

Installer Pre-Requisite Setup Guide
Oracle Banking Digital Experience
Patchset Release 22.2.5.0.0

Part No. F72987-01

October 2024

Installer Pre-Requisite Setup Guide

October 2024

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1. Preface

1.1 Purpose

Welcome to the User Guide for Oracle Banking Digital Experience. This guide explains the operations that the user will follow while using the application.

1.2 Audience

This manual is intended for Customers and Partners who setup and use Oracle Banking Digital Experience.

1.3 Documentation Accessibility

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

Access to Oracle Support

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

1.4 Critical Patches

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at [Critical Patches, Security Alerts and Bulletins](#). All critical patches should be applied in a timely manner to ensure effective security, as strongly recommended by [Oracle Software Security Assurance](#).

1.5 Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

1.6 Conventions

The following text conventions are used in this document:

Convention	Meaning
------------	---------

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

1.7 Screenshot Disclaimer

The images of screens used in this user manual are for illustrative purpose only, to provide improved understanding of the functionality; actual screens that appear in the application may vary based on selected browser, theme, and mobile devices.

1.8 Acronyms and Abbreviations

The list of the acronyms and abbreviations that you are likely to find in the manual are as follows:

Abbreviation	Description
OBDX	Oracle Banking Digital Experience

2. Introduction

This guide helps you to do the pre-requisite setup required before the execution of OBDX 22.2.0.0.0 Installer.

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

2.1 Software List

Software Name	Version	Mandatory Software
Operating System	ORACLE LINUX 8.3	Y
Oracle Database	19.16.0.0.0	Y
Oracle Java Development Kit	11.0.16 or 11.0.14	Y
Oracle Weblogic Server	14.1.1.0.0	Y
Any HTTP Server	NA	Y
Oracle Digital Assistant (ODA)	20.05	N***
Python	3.8.x	Y****
Python Package: cx_Oracle	8.3.0	Y*****
Python Package: urwid	2.1.2	Y
Flyway	7.9.2	Y*****
Gradle	7.5.1	Y
* Required if OBDX Native Authentication is not used and OAM is managing Authentication ** Required if Integration with Oracle Analytics Publisher is needed. *** Required if OBDX Chat bot Banking Features are used. **** For python 3 installation refer section 2.3 Pre-requisite software installation and OS configuration for OBDX Installer – Python 3.8.0 for Linux Operating System ***** In case of python 3 cx_Oracle needs to be re-installed. ***** Required for database files execution		

2.2 Pre-requisite software installation and OS configuration for OBDX Installer

Below steps assume Python 3.8.x is installed and available on server. You can verify the Python version by executing the command as shown below:

```
[root@~ - ~]# python3.8 -V
Python 3.8.0
```

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

Flyway Installation

Download the flyway version 7.9.2 zip file from flyway site

Unzip the downloaded zip file into the desire path.

Example :-

```
cd /home/obdxuser
```

```
tar -xvzf flyway-commandline-7.9.2-linux-x64.tar.gz
```

```
FLYWAY_HOME=/home/obdxuser/flyway-7.9.2
```

(flyway home path will be /home/obdxuser/flyway-7.9.2)

Gradle Installation

Download the gradle zip file from the gradle site

Unzip the downloaded zip file into the desire path

Example :-

```
cd /home/obdxuser
```

```
unzip gradle-7.4.2-bin.zip
```

```
GRADLE_HOME=/home/obdxuser/gradle-7.4.2
```

cx_Oracle (Software Installation)

Step 1: Oracle Instant Client

Download `oracle-instantclient19.10-basic-19.10.0.0-1.x86_64.rpm` from site https://yum.oracle.com/repo/OracleLinux/OL7/oracle/instantclient/x86_64/getPackage/oracle-instantclient19.10-basic-19.10.0.0-1.x86_64.rpm

Run the below command

`dnf install oracle-instantclient19.10-basic-19.10.0.0-1.x86_64.rpm`

```
[root@ofss-mum-173 ~]# dnf install oracle-instantclient19.10-basic-19.10.0.0-1.x86_64.rpm
Last metadata expiration check: 0:00:40 ago on Tue 08 Jun 2021 07:13:09 AM GMT.
Dependencies resolved.
=====
Package                               Architecture      Version            Repository          Size
-----
Installing:
  oracle-instantclient19.10-basic      x86_64            19.10.0.0-1       @commandline        52 M
Installing dependencies:
  libnl                                x86_64            2.29-127.0.3.el8_3.2  o18_u3_baseos_patch 100 k
=====
Transaction Summary
-----
Install 2 Packages

Total size: 52 M
Total download size: 100 k
Installed size: 227 M
Is this ok [y/N]: y
Downloading Packages:
libnl-2.29-127.0.3.el8_3.2.x86_64.rpm                                17 MB/s | 100 kB  00:00
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing                : libnl-2.29-127.0.3.el8_3.2.x86_64                                1/1
  Installing               : libnl-2.29-127.0.3.el8_3.2.x86_64                                1/2
  Installing               : oracle-instantclient19.10-basic-19.10.0.0-1.x86_64                2/2
  Running scriptlet        : oracle-instantclient19.10-basic-19.10.0.0-1.x86_64                3/2
  Verifying                : libnl-2.29-127.0.3.el8_3.2.x86_64                                1/2
  Verifying                : oracle-instantclient19.10-basic-19.10.0.0-1.x86_64                2/2

Installed:
  libnl-2.29-127.0.3.el8_3.2.x86_64                                oracle-instantclient19.10-basic-19.10.0.0-1.x86_64
Complete!
[root@ofss-mum-173 ~]#
```

Step 2: Install cx_Oracle

- Download cx_Oracle from [cx_Oracle](https://cx-oracle.org) (or cx-oracle.org) website
- Extract the tar file as shown below

```
[obdxdevops@ofss-mum-1460 OBDXINS_22]$ tar -xvf cx_Oracle-8.3.0.tar.gz
cx_Oracle-8.3.0/
cx_Oracle-8.3.0/LICENSE.txt
cx_Oracle-8.3.0/MANIFEST.in
cx_Oracle-8.3.0/PKG-INFO
cx_Oracle-8.3.0/README.txt
cx_Oracle-8.3.0/cx_Oracle.egg-info/
cx_Oracle-8.3.0/cx_Oracle.egg-info/PKG-INFO
cx_Oracle-8.3.0/cx_Oracle.egg-info/SOURCES.txt
cx_Oracle-8.3.0/cx_Oracle.egg-info/dependency_links.txt
cx_Oracle-8.3.0/cx_Oracle.egg-info/top_level.txt
cx_Oracle-8.3.0/odpi/
cx_Oracle-8.3.0/odpi/embed/
cx_Oracle-8.3.0/odpi/embed/dpi.c
cx_Oracle-8.3.0/odpi/include/
cx_Oracle-8.3.0/odpi/include/dpi.h
cx_Oracle-8.3.0/odpi/src/
cx_Oracle-8.3.0/odpi/src/dpiConn.c
cx_Oracle-8.3.0/odpi/src/dpiContext.c
cx_Oracle-8.3.0/odpi/src/dpiData.c
cx_Oracle-8.3.0/odpi/src/dpiDebug.c
```

- Browse into the extracted directory and run below command

`python3.8 setup.py build_py`

```
bash-4.4# python3.8 setup.py build_py
running build_py
```

- Execute below command to perform Urwid installation

python3.8 setup.py install

```
bash-4.4# python3.8 setup.py install
running install
running bdist_egg
running egg_info
writing cx_Oracle.egg-info/PKG-INFO
writing dependency_links to cx_Oracle.egg-info/dependency_links.txt
writing top-level names to cx_Oracle.egg-info/top_level.txt
reading manifest file 'cx_Oracle.egg-info/SOURCES.txt'
reading manifest template 'MANIFEST.in'
no previously-included directories found matching 'odpi/test'
no previously-included directories found matching 'odpi/samples'
writing manifest file 'cx_Oracle.egg-info/SOURCES.txt'
installing library code to build/bdist.linux-x86_64/egg
running install_lib
running build_ext
building 'cx_Oracle' extension
```

Note :- Or you can install cx_Oracle from step mention in 2.3 below step 2

Urwid (Software Installation)

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

Note: Support version for Urwid is 2.1.2 (urwid-2.1.2.tar.gz)

Step 2: Extract the tar file as shown below

```
bash-4.2# tar -xvf urwid-2.1.2.tar.gz
urwid-2.1.2/
urwid-2.1.2/COPYING
urwid-2.1.2/MANIFEST.in
urwid-2.1.2/PKG-INFO
urwid-2.1.2/README.rst
urwid-2.1.2/docs/
urwid-2.1.2/docs/Makefile
urwid-2.1.2/docs/changelog.rst
urwid-2.1.2/docs/conf.py
urwid-2.1.2/docs/examples/
urwid-2.1.2/docs/examples/bigtext.py
urwid-2.1.2/docs/examples/bigtext.py.xdotool
urwid-2.1.2/docs/examples/bigtext1.py
```

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

python3.8 setup.py build_py

```

bash-4.4# python3.8 setup.py build_py
running build_py
creating build
creating build/lib.linux-x86_64-3.8
creating build/lib.linux-x86_64-3.8/urwid
copying urwid/__init__.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/_async_kw_event_loop.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/canvas.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/command_map.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/compat.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/container.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/curses_display.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/decoration.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/display_common.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/escape.py -> build/lib.linux-x86_64-3.8/urwid
copying urwid/font.py -> build/lib.linux-x86_64-3.8/urwid

```

Note: Ensure Python 3.8.0 version should be available in PATH variable. Above execution should be done using Python 3.8.0.

Step 4: Execute below command to perform Urwid installation

```
# python3.8 setup.py install
```

```

bash-4.4# python3.8 setup.py install
running install
running bdist_egg
running egg_info
writing urwid.egg-info/PKG-INFO
writing dependency_links to urwid.egg-info/dependency_links.txt
writing top-level names to urwid.egg-info/top_level.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

```

Note:

Or you can install urwid from step mention in 2.3 below step 2

Ensure Python 3.8.0 version should be available in PATH variable. Above execution should be done using Python 3.8.0.

2.3 Python 3.8.0 installation on Linux Operating System

Step 1: Execute below commands to install the python 3.8.0

```
dnf groupinstall 'development tools'
```

```
dnf install bzip2-devel expat-devel gdbm-devel ncurses-devel openssl-devel
readline-devel wget sqlite-devel tk-devel xz-devel zlib-devel libffi-devel
```

```
wget https://www.python.org/ftp/python/3.8.0/Python-3.8.0.tgz
```

```
tar -xzf Python-3.8.0.tgz
```

```
cd Python-3.8.0
```

```
./configure --enable-optimizations
```

```
make altinstall
```

```
python3.8 --version
```

```
[root@~ - ~]# python3.8 -V  
Python 3.8.0
```

Step2: Once above steps are executed successfully install the following required modules.

```
pip3.8 install cx-Oracle==8.3.0
```

```
pip3.8 install urwid==2.1.2
```

limits.conf (OS Configuration)

Ensure the nofile resource limit is set 10240 or higher for the user which would execute the OBDX Installer.

