

Oracle Banking APIs

Installation Guide

Release 18.1.0.0.0

Part No. E94092-01

April 2018

ORACLE®

Installation Guide

April 2018

Oracle Financial Services Software Limited

Oracle Park

Off Western Express Highway

Goregaon (East)

Mumbai, Maharashtra 400 063

India

Worldwide Inquiries:

Phone: +91 22 6718 3000

Fax: +91 22 6718 3001

www.oracle.com/financialservices/

Copyright © 2018, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are “commercial computer software” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Table of Contents

1.	Preface.....	4
2.	Introduction.....	6
3.	Prerequisites.....	7
4.	Installation.....	9
5.	Installation In Silent Mode	22
6.	Installer Verification	25
7.	Installer Scope	26
8.	Post Installation Steps	31
9.	OBAPIs Product Verification	61
10.	Configuration for OUD/OAM	64
11.	Multi Entity	77
12.	Multi-entity installation In Silent Mode	82
13.	OBAPIs Product Security	85
14.	Troubleshoot Overview	86

1. Preface

1.1 Intended Audience

This document is intended for the following audience:

- Customers
- Partners

1.2 Documentation Accessibility

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

1.3 Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

1.4 Structure

This manual is organized into the following categories:

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

The subsequent chapters cover following:

- Introduction
- Prerequisites
- Installation
- Post Installation Steps
- Product Verification
- Multi-Entity Installation and configuration

1.5 Related Information Sources

For more information on Oracle Banking APIs Release 18.1.0.0.0, refer to the following documents:

- Oracle Banking APIs Licensing Guide
- Oracle Banking APIs Installer Pre-Requisite Setup Manual
- Oracle Banking APIs OBP Base Setup and Configuration
- Oracle Banking APIs OBP US LZN Setup and Configuration
- Oracle Banking APIs OFSLL Setup Configuration
- Oracle Banking APIs Origination Social Media Integration
- Oracle Banking APIs OHS User Interface Configuration
- Oracle Banking APIs Chatbot Configuration

- Oracle Banking APIs Mobile Application Builder-Android
- Oracle Banking APIs Mobile Application Builder-iOS
- Oracle Banking APIs Security Guide
- Oracle Banking APIs System Configuration
- User Manual Oracle Banking APIs Core
- Oracle Banking APIs File Upload Report Configuration

2. Introduction

2.1 Purpose of the Document

The purpose of the OBAPIs Installation Manual is to provide a step by step overview on the installation process of the solution.

It includes:

- Reference to prerequisites software installation required for OBAPIs & OBAPIs installer
- Setup of OBAPIs with Oracle's own Core Banking and Origination Products along with Third-party HOST system.
- Running the installation in silent mode
- Advanced Configurations (Post installation)
- Installation Verification
- Multi-Entity Installation and configuration

[Home](#)

3. Prerequisites

OBAPIs pre-requisite software should be installed and available before proceeding.

For OBAPIs pre-requisite software setup refers document “Oracle Banking APIs Installer Pre-Requirement Setup Manual” mentioned in section 1.5 Related Information Sources.

Installer Pre-requisite verification

Post installation of OBAPIs Installer prerequisite software’s, verification can be done using below steps.

Note: Verification should be performed on Server where Oracle Weblogic is locally installed and by OS user (which is owner for Oracle Weblogic home directory) for non-root steps. The same user will be used to execute installer.

Oracle Instant client

Step 1: Login using root user.

Step 2: Run below command to verify if Oracle Instant client is installed.

```
rpm -qa | grep oracle
```

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

Note: Above package verification command is specific to Oracle Linux and RHEL distributions only. For other Linux distributions or OS please refer to OS specific package manager documentation.

Python

Step 1: Execute python -V command

```
python -V
```

```
[          ]# python -V
Python 2.7.5
```

Note: Ensure Python 2.7.5 supported version is installed. Above command should reflect the same.

cx Oracle & Urwid

Step 1: Execute python command

```
python
```

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

Step 2: Import Urwid and check version

```
import urwid (Press Enter)  
urwid.__version__
```

```
[ urwid-1.3.1]# python  
Python 2.7.5 (default, May 8 2014, 17:35:19)  
[GCC 4.8.2 20140120 (Red Hat 4.8.2-16)] on linux2  
Type "help", "copyright", "credits" or "license" for more information.  
>>> import urwid  
>>> urwid.__version__  
'1.3.1'
```

If version is displayed, then Urwid is installed and available for use.

Note: Ensure Urwid 1.3.1 supported version is installed. Above command should reflect the same.

Step 3: Similarly import cx_Oracle and check version

```
import cx_Oracle (Press Enter)  
cx_Oracle.version
```

```
>>> import cx_Oracle  
>>> cx_Oracle.version  
'5.2.1'
```

If version is displayed, then cx_Oracle is installed and available for use.

Note: Ensure cx_Oracle 5.2.1 supported version is installed. Above command should reflect the same.

[Home](#)

4. Installation

Pre-Installation

- Install all the prerequisite software and packages mentioned above

Steps of Installation

- Download and extract the installer zip file (Base – non localization version).
- Navigate to “<OBAPIS INSTALLER DIR>/core/config”
- Open the “installer.properties” file to maintain key configurations for BASE ENTITY (OBAPIS_BU)

```

#####
# Installer Properties
#
# All entries to be made immediately after the '=' and WITHOUT quotation marks. i.e. '' or ""
#
#####

#####
#
# Weblogic Details
#
#####

#Middleware home path. Example /home/obdxuser/Oracle/Middleware/Oracle_Home - where you have sub-directories like wlsserver,oracle_common etc.
MiddlewareHome=

#JAVA home path. Example /home/obdxuser/jdk18 - where you have sub-directories like bin,jre,lib etc.
JAVA_HOME=

#Path where OBDX needs to be installed.
INSTALLATION_HOME=

#Domain name. The domain will be created by the name specified.
DomainName=

#Domain path. Example /home/obdxuser/domain.
DOMAIN_PATH=

#Domain user ID. The user id will be used to access the Weblogic Administrative console.
DomainUserID=

#Name of OBDX cluster.
ClusterName=

#Host name or IP address of managed server participating in the cluster.
ClusterMachineNameList=

#AdminServer port. It is the port to access the administrative console of the Weblogic server. Generally port 7001 is used as the AdminServer port.
HostMachinePort=

#AdminServer SSL port. It is the port used to securely access (https) the administrative console of the Weblogic server. Generally port 7002 is used as the AdminServer port.
HostMachineSSLPort=

#Node Manager Port. It is the port used by Node Manager to be configured for OBDX domain. Generally, 5556 is utilised as Node Manager Port.
NodeManagerPort=

#Managed Server name. This will be the name of managed server created in the OBDX cluster. i.e. If this is set as 'clip' managed servers would be clip1 etc.
ManagedServerName=

#Managed Server port. Managed server in OBDX cluster will utilize this port for hosting OBDX components and associated resources.
ManagedServerPort=

#Set the paths for the Persistence stores Audit; FileUpload and Reports JMS modules (for all supported OBDX host).
#####
Line: 1/204      Column: 1      Character: 35 (0x23)      Encoding: 1252 (ANSI - Lat)

```

IMPORTANT:

- Enter the values right after the “=” sign
- DO NOT change anything to the left of the “=”
- DO NOT change any of the flag values or pre-filled values (such as DataSourceName, DataSourceJNDI, Flag values etc) available post “Factory Shipped” section.
- Ensure there is no blank space after “=” sign

Only below parameters should be set in installer.properties file.

Component	Parameter	Description	Example
DB details (for Weblogic RCU and OBAPIs schema)	DatabaseHostName	Enter the hostname of the database server which would host the database schema for OBAPIs and RCU	ofss310759
	DatabaseHostPort	Enter the port number of the database listener	1521
	DatabaseHostSID	Enter the Oracle Service Name for database instance	OBAPISID
	DB_SYS_USER	Enter the username with 'sys' privileges	sys
	POST_FIX	For OBAPIs schema name like "OBAPIS_DEV" POST FIX is 'DEV'. SHOULD BE IN UPPERCASE ONLY.	DEV
	DIRECTORY_NAME	Enter the directory name in which you want the OBAPIs schema tablespace datafile to be created. Enter Logical name (i.e. DIRECTORY_NAME column) from DBA_DIRECTORIES table NOT the physical path.	OPATCH_LOG_DIR

Component	Parameter	Description	Example
UBS DB details (to be configured only in-case of FLAVOR as UBS)	DatabaseHostNameUBS	Enter the hostname for the UBS HOST database host server	ofss310759
	DatabaseHostPortUBS	Enter the port number of the UBS database listener	1521
	SCHEMA_NAME_UBS	Enter the Complete OBAPIs-EXT (B1A1) HostInterfaceschema name you want installer to create as new schema. SHOULD BE IN UPPERCASE ONLY.	UBSSCHEMA123
	DIRECTORY_NAME_UBS	Enter the directory name in which you want the OBAPIs-EXT (B1A1) schema tablespace datafile to be created. Enter Logical name (i.e. DIRECTORY_NAME column) from DBA_DIRECTORIES table NOT the physical path.	OPATCH_LOG_DIR

	DB_SYS_USER_UBS	Enter the username with 'sys' privileges	sys
	DatabaseHostSID_UBS	Enter the UBS Host database Service Name	UBSSID
	UBS_SCHEMA	Enter the EXISTING UBS Host schema name	OBAPISUBS
	UBS_CCY	Enter the Country code for UBS HOME Branch	GB
	UBS_HB	Enter the Branch code for code for UBS HOME Branch	AT3

Component	Parameter	Description	Example
WEBLOGIC server details	MiddlewareHome	Middleware home path. Example /home/obapisuser/Oracle/Middleware/Oracle_Home - where you have directories like wlsserver,oracle_common etc.	/home/obapisuser/Oracle/Middleware/Oracle_Home
	JAVA_HOME	Path where JAVA (JDK) is installed	/home/obapisuser/jdk18
	INSTALLATION_HOME	Path where OBAPIs is to be installed. All configuration files will be copied as a sub-directory "config" under this directory. DO NOT KEEP INSTALLATION_HOME AS MiddlewareHome.	/home/obapisuser/obapis
	DOMAIN_PATH	Path where OBAPIs Weblogic domain should be created. Users can now enter custom path as per their requirements.	/home/obapisuser/domains
	ClusterName	Name of cluster; this cluster would have one single managed server.	obapis_cluster
	ClusterMachineNameList	Host name or IP address of managed server participating in the cluster. Currently only single node is supported.	ofss310759

	HostMachinePort	AdminServer port. It is the port to access the administrative console of the Weblogic server. Generally port 7001 is used as the AdminServer port.	7001
	HostMachineSSLPort	AdminServer SSL port. It is the port used to securely access (https) the administrative console of the Weblogic server. Generally port 7002 is used as the AdminServer port.	7002
	NodeManagerPort	Node Manager Port. It is the port used by Node Manager to be configured for OBAPIs domain. Generally, 5556 is utilized as Node Manager Port. Custom ports are supported.	5556
	ManagedServerName	Managed server name. This will be the name of the managed server created in the cluster followed by indexes. eg- If this is set as 'clip' managed servers would be clip1etc.	clip
	ManagedServerPort	Managed Server Port. Managed server will utilize this port for hosting OBAPIs components and associated resources.	9001
	DomainName	Enter Weblogic Domain name.	obapis_domain1
	DomainUserID	Domain user ID. The user id will be used to access the Weblogic Administrative console.	weblogic
	FileUploadFileStore (to be configured for all OBAPIs supported HOST)	Set the paths for the persistence stores of the FileUpload JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME.	/scratch/obapis/FileUpload
	AuditFileStore (to be configured for all OBAPIs supported HOST)	Set the paths for the persistence stores of the Audit JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME.	/scratch/obapis/Audit
	ReportsFileStore (to be configured for all OBAPIs supported)	Set the paths for the persistence stores of the Reports JMS modules. DO NOT KEEP path as	/scratch/obapis/Reports

	HOST)	INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME .	
	ExtSystemReceiverFileStore (to be configured for Third-party OBAPIs host only)	Set the paths for the persistence stores of the ExtSystemReceiver JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME.	/scratch/obapis/Receiver
	ExtSystemSenderFileStore (to be configured for Third-party OBAPIs host only)	Set the paths for the persistence stores of the ExtSystemSender JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME.	/scratch/obapis/Sender
	JMSForeignServerURL (to be configured for UBS host only)	Set the IP and port for UBS Managed server where JMS queue are available (Specific to OBAPIs – UBS flavor)	10.184.135.59:7860
RCU	STBSchemaPrefix	STB schema name prefix. If schema pre-fix is 'OBAPIs' then 'OBAPIS_STB' would be the STB schema name.	OBAPIS_STB

Note: Apart from above any other property values should not be modified

Ensure ORACLE_HOME, JAVA_HOME variable are set and their binaries are available in PATH variable before proceeding.

