# Oracle Banking Digital Experience

Installer Pre-Requisite Setup Guide Release 19.2.0.0.0

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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 of pre-requisite software's

## 1.5 Related Information Sources

For more information on Oracle Banking Digital Experience Release 19.2.0.0.0, 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 19.2.0.0.0 Installer.

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

## 2.1 Software List

Software Name	Version	Mandatory Software
Operating System	ORACLE LINUX 7.x	Y
Oracle Database	19.3.0.0.0	Y
Oracle Java Development Kit	1.8.0_231	Y
Oracle Weblogic Infrastructure	12.2.1.3.0	Y
Oracle HTTP Server	12.2.1.3.0	Y
Oracle Identity and Access Management Suite (IAM)	12.2.1.3.0	N*
LDAP (OUD)	12.2.1.3.0	N*
Oracle Business Intelligence Publisher	12.2.1.4.0	N**
Oracle Digital Assistant (ODA)	9.1.5	N***
Python	2.7.5/3.8.0	Υ***
Python Package: cx_Oracle	7.3.0	Υ****
Python Package: urwid	1.3.1/2.1.0( <b>for 3.8</b> )	Y

Software Name	Version	Mandatory Software			
Oracle Client	18.3.0.0.0	Y			
Oracle Outside In	8.5.4	Required for MS Excel file uploads			
* Required if OBDX Native A managing Authentication	Authentication is not u	used and OAM is			
** Required if Integration with Oracle Business Intelligence Publisher is needed.					
*** Required if OBDX Chat bot Bankir	ng Features are used.				
**** For python 3 installation refer section 2.3 Pre-requisite software installation and OS configuration for OBDX Installer – Python 3.8.0					
***** In case of python 3 cx_Oracle	needs to be re-installed				

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

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

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

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

#### cx\_Oracle (Software Installation)

<u>Step 1</u>:

Install the **oracle-release-el7** and **oraclelinux-developer-release-el7** release packages to set up yum repository access for Oracle Instant Client and cx\_Oracle

\$yum -y install oracle-release-el7 oraclelinux-developer-release-el7

```
If /etc/yum.repos.d/public-yum-ol7.repo file exists and you have the base oraclelinux-
release-<rel> package installed, you may still need to run
the /usr/bin/ol_yum_configure.sh script.
$/usr/bin/ol_yum_configure.sh
```

Step 2:

Install cx\_Oracle

#### \$ yum -y install python-cx\_Oracle

<pre>[root@ /]# yum -y install python-cx_Oracle Loaded plugins: ovl, ulninfo Resolving Dependencies &gt; Running transaction check &gt; Package python-cx_Oracle.x86_64 0:7.3-1.e17 will &gt; Processing Dependency: oracle-instantclient18.3-bc</pre>		-
Running transaction Installing : libaio-0.3.109-13.e17.x86 64		1/3
Installing : oracle-instantclient18.3-basic-18.3.0.0.0	-2.x86_64	2/3
<pre>Installing : python-cx_Oracle-7.3-1.el7.x86_64</pre>		3/3
Verifying : libaio-0.3.109-13.e17.x86_64		1/3
Verifying : oracle-instantclient18.3-basic-18.3.0.0.0	-2.x86_64	2/3
Verifying : python-cx_Oracle-7.3-1.el7.x86_64		3/3
Installed:		
python-cx_Oracle.x86_64 0:7.3-1.e17		
Dependency Installed:		
libaio.x86_64 0:0.3.109-13.e17	oracle-instantclient18.3-basic.x86_64 0:18.3.0.0.0-2	
Complete		

#### **Urwid (Software Installation)**

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

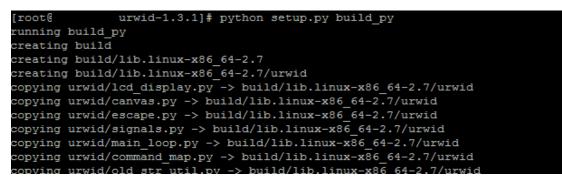
Note: Support version for Urwid is 1.3.1 (urwid-1.3.1.tar.gz)

Step 2: Extract the tar file as shown below

[root@	setup]#	tar -zxv	f urwid-	1.3.1.tar.gz	
urwid-1.3.1/u	rwid/tests	/test_co	ntainer.	ρy	
urwid-1.3.1/u	rwid/tests	s/test_ut	il.py		
urwid-1.3.1/u	rwid/tests	/test_vt	erm.py		
urwid-1.3.1/u	rwid/tests	s/test_gr	aphics.p	Y	
urwid-1.3.1/u	rwid/tests	s/test_li	stbox.py		
urwid-1.3.1/u	rwid/tests	/test_wi	.dget.py		
urwid-1.3.1/u	rwid/tests	/ init	•py		
urwid-1.3.1/u	rwid/tests	/test do	ctests.p	v	

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

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

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

## 2.3 Pre-requisite software installation and OS configuration for OBDX Installer – Python 3.8.0

Step 1: Execute below commands to install the dependencies yum -y groupinstall development yum -y install zlib-devel yum install openssl-devel -y yum install zlib-devel bzip2-devel openssl-devel ncurses-devel sqlite-devel yum install zlib-devel bzip2-devel openssl-devel ncurses-devel sqlite-devel -y yum install python38-pip -y yum install libreadline-gplv2-dev libncursesw5-dev libssl-dev libsglite3-dev tk-dev libgdbm-dev libc6-dev libbz2-dev -y yum install -y libffi-devel yum install python36u-devel -y yum install python38u-devel -y yum install yum-utils -y yum install epel-release -y yum install python3.8-pip -y yum install python3-pip -y

#### Note: In case wget is not installed , perform following step to install wget

yum install wget

#Download the python.tar.xz of the required version

wget https://www.python.org/ftp/python/3.8.0/Python-3.8.0.tar.xz

#Untar the Python tar file

tar xJf Python-3.8.0.tar.xz

#Navigate to the Python-<version> directory and run the below commands

cd Python-3.8.0

./configure

make

make install

<u>Step 2</u>: To install the Python3 compatible libraries to Python2.7 , configuration of pip needs to be done

cd /root mkdir .pip vi ~/.pip/pip.conf [global] trusted-host = pypi.python.org pypi.org files.pythonhosted.org

Step3: Give permission to pip.conf file and a soft link needs to be created.