3. Installing and Configuring Weblogic Server 14c

This chapter describes the steps for installing the Weblogic Server version 14.1.1.0.0:

- Section 3.1, "Installing Stand-alone Weblogic"

3.1 Installing Stand-alone Weblogic Server

Oracle WebLogic Server is a scalable, enterprise-ready Java Platform, Enterprise Edition (Java EE) application server. The WebLogic Server 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 11.0.14"
- Section 3.1.2, "Installing Weblogic Server "
- Section 3.1.3, "Verifying the Installation"

3.1.1 Pre-requisite - Installing Java 11

- Obtain the Java tarball pack from the Oracle Java Downloads. Download **jdk-11.0.14_linux-x64_bin.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-11.0.14_linux-x64_bin.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>/jdk-11.0.14

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

3.1.2 Installing Weblogic

- Obtain Weblogic Server 14.1.1.0.0 zip from the Oracle Downloads. Extract the downloaded zip to get **fmw_14.1.1.0.0_wls.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_14.1.1.0.0_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 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 the 'Installation Inventory Setup' window for Oracle Fusion Middleware 14.1.1 WebLogic Installation. The window has a title bar with the Oracle logo and the text 'Oracle Fusion Middleware 14.1.1 WebLogic Installation@...'. The main content area is titled 'Installation Inventory Setup' and features the Oracle Fusion Middleware logo. Below the title, there is a section titled 'Central Inventory Directory' with the instruction: 'Enter the Central inventory directory for all your oracle installations. The installer will create a new central inventory directory if it does not exist.' There are two input fields: 'Inventory Directory:' with the text '/scratch/obdxdevops/orainventory' and a 'Browse' button, and 'Operating System Group:' with a dropdown menu showing 'obdxdevops'. Below these fields is the instruction: 'Enter the full path for the directory.' and 'Specify a group with write permission to the inventory directory'. At the bottom, there is a section titled 'Central Inventory Pointer File' with the instruction: 'Click OK to create a script (createCentralInventory.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.' The window has 'Help', 'OK', and 'Cancel' buttons at the bottom.

Oracle Fusion Middleware 14.1.1 WebLogic Installation@...

Installation Inventory Setup

ORACLE
FUSION MIDDLEWARE

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 (createCentralInventory.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.

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.

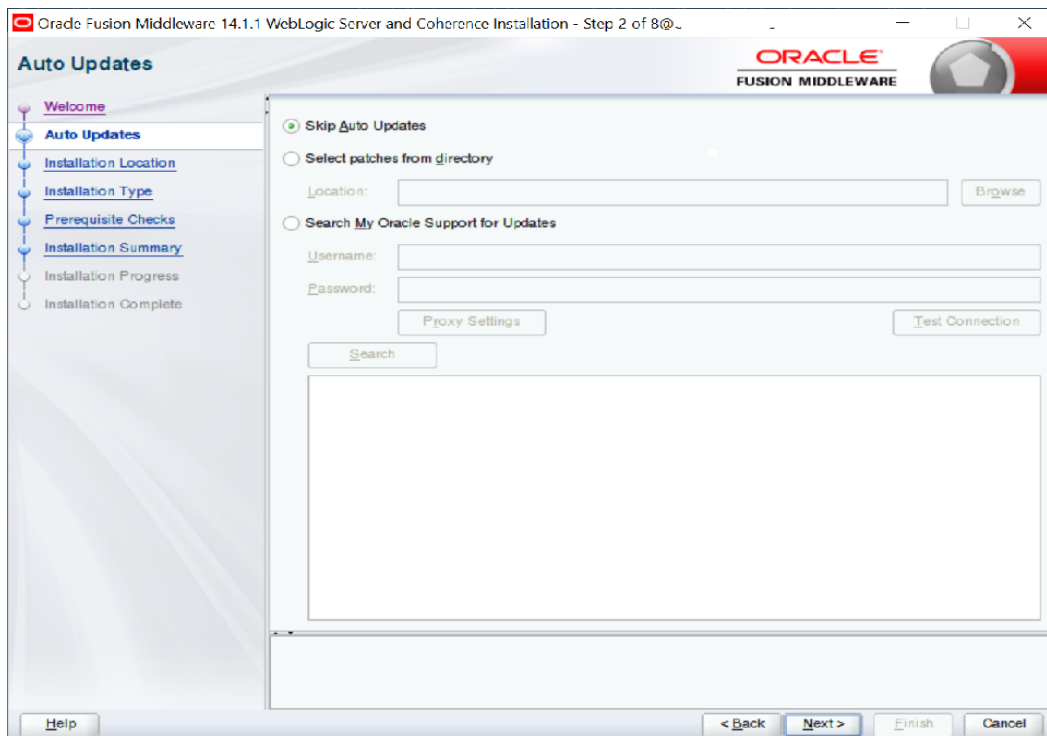
Welcome Screen



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

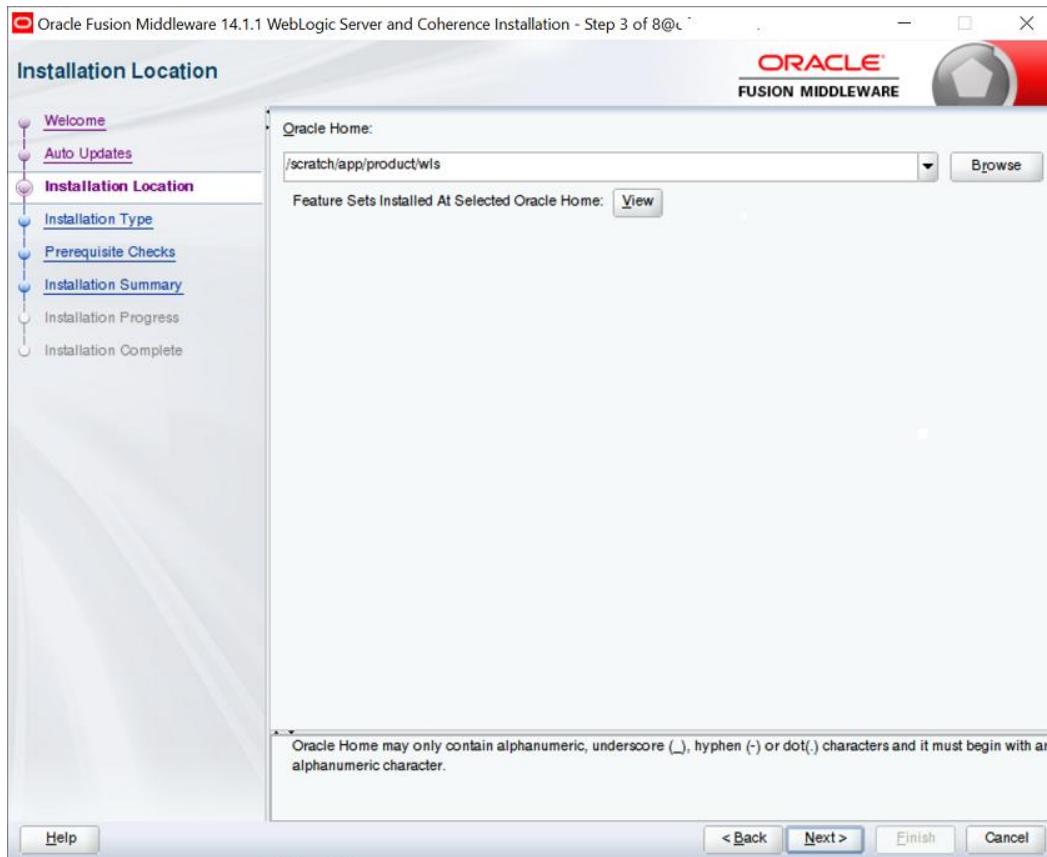
Click **Next** to continue.

Auto Updates Screen



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

Specify Installation Location Screen



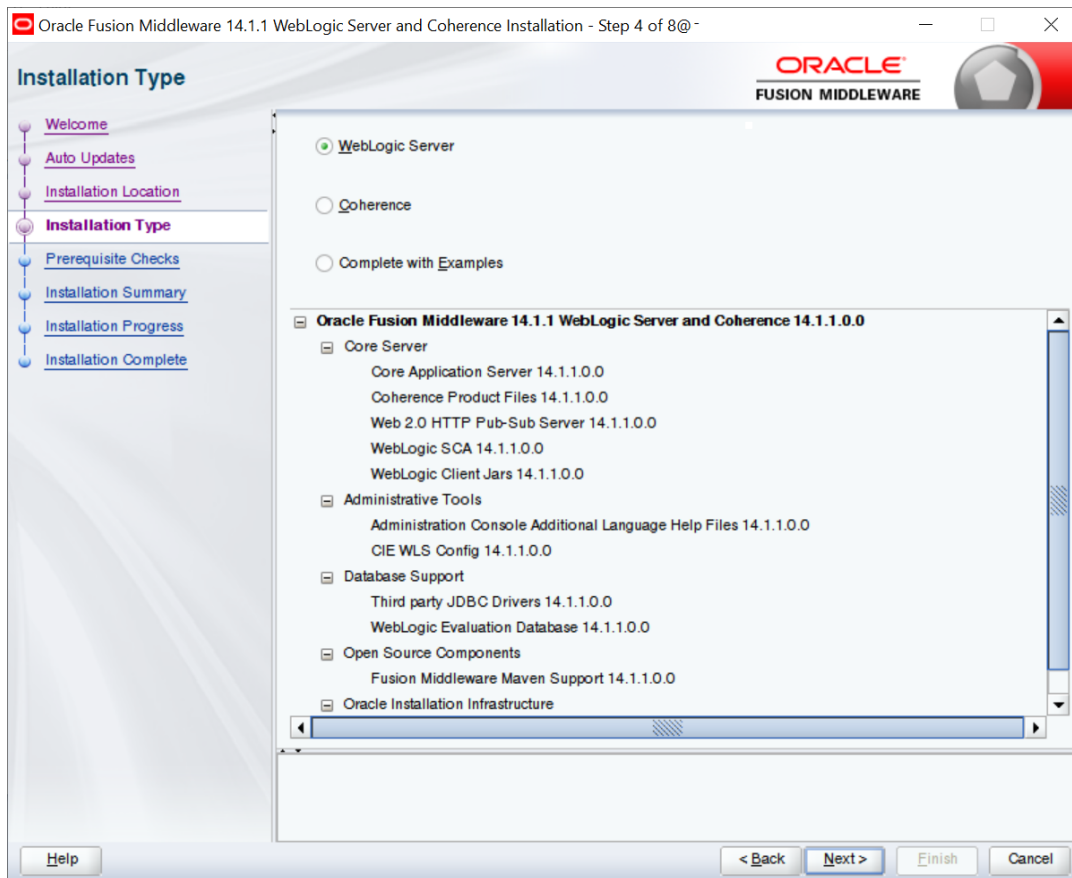
Specify the following installation locations:

- 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

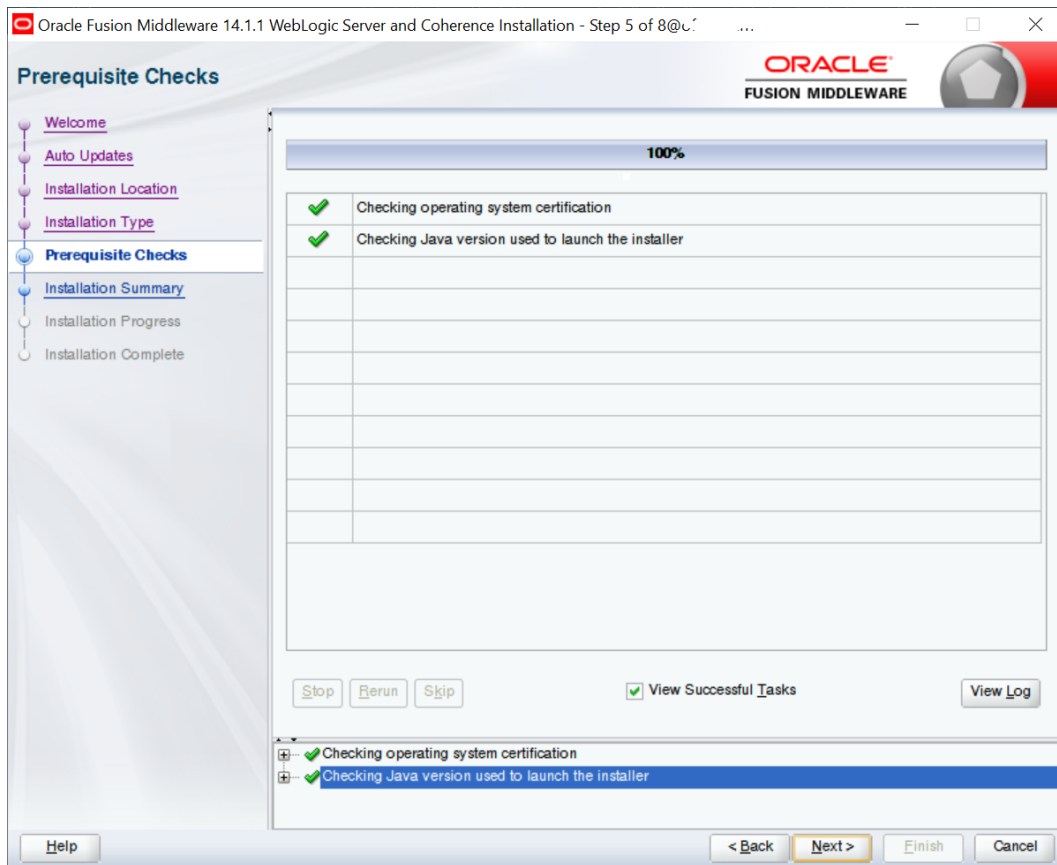


Following are the installation types:

- Weblogic Server
- Coherence
- Complete with Examples

Select Weblogic Server and Click **Next** to continue.

Prerequisite Checks Screen

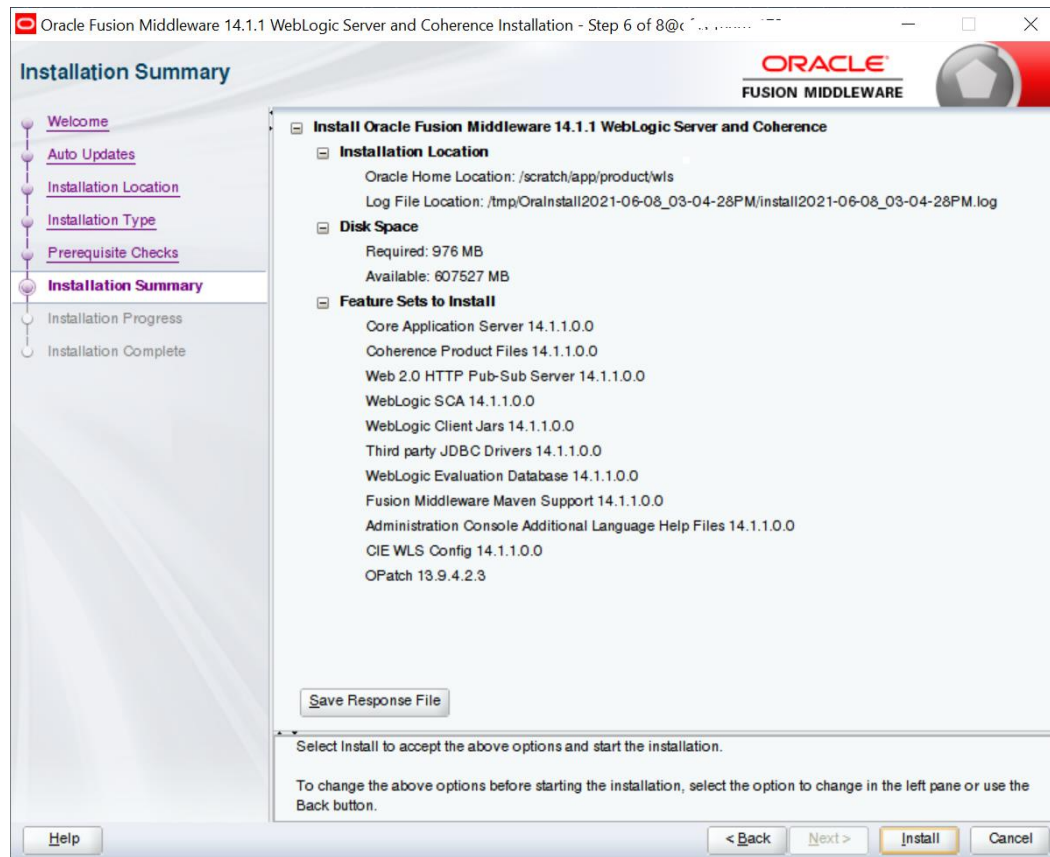


This screen shows whether the system requirements are met in order to install the software.

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.

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.

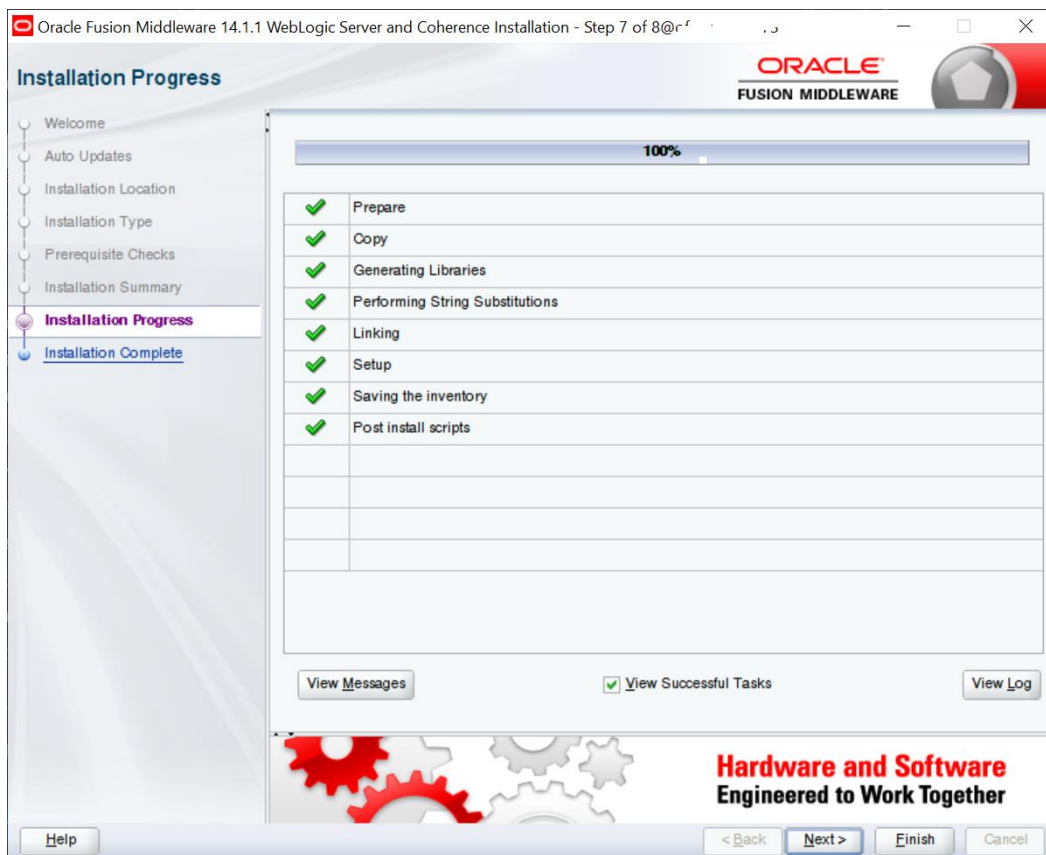
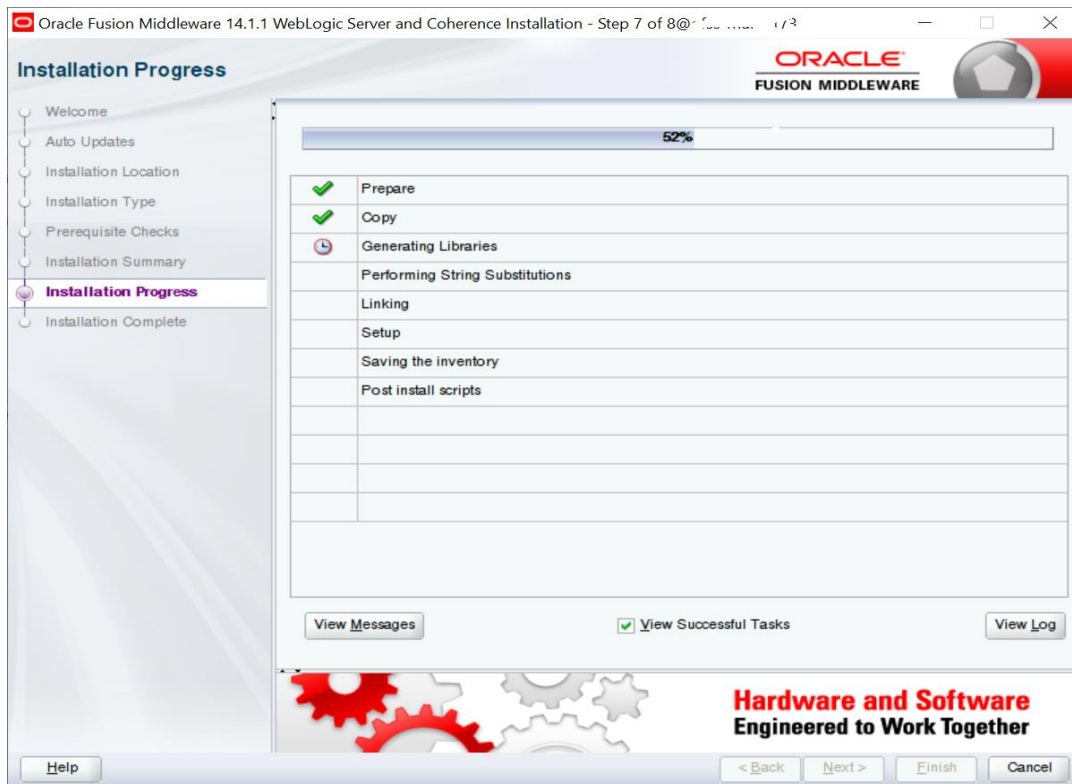
If you want to make any changes to the configuration before starting the installation, use the navigation pane, and select the topic you want to edit.

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.

