# Oracle Banking Digital Experience

Installer Pre-Requisite Setup Manual Release 17.2.0.0.0

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# ORACLE

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

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## 1. Preface

## 1.1 Intended Audience

This document is intended for the following audience:

- Customers
- Partners

## **1.2** Documentation Accessibility

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

## 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.

## **1.5 Related Information Sources**

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

Oracle Banking Digital Experience Licensing Guide

## 2. Introduction

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

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

## 2.1 Software List

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

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

## 2.2 Pre-requisite software installation for OBDX Installer

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

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

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

#### cx\_Oracle

Step 1: Download cx\_Oracle from Python packages website.

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

For .e.g.: cx\_Oracle-5.2.1-12c-py27-1.x86\_64.rpm for Python 2.7.5 and Oracle 12c

<u>Step 2</u>: 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 c	x_Oracle	e-5.2	.1-12c	-py27-	1.x86	64.rpm	
Preparing				###	****	*****	*****	*****	*******	[100%]
Updating / ins	stalling									
1:cx Oracle	-5.2.1-1			###	****	*****	*****	*****	*******	[100%]

#### Urwid

<u>Step 1</u>: Download Urwid from Urwid (or urwid.org) website.

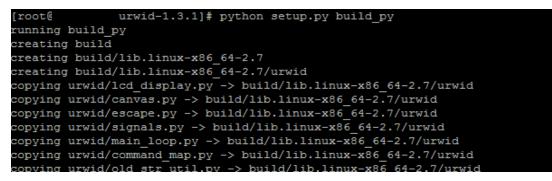
Note: Support version for Urwid is 1.3.1 (urwid-1.3.1.tar.gz)

Step 2: Extract the tar file as shown below

[root@	setup]# tar -zxvf urwid-1.3.1.tar.gz
urwid-1.3.1/ur	rwid/tests/test_container.py
urwid-1.3.1/ur	rwid/tests/test_util.py
urwid-1.3.1/ur	rwid/tests/test_vterm.py
urwid-1.3.1/ur	rwid/tests/test_graphics.py
urwid-1.3.1/ur	rwid/tests/test_listbox.py
urwid-1.3.1/ur	rwid/tests/test_widget.py
urwid-1.3.1/ur	rwid/tests/initpy
urwid-1.3.1/ur	rwid/tests/test doctests.pv

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

# python setup.py build\_py



**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



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

## 3. Installing and Configuring Weblogic 12c with JRF

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

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

## 3.1 Installing Stand-alone Weblogic

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

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

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

#### 3.1.1 Pre-requisite - Installing Java 1.8

- Obtain the Java tarball pack from the Oracle Java Downloads. Download *jdk-8u131-linuxx64.tar.gz* file to a directory.
- Change the directory in which you want to install,

#### cd <Directory\_Path>

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

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

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

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

#### export JAVA\_HOME=<Java\_Install\_Path>/jdk1.8.0\_131

#### export PATH=\$JAVA\_HOME/bin:\$PATH

#### 3.1.2 Installing Weblogic

- Obtain Weblogic 12.2.1.2.0 JAR from the Oracle Fusion Middleware Downloads. Download *fmw\_12.2.1.2.0\_wls.jar* file to a directory.
- Now to start the installer, go to the directory where you downloaded the file.
- Start the installer from the same directory using the below command:

#### java –jar <Path>/fmw\_12.2.1.2.0\_wls.jar

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

If you are installing on a UNIX system, and if this is the first time any Oracle product is being installed on your system with the Oracle Universal Installer, you will 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

Installation Inv		-		
Central Inventory Director	ry .			
Enter the Central inventory central inventory directory		installations. The installer wil	create	a new
nventory Directory:	/scratch/obdxdevops1/or	alnventory		Browse
	Enter the full path for the di	rectory.		
Operating System Group :	obdxdevops1		-	
	Specify a group with write permission to the inventory directory			
Central Inventory Pointer	File			
		in the inventory directory. Ru on of the central inventory fo		
installations and administr	ative operations, such as pat	ching and upgrade.		
Help			ок	Cancel

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.

#### Auto Updates Screen

Oracle Fusion Middleware 12c W	ebLogic Server and	Coherence Installation - Step	o 2 of 8@mum00bjw		_ <b>_ X</b>
Auto Updates					
φ <u>Welcome</u>					
Auto Updates	Skip <u>A</u> uto Upd	ates			
Installation Location	Select patches	from <u>d</u> irectory			
unstallation Type	Location:				Br <u>o</u> wse
Prerequisite Checks	O Search My Ora	cle Support for Updates			
Installation Summary	<u>U</u> sername:				
Unstallation Progress	Password:				
o Installation Complete	_	Proxy Settings			Test Connection
	C				rest connection
	<u>S</u> earch				
Help			< <u>B</u> ack	<u>N</u> ext > Eir	ish Cancel

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

0	Oracle Fusion Middleware 12c W	ebLogic Server and Coherence Installation - Step 3 of 8@mum00bjw	X
Ir	stallation Location		
Ŷ	Welcome	<u>O</u> racle Home:	
φ	Auto Updates	/scratch/obdxdevops1/Oracle/Middleware	▼ Browse
0	Installation Location	Feature Sets Installed At Selected Oracle Home: View	
	Installation Type		
<b>•</b>	Prerequisite Checks		
<b>\</b>	Installation Summary		
Ý	Installation Progress		
9	Installation Complete		
		Oracle Home may only contain alphanumeric, underscore (_), hyphen (-) or dot(.) charact begin with an alphanumeric character.	ters and it must
	Help	Sack Next > Eini	sh Cancel

#### **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.

Oracle Fusion Middleware 12c     Installation Type	WebLogic Server and Coherence Installation - Step 4 of 9@mum00bjw
↓ Welcome ↓ Auto Updates	● <u>W</u> ebLogic Server
<ul> <li>Installation Location</li> <li>Installation Type</li> </ul>	
Prerequisite Checks     Security Updates	Complete with Examples
Installation Summary Installation Progress Installation Complete	<ul> <li>Oracle Fusion Middleware 12c WebLogic Server and Coherence 12.2.1.2.0         <ul> <li>Core Server</li> <li>Core Application Server 12.2.1.2.0</li> <li>Coherence Product Files 12.2.1.2.0</li> <li>WebLogic SCA 12.2.1.2.0</li> <li>WebLogic Client Jars 12.2.1.2.0</li> <li>Administrative Tools</li> <li>Administrative Tools</li> <li>Cong Support</li> <li>Thirdparty JDBC Drivers 12.2.1.2.0</li> <li>Open Source Components</li> <li>Fusion Middleware Maven Support 12.2.1.2.0</li> <li>Oracle Installation Infrastructure</li> <li>FMW Platform Generic 12.2.1.2.0</li> </ul> </li> </ul>
Help	< <u>Back</u> <u>Next&gt;</u> Einish Cancel

#### Specify Installation Type Screen

Following are the installation types:

- Weblogic Server
- Coherence
- Complete with Examples

Select Weblogic server and Click Next to continue.

Oracle Fusion Middleware 12c W	ebLogic Server and Coherence Installation - Step 5 of 9@mum00bjw	X
Prerequisite Checks		
Welcome		
Auto Updates	100%	
unstallation Location		
unstallation Type	Checking operating system certification	
Prerequisite Checks	Checking Java version used to launch the installer	
<ul> <li>Security Updates</li> </ul>		
Installation Summary		
Q Installation Progress		
U Installation Complete		
o instanation complete		
	<u>Stop</u> <u>R</u> erun S <u>k</u> ip <b>√</b> View Successful <u>T</u> asks	View <u>L</u> og
	Checking operating system certification	
	🖶 🖋 Checking Java version used to launch the installer	
Help	< <u>Back</u> Next > Eini	sh Cancel

#### **Prerequisite Checks Screen**

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

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

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

To stop prerequisite checking for all components, click Abort.

Oracle Fusion Middleware 12c WebLogic Server and Coherence Installation - Step 6 of 9@mum00bjw				
Security Updates				
Welcome				
Auto Updates				
Installation Location				
Installation Type	Provide your email address to be informed of security issues, install the product			
Prerequisite Checks	and initiate configuration manager. <u>View details</u> .			
Security Updates	E <u>m</u> ail: Easier for you if you use your My Oracle Support email address/username.			
Installation Summary				
Installation Progress	I wish to receive security updates via My Oracle Support.			
i O Installation Complete	My <u>O</u> racle Support Password:			
Help	< <u>Back</u> <u>Next&gt;</u> <u>Finish</u> Cancel			

#### **Specify Security Updates Screen**

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

Oracle Fusion Middleware 12c WebLogic Server and Coherence Installation - Step 6 of 9@mum00bjw				
Security Updates				
Welcome				
Auto Updates				
Installation Location				
Installation Type	Provide your email address to be informed of security issues, install the product			
Prerequisite Checks	and initiate configuration manager. <u>View details</u> .			
Security Updates	E <u>m</u> ail: Easier for you if you use your My Oracle Support email address/username.			
Installation Summary				
Installation Progress	O My Oracle Support Username/Email Address Not Specified@mum00bjw			
O Installation Complete	You have not provided an email address. Do you wish to remain uninformed of critical security issues in your configuration? Yes No			
Help	< <u>Back</u> <u>N</u> ext> <u>F</u> inish Cancel			

#### **Specify Security Updates Screen**

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

Select Yes and Click on Next to proceed.

Installation Summary			
Welcome	□ Install Oracle Fusion Middleware 12c WebLogic Server and Coherence		
Auto Updates	Installation Location		
	Oracle Home Location: /scratch/obdxdevops1/Oracle/Middleware		
Installation Location	Log File Location: /tmp/Oralnstall2017-07-13_03-29-51PM/install2017-07-13_03-29-51P		
Installation Type	M.log		
Prerequisite Checks	Disk Space		
Prerequisite Checks	Required: 862 MB		
Security Updates	Available: 56080 MB		
Installation Summary	Feature Sets to Install		
	Core Application Server 12.2.1.2.0		
O Installation Progress	Coherence Product Files 12.2.1.2.0		
Installation Complete	Web 2.0 HTTP Pub-Sub Server 12.2.1.2.0		
	WebLogic SCA 12.2.1.2.0		
	WebLogic Client Jars 12.2.1.2.0		
	Administration Console Additional Language Help Files 12.2.1.2.0		
	CIE WLS Config 12.2.1.2.0		
	FMW Platform Generic 12.2.1.2.0		
	OPatch 13.9.1.0.0		
	Thirdparty JDBC Drivers 12.2.1.2.0		
	WebLogic Evaluation Database 12.2.1.2.0		
	Fusion Middleware Maven Support 12.2.1.2.0		
	Save Response File		
	Select Install to accept the above options and start the installation.		
	To change the above options before starting the installation, select the option to change in the left pane or use the Back button.		
Help	< Back Next > Install Cancel		

#### 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.

Oracle Fusion Middleware 12c W	ebLogic Server and Coherence Installation - Step 8 of 9@mum00bjw
Installation Progress	
9 Welcome	
Auto Updates	100%
Unstallation Location	
i 🏳 Installation Type	V Prepare
Prerequisite Checks	🗸 Сору
Security Updates	Cenerating Libraries
Installation Summary	Performing String Substitutions
Installation Progress	V Linking
Installation Complete	Setup
<ul> <li>Installation Complete</li> </ul>	Saving the inventory
	Post install scripts
	View Messages View Log
	Hardware and Software
	Engineered to Work Together
Help	< <u>Back</u> <u>Next</u> <u>Einish</u> Cancel

#### Installation Progress Screen

This screen shows the progress of the installation.

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

Oracle Fusion Middleware 12c	WebLogic Server and Coherence Installation - Step 9 of 9@mum00bjw		
Installation Complete			
♀ Welcome	😑 Install Oracle Fusion Middleware 12c WebLogic Server and Coherence		
Auto Updates	Installation Location		
O Installation Location	Oracle Home Location: /scratch/obdxdevops1/Oracle/Middleware		
	Log File Location: /tmp/Oralnstall2017-07-13_03-29-51PM/install2017-07-13_03-29-51P		
O Installation Type	M.log		
Prerequisite Checks	Feature Sets Installed Successfully		
Security Updates	Core Application Server 12.2.1.2.0 Coherence Product Files 12.2.1.2.0		
	Web 2.0 HTTP Pub-Sub Server 12.2.1.2.0		
Ý Installation Summary	WebLogic SCA 12.2.1.2.0		
↓ ↓ Installation Progress	WebLogic Client Jars 12.2.1.2.0		
Installation Complete	Administration Console Additional Language Help Files 12.2.1.2.0		
Instantation complete	Cle WLS Config 12.2.1.2.0		
	FMW Platform Generic 12.2.1.2.0		
	OPatch 13.9.1.0.0 Thirdparty JDBC Drivers 12.2.1.2.0		
	WebLogic Evaluation Database 12.2.1.2.0		
	Fusion Middleware Mayen Support 12.2.1.2.0		
	Fusion miguleware Maven Support 12.2.1.2.0		
	Next Step(s):		
	✓ Automatically Launch the Configuration Wizard		
	Oracle Fusion Middleware 12c WebLogic Server and Coherence installation completed successfully		
Help	<a>Back</a> <a>Einish</a> <a>Cancel</a>		

#### Installation Complete Screen

This screen summarizes the installation that was just completed.

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

Click Finish to dismiss the screen.

#### 3.1.3 Verifying the Installation

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

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

## 3.2 Extending the Weblogic environment with JRF

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

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

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

#### 3.2.1 Installing JRF Components

Obtain FMW 12.2.1.2.0 Infrastructure JAR from the Oracle Fusion Middleware Downloads. Download *fmw\_12.2.1.2.0\_infrastructure.jar* file to a directory.

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

java – jar <Path>/fmw\_12.2.1.2.0\_infrastructure.jar

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

If you are installing on a UNIX system, and if this is the first time any Oracle product is being installed on your system with the Oracle Universal Installer, you will 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.

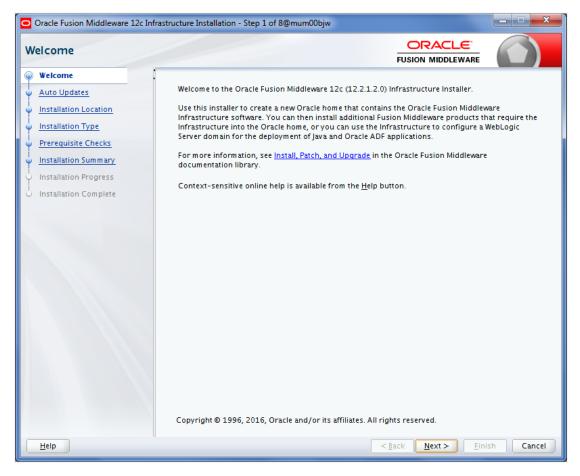
#### Installation Inventory Setup Screen

Installation Inventory Setup			
Central Inventory Directo	ry.		
12 12 12 12 12 12 12 12 12 12 12 12 12 1	directory for all your oracle	installations.The installer will crea	ate a new
nventory <u>D</u> irectory:	/scratch/obdxdevops1/or	alnventory	Browse
	Enter the full path for the di	rectory.	
Operating System Group :	obdxdevops1		3
	Specify a group with write p directory	ermission to the inventory	
Central Inventory Pointer	File		
create a pointer file, which		n the inventory directory. Run thi on of the central inventory for fut ching and upgrade.	
Help		<u>o</u> k	Cancel

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 In	frastructure Installation - Step 2 of 8@mum00bjw	
Auto Updates		
φ <u>Welcome</u>		
Auto Updates	Skip <u>A</u> uto Updates	
Installation Location	Select patches from <u>d</u> irectory	
Installation Type	Location:	Br <u>o</u> wse
Prerequisite Checks	○ Search <u>My</u> Oracle Support for Updates	
Installation Summary	<u>U</u> sername:	
ပုံ Installation Progress	Password:	
ပ် Installation Complete	Proxy Settings	Test Connection
	Search	
	20001	
	* *	
Help		< <u>Back Next&gt; Einish</u> Cancel

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

Oracle Fusion Middleware 12c Ir	frastructure Installation - Step 3 of 8@mum00bjw	
Installation Location		
<u>Welcome</u>	<u>O</u> racle Home:	
Auto Updates	/scratch/obdxdevops1/Oracle/Middleware	▼ B <u>r</u> owse
Installation Location	Feature Sets Installed At Selected Oracle Home: View	
<ul> <li>Installation Type</li> </ul>		
Prerequisite Checks		
• Installation Summary		
O Installation Progress		
O Installation Complete		
	Oracle Home may only contain alphanumeric, underscore (_), hyphen (-	) or dot(.) characters and it must
	begin with an alphanumeric character.	
Help	< <u>Back</u>	Next > Einish Cancel

#### **Specify Installation Location Screen**

Specify the following installation locations:

• Oracle Middleware Home

The absolute path to the directory where WebLogic Server is already installed Click Next to continue.

Installation Type		
<u>Welcome</u> <u>Auto Updates</u> <u>Installation Location</u> Installation Type	<ul> <li>Eusion Middleware Infrastructure</li> <li>Fusion Middleware Infrastructure With Examples</li> </ul>	
Prerequisite Checks Installation Summary Installation Progress Installation Complete	<ul> <li>Gracle Fusion Middleware 12c Infrastructure 12.2.1.2.0</li> <li>Core Server</li> <li>Core Application Server 12.2.1.2.0</li> <li>Coherence Product Files 12.2.1.2.0</li> <li>Web 2.0 HTTP Pub-Sub Server 12.2.1.2.0</li> <li>WebLogic SCA 12.2.1.2.0</li> <li>WebLogic Client Jars 12.2.1.2.0</li> <li>Administrative Tools</li> <li>Administration Console Additional Language Help Files 12.2.1.2.0</li> <li>Clie WLS Config 12.2.1.2.0</li> <li>Enterprise Manager Fusion Middleware Control 12.2.1.2.0</li> <li>Database Support</li> <li>Thirdparty JDBC Drivers 12.2.1.2.0</li> <li>Open Source Components</li> <li>Fusion Middleware Mayen Support 12.2.1.2.0</li> <li>JRF and Enterprise Manager</li> <li>WLS for FMW 12.2.1.2.0</li> <li>Oracle Automatic Diagnostic Repository Feature Set Group</li> </ul>	
Help	< <u>Back</u> <u>Next</u> Einish	Cancel

#### **Specify Installation Type Screen**

Following are the installation types:

- Fusion Middleware Infrastructure
- Fusion Middleware Infrastructure with Examples

Select Fusion Middleware Infrastructure and Click Next to continue.