Note: pip version 20.1.1

In -s ~/.pip/pip.conf /etc/pip.conf Is -Irt ~/.pip/pip.conf chmod 777 /root/.pip/pip.conf Is -Irt ~/.pip/pip.conf pip3 list pip3 install --upgrade pip

Step4: Once above steps are executed successfully install the following required modules.

pip3 install cx-Oracle==7.3.0 pip3 install urwid==2.1.0

#### limits.conf (OS Configuration)

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

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## 3. Installing and Configuring Weblogic Infrastructure 12c

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

• Section 3.1, "Installing Stand-alone Weblogic"

## 3.1 Installing Stand-alone Weblogic Infrastructure

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

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

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

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

- Obtain the Java tarball pack from the Oracle Java Downloads. Download jdk-8u231-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-8u231-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\_231

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

#### 3.1.2 Installing Weblogic

- Obtain Weblogic Infrastructure 12.2.1.3.0 zip from the Oracle Fusion Middleware Downloads. Extract the downloaded zip to get *fmw\_12.2.1.3.0\_infrastructure.jar* file to a directory.
- Now to start the installer, go to the directory where you have extracted the jar file.
- Start the installer from the same directory using the below command:

#### java – jar <Path>/fmw\_12.2.1.3.0\_infrastructure.jar

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

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

Oracle Fusion Middleware	e 12c Infrastructure Installation		- 0	×	
Installation Inv	entory Setup				
Central Inventory Director	ry				
Enter the Central inventory central inventory directory	directory for all your oracle instal if it does not exist.	lations.The installer will c	reate a new		
Inventory Directory:	/home/devops/oralnventory		Brow	se	
	Enter the full path for the directo	ry.			
Operating System Group :	devops		-		
	Specify a group with write permis directory	sion to the inventory			
Central Inventory Pointer	File				
create a pointer file, which	Click OK to create a script (createCentralInventory.sh) in the inventory directory. Run this script to create a pointer file, which is used to identity the location of the central inventory for future				
installations and administrative operations, such as patching and upgrade.					
Help <u>O</u> K Cancel					

#### Installation Inventory Setup Screen

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

Click OK to continue.

#### Welcome Screen



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

Click Next to continue.

#### Auto Updates Screen

Oracle Fusion Middleware 12c In	frastructure Installation - Step 2 of 8	- 🗆 ×
Auto Updates		
Welcome         Auto Updates         Installation Location         Installation Type         Prerequisite Checks         Installation Progress         Installation Complete	<ul> <li>Skip Auto Updates</li> <li>Select patches from directory         <ul> <li>Location:</li> <li>Search My Oracle Support for Updates</li> <li>Username:</li> <li>Password:</li> <li>Proxy Settings</li> <li>Search</li> </ul> </li> </ul>	FUSION MIDDLEWARE         Browse         Image: Imag
Help		< <u>Back Next &gt; Finish</u> Cancel

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

Oracle Fusion Middleware 12c	nfrastructure Installation - Step 3 of 8		- 0	×
Installation Location			_	
Welcome         Auto Updates         Installation Location         Installation Type         Prerequisite Checks         Installation Summary         Installation Complete	Oracle Home:         /home/devops/Oracle/Middleware/Oracle_Home         Feature Sets Installed At Selected Oracle Home:         View    Oracle Home may only contain alphanumeric, underscorr begin with an alphanumeric character.			rowse t must
Help	n[	< <u>B</u> ack <u>N</u> ext >	Einish	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.

nstallation Type	
Welcome           Auto Updates           Installation Location           Installation Type	Fusion <u>M</u> iddleware Infrastructure With Examples
Prerequisite Checks     Installation Summary     Installation Progress     Installation Complete	<ul> <li>□ Oracle Fusion Middleware 12c Infrastructure 12.2.1.3.0</li> <li>□ Core Server</li> <li>○ Coherence Product Files 12.2.1.3.0</li> <li>○ Web 2.0 HTTP Pub-Sub Server 12.2.1.3.0</li> <li>○ WebLogic SCA 12.2.1.3.0</li> <li>○ WebLogic Client Jars 12.2.1.3.0</li> <li>□ Administrative Tools</li> <li>△ Administration Console Additional Language Help Files 12.2.1.3.0</li> <li>□ Clie WLS Config 12.2.1.3.0</li> <li>□ Database Support</li> <li>□ Third party JDBC Drivers 12.2.1.3.0</li> <li>□ Open Source Components</li> <li>□ Fusion Middleware Mayen Support 12.2.1.3.0</li> <li>□ JRF and Enterprise Manager</li> <li>WLS for FMW 12.2.1.3.0</li> <li>□ Oracle Automatic Diagnostic Repository Feature Set Group</li> </ul>
Help	< Back Next > Finish Canc

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

Following are the installation types:

- Fusion Middleware Infrastructure with Examples
- Fusion Middleware Infrastructure

Select Fusion Middleware Infrastructure and Click Next to continue.

Prerequisite Checks			
Welcome	1		
Auto Updates		100%	
Installation Location			
Installation Type	Checking operating sy		
Prerequisite Checks	Checking Java version	used to launch the installer	
Security Updates			
Installation Summary			
Unstallation Progress			
U Installation Complete			
o motanation complete			
	<u>Stop</u> <u>R</u> erun S <u>k</u> ip	View Successful <u>T</u> asks	View <u>L</u> og
	Checking operating system		
	🗄 – 🏈 Checking Java version used	d to launch the installer	
Help		< <u>B</u> ack <u>N</u> ext >	Einish 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.

Click Next to continue.

stallation Summary					
	FUSION MIDDLEWARE				
Welcome	<ul> <li>Install Oracle Fusion Middleware 12c Infrastructure</li> </ul>				
Auto Updates	Installation Location				
Installation Location	Oracle Home Location: /home/devops/Oracle/Middleware/Oracle_Home2				
	Log File Location: /tmp/OraInstall2018-07-06_04-01-04AM/install2018-07-06_04-01-04A				
Installation Type	M.log Disk Space				
Prerequisite Checks	Required: 2111 MB				
Installation Summary	Available: 17953 MB				
	Feature Sets to Install				
Installation Progress	Core Application Server 12.2.1.3.0				
Installation Complete	Coherence Product Files 12.2.1.3.0				
	Web 2.0 HTTP Pub-Sub Server 12.2.1.3.0				
	WebLogic SCA 12.2.1.3.0				
	WebLogic Client Jars 12.2.1.3.0				
	Third party JDBC Drivers 12.2.1.3.0				
	WebLogic Evaluation Database 12.2.1.3.0				
	Fusion Middleware Maven Support 12.2.1.3.0				
	Administration Console Additional Language Help Files 12.2.1.3.0				
	CIE WLS Config 12.2.1.3.0				
	Enterprise manager 12.2.1.3.0				
	WLS for FMW 12.2.1.3.0				
	FMW Platform Generic 12.2.1.3.0				
	OPatch 13.9.2.0.0				
	Toplink Developer 12.2.1.3.0				
	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 use the Back button.				
Help	< Back Next > Install Canc				