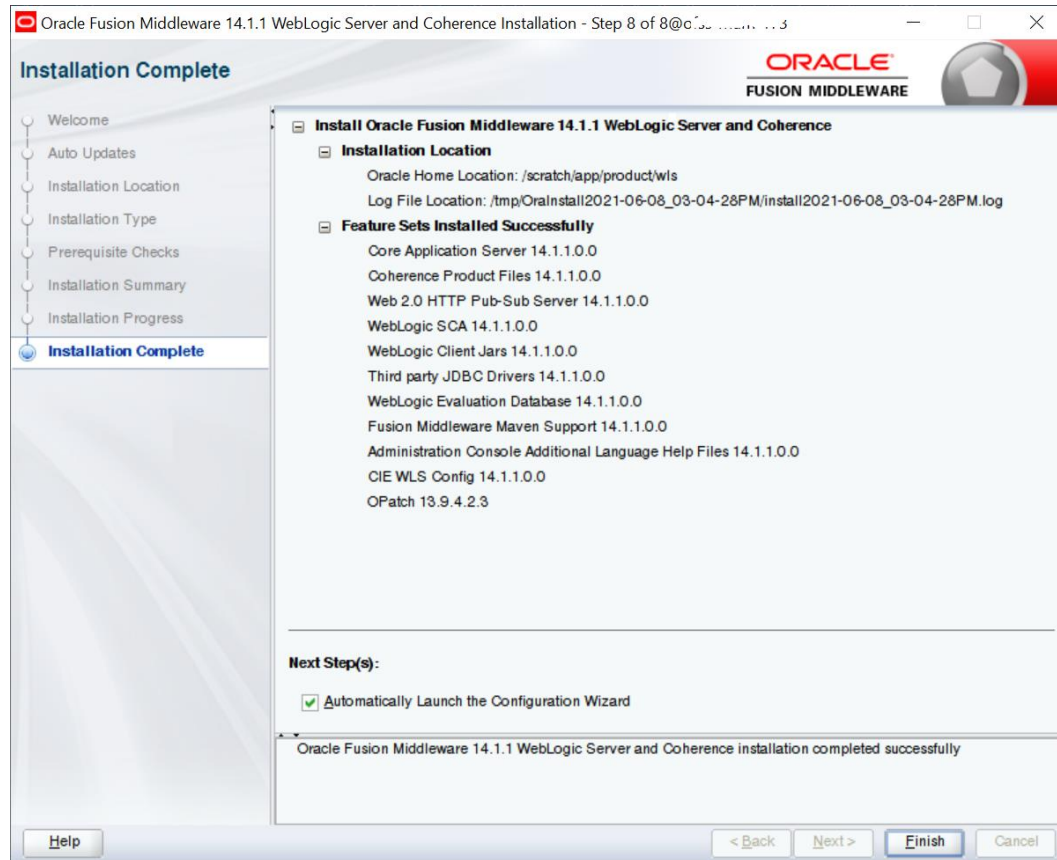
Installation Progress Screen



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.

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 (OHS) is an enterprise grade Web Server software - based on open source Apache HTTP Web Server - designed to deliver the following benefits:

- Deliver HTTP Listener for Oracle WebLogic Server through built-in WebLogic Web Server Proxy Plug-In.
- Deliver Web Server component for Fusion Middleware.
- Serve static web content such as HTML, JavaScript, Images etc, and dynamic web content built with CGI/FastCGI based applications.

- **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.

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"

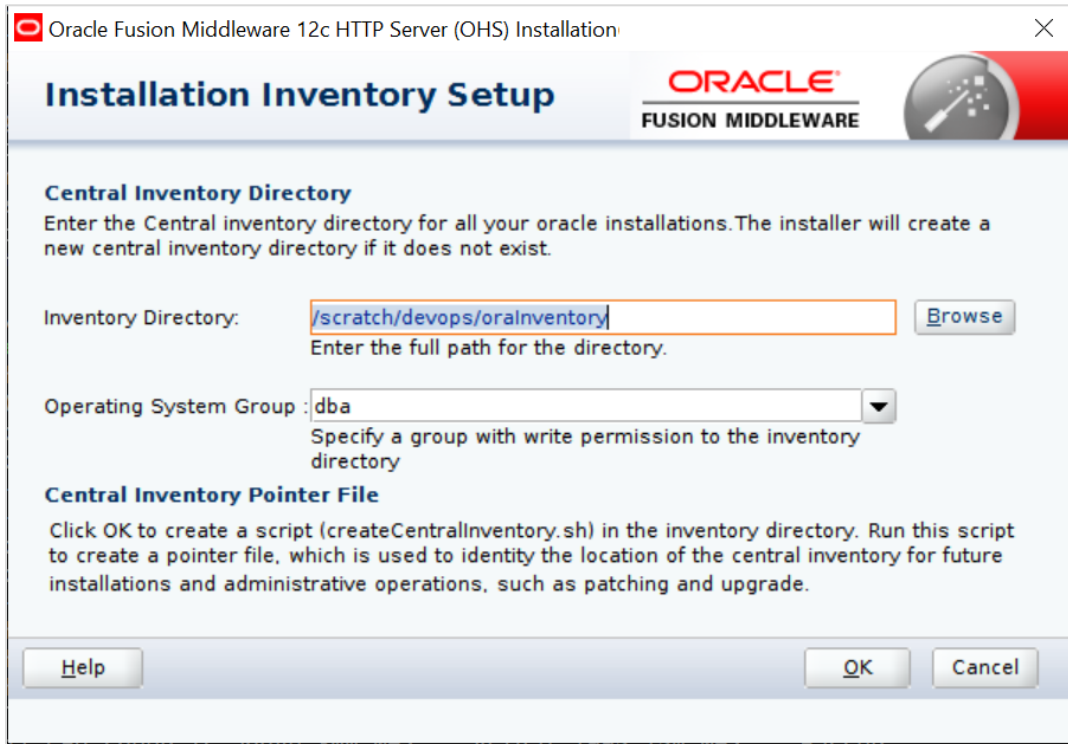
4.1 **Installing and Configuring Oracle HTTP Server (OHS)**

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_12.2.1.4.0_ohs_linux64.bin` Now, follow the instructions as shown below to install Webtier,

Specify Inventory Directory Screen



The screenshot shows the 'Installation Inventory Setup' window for Oracle Fusion Middleware 12c HTTP Server (OHS) Installation. The window has a title bar with the Oracle logo and the text 'Oracle Fusion Middleware 12c HTTP Server (OHS) Installation'. The main content area is titled 'Installation Inventory Setup' and includes the Oracle Fusion Middleware logo. Below the title, there is a section for 'Central Inventory Directory' with instructions: 'Enter the Central inventory directory for all your oracle installations. The installer will create a new central inventory directory if it does not exist.' There is a text field for 'Inventory Directory:' containing '/scratch/devops/orainventory' and a 'Browse' button. Below this is a dropdown menu for 'Operating System Group:' with 'dba' selected and a note: 'Specify a group with write permission to the inventory directory'. A section for 'Central Inventory Pointer File' explains that clicking OK will create a script (createCentralInventory.sh) in the inventory directory to create a pointer file. At the bottom, there are 'Help', 'OK', and 'Cancel' buttons.

Oracle Fusion Middleware 12c HTTP Server (OHS) Installation

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 (createCentralInventory.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.

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

Oracle HTTP Server Installation - Step 2 of 9

Auto Updates

ORACLE
FUSION MIDDLEWARE

Navigation links: Welcome, **Auto Updates**, Installation Location, Installation Type, JDK Selection, Prerequisite Checks, Installation Summary, Installation Progress, Installation Complete

☒ Skip Auto Updates

☐ Select patches from directory

Location:

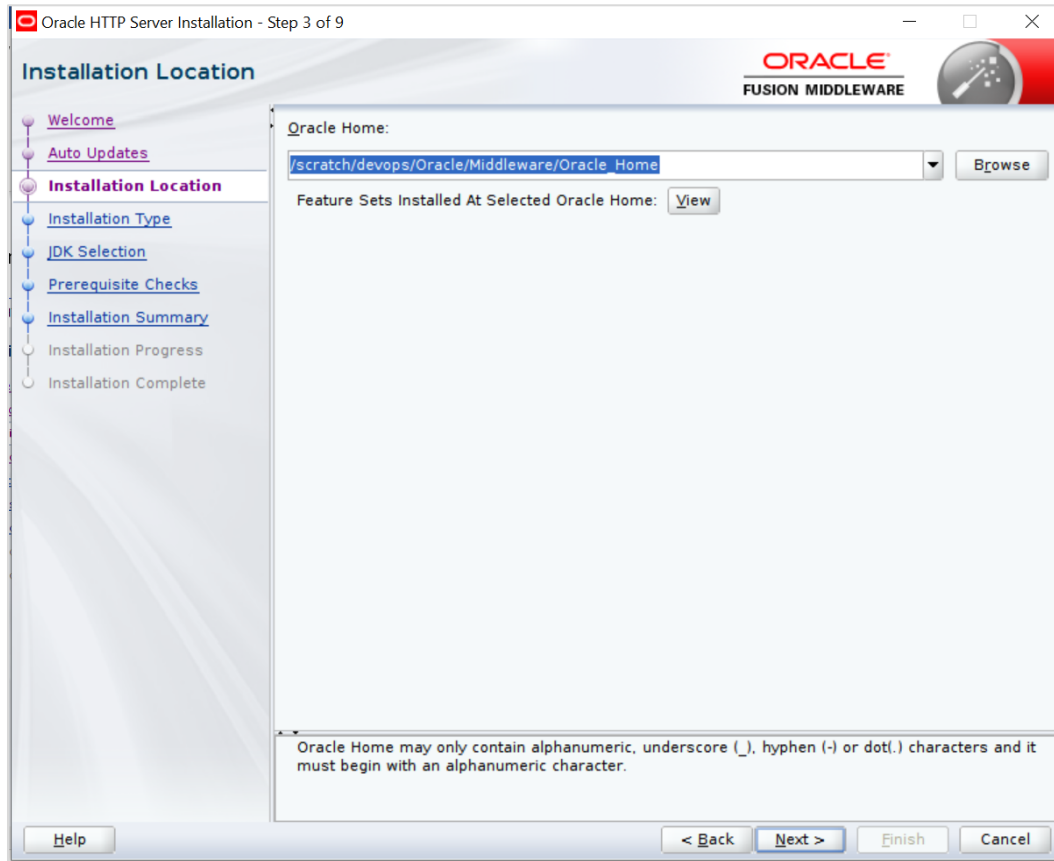
☐ Search My Oracle Support for Updates

Username:

Password:

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

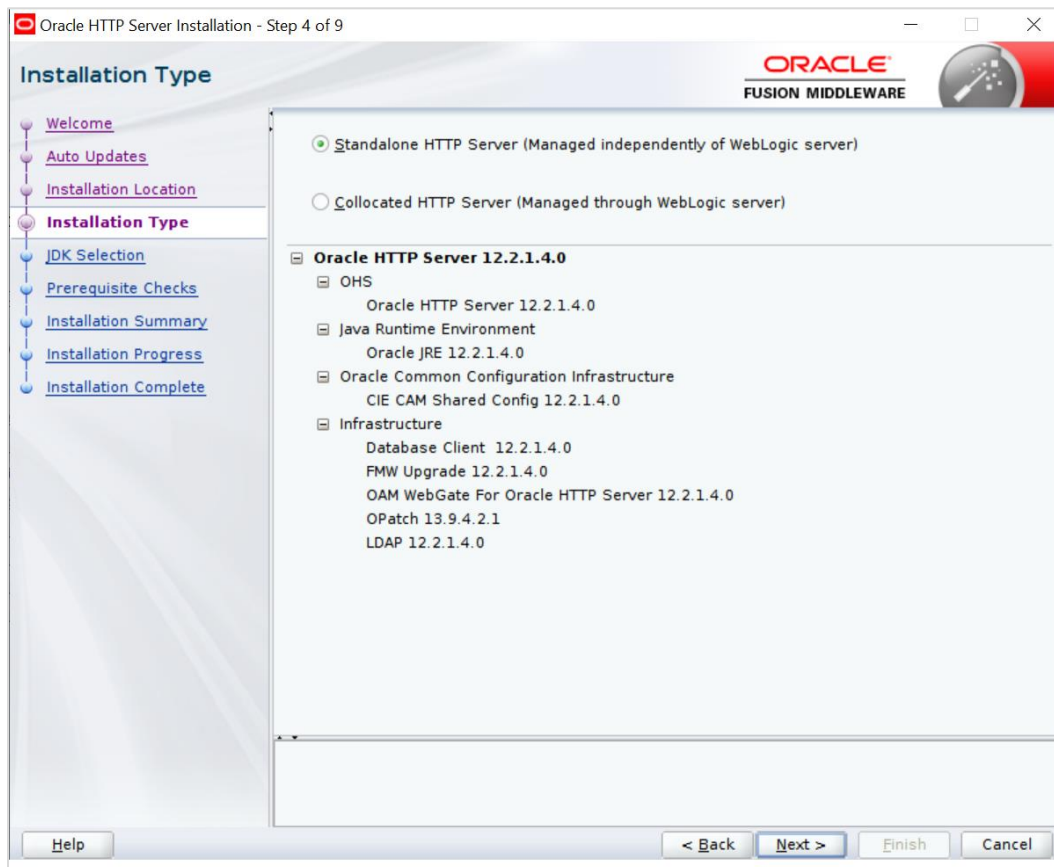
Select Installation Location



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

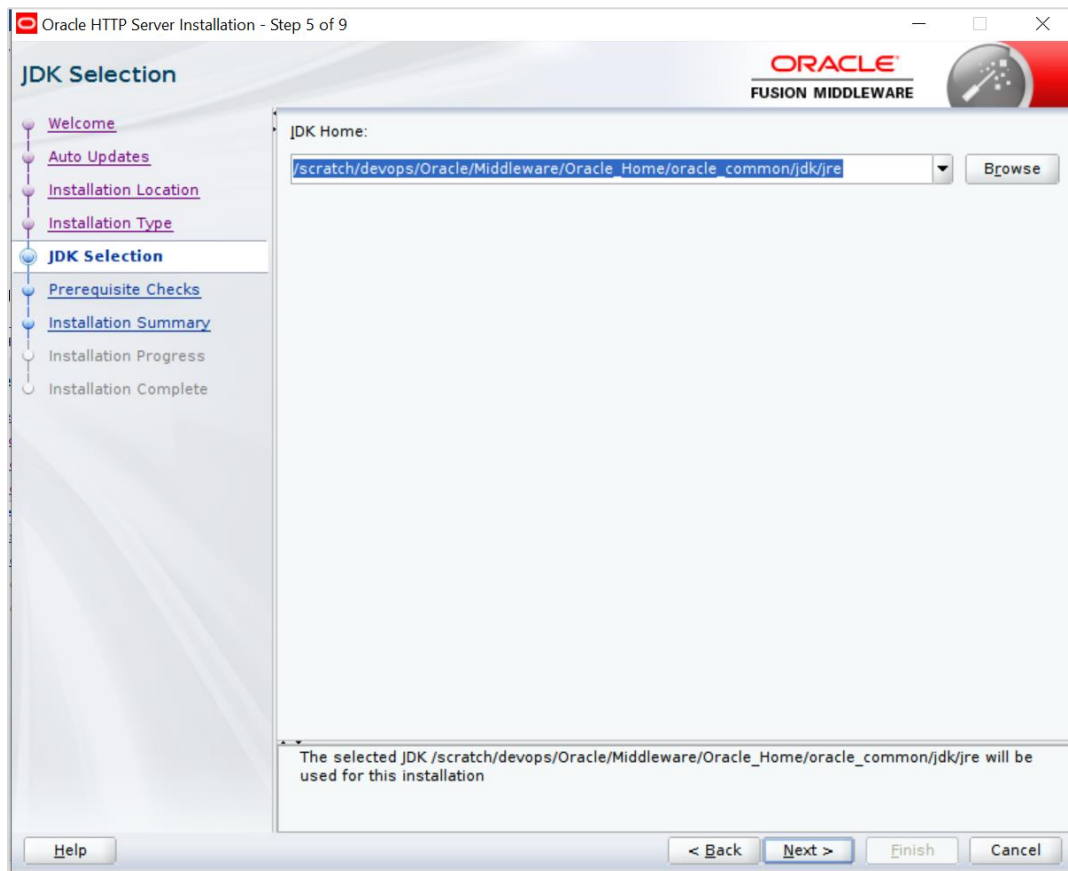


The following are the Installation Types available.

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

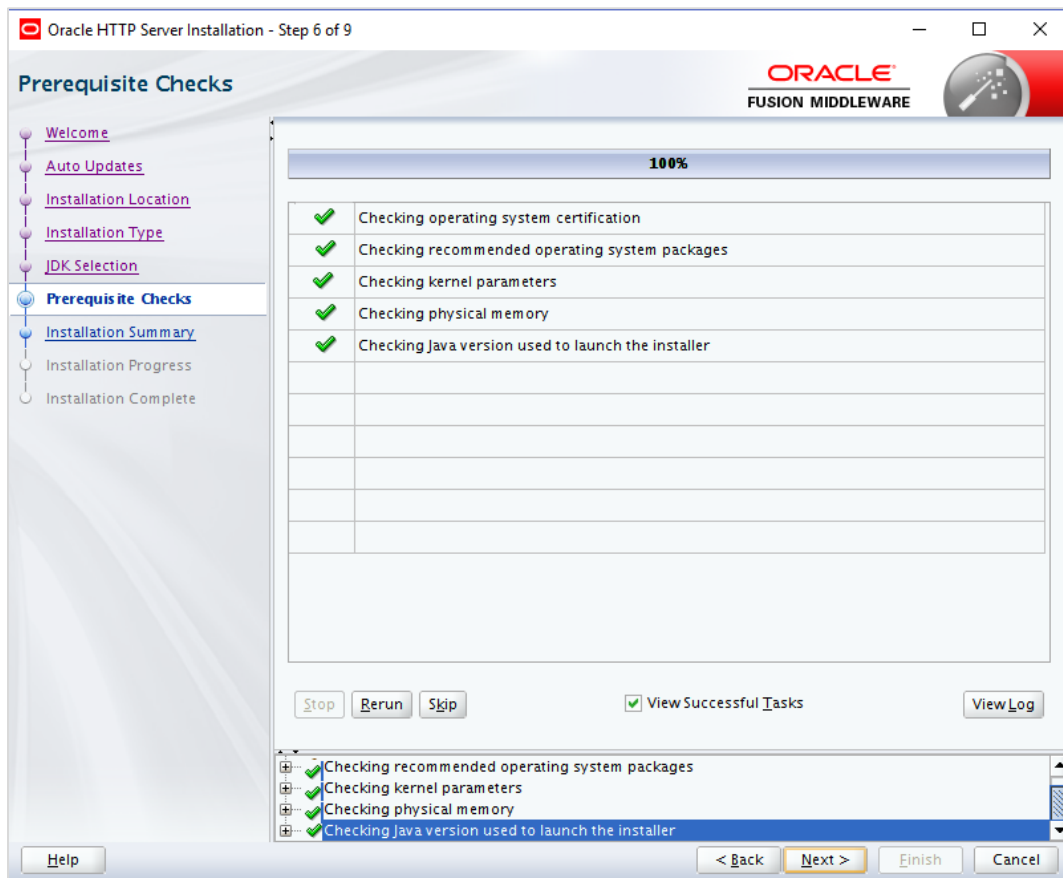
Choose installation type as per requirement. Select Standalone HTTP Server (Managed Independently of Weblogic Server). Click **Next** to continue.

Select JDK home



Click **Next** to continue

Prerequisite Checks Screen

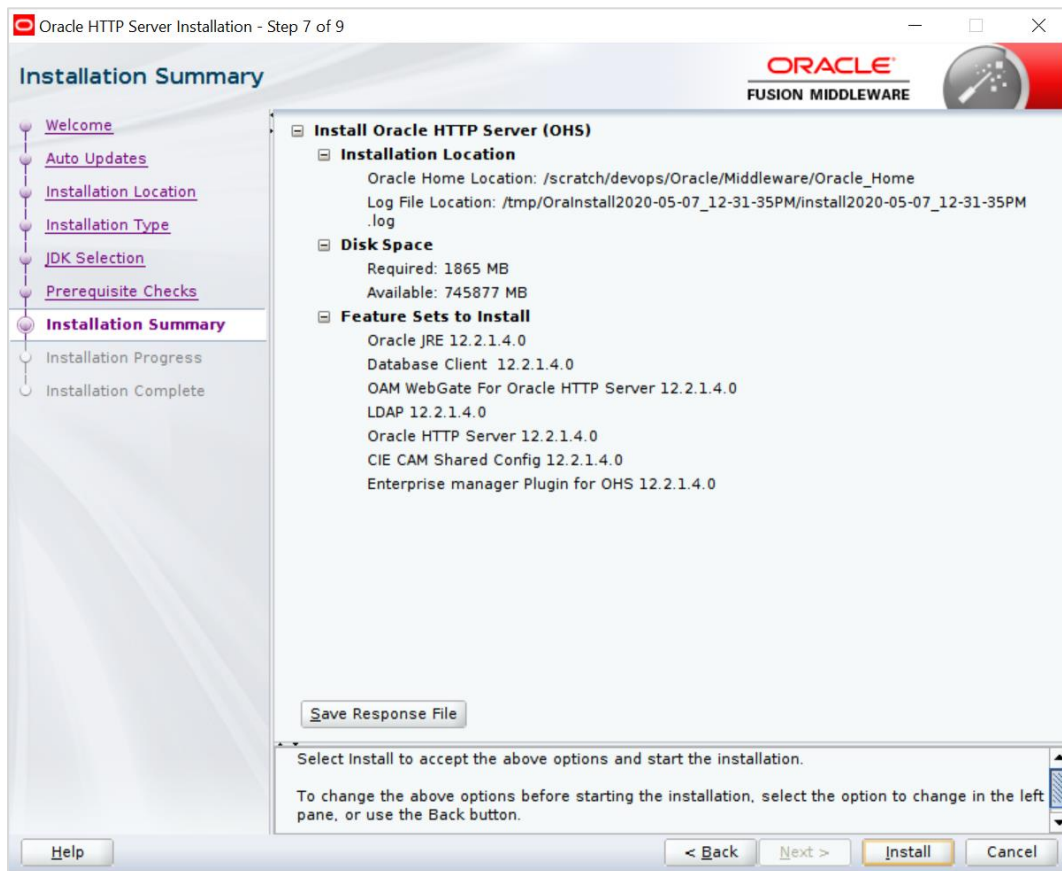


This screen shows whether the system requirements are met in order to install the software.