Oracle Fusion Middleware 12c In	frastructure Installation - Step 5 of 8@mum00bjw	X
Prerequisite Checks		
Y Welcome	100%	
Auto Updates	100%	
Installation Location	Checking operating system certification	
Installation Type     Prerequisite Checks	Checking Java version used to launch the installer	
Installation Summary		
Installation Progress		
i O Installation Complete		
	Stop     Skip         ✓     View Successful Tasks	View <u>L</u> og
	Checking operating system certification	
	Checking operating system certification Checking Java version used to launch the installer	
Help	< <u>Back</u> <u>N</u> ext > Eini	sh Cancel

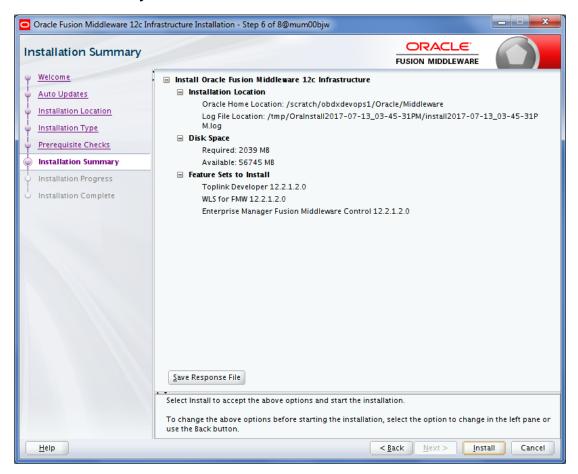
#### Prerequisite Checks Screen

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

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

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

To stop prerequisite checking for all components, click Abort.



#### 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.

Oracle Fusion Middleware 12c In	irastructure Installation - Step 7 of 8@mum00bjw
Installation Progress	
9 Welcome	
4 Auto Updates	100%
Installation Location	V Prepare
Installation Type	
Prerequisite Checks	
i Y Installation Summary	
Installation Progress	
Installation Complete	
	Post install scripts
	View <u>M</u> essages ✓ <u>V</u> iew Successful Tasks ViewLog
	Hardware and Software Engineered to Work Together
Help	< <u>Back</u> <u>Next</u> <u>Einish</u> Cancel

#### Installation Progress Screen

This screen shows the progress of the installation.

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

nstallation Complete		
Welcome	Install Oracle Fusion Middleware 12c Infrastructure	2
Auto Updates	Installation Location	Γ
	Oracle Home Location: /scratch/obdxdevops1/Oracle/Middleware	
Installation Location	Log File Location: /tmp/Oralnstall2017-07-13_03-45-31PM/install2017-07-13_03-45-31P	L
Installation Type	M.log	
Prerequisite Checks	Feature Sets Installed Successfully	
	Toplink Developer 12.2.1.2.0	
Installation Summary	WLS for FMW 12.2.1.2.0	L
Installation Progress	Enterprise Manager Fusion Middleware Control 12.2.1.2.0	
Installation Complete	Pre-Existing Feature Sets	
,	FMW Platform Generic 12.2.1.2.0 OPatch 13.9.1.0.0	8
	Thirdparty JDBC Drivers 12.2.1.2.0	L
	WebLogic Evaluation Database 12.2.1.2.0	
	Fusion Middleware Mayen Support 12.2.1.2.0	L
	Administration Console Additional Language Help Files 12.2.1.2.0	
	CIE WLS Config 12.2.1.2.0	L
	Core Application Server 12.2.1.2.0	L
	Coherence Product Files 12.2.1.2.0	L
	Web 2.0 HTTP Pub-Sub Server 12.2.1.2.0	Н
	WebLogic SCA 12.2.1.2.0	j,
		ľ
	Next Step (s): See the online help for next steps after installation. Oracle Fusion Middleware 12c Infrastructure installation completed successfully	
Help	<back next=""> Einish Canc</back>	el

#### Installation Complete Screen

This screen summarizes the installation that was just completed.

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

Click Finish to dismiss the screen.

#### 3.2.2 Verifying the Installation

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

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

## 4. Oracle Webtier Installation

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

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

- <u>Oracle HTTP Server:</u> 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.
- <u>Oracle Web Cache:</u> 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 commandline 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:

- <u>In stand-alone mode:</u> 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.
- <u>Using Oracle Enterprise Manager Fusion Middleware Control</u>: In order to use the Oracle Enterprise Manager Fusion Middleware Control, WebLogic Server domain needs to be configured using both the Enterprise Manager and the Java Required Files (JRF) domain templates.

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

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

## 4.1 Installing and Configuring Oracle HTTP Server (Webtier)

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

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

#### ./runInstaller – jreLoc Java\_Home/jdk

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

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

#### **Specify Inventory Directory Screen**

Specify Inventory direc		CLE <sup>®</sup> 118
installer files. This is called the "inventory of up subdirectories for each product to con Enter the full path of the inventory director	his host. As part of this install, you need to specify a dii directory". Within the inventory directory, the installer a tain inventory data and will consume typically 150 Kilob ry. Ip that has write permissions to the above directory	utomatically sets
Inventory <u>D</u> irectory:	/home/Oracle/oralnventory	<u>B</u> rowse
Operating <u>S</u> ystem Group name:	g900 🗸	]
Operating <u>S</u> ystem Group name:	g900	
<u>H</u> elp	<u>k</u>	Cancel

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

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

#### Inventory Location Confirmation Screen

🕍 Inventory Location Confirmation Dialog		
Certain actions need to be performed with r continue. Please execute the script /home/oralnventory/createCentralInventor window and then press "Ok" to coninue the If you do not have the root privileges and wi "Continue installation with local inventory" of Continue Installation with local inventory	y.sh nowfrom another install. ish to continue the install select the option	
Help	<u>O</u> k Cancel	

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

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

Click Ok to continue.

#### Welcome Screen

Welcome	FUSION MIDDLEWARE 11
Welcome         Install Software Updates         Install and Configure         Prerequisite Checks         Installation Location         Security Updates         Configure Components         Specify WebLogic Doma         Specify Component Det         Configure Ports         Installation Summary         Installation Progress         Configuration Progress         Installation Complete	Welcome to Oracle Fusion Middleware 11g Web Tier Utilities Installer version 11.1.9.0. This installer can be used to install a new Web Tier Oracle Home or to update an existing Web Tier Oracle Home. For additional information and installation instructions, please refer to the Oracle Fusion Middleware Installation Guide for Web Tier Utilities and the Oracle Fusion Middleware Patching Guide. Click Help at any time for context-sensitive help. Click Next to begin the installation. Copyright (c) 1999, 2015, Oracle and/or its affiliates. All rights reserved.
Help	< <u>Back</u> Next > Einish Cancel

Oracle Banking Digital Experience Installer Pre-Requisite Setup Manual

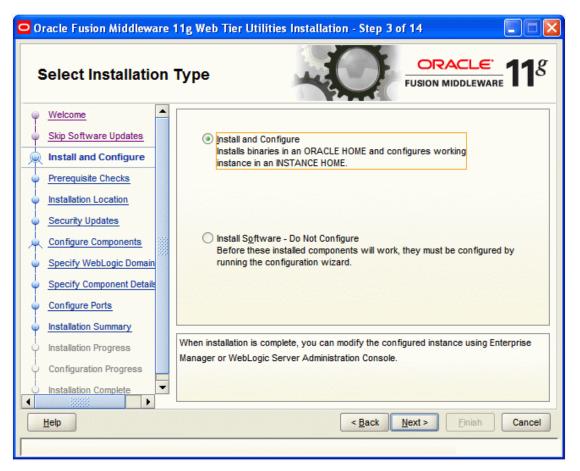
The Welcome screen is displayed each time you start the installer. Click Next to continue.

🗢 Oracle Fusion Middleware 11g Web Tier Utilities Installation - Step 2 of 14 📃 🗖 🔀					
Install Software Updates					
Welcome	Skip Software Updates				
My Oracle Support Upd	Search My Oracle Support for Updates				
Install and Configure	Us <u>e</u> r Name:				
Prerequisite Checks	Password:				
Installation Location	Proxy Settings Test Connection				
Security Updates	Search Local Directory for Updates				
Configure Components	Search For Updates				
Specify WebLogic Domain					
Specify Component Details					
Configure Ports					
i Installation Summary					
Installation Progress	Allows user to search for and download software updates from My Oracle Support using My Oracle Support Account user name and password.Click "Test Connection" to				
Configuration Progress	test the credentials.				
Installation Complete					
Help	< <u>B</u> ack <u>N</u> ext > <u>Finish</u> Cancel				

#### Install Software Updates Screen

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

#### Select Installation Type Screen



The following are the Installation Types available.

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

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

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

#### **Prerequisite Checks Screen**

Prerequisite Cho	ecks	-0		
Welcome	Selection	Check	Progress	Status
Skip Software Updates	1	Checking operating system certific	100%	×
Install Only	8	Checking recommended operating	100%	×
Prerequisite Checks	×	Checking kernel parameters	100%	×
Installation Location	<b>v</b>	Checking Recommended glibc ver	100%	× .
Security Updates	<b>v</b>	Checking physical memory	100%	1
Installation Summary	<b>V</b>	Checking for LD_ASSUME_KERNEL	100%	1
Installation Progress	•	Abort	Retry	<u>C</u> ontinue
		hecking operating system certification hecking recommended operating syste hecking kernel parameters hecking Recommended glibc version		

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

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

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

To stop prerequisite checking for all components, click Abort.

**Specify Installation Location Screen** 

🗢 Oracle Fusion Middleware 11g Web Tier Utilities Installation - Step 5 of 14 🛛 🔲 🗖 🔀					
Specify Installation Location					
<ul> <li>Welcome</li> <li>Skip Software Updates</li> <li>Install and Configure</li> <li>Prerequisite Checks</li> <li>Installation Location</li> <li>Security Updates</li> <li>Configure Components</li> <li>Specify WebLogic Domain</li> <li>Specify Component Details</li> <li>Configure Ports</li> <li>Installation Summary</li> <li>Installation Progress</li> <li>Configuration Progress</li> <li>Installation Complete</li> </ul>	Oracle <u>Mi</u> ddleware Home: <u>O</u> racle Home Directory:	C:\Oracle\Middleware Oracle_WT1 must already be installed.	▼ Browse		
Help		< <u>B</u> ack <u>N</u> ext >	Einish Cancel		

Specify the following installation locations:

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

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

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

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

**Specify Security Updates Screen** 

🗢 Oracle Fusion Middleware 11g Web Tier Utilities Installation - Step 6 of 14 📃 🗖 🔀				
Specify Security Updates				
<ul> <li>Welcome</li> <li>Skip Software Updates</li> <li>Install and Configure</li> <li>Prerequisite Checks</li> <li>Installation Location</li> <li>Security Updates</li> <li>Configure Components</li> <li>Specify WebLogic Domain</li> <li>Specify Component Details</li> <li>Configure Ports</li> <li>Installation Summary</li> <li>Installation Progress</li> <li>Configuration Progress</li> <li>Installation Complete</li> </ul>	Provide your email address to be informed of security issues, install the product and initiate configuration manager. <u>View details</u> .         Email:			
Help	< <u>Back</u> <u>Next</u> > <u>Finish</u> Cancel			

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

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

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

## Configure Components Screen

Configure Components		
Welcome         Skip Software Updates         Install and Configure         Prerequisite Checks         Installation Location         Security Updates         Configure Component         Specify WebLogic Domain         Specify Component Details         Configure Ports         Installation Summary	Oracle HTTP Server Oracle Web Cache Oracle Process Manager Notification (OPMN) is always configured	
Installation Progress     Configuration Progress     Installation Complete	< Back Next > Finish Cancel	

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

Uncheck Associate Selected Components with WebLogic Domain.

**Specify Component Details Screen** 

🗢 Oracle Fusion Middleware 11g Web Tier Utilities Installation - Step 9 of 15 📃 🗖 🗙		
Specify Componer	nt Details	ORACLE' FUSION MIDDLEWARE 118
<ul> <li>Welcome</li> <li>Skip Software Updates</li> <li>Install and Configure</li> <li>Prerequisite Checks</li> <li>Installation Location</li> <li>Security Updates</li> <li>Configure Components</li> <li>Specify WebLogic Domain</li> <li>Specify Component De</li> <li>Web Cache Administrator</li> <li>Configure Ports</li> <li>Installation Summary</li> <li>Installation Progress</li> <li>Configuration Progress</li> </ul>	Instance Home Location: Instance Name: OHS Component Name: Web Cache Component Name:	le_WT1\instances\instance1     Browse       instance1       ohs1       webcache1
Help		< Back Next > Einish Cancel

Specify the following component details:

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

🗢 Oracle Fusion Middleware 11g Web Tier Utilities Installation - Step 10 of 15 🛛 🗐 🗖 🗙		
Web Cache Admin Password	istrator ORACLE 118	
●       Welcome         ●       Skip Software Updates         ●       Install and Configure         ●       Prerequisite Checks         ●       Installation Location         ●       Security Updates         ●       Configure Components         ●       Specify WebLogic Domain         ●       Specify Component Details         ●       Web Cache Administra         ●       Installation Summary         ●       Installation Progress         ●       Configuration Progress         ●       Installation Progress	Web Cache Administrator Password:         Confirm Password:         Valid passwords are 5 to 30 characters long, must begin with an alphabetic character, use only alphanumeric, underscore (_), dollar (\$) or pound (#) characters and include at least one number.         < Back       Next >         Einish       Cancel	

Web Cache Administrator Password Screen

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

## **Configure Ports Screen**

Oracle Fusion Middleware 1	1g Web Tier Utilities Installation - Step 11 of 15
Configure Ports	EUSION MIDDLEWARE 118
<ul> <li>Welcome</li> <li>Skip Software Updates</li> <li>Install and Configure</li> <li>Prerequisite Checks</li> <li>Installation Location</li> <li>Security Updates</li> <li>Configure Components</li> <li>Specify WebLogic Domain</li> <li>Specify Component Details</li> <li>Web Cache Administrator</li> <li>Configure Ports</li> <li>Installation Summary</li> <li>Installation Progress</li> <li>Configuration Progress</li> </ul>	<ul> <li>● Auto Port Configuration</li> <li>● Specify Ports using Configuration file</li> <li>File name: C:\Documents and Settings\staticports</li> <li>● Browse</li> <li>✓jiew/Edit File</li> </ul>
Help	< <u>Back</u> <u>N</u> ext> <u>Finish</u> Cancel

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

## Installation Summary Screen

Oracle Fusion Middleware	11g Web Tier Utilities Installation - Step 12 of 15		
Installation Summa	ary ORACLE' 118		
Welcome	Type: Install and Configure		
Skip Software Updates	Location: C:\Oracle\Middleware\Oracle_WT1		
Linstall and Configure	·····Oracle Instance Name: instance101     ·····Oracle Instance Home: C:\Oracle\Middleware\Oracle_WT1\instances		
Prerequisite Checks	Associate With Domain Case		
Installation Location	⊡Disk Space		
Security Updates	Required: 1900 MB		
Configure Components	Available: 66456 MB		
Specify WebLogic Domain	EOracle Instance Home		
Specify Component Details			
Web Cache Administrator	Save Response File: Save		
Configure Ports			
Installation Summary	To change this configuration before installing, select the topic you want to change in the pane on the left.		
Installation Progress	To install this configuration, select Install.		
Configuration Progress			
Help	< <u>Back</u> <u>Next</u> > <u>Install</u> Cancel		

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

Oracle Fusion Middleware	11g Web Tier Utilities Installation - Step 13 of 15
Installation Progre	ss ORACLE 118
Specify WebLogic Domain Specify Component Details Web Cache Administrator Configure Ports Installation Summary	Progress  27% Setting up Install Log C:\Program Files\Oracle\Inventory\logs\install2011-09-27_05-35-54PM.log  Setting Up: Oracle Ice Browser 11.1.1.6.0 Setting Up: Oracle AS Common Toplevel Component 11.1.1.2.0 Setup Completed Saving the inventory. It may take few minutes.
Oracle Fu	Extreme Productivity
Help	< <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel

This screen shows the progress of the installation.

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

## **Configuration Progress Screen**

Oracle Fusion Middleware	11g Web Tier Utilities Installation - Step 14 of 15	
Configuration Prog		ACLE. 118
Velcome Skip Software Updates	Configuration Tools	Progress
Install and Configure	E Web Tier Configuration	25%
Prerequisite Checks	Create and Start AS Instance (instance101)	Success
Installation Location	Create and Start OHS Component (ohs1)	In Progress
Security Updates	Create and Start Web Cache Component (webcacl     Create Shortcuts	Recommended
Configure Components		Recommended
Specify WebLogic Domain		
Specify Component Details	<u>Abort</u> <u>R</u> etry	Continue
Web Cache Administrator	Configuration Log Location: C:\Program	
Configure Ports	Files\Oracle\Inventory\logs\install2011-09-27_05-35-54PM.log	
Installation Summary		
Installation Progress		
Configuration Progress		
Help	< <u>B</u> ack <u>N</u> ext >	Einish Cancel
		111

This screen shows you the progress of the component configuration.

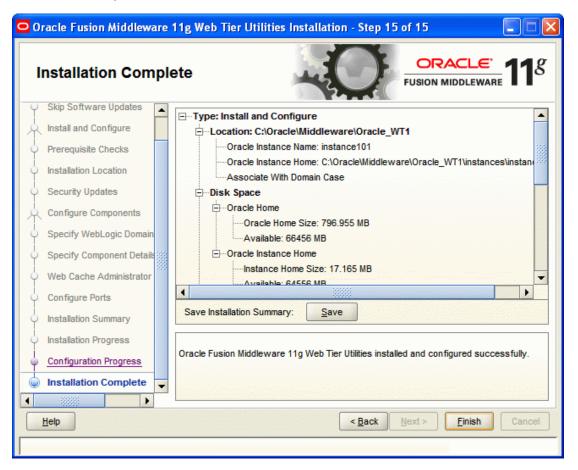
If there is a problem, a short error message appears in the bottom portion of the screen. Fix the error and click Retry to try again.

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

Click Abort to stop prerequisite checking for all components.

