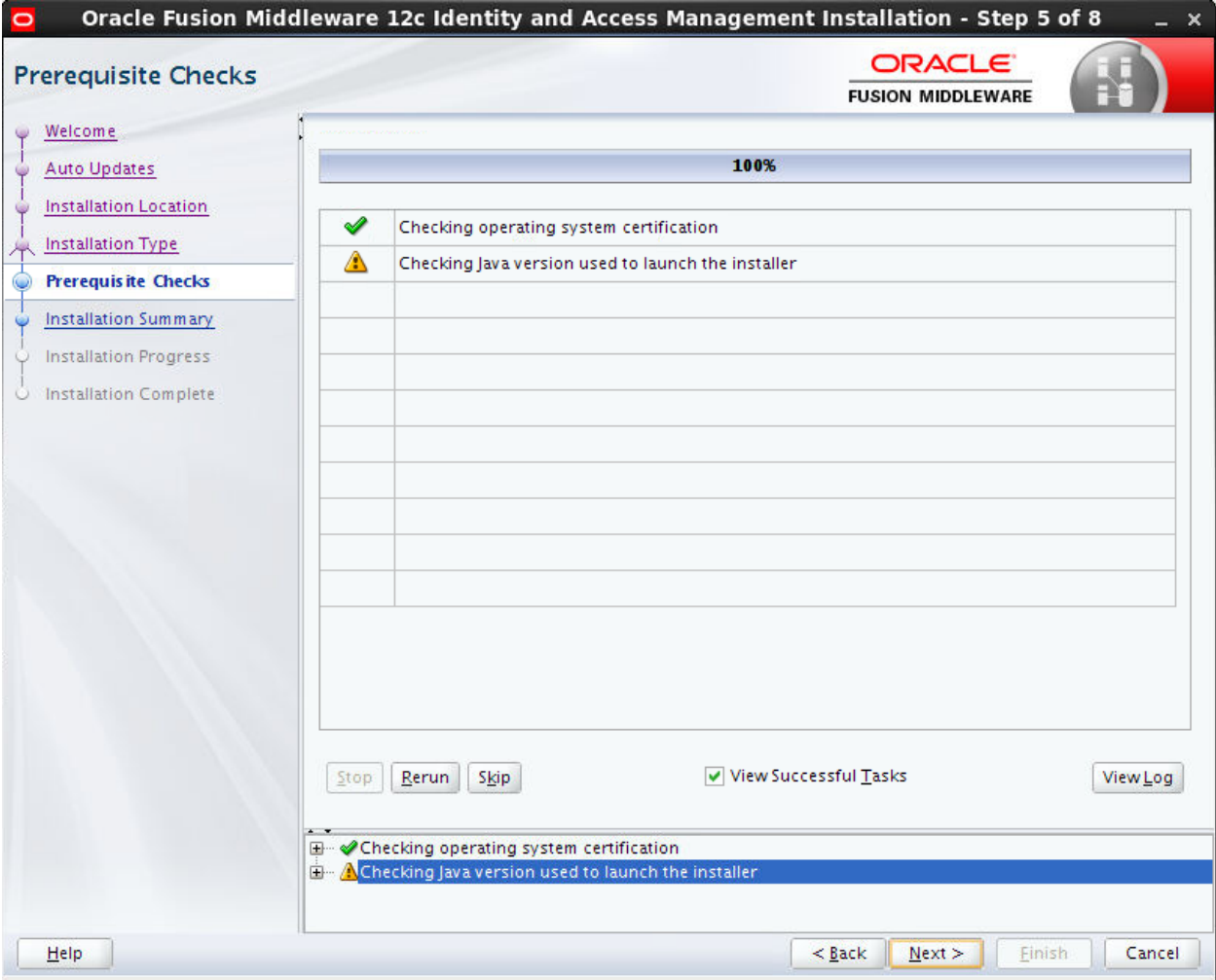
Next >



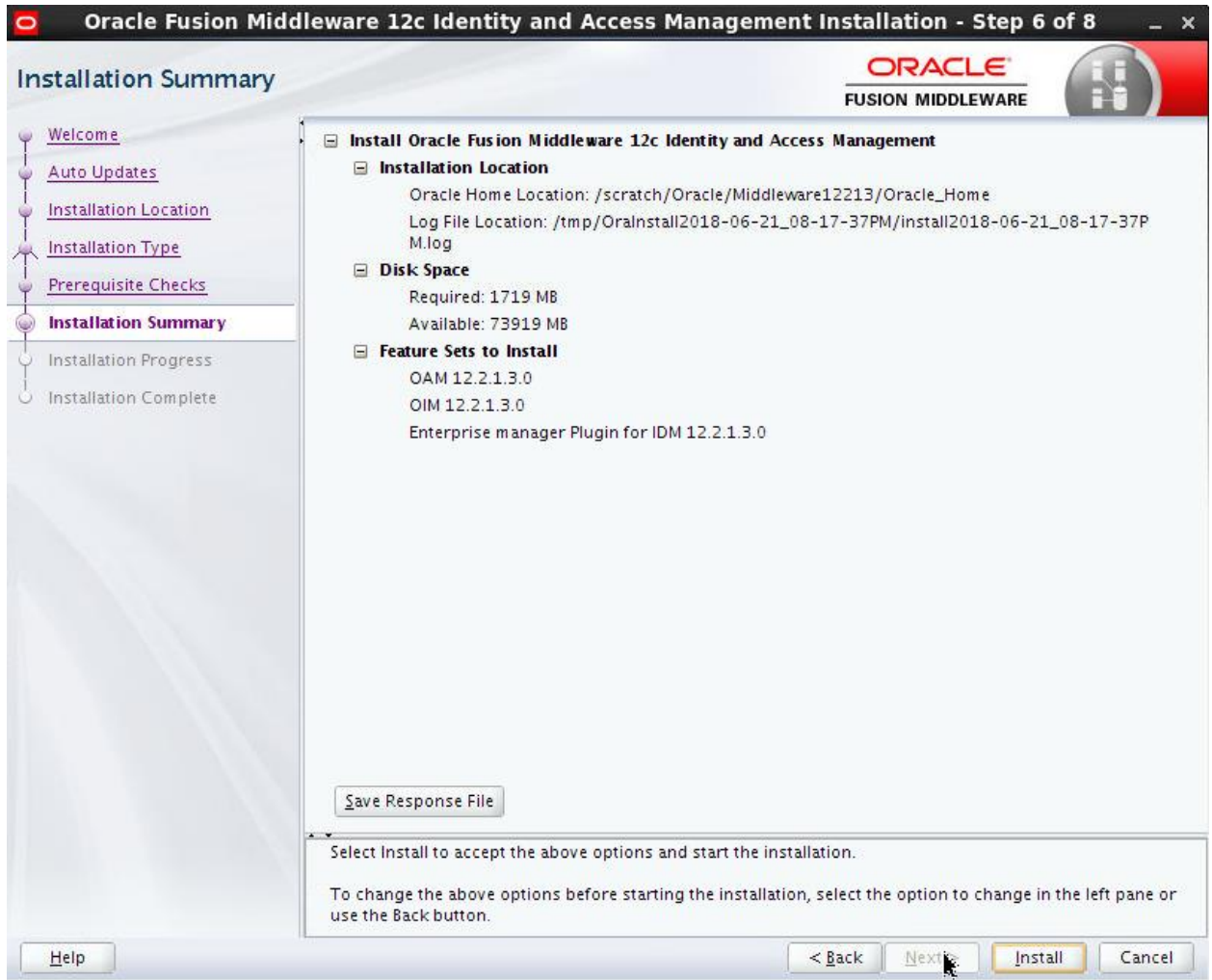
Select the same Weblogic as in Sec 6.2.1



Next >



Next >



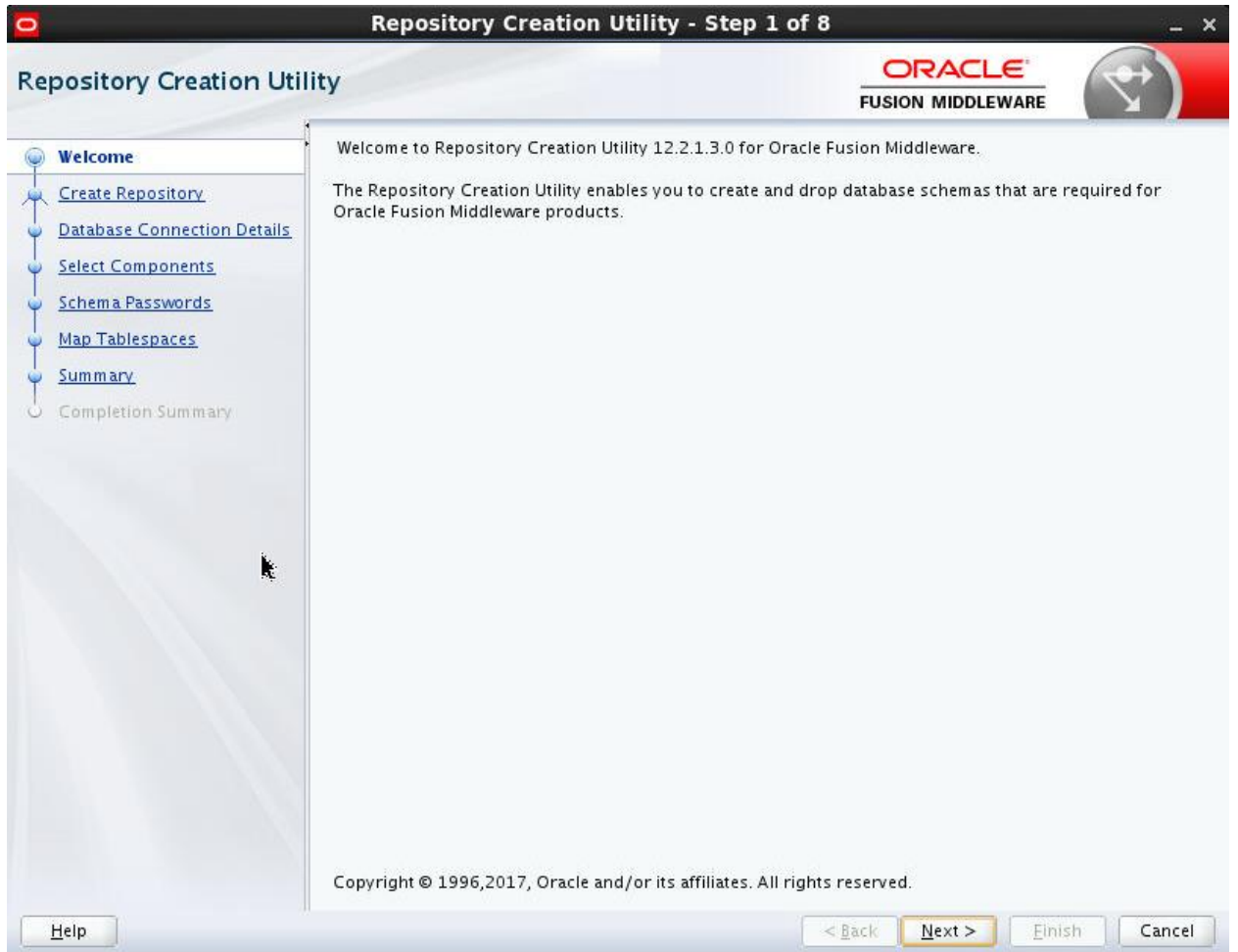
Click Install to complete the installation

Running the repository creation utility (RCU)

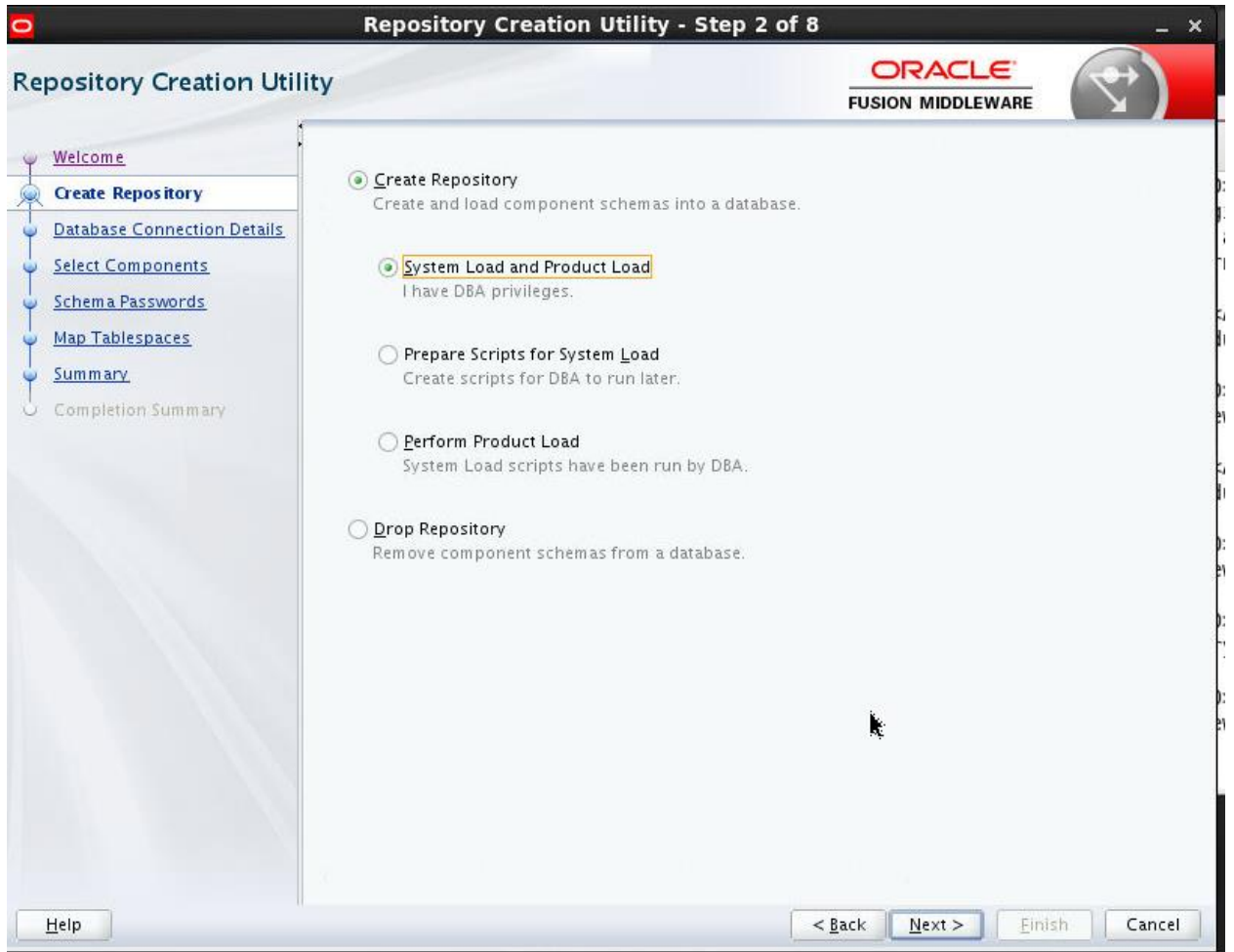
Run below command

```
<ORACLE_HOME>/oracle_common/bin
```