#### 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.

C	Oracle Fusion Middleware 12c l	nfrastruc	ture Installation - Ste	p 7 of 8			_	
Ir	stallation Progress							
Ŷ	Welcome	1						
Ý	Auto Updates				31%			
9	Installation Location	<b>a</b>	Prepare					
Ý	Installation Type	l Č	Сору					
ģ	Prerequisite Checks		Generating Librario					
ģ	Installation Summary		Performing String					
0	Installation Progress		Linking	Substitutions				
9	Installation Complete		Setup					
			Saving the invento	rv				
			Post install scripts					
		Vie	ew <u>M</u> essages		✓ <u>V</u> iew Suc	cessful Tasks		View <u>L</u> og
					6			
		3	See.	and a	2	Hardware and Engineered to V		
	<u>H</u> elp				,	< <u>B</u> ack <u>N</u> ext >	<u> </u>	h Cancel

#### Installation Progress Screen

Oracle Fusion Middleware 12c Infrast	ructure Installation - Step 7 of 8 - 🗆 🗙
Installation Progress	
Y Welcome	
Auto Updates	100%
Installation Location	A . Decement
V Installation Type	
Prerequisite Checks	
V Installation Summary	-
Installation Progress	
Installation Complete	
~	
•	
•	Post install scripts
	·
	View Messages View Successful Tasks View Log
	Hardware and Software Engineered to Work Together
Help	< <u>Back</u> <u>Next</u> > <u>Finish</u> Cancel

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

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

Oracle Fusion Middleware 1	I2c Infrastructure Installation - Step 8 of 8 - C					
nstallation Complet						
Welcome	🔄 Install Oracle Fusion Middleware 12c Infrastructure					
Auto Updates	Installation Location					
Installation Location	Oracle Home Location: /home/devops/Oracle/Middleware/Oracle_Home2					
/ Installation Location	Log File Location: /tmp/Oralnstall2018-07-06_04-01-04AM/install2018-07-06_04-01-04A					
Installation Type	M.log					
Prerequisite Checks	□ Feature Sets Installed Successfully Core Application Server 12.2.1.3.0					
Installation Summary	Core Application Server 12.2.1.3.0 Coherence Product Files 12.2.1.3.0					
	Web 2.0 HTTP Pub-Sub Server 12.2.1.3.0					
Installation Progress	WebLogic SCA 12.2.1.3.0					
Installation Complete	WebLogic Client Jars 12.2.1.3.0					
	Third party JDBC Drivers 12.2.1.3.0					
	WebLogic Evaluation Database 12.2.1.3.0					
	Fusion Middleware Maven Support 12.2.1.3.0					
	Administration Console Additional Language Help Files 12.2.1.3.0 CIE WLS Config 12.2.1.3.0					
	Enterprise manager 12.2.1.3.0					
	WLS for FMW 12.2.1.3.0					
	FMW Platform Generic 12.2.1.3.0 OPatch 13.9.2.0.0					
	Toplink Developer 12.2.1.3.0					
	Next Step(s):					
See the online help for next steps after installation. Oracle Fusion Middleware 12c Infrastructure installation completed successfully						
				Help	< Back Next > Finish Cance	

#### Installation Complete Screen

This screen summarizes the installation that was just completed.

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

**Click Finish** 

#### 3.1.3 Verifying the Installation

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

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

Home

## 4. Oracle HTTP Server Installation

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

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

#### Oracle HTTP Server:

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

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

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 (OHS)

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

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

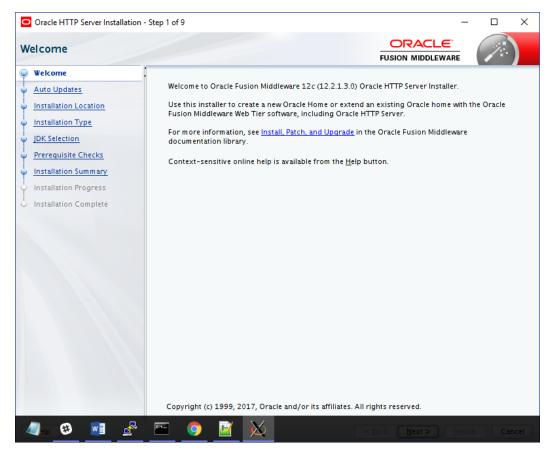
./fmw\_12.2.1.3.0\_ohs\_linux64.bin Now, follow the instructions as shown below to install Webtier,

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

Oracle Fusion Middleware	I	-		×	
Installation Invo			7	)	
<b>Central Inventory Directory</b> Enter the Central inventory directory for all your oracle installations.The installer will create a new central inventory directory if it does not exist.					
Inventory Directory:	/home/devops/oralnventory			<u>B</u> rowse	
	Enter the full path for the director	у.			
Operating System Group :	devops		-		
	Specify a group with write permiss directory	sion to the inventory			
Central Inventory Pointer	File				
Click OK to create a script (createCentralInventory.sh) in the inventory directory. Run this script to create a pointer file, which is used to identity the location of the central inventory for future installations and administrative operations, such as patching and upgrade.					
Help		0	K	Cance	el

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

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



#### Welcome Screen

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

Click Next to continue.

Oracle HTTP Server Installation	- Step 2 of 9	- 🗆 X
Auto Updates		
Auto Updates	Skip <u>A</u> uto Updates Select patches from <u>directory</u> Location: Search <u>My</u> Oracle Support for Updates Username: Password: Proxy Settings Search Search	
Help		< <u>Back</u> <u>Next</u> > <u>Finish</u> Cancel

**Install Software Updates Screen** 

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

#### Select Installation Location

Oracle HTTP Server Installation	- Step 3 of 9
Installation Location	
<u>Welcome</u>	<u>O</u> racle Home:
Auto Updates	/home/devops/Oracle/Middleware/Oracle_Home
Installation Location	Feature Sets Installed At Selected Oracle Home: View
Installation Type	
JDK Selection	
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> <u>Next</u> > <u>Finish</u> Cancel

Specify the following installation locations:

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

#### Select Installation Type Screen

Oracle HTTP Server Installation	- Step 4 of 9 — 🗆	×
Installation Type		
Welcome     Auto Updates     Installation Location     Installation Type     JDK Selection     Prerequisite Checks     Installation Summary     Installation Progress     Installation Complete	<ul> <li>Standalone HTTP Server (Managed independently of WebLogic server)</li> <li>Collocated HTTP Server (Managed through WebLogic server)</li> <li>Oracle HTTP Server 12.2.1.3.0</li> <li>Oracle HTTP Server 12.2.1.3.0</li> <li>Java Runtime Environment Oracle JRE 12.2.1.3.0</li> <li>Oracle Common Configuration Infrastructure CIE CAM Shared Config 12.2.1.3.0</li> <li>Infrastructure Database Client 12.1.0.2.0 FMW Upgrade 12.2.1.3.0 OAM WebCate For Oracle HTTP Server 12.2.1.3.0 OPatch 13.9.2.0.0 LDAP 12.2.1.3.0</li> </ul>	
Help	< <u>Back</u> <u>Next&gt;</u> <u>Einish</u> Ca	ncel

The following are the Installation Types available.