Login with OS user which was used to perform OBAPIs pre-requisite software installation (or has ownership on Oracle Weblogic home directory)

Ensure OBAPIs Installation home and filestore path maintained in installer.properties exists and user running the installer has read-write permissions.

- From your terminal navigate to <OBAPIs INSTALLER DIR>/
- Enter the following command

python runInstaller.py

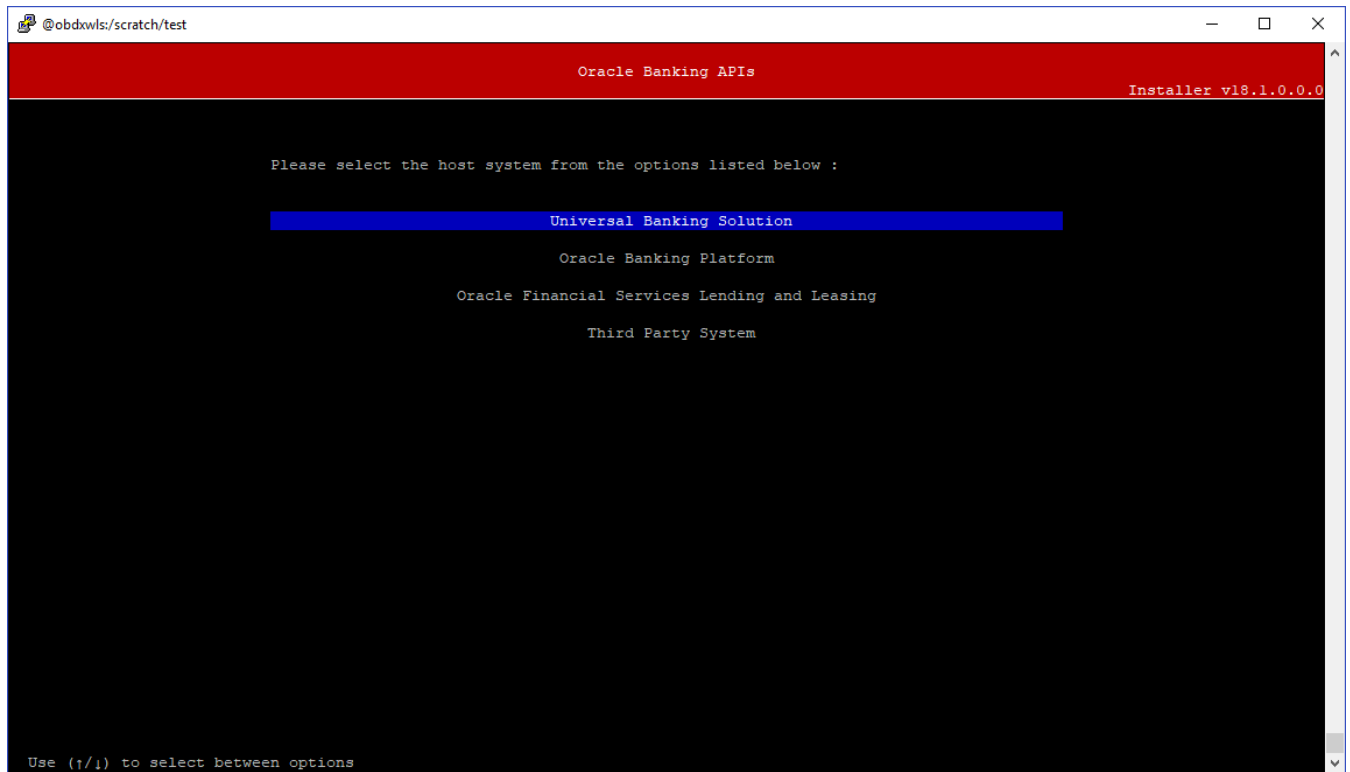
Select the appropriate type of Installation



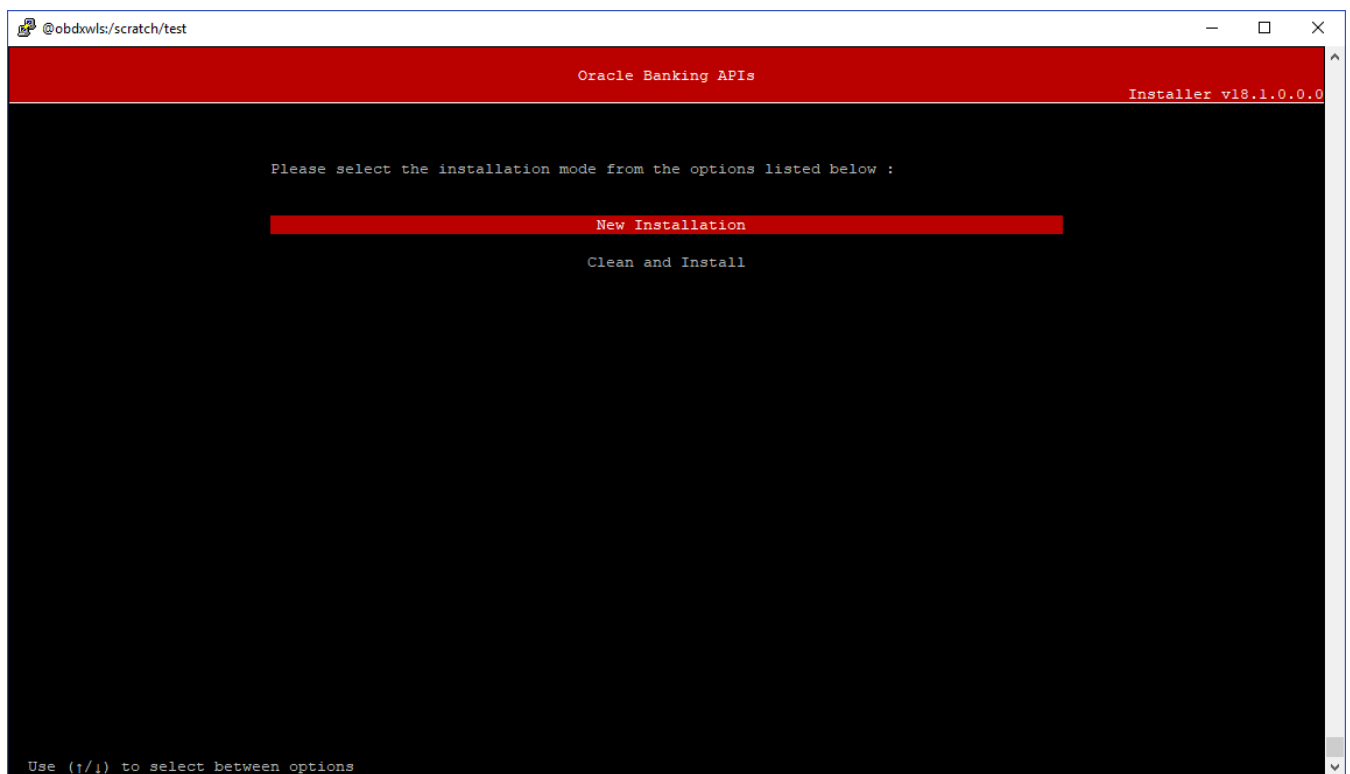
- OBAPIs Installation: This option should be used for first-time installation or for first entity only. Existing installation should not utilize this option unless performing “Clean and Install” on already installed environment.
- New Entity Creation: This option should be used for multi-entity installation only.

Post selection of installation type.

Select the appropriate host system for Installation



Post selection of host system below installation mode would be available



Mode of Installation - New Installation

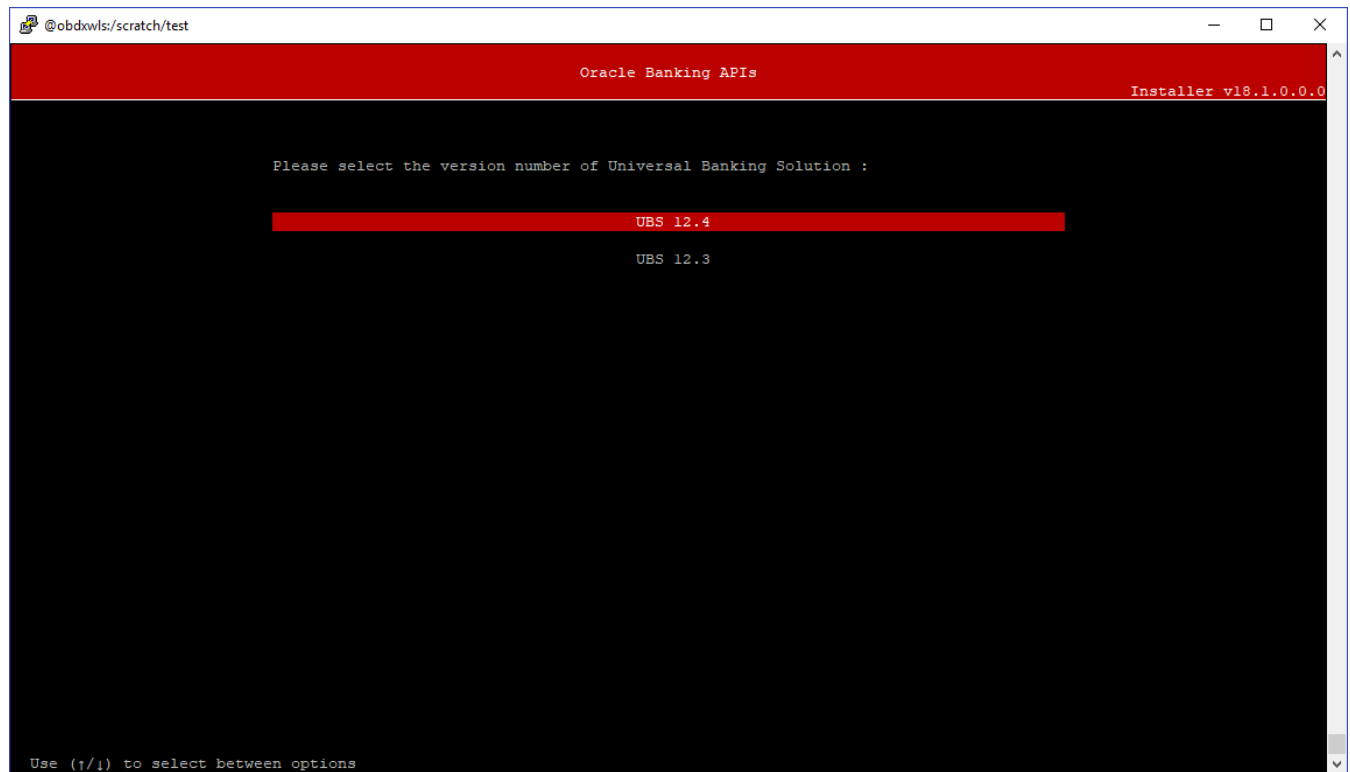
- New installation

In-case of a fresh installation of OBAPIs with appropriate host system for the first run on server.