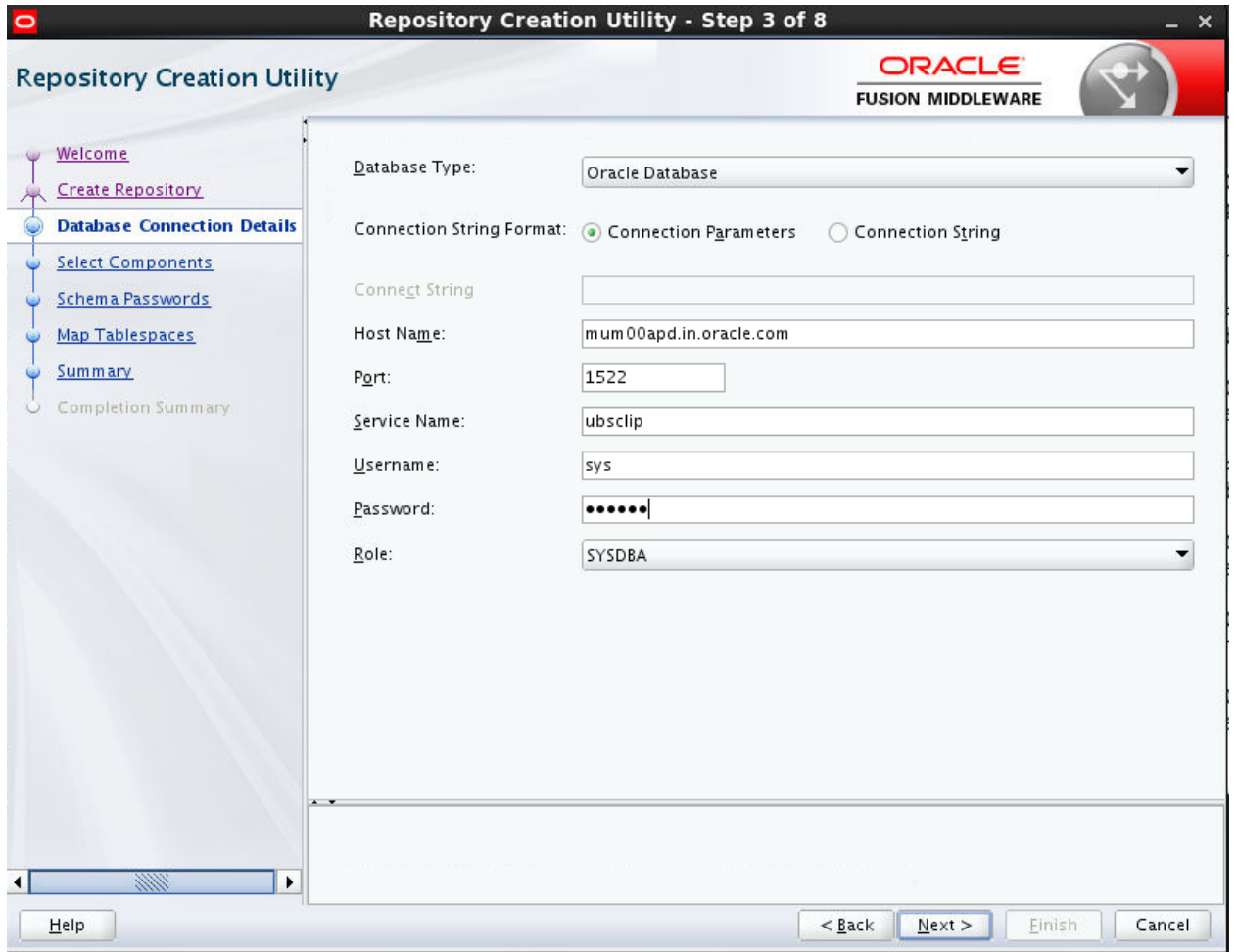
```
./rcu
```



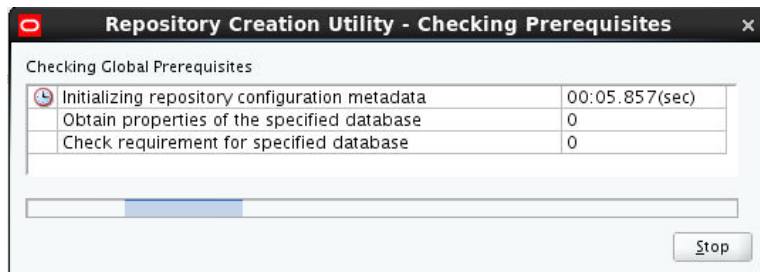
Next >

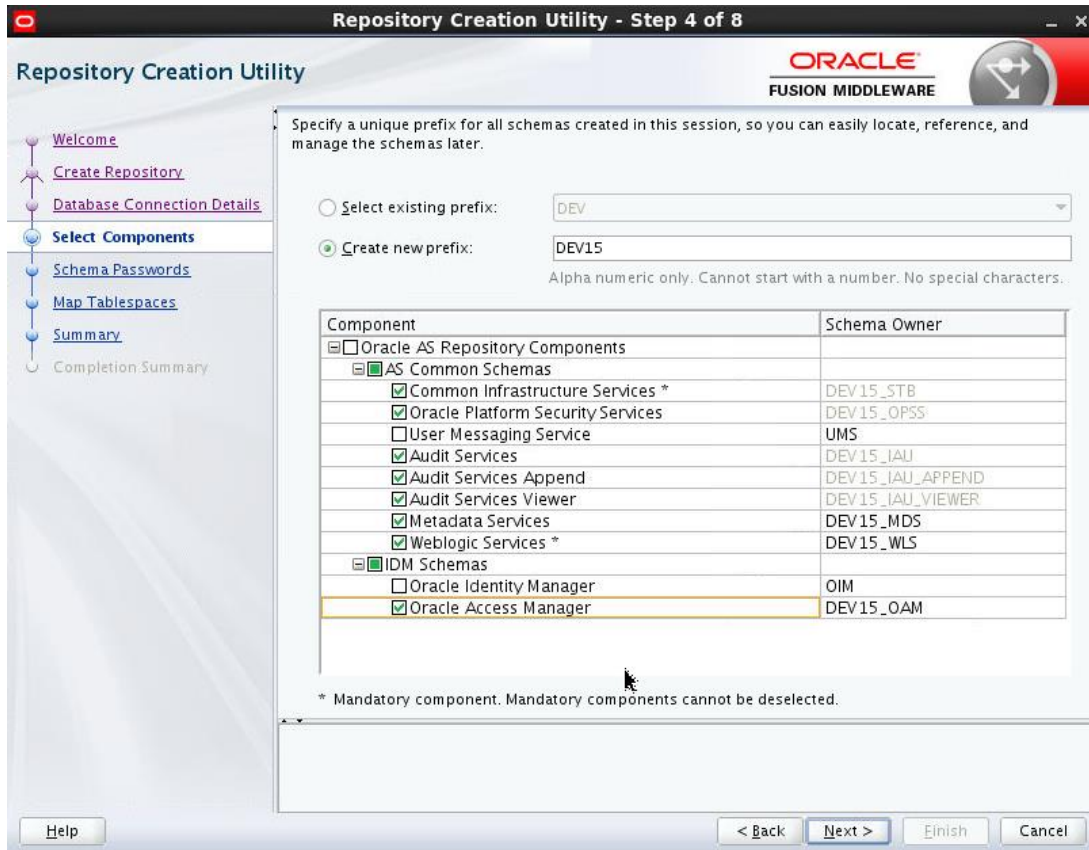


Next >

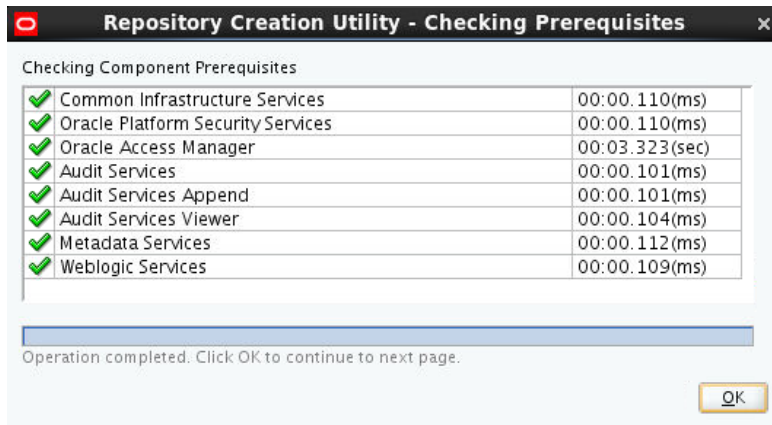


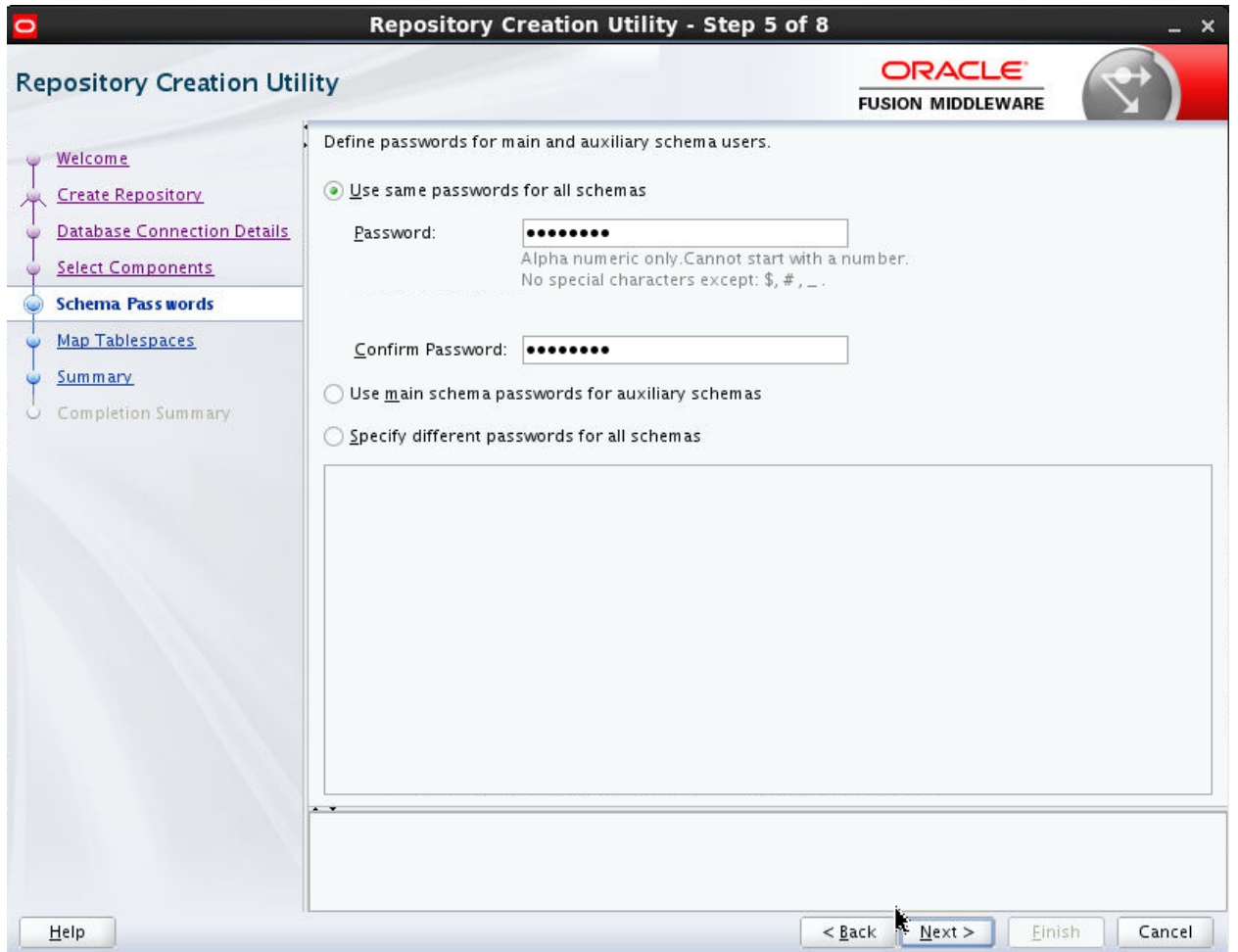
Provide connection parameter (Oracle 12c DB) > Next