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

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

#### Select JDK home

Oracle HTTP Server Installation	Step 5 of 9 – 🗆 🗙
JDK Selection	
Y Welcome	JDK Home:
Auto Updates	/home/devops/Oracle/Middleware/Oracle_Home/oracle_common/jdk/jre
Installation Location	
Installation Type	
JDK Selection	
Prerequisite Checks	
Installation Summary	
Installation Progress	
o Installation Complete	
	The selected JDK /home/devops/Oracle/Middleware/Oracle_Home3/oracle_common/jdk/jre will be used for this installation
Help	< <u>Back</u> <u>N</u> ext > <u>Finish</u> Cancel

Click Next to continue

#### **Prerequisite Checks Screen**

Oracle HTTP Server Installation -	Step 6 of 9 – 🗆 🗙
Prerequisite Checks	
Welcome	
Auto Updates	100%
Installation Location	Checking operating system certification
Installation Type	Checking operating system certification     Checking recommended operating system packages
JDK Selection	Checking recommended operating system packages      Checking kernel parameters
Prerequisite Checks	Checking kernel parameters     Checking physical memory
Installation Summary	Checking physical memory     Checking Java version used to launch the installer
Installation Progress	
i O Installation Complete	
	Stop         Rerun         Skip         ✓ View Successful Tasks         View Log
	A •
	Checking recommended operating system packages     Checking kernel parameters
	Em Checking physical memory
	🗈 – 🖉 Checking Java version used to launch the installer
<u>H</u> elp	< <u>Back</u> <u>Next</u> > <u>Finish</u> Cancel

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

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

Click Next to continue.

#### **Installation Summary**

Oracle HTTP Server Installatio	n - Step 7 of 9 X
nstallation Summary	
Welcome	□ Install Oracle HTTP Server (OHS)
Auto Updates	Installation Location
Installation Location	Oracle Home Location: /home/devops/Oracle/Middleware/Oracle_Home3
Installation Type	Log File Location: /tmp/Oralnstall2018-07-06_05-14-45AM/install2018-07-06_05-14-45A M.log
	Disk Space
JDK Selection	Required: 1781 MB
Prerequisite Checks	Available: 15408 MB
Installation Summary	Feature Sets to Install
-	CIE CAM Shared Config 12.2.1.3.0
Installation Progress	Oracle HTTP Server 12.2.1.3.0
Installation Complete	Oracle JRE 12.2.1.3.0
	Database Client 12.1.0.2.0
	FMW Upgrade 12.2.1.3.0 OAM WebGate For Oracle HTTP Server 12.2.1.3.0
	OPatch 13.9.2.0.0
	LDAP 12.2.1.3.0
	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	< <u>Back</u> <u>Next</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.

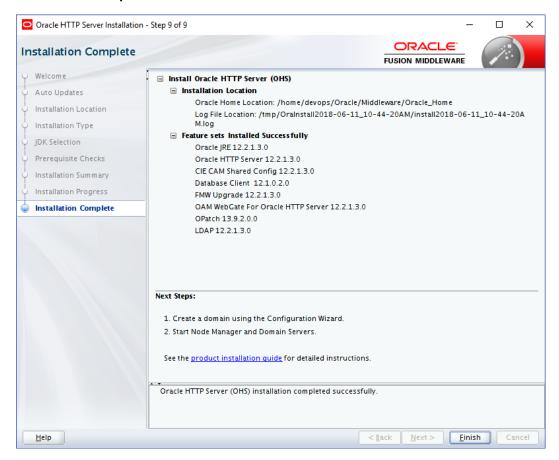
Click Install.

#### Installation Progress Screen

Oracle HTTP Server Installation - Ste	ep 8 of 9 − □ ×
Installation Progress	
Y Welcome	
Auto Updates	100%
Installation Location	✓ Prepare
🔆 Installation Type	
O IDK Selection	
<ul> <li>Prerequisite Checks</li> </ul>	Cenerating Libraries
Installation Summany	Performing String Substitutions
Installation Program	V Linking
Lastallation Complete	Setup
	Saving the inventory
	Post install scripts
	View Messages View Log
	Hardware and Software
	Engineered to Work Together
Help	< <u>Back</u> <u>Next&gt;</u> <u>Finish</u> Cancel

This screen shows the progress of the installation.

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



#### Installation Complete Screen

This screen summarizes the installation that was just completed.

Click Finish to dismiss the screen.

Configure the HTTP server

Follow below steps to configure domain for HTTP server

- 1. Browse <Middleware\_Home>/oracle\_common/common/bin directory
- 2. Execute below command

## ./config.sh

Below screen will be displayed

Fusion Middleware Configuration	on Wizard - Page 1 of 6	5				_		×
Configuration Type				Ē				
Create Dornain Templates JDK Selection Configuration Summary Configuration Progress End Of Configuration	What do you want © <u>Create a new du</u> Dupdate an exist Domain Location: Create a new domai	omain ting domain Dracle/Middlewar	e/Oracle_Home,					owse
Help				< <u>B</u> ack	<u>N</u> ext >	Einish	C	ancel

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

Fusion Middleware Configuration	on Wizard - Page 1 of	6				_		ı ×
Configuration Type				FI				
🔍 Create Domain	•							
🗼 <u>Templates</u>								
JDK Selection								
Configuration Summary								
Configuration Progress								
End Of Configuration	What do you want	lomain sting domain	eware/Oracle_H	lome/user_proje	:ts/domains/b	oase_doma	ain	Browse
	Create a new doma	ún.						
Help				< <u>B</u> ack	<u>N</u> ext >	Einish		Cancel

4. Select Oracle HTTP Server option and click Next

Fusion Middleware Configurat	ion Wizard - Page 2 of 8	}			_		×
Templates						/	
Create Domain Templates JDK Selection System Components OHS Server Configuration Summary Configuration Progress End Of Configuration	Filter Templates Available Templ Basic Standa	Include all <u>s</u> elected template	12.2.1.3.(	nclude all previou 0 [wiserver] *	usly applie	ed templat	
Help			< <u>B</u> ack	<u>N</u> ext >	Einish		ancel