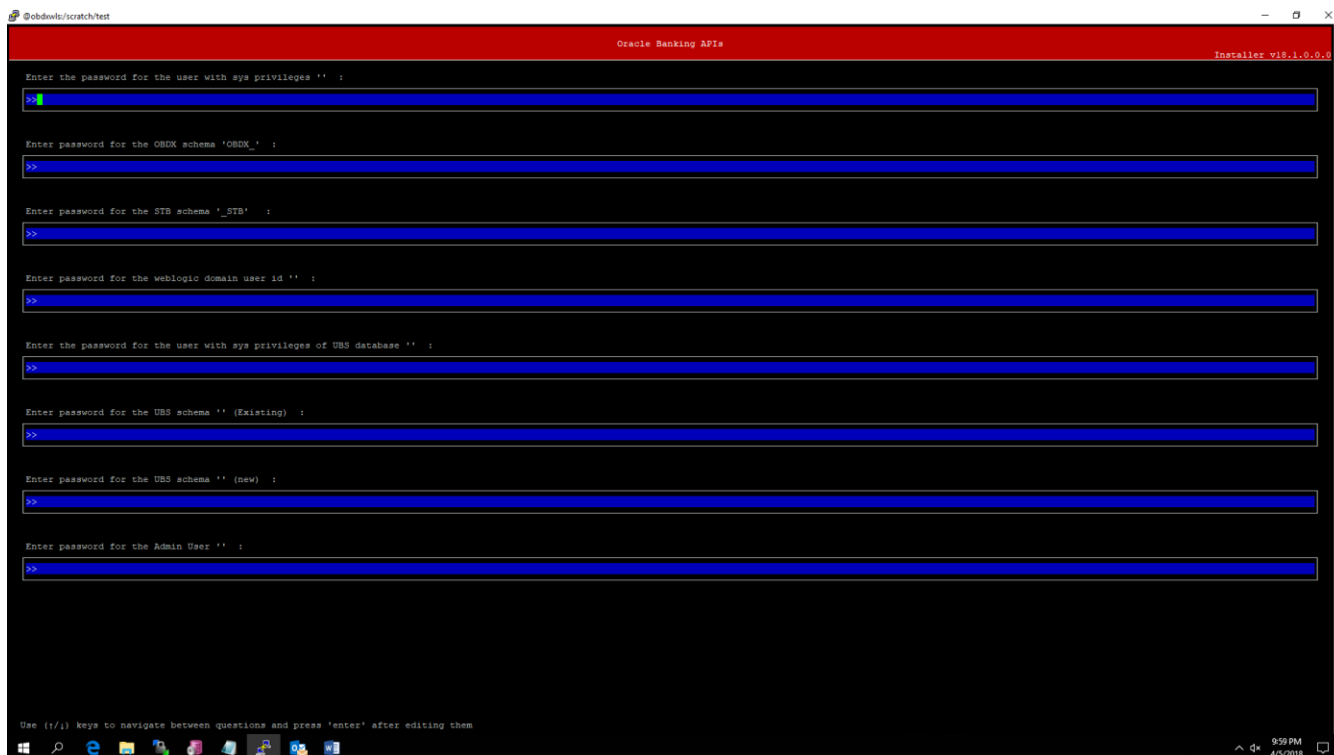
Below screens would appear with respective to host selected

Universal Banking Solution (OBAPIs with UBS)

Select the version of UBS HOST system from available options



Post UBS HOST version selection, enter the required credentials details



Enter below passwords:

- SYS privilege user password where OBAPIs schema would be created
- OBAPIs schema password
- OBAPIs STB schema password
- Weblogic console administrator user password
- SYS privilege user password where UBS host schema exists
- Existing UBS HOST schema password
- New OBAPIs EXT schema password
- Password for OBAPIs application admin user (In-case of OUD as provider, password should be similar to one used while user creation in OUD (or User Password field))

Oracle Banking Platform (OBAPIs with OBP)

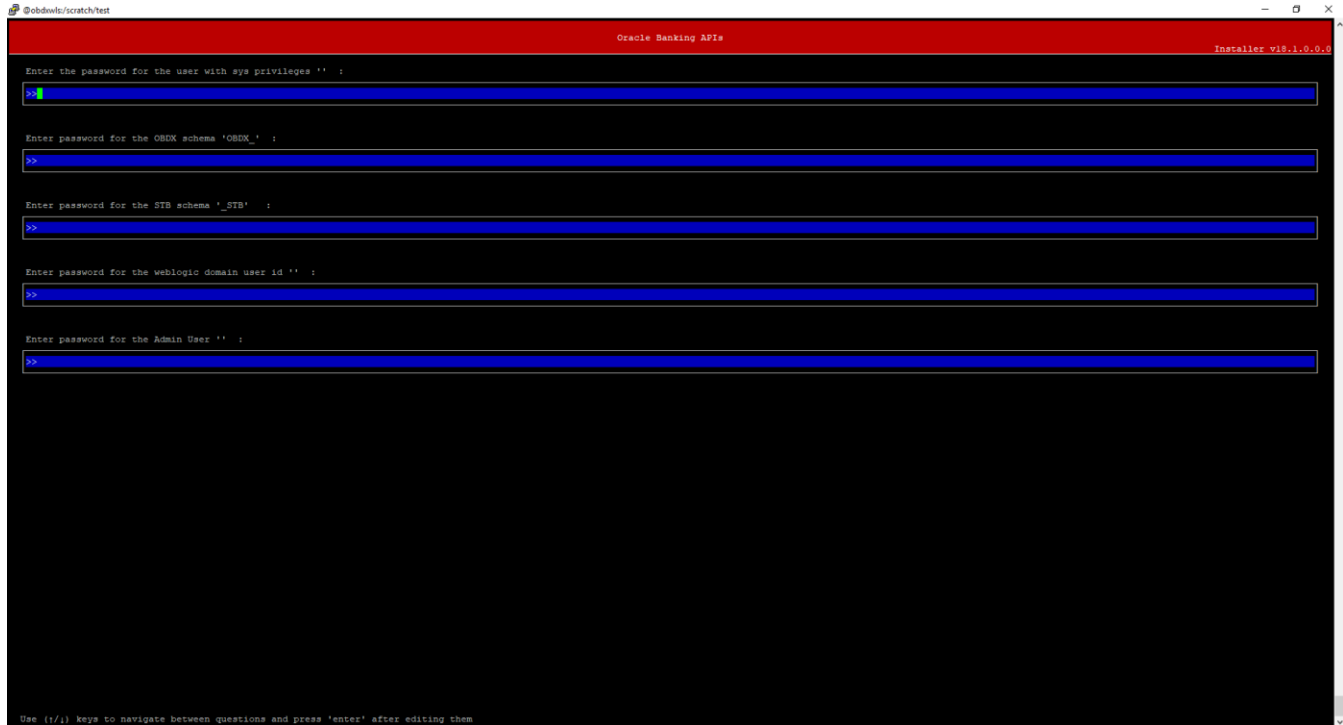
No additional input required. Screen is same as available in Third Party System.

Oracle Financial Services Lending and Leasing (OBAPIs with OFSLL)

No additional input required. Screen is same as available in Third Party System.

Third Party System (OBAPIs with THP)

Post Third Party System selection, enter the required credentials details



Enter below passwords:

- SYS privilege user password where OBAPIs schema would be created
- OBAPIs schema password
- OBAPIs STB schema password
- Weblogic console administrator user password
- OBAPIs application admin user password (In-case of OUD as provider, password should similar to one used while user creation in OUD (or User Password field))

Mode of Installation - Clean and Install

In-case of an existing OBAPIs installation that you want to overwrite OR in case of a previously failed installation user can opt for this option.

Pre-requisites

- Weblogic domain processes should be down (i.e. AdminServer, NodeManager, Managed Servers, Derby etc)
- No open session (user should not be logged-in) with OBAPIs database schema (and OBAPIsEXT schema in-case of OBAPIs UBS flavor) and RCU schema.

Key pointers

- OBAPIs schema (and OBAPIs EXT schema in-case of OBAPIs UBS flavor) and RCU schema would be dropped and recreated (as per installer.properties). Tablespace would be re-used.
- Weblogic domain (as per installer.properties) would be deleted and created again.
- Installation Home would be cleaned up and all files/ sub-directories would be deleted.

Note: All input screens are similar to new installation option and as per the host system opted.

Installation Status

After selecting the mode and entering all required details, the status is displayed (as shown below) on the terminal to indicate the progress of the installation.

```

[OBDX_Installer] python runInstaller.py
Starting base installation with UBS host
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Roles...
Role created
Creating Grants...
Execution of clip_master_script.sql started
Execution of clip_master_script.sql completed
Execution of clip_constraints.sql started
Execution of clip_constraints.sql completed
Execution of clip_seeds_executable.sql started
Execution of clip_seeds_executable.sql completed
SUCCESSFULLY installed OBDX database
Starting UBS database installation
Starting UBS Database Installation...
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Roles...
Roles Created
Executing table-scripts.sql...
Execution of table-scripts.sql completed
Executing uba_object_scripts.sql...
Execution of uba_object_scripts.sql completed
Executing execute-seeds.sql...
Execution of execute-seeds.sql completed
SUCCESSFULLY installed UBS database
OS :linux
Policy seeding successful
connection to Database successful.

Creating JIS Schema ...
Running SCU
Schema creation in progress ...

```

When the installation completes, the below message is displayed

```

[Jan 10, 2018 6:10:41 AM UTC] <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, obdx.app.timer [archive: /scratch/obdx/OBDX_Instal
ler/installables/app/components/ubs/deploy/obdx.app.timer.ear], to OBDX181 .>
Applications deployed successfully
starting Admin Server.

Admin server started.
Weblogic Configuration completed successfully.
[Jan 10, 2018 6:11:50 AM UTC] <Warning> <JNDI> <BEA-050001> <WLContext.close() was called in a different thread than the one in which it was created.>

Successfully configured jps-config.xml.

Successfully configured weblogic.

```

[Home](#)

5. Installation In Silent Mode

This chapter describes how to run the OBAPIs installer in silent mode.

What is silent-mode installation?

During installation in silent mode, the installation program reads the details for your configuration from the environment properties and installer.properties that you set for the session before beginning the installation. The installation program does not display any configuration options during the installation process.