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

#### Installation Complete Screen



This screen summarizes the installation that was just completed.

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

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

Click Finish to dismiss the screen.

## 4.2 Verifying the Installation

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

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

Web\_Tier\_ORACLE\_HOME/user\_projects/domains/domain\_name/servers/server\_name

• Verifying the OPMN Status: Run the opmnctl status command from the INSTANCE\_HOME/bin directory on UNIX, in your instance home location. For example:

#### ./opmnctl status

Processes in Instance: instance2

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

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

#### Checking the Browser URLs

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

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

#### ./opmnctl status -l

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

## http://system\_name:port\_number

# 5. Oracle HTTP Server Webgate Installation and Configuration

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

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

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

## 5.1 Installing and Configuring Oracle HTTP Server WebGate

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

To start the installation wizard, perform the following steps:

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

## ./runInstaller -jreLoc Java\_Home/jdk

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

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

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

## **Specify Inventory Directory Screen**

📓 Oracle Fusion	Middleware 11g Installation ×
Specify Inventory director	TY ORACLE TIS
installer files. This is called the "inventory direct	ost. As part of this install, you need to specify a directory for cory". Within the inventory directory, the installer automatically sets nventory data and will consume typically 150 Kilobytes per product.
Enter the full path of the inventory directory. You can specify an Operating System group that	
Inventory <u>D</u> irectory:	/scratch/obdxuser/oralnventory <u>B</u> rowse
Operating System Group name:	obdxuser 👻
<u>H</u> elp	<u>O</u> k Cancel

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

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

Click Ok to continue.

## Inventory Location Confirmation Screen

Inventory Location Confir	mation Dialog	×
Certain actions need to be performed with root pri continue. Please execute the script /scratch/obdxuser/oralnventory/createCentralIn window and then press "OK" to continue the install If you do not have the root privileges and wish to o "Continue installation with local inventory" option	ventory.sh nowfrom another	
Continue Installation with local inventory		
<u>H</u> elp	Ok Cancel	

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

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

Click Ok to continue.

## Welcome Screen

Oracle Access Ma	nager OHS 11g Webgates Installation - Step 1 of 7 $ \times$
Welcome	EVEN FUSION MIDDLEWARE 118
Velcome     Install Software Updates     Prerequisite Checks     Installation Location     Installation Summary     Installation Progress     Installation Complete	<ul> <li>Welcome to Oracle Fusion Middleware 11g Installer for Oracle Access Manager Oracle Http Server (OHS) 11g Webgates component.</li> <li>Before proceeding make sure that you have installed Oracle WebTier Utilities version 11.1.1.7.0 or higher in the same Middleware Home.</li> <li>For additional information and installation instructions, please refer to the Oracle Fusion Middleware Installation Guide for Oracle Access Manager.</li> <li>Click Help at any time for context-sensitive help.</li> <li>Click Next to begin the installation.</li> <li>Copyright (c) 1999, 2013, Oracle and/or its affiliates. All rights reserved.</li> </ul>
Help	< <u>B</u> ack <u>N</u> ext > Einish Cancel
	Elapsed Time: Om 18s

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

Oracle Access Manager OHS 11g Webgates Installation - Step 2 of 7 🚬 🗙			
Install Software Updates			
Welcome	Skip Software Updates		
My Oracle Support Update	Search My Oracle Support for Updates		
Prerequisite Checks	Us <u>e</u> r Name:		
Installation Location	Password:		
Installation Summary	Proxy Settings Test Connection		
Installation Progress	Search Local Directory for Updates		
Installation Complete	Search For Updates		
	Allows user to search for and download software updates from My Oracle Support using My Oracle Support Account user name and password.Click "Test Connection" to test the credentials.		
Help	< <u>Back</u> <u>Nex</u> <u>Einish</u> Cancel		
	Elapsed Time: Om 3	23s	

## 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.

## Prerequisite Checks Screen

Oracle Access Manager OHS 11g Webgates Installation - Step 3 of 7 💦 🚬 🗙				
Prerequisite Chec	ks			<b>11</b> <i>g</i>
Welcome	Selection	Check	Progress	Status
Skip Software Updates	4	Checking operating system certific	100%	×
Prerequisite Checks	4	Checking recommended operating	100%	~
Installation Location	4	Checking kernel parameters	100%	~
Installation Summary	4	Checking Recommended glibc ver	100%	~
<ul> <li>Installation Progress</li> </ul>	4	Checking physical memory	100%	~
O Installation Complete				
		Abort hecking operating system certification hecking recommended operating syst hecking kernel parameters hecking Recommended glibc version	1	<u>Continue</u>
Help     < Back     Next >     Einish     Cancel       Elapsed Time: 0m 33s				

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

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

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

To stop prerequisite checking for all components, click Abort.

Oracle Access Ma	nager OHS 11g Webgates Installation - Step 4 of 7 💿 _ 🗙
Specify Installati	on Location
Welcome     Skip Software Updates     Prerequisite Checks     Installation Location     Installation Summary     Installation Progress     Installation Complete	Oracle <u>M</u> iddleware Home: <u>atch/obdxuser/Middleware</u> <u>Browse</u> Oracle Home Directory: Oracle_OAMWebCate1
Help	An Application Server must already be installed.          < Back       Einish       Cancel         Elapsed Time: 0m 43s

Specify Installation Location Screen

Specify the following installation locations:

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

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

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

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

Oracle Access Manager OHS 11g Webgates Installation - Step 5 of 7 $$ $\times$			
Installation Summ	nary CRACLE 118		
Welcome	Install WEBGATE		
Skip Software Updates	Directory Details		
Prerequisite Checks	Middleware Home Location: /scratch/obdxuser/Middleware Oracle Home Location: /scratch/obdxuser/Middleware/Oracle_OAMWe		
Installation Location	⊡Disk Space		
Installation Summary	Required: 1400 MB Available: 119872 MB		
Installation Progress	⊡Applications		
O Installation Complete	Oracle Access Manager - OHS 11g Webgates		
	✓ Save Response File: Save          Click Install to accept this configuration and start the installation.         To change the configuration before starting the installation, select the topic to change in the left pane, or use the Back button.		
Help	< <u>Back</u> <u>Next</u> > <u>Install</u> Cancel		
	Elapsed Time: Om 48s		

### Installation Summary Screen

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

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

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

Click Install.

## Installation Progress Screen

Oracle Access Manager OHS 11g Webgates Installation - Step 6 of 7 💦 🚬 🗙				
Installation Progress				
⊖ Welcome	Progress			
Skip Software Updates	100%			
Prerequisite Checks	Completed			
<ul> <li>Installation Location</li> </ul>	Install Log /scratch/obdxuser/oralnventory/logs/install2015-08-11_05-45-48			
Installation Summary	Installation Successful. Starting execution of post install scripts			
Installation Progress	Execution of post install scripts completed			
O Installation Complete				
Oracle Fusion Middleware				
Help	< <u>Back</u> <u>Next</u> <u>Finish</u> Cancel			
	Elapsed Time: 4m 23s			

This screen shows the progress of the installation.

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

$igodot$ Oracle Access Manager OHS 11g Webgates Installation - Step 7 of 7 $\_$ $\times$		
Installation Com	plete CRACLE 118	
Welcome	Install WEBGATE	
Skip Software Updates	Empirectory Details	
Prerequisite Checks	Middleware Home Location: /scratch/obdxuser/Middleware	
<ul> <li>Installation Location</li> </ul>	🗇 Disk Space	
Installation Summary	Oracle Home Size: 96 MB Available: 119772 MB	
Installation Progress	□Applications	
Installation Complete	Oracle Access Manager - OHS 11g Webgates	
	Save Installation Details: Save	
Help	< <u>B</u> ack <u>N</u> ext > <u>Finish</u> Cancel	
	Elapsed Time: 4m 28s	

## Installation Complete Screen

This screen summarizes the installation that was just completed.

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

Click Finish to dismiss the screen.

## 5.2 Post-Installation Steps for Oracle HTTP Server WebGate

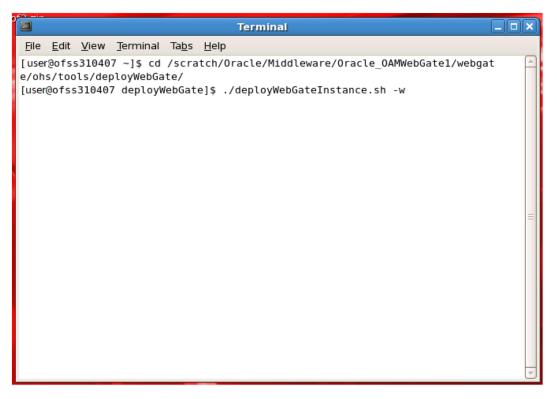
You must complete the following steps after installing Oracle HTTP Server 11g WebGate for Oracle Access Manager:

• Go to the WebGate\_Home/webgate/ohs/tools/deployWebGate directory by running the following command:

## cd WebGate\_Home/webgate/ohs/tools/deployWebGate

• Run the following command to copy the required bits of agent from the WebGate\_Home directory to the WebGate\_Instance location:

## ./deployWebGateInstance.sh -w WebGate\_Instance\_Directory -oh WebGate\_Oracle\_Home



In this command:

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

Example: MW\_HOME/Oracle\_OAMWebGate1

WebGate\_Instance\_Directory is the location of WebGate Instance Home, which is same as the Instance Home of Oracle HTTP Server.

Example:

MW\_HOME/Oracle\_WT1/instances/instance1/config/OHS/ohs1

Run the following command to ensure that the LD\_LIBRARY\_PATH variable contains Oracle\_Home\_for\_Oracle\_HTTP\_Server/lib:

## export LD\_LIBRARY\_PATH = \$LD\_LIBRARY\_PATH:Oracle\_Home\_for\_Oracle\_HTTP\_Server/lib

From your present working directory, move to directory:

### cd WebGate\_Home/webgate/ohs/tools/setup/InstallTools

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

## ./EditHttpConf -w WebGate\_Instance\_Directory [-oh WebGate\_Oracle\_Home] [-o output\_file]

In this command:

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

Example: MW\_HOME/Oracle\_OAMWebGate1

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WebGate\_Instance\_Directory is the location of WebGate Instance Home, which is same as the Instance Home of Oracle HTTP Server.

Example: MW\_HOME/Oracle\_WT1/instances/instance1/config/OHS/ohs1

output\_file is the name of the temporary output file used by the tool.

Example: Edithttpconf.log

**Note:** The -oh WebGate\_Oracle\_Home and -o output\_file parameters are optional.

## 5.3 Verifying the Installation of Oracle HTTP Server WebGate

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

The default location of the log is : WebGate\_Home/oralnst.loc

## 5.4 Registering the New Oracle HTTP Server 11g WebGate

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

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

# 6. Oracle Identity and Access Management Installation and Configuration

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

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

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

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

## 6.1 Pre-requisite - Installing Java 1.7

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

• Change the directory in which you want to install,

## cd <Directory\_Path>

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

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

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

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

export JAVA\_HOME=<Java\_Install\_Path>/jdk1.7.0\_80

## export PATH=\$JAVA\_HOME/bin:\$PATH

## 6.2 Pre-requisite - Installing Weblogic 11g

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

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

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

## 6.2.1 Installing Weblogic

Obtain Weblogic 10.3.6 JAR from the Oracle Fusion Middleware Downloads. Download *wls1036\_generic.jar* file to a directory.

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

## java –jar <Path>/wls1036\_generic.jar

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

Follow the instructions as shown below for installation:

### Welcome Screen

🐻 Oracle Installer - WebLogic 10.3.6.0 _ 🛛 🛛		
<b>Welcome</b> This installer will guide you through the WebLogic 10.3.6.0	installation of	ORACLE
	□ Instructions	
	to change entries in a pre	proceed to the next screen. If you want wious screen, click the Previous installer at any time by clicking the
ORACLE		
E <u>x</u> it		Previous <u>N</u> ext

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

🔂 Oracle Installer - WebLogic 10.3.6.0 _ ×		
Choose Middleware Home Dire Specify the Middleware Home where you w WebLogic 10.3.6.0.	•	ORACLE
Middleware Home Type	/scratch/latest_softwares/Oracle/Middl	eware
O Use an existing Middleware Home		
Create a new Middleware Home		
Middleware Home Directory		
/scratch/Oracle/Middleware		
<u>B</u> rowse <u>R</u> eset		
E <u>x</u> it		Previous Next

## Specify Middleware Home Screen

Specify the following installation locations:

• Oracle Middleware Home

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

Specify S	Security	Updates	Screen
-----------	----------	---------	--------

🗟 Oracle Installer - WebLogic 10.3.6.0 _ ×		
Register for Security Updates Provide your email address for security updates and to initiate configuration manager.	ORACLE	
Email: Use My Oracle Support email address/user	name	
✓ I wish to receive security updates via My Oracle Support		
Support Password:		
E <u>x</u> it	Previous <u>N</u> ext	

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

	Oracle Installer - WebLogic 10.3.6.0	×
Register for Secu Provide your email add to initiate configuratio	dress for security updates and	ORACLE
	Email: Use My Oracle Support email address	/username
vis .	Are you sure? Do you wish to bypass initiation of the configuration m remain uninformed of critical security issues in your of Yes No	-
Exit		Previous Next

Select Yes and Click on Next.

## Specify Security Updates Screen

٦	Oracle Installer - WebLogic 10.3.6.0	) _ ×
Register for Security Provide youiremail address to initiate configuration ma	for security updates and	ORACLE
☑ I wish to rec	Email: Use My Oracle Support email address Email Address Not Specified You have not provided an email address. Do you wish to remain uninformed of critical s issues in your configuration? Yes No	×
E⊻it		Previous Next

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

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

٦	Oracle Installer - WebLogic 10.3.6.0	_ × _
Register for Secu Provide your email add to initiate configuratio	dress for security updates and	ORACLE
	Email: Use My Oracle Support email address/use	rname
vis ₪	Are you sure? Do you wish to bypass initiation of the configuration mana remain uninformed of critical security issues in your conf Yes No	-
E <u>x</u> it		Previous Next

Select Yes and Click on Next to proceed.

0	Oracle Installer - WebLogic 10.3.6.0	_ ×
Reçig	ster for Security Updates	
Provid to initi		× DRACLE
	If necessary, specify proxy server information. Otherwise click Cancel and check your network connection.	i ne
	Proxy Server:	in e
	Proxy Port:	
	Use authentication	
	Proxy Username:	
	Proxy Password:	
	If this machine has no internet connection, select the checkbox below and click Continue.	
	I wish to remain uninformed of security issues in my configuration or this machine has no Internet access.	
	Cancel Continue	
E	21	revious <u>N</u> ext

## **Specify Security Updates Screen**

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

Click on Continue to proceed.

Specify	Installation	Type	Screen
---------	--------------	------	--------

0	Oracle Installer - WebLogic 10.3.6.0	_ ×
<b>Choose Install Type</b> Select the type of installation you wish to perform.		ORACLE
© Тур (⊘)	ical Install the following product(s) and component(s): WebLogic Server Oracle Coherence	
⊖ Cus	tom	
<b>E</b>	Choose software products and components to install ar optional configuration.	nd perform
E <u>x</u> it		Previous Next

Following are the installation types:

- Typical
- Custom

Select Typical and Click Next to continue.

## Specify JDK Selection Screen

🧟 Oracle Installer - WebLogic 10.3.6.0 _ ×		
JDK Selection JDK(s) chosen will be installed. Defaults will be used in script string-substitution if installed.	ORACLE	
	💍 Dis <u>c</u> ard Changes	
Bundled JDK:	Approximate installed size*	
	Highlighted item:	
	All selected bundled JDK's: 0.0 KB	
	Total of all selected items: 690.2 MB	
	*Installer requires free disk space approximately 2x this total	
Local JDK:		
✓ Oracle 1.7.0_60 (/scratch/java/jdk1.7.0_60)		
<u>B</u> rowse		
Exit	Previous Next	

Check if the JDK Path listed is correct.

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

Once done, Click Next to continue.

## **Choose Product Installation Directories Screen**

Oracle Installer - WebLogic 10.3.6.	.0 _ ×
Choose Product Installation Directories Provide the directories where you wish to install WebLogic 10.3.6.0.	ORACLE
	💍 Dis <u>c</u> ard Changes
Middleware Home Directory	
/scratch/Oracle/Middleware	
Product Installation Directories The Product Home might contain shared utilities and any products or co directories are not set. WebLogic Server:	mponents for which unique
/scratch/Oracle/Middleware/wiserver_10.3	<u>B</u> rowse
Oracle Coherence:	
/scratch/Oracle/Middleware/coherence_3.7	Browse
E <u>x</u> it	Previous <u>N</u> ext

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

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

## Installation Summary Screen

🐻 Oracle Installer - WebLogic 10.3.6.0 _ ×		
Installation Summary The following Products and JDKs will be install	ed. ORACLE	
🛅 WebLogic Server	Description	
Core Application Server Administration Console Configuration Wizard and Upgrade F Web 2.0 HTTP Pub-Sub Server WebLogic SCA WebLogic JDBC Drivers Third Party JDBC Drivers WebLogic Server Clients WebLogic Web Server Plugins	Implements JEE technologies, Web services, and other leading Internet standards, to provide a reliable framework for highly available, scalable, and secure applications.	
UDDI and Xquery Support	Approximate Installed Size         Highlighted item:       693.9 MB         Total of all selected items:       690.3 MB	
E <u>x</u> it	Previous <u>N</u> ext	

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

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

## Click Next.

Then screen shows the progress of the installation.

## Installation Progress Screen



This screen shows the progress of the installation.

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

🧟 Oracle Installer - WebLogic 10.3.6.0 _ 🛛 🔤		
Installation Complete Click the Done button to exit the installer		ORACLE
	Message	
	Congratulations! Installation is complete.	
ORACLE		
	🗹 Run Quickstart	
E <u>x</u> it	[	Previous Done

## Installation Complete Screen

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

Click Done to dismiss the screen.

## 6.2.2 Verifying the Installation

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

## • Verifying the Installation Directory

Check if Oracle Home directory exists or not.

## 6.3 Installing Oracle Identity and Access Management

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

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

## 6.3.1 Installing and Configuring Oracle Identity and Access Management

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

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

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## ./runInstaller – jreLoc Java\_Home/jdk

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

- If you are installing on a UNIX system, and if this is the first time any Oracle product is being installed on your system with the Oracle Universal Installer, you will 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.
- 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.