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



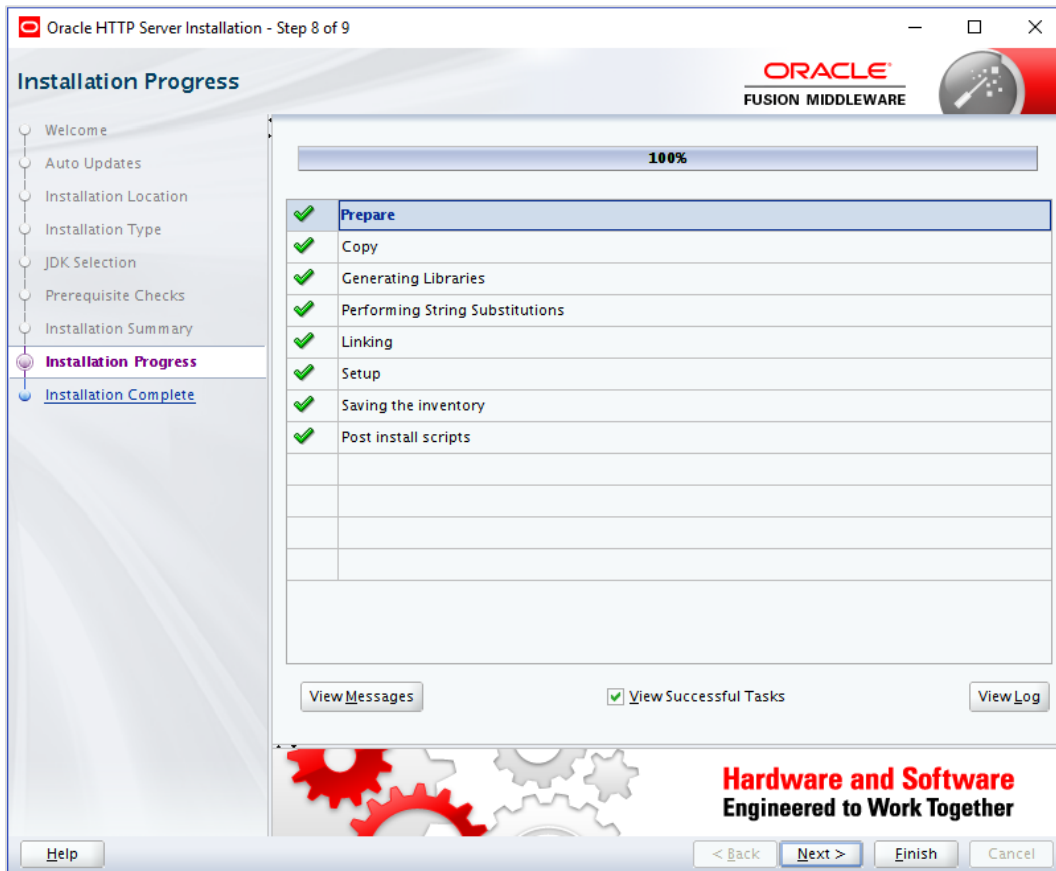
Review the information on this screen. The operations summarized on this page will be performed when you click Install.

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

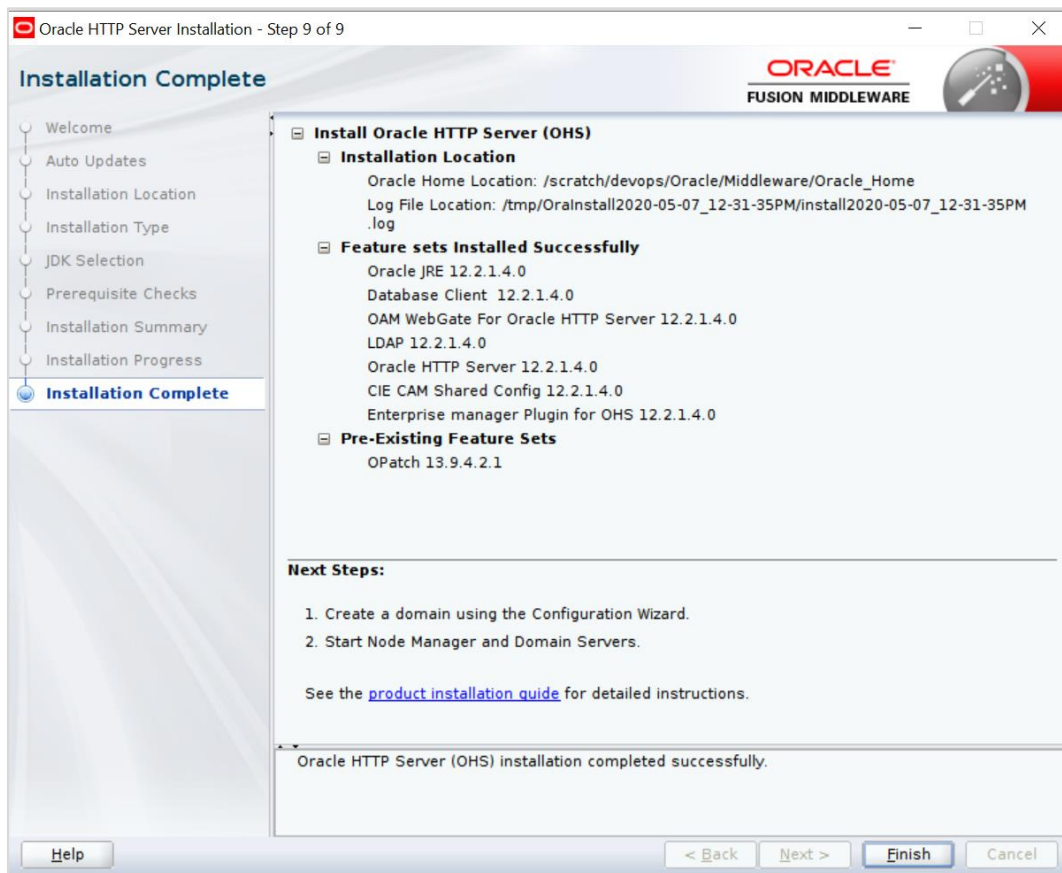


This screen shows the progress of the installation.

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.

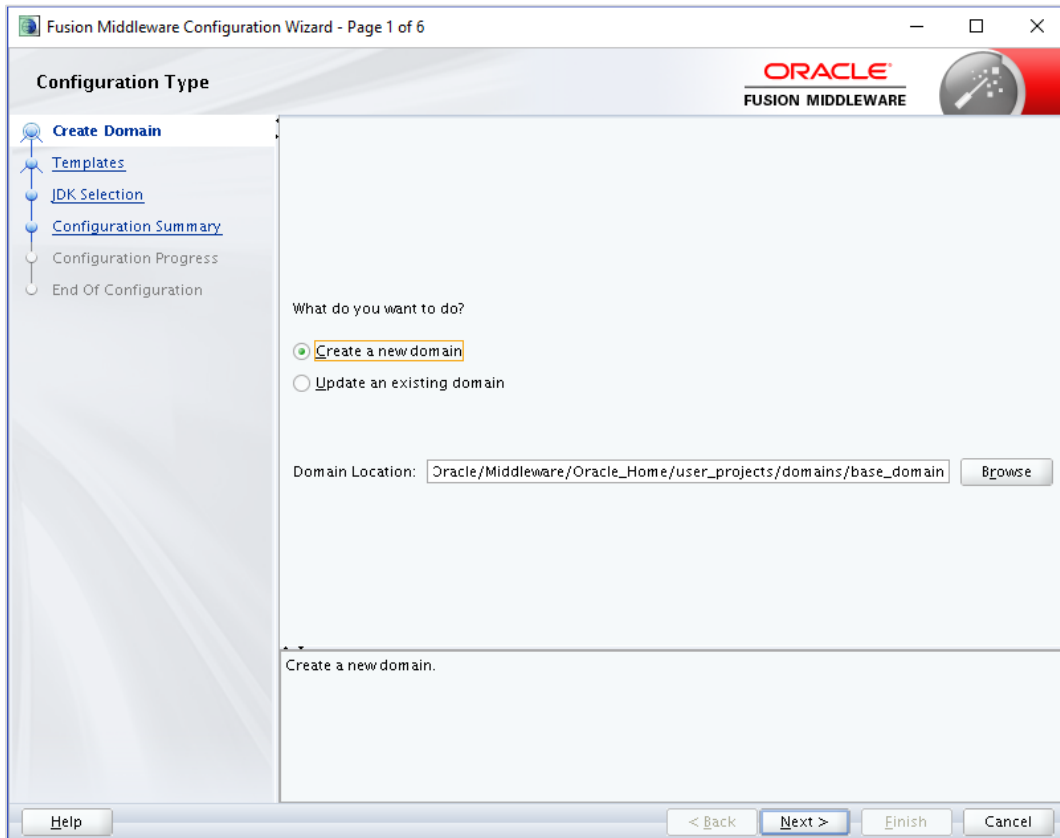
Configure the HTTP server

Follow below steps to configure domain for HTTP server

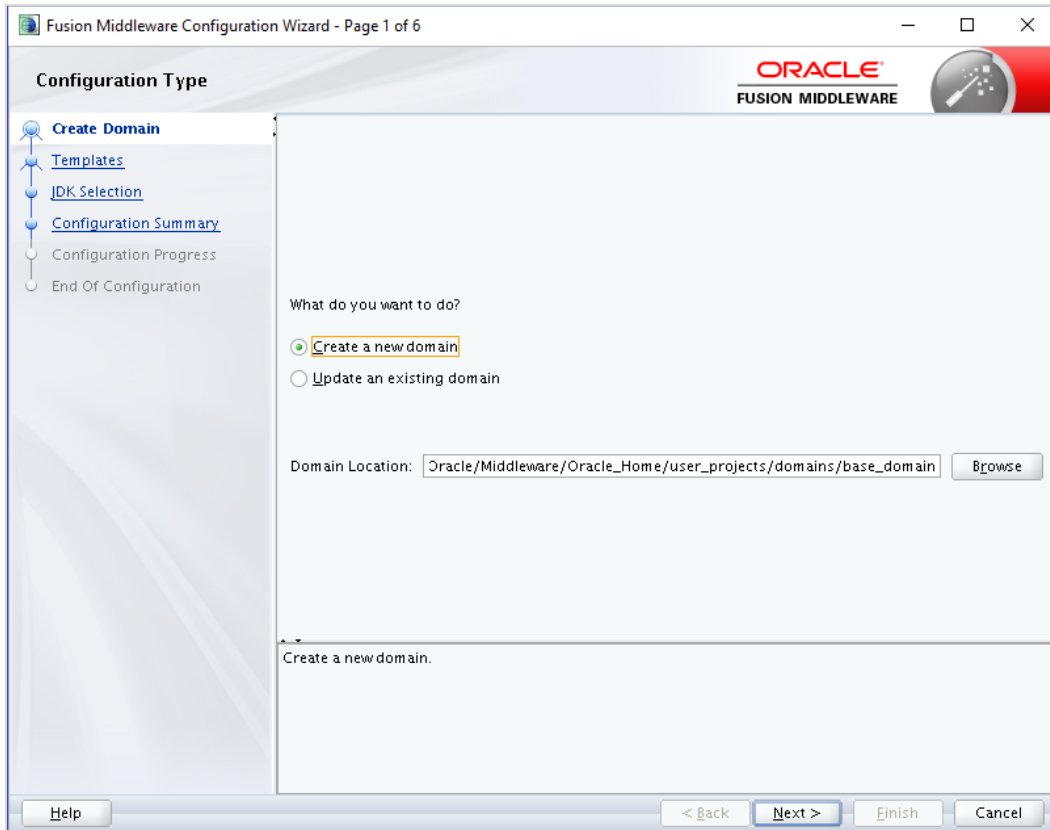
1. Browse <Middleware_Home>/oracle_common/common/bin directory
2. Execute below command

```
./config.sh
```