Steps for Silent-Mode Installation

- Set the environment variables

```
[ OBDX_Installer]$  
[ OBDX_Installer]$  
[ OBDX_Installer]$  
[ OBDX_Installer]$ export FLAVOUR=UBS  
[ OBDX_Installer]$ export MODE=New  
[ OBDX_Installer]$ export DB_SYS_PASSWORD=welcome1  
[ OBDX_Installer]$ export SCHEMA_PASS=welcome1  
[ OBDX_Installer]$ export STBPassword=welcome1  
[ OBDX_Installer]$ export DomainPassword=welcome1  
[ OBDX_Installer]$ export DBAuthPassword=Welcome@1  
[ OBDX_Installer]$ export DB_SYS_PASSWORD_UBS=welcome1  
[ OBDX_Installer]$ export UBS_PASS=UBS123  
[ OBDX_Installer]$ export SCHEMA_PASS_UBS=welcome1  
[ OBDX_Installer]$  
[ OBDX_Installer]$  
[ OBDX_Installer]$
```

Below parameters should be set in environment variables

	Parameter	Description
Universal Banking Solution (OBAPIs with UBS)	FLAVOUR	Flavour for installation ' UBS ' for Universal Banking Solution (Installation with UBS)
	MODE	Mode of installation. ' New ' in-case of a fresh installation of OBAPIs for the first run on server ' Clean ' in-case of an existing OBAPIs installation that you want to overwrite OR in case of a previously failed installation
	DB_SYS_PASSWORD	Sys password of OBAPIs database (Existing)
	SCHEMA_PASS	Password for new schema on OBAPIs database
	STBPassword	Password for STB schema
	DomainPassword	Password for weblogic admin console
	DB_SYS_PASSWORD_UBS	Sys password of UBS database (Existing)
	UBS_PASS	Password of existing HOST UBS schema (Existing)
	SCHEMA_PASS_UBS	Password for new B1A1 schema on UBS database
	DBAuthPassword	Password for new Admin user of the application (In-case of OUD as provider, password should similar to one used while user creation in OUD(or User Password field))
Oracle Banking Platform (OBAPIs with OBP)/ Oracle Financial Services Lending and Leasing (OBAPIs with OFSLL) / Third Party System (OBAPIs with THP)	FLAVOUR	Flavour for installation ' OBP ' for Oracle Banking Platform (OBAPIs with OBP) OBAPIs ' for Third Party System (OBAPIs with THP) ' FLL ' for Oracle Financial Services Lending and Leasing (OBAPIs with OFSLL)
	Mode	Mode of installation. ' New ' in-case of a fresh installation of OBAPIs for the first run on server ' Clean ' in-case of an existing OBAPIs installation that you want to overwrite OR in case of a previously failed installation
	DB_SYS_PASSWORD	Sys password of OBAPIs database (Existing)
	SCHEMA_PASS	Password for new schema on OBAPIs database
	STBPassword	Password for STB schema
	DomainPassword	Password for weblogic admin console
		DBAuthPassword

Run the runInstaller.py file with '--silent' argument along with '--base' option

```
OBDX_Installer]$
OBDX_Installer]$ python runInstaller.py --silent --base
```

Installation Status

After all passwords are entered, the status is displayed on the terminal to indicate the progress of the installation.

```
Starting base Installation with UBS host
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Roles...
Role created
Creating Grants...
Execution of clip_master_script.sql started
Execution of clip_master_script.sql completed
Execution of clip_constraints.sql started
Execution of clip_constraints.sql completed
Execution of clip_seeds_executable.sql started
Execution of clip_seeds_executable.sql completed
SUCCESSFULLY installed OBDX database
Starting UBS database installation
Starting UBS Database Installation...
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Roles...
Roles Created
Executing table-scripts.sql...
Execution of table-scripts.sql completed
Executing ubs_object_scripts.sql...
Execution of ubs_object_scripts.sql completed
Executing execute-seeds.sql...
Execution of execute-seeds.sql completed
SUCCESSFULLY installed UBS database
OS :linux
Policy seeding successful
connection to Database successful.

Creating STB Schema ...
Running RCU
Schema creation in progress ...
```

When the installation completes, the below message is displayed

```
<Jan 10, 2018 6:10:41 AM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, obdx.app.timer [archive: /scratch/obdx/OBDX_Instal
ler/installables/app/components/ubs/deploy/obdx.app.timer.ear], to OBDX181 .>
Applications deployed successfully
starting Admin Server.
Admin server started.
Weblogic Configuration completed successfully.
<Jan 10, 2018 6:11:50 AM UTC> <Warning> <JNDI> <BEA-050001> <WLContext.close() was called in a different thread than the one in which it was created.>
Successfully configured jps-config.xml.
Successfully configured weblogic.
```

[Home](#)

6. Installer Verification

Each execution creates a new directory as <DDMonthHHMM> under <OBAPIs INSTALLER DIR>/ExecInstances directory where output logs as describe are stored.

Log Description	PATH
Summarized Installer Activity Log	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/obapis_installer.log
Summarized Database Logs	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/DB_installation.log
Detailed OBAPIs DB Logs per SQL file	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/OBAPIs/*
Detailed UBS DB Logs per SQL file (specific to UBS host system only)	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/UBS/*
RCU Logs	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/app/obapis_stb_rcu_1600.log
Weblogic Configuration Logs	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/app/obapis_wls_post.log
Detailed policy seeding logs per SQL Statement	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/out.log
Detailed policy seeding logs if SQL execution fails Note: It will be created in case of failure during execution of policies.	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/error.log
Policy seeding jar failure Log	<OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/seedPolicies.log

Check all the logs for any errors.

[Home](#)

7. Installer Scope

OBAPIs Installer currently covers below activities:

Flavor: Third Party system (OBAPIs with THP)

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
OBAPIs (Installation with Third Party System)	OBAPIs DB Setup			
		Create Tablespace	√	NA
		Create Schema and Role	√	√ (drop and create)
		Grants	√	√
		Load DB object (DDL's and DML's)	√	√
		Compile Schema	√	√
	Weblogic Setup and Configuration	RCU schema and Create Domain	√	√ (drop and create)
		Create and Configure AdminServer, Machine, Managed Server and Cluster	√	√
		Configure NodeManager	√	√
		Configure JDBC	√	√
		Configure DB Authenticator, JMS servers, Persistent stores and JMS Modules	√	√
		Application Deployment	√	√
		JTA	√	√
		Enable Production Mode	√	√
		Start AdminServer and NodeManager	√	√
	OBAPIs Configuration	Copy Config files into OBAPIs Installation Home	√	√ (Delete old and copy new from installer zip)

Flavor: Universal Banking Solution (OBAPIs with UBS)

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
OBAPIs with UBS (Installation with Universal Banking Solution)	OBAPIs Setup			
		Create Tablespace	√	NA
		Create Schema and Role	√	√ (drop and create)
		Grants	√	√
		Load DB object (DDL's and DML's)	√	√
		Compile Schema	√	√
	OBAPIs EXTSYSTEM DB Setup	Create Tablespace	√	NA
		Create Schema and Role	√	√ (drop and create)
		Grants	√	√
		Load DB object (DDL's and DML's)	√	√
		DB Link pointing to OBAPIs Schema	√	√
		Compile Schema	√	√
	Weblogic Setup and Configuration	RCU schema and Create Domain	√	√ (drop and create)
		Create and Configure AdminServer, Machine, Managed Server and Cluster	√	√
		Configure NodeManager	√	√
		Configure JDBC	√	√
		Configure DB Authenticator, JMS servers, Persistent stores and JMS Modules	√	√
		Application Deployment	√	√
		JTA	√	√
		Enable Production Mode	√	√

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
		Start AdminServer and NodeManager	√	√
	OBAPIs Configuration	Copy Config files into OBAPIs Installation Home and configure Preferences.xml (set AdapterFactories)	√	√ (Delete old and copy new from installer zip)

Flavor: Oracle Banking Platform (OBAPIs with OBP)

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
OBAPIs with OBP (Installation with Oracle Banking Platform)	OBAPIs DB Setup			
		Create Tablespace	√	NA
		Create Schema and Role	√	√ (drop and create)
		Grants	√	√
		Load DB object (DDL's and DML's)	√	√
		Compile Schema	√	√
	Weblogic Setup and Configuration	RCU schema and Create Domain	√	√ (drop and create)
		Create and Configure AdminServer, Machine, Managed Server and Cluster	√	√
		Configure NodeManager	√	√
		Configure JDBC	√	√
		Configure DB Authenticator, JMS servers, Persistent stores and JMS Modules	√	√
		Application Deployment	√	√
		JTA	√	√
		Enable Production Mode	√	√
Start AdminServer and NodeManager	√	√		

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
	OBAPISConfiguration	Copy Config files into OBAPIS Installation Home	√	√ (Delete old and copy new from installer zip)

Flavor: Oracle Financial Services Lending and Leasing (OBAPIS with OFSLL)

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
OBAPIS with OFSLL (Installation with Oracle Financial Services Lending and Leasing)	OBAPIS DB Setup			
		Create Tablespace	√	NA
		Create Schema and Role	√	√ (drop and create)
		Grants	√	√
		Load DB object (DDL's and DML's)	√	√
		Compile Schema	√	√
	Weblogic Setup and Configuration	RCU Schema and Create Domain	√	√ (drop and create)
		Create and Configure AdminServer, Machine, Managed Server and Cluster	√	√
		Configure NodeManager	√	√
		Configure JDBC	√	√
		Configure DB Authenticator, JMS servers, Persistent stores and JMS Modules	√	√
		Application Deployment	√	√
		JTA	√	√
		Enable Production Mode	√	√
		Start AdminServer and NodeManager	√	√
OBAPIS Configuration	Copy Config files into OBAPIS Installation Home and configure Preferences.xml (set AdapterFactories)	√	√ (Delete old and copy new from installer zip)	

[Home](#)

8. Post Installation Steps

Once Installation is successful and no errors are observed, proceed with below set of steps.

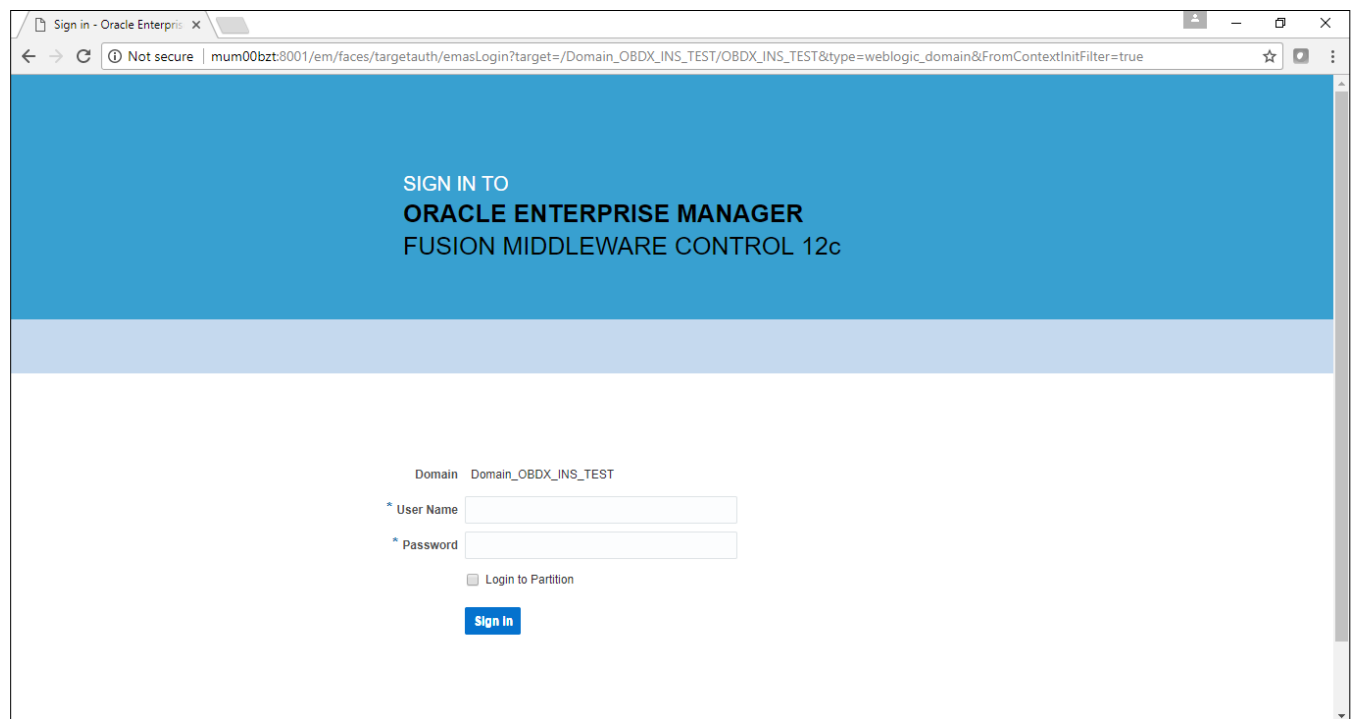
Apply JRF Template

To apply JRF template follow below steps.