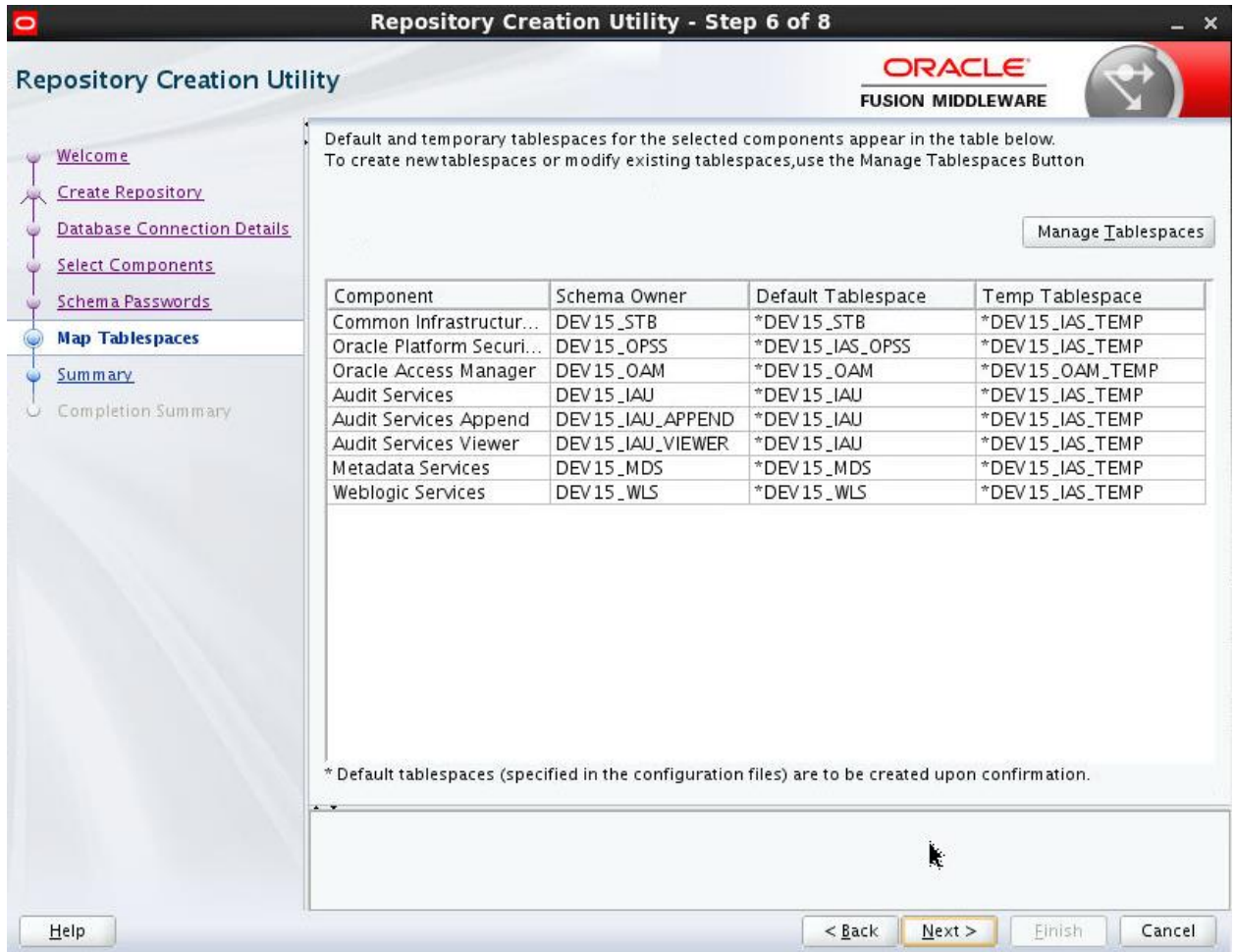


Provide prefix > Next





Provide passwords > Next



Click Next > Finish to complete installation of schemas

Configuring Weblogic Domain to use OUDSM and OAM

- Execute the below command, to launch the Weblogic Configuration Wizard:

<Oracle_Home>/oracle_common/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:

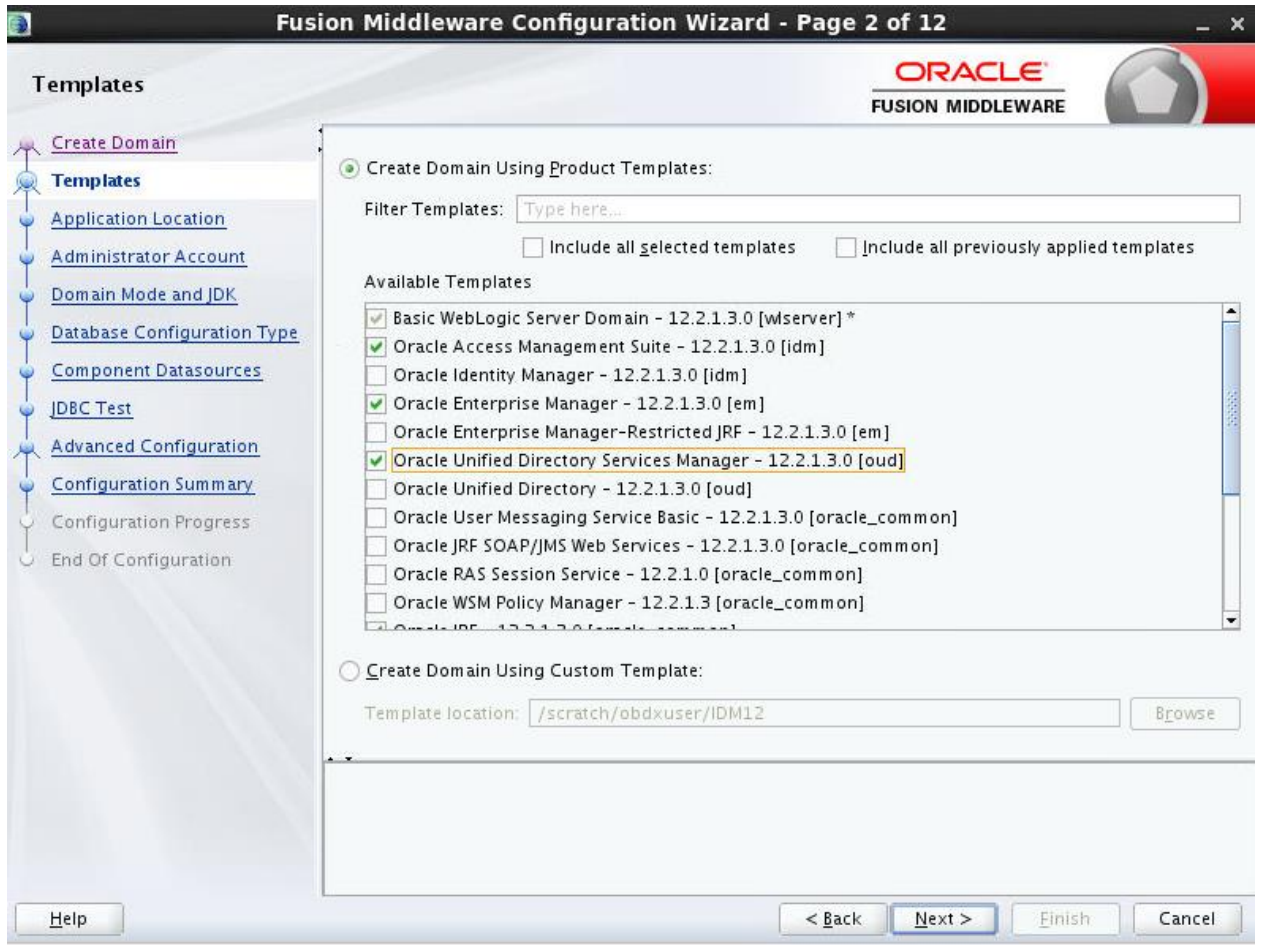
Welcome Screen

The Welcome screen is displayed > Next

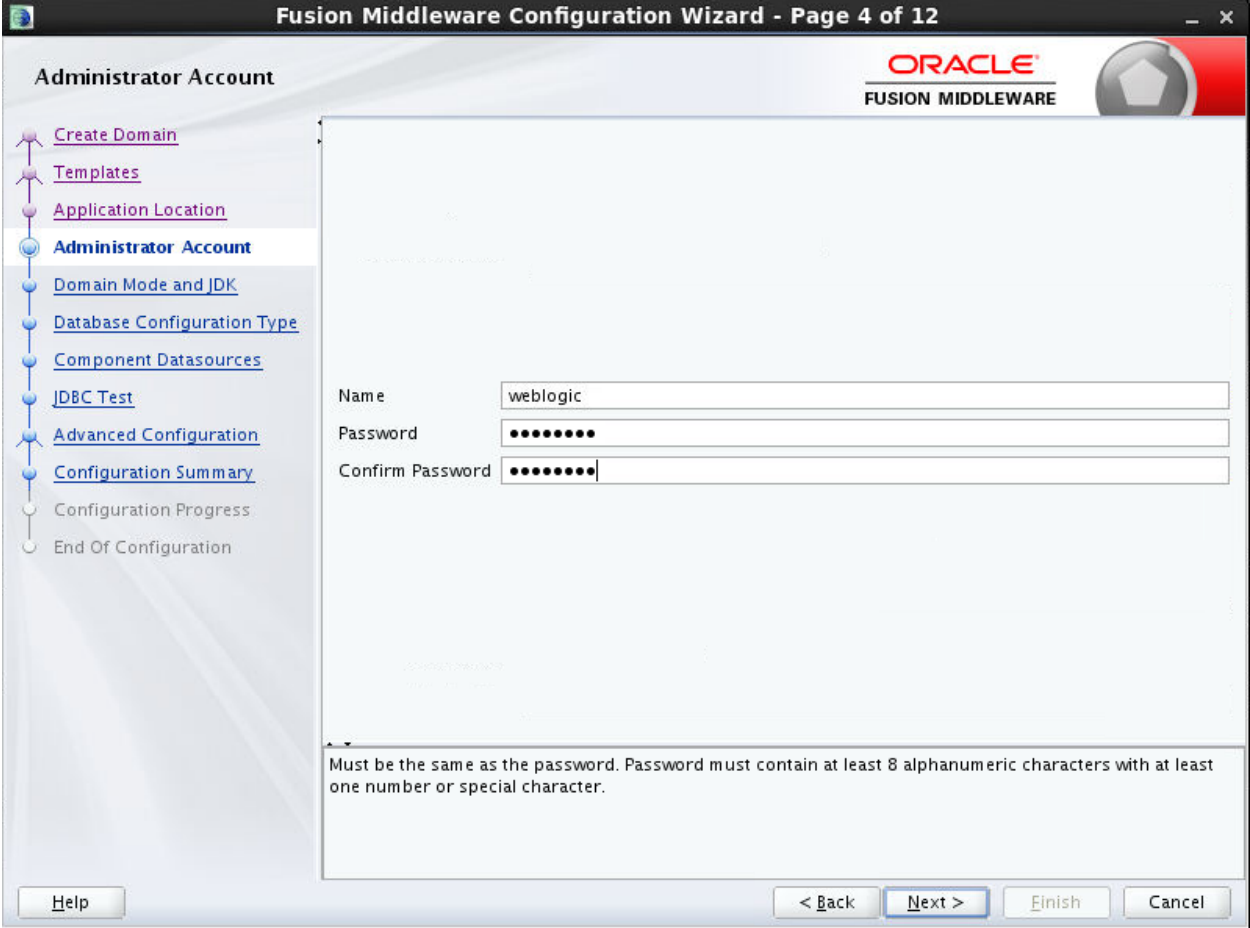


Click Next to continue.