	Welcome O					
Skip Software Updates	Skip <u>S</u> oftware Updates					
	Search My Oracle Support for U	pdates				
Prerequisite Checks	User Name:					
Installation Location	gassword.					
Installation Summary		Proxy Settings [ Jest Connection ]				
Installation Progress	O Search Local Directory for Upda	tes				
Installation Complete	Local Directory:	Browse				
	Search For Updates					
	VERIFICEN DEGRES					

#### 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.

Pr	rerequisite Cho	ecks	~0		
P 1	<u>Welcome</u>	Selection	Check	Progress	Status
5	Skip Software Updates	4	Checking operating system certific	100%	1
P	Prerequisite Checks	4	Checking recommended operating	100%	1
1	nstallation Location	4	Checking kernel parameters	100%	1
1	nstallation Summary	4	Checking Recommended glibc ver	100%	1
1	nstallation Summary nstallation Progress nstallation Complete	3	Checking Recommended glibc ver Checking physical memory	100%	*
1	nstallation Progress				100

#### **Prerequisite Checks Screen**

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

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

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

To stop prerequisite checking for all components, click Abort.

$igodot$ Oracle Identity and Access Management Installation - Step 4 of 7 $\_$ $\times$					
Specify Installation	on Location				
<ul> <li>Welcome</li> <li>Skip Software Updates</li> <li>Prerequisite Checks</li> <li>Installation Location</li> <li>Installation Summary</li> <li>Installation Progress</li> <li>Installation Complete</li> </ul>	Oracle Middleware Home:       scratch/Oracle/Middleware ▼       Browse         Oracle Home Directory:       Oracle_IDM1         The Oracle home will be created under the Oracle Middleware Home location with the given name.				
Help	<u>Back</u> <u>Next</u> <u>Einish</u> Cancel     Elapsed Time: 0m 50s				

**Specify Installation Location Screen** 

Specify the following installation locations:

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

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

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

#### Installation Summary Screen

Oracle Identity and Access Management Installation - Step 5 of 7 $$ $\times$						
Installation Summary						
Welcome	Welcome     Summary Information:					
Skip Software Updates	Location:					
Prerequisite Checks	Middleware Home Location: /scratch/Oracle/Middleware Oracle Home Location: /scratch/Oracle/Middleware/Oracle_IDM1					
Installation Location	🖻 Disk Space:					
Installation Summary	Required: 2600 MB Available: 5772 MB					
O Installation Progress	Free After Install: 3172 MB					
Unstallation Complete	Applications:     Oracle Identity Manager Server     Oracle Identity Manager Design Console     Oracle Identity Manager Remote Manager     Oracle Access Manager     Save Response File: Save  To change this configuration before installing, select the topic you want to change in the pane on the left. To install this configuration, select Install.					
Help	< <u>B</u> ack <u>N</u> ext > <u>Install</u> Cancel					
Elapsed Time: 5m 35s						

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

Oracle Identity and Access Management Installation - Step 6 of 7 $\_$ $\times$					
Installation Prog	Iress ORACLE 118				
Q Welcome	Progress				
<ul> <li>Skip Software Updates</li> </ul>	72%				
Prerequisite Checks	Copying Files				
Installation Location	Install Log /scratch/setup/Middleware/logs/install2016-09-23_03-27-10PM.log				
<ul> <li>Installation Summary</li> </ul>	Copying files for: Oracle IDM UI Shell 11.1.2.3.0 Copying files for: Oracle OES 11.1.1.9.0				
Installation Progress	Copying files for: Oracle Upgrade Assistant 11.1.1.9.0 Copying files for: Oracle Identity Manager Server 11.1.2.3.0				
<ul> <li>Installation Complete</li> </ul>	Copying mes for. Gracie identity Manager Server 11.1.2.5.0				
Oracle Fusion Middleware Extreme Productivity					
Help	< <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel				
	Elapsed Time: 10m Os				

This screen shows the progress of the installation.

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

#### Installation Complete Screen



This screen summarizes the installation that was just completed.

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

Click Finish to dismiss the screen.

#### 6.3.2 Verifying the Installation

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

- Verifying the Installation Logs: Check for the presence of installation log files in logs directory inside your Oracle Inventory directory.
- Verifying the IDM Home Directory: Check for the presence of IDM Home directory. For example, <Oracle\_Home>/Oracle\_IDM1

# 7. Oracle Access Management Installation and Configuration

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

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

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

#### 7.1 Creating Weblogic Domain for Oracle Access Manager

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

#### <Oracle\_Home>/wlserver\_10.3/common/bin/config.sh

**Note:** Oracle\_Home is the Middleware Home, which is the absolute path where Weblogic Server is installed.

• Follow the instructions as shown below for installation:

#### Welcome Screen

<b>(</b>	Fusion Middleware Configuration Wizard	_ ×
Welcome		ORACLE
i	⊙ Create a new WebLogic domain	
	Create a WebLogic domain in your projects directory.	
	O Extend an existing WebLogic domain	
	Use this option to add new components to an existing domain and modify configuration settir	ıgs.
E <u>x</u> it	Help	Previous <u>N</u> ext

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

Fusion Middleware Configuration Wizard _
Select Domain Source
Generate a domain configured automatically to support the following products:
Oracle Identity Manager - 11.1.2.0.0 [Oracle_IDM1]
✓ Oracle Access Management And Mobile Security Suite - 11.1.2.3.0 [Oracle_IDM1]
Oracle Adaptive Access Manager - Server - 11.1.2.0.0 [Oracle_IDM1]
Oracle Adaptive Access Manager Offline - 11.1.2.0.0 [Oracle_IDM1]
Oracle Adaptive Access Manager Admin Server - 11.1.2.0.0 [Oracle_IDM1]
Oracle Entitlements Server for Managed Server - 11.1.1.0 [Oracle_IDM1]
Oracle Entitlements Server for Admin Server - 11.1.1.0 [Oracle_IDM1]
🗌 Oracle Privileged Account Manager - 11.1.2.0.0 [Oracle_IDM1]
✓ Oracle Enterprise Manager - 11.1.1.0 [oracle_common]
Oracle BI Publisher - 11.1.1.6.0 [oracle_bip]
Oracle BIJDBC - 11.1.1.9.0 [oracle_bip]
Oracle Directory Services Manager - 11.1.2.3.0 [Oracle_OUD1]
🗌 Oracle Entitlements Server Weblogic Security Module On Weblogic Managed Server and JRF - 11.1.1.0 [Oracle_IDM1]
Oracle Entitlements Server Weblogic Security Module On JRF - 11.1.1.0 [Oracle_IDM1]
O Base this domain on an existing template
Template location: /scratch/Oracle/Middleware <u>B</u> rowse
Exit Help Previous Next

#### Select Domain Source Screen

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

For Oracle Access Manager, select the Oracle Access Management And Mobile Security Suite - 11.1.2.3.0 [IDM\_HOME]

Click Next to continue.

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

Fu Fu	sion Middleware Configuration Wizard	_ ×
Specify Domain Name and Locat	tion	ORACLE
Enter the na	ame and location for the domain and its application	ons:
Domain name:	oam_domain	
Domain location:	/scratch/Oracle/Middleware/user_projects/domains	Browse
Application location:	/scratch/Oracle/Middleware/user_projects/applications	Browse
E <u>X</u> it <u>H</u> elp		Previous Next

#### **Specify Domain Name and Location Screen**

Specify the following locations:

• Domain name

Specify the name of the domain.

Domain location

The default locations for the domain home is

#### <Oracle\_HOME>/user\_projects/domains

However, the domain home directory can also be created outside of Oracle home.

Application location

The default locations for the domain home is

#### <Oracle\_HOME>/user\_projects/applications

However, the domain home directory can also be created outside of Oracle home.

Here, Oracle Home directory is where the Weblogic Server is installed.

Click on Next.

🗊 Fusion Middleware Configuration Wizard _ ×				
Configure Administrator	r User Name and Password	ORACLE		
Dis <u>c</u> ard Changes				
*Name:	weblogic			
*User password:	******			
*Confirm user password:	*****			
Description:	This user is the default administrator.			
E <u>x</u> it <u>H</u> elp		Previous Next		

#### Configure Administrator User Name and Password Screen

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

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

Then, Click on Next.

Fusion Middley	ware Configuration Wizard _ ×
Configure Server Start Mode and JDK	ORACLE'
Before putting your domain into production, make sure tha 'Securing a Production Environment' in the WebLogic Serve	at the production environment is secure. For more information, see the topic er documentation.
WebLogic Domain Startup Mode	JDK Selection
• Development Mode Utilize boot.properties for username and password and poll for applications to deploy. Sun JDK recommended for better startup performance during iterative development.	● Available JDKs Sun SDK 1.7.0_79 @ /scratch/latest_softwares/java/jo
Production Mode Require the entry of a username and password and do not poll for applications to deploy. WebLogic JRockit JDK recommended for better runtime performance and management.	Image: wide of the second
E <u>x</u> it <u>H</u> elp	Previous Next

#### Configure Server Start Mode and JDK Screen

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

Click Next.

	🛐 Fusion Middleware Configuration Wizard _ 🗙						
Conf	Configure JDBC Component Schema						ORACLE
Note	Note: Change only the input fields below that you wish to modify and values will be applied to all selected rows.						
	Vendor:	Oracle			DBMS/S	ervice: INST	
	Driver:	*Oracle's Driver	(Thin) for Service coni	nections; Versions:9.0.	1 – Host	Name: 10.180.7.88	
S	chema Owner:	Varies among co	mponent schemas			Port: 1521	
Sche	ema Password:	****					
		for component sc O Convert to Gric	ILink () Convert	to RAC multi data sour	-	't convert	Colours Decoursed
		onent Schema	DBMS/Service	Host Name 10.180.7.88	Port 1521	Schema Owner DEV1_MDS	Schema Password
	OWSM MDS S		INST	10.180.7.88	1521	DEV1_MDS	*****
	OAM Infrast	ructure	INST	10.180.7.88	1521	DEV1_OAM	*******
	OMSM Scher	na	INST	10.180.7.88	1521	DEV1_OMSM	****
	OPSS Schem	a	INST	10.180.7.88	1521	DEV1_OPSS	******
	Exit Help Previous Next						

#### **Configure JDBC Component Schema Screen**

This screen displays a list of the following component schemas:

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

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

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

Click Next.

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

•	Fusion Middleware Configuration Wizard _ ×					
Test JI	DBC Co	mponent Schema		ORACLE		
	Status	Component Schema	JDBC Connection URL			
	$\checkmark$	OAM MDS Schema	jdbc:oracle:thin:@10.180.7.88:1521/INST			
	1	OWSM MDS Schema	jdbc:oracle:thin:@10.180.7.88:1521/INST			
	$\checkmark$	OAM Infrastructure	jdbc:oracle:thin:@10.180.7.88:1521/INST			
	$\checkmark$	OMSM Schema	jdbc:oracle:thin:@10.180.7.88:1521/INST			
	$\checkmark$	OPSS Schema	jdbc:oracle:thin:@10.180.7.88:1521/INST			
Selec		<u>Inselect All</u> <u>T</u> est Connect	tions			
Conr	nection Re	sult Log				
Driv URL: User Pass SQL	er=oracle =jdbc:ora =DEV1_C word=*** Test=sele	*****	INST egistry where owner=(select user from dual) and mr_type='OMSM'			
Exi	Exit Help Previous Next					

#### Test JDBC Component Schema Screen

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

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

🛐 Fu	ision Middleware Configuration Wizard	_ ×
Select Optional Configuration		ORACLE
	<ul> <li>Administration Server Modify Settings</li> <li>Managed Servers, Clusters and Machines Add or Delete Modify Settings</li> <li>Deployments and Services Target to Servers or Clusters</li> <li>RDBMS Security Store Modify Settings</li> </ul>	
E <u>x</u> it <u>H</u> elp		Previous <u>N</u> ext

### Select Optional Configuration Screen

Choose the options to configure from the following list:

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

Select Administration Server and Click on Next.

۵.	Fusion Middleware Configuration Wizard	_ ×
Configure the Ad	ministration Server	ORACLE
🕐 Dis <u>c</u> ard Changes		
*Name:	AdminServer	
*Listen address:	All Local Addresses	
Listen port:	7011	
SSL listen port:	N/A	
SSL enabled:		
	_	
E <u>x</u> it <u>H</u> elp		Previous Next

#### Configure the Administrator Server Screen

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

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

After entering the details, click on Next.

#### **Fusion Middleware Configuration Wizard** × **Configuration Summary** ORACLE Click on an item in the Domain Summary pane on the left to inspect its attributes Domain Summary in the Details pane below. You can make limited adjustments by clicking Previous Summary Views to return to a prior panel. If everything is satisfactory, click Create. Deployment 🛅 oam\_domain (/scratch/Oracle/Middleware/use 📥 Details 🖻 🛅 Server Attribute Value 🚊 🛅 AdminServer Name Basic WebLogic Server Domain \* 🚊 🛅 Service Description Create a basic WebLogic Server domain without installing same 🗄 🛅 Shutdown Class Author Oracle Corporation 📋 JOC-Shutdown Location /scratch/Oracle/Middleware/wiserver\_10.3/common/templat DMSShutdown 🗄 🛅 Startup Class Name Oracle Access Management And Mobile Security Suite ] JRF Startup Class Description Oracle Access Management Server and Mobile Security Extensi Author Oracle Corporation ] JPS Startup Class /scratch/Oracle/Middleware/Oracle\_IDM1/common/template Location 🗋 ODL-Startup AWT Application Context Star Name Oracle Mobile Security Manager JMX Framework Startup Class Description Oracle Mobile Security Manager Extension Template Web Services Startup Class Author Oracle Corporation 🗋 JOC-Startup /scratch/Oracle/Middleware/Oracle\_IDM1/common/template Location DMS-Startup Name Oracle Access Management 🖨 🛅 JDBC Description Oracle Access Management Server Extension Template Ŧ 😑 🦳 IDBC Data Source ► .€ . Þ E<u>x</u>it Help <u>Previous</u> <u>C</u>reate

#### **Configuration Summary Screen**

Review the domain configuration on this screen.

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

Click Create to start creating the domain.

By default, a new Weblogic Domain to support Oracle Access Management is created in the <Oracle\_Home>/user\_projects/domains directory.

#### **Creating Domain Screen**

	Fusion Middleware Configuration Wizard _ ×
Creating Domain	ORACLE <sup>®</sup>
	Progress:
ORACLE	Preparing         Extracting Domain Contents         Creating Domain Security Information         Saving the Domain Information         Storing Domain Information         String Substituting Domain Files         Performing OS Specific Tasks         Performing Post Domain Creation Tasks         Domain Created Successfully!         Domain Location: /scratch/latest_softwares/Oracle/Middleware/user_projects/domains/oam_dc         Admin Server URL: http://ofss312890.in.oracle.com:7011
Exit Help	Previous Done

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

Click Done to dismiss the screen.

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

<Oracle\_Home>/oracle\_common/common/bin/wlst.sh <IDM\_HOME>/common/tools/configureSecurityStore.py -d <Oracle\_Home>/user\_projects/domains/<OAM\_domain>/ -c IAM -p <opss\_schema\_password> -m create

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

#### <Oracle\_Home>/user\_projects/domains/<OAM\_domain>/bin/startWeblogic.sh

**Note:** Oracle\_Home is the Middleware Home, which is the absolute path where Weblogic Server is installed & IDM\_HOME is the absolute path of the Oracle\_IDM directory.

## 7.2 Post-Installation Tasks

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

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

#### http://<hostname>:<oam\_admin\_port>/console

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

Name : OUDAuthenticator

Type : IPlanetAuthenticator

Control Flag : SUFFICIENT

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

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

- Click on Save to update the changes.
- Click on Save and reorder the providers so that LDAP Provider gets highest priority followed by DefaultAuthenticator.
- Click Save to apply the changes and shutdown the Admin Server for restart.
- Now, again start the Admin Server using the command,

#### <Oracle\_Home>/user\_projects/domains/<OAM\_domain>/bin/startWeblogic.sh

• Also, start the OAM Managed Server (by default it is 'oam\_server1') as mentioned below:

<Oracle\_Home>/user\_projects/domains/<OAM\_domain>/bin/startManagedWeblogic.s h oam\_server1

(Only if Managed Server Start Fails)

• In-case Managed Server startup fails with the below error

<Info> <Security> <BEA-090065> <Getting boot identity from user.>

Enter username to boot WebLogic server:Error: Failed to get value from Standard Input

Enter password to boot WebLogic server:

<Info> <Management> <BEA-141107> <Version: WebLogic Server 10.3.6.0 Tue Nov 15
08:52:36 PST 2011 1441050 >

<Error> <Configuration Management> <BEA-150021> <The admin server failed to
authenticate the identity of the user starting the managed server. The reason for the
error is .>

or

<Error> <Security> <BEA-090783> <Server is Running in Development Mode and Native Library(terminalio) to read the password securely from command line is not found.>

- To fix the above problem, either create a file "boot.properties" in <OAM\_domain>/servers/oam\_server1/security or copy it from <OAM\_domain>/servers/AdminServer/security
- If creating a new file, add the username and password as given below:

username=<domain\_username>

password=<domain\_password>

• After setting the values in the file, try starting the Managed Server once again.

### 7.3 Verifying the Installation

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

#### http://<hostname>:<oam\_admin\_port>/oamconsole

• You will be redirected to:

#### http://<hostname>:<oamserver\_port>/oam/server

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

• Verifying the installation for Weblogic Server Administration Console

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

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

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

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

## 8.1 Creating WebGate Agent on OAM Console

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

Login to OAM Console.