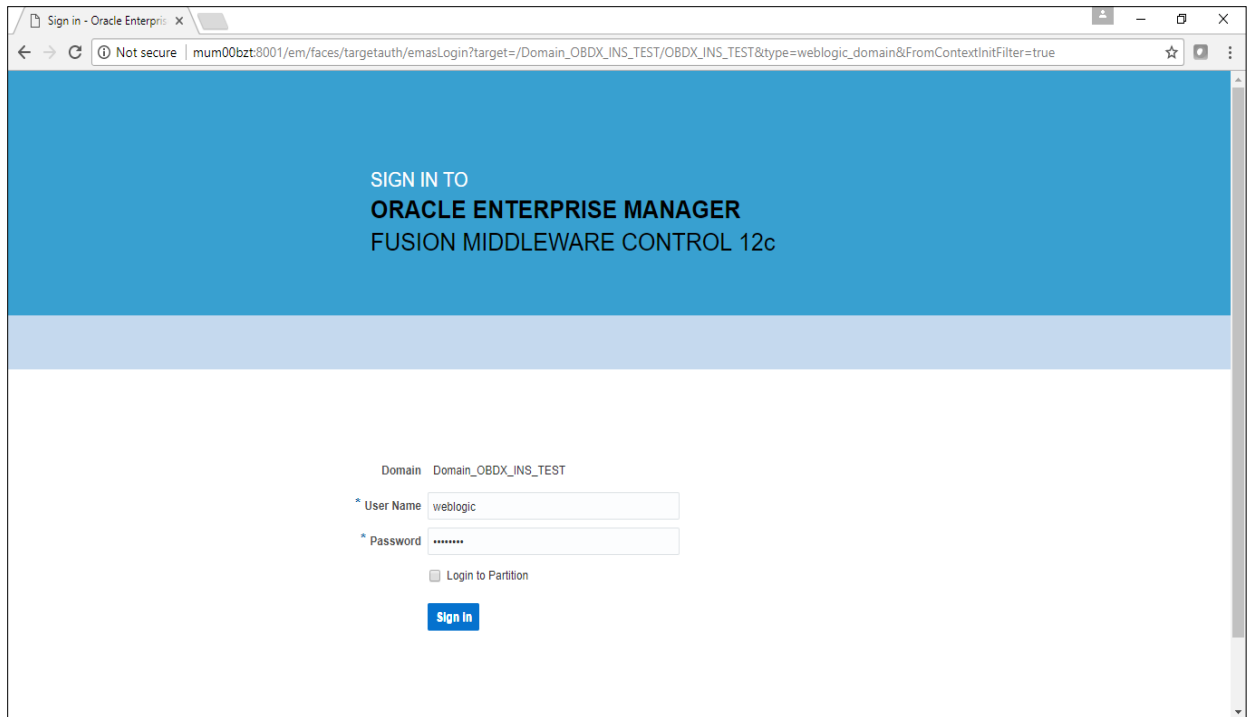
- To do this, ensure that the Admin Server is running. Login to the EM (Enterprise Manager) Console using the following URL:

http://<hostname>:<admin_port>/em

Note: EM console would be available on same hostname and port which was used for Weblogic Admin Console for OBAPIs domain (created via installer), just replace the “/console” with “/em”.



- Enter Weblogic administrator username and password (same used for Weblogic administrator console login)



Sign in - Oracle Enterprise x

← → Not secure | mum00bzt:8001/em/faces/targetauth/emasLogin?target=/Domain_OBDX_INS_TEST/OBDX_INS_TEST&type=weblogic_domain&FromContextInitFilter=true ☆

SIGN IN TO
ORACLE ENTERPRISE MANAGER
FUSION MIDDLEWARE CONTROL 12c

Domain: Domain_OBDX_INS_TEST

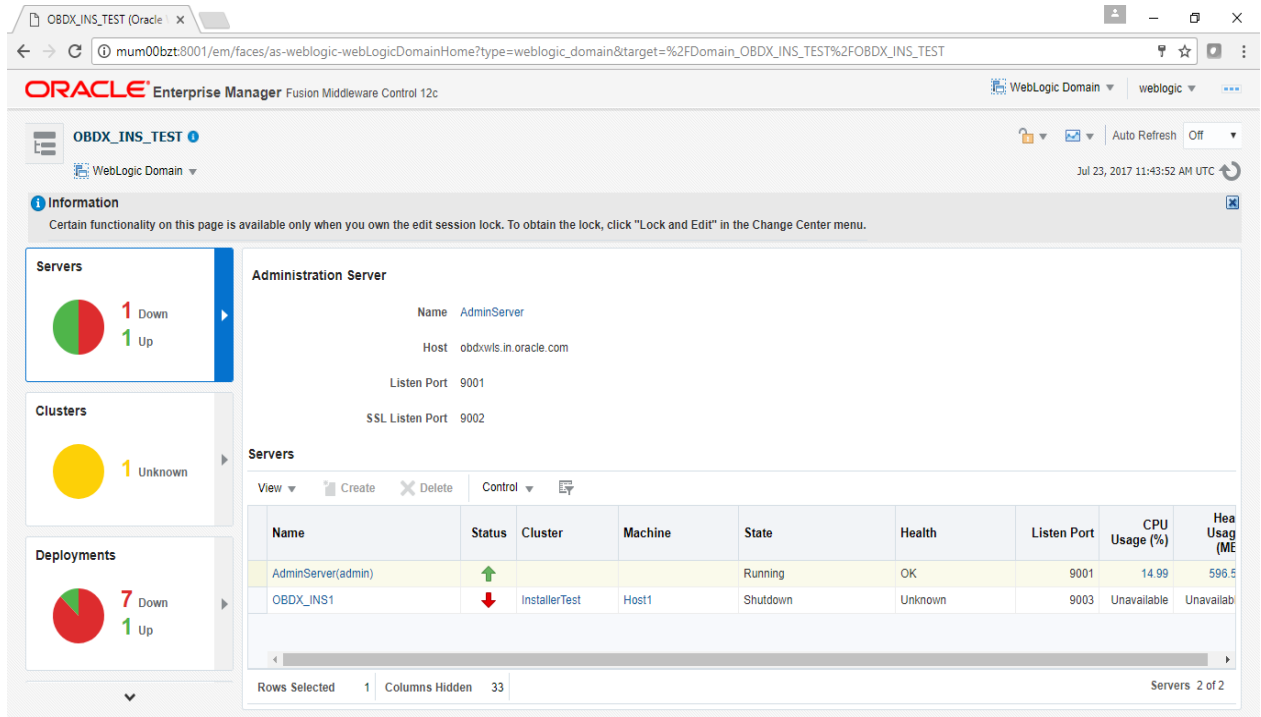
* User Name: weblogic

* Password:

Login to Partition

Sign in

Click on Sign In



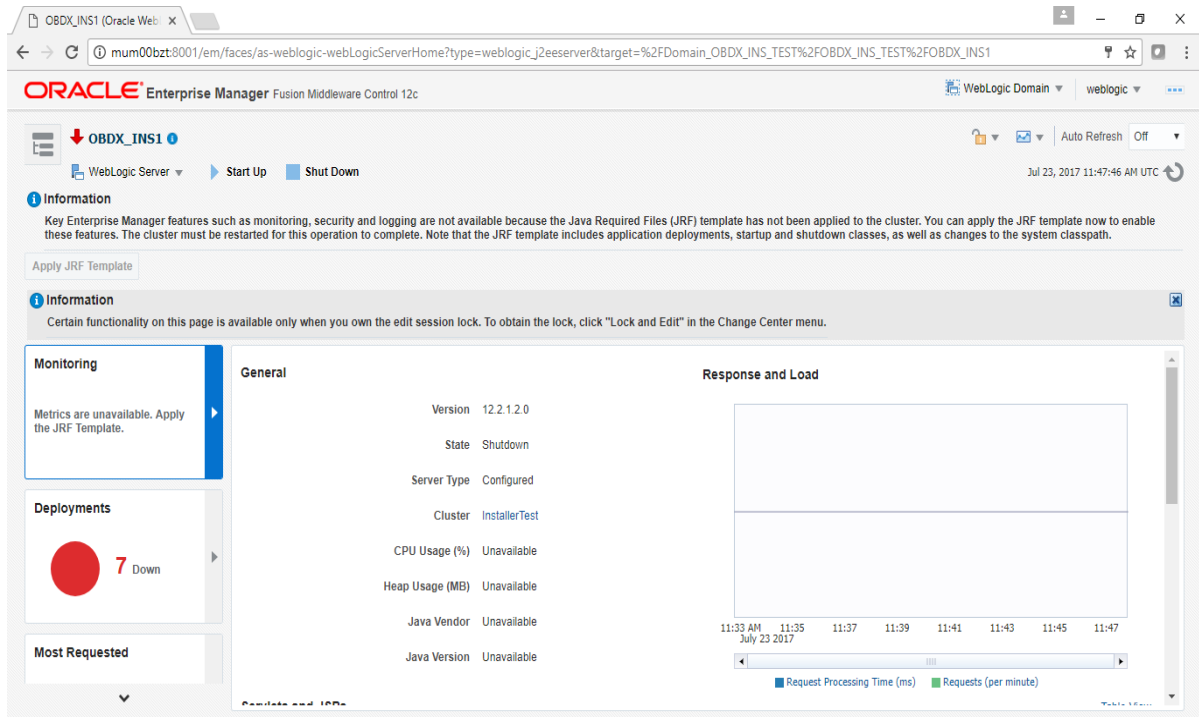
- Click on the Managed Server (as highlighted below)

Servers

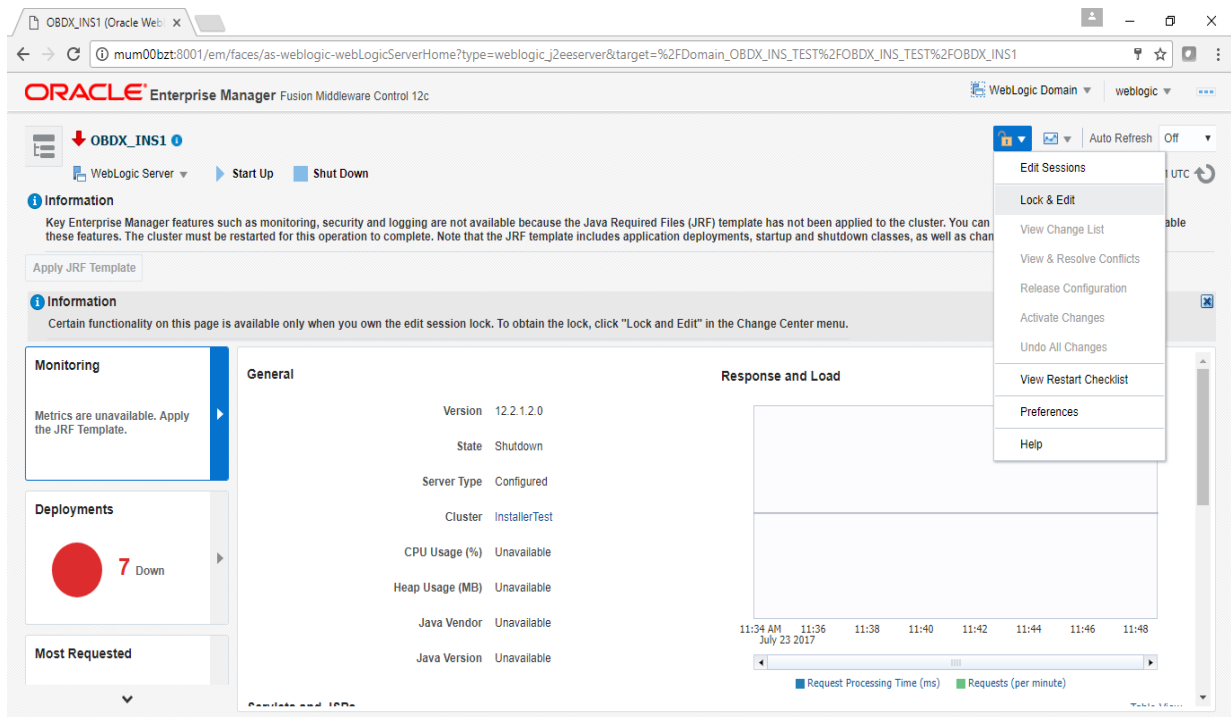
View Create Delete Control

Name	Status	Cluster	Machine	State	Health	Listen Port
AdminServer(admin)	↑			Running	OK	9001
OBDX_INS1	↓	InstallerTest	Host1	Shutdown	Unknown	9003