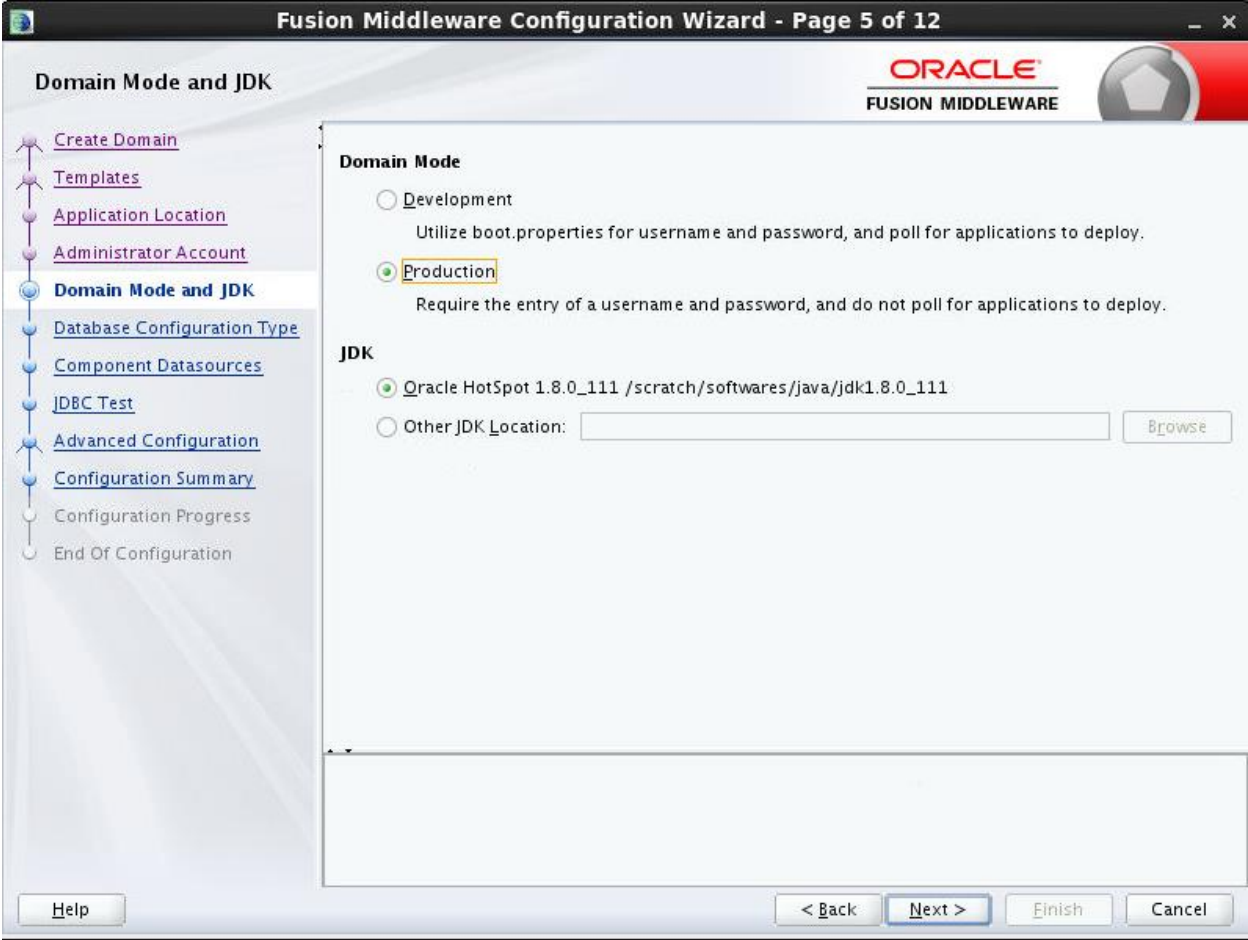
Select Domain Source Screen

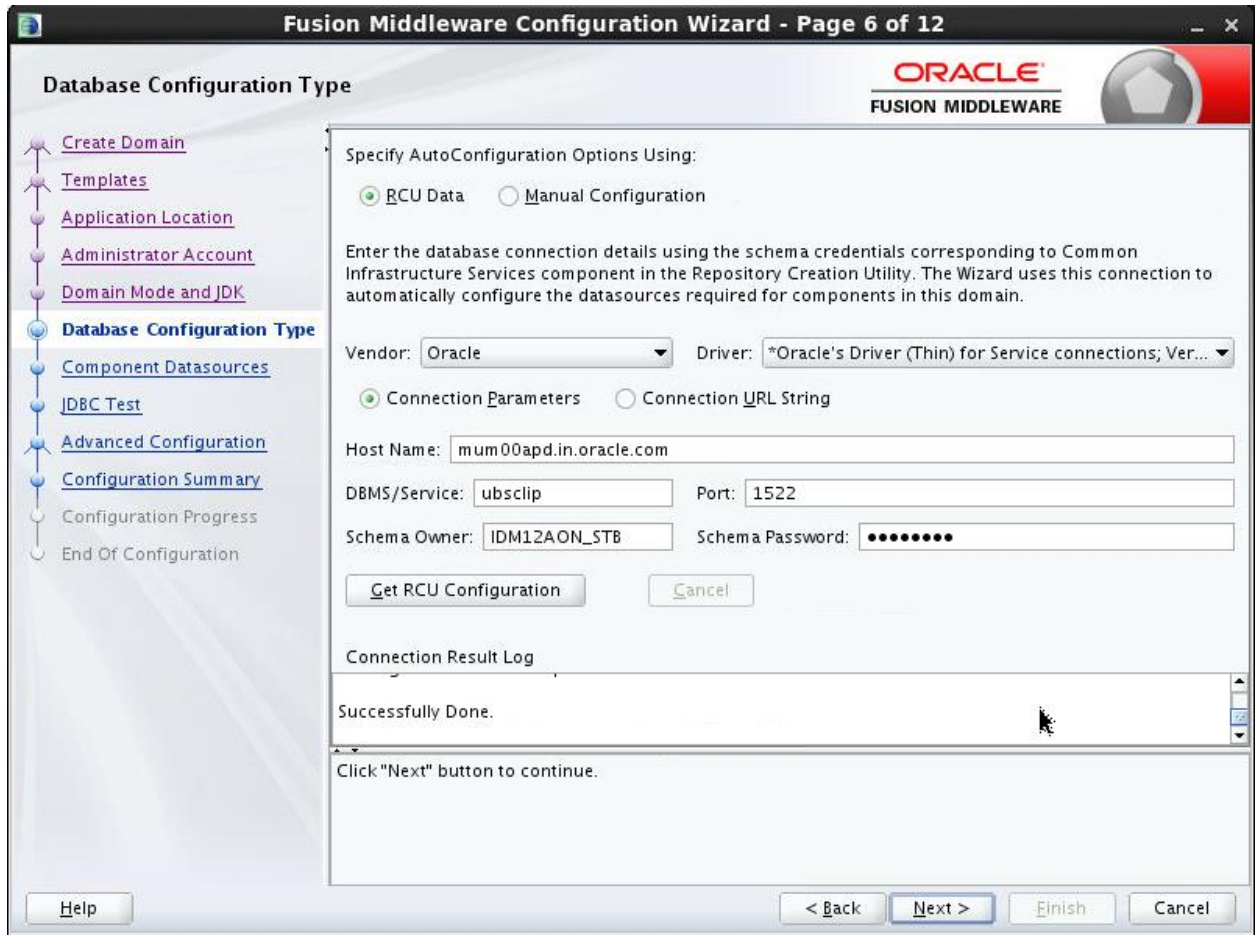


Select options as shown above (Do not uncheck auto selected options) > Next

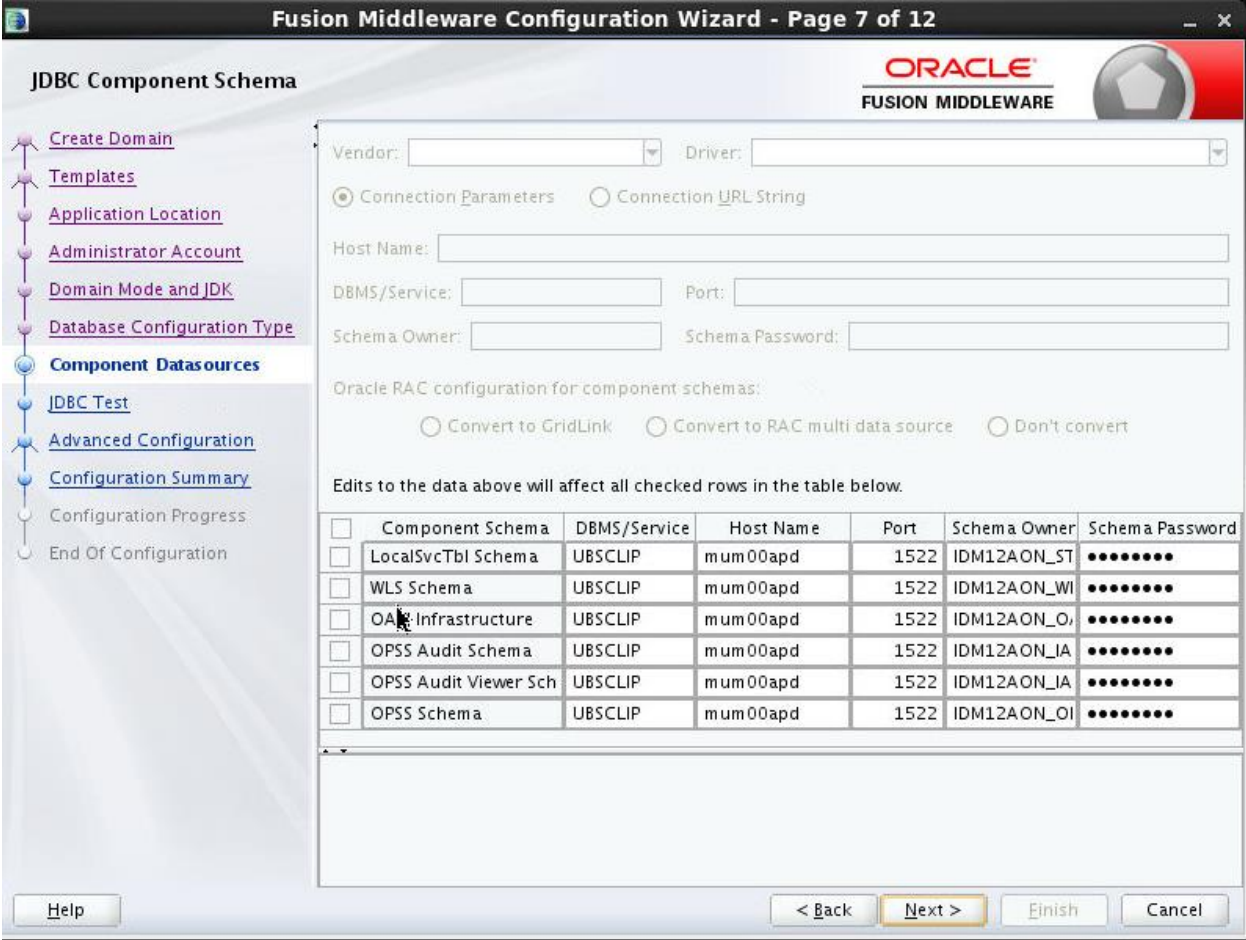


Enter domain password > Next





Provide Database details as created by RCU previously (Use same schema prefix) > Get RCU Configuration > Next



Next

Fusion Middleware Configuration Wizard - Page 8 of 12

JDBC Component Schema Test

| Status | Component Schema | JDBC Connection URL |
|--------|--------------------------|--|
| ✓ | LocalSvcTbl Schema | jdbc:oracle:thin:@//mum00apd:1522/UBSC |
| ✓ | WLS Schema | jdbc:oracle:thin:@//mum00apd:1522/UBSC |
| ✓ | OAM Infrastructure | jdbc:oracle:thin:@//mum00apd:1522/UBSC |
| ✓ | OPSS Audit Schema | jdbc:oracle:thin:@//mum00apd:1522/UBSC |
| ✓ | OPSS Audit Viewer Schema | jdbc:oracle:thin:@//mum00apd:1522/UBSC |
| ✓ | OPSS Schema | jdbc:oracle:thin:@//mum00apd:1522/UBSC |

Test Selected Connections Cancel Testing

Connection Result Log

```
Component Schema=LocalSvcTbl Schema
Driver=oracle.jdbc.OracleDriver
URL=jdbc:oracle:thin:@//mum00apd:1522/UBSC
User=IDM12AON_STB
Password=*****
SQL Test=SELECT 1 FROM DUAL

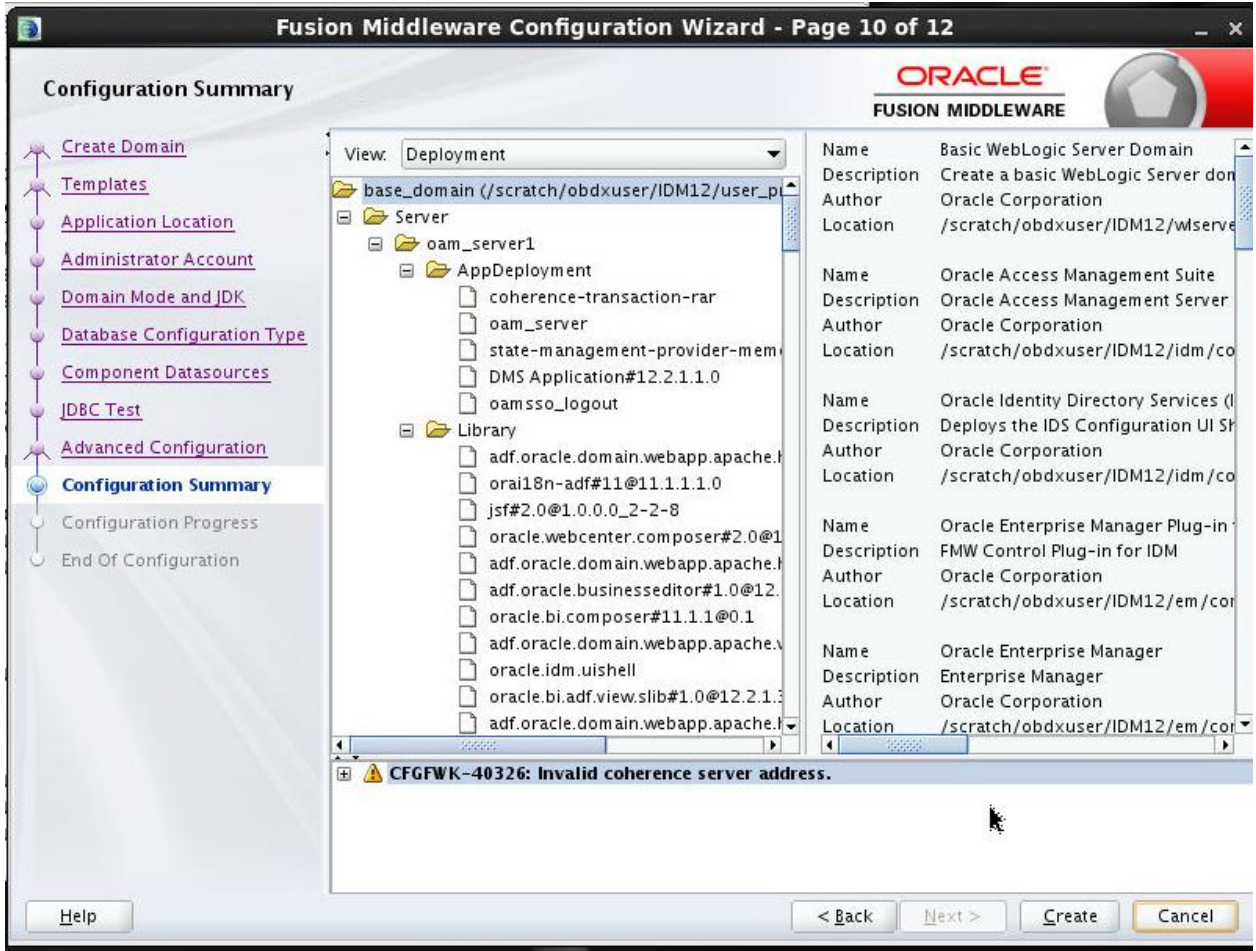
CFGFWK-64213: Test Successful!
CFGFWK-64213: JDBC connection test was successful
```

Help < Back Next > Finish Cancel

>Next



Change any ports if required by selecting required options > Next



Click Create and then Finish to complete the configuration

Starting servers –

ODJ

<ORACLE_HOME>/asinst_1/ODJ/bin → ./start-ds

OAM

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

<Oracle_Home>/user_projects/domains/<OAM_domain>/bin/startManagedWeblogic.sh
oam_server1

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 restart the Admin Server using the command,

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

- Also, restart the OAM Managed Server (by default it is ‘oam_server1’) as mentioned below:

<Oracle_Home>/user_projects/domains/<OAM_domain>/bin/startManagedWeblogic.sh oam_server1

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.