#### E. g. http://<hostname>:<oam\_admin\_port>/oamconsole

ORACLE' Access Manageme	S Approximation Security	reservices 🔲 Matter Security 💰 Configuration	
Lamb Pal			
Quick Start Wizards	Access Manager ++	Agenta	
Perform common selay Code	Manage Single Sign On Application Dovisions	Manage Bargin S Counter Voldspate Excelore 2010/2 Agent	
Standard Registration SSD Agent Registration	Application Districtions Therease on Trippes	Contin Open2000 Agent	
	Hud Identifiers Authentization Schemes		
	•		
(≌)	<b>2</b>		
Session Management	Password Policy	Papies ++	
Managa Single Sign-On seasons	Verage Common Feature of Parky for Single Sign-On	Managa-Jadharikustan Ping-itra	
		Administration Reads	
		Admittable Play in	
Securit \$2000.27% Security in efforts. 20 option			

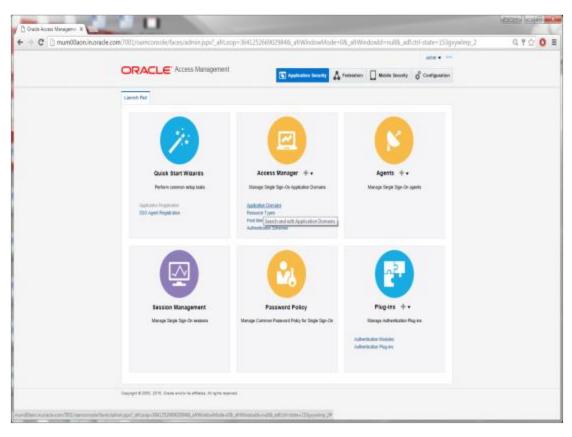
In the Agents block, Click the "+" and choose Create Webgate.

ODACI	- Loose Hassaure					
ORACD	E' Access Management	3	Application Security A Federation	Boble Security	of Cardquintee	
Laund Pol Crose	Weath x				8	
Aprile Manager						
Create Webga		egiden, ensure that at least a	te 0401 Server is running in the party mode air	he Agent to be registered.	Apple	
	* Newion tig +		"Security a Ope	e.		
	"Network munitives in state con-		0 Be			
0	exception		© Cel Virtual host			
			Aalta Create Policies 🖉			
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Access Clarif	Permitted					
Hor	New York multipleter in an edu com					
User Defined P	arameteria					
Resource Lints						
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Protecter	Resource List	Add Delate	Public Resource List	Add	Delata	
Falative	18		Relative UR			
1 C						

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

This creates the 11g Webgate Agent for OAM.

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



## 8.2 Manage Application Domain and Resources

Go to Launch Pad and search for an application domain.

noracle.com/7001/comconcole/faces/admin.jeps?_alt5.cop+3641252669029848_alt4Words	owMode=08_ahWedowld=null8_adl.ctrl=state=155gvywimp_2	9,7☆ 0 표
	ate •	
ORACLE' Access Management	namby 🛕 finitestan 🔲 Molek Security 💰 Contiguation	
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		1

Click on Applications Domain in the Access Manager tab.

Click on Search

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	ORACLE Access Management	🕃 Application Security 🛔 Federators 🔲 Biblio Security 💰 Configuration	
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	Nate		
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	Row Name	Description	
	<ol> <li>Purset Appe Integration</li> </ol>	Policy objects enabling integration with Diracle Fusion-Applications	
	2 14M Sulle	Policy objects enabling CAM Jugent to protect deployed UM Solite applications	
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	4 marillaure in week com 5 obs/11023	Application Comunic could through Remain Registration	
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Click on the Domain Name you want to configure.

ORACLE Access	Nanagement.	The Application Security Africation	Mobile Security	$\delta$ Configuration	
Laurch Ref - Appituation Dismain a	unifice a cuck con a			8	
Room Warapet >					
mum00aom.in.oracle.com	Applicative Domain				
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Allow GAuth Token					
Allow Session Impersonation					
Enable Policy Onlaring					
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Click on the Resources Tab

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a possed prior	Type Type remained remained on, warry of	ring Authentication Polic	cy Authorization Policy	
Concept R 2001, 2010, Soins and an in artistans. Al spins reasonal	a presentation			
	Courses # 2011, 2018, Once and in the effective, All spins reserved.			

#### Click on Search

Actions	▼ View ▼	🕂 Create 🛛 🖓 🕻	Duplicate 🥜 Edit 💥 D	elete 🔛 Detach		
Row	Resource Type	Host Identifier	Resource URL	Query String	Authentication Policy	Authorization Policy
1	HTTP	mum00aom.in			Protected Resource Policy	Protected Resource Policy

Search Results will show an entry for Resource URL as  $I^{**}$  which is Protected. Select the Resource entry and Click the Edit option.

A state of the second s		op=137380009897342118_ahWindowModa=08_ahWindowId=wall8_adt		2021
mum00aom.in.oracle.co Use the following screen to define a R across domains, but the combination of	esource and the URL pretix that ide	ntifies the resource (document of entity) stored on a server individual resource URLs d a host identifier must be unique actoss domains.	Duplicate Ap	PAA.
Туре	HILL			
Description				
* Host Identifier	mumbliaominic Q			
.at Un				
* Resource URL	**			
Guery	8 Name Value Int 🕕 String			
	Query		+ ×	
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" Operations Ava	ilable 🥁 Al			
	CONNECT	-		
	POST			
	(# p+r			
# Protection				
* Protection Level	Unprotected ·			
Authentication Policy	Public Resource Policy •			
Authoritation Pokry	Public Resource Policy ·			

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

ORACLE: Access Management	T Application	Second A Parameters	Mobile Security	o <sup>2</sup> Cardqueator	
Land Par Appliatio Danie , manificania cost	b.008 .			8	
Roome Manager +					
mum00aom.in.oracle.com Assistant Senar					
Application Durate provides a logical container for resources of	or sets of inequalities, and the associated policies	that citables who can access spec	fk protecke) reasources		
Sermany Researces Authenticulus Pakies Author	coden Pokant Toler Insurce Pokan A	dramatulize			
The the search buil to find an existing Resource or slok the f	tes Resource bytton to create a new sime				
# Search					
Resource Figure #TTP +	Dresk gaudt				
Heat Identifier	Authentikation Policy	•			
Resource URL	Authoritation Policy				
				Search Reset	
Search Results					
Adata + Veu + 🔶 Chiste /5 Displaces	/ SH JL Denn To Betach				
Row Resource Hostidestider Resource		Authentication Policy	Authoritation Dr	Are	
Vis tats to deploy	and said	Page an and a set of the set	PROFILE CONCEPT		
A Britishing					
Columna Holden 1					
Gayryn 8,200, 311. Owe wran is Allians Arryna war	NHE .				

Click on the Create Icon

Access Manager >		
Create Resource Resource		Apply
Use the following screen to define a Resource domains, but the combination of a resource	ce and the URL prefix that identifies the resource (document or entity) stored on a server. Individual resource URLs need not be unique URL, Query String, and a host identifier must be unique across domains.	across
* Туре	T	
1)20		
Description		
* Host Identifier	9	
🔺 Uri		
* Resource URL		
Øperations		
Operations Available	e 🖉 All	
Protection		
* Protection Level	7	
Authentication Policy		
Authorization Policy 🔻		

Specify the following values for each of the fields respectively:

• <u>**Type:**</u> 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.
- <u>Host Identifier:</u> 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.
- <u>Resource URL</u>: 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.
- <u>Authentication Policy:</u> Select the required value from the dropdown.
- <u>Authorization Policy:</u> Select the required value from the dropdown.

Click on Apply to add the resource.

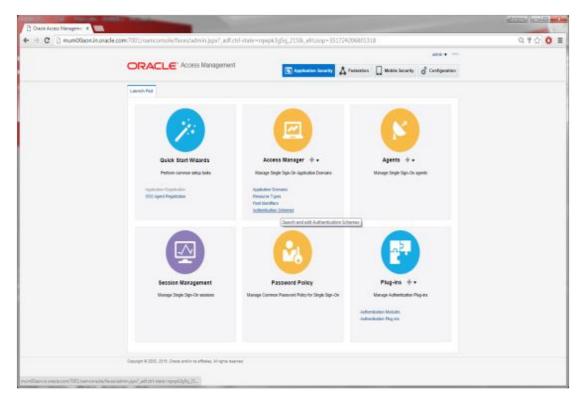
Resource URLs	Operations	Protection Level	Authentication Authorization Policy
/**	ALL	Unprotected	Public Resource Policy
/pages/*	ALL	Protected	Protected Resource Policy
/*/pages/*	ALL	Protected	Protected Resource Policy
/digx/v1/locations/branches/*	GET	Excluded	-
/digx/v1/locations/atms/*	GET	Excluded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

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

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

## 8.3 Creating Custom Login Scheme

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



Click on Authentication Schemes from the Access Manager block.

1001/carnconsole/faces/admin.jspa1_adf.xtrl-state		100 M	e
		100 - 11	
ORACLE' Access Management	🕥 Application Security 👗 Fectoral	ton 🔲 Mobile Security 🔗 Configuration	
Lands Parl Automitication Schemen a		8	
Access Maraget -			
Search Authentication Schemes		Coate Automization Scheme	
Search far an existing Authentication Scheme or olds the Create Authentication	ricultur Scherre Sultur to smille à res are.		
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		beach firead	
Search Results			
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Addes + Max + 4 Casta ~ Deploye / Int			
Row Name In Lito Implay	Description		
0			
 Caparger & 2020, 2018, David and in A Ministry All rights management			

Click on Create Authentication Scheme

<form></form>	<ul> <li>C [] mum00aon in oracle.com 2001/succession/fact</li> </ul>	er annarbha: an cu-usie - idwb	13030 T1280 90000 b = 3214 545008017318	0 7 0
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Create Authentication Scheme Indexession Scheme Ind	Louid Pal - Adventuation	iteres a Cleate Authentication Sch., a	a	
Create Authentication Scheme Indexession Scheme Ind	Access Van april -			
* Name       Beargitier       * Automization Liveri       * Automization Liveri       * Automization Liveri       * Challinger Restrict URL       * Challinger Restrict URL       * Automization Liveri       * Challinger Restricter Minitelle       * Challinger Restricter I       Challinger Restricter I       Challinger Restricter I	Create Authenticati			
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Online :       * Challings Refeat       * Challings Refeat       * Active disalise       * Active disalise       Challings Parameters	Description			
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Challings Redect DR.  * Authorization Multime Challings Parameters Chall	Default: (			
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	Casegor #1208. 2015. Crace a	ooris affana Arigon named		

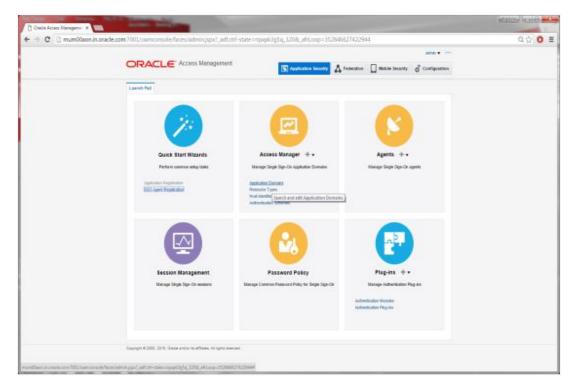
Specify the following details:

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

Click on Apply to save the Scheme.

# 8.4 Add the Login Scheme to Authentication Policy

Go to the Launch Pad.



Click on Application Domain.

Access Mategement     Access Mategement     Access Manager     Search Application Domains     text to access to be for a rating Application Domains     * Search     * Search	Regulation Security     A Preferation     Description     Control Application Demain	
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Search Application Domains the the world for Is find an existing Application Domain in did the Circ		
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Search Results		
adam • Vev • + Orate / Dil 12 Dente 2	Detail	
Row Name	Description	
1 Fusion Appa Integration	Policy objects enabling integration with Ocacle Passion lipplications	
2 Mitthe	Policy objects enabling CHUI Agent to protect deployed HUI Suite applications	
3 mmail-in in wade com	Application Dismain created through Reindle Registration	
4 mart0ash is crade com	Application Domain created: through Faimole Fagistratum	
6 shelrifi(2)	Application Diemain on order through Ferrotic Registration	
6 stephenic 8	Application Dienaic created through Riencite Registrative	
T sklade-e in snade com	Application Durnate smalled Recogili Remote Registration	
 lagyoget (K 2000, 2010, Oracle and to its affirmers, let up to more set		

Click on Search and Select the Domain Name.

					ame •	
ORACLE Access Mar	agement	Application Security	A researchers	U Mobile Security		
Launch Parl Application Donoiti a munit	Gaem.in.anacle.com					
Acces Manuel + mum00aom Jn.oracle.com == Applicater Donoir probles a lopical container		d for seaccuted policies that datate	ufu cat access get	fic protected resources.		
Summary Remarker Addresization Pr	ikan Automation Paikies Tale	er Insuurna Politiken Achalaken ko			Apely	
Appl	Allow is under our false bound bound fitting form where	•				
Oncept & 2012, 2014. On the server is allowed	Minghin maarmad					

Click on Authentication Policies Tab

🗋 mum00aon.	notade.com/2011/ormconsole/faces/admin.jops/_adf.ctrl=state=s	quipic3g5q_3208i_ah1.cop=352846627422944	4位 0
		ane v 🦟	
	ORACLE Access Management	🕼 Application Security 🔏 Preferation 🔲 Mobile Security 🔗 Configuration	
	Land Pal Applate Data y membranic makazar y	а	
	Autest Manager +		
	mum00aom.in.oracle.com Application Domain		
		arren, and the sancolulof policies that exclute who can access specific protected renewices.	
	Sumay Recom Batterbatter Polices Advector Pol		
	Select on examp Authentication Policy from the latter click the Creater Auth	teritation Roley tuiten to strele a new ane	
	Added + Tell + Onder - Disability / Str. 3	( Detro ) ) Broch	
	Row Name	Description	
	<ol> <li>Public Resource Public</li> <li>Public Resource Public</li> </ol>	Philo set during domain produit. Aild resources to the goldy is allow aroune society. Philo set during domain analism. Aild resources to the goldy is protect them.	
		Find at the Participation of the second state of the second state of the second state second state of the	
	Name		
	Copyry 6 201. 2211 Ones and to a Minus. Highly served		

Click on Protected Resource Policy

					atrix •	
ORACL	E' Access Management		🕥 Appleadan Seconda	Pedenation 🔲 Mobile Security	d <sup>2</sup> Configuration	
Launch Pad Apple	eter Donais y merillion is anais	on y manifa	an interactions to a		8	
Augent Transport						
Protected Re	source Palicy Autoritation P	ale l			Duplicate Apply	
Authenticultur Philoy	ordinen the type of nanification that word to	e performed to prim	nte a sufficient level al tract for Access Manag	er to grant access to the year making	the request. A single	
	to protect you or more resources in the 4	diarrages Creaties				
Rane	Protected Resource Policy		Terrane (19).			
Description	Palicy set during domain product. Add in This policy to protect them.	that Seed the vita	lenge confusion required to authoritate			
	wa powi u priest ever.	Re 1691				
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	Adaptive-Authorite ptoefficherne Ansersmeuntlicherne	1				
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Select the Scheme create for Login from the Authentication Scheme drop-down.

Click on Apply to save the changes.

# 8.5 Manage User Identity Stores

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

		ucer• ***
ORACLE <sup>®</sup> Access Management	S Application Security	A Federation
Leanch Pad	User Identity Stores Manage IDS profiles and ID stores	Administration
Certificate Validation	Server Instances	Settings
Varidate trust certificates	Manage and monitor OAM server instances	Manage configuration of Access components

Click on User Identity Stores.

JRACLE	Access Management	E Appl	cation Security	Federation	Mobile Security	o <sup>o</sup> Configuration
aunch Pad User Identity	Stores x					12
Configuration >						
Jser Identity Store	s					
al Default and System Sto	re					Apply
* Defau	It Store UseridentityStore1 *					
Syster	m Store UseridentityStore1 *					
View - Create	○ Duplicate	at are synchronized by using Sync IDS				Sync IDS Profiles
Name	Directory Type	Host Information	Descrip	tion		Profiles
UserIdentityStore1	EMBEDDED_LDAP	Idap-host:7001				No
ccess Management after the	common service used by Oracle I	dentity Management products to access	s and manage identity (	Directory. The I		
dentity Directory Service is a access Management after the al IDS Profiles	common service used by Oracle l y are synchronized. ectory Service Profiles. IDS Profile	dentity Management products to acces is created here will appear in OAM ID S			Create Form-Fill Ap	plication ID's Profile
dentity Directory Service is a cccess Management after the <b>MIDS Profiles</b> Manage common Identity Dire tanagement Console using to	common service used by Oracle l y are synchronized. ectory Service Profiles. IDS Profile				Create Form-Fill Ap	plication ID's Profile
dentity Directory Service is a cccess Management after the <b>MIDS Profiles</b> Manage common Identity Dire tanagement Console using to	common service used by Oracle I y are synchronized. ectory Service Profiles. IDS Profile Sync IDS Profile button	s created here will appear in CAM ID S			Create Form-Fill Ap OS Profiles created outs	plication ID's Profile

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

ORACLE <sup>®</sup> Ac	cess Management	Application Security	Federation	Mobile	Security 🙀 Cor	figuration
Launch Pad User Identity Store	es x UserIdentity Store1 x					
Configuration >						
UserIdentityStore1	Jser Identity Store Service	8 <b>4</b>	System Store	Duplicate	Test Connection	Apply
Store Name Us	serIdentityStore1		Enable SS	3L		
* Store Type Er	nbedded LDAP: Oracle WebLogic Embedded LDAP 🔻		Use Nativ	e ID Store Set	tings	
Description		Prefetched Attributes			h	
A Password Managemen	t					
Enable Password Manageme	nt					

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

	ent	Application Security	Federatio	on Mobil	e Security 🗳 Co	nfiguration
Launch Pad User Identity Stores x UserIdentitySto	re1 ×					
Configuration >						
User IdentityStore1 User Identity Store Servi	ce		🛿 System St	ore Duplicate	Test Connection	Apply
Store Name UserIdentityStore1			Enab	le SSL		
* Store Type OUD: Oracle Unified Direct	tory •		Use	Native ID Store Se	ettings	
Description		Prefetched Att	ributes		h	
Location and Credentials						
* Location Idap-host:1389	11	* Pas	ssword			
* Bind DN cn=orcladmin						
▲ Users and Groups						
* Login ID Attribute	cn					
User Password Attribute	userPassword					
* User Search Base	cn=Users,dc=in,dc=oracle,dc=	=com				
User Filter Object Classes						
Group Name Attribute						
* Group Search Base	cn=Groups,dc=in,dc=oracle,dd	c=com				
Group Filter Classes						
Enable Group Membership Cache						
Group Membership Cache Maximum Size	0 ^ ~					
Group Membership Cache Time to Live (in seconds)	0 ^ ~					

Enter the values against the mandatory field on the page:

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

**Password:** Enter the LDAP user's password.

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

#### <u>Group Search Base:</u> Provide the group search hierarchy e.g. *cn=Groups,dc=in,dc=oracle,dc=com*

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

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

Click Apply to save the changes.