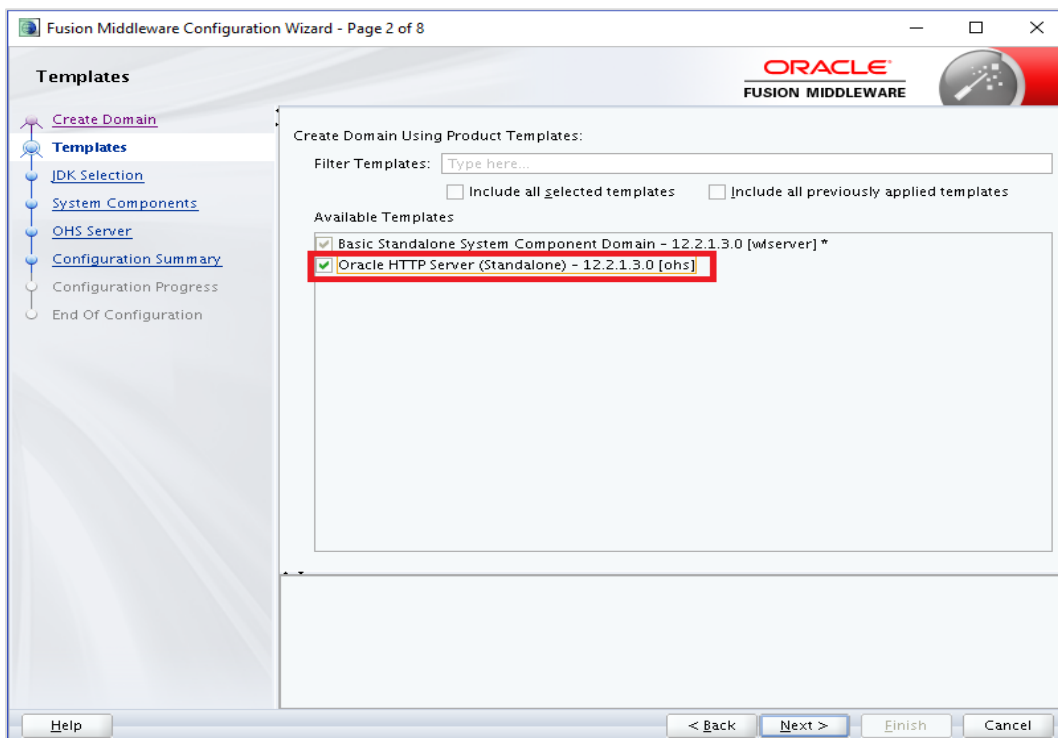
Below screen will be displayed



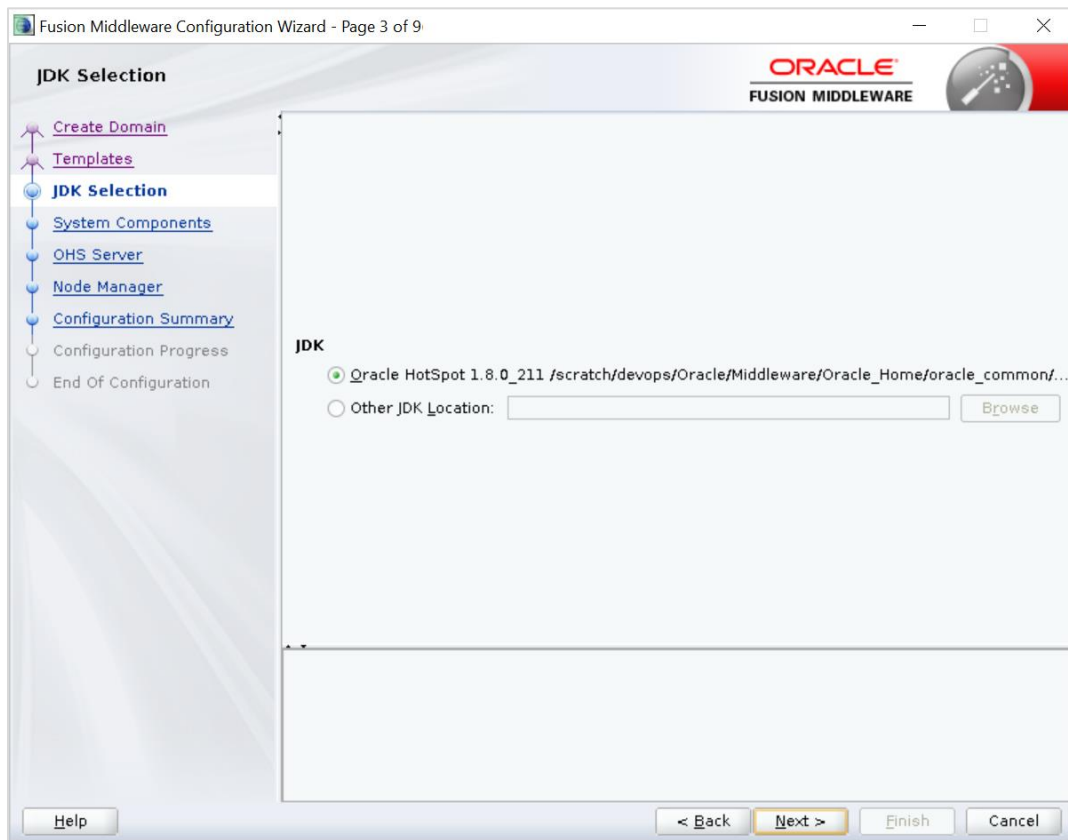
3. Select "Create a new domain" option and select Domain location. Click **Next**.



4. Select Oracle HTTP Server option and click Next



5. Click **Next**.



6. 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

Fusion Middleware Configuration Wizard - Page 4 of 9

System Components

Create Domain
Templates
JDK Selection
System Components
OHS Server
Node Manager
Configuration Summary
Configuration Progress
End Of Configuration

System Component	Component Type	Restart Interval Seconds	Restart Delay Seconds
ohs1	OHS	3600	0

Help < Back Next > Finish Cancel

7. Configure Admin Host; Port; Listen Address and click **Next**.

Fusion Middleware Configuration Wizard - Page 5 of 9

OHS Server

Create Domain
Templates
JDK Selection
System Components
OHS Server
Node Manager
Configuration Summary
Configuration Progress
End Of Configuration