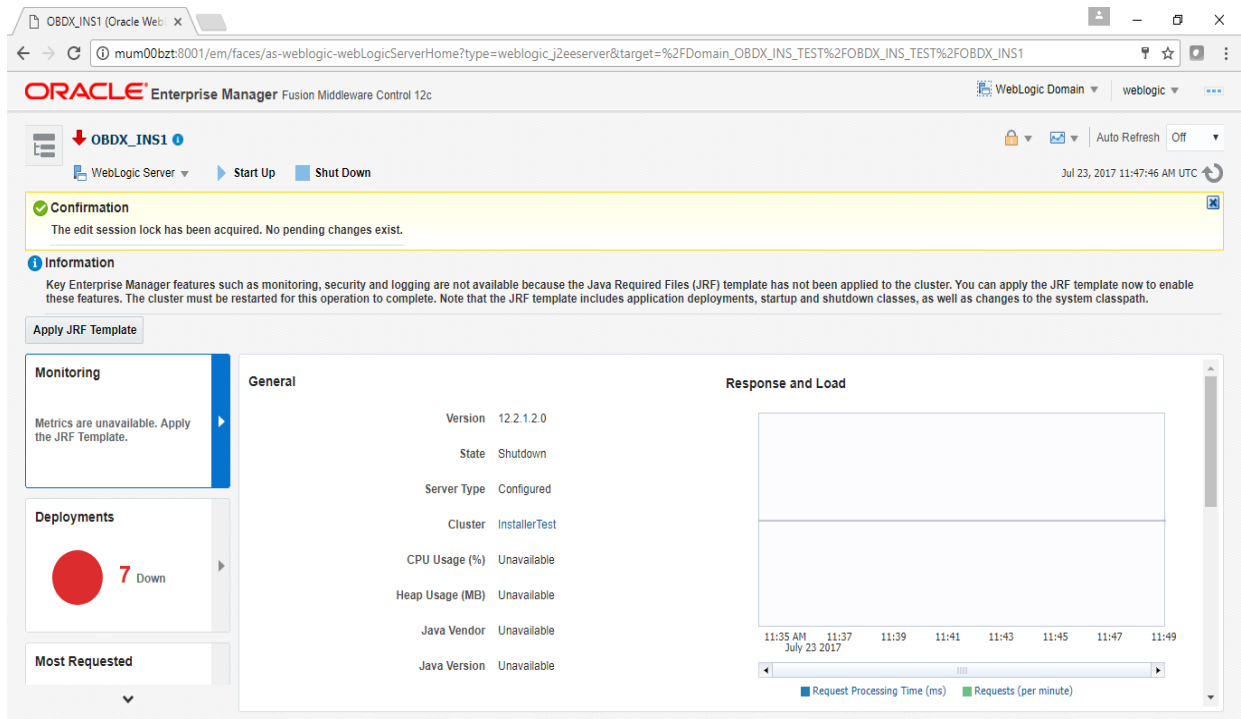
Note : Depending on installer.properties, Managed server will differ from above screenshot.



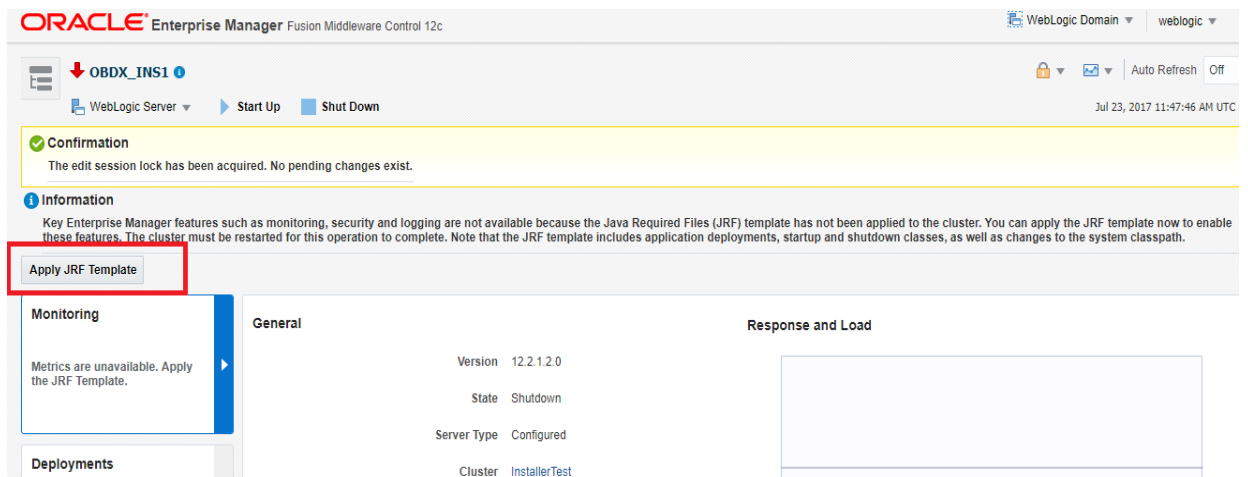
- Click on “Lock and Edit” option (as shown in screenshot).



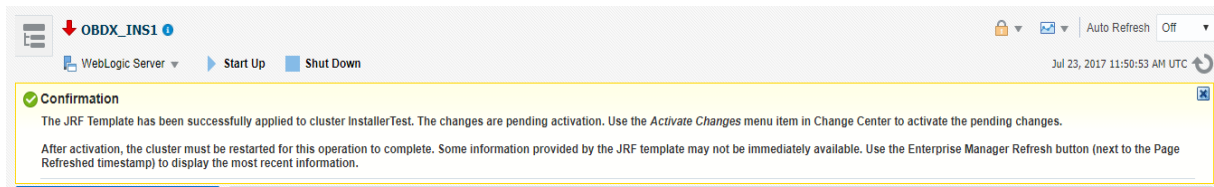
You will see below screen stating the edit session confirmation



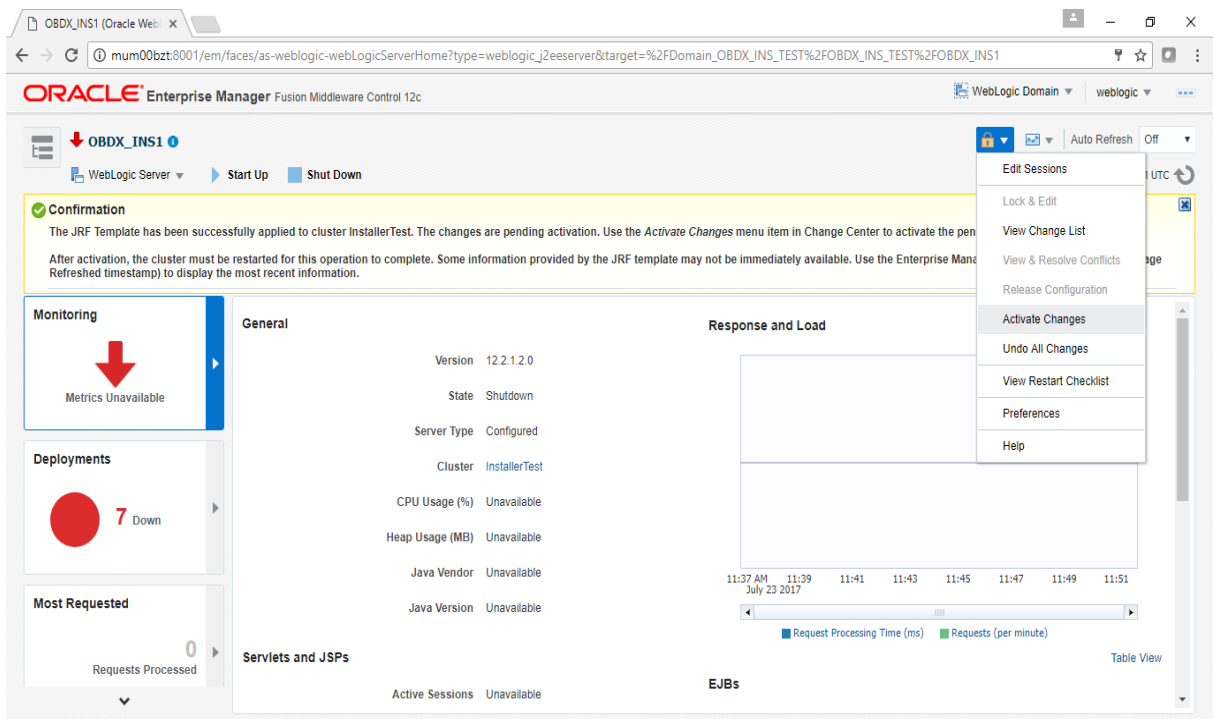
- Click on “Apply JRF Template” option (as shown in screenshot).



Is JRF successfully applied, you will get below Confirmation.



- Click on “Activates Changes” option (as shown in screenshot).



Post activation you will receive below Confirmation.

The screenshot shows the Oracle Enterprise Manager Fusion Middleware Control 12c interface. At the top, there is a confirmation message: "Confirmation: All changes have been activated. The edit session lock has been released." Below this, there is an information box stating: "Certain functionality on this page is available only when you own the edit session lock. To obtain the lock, click 'Lock and Edit' in the Change Center menu." The main content area is divided into several sections: "Monitoring" (Metrics Unavailable), "Deployments" (7 Down), and "Most Requested". The "General" section for the "obdx_server1" instance shows the following details:

Version	12.2.1.2.0
State	Shutdown
Server Type	Configured
Cluster	InstallerTest
CPU Usage (%)	Unavailable
Heap Usage (MB)	Unavailable
Java Vendor	Unavailable
Java Version	Unavailable

The "Response and Load" section contains a graph showing "Request Processing Time (ms)" and "Requests (per minute)" over time, with a "Table View" option at the bottom right.

OBAPIs Application logging

To enable OBAPIs activation logging make below change to logging.xml present at `${domain.home}/config/fmwconfig/servers/${ManagedServer}`.

```
@obdxwls:~/Oracle/Middleware/Oracle_Home/user_projects/domains/obdx_domain/config/fmwconfig/servers/obdx_server1
[ obdx_server1]$ pwd
/home/devops/Oracle/Middleware/Oracle_Home/user_projects/domains/obdx_domain/config/fmwconfig/servers/obdx_server1
[ obdx_server1]$ ls -ltr
total 40
drwxr-x--- 2 devops devops 4096 May 10 14:06 mbeans
-rw-r----- 1 devops devops 2286 May 10 14:06 dms_config.xml
drwxr-x--- 2 devops devops 4096 May 10 14:06 diagnostics-registration
-rw-r----- 1 devops devops 1796 May 10 14:06 dfw_config.xml
drwxr-x--- 2 devops devops 4096 May 10 14:06 dfw
-rw-r----- 1 devops devops 11250 May 10 14:06 logging.xml
drwxr-x--- 1 devops devops 4096 May 12 10:42 applications
-rw-r----- 1 devops devops 109 Jul 13 07:03 loggers.exclude
[ obdx_server1]$
```

Open logging.xml and make a new entry under <log_handlers> tag using below code template:

```

<log_handler name='obapis-handler' level='<LOGLEVEL>'
class='oracle.core.ojdl.logging.ODLHandlerFactory'>
    <property name='path' value='<path for OBAPIs log>/<OBAPIs log filename>' />
    <property name='maxFileSize' value='<The maximum size in bytes for each log file>' />
    <property name='maxLogSize' value='<The maximum size in bytes for the entire log>' />
    <property name='encoding' value='<encoding>' />
    <property name='useThreadName' value='true' />
    <property name='supplementalAttributes' value='<supplementalAttributes>' />
</log_handler>