5. Click Next



6. Enter below details and click Next

System Component: Set the Instance name

Component Type: Should be OHS

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

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

Fusion Middleware Configuration	ion Wizard - Page 4 of 9			– 🗆 ×
System Components				
T Create Domain Templates	Add X Dele	ite	(	🗐 Dis <u>c</u> ard Changes
UDK Selection	System Component	Component Type	Restart Interval Seconds	Restart Delay Seconds
System Components	ohs1	OHS 🔹	3600	0
Node Manager Configuration Summary Configuration Progress End Of Configuration				
Help			< Back Next >	Einish Cancel

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

Fusion Middleware Configuration	Wizard - Page 5 of 9				_		×
OHS Server			Ē				)
Create Domain Templates	System Component	ohs1					•
JDK Selection     System Components	Admin Host	obdxohs.in.oracle.com					
OHS Server	Admin Port	9999					
<ul> <li><u>Node Manager</u></li> <li><u>Configuration Summary</u></li> </ul>	Listen Address	obdxohs.in.oracle.com					
Configuration Progress	Listen Port	7777					
O End Of Configuration	SSL Listen Port	4443					
	Server Name	http://obdxohs.in.oracle.com:77	777				
Help			< <u>B</u> ack	Next >	<u>F</u> inish	Car	ncel

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

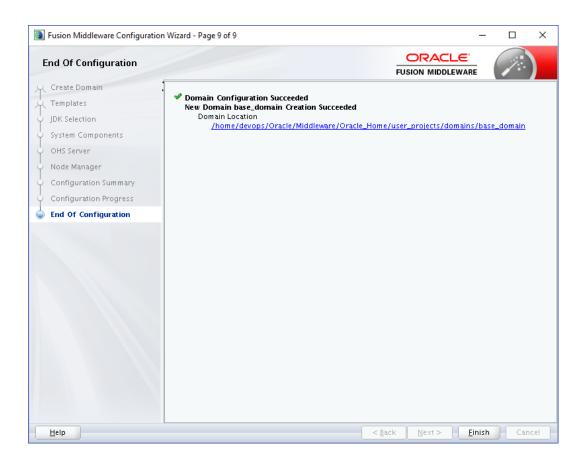
Fusion Middleware Configuration Wizard - Page 6 of 9	– 🗆 X
Node Manager	
Create Domain Templates JDK Selection System Components OHS Server Node Manager Configuration Summary Configuration Progress End Of Configuration Node Manager Home: [cle_Home/u Node Manager Credentials Username: obdxohsnoc Password: obdxohsnoc Password: obdxohsnoc	ser_projects/domains/base_domain/nodemanager] Browse
Help	< <u>B</u> ack <u>N</u> ext > Einish Cancel

9. Review summary and click Create

Fusion Middleware Configuration	on Wizard - Page 7 of 9	– 🗆 X
Configuration Summary		
Create Domain Templates JDK Selection System Components OHS Server Node Manager Configuration Summary Configuration Progress End Of Configuration	View: System Components	Admin Host: obdxohs.in.oracle.com Admin Port: 9999 Listen Address: obdxohs.in.oracle.com Listen Port: 7777 SSL Listen Port: 4443 Server Name: http://obdxohs.in.oracle.com:777
	Select <b>Create</b> to accept the above options and start crea above configuration before starting Domain Creation, g the left pane, or by using the <b>Back</b> button.	
Help		< <u>B</u> ack <u>N</u> ext > <u>C</u> reate Cancel

10. Below installation progress can be seen

Pusion ivilduleware Configurati	ion Wizard - Page 8 of 9	-		×
Configuration Progress			7	)
A Create Domain	15%			
A Templates	1070			
ပုံ JDK Selection	Copy Unprocessed Artifacts			
System Components	Security Processing     Artifacts Generation			
OHS Server	String Substitution			
V Node Manager	Post Processing			
Configuration Summary				
or Configuration Progress				
O End Of Configuration				
Нер	< <u>Back</u> <u>Next&gt;</u>	Einish	Car	ncel
	- <u> </u>	] [		
Fusion Middleware Configurati Configuration Progress	ORAC			×
	FUSION MIDDL	EWARE		
	100%			
A Templates	100%			
JDK Selection	Copy Unprocessed Artifacts			
System Components	Copy Unprocessed Artifacts  Security Processing  Artifacts Generation			
<ul> <li>System Components</li> <li>OHS Server</li> </ul>	<ul> <li>Security Processing</li> <li>Artifacts Generation</li> <li>String Substitution</li> </ul>			
System Components	Security Processing     Artifacts Generation			
<ul> <li>System Components</li> <li>OHS Server</li> </ul>	<ul> <li>Security Processing</li> <li>Artifacts Generation</li> <li>String Substitution</li> </ul>			
System Components     OHS Server     Node Manager     Configuration Summary     Configuration Progress	<ul> <li>Security Processing</li> <li>Artifacts Generation</li> <li>String Substitution</li> </ul>			
<ul> <li>System Components</li> <li>OHS Server</li> <li>Node Manager</li> <li>Configuration Summary</li> </ul>	<ul> <li>Security Processing</li> <li>Artifacts Generation</li> <li>String Substitution</li> </ul>			



### 4.2 Verifying the Installation

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

- Verifying the Installation Logs: Verify the installation logs using the Log file location available in installation complete screen (or <User home dir>/oralnventory/logs).
- Verifying the OPMN Status: Run the below commands from the <Domain\_directory>/bin directory on UNIX, in your instance home location. For example:
- Start NodeManager

cd

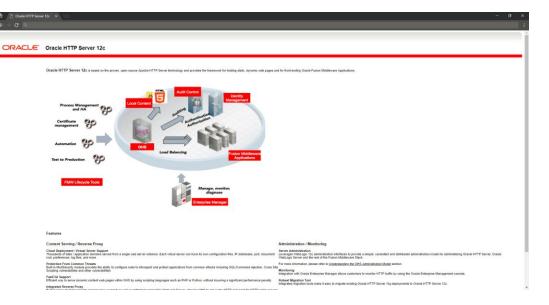
/home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/base\_domain/bin

./startNodeManager.sh

• Start component

./startComponent.sh ohs1

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



### http://<HTTPSERVERHOSTNAME>:<HTTPSERVERLISTENPORT>

**Home** 

# 5. Oracle HTTP Server Webgate Installation and Configuration

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

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

- Section 5.1, " Configuring Oracle Webgate"
- Section 5.2, "Post-Installation Steps for Oracle HTTP Server WebGate"
- Section 5.3, "Verifying the Installation and Configuration of Oracle HTTP Server WebGate"
- Section 5.4, "Registering the New Oracle HTTP Server 12c WebGate"