System Component: ohs1

Admin Host: obdxohs.in.oracle.com

Admin Port: 9999

Listen Address: obdxohs.in.oracle.com

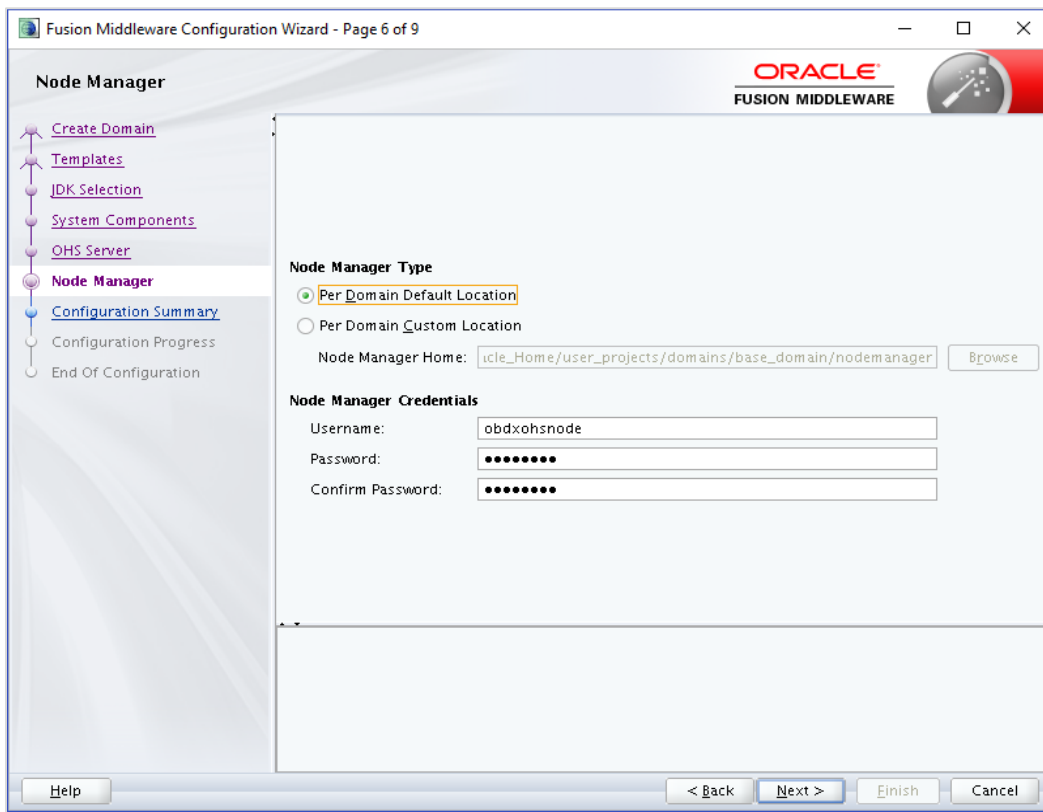
Listen Port: 7777

SSL Listen Port: 4443

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

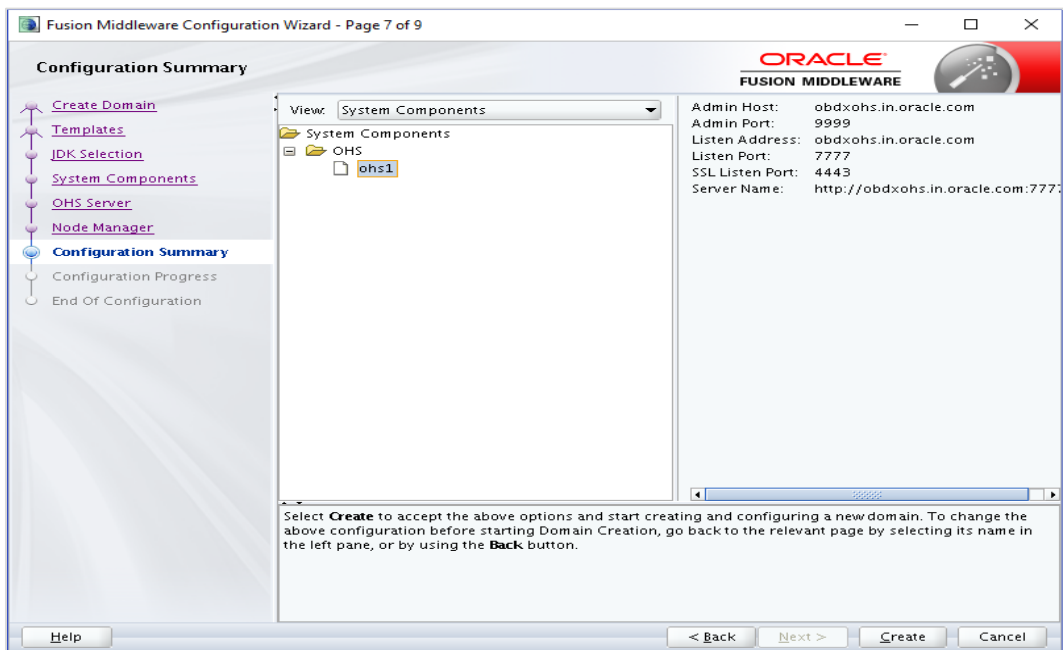
Help < Back Next > Finish Cancel

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



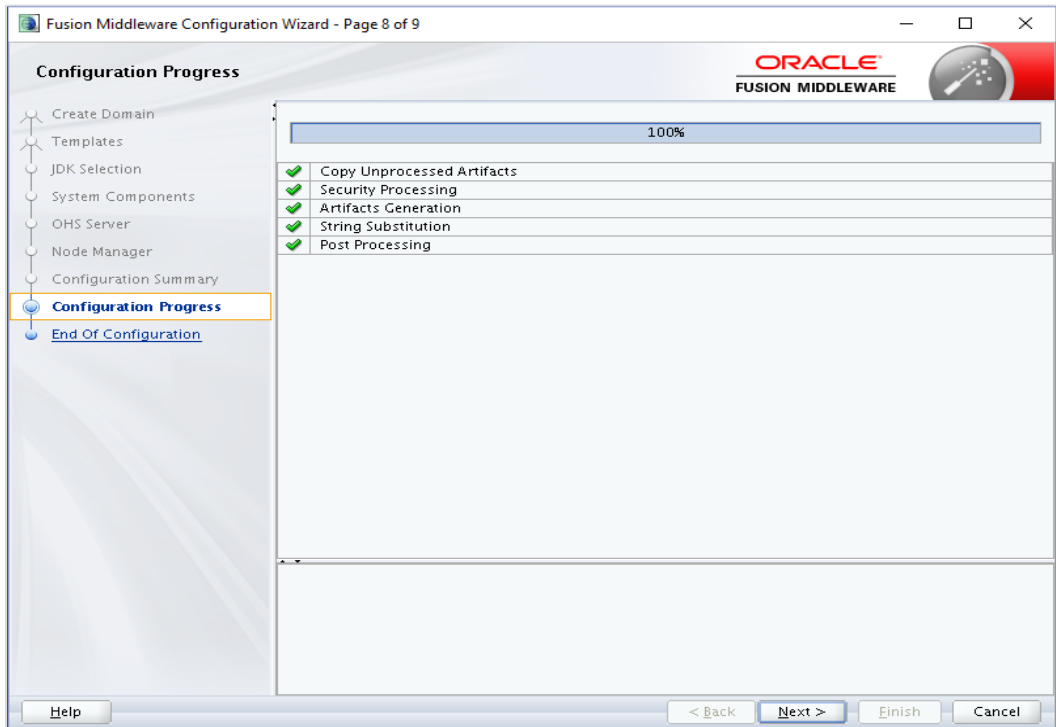
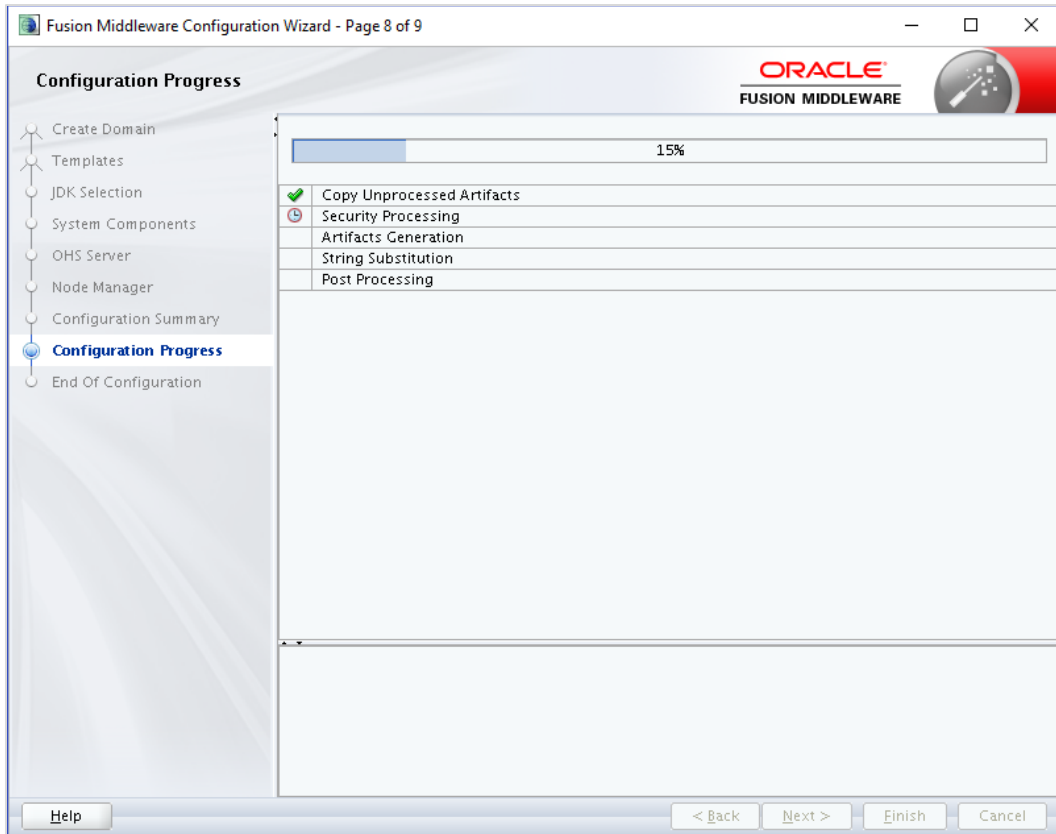
The screenshot shows the 'Node Manager' configuration page of the Fusion Middleware Configuration Wizard. The left sidebar contains a tree view with the following items: 'Create Domain', 'Templates', 'JDK Selection', 'System Components', 'OHS Server', 'Node Manager' (selected), 'Configuration Summary', 'Configuration Progress', and 'End Of Configuration'. The main area is titled 'Node Manager' and features the Oracle Fusion Middleware logo. It contains two sections: 'Node Manager Type' and 'Node Manager Credentials'. In the 'Node Manager Type' section, the 'Per Domain Default Location' radio button is selected, and the 'Node Manager Home' field is populated with 'oracle_home/user_projects/domains/base_domain/nodemanager'. In the 'Node Manager Credentials' section, the 'Username' field is 'obdxohsnode', and both the 'Password' and 'Confirm Password' fields are filled with masked characters (dots). At the bottom, there are buttons for 'Help', '< Back', 'Next >', 'Finish', and 'Cancel'.

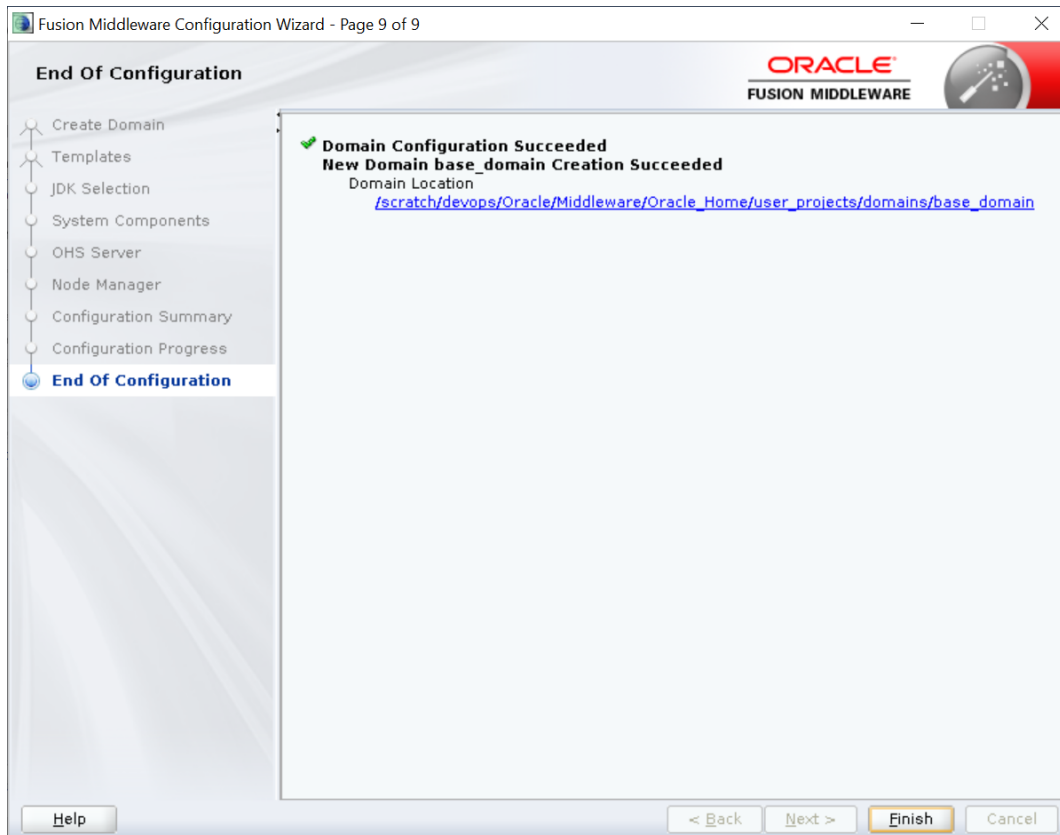
9. Review summary and click **Create**.



The screenshot shows the 'Configuration Summary' page of the Fusion Middleware Configuration Wizard. The left sidebar is identical to the previous page, with 'Configuration Summary' now selected. The main area is titled 'Configuration Summary' and features the Oracle Fusion Middleware logo. It contains a 'View' dropdown set to 'System Components', which shows a tree view with 'System Components' as the root, containing 'OHS' and 'ons1'. To the right of the tree view, a summary of configuration details is displayed: 'Admin Host: obdxohs.in.oracle.com', 'Admin Port: 9999', 'Listen Address: obdxohs.in.oracle.com', 'Listen Port: 7777', 'SSL Listen Port: 4443', and 'Server Name: http://obdxohs.in.oracle.com:7777'. At the bottom, there is a text box with instructions: 'Select **Create** to accept the above options and start creating and configuring a new domain. To change the above configuration before starting Domain Creation, go back to the relevant page by selecting its name in the left pane, or by using the **Back** button.' Below this text are buttons for 'Help', '< Back', 'Next >', 'Create', and 'Cancel'.

10. 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>/oraInventory/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
/scratch/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>

Oracle HTTP Server 12c

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 host-ending Oracle Fusion Middleware Applications.

The diagram illustrates the architecture of Oracle HTTP Server 12c. It shows a central 'Local Content' box connected to 'OHS' (Oracle HTTP Server) and 'Load Balancing'. 'OHS' is connected to 'Fusion Middleware Applications'. 'Load Balancing' is connected to 'Fusion Middleware Applications'. 'Fusion Middleware Applications' is connected to 'Enterprise Manager'. 'Enterprise Manager' is connected to 'Manage, monitor, diagnose'. 'Enterprise Manager' is also connected to 'TMM Lifecycle Tools'. 'Enterprise Manager' is connected to 'Process Management and HA', 'Certificate management', 'Automation', and 'Test to Production'. 'Enterprise Manager' is connected to 'Audit Control' and 'Identity Management'. 'Enterprise Manager' is connected to 'Manage, monitor, diagnose'.

Features

Content Serving / Reverse Proxy

Cloud Deployment / Virtual Server Support
Thousands of sites / application domains 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 intercept 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
Built-in mod_proxy module provides the ability to configure rules to intercept and protect applications from common attacks including SQL/Command injection, Cross Site Scripting, vulnerabilities and other vulnerabilities.

Administration / Monitoring

Server Administration
Leverages WebLogic 12c administration interface 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.

Subset Migration Tool
Integrated migration tools make it easy to migrate existing Oracle HTTP Server 11g deployments to Oracle HTTP Server 12c.

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
/scratch/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
/scratch/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/fmwconfig/components/OHS/ohs1 -oh
/scratch/devops/Oracle/Middleware/Oracle_Home
```

```
deployWebGate]$ ./deployWebGateInstance.sh -w /scratch/devops/Oracle/Middleware/Oracle_Home/user_projects/d
omains/base_domain/config/fmwconfig/components/OHS/ohs1 -oh /scratch/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: `/scratch/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:

/scratch/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

/scratch/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
/scratch/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/base_domain/config/fmwconfig/components/OHS/ohs1 -oh
/scratch/devops/Oracle/Middleware/Oracle_Home
```

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

6. Oracle Analytics Publisher Installation

To install Oracle Analytics Publisher Installation refer
<https://docs.oracle.com/en/middleware/bi/analytics-server/index.html>