Verifying the installation for OUD console

<http://<host>:<admin port>/oudsm>

[Home](#)

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:

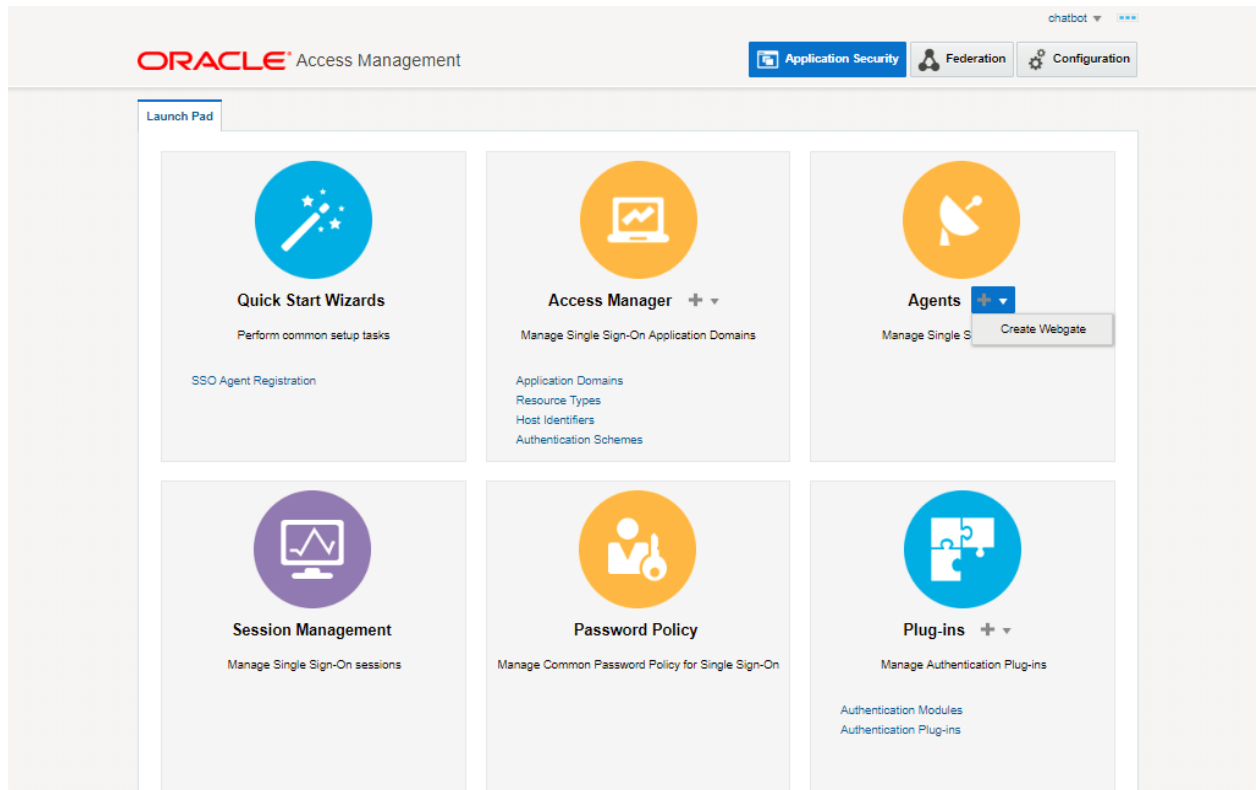
- Section 8.1, "Creating WebGate Agent on OAM Console"
- Section 8.2, "Creating Custom Login Scheme"
- Section 8.3, "Manage Application Domain and Resources"
- Section 8.4, "Creating Groups on LDAP Server"

8.1 REST API configurations for Mobile Banking (2-Legged OAuth Flows) Creating WebGate Agent on OAM Console

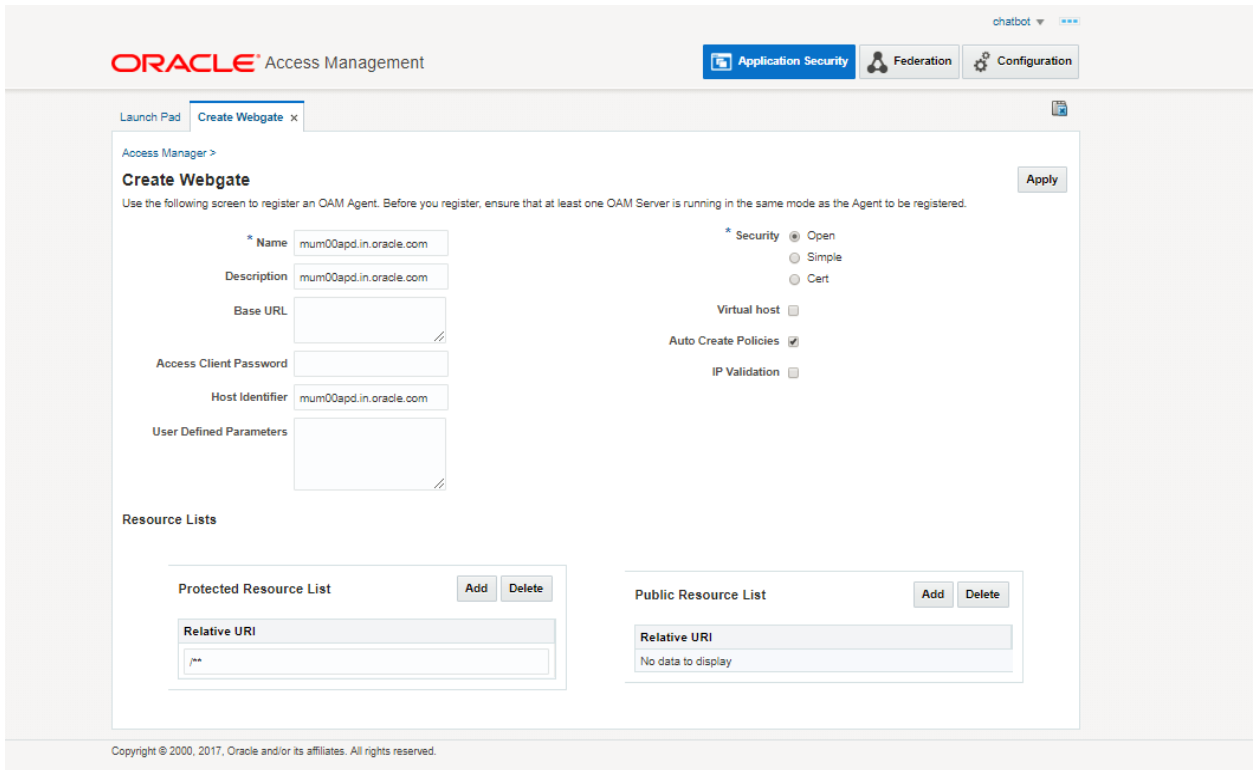
Before you can use the new Oracle HTTP Server 12c WebGate agent for Oracle Access Manager, you must register the new WebGate agent with Oracle Access Manager by using the Oracle Access Manager Administration Console. Following are the steps to register a WebGate Agent:

Login to OAM Console.

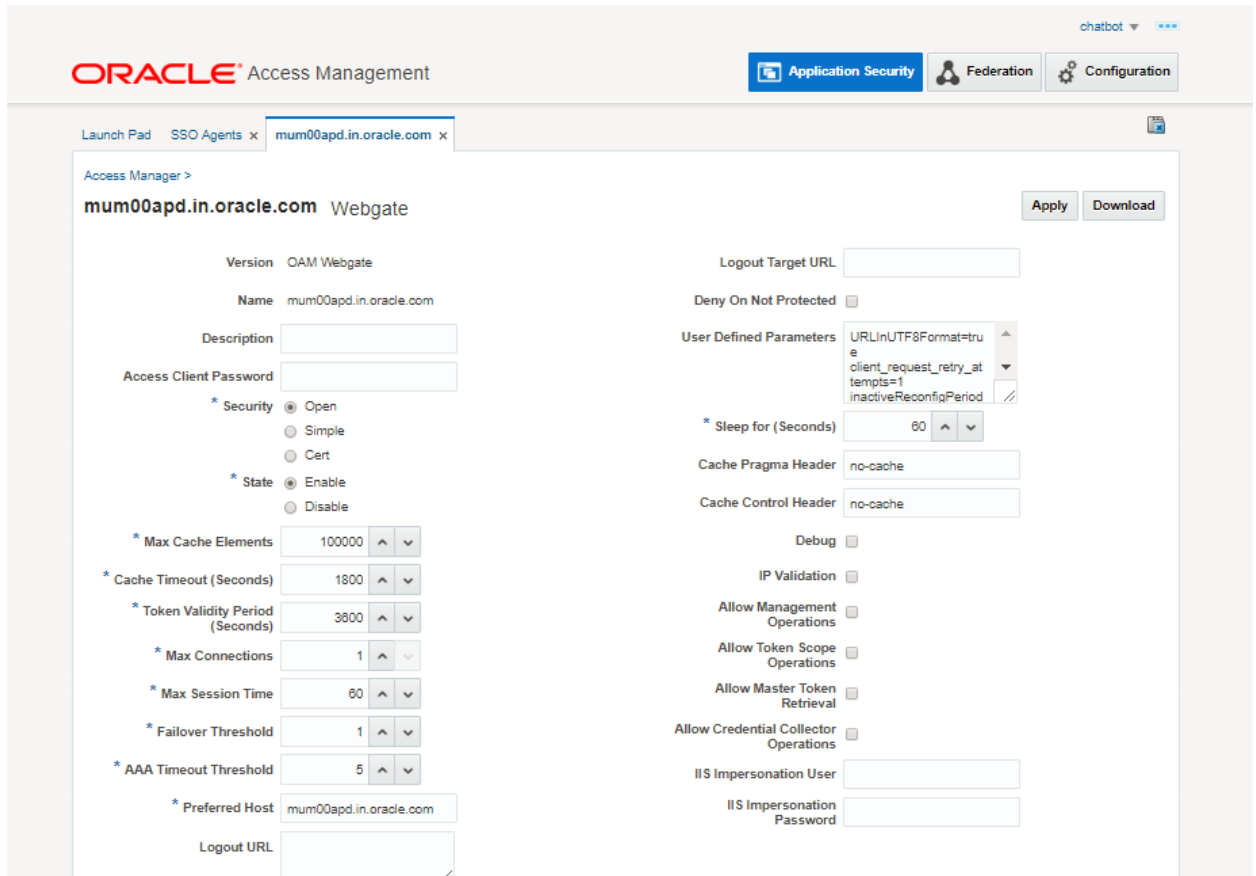
E. g. ***http://<hostname>:<oam_admin_port>/oamconsole***



In the **Agents** block, **Create Webgate**.



- Enter the hostname in Name field
- Click on Apply



This creates the Webgate Agent for OAM. Download files for webgate by clicking the “Download” button. Extract below files from zip.