### 5.1 Configuring Oracle Webgate

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

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

### cd /home/devops/Oracle/Middleware/Oracle Home/webgate/ohs/tools/deployWebGate

• Run the following command to copy the required bits of agent from the *Oracle Home* directory to the *OHS Master Config Directory* location:

./deployWebGateInstance.sh -w OHS\_Master\_Config\_Directory oh Oracle Home For .e.g:

./deployWebGateInstance.sh -w /home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/bas e\_domain/config/fmwconfig/components/OHS/ohs1 -oh /home/devops/Oracle/Middleware/Oracle\_Home

[devops@ deployWebGate]\$ ./deployWebGateInstance.sh -w /home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/base\_domain/config/ fmwconfig/components/OHS/ohs1 -oh /home/devops/Oracle/Middleware/Oracle\_Home Copying files from WebGate Oracle Home to WebGate Instancedir

In this command:

**Oracle\_Home** is the directory in which you have installed Oracle HTTP Server WebGate. Example: /home/devops/Oracle/Middleware/Oracle\_Home

**OHS\_Master\_Config\_Directory** is the location of the directory where the main Oracle HTTP Server configuration files are kept. Example:

/home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/base\_domain/config/fmw config/components/OHS/ohs1 Run the following command to ensure that the LD\_LIBRARY\_PATH variable contains Oracle\_Home\_for\_Oracle\_HTTP\_Server/lib:

**export LD\_LIBRARY\_PATH=\$LD\_LIBRARY\_PATH:** *Oracle\_Home*/lib From your present working directory, move to directory:

cd Oracle\_Home/webgate/ohs/tools/setup/InstallTools

cd

/home/devops/Oracle/Middleware/Oracle Home/webgate/ohs/tools/setup/In stallTools/ On the command line, run the following command to copy the apache webgate.template file from the Oracle Home directory to the Server configuration main Oracle HTTP directory (re-named to webgate.conf) and update the httpd.conf file to add one line to include the name Of webgate.conf:./EditHttpConf [w OHS Master Config Directory [-oh Oracle Home] o output file]

For e.g.:

./EditHttpConf -w /home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/bas e\_domain/config/fmwconfig/components/OHS/ohs1 -oh /home/devops/Oracle/Middleware/Oracle\_Home

[devops@ InstallTools]\$ ./EditHttpConf -w /home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/base\_domain/config/fmwconfig/com ponents/OHS/ohs1 -oh /home/devops/Oracle/Middleware/Oracle Home The web server configuration file was successfully updated /home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/base\_domain/config/fmwconfig/components/OHS/ohs1/httpd.conf has been backed up as /home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/base\_domain/config/fmwconfig/components/OHS/ohs1/httpd.conf.ORIG

In this command:

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

OHS\_Master\_Config\_Directoryis the location of the directory where the main OracleHTTPServerconfigurationfilesarekept.Example:/home/devops/Oracle/Middleware/Oracle\_Home/user\_projects/domains/base\_domain/config/fmwconfig/components/OHS/ohs1g/fmwconfig/components/OHS/ohs1

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

Note: The -oh Oracle\_Home and -o output\_file parameters are optional.

### 5.2 Verifying the configuration of Oracle HTTP Server 12c WebGate

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

### 5.3 Registering the New Oracle HTTP Server 12c WebGate

Before you can use the new Oracle HTTP Server 12c WebGate agent for Oracle Access Manager, you must register the new WebGate agent with Oracle Access Manager by using the Oracle Access Manager Administration Console.

Refer to the Section 8.1 "Creating WebGate Agent on OAM Console" under Oracle Access Management Configuration chapter.

<u>Home</u>

## 6. Oracle Business Intelligence Publisher Installation

To install Oracle Business Intelligence Installation refer https://docs.oracle.com/middleware/bi12214/lcm/BIEIG/toc.htm .

**Home** 

### 7. OAM Configurations for OBDX Mobile Apps

Resources to be protected in OAM

Launun Pe	ad Application	Domain × obdxoh	ns.in.oracle.com ×				
Access M	ananer a						
		le.com Applic	No. Description				
				urces, and the associated poli	cles that dictate who can access speci	fic protected resources.	
		The Deserve of the		s Token Issuance Policies			
		id an existing Resource	ce or click the New Resource	e button to create a new one.			
1 26	arch						
	Resource Type	HTTP 🗸	•	Query String			
	Host Identifier		Autho	entication Policy	~		
	Resource URL		Auth	norization Policy	~		
						Search	Reset
Coare	h Paculte					Search	Reset
	h Results					Search	Reset
	th Results	+ Create 🗠	Duplicate 🥜 Edit 👌	C Delete 🔂 Detach		Search	Reset
			Duplicate / Edit ) Resource URL	Collecte Collection	Authentication Policy	Search Authorization Policy	Reset
Action Row	Resource		Resource URL		Authentication Policy Public Resource Policy		Reset
Action Row	Resource Type	Host Identifier	Resource URL			Authorization Policy Public Resource Policy	Reset
Action Row	Resource Type HTTP	Host Identifier	Resource URL /digx/** /home.html		Public Resource Policy	Authorization Policy Public Resource Policy	Reset
Action Row	Resource Type HTTP HTTP	Host Identifier obdxotis in oracl. obdxotis in oracl.	Resource URL /digx/** /home.html		Public Resource Policy	Authorization Policy Public Resource Policy Protected Resource Policy	Reset
Action Row 1 3 3 4 4	is + View + <b>Resource</b> <b>Туре</b> 1 НТТР 2 НТТР 4 НТТР 4 НТТР 5 НТТР	Host Identifier obdxotis in oracl. obdxotis in oracl. obdxotis in oracl. obdxotis in oracl.	Resource URL /digx/** /home.html /**		Public Resource Policy Protected Resource Policy Protected Resource Policy	Authorization Policy Public Resource Policy Protected Resource Policy	Reset
Action Row 1 5 6	Resource Type HTTP HTTP HTTP HTTP HTTP	Host Identifier obdxotis in oracl. obdxotis in oracl. obdxotis in oracl. obdxotis in oracl.	Resource URL Idigot** finome.html /* Ioarn/pages/consent.jsp Ioauth2/test/approval		Public Resource Policy Protected Resource Policy Protected Resource Policy	Authorization Policy Public Resource Policy Protected Resource Policy Protected Resource Policy	Reset