```

Below is a sample implementation for log_handlers file.

```

<log_handler name='obapis-handler' level='ERROR' class='oracle.core.ojdl.logging.ODLHandlerFactory'>
    <property name='path' value='${domain.home}/servers/${weblogic.Name}/logs/obapis.log' />
    <property name='maxFileSize' value='10485760' />
    <property name='maxLogSize' value='104857600' />
    <property name='encoding' value='UTF-8' />
    <property name='useThreadName' value='true' />
    <property name='supplementalAttributes'
value='J2EE_APP.name,J2EE_MODULE.name,WEBSERVICE.name,WEBSERVICE_PORT.name,compos
ite_instance_id,component_instance_id,composite_name,component_name' />
</log_handler>

```

```

@obdxwls:~/domain/OBDX_INS_TEST/config/fmwconfig/servers/OBDX_INS1
<?xml version='1.0' encoding='UTF-8'?>
<logging_configuration>
<log_handlers>
    <log_handler name='obapis-handler' level='ERROR' class='oracle.core.ojdl.logging.ODLHandlerFactory'>
        <property name='path' value='${domain.home}/servers/${weblogic.Name}/logs/obdx.log' />
        <property name='maxFileSize' value='10485760' />
        <property name='maxLogSize' value='104857600' />
        <property name='encoding' value='UTF-8' />
        <property name='useThreadName' value='true' />
        <property name='supplementalAttributes' value='J2EE_APP.name, J2EE_MODULE.name, WEBSERVICE.name, WEBSERVICE_PORT.name, composite_instance_id, component_instance_id, composite_name, component_name' />
    </log_handler>
    <log_handler name='console-handler' class='oracle.core.ojdl.logging.ConsoleHandler' level='WARNING:32' formatter='oracle.core.ojdl.weblogic.ConsoleFormatter' />
    <log_handler name='odl-handler' class='oracle.core.ojdl.logging.ODLHandlerFactory' filter='oracle.dfw.incident.IncidentDetectionLogFilter'>
        <property name='path' value='${domain.home}/servers/${weblogic.Name}/logs/${weblogic.Name}-diagnostic.log' />
        <property name='maxFileSize' value='10485760' />
        <property name='maxLogSize' value='104857600' />
        <property name='encoding' value='UTF-8' />
        <property name='useThreadName' value='true' />
        <property name='supplementalAttributes' value='DSID, J2EE_APP.name, J2EE_MODULE.name, WEBSERVICE.name, WEBSERVICE_PORT.name, oracle.soa.tracking.FlowId, oracle.soa.tracking.InstanceId, oracle.soa.tracking.SCAEntityId, Oracle.soa.tracking.FaultId, oracle.soa.tracking.RetryCount, composite_name' />
    </log_handler>
    <log_handler name='wls-domain' class='oracle.core.ojdl.weblogic.DomainLogHandler' level='WARNING' />
    <log_handler name='owsm-message-handler' class='oracle.core.ojdl.logging.ODLHandlerFactory'>
        <property name='path' value='${domain.home}/servers/${weblogic.Name}/logs/owsm/msglogging/diagnostic.log' />

```

Add loggers under <loggers> tag using below template:

```

<logger name='com.ofss' level='ERROR' useParentHandlers='false'>
    <handler name='obapis-handler' />
</logger>
<logger name='#BANKCODE#.com.ofss' level='ERROR' useParentHandlers='false'>
    <handler name='obapis-handler' />

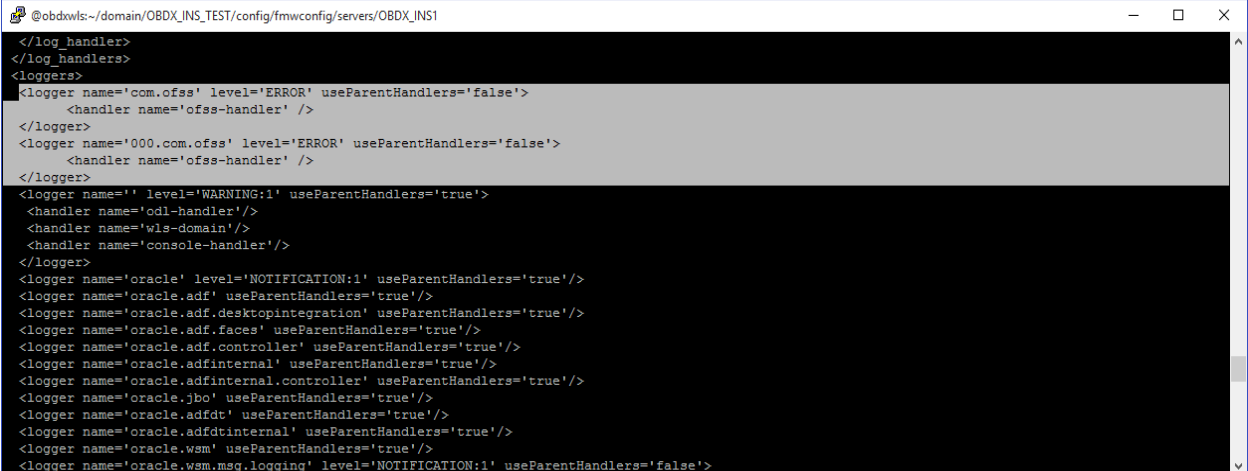
```

```
</logger>
```

Note: Replace the #BANKCODE# with bank code.

Below is a sample implementation for loggers file

```
<logger name='com.ofss' level='ERROR' useParentHandlers='false'>
  <handler name='obapis-handler' />
</logger>
<logger name='000.com.ofss' level='ERROR' useParentHandlers='false'>
  <handler name='obapis-handler' />
</logger>
```



```
@obdxwls:~/domain/OBDX_INS_TEST/config/fmwconfig/servers/OBDX_INS1
</log_handler>
</log_handlers>
<loggers>
<logger name='com.ofss' level='ERROR' useParentHandlers='false'>
  <handler name='ofss-handler' />
</logger>
<logger name='000.com.ofss' level='ERROR' useParentHandlers='false'>
  <handler name='ofss-handler' />
</logger>
<logger name='' level='WARNING:1' useParentHandlers='true'>
  <handler name='odl-handler' />
  <handler name='wls-domain' />
  <handler name='console-handler' />
</logger>
<logger name='oracle' level='NOTIFICATION:1' useParentHandlers='true' />
<logger name='oracle.adf' useParentHandlers='true' />
<logger name='oracle.adf.desktopintegration' useParentHandlers='true' />
<logger name='oracle.adf.faces' useParentHandlers='true' />
<logger name='oracle.adf.controller' useParentHandlers='true' />
<logger name='oracle.adfinternal' useParentHandlers='true' />
<logger name='oracle.adfinternal.controller' useParentHandlers='true' />
<logger name='oracle.jbo' useParentHandlers='true' />
<logger name='oracle.adfdt' useParentHandlers='true' />
<logger name='oracle.adfdtinternal' useParentHandlers='true' />
<logger name='oracle.wsm' useParentHandlers='true' />
<logger name='oracle.wsm.msg.logging' level='NOTIFICATION:1' useParentHandlers='false'>
```

Eclipselink logging

To modify eclipselink logging make changes in <INSTALLATION_HOME>\config\META-INF\persistence.xml using below link :

<https://wiki.eclipse.org/EclipseLink/Examples/JPA/Logging>



```
@obdxwls:~/obdx/config/META-INF
[ META-INF ] $
[ META-INF ] $
[ META-INF ] $ pwd
/home/devops/obdx/config/META-INF
```

```

@ebdowls:~/obdv/config/META-INF
└─$ cat persistence.xml
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<persistence xmlns="http://java.sun.com/xml/ns/persistence" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" version="2.0" xsi:schemaLocation="http://java.sun.com/xml/ns/persistence http://java.sun.com/xml/ns/persistence/persistence_2_0.xsd">
  <persistence-unit name="DIGX" transaction-type="JTA">
    <jta-data-source>DIGX</jta-data-source>
    <mapping-file>META-INF/generic-mapping.orm.xml</mapping-file>
    <properties>
      <property name="eclipselink.logging.level" value="WARNING"/>
      <property name="eclipselink.logging.file" value="jpa-eclipselink.log"/>
      <property name="eclipselink.jdbc.connector" value="com.offs.fc.infra.das.orm.eclipselink.EclipseLinkConnector"/>
      <property name="eclipselink.target-server" value="WebLogic"/>
      <property name="eclipselink.session.customizer" value="com.offs.digx.infra.das.orm.eclipselink.EclipseLinkSessionCustomizer"/>
    </properties>
  </persistence-unit>
  <persistence-unit name="BATCH" transaction-type="RESOURCE_LOCAL">
    <mapping-file>META-INF/generic-mapping.orm.xml</mapping-file>
    <properties>
      <property name="eclipselink.logging.level" value="WARNING"/>
      <property name="eclipselink.logging.file" value="jpa-eclipselink-batch.log"/>
      <property name="eclipselink.jdbc.connector" value="com.offs.fc.infra.das.orm.eclipselink.EclipseLinkConnector"/>
      <property name="eclipselink.target-server" value="WebLogic"/>
      <property name="eclipselink.session.customizer" value="com.offs.digx.infra.das.orm.eclipselink.EclipseLinkSessionCustomizer"/>
    </properties>
  </persistence-unit>
  <persistence-unit name="NONXA" transaction-type="RESOURCE_LOCAL">
    <non-jta-data-source>NONXA</non-jta-data-source>
    <mapping-file>META-INF/generic-mapping.orm.xml</mapping-file>
    <properties>
      <property name="eclipselink.logging.level" value="WARNING"/>
      <property name="eclipselink.logging.file" value="jpa-eclipselink-nonxa.log"/>
      <property name="eclipselink.jdbc.connector" value="com.offs.fc.infra.das.orm.eclipselink.EclipseLinkConnector"/>
      <property name="eclipselink.target-server" value="WebLogic"/>
      <property name="eclipselink.session.customizer" value="com.offs.digx.infra.das.orm.eclipselink.EclipseLinkSessionCustomizer"/>
    </properties>
  </persistence-unit>
</persistence>
META-INF└─$

```

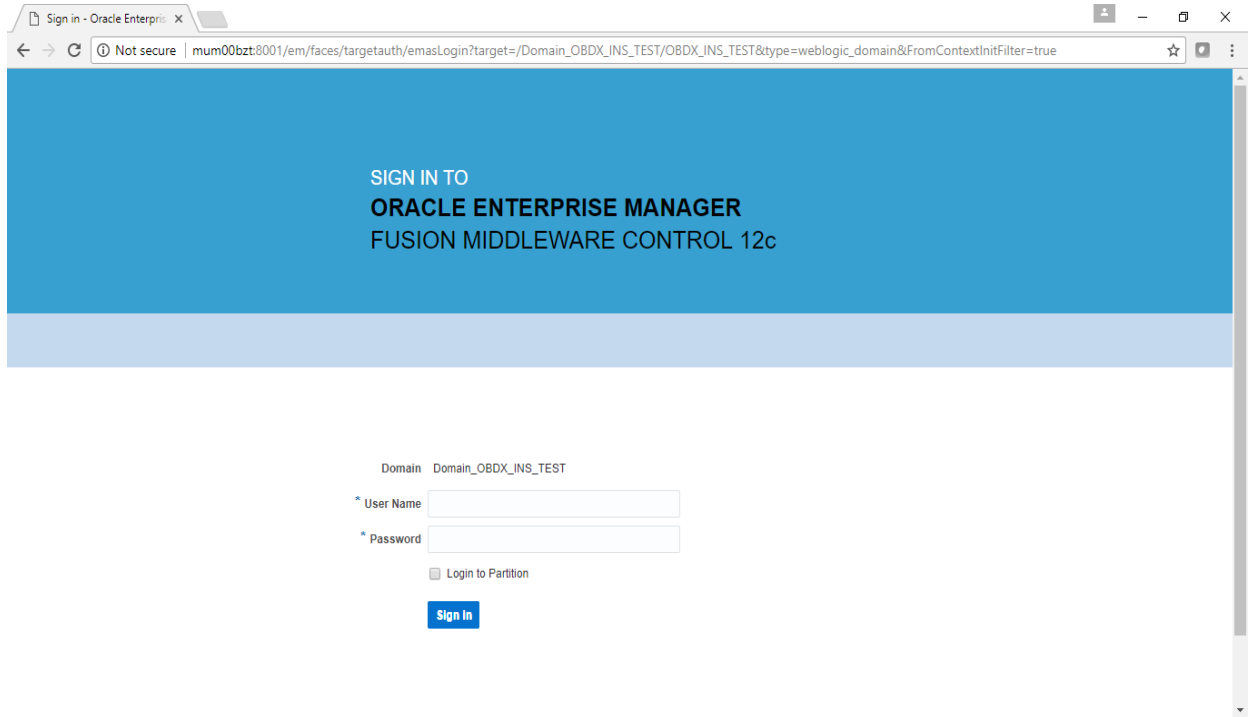
Change logging level during runtime

To change OBAPIs application logging level at runtime (when OBAPIs application is up and running) do following steps.