cwallet.sso

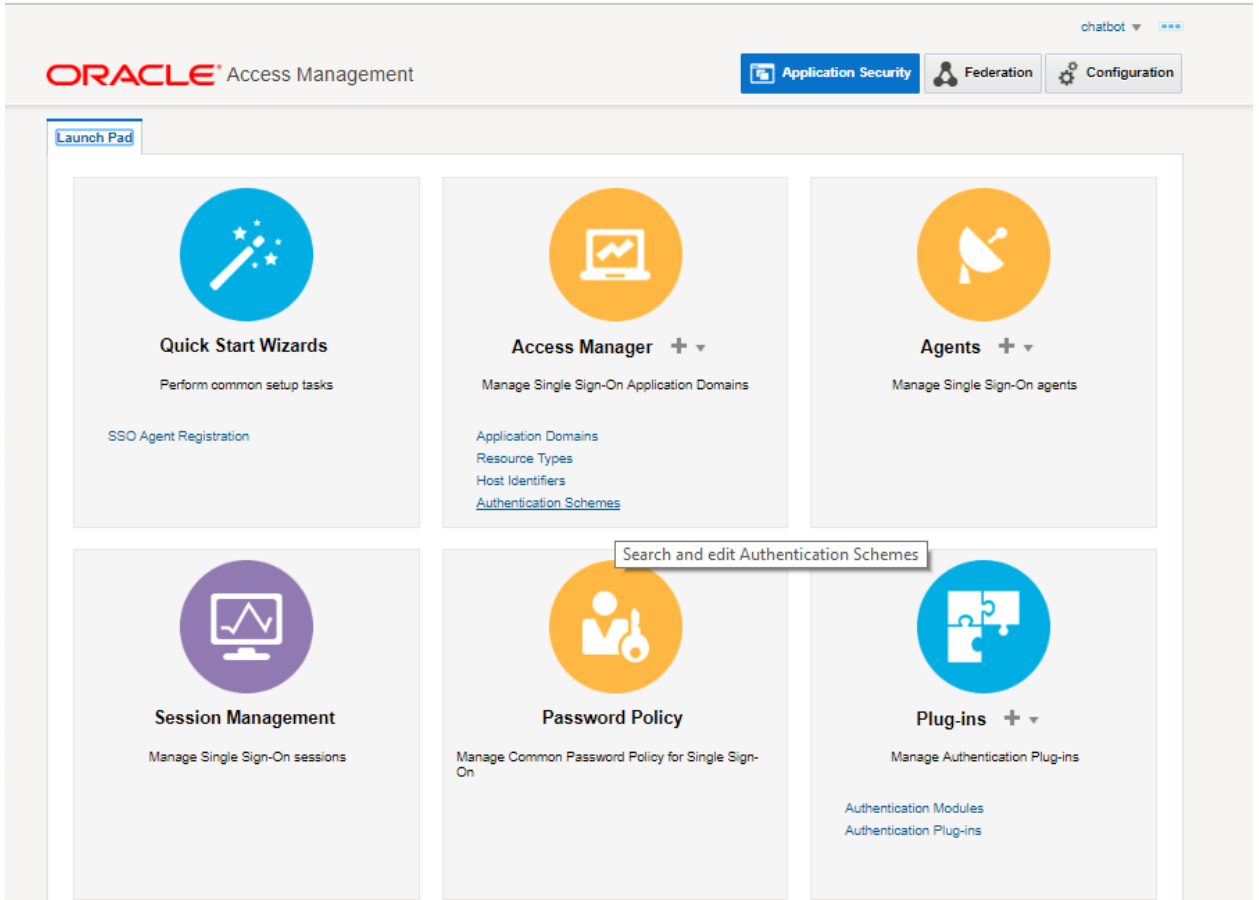
ObAccessClient.xml

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

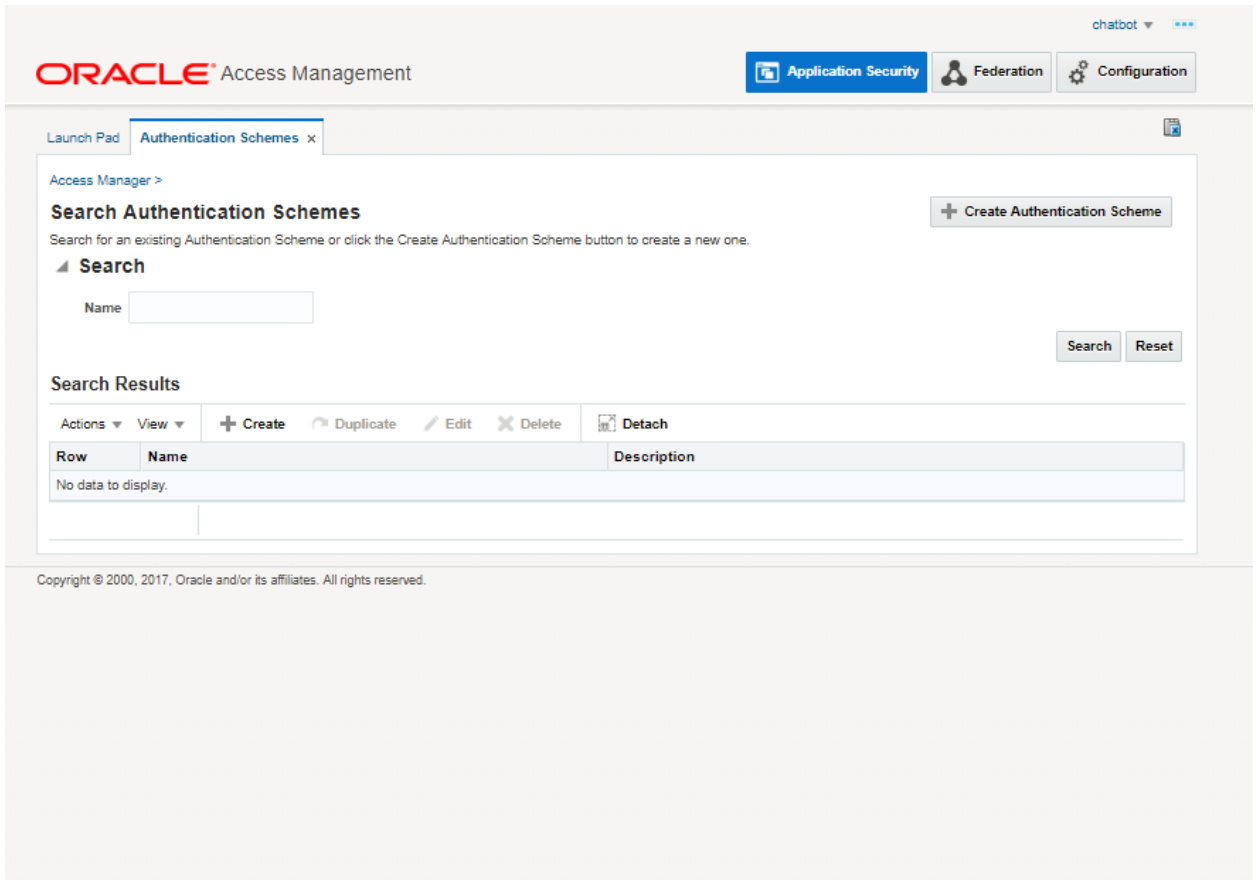
Note: The hostname here will be the fully qualified hostname of the server where Webgate is installed.

8.2 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

The screenshot shows the Oracle Access Management console interface. At the top, there is a navigation bar with the Oracle logo and 'Access Management' text. On the right, there are buttons for 'Application Security', 'Federation', and 'Configuration'. Below this, there are tabs for 'Launch Pad', 'Authentication Schemes', and 'CLIPSchemeOUD12'. The main content area is titled 'OBDXLoginScheme Authentication Scheme' and includes a description: 'An Authentication Scheme defines the challenge mechanism required to authenticate a user. Each Authentication Scheme must also include a defined Authentication Module.' There are three buttons: 'Set As Default', 'Duplicate', and 'Apply'. The configuration form contains the following fields:

- * Name: OBDXLoginScheme
- Description: OBDXLoginScheme
- * Authentication Level: 2
- Default:
- * Challenge Method: FORM
- Challenge Redirect URL: /oam/server/
- * Authentication Module: LDAP
- * Challenge URL: http://10.180.88.136:7779/?module=login
- * Context Type: external
- Challenge Parameters: (empty text area)

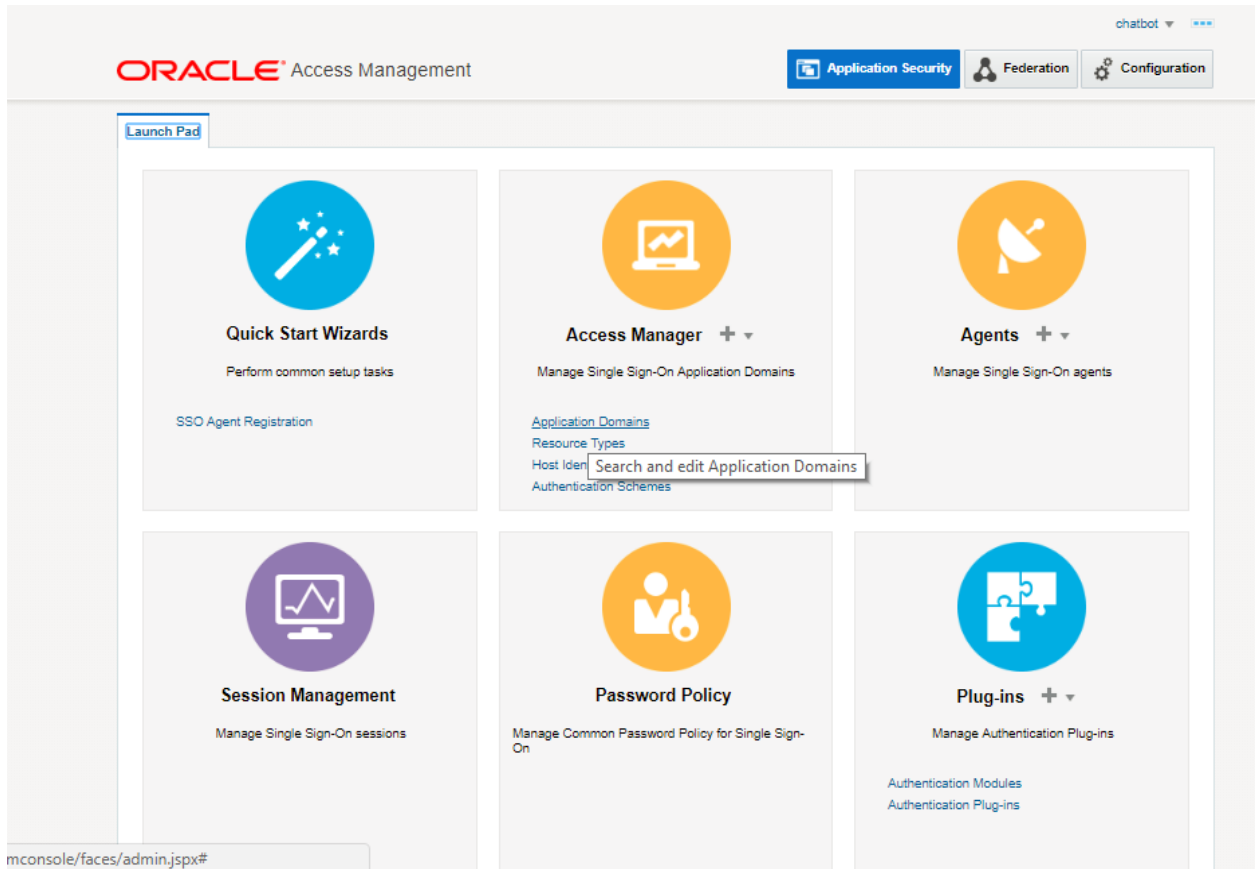
At the bottom of the page, there is a copyright notice: 'Copyright © 2000, 2017, Oracle and/or its affiliates. All rights reserved.'

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.

8.3 Manage Application Domain and Resources



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

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

The screenshot shows the Oracle Access Management (OAM) console interface. At the top, there is a navigation bar with the Oracle logo and 'Access Management' text. On the right side of the navigation bar, there are buttons for 'Application Security', 'Federation', and 'Configuration'. Below the navigation bar, there is a 'Launch Pad' section with a tab for 'Application Domain'. The main content area is titled 'Search Application Domains' and includes a search form with a 'Name' input field and 'Search' and 'Reset' buttons. A 'Create Application Domain' button is also present. Below the search form, there is a 'Search Results' section with a table that currently displays 'No data to display.' The table has columns for 'Row', 'Name', and 'Description'. At the bottom of the page, there is a copyright notice: 'Copyright © 2000, 2017, Oracle and/or its affiliates. All rights reserved.'

Click on **Search**

ORACLE Access Management

Application Security Federation Configuration

Launch Pad Application Domain x

Access Manager >

Search Application Domains + Create Application Domain

Use the search tool to find an existing Application Domain or click the Create Application Domain button to create a new one.

Search

Name

Search Reset

Search Results

Actions View + Create Edit Delete Detach

| Row | Name | Description |
|-----|--|--|
| 1 | Fusion Apps Integration | Policy objects enabling integration with Oracle Fusion Applications |
| 2 | IAM Suite | Policy objects enabling OAM Agent to protect deployed IAM Suite applications |
| 3 | mum00apd.in.oracle.com | Application Domain created through Agent Registration |
| 4 | obdxohs.in.oracle.com | Application Domain created through Agent Registration |
| 5 | ofss310838.in.oracle.com | Application Domain created through Agent Registration |
| 6 | sdate-lap.in.oracle.com | Application Domain created through Agent Registration |

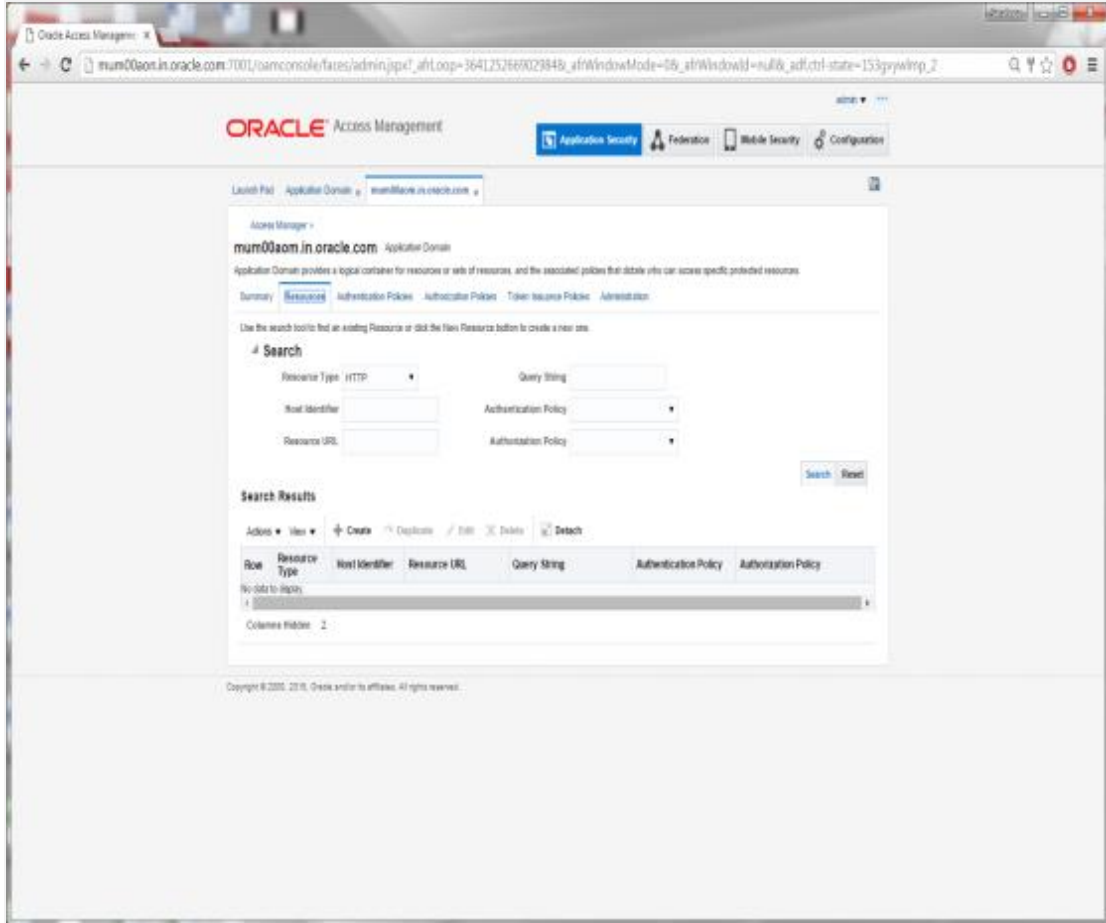
Copyright © 2000, 2017, Oracle and/or its affiliates. All rights reserved.

aces/admin.ispx#

Click on the Domain Name you want to configure.