In httpd.conf of OHS of OBDX and OHS ensure OPTION request return 200, using below block

```
<IfModule mod_rewrite.c>
RewriteEngine On
RewriteCond %{REQUEST_METHOD} OPTIONS
RewriteRule ^(.*)$ $1 [R=200,L]
</IfModule>
```

In OBDX UI which is deployed on OHS make sure the authenticator type is set to "OAMAuthenticator" in file  $\rightarrow$  framework/js/configurations/config.js

Ensure PKCE is enabled in OAM by applying the patch given in below link at - Proof Key for Code Exchange (PKCE) Support in OAM

https://docs.oracle.com/en/middleware/idm/access-manager/12.2.1.4/aiaag/configuring-oauth-services-12c.html#GUID-D48FC8CC-653B-44AF-9E09-9182C7973D63

Ensure mod\_wl\_ohs.conf changes are completed as given in below link

https://docs.oracle.com/en/middleware/idm/access-manager/12.2.1.4/aiaag/configuring-oauth-services-12c.html#GUID-9403C910-556B-486D-BC36-1F997FA1858C

		Application Security	A Federation	¢ Contigura
Launch Pad Available Services ×				
Configuration >				
Available Services				
The following is the list of services installed in your current deploy		service and will not uninstall it from	the system.	
A	Application Security			
Access Manager		Enabled	Disable S	Service
		Enabled		
Adaptive Authentication Servic	<b>a</b>		Disable S	onvino.
	,	Enabled	Disable 3	ervice
OAuth and OpenIDConnect Ser	vice		Disable S	ervice
W1010		Enabled		
4	Lange Federation			
Identity Federation			Disable S	Gervice
		Enabled		
		8		
Access Portal Service			Enable S	ervice
		Disabled		

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

To define OAuth Clients in OAM, invoke below REST APIs as OAM does not provide a screen to define the OAuth client.

OAM Admin console credentials are required to invoke these APIs.

### **Domain Creation:**

```
http://<OAM Host>:<OAM
```

Port>/oam/services/rest/ssa/api/v1/oauthpolicyadmin/oauthidentitydomain

Headers – Authorization: Basic <Base64 of UID:PWD>, Content-Type: application/json, Method : POST

Configure identityProvider & refreshTokenExpiry as required

### 1. Mobile App Login

{

"name": "OBDXMobileAppDomain",

"identityProvider": "OUD12",

### "tokenSettings": [{

"tokenType": "ACCESS\_TOKEN",

"tokenExpiry": 600,

"lifeCycleEnabled": true,

"refreshTokenEnabled": true,

- "refreshTokenExpiry": 864000,
- "refreshTokenLifeCycleEnabled": true

#### }, {

"tokenType": "AUTHZ\_CODE", "tokenExpiry": 600, "lifeCycleEnabled": true, "refreshTokenEnabled": true, "refreshTokenExpiry": 864000, "refreshTokenLifeCycleEnabled": true

### }]

,"customAttrs": "{\"usePKCE\":\"ALL\_CLIENTS\_TYPES\"}

### }

### 2. Siri

{

"name": "OBDXSiriDomain", "identityProvider": "OUD12", "tokenSettings": [{ "tokenType": "ACCESS\_TOKEN", "tokenExpiry": 600, "lifeCycleEnabled": true, "refreshTokenEnabled": true, "refreshTokenExpiry": 864000, "refreshTokenLifeCycleEnabled": true

### }, {

"tokenType": "AUTHZ\_CODE", "tokenExpiry": 600, "lifeCycleEnabled": true, "refreshTokenEnabled": true,

"refreshTokenExpiry": 864000,

"refreshTokenLifeCycleEnabled": true

### }]

,"customAttrs": "{\"usePKCE\":\"ALL\_CLIENTS\_TYPES\"}

### }

### 3. Wearables

{

"name": "OBDXWearDomain", "identityProvider": "OUD12", "tokenSettings": [{ "tokenType": "ACCESS\_TOKEN", "tokenExpiry": 600, "lifeCycleEnabled": true, "refreshTokenEnabled": true, "refreshTokenExpiry": 864000, "refreshTokenLifeCycleEnabled": true

}, {

"tokenType": "AUTHZ\_CODE", "tokenExpiry": 600, "lifeCycleEnabled": true, "refreshTokenEnabled": true, "refreshTokenExpiry": 864000, "refreshTokenLifeCycleEnabled": true

}]

,"customAttrs": "{\"usePKCE\":\"ALL\_CLIENTS\_TYPES\"}

}

### 4. Mobile Snapshot

{

"name": " OBDXSnapshotDomain", "identityProvider": "OUD12", "tokenSettings": [{ "tokenType": "ACCESS\_TOKEN", "tokenExpiry": 600, "lifeCycleEnabled": true, "refreshTokenEnabled": true, "refreshTokenExpiry": 864000, "refreshTokenLifeCycleEnabled": true

}, {

"tokenType": "AUTHZ\_CODE", "tokenExpiry": 600, "lifeCycleEnabled": true, "refreshTokenEnabled": true, "refreshTokenExpiry": 864000, "refreshTokenLifeCycleEnabled": true

### }]

,"customAttrs": "{\"usePKCE\":\"ALL\_CLIENTS\_TYPES\"}

}

### 5. Soft Token App

{

```
"name": " OBDXSofttokenDomain",
"identityProvider": "OUD12",
"tokenSettings": [{
"tokenType": "ACCESS_TOKEN",
"tokenExpiry": 600,
"lifeCycleEnabled": true,
"refreshTokenEnabled": true,
```

"refreshTokenExpiry": 864000, "refreshTokenLifeCycleEnabled": true

}, {

```
"tokenType": "AUTHZ_CODE",
"tokenExpiry": 600,
"lifeCycleEnabled": true,
"refreshTokenEnabled": true,
"refreshTokenExpiry": 864000,
"refreshTokenLifeCycleEnabled": true
```

}]

,"customAttrs": "{\"usePKCE\":\"ALL\_CLIENTS\_TYPES\"}

}

### **Resource Server:**

http://<OAM Host>:<OAM Port>/oam/services/rest/ssa/api/v1/oauthpolicyadmin/application

Headers – Authorization: Basic <Base64 of UID:PWD>, Content-Type: application/json, Method : POST

### 1. Mobile App

{

```
"name": "OBDXMobileAppResServer",

"description": "Resource Server for Mobile",

"scopes": [{

    "scopeName": "OBDXLoginScope",

    "description": "OBDXLoginScope"

    },

    {

    "scopeName": "ValidateDeviceScope",

    "description": "ValidateDeviceScope"

    }
```

```
],
"tokenAttributes": [],
"idDomain": "OBDXMobileAppDomain",
"audienceClaim": {}
```