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

# 8.6 Enabling OIC in OAM (For Mobile Banking)

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

	Access Management	Application Security	A Federation	Mobile Security	o <sup>° Configuration</sup>
aunch Pad Availab	le Services 🗙				
Configuration > Available Serv	ices of services installed in your current deployment. D	sabling a service will only turn off that ser	vice and will not unin	stall it from the system.	
Application					
	Access Manager		0	Disable S	Service
			Enabled		
E.	Adaptive Authentication Service		8	Enable S	ervice
A A Federation			Disabled		
	Identity Federation		0	Disable 3	Service
			Enabled		
Ēt	Security Token Service		0	Disable \$	Service
-			Enabled		
	Access Portal Service		8	Enable S	iervice
Mobile			Disabled		
	Mobile and Social		0	Disable 5	Service
			Enabled		
1	Mobile Security Service			Disable	service
			-	Di Jabre V	

Navigate to Configuration > Available Services

Enable Mobile and Social Service.

inch Pad	SSO Agen	ts x							
Access Nearch S	so Age	ents							
Vebgates	OSSO Age	ints OpenSSO	Agents						
earch for a	en existing V	VebGate or click t	the Create WebG	te button to create	a new one.			+ 1	Create Webgate
⊿ Sea	rch								
	Name				State	Enabled ¥			
	Version	All ¥			Primary Server				
Pref	erred Host	ofss310838			Secondary Serve				
									Search Reset
Search F	Results								
Actions •	View •	+ Create	Duplicate	/ Edit 💢 Delet	e 🖹 Monitor	III Detach			
Row	Name		ion Preferred		Primary \$			condary Server	
	1 ofss310	\$38 11g	ofss31083	Enabled	mum00aon.	in.oracle.com:5	575		

Now, go to Application Security Tab > Agents

Select the WebGate for which OIC is to be enabled.

JIEran				Management					Applic	ation Se	curity	A Federation	Ģ	Mobile Secu	urity 4	¢ °	Configuration
aunch Pad	SSO Agents	x 0	lss31(	838 ×													
Access M	anager >																
fss3108	38 Webgate														Appl	у	Download
Version	11g			Logout	Target URL												
Name	ofss310838			Deny Pr	On Not otected		_	_	-								
Description				User	Defined	OAMAuth corySSL	Heade	erVar=1	S SSL							*	
Access Client Password				Para	meters	URLINUT client_req inactiveRe	uest	retry_a	ttempts	s=1						• //	
* Security				* SI (S4	eep for conds)		60	^ v									
	Simple     Cert				Cache Pragma Header	no-cache											
* State	Enable     Disable			Cache		no-cache											
* Max	-				Debug												
Cache Elements	100000	^	*	IP Val	idation												
* Cache Timeout (Seconds)	1800	^	*		Allow gement rations	8											
* Token Validity Period	3600	^	~		Token Scope												
(Seconds)					mations Master												
* Max Connections	1	^			Token												
* Max Session Time	60	^	*		Allow dential												
* Failover Threshold	1	^	*	Sha	rations repoint												
* AAA Timeout Threshold	5	^	~	Impers	User repoint												
* Preferred Host	ofss310838			Impers													

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

#### OAMAuthUserAgentPrefix=OIC

#### OAMAuthAuthenticationServiceLocation=http://<OAM Host>:14100/oic\_rest/rest/oamauthentication

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

	CLE.	Access Manage	ement	Application Sec	curity 👗 Federation	Mobile Security Configuration
aunch Pad	Application D	omain 🗙				C
Access	Manager >					
Search	Applicatio	n Domains				+ Create Application Domain
		existing Application Do	main or click the Create	e Application Domain button to create a	a new one.	
⊿ Sea	rch					
Name	ie iam					Â
						Search Reset 👻
Search R	Results					
Search R		- Create 🥒 Edit	🗶 Delete  📆	Detach		
Actions •		= Create 🥒 Edit	X Delete	Detach Description		

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

	_e Access	Management	Application Security	Lage Federation	Mobile Security	¢ °°	nfigurati
nch Pad Appli	ication Domain 🗙 IA	AM Suite × IAM Suite : OICAuth	entica ×				C
Access Manage	er >						
CAuthenti	icationPolicy	Authentication Policy				Duplicate	Apply
		verification that must be performed to are resources in the Application Dom	o provide a sufficient level of trust for Acces ain.	s Manager to grant a	coess to the user making	the request.	A single
* Name	OICAuthenticationPo	blicy	Success URL				
Description	Protected resource p	policy for OIC Resources	Failure URL				
Authentication Scheme	CLIPLoginScheme	T					
esources Re	sponses Advanced	Rules					
Resources Res	+ Add X Del						
	+ Add 🗙 De	lete	Query String				
Resources	+ Add 🗙 De	lete	Query String				

Select the OBDX Authentication Scheme created previously and click Apply.

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

# 8.7 Finger Print Authentication

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

nch Pad Mobile Services x				0
	anagement (IAM) products and LDAP		on, authorization, and basic user-profile directory service Configure the following sections to define both the back-	
Service Providers				6
View 🔻 🔮 Create 👻 🥒 Edit 💥	Delete 🔃 Refresh			
Name	Туре	Description	1	
MobileJWTQAMAuthentication	Authentic	ation Out Of The E	lox Mobile Java Web Token (JWT) & Oracle Access M	
JWTAuthentication	Authentic	out Of The E	lox Java Web Token (JWT) Authentication Token Servi	
UserProfile	User pro	file Out Of The E	lox User Profile Service Provider	
CustomAuthentication	Authentic	sation		
JWTOAMAuthentication	Authentic	cation Out Of The E	lox Mobile Java Web Token (JWT) & Oracle Access M	
Service Profiles	Displays the list of confi	gured service providers.		6
View 👻 🎴 Create 👻 🖉 Edit 💥	Delete 🝓 Refresh			
Name	Туре	Service Endpoint	Description	
a MobileJWTQAMAuthentication	Authentication	/mobilejwtoamauthentication	Out Of The Box Mobile Java Web Token (JWT) &	2
	Authentication	/jwtauthentication	Out Of The Box Java Web Token (JWT) Authenti	
JWTAuthentication	User profile	/userprofile	Out Of The Box User Profile Service	
JWTAuthentication		forder and the still still a	Out Of The Box Java Web Token (JWT) & Oracle	
	Authentication	/jwtoamauthentication		
UserProfile	Authentication Authentication	/mobileoamauthentication	Out Of The Box Mobile Oracle Access Manager (	
UserProfile			Out Of The Box Mobile Oracle Access Manager (	0
UserProfile UserProfile UserProfile UserProfile MobileOAMAuthentication	Authentication		Out Of The Box Mobile Oracle Access Manager (	0

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

ervice Provider Config	uration		Save Rever
Name	JWTOAMAuthentication		
Description	Out Of The Box Mobile Java Web Token (JWT) & Cracle Access Manager (OAM) Authentication Service Provider		
Service Provider Java Class	oracle.security.idaas.rest.provider.token.JWTOAMTokenServi	ceProvider	
Attributes			
Identity Directory Service Name	userrole 🔻		
* Crypto Scheme	RS512		
* Validity Period	38000 🔺 🗸 Seconds		
* Validity Period	38000 A V Seconds		
Relying Party Token	Enabled      Ursabled	Value	
Relying Party Token	© Enabled ● Disabled View ▼ - + Add X Delete	Value OAM_11G	
Relying Party Token	© Enabled ⊕ Descried View ▼ + Add X Delete Name		
Relying Party Token	Enabled      Desabled  Vew      + Add      Delete      Name      OAM_VERSION	OAM_11G	
Relying Party Token	Enabled      Disabled      View      + Add      Add      Delete      Name      OAM_VERSION      DEBUG_VALUE	0 AM_11G	
Relying Party Token	Enabled & Detabled  Vew      + Add X Delete      Add_VERSION      DEBUG_VALUE      TRANSPORT_SECURITY	0AM_11G 0 0PEN	
Relying Party Token	Enabled & Dasabled  Vew   Add X Delete  Aame  Aame Aame	OAM_11G 0 OPEN mum00aon.in.oracle.com:5575	
Relying Party Token	Enabled  Disabled  Vew    Add  Delete  Name  OAM_VERSION  DEBUG_VALUE  TRANSPORT_SECURITY  OAM_SERVER_1  OAM_SERVER_1_MAX_CONN	OAM_11G 0 0 OPEN mum00aon.in.oracle.com:5575 4	

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

DRACLE <sup>®</sup> Access Managemen	The Application Security A Federation	Nobile Security of Configuration
Launch Pad SSO Agents x ofss310655 x Authenti	ication Modules × DeviceUUIDBasedUserModule ×	C
Access Manager >		
Authentication Module Authentication Modu	ule	Duplicate Apply
	or those that are developed using the Access Manager Authentication Extensibility Java AP rforms a specific authentication function.	1). This module uses more than one
		I). This module uses more than one
plug-in that you can orchestrate to ensure that each one pe Generat Steps Steps Orchestration		I). This module uses more than one
plug-in that you can orchestrate to ensure that each one pe Generat Steps Steps Orchestration	rforms a specific authentication function.	I). This module uses more than one

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

Give Name eg. DeviceUUIDBasedUserModule

Access Manager >				
uthentication Mode	Ile Authentication M	lodule	Duplicate Ap	oply
g-in that you can orchestrate eneral Steps Steps Orc	elies on bundled plug-in to ensure that each one chestration	ns (or those that are developed using the Access Manager Authentication Extensibilit performs a specific authentication function.	y Java API). This module uses more than (	one
Step Name	Description	Plug-in Name		
UI		UserIdentificationPlugIn		
			ta	•
tep Details			Save Can	
Step Nan				
Step Nan Descriptio	'n			
Step Nan	'n	Yugin		
Step Nan Descriptio Plug-in Nan	n e UserldentificationP			
Descriptio	un UserldentificationP F UserldentityStore1			

Now, configure the Steps tab as shown above.

	<ul> <li>Access Management</li> </ul>	Application Se	Federation	bile Security
aunch Pad SSO Ager	nts $_{\rm X}$ ofss310655 $_{\rm X}$ Authenticatio	on Modules x DeviceUUIDBasedUserModule	×	
ustom Authentication M	estrate to ensure that each one perform	ose that are developed using the Access Manage ns a specific authentication function.	r Authentication Extensibility Java API).	Duplicate Apply This module uses more than one
Seneral Steps St	eps Orchestration			
General Steps St You can specify the init * Initial Step UI • Name	bescription	On Success	On Failure	On Error

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

ORACLE'	Access Manage	ment		Application Security	Federation	Mobile Securit	y 🧔 Cor	nfiguratio
Launch Pad Authentication	Schemes × Device	JUIDBasedUserAuthNS	×					
Access Manager >								
DeviceUUIDBased	lUserAuthNSch	eme Authentication Sc	heme			Set As Default	Duplicate	Apply
An Authentication Scheme d	efines the challenge med	hanism required to authen	ticate a use	Each Authentication Schen	ne must also include a	defined Authenticatio	n Module.	
* Name	DeviceUUIDBasedUser	AuthNScheme						
Description								
* Authentication Level	3 🔨	~						
Default								
* Challenge Method	FORM •							
Challenge Redirect URL								
* Authentication Module	DeviceUUIDBasedUser	Module 🔻						
* Challenge URL	/pages/login.jsp							
* Context Type	default •							
* Context Value	ctx							
Challenge Parameters								

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

		Application Security
aunch Pad A	withentication Modules $_{X}$ DeviceUUIDBasedUserPlugin $_{X}$ Applica	tion Domain x IAM Suite x
Access Man	nager >	
AM Suite	Application Domain	
pplication Dom	ain provides a logical container for resources or sets of resources, and t	he associated policies that dictate who can access specific protected resources.
Summary R	esources Authentication Policies Authorization Policies Token	Issuance Policies Administration
Select an exist	ting Authentication Policy from the list or click the Create Authentication I	Policy button to create a new one.
Actions <b>v</b>	View - + Create 🖓 Duplicate 🖉 Edit 💥 Delete	Detach
Row	Name	Description
1	LocalAuthnFederationFAAuthScheme	Policy Component created for Local Authentication in IdP mode - Do not modify
2	LocalAuthnFederationLDAPScheme	Policy Component created for Local Authentication in IdP mode - Do not modify
3	LocalAuthnFederationBasicFAScheme	Policy Component created for Local Authentication in IdP mode - Do not modify
4	LocalAuthnFederationBasicScheme	Policy Component created for Local Authentication in IdP mode - Do not modify
5	ESSOAuthnPolicy	Authentication policy for ESSO resources
6	Federation SSO Protected Policy	Federation SSO Protected Policy for SP Service
7	TAP Response Protected Policy	TAP Response Protected Authentication Policy for OAMAgent
8	Public Policy	Protected Authentication Policy for OAMAgent
9	Protected LowerLevel Policy	Protected Authentication Policy for OAMAgent
10	OAM System Resource Policy	Protected Internal Resources for OAM Server
	Protected HigherLevel Policy	Protected Authentication Policy for OAMAgent
11		
	OICTokenExchangePolicy	Protected resource policy for OIC Token Exchange
12	OICTokenExchangePolicy OICAuthenticationPolicy	Protected resource policy for OIC Token Exchange Protected resource policy for OIC Resources

l/oamconsole/faces/admin.jspx?\_afrLoop=5909106988165184&\_afrWindowMode=0&\_afrWindowId=null&\_adf.ctrl-state=9dqjk8c5s\_2#

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

	Access Ma	nagement	Application Security	Federation	Mobile Security	¢ <sup>°</sup> Co	nfiguratio
itication Module	es 🗙 DeviceUUIDBase	dUserPlugin 🗙 Application Domair	IAM Suite × IAM Suite : Of	CTokenExcha ×	> <b>•</b>		C
Access Manage	er >						
CTokenEx	changePolicy A	uthentication Policy				Duplicate	Apply
		fication that must be performed to prov r more resources in the Application Do		ss Manager to grant a	ccess to the user makin	ng the reque	st. A
* Name	OICTokenExchangePol	icy	Success URL				
Description	Protected resource poli	cy for OIC Token Exchange	Failure URL				
Authentication	DeviceUUIDBasedUse	AuthNScheme V					
Scheme							
esources Res	sponses Advanced Ru	iles					
Resources	🕂 Add 🗙 Delete						
Resources Resource Ty	1	Resource URL	Query String				

Map the DeviceUUID scheme here from the Authentication scheme dropdown.

Click Apply to save the changes.

### 8.8 Copying the artifacts generated after registering Webgate

Registering the new WebGate agent will generate the following files and artifacts either in <*IDM\_HOME>/oam/server/rreg/client/rreg/output/Agent\_ID* directory or else in <*Oracle\_Home>/user\_projects/domains/<coam\_domain>/output/Agent\_ID* directory:

- cwallet.sso
- ObAccessClient.xml

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

# 9. LDAP Installation and Configuration

This chapter describes the different ways of installing the Lightweight **D**irectory **A**ccess **P**rotocol (LDAP) server in the following sections respectively:

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

# 9.1 Using Oracle Unified Directory

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

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

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

### 9.1.1 Installing and Configuring Oracle Unified Directory

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

Start the installer from the Disk1 directory (On UNIX)

#### ./runInstaller – jreLoc Java\_Home/jdk

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

- If you are installing on a UNIX system, and if this is the first time any Oracle product is being installed on your system with the Oracle Universal Installer, you will 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.
- 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.

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

#### Table: Inventory Directory and Group Screens

Screen	Description and Action Required
(UNIX Only)	

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

#### Welcome Screen



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

#### Install Software Updates Screen

Oracle	Unified Directory Ins	stallation - Step 2	of 7	<u> </u>
Install Software	Updates	-	JSION MIDDLEWARE	11 <sup>8</sup>
Welcome     Skip Software Updates     Prerequisite Checks     Installation Location     Installation Summary     Installation Progress     Installation Complete	<ul> <li>Skip Software Updates</li> <li>Search My Oracle Supp Usgr Name: Password:</li> <li>Search Local Directory Local Directory:</li> <li>Search For Updates</li> </ul>	Proxy Settings	Ess Connection	se
Help		< <u>B</u> ack Next	Einish Eiapsed Tir	Cancel

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.

#### Prerequisite Checks Screen

Prerequisite Che	cks	-	FUSION MIDDL	LE' EWARE
Welcome	Selection	Check	Progress	Status
Skip Software Updates	V	Checking operating system certific	100%	1
Prerequisite Checks	V	Checking recommended operating	100%	~
Installation Location	V	Checking kernel parameters	100%	4
Installation Summary	V	Checking Recommended glibc ver	100%	~
Installation Progress	2	Checking physical memory	100%	1
Installation Complete				
errorationer som proce		Abort	Retry	

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

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

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

To stop prerequisite checking for all components, click Abort.

Specify	/Installation	Location	Screen
---------	---------------	----------	--------

Oracle Unified Directory Installation - Step 4 of 7 _ ×			
Specify Installatio	on Location		
Welcome     Skip Software Updates     Prerequisite Checks     Installation Location     Installation Summary     Installation Progress     Installation Complete	OUD Base Location Home:       scratch/Oracle/Middleware       Browse         Oracle Home Directory:       Oracle_OUD1		
	Provide a valid Unified Directory Base location		
Help	< Back		

Specify the following installation locations:

• Oracle Middleware Home

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

Oracle Home Directory

The directory name for your Oracle home:

- You can specify a pre-existing directory that you want to use as the Oracle home; the directory must be an empty directory.
- You can specify the name of a new directory that will be created for you inside the Middleware home.

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

**Note:** This installation directory will be referred to as OUD\_ORACLE\_HOME throughout the remainder of this document.