The screenshot displays the Oracle Access Management (OAM) console interface. At the top, the Oracle logo and 'Access Management' text are visible. Navigation tabs include 'Application Security', 'Federation', and 'Configuration'. The main content area shows the configuration for an 'Application Domain' named 'mum00apd.in.oracle.com'. The 'Summary' tab is active, showing fields for 'Name' (mum00apd.in.oracle.com) and 'Description' (Application Domain created through Agent Registration). There is also a 'Session Idle Timeout (minutes)' spinner set to 0, and three checkboxes: 'Allow OAuth Token', 'Allow Session Impersonation', and 'Enable Policy Ordering', all of which are currently unchecked. An 'Apply' button is located in the top right corner of the configuration area. A copyright notice 'Copyright © 2000, 2017, Oracle and/or its affiliates. All rights reserved.' is visible at the bottom of the page.

Click on the Resources Tab



Click on Search

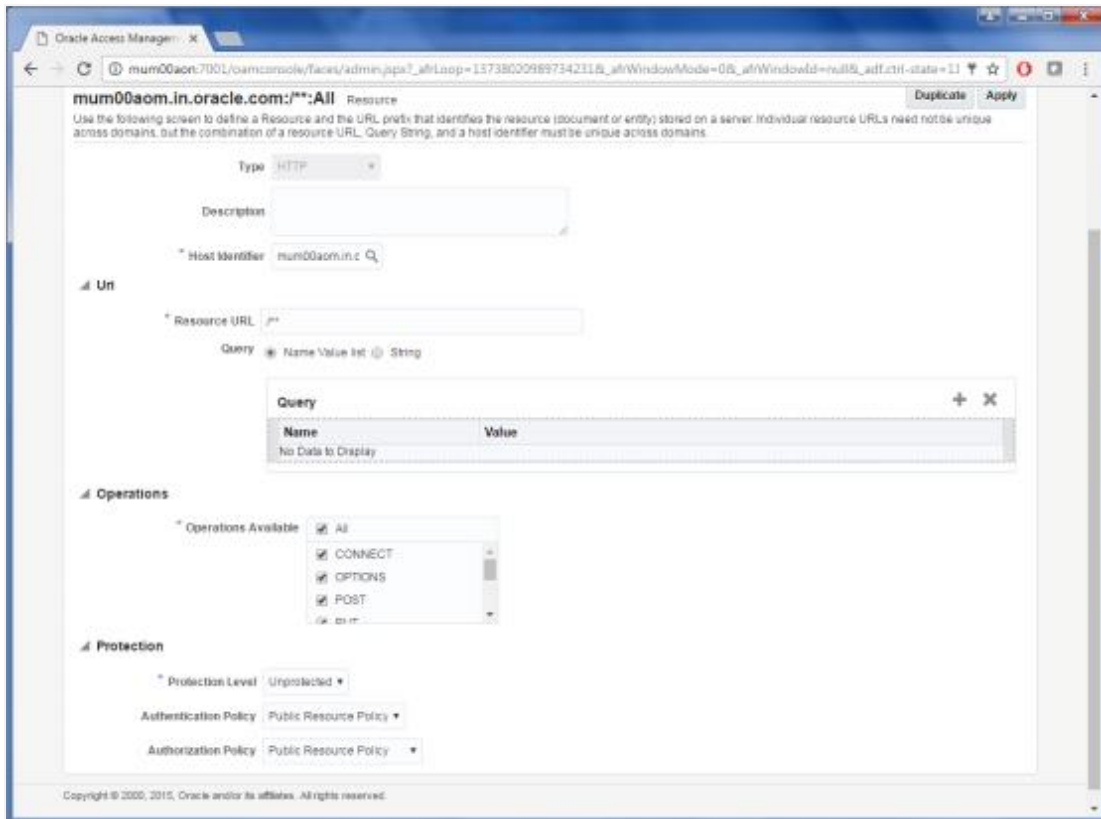
Search Results

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

Access Manager >

Create Resource Resource Apply

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.

* Type

Description

* Host Identifier

▲ Uri

* Resource URL

▲ Operations

Operations Available All

▲ Protection

* Protection Level

Authentication Policy

Authorization Policy

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.

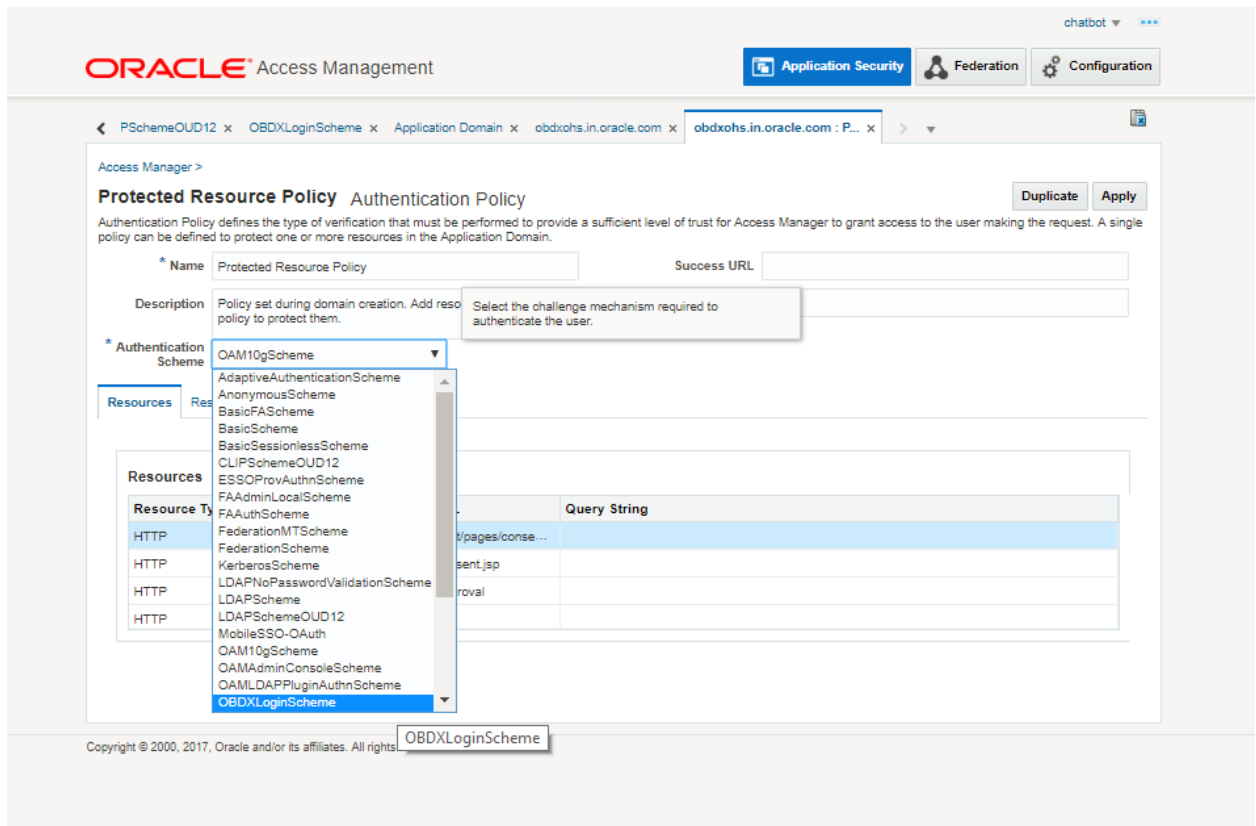
Click on Apply to add the resource.

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 |
| /oam/pages/consent.jsp | 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 | - |
| /.../*.js | ALL | Excluded | - |
| /oauth2/rest/approval | ALL | Protected | Protected Resource Policy |
| /oauth2/rest/** | ALL | Excluded | - |
| /oam/** | ALL | Excluded | - |

Mapping Login Scheme to Application Domain

Navigate to Authentication Policy Tab > Protected Resource Policy > Select the scheme > Apply



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

[Home](#)

8.4 Scripts for OBDX Schema

```
UPDATE DIGX_FW_CONFIG_VAR_B SET PROP_VALUE='<oam host>' WHERE
PROP_ID='OAUTH_HOST_IP';
```

```
UPDATE DIGX_FW_CONFIG_VAR_B SET PROP_VALUE='<oam oauth port>' WHERE
PROP_ID='OAUTH_HOST_PORT';
```

---Above scripts should be executed for all entities

```
UPDATE DIGX_FW_CONFIG_ALL_B SET
PROP_VALUE='ipm1.0,ORACLEBI12.2.1.2,GENERIC1.0,OAM122130,LIVEEXP1.0,OBDX1.0,O
BCL1.0,MIDOFFICE1.0' WHERE PROP_ID='01';
```

8.5 Setting up OHS

The mobile application should not point to the OHS patched with webgate. Hence the mobile application should either point to Weblogic Managed server directly, or a separate instance of OHS must be setup without webgate patched. UI need not be deployed on this OHS.

8.6 API configurations for Mobile Banking (2-Legged OAuth Flows)

OBDX Mobile application user OAuth for API Based login. Clients are defined in OAM and the same are mapped to access points in OBDX.

To define OAuth Clients in OAM, invoke below REST APIs as OAM does not provide a screen to define the OAuth client. OAM Admin console credentials are required to invoke these APIs.

Domain Creation –

<http://mum00aon.in.oracle.com:8001/oam/services/rest/ssa/api/v1/oauthpolicyadmin/oauthidentitydomain>

Headers –

Authorization: Basic <Base64 of uid:pwd>

Content-Type: application/json

1. Mobile App

```
{
  "name": " OBDXMobileAppDomain ",
  "tokenSettings": [{
    "tokenType": "ACCESS_TOKEN",
    "tokenExpiry": 300,
    "lifeCycleEnabled": true,
    "refreshTokenEnabled": true,
    "refreshTokenExpiry": 864000,
    "refreshTokenLifeCycleEnabled": true
  }]
}
```

2. Siri

```
{
  "name": " OBDXSiriDomain ",
  "tokenSettings": [{
    "tokenType": "ACCESS_TOKEN",
    "tokenExpiry": 300,
    "lifeCycleEnabled": true,
    "refreshTokenEnabled": true,
    "refreshTokenExpiry": 864000,
    "refreshTokenLifeCycleEnabled": true
  }]
}
```

3. Wearable

```
{
  "name": " OBDXWearDomain",
  "tokenSettings": [{
    "tokenType": "ACCESS_TOKEN",
```

```

        "tokenExpiry": 300,
        "lifeCycleEnabled": true,
        "refreshTokenEnabled": true,
        "refreshTokenExpiry": 864000,
        "refreshTokenLifeCycleEnabled": true
    ]}
}

```

4. Snapshot

```

{
    "name": "OBDXSnapshotDomain",
    "tokenSettings": [{
        "tokenType": "ACCESS_TOKEN",
        "tokenExpiry": 300,
        "lifeCycleEnabled": true,
        "refreshTokenEnabled": true,
        "refreshTokenExpiry": 2592000,
        "refreshTokenLifeCycleEnabled": true
    }]
}

```

4. SoftToken

```

{
    "name": "OBDXSofttokenDomain",
    "tokenSettings": [{
        "tokenType": "ACCESS_TOKEN",
        "tokenExpiry": 300,
        "lifeCycleEnabled": true,
        "refreshTokenEnabled": false,
        "refreshTokenExpiry": 2592000,
        "refreshTokenLifeCycleEnabled": true
    }]
}

```

Resource Server:

<http://mum00aon.in.oracle.com:8001/oam/services/rest/ssa/api/v1/oauthpolicyadmin/application>

Headers –

Authorization: Basic <Base64 of uid:pwd>

Content-Type: application/json

Mobile App

```
{
  "name": "OBDXMobileAppResServer",
  "description": "Resource Server for Mobile",
  "scopes": [{
    "scopeName": "OBDXLoginScope",
    "description": "OBDXLoginScope"
  },
  {
    "scopeName": "ValidateDeviceScope",
    "description": "ValidateDeviceScope"
  }
  ],
  "tokenAttributes": [],
  "idDomain": "OBDXMobileAppDomain",
  "audienceClaim": {}
}
```

}

Siri

```
{
  "name": "OBDXSiriResServer",
  "description": "Resource Servcer for Siri",
  "scopes": [{
    "scopeName": "ValidateDeviceScope",
    "description": "ValidateDeviceScope"
  }
  ],
  "tokenAttributes": [],
  "idDomain": "OBDXSiriDomain",
  "audienceClaim": {}
}
```

}

Wearables

```
{
  "name": "OBDXWearResServer",
  "description": "Resource Servcer for Wearables",
  "scopes": [{
    "scopeName": "ValidateDeviceScope",
```

```

        "description": "ValidateDeviceScope"
    }],
    "tokenAttributes": [],
    "idDomain": "OBDXWearDomain",
    "audienceClaim": {}
}
Snapshot
{
    "name": "OBDXSnapshotResServer",
    "description": "Resource Servcer for Snapshot",
    "scopes": [{
        "scopeName": "ValidateDeviceScope",
        "description": "ValidateDeviceScope"
    }],
    "tokenAttributes": [],
    "idDomain": "OBDXSnapshotDomain",
    "audienceClaim": {}
}
SoftToken
{
    "name": "OBDXSofttokenResServer",
    "description": "Resource Server for Softtoken",
    "scopes": [{
        "scopeName": "OBDXLoginScope",
        "description": "OBDXLoginScope"
    }],
    "tokenAttributes": [],
    "idDomain": "OBDXSofttokenDomain",
    "audienceClaim": {}
}

```

Clients:

<http://mum00aon.in.oracle.com:8001/ /oam/services/rest/ssa/api/v1/oauthpolicyadmin/client>