### }

2. Siri

```
{
```

```
"name": "OBDXSiriResServer",
"description": "Resource Servcer for Siri",
"scopes": [{
scopeName": "ValidateDeviceScope",
"description": "ValidateDeviceScope"
```

### }],

```
"tokenAttributes": [],
"idDomain": "OBDXSiriDomain",
"audienceClaim": {}
```

### }

### 3. Wearables

### {

"name": "OBDXWearResServer",

"description": "Resource Servcer for Wearables", "scopes": [{

> "scopeName": "ValidateDeviceScope", "description": "ValidateDeviceScope"

### }],

"tokenAttributes": [], "idDomain": "OBDXWearDomain", "audienceClaim": {}

### }

### 4. Mobile Snapshot

### {

"name": "OBDXSnapshotResServer", "description": "Resource Servcer for Snapshot", "scopes": [{ "scopeName": "ValidateDeviceScope",

"description": "ValidateDeviceScope"

#### }],

"tokenAttributes": [], "idDomain": "OBDXSnapshotDomain",

```
"audienceClaim": {}
```

```
}
```

### 5. Soft Token

{

```
"name": "OBDXSofttokenResServer",
```

"description": "Resource Server for Softtoken",

"scopes": [{

"scopeName": "OBDXLoginScope", "description": "OBDXLoginScope"

}], "tokenAttributes": [], "idDomain": "OBDXSofttokenDomain", "audienceClaim": {}

}

### Clients :

http://<OAM Host>:<OAM Port>/oam/services/rest/ssa/api/v1/oauthpolicyadmin/client

Headers - Authorization: Basic < Base64 of UID: PWD>, Content-Type: application/json, Method : POST

### 1. Mobile App

### **User/Password Login**

{

```
"attributes": [],
         "secret": "welcome1",
         "id": "2d79e939e0424mobapp8e5fab436fb5581a",
         "scopes": ["OBDXMobileAppResServer.OBDXLoginScope"],
         "clientType": "PUBLIC_CLIENT",
         "idDomain": "OBDXMobileAppDomain",
         "description": "OBDXMobileAppClienta",
         "name": "OBDXMobileAppClienta",
         "grantTypes": ["REFRESH_TOKEN", "AUTHORIZATION_CODE"],
         "defaultScope": "OBDXMobileAppResServer.OBDXLoginScope",
         "redirectURIs": [{
                  "url": "zigbank://oauthredirect",
                  "isHttps": true
         }]
         , "usePKCE": "STRICT"
Biometric Login
```

### {

}

"attributes": [], "secret": "welcome1",

```
"id": "2d79e939e0424mobapp8e5fab436fb5581A",
"scopes": ["OBDXMobileAppResServer.ValidateDeviceScope"],
"clientType": "MOBILE_CLIENT",
"idDomain": "OBDXMobileAppDomain",
"description": "OBDXMobileAppClientA",
"name": "OBDXMobileAppClientA",
"grantTypes": ["REFRESH_TOKEN", "AUTHORIZATION_CODE"],
"defaultScope": "OBDXMobileAppResServer.ValidateDeviceScope",
"redirectURIs": [{
            "url": "zigbank://oauthredirect",
            "isHttps": true
}]
, "usePKCE": "STRICT"
```

```
}
```

### 2. Siri

{

```
"attributes": [],
"secret": "welcome1",
"id": "2d79e939e0424sirichat8e5ab43fb5591",
"scopes": ["OBDXSiriResServer.ValidateDeviceScope"],
"clientType": "MOBILE_CLIENT",
"idDomain": "OBDXSiriDomain",
"description": "OBDXSiriClient",
"name": "OBDXSiriClient",
"grantTypes": ["REFRESH_TOKEN", "AUTHORIZATION_CODE"],
"defaultScope": "OBDXSiriResServer.ValidateDeviceScope",
"redirectURIs": [{
        "url": "zigbank://oauthredirect",
        "isHttps": true
}]
```

, "usePKCE": "STRICT"

}

#### 3. Wearables

```
{
```

```
"attributes": [],

"secret": "welcome1",

"id": "2d79e939e0424wearable8e5ab43fb5591",

"scopes": ["OBDXWearResServer.ValidateDeviceScope"],

"clientType": "MOBILE_CLIENT",

"idDomain": "OBDXWearDomain",

"description": " OBDXWearClient",

"name": "OBDXWearClient",
```

```
"grantTypes": ["REFRESH_TOKEN", "AUTHORIZATION_CODE"],

"defaultScope": "OBDXWearResServer.ValidateDeviceScope",

"redirectURIs": [{

    "url": "zigbank://oauthredirect",

    "isHttps": true

}]

, "usePKCE": "STRICT"
```

```
4. Mobile Snapshot
```

```
{
```

}

"attributes": [],

```
"secret": "welcome1",
"id": "2d79e939e0424snapshot8e5ab43fb5591",
"scopes": ["OBDXSnapshotResServer.ValidateDeviceScope"],
"clientType": "MOBILE_CLIENT",
"idDomain": "OBDXSnapshotDomain",
"description": "OBDXSnapshotClient",
"name": "OBDXSnapshotClient",
"grantTypes": ["REFRESH_TOKEN", "AUTHORIZATION_CODE"],
"defaultScope": "OBDXSnapshotResServer.ValidateDeviceScope",
"redirectURIs": [{
        "url": "zigbank://oauthredirect",
        "isHttps": true
```

#### }]

, "usePKCE": "STRICT"

#### }

### 5. Soft Token

{

```
"attributes": [],
"secret": "welcome1",
"id": "2d79e939e0424sotapp8e5fab436fb5581",
"scopes": ["OBDXSofttokenResServer.OBDXLoginScope"],
"clientType": "PUBLIC_CLIENT",
"idDomain": "OBDXSofttokenDomain",
"description": "OBDXSofttokenDomain",
"name": "OBDXSofttokenClient",
"grantTypes": ["AUTHORIZATION_CODE"],
"defaultScope": "OBDXSofttokenResServer.OBDXLoginScope",
"redirectURIs": [{
        "url": "zigbank://oauthredirect",
        "isHttps": true
}]
```

#### }]

, "usePKCE": "STRICT"

Update the client ids in DIGX\_FW\_ACCESSPOINT table or from admin screen under touch point maintenance

АРМОВАРР	2d79e939e0424mobapp8e5fab436fb5581A
APSIRICHATBOT	2d79e939e0424sirichat8e5ab43fb5591
APWEARABLE	2d79e939e0424wearable8e5ab43fb5591
APSNAPSHOT	2d79e939e0424snapshot8e5ab43fb5591
APSOFTTOKEN	2d79e939e0424sotapp8e5fab436fb5581

}