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

#### Installation Summary Screen

Oracle Unified Directory Installation - Step 5 of 7 _ ×			
Installation Sumr	mary CRACLE FUSION MIDDLEWARE 118		
🤍 <u>Welcome</u>	⊡…Install OUD		
Skip Software Updates	Directory Details		
Prerequisite Checks			
Installation Location	⊡…Disk Space		
Installation Summary	Required: 150 MB Available: 7288 MB		
Installation Progress	Applications		
Installation Complete	Installing Oracle Unified Directory Products		
	Save Response File:       Save         To change this configuration before installing, select the topic you want to change in the pane on the left.       To install this configuration, select Install.		
Help	<u>Back</u> <u>Next</u> <u>Install</u> Cancel     Elapsed Time: 1m 59s		

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

Oracle Unified Directory Installation - Step 6 of 7		
Installation Pro	gress ORACLE 118	
Welcome     Skip Software Updates     Prerequisite Checks     Installation Location     Installation Summary     Installation Progress     Installation Complete	Progress  G3% Copying Files Install Log /scratch/setup/Middleware/logs/install2016-09-26_03-53-00PM.lo Copying files for: Oracle Universal Installer 11.1.0.9.0 Copying files for: Oracle Identity Healthcheck 11.1.2.3.0 Copying files for: Oracle Directory Services Manager 11.1.2.3.0 Copying files for: Oracle Unified Directory 11.1.2.3.0	
	Fusion Middleware Improved Experience	
Help	<gack next=""> Einish Cancel</gack>	

This screen shows the progress of the installation.

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

#### Installation Complete Screen

Oracle Unified Directory Installation - Step 7 of 7 _ ×		
Installation Com	olete CRACLE 118	
O Welcome	E-Install OUD	
kip Software Updates	Directory Details	
Prerequisite Checks		
Installation Location	Disk Space	
Installation Summary	Oracle Home Size: 205 MB Available: 7080 MB	
Installation Progress	⊡Applications	
Installation Complete	Installing Oracle Unified Directory Products	
	Save Installation Details: Save	
Help	< <u>B</u> ack <u>N</u> ext > <u>F</u> inish Cancel	
	Elapsed Time: 4m 44s	

This screen summarizes the installation that was just completed.

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

Click Finish to dismiss the screen.

 After the installation of OUD, go to the OUD\_Oracle\_Home directory and start the oudsetup.sh as follows,

#### cd /ORACLE\_HOME/Oracle\_OUD1/

#### ./oud-setup

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

	Oracle Unified Directory Setup	- ¤ ×
I Welcome	Welcome	
Server Settings	The Oracle Unified Directory Setup tool will ask you for some basic server and data configuration settings and will get your server up and running quickly.	
Topology Options	semulta ana an iteritan seran da maranunik darente	
Oracle Components Integration		
Server Tuning		
Review		
Progress		
Finished		
	Next >	Quit

#### Welcome Screen

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

Server Settings Screen

Oracle Unified Directory Setup _ 🗆 ×				
Welcome Server Settings Topology Options Directory Data Oracle Components Integration Server Tuning Review Progress Finished	Server Settings	etup _ C X and enter a password for the server initial Root user. ofss312890.in oracle.com 2389 Could not use 389. Port in use or user not authorized. S444 Could not use 4444. Port in use or user not authorized. disabled Configure cn=orcladmin *******		
	< Previous Next >	Quit		

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

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

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

The default administration port is 4444.

	Oracle Unified Directory Setup	- ¤ ×
Welcome Server Settings Topology Options Directory Data Oracle Components Integration Server Tuning Review Progress Finished	Topology Options Choose the Data Replication Options. You can change these settings later using the 'dsreplication' command-line.  This will be a stand alone server This server will be part of a replication topology Replication Port: 9999 Configure as Secure There is already a server in the topology Host Name Administration Connector Part: 4444 Administration Connector Part: 4444 Admin User: Admin Password:	
	< Previous Next >	Quit

Topology Options Screen

Select This will be a stand alone server.

Click Next.

### **Directory Data Screen**

salatiki Malati	Oracle Unified Directory Setup _	п×
Welcome Server Settings Topology Options Directory Data Oracle Components Integration Server Tuning Review Progress Finished	Directory Data   Choose options for the LDAP data to be hosted by the server.   Directory Base Prime:   Deve empty if you do not want to create a base DN.   Directory Data:   Only Create Base Entry (dc=in,dc=oracle.dc=com)   Leave Database Empty   Import Data from LDIF File   Path   Path Browse Import Automatically-Generated Sample Data Number of User Entries: 2003	
	< Previous Next >	Quit

Specify how to load data into your directory

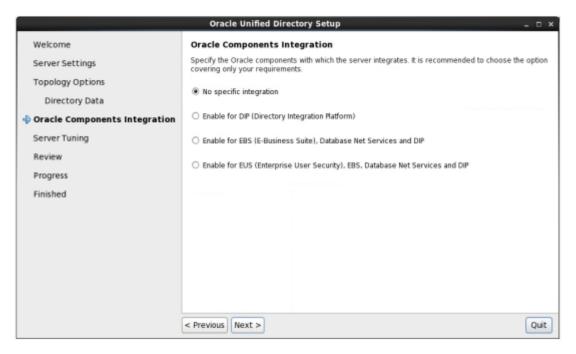
Directory Base DN: Enter the base DN for your directory.

dc=in,dc=oracle,dc=com

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

Click Next.

#### **Oracle Components Integration Screen**



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

Server Tuning Screen

	Oracle Unified Directory Setup		<b>n</b> x
Welcome	Server Tuning		
Server Settings Topology Options Directory Data Oracle Components Integration	Select how you want the OUD server to be tuned. The default proposed settings are calculated based on the free memory available in the machine the recommended value if you do not have special requirements. You can change these settings using the 'dstune' command-line. Options: Providing Runtime Options		
Server Tuning Review Progress Finished	You are running a non HotSpot(TM) JVM (OpenJDK 64-Bit Server VM). To be able to tune the server using the automatic mode or using other criteria (like pr some memory limitation), you must use a HotSpot(TM) Java Virtual Machine (like the O Java Standard Edition). You tune the OUD server by providing directly the IVM runtime options you want it to use.		8
	The off-line tools are: import-ldf, export-ldf, verify-index and rebuild-index. Server Runtime Settings: java arguments: -server Change Off-line Tools Runtime Settings: java arguments: -server Change Reset to Default		
	< Previous Next >	4	Quit

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

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

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

Click Next.

#### **Review Screen**

Oracle Unified Directory Setup _ 🗆 🗙			
Welcome	Review		
Server Settings	Review your settings and click Finish if they ar	re correct.	Show Summary
Topology Options	Host Name:	ofss312890.in.or	acle.com
Directory Data	LDAP Listener Port:	2389	
Oracle Components Integration	Administration Connector Port:	5444	
	LDAP Secure Access:	disabled	
Server Tuning	Root User DN:	cn=orcladmin	
Review Progress	Directory Data:		DN dc=in,dc=oracle,dc=com Ily Create Base Entry (dc=in,dc=oracle,d
Finished	Integration with Oracle components:	No Integration	
Filipled	Runtime Options:	Use Custom Valu	es for Server Runtime (-server) es for Off-line Tools (-server)
	Start Server when Configuration has Comp	leted	
	< Previous Finish		Quit

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

Click Finish.

#### **Configuration Done Screen**

	Oracle Unified Directory Setup
Welcome Server Settings Topology Options Directory Data Oracle Components Integration Server Tuning Review Progress Finished	Progress Creating Base Entry Details: See /scratch/latest_softwares/Oracle/Middleware/asinst_2/OUD/logs/oud-setup for a detailed log of this operation. Configuring Directory Server Done. Creating Base Entry dc=in,dc=oracle,dc=com

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

#### 9.1.2 Verifying the Installation

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

• Verifying the Installation Logs

Check for the presence of installation log files in logs directory inside your Oracle Inventory directory. On UNIX systems, if you do not know the location of your Oracle Inventory directory, you can find it in the OUD\_ORACLE\_HOME/oraInst.loc file.

• Checking the Browser URLs

Use the port numbers of OUD provided during configuration, by default UserDN port is 1389 and Admin Connector Port is 4444. Check if there is any process running on the port. Use the following command:

#### netstat-tulpn | grep <port\_number>

• To check the URLs, use the format:

#### http://system\_name:port\_number/odsm

# 9.2 Creating Weblogic Domain for Oracle Unified Directory

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

#### <Oracle\_Home>/wlserver\_10.3/common/bin/config.sh

**Note:** Oracle\_Home is the Middleware Home, which is the absolute path where Weblogic Server is installed.

• Follow the instructions as shown below for installation:

#### Welcome Screen

	Fusion Middleware Configuration Wizard	_ ×
Welcome		ORACLE
	Create a new WebLogic domain     Create a WebLogic domain	
	Create a WebLogic domain in your projects directory. O <b>Extend an existing WebLogic domain</b>	
	Use this option to add new components to an existing domain and modify configuration settin	gs.
E <u>x</u> it	<u>H</u> elp	Previous <u>N</u> ext

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

#### Select Domain Source Screen

Fusion Middleware Configuration Wizard _ ×
Select Domain Source
Generate a domain configured automatically to support the following products:
Oracle Identity Manager - 11.1.2.0.0 [Oracle_IDM1]
Oracle Access Management And Mobile Security Suite - 11.1.2.3.0 [Oracle_IDM1]
Oracle Adaptive Access Manager - Server - 11.1.2.0.0 [Oracle_IDM1]
Oracle Adaptive Access Manager Offline - 11.1.2.0.0 [Oracle_IDM1]
Oracle Adaptive Access Manager Admin Server - 11.1.2.0.0 [Oracle_IDM1]
Oracle Entitlements Server for Managed Server - 11.1.1.0 [Oracle_IDM1]
Oracle Entitlements Server for Admin Server - 11.1.1.0 [Oracle_IDM1]
Oracle Privileged Account Manager - 11.1.2.0.0 [Oracle_IDM1]
Oracle Enterprise Manager - 11.1.1.0 [oracle_common]
Oracle Bl Publisher - 11.1.1.6.0 [oracle_bip]
Oracle BI JDBC - 11.1.1.9.0 [oracle_bip]
✓ Oracle Directory Services Manager - 11.1.2.3.0 [Oracle_OUD1]
Oracle Entitlements Server Weblogic Security Module On Weblogic Managed Server and JRF - 11.1.1.0 [Oracle_IDM1]
Oracle Entitlements Server Weblogic Security Module On JRF - 11.1.1.0 [Oracle_IDM1]
O Base this domain on an existing template
Template location: /scratch/Oracle/Middleware Browse
Exit Help Previous Next

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

# For Oracle Access Manager, select the Oracle Directory Services Manager - 11.1.2.3.0 [OUD\_HOME]

Click Next to continue.

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

#### **Specify Domain Name and Location Screen**

	Fusion Middleware Configuration Wizard	_ ×
Specify Domain Name and Lo	cation	ORACLE
	Enter the name and location for the domain:	
Domain name:	oud_domain	
Domain location:	/scratch/Oracle/Middleware/user_projects/domains	Browse
E <u>x</u> it <u>H</u> elp		Previous Next

Specify the following locations:

Domain name

Specify the name of the domain.

Domain location

The default locations for the domain home is

### <Oracle\_HOME>/user\_projects/domains

However, the domain home directory can also be created outside of Oracle home.

Here, Oracle Home directory is where the Weblogic Server is installed.

Click on Next.

<b>B</b>	Fusion Middleware Configuration Wizard	_ ×
Configure Administrato	r User Name and Password	ORACLE <sup>.</sup>
💍 Dis <u>c</u> ard Changes		
*Name:	weblogic	
*User password:	*****	
*Confirm user password:		
Description:	This user is the default administrator.	
E <u>x</u> it <u>H</u> elp		Previous Next

### Configure Administrator User Name and Password Screen

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

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

Then, Click on Next.

### Configure Server Start Mode and JDK Screen

🛐 Fusion Middleware Configuration Wizard _ ×				
Configure Server Start Mode and JDK	ORACLE <sup>.</sup>			
'Securing a Production Environment' in the WebLogic Serv	Before putting your domain into production, make sure that the production environment is secure. For more information, see the topic 'Securing a Production Environment' in the WebLogic Server documentation.			
WebLogic Domain Startup Mode	JDK Selection			
Development Mode Utilize boot, properties for username and password and poll for applications to deploy. Sun JDK recommended for better startup performance during iterative development.	● Available JDKs Sun SDK 1.7.0_79 @ /scratch/latest_softwares/java/j¢			
Production Mode Require the entry of a username and password and do not poll for applications to deploy. WebLogic JRockit JDK recommended for better runtime performance and management.				
Exit Help	Previous Next			

Choose a JDK from the Available JDKs.

Select a mode under the Weblogic Domain Startup Mode.

Click Next.

3	Fusion Middleware Configuration Wizard	_ ×
Select Optional Configuration	1	ORACLE
	Administration Server Modify Settings	
	Managed Servers, Clusters and Machines Add or Delete Modify Settings	
	Deployments and Services Target to Servers or Clusters	
	RDBMS Security Store     Modify Settings	
E <u>x</u> it <u>H</u> elp		Previous Next

### **Select Optional Configuration Screen**

Choose the options to configure from the following list:

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

Select Administration Server and Click on Next.

### Configure the Administrator Server Screen

	Fusion Middleware Configuration Wizard	_ ×
Configure the Ad	ministration Server	ORACLE <sup>.</sup>
💍 Dis <u>c</u> ard Changes		
*Name:	AdminServer	
*Listen address:	All Local Addresses	
Listen port:	7001	
SSL listen port:	N/A	
SSL enabled:		
Evit Uala		Draviour, Next
E <u>x</u> it <u>H</u> elp		Previous <u>N</u> ext

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

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

After entering the details, click on Next.

#### **Configuration Summary Screen**

Fusion Middleware Configuration Wizard _ >								
Configuration Summary		ORACLE						
Domain Summary Summary View. Deployment  oud_domain (/scratch/Oracle/Middleware/user	in the Details to return to a	m in the Domain Summary pane on the left to inspect its attributes pane below. You can make limited adjustments by clicking Previous prior panel. If everything is satisfactory, click Create.						
- Server	Details							
	Attribute Name Description Author Location	Value Basic WebLogic Server Domain Create a basic WebLogic Server domain without installing samp Oracle Corporation /scratch/Oracle/Middleware/wiserver_10.3/common/templat						
JRF Startup Class     JRF Startup Class     JRF Startup Class     ODL-Startup	Name Description Author Location	Oracle Directory Services Manager Oracle Directory Services Manager Extension Template Oracle Corporation /scratch/Oracle/Middleware/Oracle_OUD1/common/templat						
AWT Application Context Stal     MX Framework Startup Class     Web Services Startup Class     OC-Startup	Name Description Author Location	Oracle WebCenter Composer Extension This template configures Oracle WebCenter Composer and de Oracle Corporation /scratch/Oracle/Middleware/oracle_common/common/temp						
Module-FMWDFW	Name Description	Oracle WebCenter Composer This template configures Oracle WebCenter Composer and del 👻 🕨						
E <u>xit</u> Help		Previous Create						

Review the domain configuration on this screen.

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

Click Create to start creating the domain.

By default, a new Weblogic Domain to support Oracle Unified Directory is created in the <Oracle\_Home>/user\_projects/domains directory.

#### **Creating Domain Screen**

	Fusion Middleware Configuration Wizard _ ×
Creating Domain	ORACLE <sup>.</sup>
	Progress:
ORACLE	Preparing Extracting Domain Contents Creating Domain Security Information Saving the Domain Information Storing Domain Information String Substituting Domain Files Performing OS Specific Tasks Performing Post Domain Creation Tasks Domain Created Successfully! Domain Location: /scratch/Oracle/Middleware/user_projects/domains/oud_domain Admin Server URL: http://ofss312890.in.oracle.com:7001
E <u>x</u> it <u>H</u> elp	Previous Done

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

Click Done to dismiss the screen.

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

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

#### 1. <u>To create Attributes</u>

• Copy the "attributes.ldif" file from OBDX\_Installer/installables/oud directory to a location on the server where OUD is installed and switch to the following directory:

#### cd <Oracle\_Home>/Oracle\_OUD1/bin

• Now, execute the below command:

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

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

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

#### 2. <u>To create a Object Class</u>

• Copy the "objectclass.ldif" file from <Installer\_Home>/installables/oud directory to a location on the server where OUD is installed and switch to the following directory:

#### cd <Oracle\_Home>/Oracle\_OUD1/bin

• Now, execute the below command:

#### ./ldapmodify -h localhost -p <ldap\_port> -D "ldap\_user" -w <ldap\_password> -a -f <file\_location>/objectclass.ldif

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

#### 3. <u>To create Groups</u>

• Copy the "usergroup.ldif" file from <Installer\_Home>/installables/oud directory to a location on the server where OUD is installed and switch to the following directory:

#### cd <Oracle\_Home>/Oracle\_OUD1/bin

• Now, execute the below command:

./ldapmodify -h localhost -p <ldap\_port> -D "ldap\_user" -w <ldap\_password> -a -f <file\_location>/usergroup.ldif

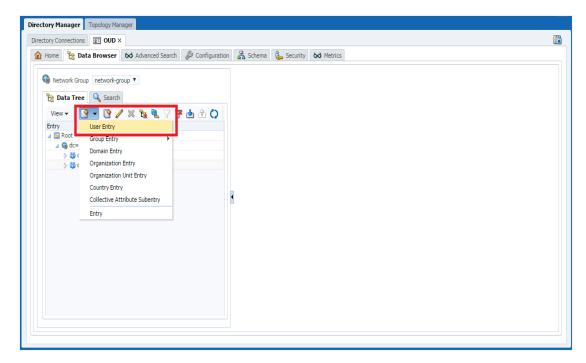
 Login to ODSM Console. E.g. http://<hostname>:<port>/odsm and under the Data Browser tab check if the groups are created.

#### 4. <u>To create User and mapping it to the Group</u>

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

Directory Manager Topology Manager
Directory Connections DUD ×
🔒 Home 隆 Data Browser 🔗 Advanced Search 🖉 Configuration 😤 Schema 🗞 Security 6d Metrics
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• Under the Data Browser tab, click on the Add icon



• Select User Entry from the list.