Headers –

Authorization: Basic <Base64 of uid:pwd>

Content-Type: application/json

Mobile App

```

{
  "attributes": [],
  "secret": "welcome1",
  "id": "2d79e939e0424mobapp8e5fab436fb5581",
  "scopes": ["OBDXMobileAppResServer.ValidateDeviceScope",
"OBDXMobileAppResServer.OBDXLoginScope"],
  "clientType": "CONFIDENTIAL_CLIENT",
  "idDomain": "OBDXMobileAppDomain",
  "description": "OBDXMobileAppDomain",
  "name": "OBDXMobileAppClient",
  "grantTypes": ["PASSWORD", "REFRESH_TOKEN"],
  "defaultScope": "OBDXMobileAppResServer.ValidateDeviceScope",
  "redirectURIs": [{
    "url": "http://localhost:8080/Sample.jsp",
    "isHttps": false
  }]
}

```

Siri

```

{
  "attributes": [],
  "secret": "welcome1",
  "id": "2d79e939e0424sirichat8e5ab43fb5591",
  "scopes": ["OBDXSiriResServer.ValidateDeviceScope"],
  "clientType": "CONFIDENTIAL_CLIENT",
  "idDomain": "OBDXSiriDomain",
  "description": "OBDXSiriDomain",
  "name": "OBDXSiriClient",
  "grantTypes": ["PASSWORD", "REFRESH_TOKEN"],
  "defaultScope": "OBDXSiriResServer.ValidateDeviceScope",
  "redirectURIs": [{
    "url": "http://localhost:8080/Sample.jsp",
    "isHttps": false
  }]
}

```

Wearables


```
{
  "attributes": [],
  "secret": "welcome1",
  "id": "2d79e939e0424wearable8e5ab43fb5591",
  "scopes": ["OBDXWearResServer.ValidateDeviceScope"],
  "clientType": "CONFIDENTIAL_CLIENT",
  "idDomain": "OBDXWearDomain",
  "description": "OBDXWearDomain",
  "name": "OBDXWearClient",
  "grantTypes": ["PASSWORD", "REFRESH_TOKEN"],
  "defaultScope": "OBDXWearResServer.ValidateDeviceScope",
  "redirectURIs": [{
    "url": "http://localhost:8080/Sample.jsp",
    "isHttps": false
  }]
}
```

Snapshot

```
{
  "attributes": [],
  "secret": "welcome1",
  "id": "2d79e939e0424snapshot8e5ab43fb5591",
  "scopes": ["OBDXSnapshotResServer.ValidateDeviceScope"],
  "clientType": "CONFIDENTIAL_CLIENT",
  "idDomain": "OBDXSnapshotDomain",
  "description": "OBDXSnapshotDomain",
  "name": "OBDXSnapshotClient",
  "grantTypes": ["PASSWORD", "REFRESH_TOKEN"],
  "defaultScope": "OBDXSnapshotResServer.ValidateDeviceScope",
  "redirectURIs": [{
    "url": "http://localhost:8080/Sample.jsp",
    "isHttps": false
  }]
}}
```

Soft Token

```
{
  "attributes": [],
  "secret": "welcome1",
  "id": "2d79e939e0424sotapp8e5fab436fb5581",
  "scopes": ["OBDXSofttokenResServer.OBDXLoginScope"],
```

```

"clientType": "CONFIDENTIAL_CLIENT",
"idDomain": "OBDXSofttokenDomain",
"description": "OBDXSofttokenDomain",
"name": "OBDXSofttokenClient",
"grantTypes": ["PASSWORD"],
"defaultScope": "OBDXSofttokenResServer.OBDXLoginScope",
"redirectURIs": [{
    "url": "http://localhost:8080/Sample.jsp",
    "isHttps": false
}]
}

```

8.7 Creating Groups and System Admin user on LDAP server

1. To create Groups

- Copy the "group.ldif" file from <OBDX BASE Installer zip>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
```

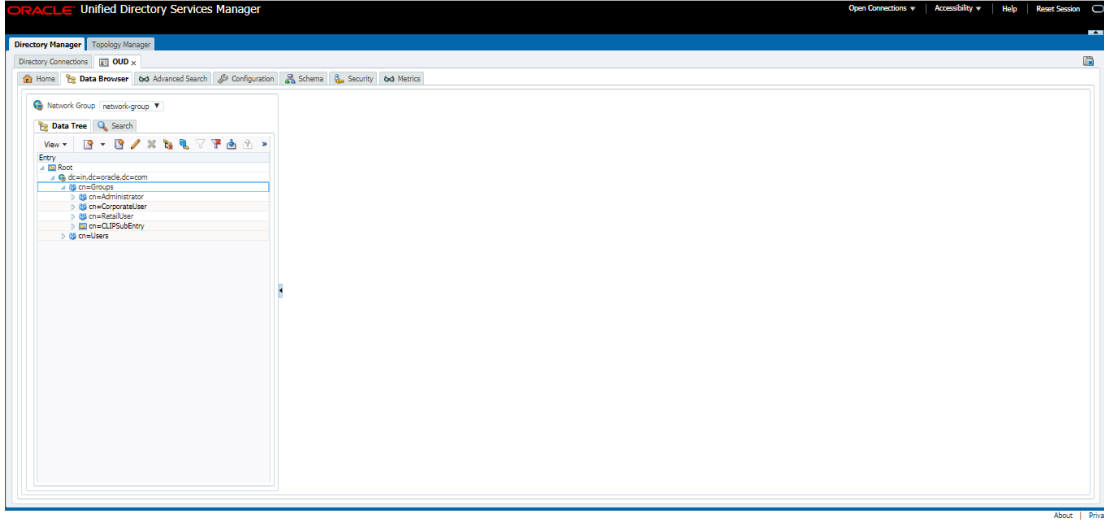
- Now, execute the below command:

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

OR (using SSL)

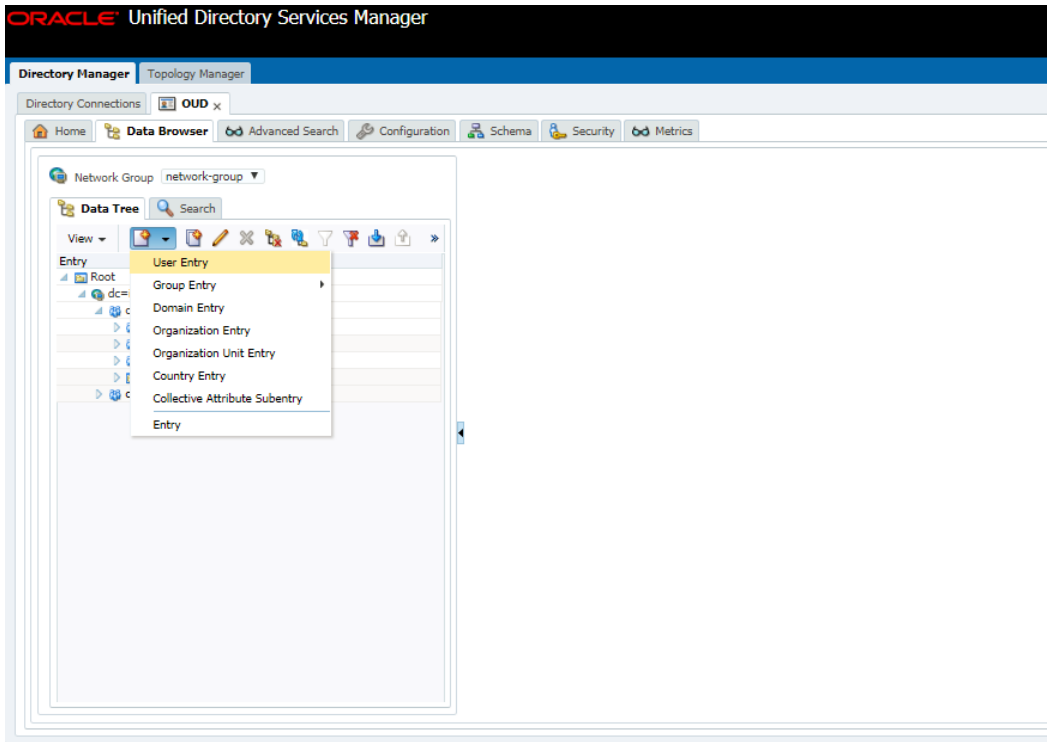
```
./ldapmodify -h localhost -p <ldap_port> -D "ldap_user" -w <ldap_password> -a -f <file_location>/group.ldif --useSSL
```

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

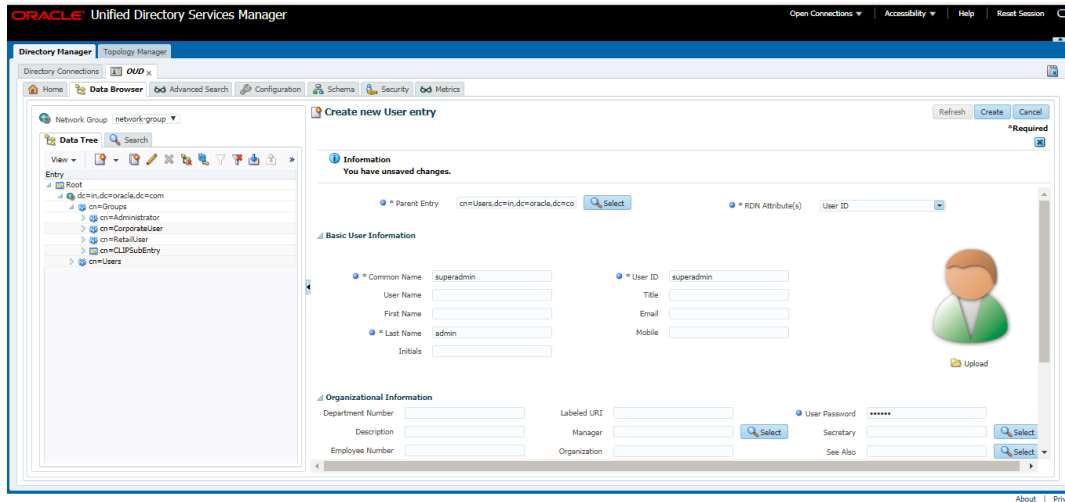


2. **To create System Admin User and mapping it to the Group**

- Login to ODSM Console using required credentials. Post login you should see below screen.
E.g. *http://<hostname>:<port>/oudsm*.
- Under the Data Browser tab, click on the Add icon



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

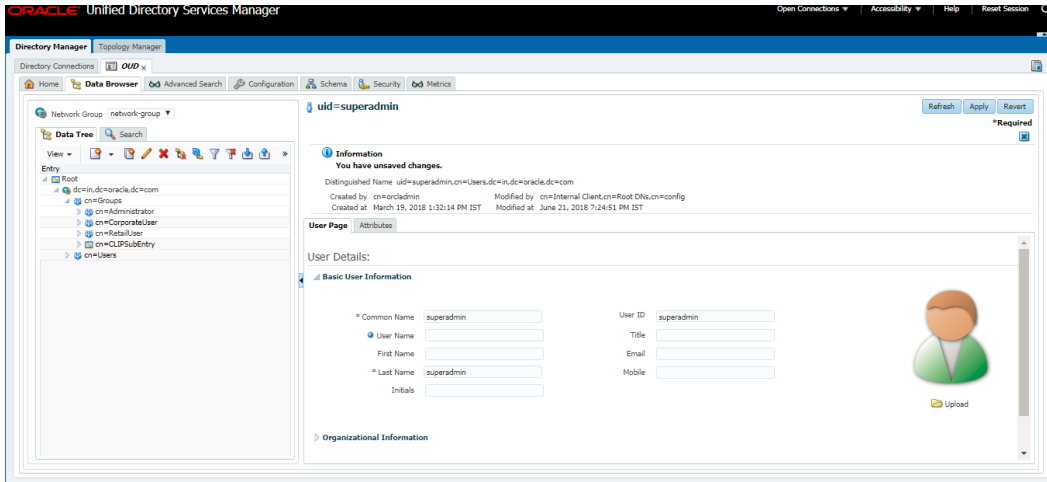


- Now, uncheck **Common Name** from the **RDN Attributes** dropdown list.
- And, Check the **User ID** Attribute checkbox.
- Add the values in the mandatory fields **Common Name, Last Name, User ID and User Password**.

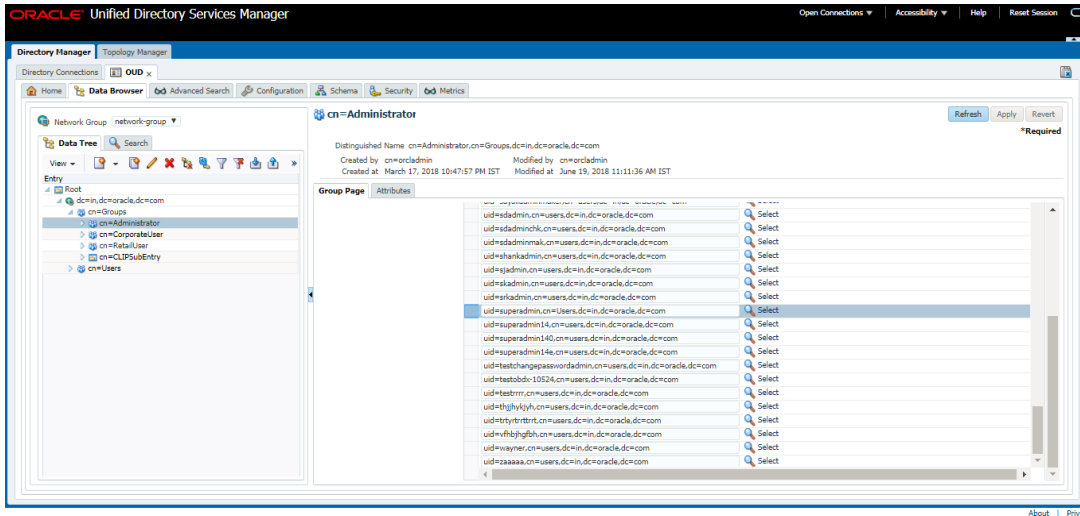
Note: Properties

OBDX_ADMIN_USERNAME,OBDX_ADMIN_EMAIL,OBDX_ADMIN_CONTACT_NO from “installer.properties” file at “<OBDX INSTALLER DIR>/core/config” to be referred for system admin user related details .

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.

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9. Oracle Business Intelligence Publisher Installation

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

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