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Home 🐮 Data Browser 🐼 Ad	vanced Search 🔑 Configuration 🔒	Schema 🐍 Security 🐼 Metrics				
Network Group network-group 🔻	🔮 Create new User entry					Refresh Create Cancel
						*Require
😫 Data Tree 🔍 Search			0			
View 👻 📑 👻 🦉 🖌 🗙	* Parent Entry	cn=Users,dc=in,dc=oracle,dc=com	🔍 Select	* RDN Attribute(	s) Common Name	
Entry Market Sout						
⊿ 🚱 dc=in,dc=oracle,dc=com	Basic User Information					
iii cn=Groups iii cn=Users						
V Grein-osers	* Common Name		User ID			
	User Name		Title			
	First Name		Email			
	* Last Name		Mobile			
	Initials					🔁 Upload
						C opicad
	Ørganizational Information					
	Department Number	Labeled U	IRT		User Password	
				Q Select		
	Description	Manag		Select	Secretary	Q Select
	Employee Number	Organizat	ion		See Also	🔍 Select
	Employee Type	Organization U	nit			
	Contact Information					
	Home Phone Number	Physical	Delivery Office Name		Room Number	
	Home Postal Address				State/Drovince Name	

ctory Connections 📧 OUD 🗙								
Home 🐮 Data Browser 6d A	dvanced Search 🛯 🖉 Configur	ation 🖁	Schema 👌 Security	6d Metrics				
🍓 Network Group 🛛 network-group 🔻	Create new User	entry						Refresh Create Cance *Requi
View - C - C X	*Pare	ent Entry	cn=Users,dc=in,dc=orad	cle,dc=com 🔍	ielect	*RDN Attribute	2(5)	Select the RDN attribu
Entry  Contemporal	🔏 Basic User Informati	on					Common Name Department number Description	
V Qr ch-osers	* Common Na	me			User ID		Email	
	User Na	me			Title		Employee Number	
	First Na	me			Email		First Name	
	* Last Na	me			Mobile		Home Phone Number Home Postal Address	
	Init	als					<ul> <li>Initials</li> </ul>	
							International ISDN Number Labeled URI	. 🗁 Upload
	Organizational Information	nation					Locality Name	
	Department Number			Labeled URI			User Passivoru	•
	Description			Manager		Q Select	Secretary	Q Select
	Employee Number			Organization			See Also	Q Select
	Employee Type			Organization Unit				
	Contact Information							
	Home Phone Num	ber		Physical Delive	ry Office Name		Room Number	
	Home Doctol Add			_ ·	·		State/Province Name	

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

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Network Group network-group	Create new User entry	Security Corpectus		Refresh Create Cancel
Bats Tree     Search       View -        •        •        •        •	* Parent Entry on=User	s.dc=in,dc=oracle,dc=com	Pos Pos Pos Ros	er sla Advres tal Code Coffice Box om Number refary
	*Last Name	Labeled UR	Sta	te/Province Name eet sphone Number r ID
	Description Employee Number Employee Type	Manager Organization Organization Unit	Secretary See Also	Q Select
	Contact Information Home Phone Number	Physical Delivery Office Name		Room Number

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

Detectory Connectors A Horne & Duba Browser & & Advanced Search & Configuration & Schema & Security & Metrics   Image: Advanced Search Create new User entry   Refireting Create new User entry   Image: Advanced Search   Prevent Entry   Image: Advanced Search   Prevent Entry   Image: Advanced Search   I	Directory Manager Topology Manager									-		
Refrex Create new User entry     Refrex Create     Refrex Refrex												
Wetwork Group Inetwork-group *     * Bata Tree     * Bata Tree	👔 Home     🔞 Advance	ed Search 🥼 Configuration	🚠 Schema 🔥 Security 🐱 Metric	15								
Common Name	🚳 Network Group 🛛 network-group 🔻	Create new User ent	ry					Re	resh Create			
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Rot     Rot     Geraded=con     Geraded=c		(1) Information										
Common Name superadmin     Ver ID super		You have up and all a set										
*Brent Entry Cn=Usersdc=in.dc=oracle.dc=com Select   *BDN Attribute(s) User ID   Basic User Information   Common Name superadmin  User Name  First Name  First Name  Latt Name Superadmin  Moble  Initials												
Basic User Infomation      Common Name superadmin      User Name      First Name      First Name      Tide		* Parent Er	ntry cn=Users,dc=in,dc=oracle,dc=com	🔍 Select		*RDN Attribut	e(s) User ID					
Common Name superadmin     Superadmin     User ID     Superadmin     User IID     Superadmin     Tele     Frost Name     Email     * Last Name     Superadmin     Mobile     Initials												
User Name Title Frist Name Email Initials		Basic User Information							_			
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		•										

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

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Kooc     Gode     Gode     Gode     Gode     Gode     Gode     Construction     Constr	* Parent E	ntry cn=Users,dc=in,dc=oracle,dc=co	n 🔍 Select		*RDN Attribute	e(s) User ID		×	
	A Basic User Information								
	Common Name	superadmin	* User ID	superadmin					
	User Name     First Name		Title Email					M	
	* Last Name	superadmin	Mobile				(		
	Initials							🗁 Upload	
	🔏 Organizational Informati	on							
	Department Number	Label	d URI			User Password	•••••		
	Description	Ma	nager		🔍 Select	Secretary			🔍 Selec
	Employee Number	Organ	zation			See Also			Q Selec
	Employee Type	Organizatio	n llož						

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

Directory Manager Topology Manager					
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<ul> <li>Us</li> </ul>	Created by cn=orcla	id=superadmin,cn=Users,dc=in,dc= admin Modifi y 27, 2017 2:22:57 PM IST Modifi	ed by cn=orcladmin		
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Directory Manager Topology Manager				
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a 🖏 cn=Groups	User Details:			
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> 👌 uid=superadmin				C opicad
	Organizational Info	rmation		
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• Now, expand the Groups tab.

ectory Connections 🗉 OUD X Home 隆 Data Browser 🐼 Advanced Search 🔌	Configuration 🔒	Schema 👌 Security	60 Metrics					
Network Group network-group   Data Tree  Search  View   Tree  Yew   Yew	Created	hed Name cn=Groups,dc	м	odified by cn=orc	ladmin y 27, 2017 1:21:08 PM IST		Refresh	Apply Revert
	Group Page	* Common Name	Groups			Description		
	1	Organization Organization Owner			G Select	Business Category See Also		Q Select
> ∰ cn=RetailUser > ∰ cn=Vlaver ⊿ ∰ cn=Vlaver > ∦ uid=superadmin								

• Select Administrator Group.

Directory Manager Topology Manager		
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Entry	Created at February 27, 2017 1:21:08 PM IST Modified at February 27, 2017 1:21:08 PM IST	
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the second seco		
Q) cn=Administrator	Group Information	
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Image: Second	Member Information	
D 🖓 cn=RetailUser		
Qi cn=Viewer	Member 👍 Add 💥 Delete	
🔺 🦓 cn=Users	Value	
id uid=superadmin	Members are not available.	

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

	Configuration 🐰 Schema 🐍 Security 🍪 Metrics	
Network Group network-group 🔻	👸 cn=Groups	Refresh Apply Re *Rec
View + Q + Q + X to to T + T + T + T + T + T + T + T + T + T	Information You have unsaved changes. Distinguished Name cn=Groups,dc=in,dc=oracle,dc=com Created by cn=ercladmin Created by cn=ercladmin Modified by cn=orcladmin Interference 27, 2017;12:108 PM IST	
	Group Page Attributes	
<ul> <li> <sup>3</sup> <sup>3</sup> <sup>3</sup>         cn=Administrators <sup>3</sup> <sup>3</sup>         cn=AuthAdmin <sup>3</sup> <sup>3</sup>         cn=Checker         </li> </ul>	* Common Name Groups	
G) cn=CorporateAdminChecker     G) cn=CorporateAdminMaker     G)     G)     CorporateAdminMaker     G)     CorporateAdminMaker     G)     CorporateAdminMaker     Corp	Group Information	
G cn=CorporateAdminMaker      G cn=CorporateUser	Organization Unit Description	
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⊿ 🚳 cn=Users		
id=superadmin	Member Information	
	Member 4 add 20 Datas	
	Value The value of a	attribute.
	uid=superadmin,cn=Users,dc=in,dc=oracle,dc=com 🔍 Select	
	uid=superadmin,cn=Users,dc=in,dc=oracle,dc=com	

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

	Configuration 💑 Schema 🐁 Security 🚧 Metrics
🖢 Network Group 🔹 network-group 💌	<sup>®</sup> / <sub>1</sub> cn=Groups            Refresh           Apply           *Req
View - 💽 - 💽 🖍 🕱 🗞 🦉 🍸 » Entry 4 🖸 Root	Information You have unsaved changes. Distinguished Name cn=Groups,dc=in,dc=oracle,dc=com
	Created by cn=orcladmin Modified by cn=orcladmin Created at February 27, 2017 1:21:08 PM IST Modified at February 27, 2017 1:21:08 PM IST
<ul> <li>&gt; 33 cn = Admin Maker</li> <li>&gt; 30 cn = Administrator</li> <li>&gt; 33 cn = Administrators</li> <li>&gt; 33 cn = Auth Admin</li> </ul>	Group Page Attributes * Common Name Groups
> (3) cn=Checker > (3) cn=CorporateAdminChecker > (3) cn=CorporateAdminMaker	Group Information
<ul> <li>&gt; 33 cn=CorporateUser</li> <li>&gt; 33 cn=Customer</li> <li>&gt; 35 cn=Maker</li> <li>&gt; 33 cn=RetailUser</li> </ul>	Organization Business Category
Ga cn - Netanoser      Ga cn - Netanoser      Ga cn - Viewer      Ga cn - Users      Ga cn - Users      Ga cid-superadmin	Ovner Quisect See Also Quise
y un-speciality	Member Information     Member     Member     Add

• Click on Apply to save the changes.

Home 🏾 隆 Data Browser 🐼 Advanced Search	🖉 Configuration 🛛 😤 Schema 👌 Security 🔂 Metrics	
Network Group network-group        Bota Tree     Q Search	🔯 cn=Groups Refresh Apply	y Re *Rec
View - (P - (P / X & ), P (P ) Entry A © Root A @ dc=in,dc=oracle,dc=com A @ cr=croups > % cr=cAdminChecker	Confirmation     Entry modified successfully.     Distinguished Name cn=Groups,dc=in,dc=orade,dc=com     Created by cn=orcladmin     Created by cn=orcladmin     Created at February 27, 2017 1:21:08 PM IST     Modified at February 27, 2017 2:32:48 PM IST	
S    Gn=AdminMaker     S    Gn=Administrator     S    Gn=Administrator     S    Gd    Gn=Administrators     S    Gd    Gn=AdthAdmin     S    Gd    Gn=AdthAdmin     S    Gn=Checker     S    Gd    Gn=CorporateAdminChecker	Group Page Attributes  * Common Name Groups Group Information	
> ☎ cn=CorporateAdminMaker           > ☎ cn=CorporateIser           > ☎ cn=Customer           > ☎ cn=Ruster           > ☎ cn=Ruster           > ☎ cn=Ruster           > ☎ cn=Verser	Organization Unit     Description       Organization     Business Category       Owner     Q Select     See Also	Select
⊿ ∰ cn-Users > ğ uid=superadmin	Member Information Member Add  Delete	)

### 5. Adding Optional Attributes

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

Directory Ma	nager Topology Ma	inager								
Directory Con	nections 🖭 OUD :	×								×
Home Home	😤 Data Browser	60 Advanced Search	& Configuration	🖁 Schema	💪 Security	6d Metrics				
G Netw	vork Group network-g	Iroup 🔻								
ිසි Da	ta Tree 🔍 Search	1								
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Entry	laat									
	ooc ) dc=in,dc=oracle,dc=	=com								
	de=injde=oraciejde=	-0011								
	> 🍪 cn=Users									

• Under the Data Browser tab, expand the Groups

		ichema 👌 Security 👌 M				
Network Group network-group	🖏 cr	=Administrator				Refresh Apply F
						*R
😫 Data Tree 🔍 Search		Distinguished Name cn=Adminis	trator,cn=Groups,dc=in,dc=oracle,dc=	=com		
View 🕶 📑 👻 😭 🖊 🙀 🖏 🍸 🚰 🏦 🕻	)	Created by cn=orcladmin	Modified by cn=orclade	min		
Entry		Created at July 25, 2016 5:31:	16 PM IST Modified at September	r 15, 2016 9:11:49 AM I	ST	
A DRoot	Grou	p Page Attributes				
⊿ 😋 dc=in,dc=oracle,dc=com	GIO	ip rage Attributes				
⊿ 🍇 cn=Groups		* Common Name	Administrator			
🕥 🖏 cn=Administrator						
b 🖏 cn=Administrators						
🔈 🚳 cn=AuthAdmin		iroup Information				
> 🍪 cn=Checker		Organization Unit	Admin		Description	
the second seco		-				
> 🍪 cn=Customer		Organization			Business Category	
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> 🍪 cn=RetailUser	- 11	Owner		🔍 Select	See Also	Q s
b 3 cn=Viewer						
> 🍪 cn=Users	- D	1ember Information				

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

Directory Manager Topology Manager				
Directory Connections I OUD ×				
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Network Group      Network-group	🔯 cn=Administrator			Refresh Apply Revert
😤 Data Tree 🔍 Search	Dictinguished Name, cn=Adminis	strator,cn=Groups,dc=in,dc=oracle,dc=com		*Required
View - 💽 - 🕃 🥒 🗙 🗞 🗞 🍸 👎 💩 🗘 🗘	Created by cn=orcladmin	Modified by cn=orcladmin		
		16 PM IST Modified at September 15, 2016	5 9:11:49 AM IST	
🔺 🖸 Root	Group Page Attributes			
⊿ 🤤 dc=in,dc=oracle,dc=com	▲ Mandatory Attributes			
⊿ 🍇 cn=Groups				
> 🖏 cn=Administrator	Object Class	🖗 👍 Add 🛛 💥 Delete		
> 🍪 cn=Administrators		Name		
D		groupOfUniquenames	Q Select	
> @ cn=cnecker > & cn=CorporateUser				
> tri=cuiporateoser		fcRole	🔍 Select	
> & cn=Customer		top	Q Select	
> 👸 cn=RetailUser	1			
> & cn=Viewer	cn	👍 Add 🛛 💥 Delete		
> & cn=Users				
,		Value Administrator		
		Administrator		
	> Optional Attributes			

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

ctory Connections 🗵 OUD ×		
Home   隆 Data Browser 🕺 Advanced Search 🖉 Configur	ion 🗸 Schema 💩 Security 6d Metrics	
🚳 Network Group 🛛 network-group 🔻	🖏 cn=Administrator	Refresh Apply Re
🗞 Data Tree 🔍 Search	Distinguished Name cn=Administrator,cn=Groups,dc=in,dc=oracle,dc=com	*Rei
View • 🕜 • 🕜 🖊 💥 🗞 🤻 🍸 🖄 🖄 🗘	Created by cn=orcladmin Modified by cn=orcladmin Created at July 25, 2016 5:31:16 PM IST Modified at September 15, 2016 9:11:49 AM IST	
Root	Group Page Attributes	
∠ to c=in,oc=oracle,oc=com ∠ to c=Groups	Mandatory Attributes	
Gn=Administrator      M cn=Administrators	Object Class 👍 Add 💥 Delete	
AuthAdmin	Name	
> 🍪 cn=Checker	groupOfUniquenames 🔍 Select	
> 🖏 cn=CorporateUser	fcRole Q Select	
b 🖏 cn=Customer		
Maker	top 🔍 Select	
> 🖏 cn=RetailUser		
> 🍪 cn=Viewer	cn 👍 Add 💥 Delete	
Signature State	Value	
	Administrator	
	Optional Attributes	Show Attributes
	businesscategory 👍 Add 💥 Delete	
	Value Attributes are not available.	
	description 👍 Add 🛞 Delete	
	Value Attributes are not available.	

• Click on Show Attributes button.

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• In the Filter type "fc" and click on Search button. It will show a entry for "fcroleid".

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• Select the entry "fcroleid".

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

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

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View ▼ P ★ % % % % % A ↓ A ↓ A ↓ A ↓ A ↓ A ↓ A ↓ A	Information     You have unsaved changes. Distinguished Name on=Administrator,cn=Groups,dx=in,dx=orade,dx=com Created by on=oradadmin Modified by on=oradadmin Created at July 25, 2016 5:31:16 PM IST Modified at September 15, 2016 9:11:49 AM IST	۵
G on=Administrators      G on=AuthAdmin      G on=AuthAdmin      G on=Checker	Group Page Attributes Administrator	
Stand CorporateUser     Stand CorporateUser     Stand CorporateUser     Stand CorporateUser     Stand CorporateUser     Stand CorporateUser	✓ Optional Attributes	Show Attributes
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	° ➡Add % Delete Value Attributes are not available.	<b>.</b>

• Now, Click on the '+ Add' button of "fcroleid" attribute.

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😤 Data Tree 🔍 Search		Distinguished Nam	e cn=Administrator,cn=Groups,dc=in,dc=oracle,dc=com	
View 🕶 📴 🕶 🕐 🗶 🏷 🦉 🍞 🎂 🏦 🗘		Created by cn=	orcladmin Modified by cn=orcladmin	
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ki cn=AuthAdmin				
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• Refer to the table below and enter the value mentioned for the respective Group which is being modified. E.g. for "cn=Administrator" group the value is "EMPLOYEE".

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

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Entry	•	
A B Root	You have unsaved changes.	
✓ G dc=in,dc=oracle,dc=com	Distinguished Name cn=Administrator,cn=Groups,dc=in,dc=oracle,dc=com	
A G cn=Groups	Created by cn=orcladmin Modified by cn=orcladmin	
> 🚳 cn=Administrator	Created at July 25, 2016 5:31:16 PM IST Modified at September 15, 2016 9:11:49 AM IST	
> & cn=Administrators		
> & cn=AuthAdmin	Group Page Attributes	
> & cn=Checker	Administrator	
Sign of chicken in the second seco		
> the composition of the composi	✓ Optional Attributes	Show Attributes
> 🚯 cn=Maker		
> 88 cn=RetailUser	businesscategory 🗸 Add 💥 Delete	
> 88 cn=Viewer	Value	
> 🎇 cn=Users	Attributes are not available.	
	description 🚽 Add 💥 Delete	
	Value	
	Attributes are not available.	
	🛛 fcroleid 🔔 Add 🕱 Delete	
	Value Value of optional attribute fcroleid	
	EMPLOYEE	
	° 🚚 Add 💥 Delete	
	•	
	Value	
	Attributes are not available.	

• Click on Apply to save the changes.

# 10. Oracle Business Intelligence Publisher Installation

To install Oracle Business Intelligence Installation click here.