To do this, ensure that the Admin Server is running. Login to the EM (Enterprise Manager) Console using the following URL:

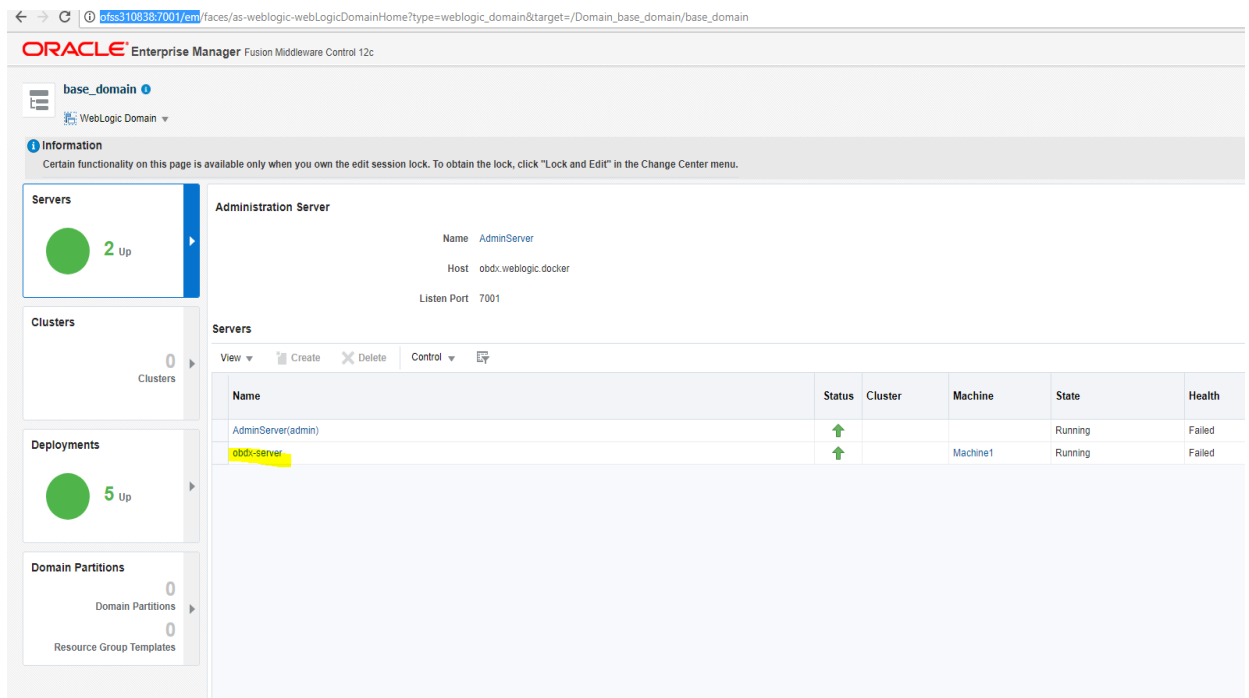
http://<hostname>:<admin_port>/em

Note: EM console would be available on same hostname and port which was used for Weblogic Admin Console for OBAPIs domain (created via installer), just replace the “/console” with “/em”.

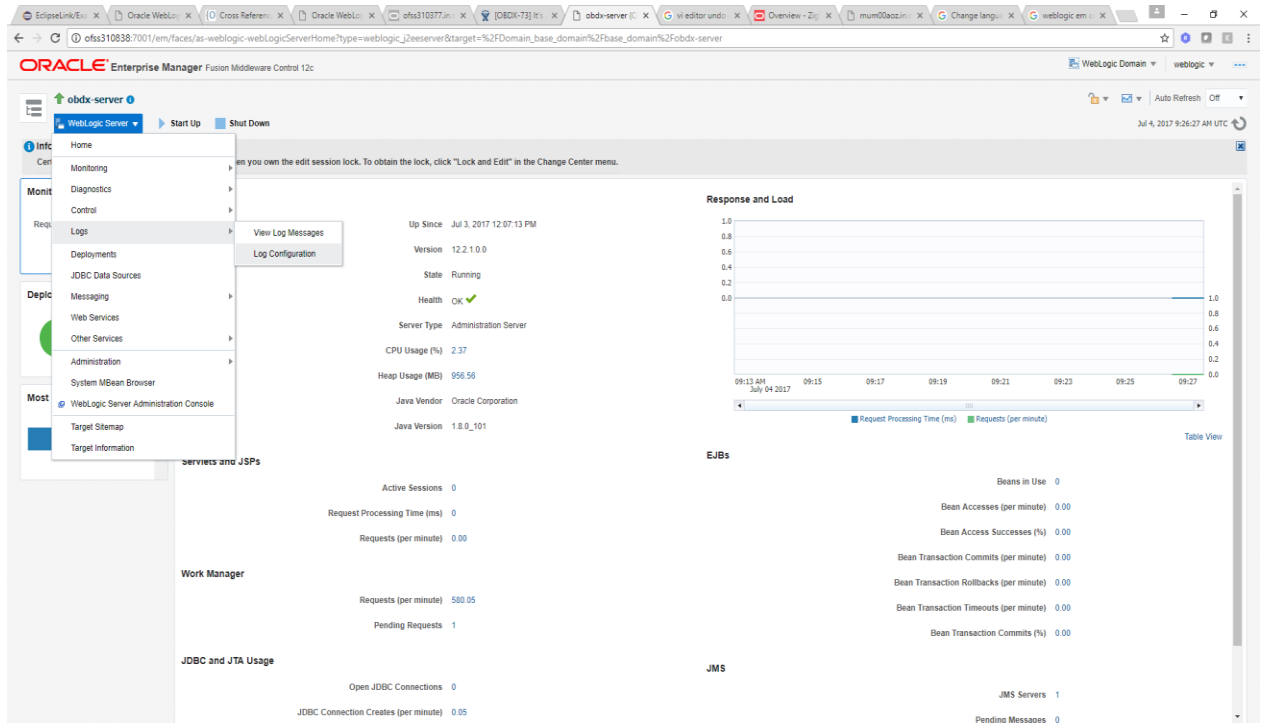


- Click on obapis-server

Note : Depending on installer.properties, Managed server will differ from above screenshot.



- In Weblogic Domain menu click on Logs -> Logs Configurations



- Select the logger and change the logging level and then click on apply.

Oracle Enterprise Manager Fusion Middleware Control 12c

obdx-server
WebLogic Server

Start Up Shut Down

/Domain_base_domain/base_domain/obdx-server > Log Configuration

View Runtime Loggers

Search All Categories

Logger Name	Oracle Diagnostic Logging Level (Java Level)	Log File	Persistent Log Level State
Root Logger	ERROR:1 (SEVERE)	ofss-handler	ERROR:1
000	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
08	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
08.com.ofss	ERROR:1 (SEVERE)	ofss-handler	ERROR:1
ExampleApplication:Encoder	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
LifeCycle	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
Security	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
ServiceLoader	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
com	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
global	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
io	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
javax	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
jersey	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
jmx:fmw	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	
oracle	NOTIFICATION:1 (INFO)	ofss-handler	NOTIFICATION:1
org	ERROR:1 (SEVERE) [Inherited fr]	ofss-handler	

Note : Logger name should be defined in logging.xml.

Universal Banking Solution (OBAPIs with UBS)

If during installer execution Universal Banking Solution (OBAPIs with UBS) is selected, then below steps needs to be done manually.

Foreign Server

- Login into Weblogic Admin console (OBAPIs domain created using installer) and Browse to Summary of JMS Modules > UBSSystemModule (as shown below)

Home > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules

Summary of JMS Modules

JMS system resources are configured and stored as modules similar to standard Java EE modules. Such resources include queues, topics, connection factories, templates, destination keys, quota, distributed queues, distributed topics, foreign servers, and JMS s configure and manage JMS system modules as global system resources.

This page summarizes the JMS system modules that have been created for this domain.

[Customize this table](#)

JMS Modules

Click the *Lock & Edit* button in the Change Center to activate all the buttons on this page.

New Delete

<input type="checkbox"/>	Name ↕	Type	Scope	Domain Partitions
<input type="checkbox"/>	AsyncFailureLogJMS	JMSSystemResource	Global	
<input type="checkbox"/>	AuditJMS	JMSSystemResource	Global	
<input type="checkbox"/>	FileUploadJMS	JMSSystemResource	Global	
<input type="checkbox"/>	ReportsJMSModule	JMSSystemResource	Global	
<input type="checkbox"/>	UBSSystemModule	JMSSystemResource	Global	

New Delete

Home > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSSystemModule

Settings for UBSSystemModule

Configuration Subdeployments Targets Security Notes

This page displays general information about a JMS system module and its resources. It also allows you to configure new resources and access existing resources.

Name: UBSSystemModule The name of this JMS system module. [More Info...](#)

Scope: Global Specifies if the JMS system module is accessible within the domain, a p

Descriptor File Name: jms/ubssystemmodule-jms.xml The name of the JMS module descriptor file. [More Info...](#)

This page summarizes the JMS resources that have been created for this JMS system module, including queue and topic destinations, connection factories, JMS templates, destination sort keys, destination quota, distributed destinations, foreign servers, and store-and-for

[Customize this table](#)

Summary of Resources

Click the *Lock & Edit* button in the Change Center to activate all the buttons on this page.

New Delete

<input type="checkbox"/>	Name ↕	Type	JNDI Name	Subdeployment
<input type="checkbox"/>	UBSForeignServer	Foreign Server	N/A	UBSSubdeployment

New Delete

- Click on UBSForeignServer

Home > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSSystemModule > UBSForeignServer

Settings for UBSForeignServer

Configuration | Subdeployment | Notes

General | Destinations | Connection Factories

Click the **Lock & Edit** button in the Change Center to modify the settings on this page.

Save

A foreign server represents a JNDI provider that resides outside a WebLogic Server. It contains information that allows WebLogic Server to reach the remote JNDI provider. This way, a number of connection factory and foreign server.

Name: UBSForeignServer The name of this fo

JNDI Initial Context Factory: weblogic.jndi.WLInitialConte: The name of the cla the vendor that are

JNDI Connection URL: t3://10.184.135.59:7860/ The URL that WeblC being used. For Web Info...

JNDI Properties Credential: Any Credentials that the constructor for t the Properties field r

Confirm JNDI Properties Credential:

JNDI Properties: java.naming.security.principal=infra Any additional propre JNDI provider's Initi

Default Targeting Enabled Specifies whether th mechanism. More

Save

- Click on Lock & Edit

ORACLE WebLogic Server Administration Console 12c

Home | Log Out | Preferences | Record | Help

Home > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSSystemModule > UBSForeignServer

Settings for UBSForeignServer

Configuration | Subdeployment | Notes

General | Destinations | Connection Factories

Click the **Lock & Edit** button in the Change Center to modify the settings on this page.

Save

A foreign server represents a JNDI provider that resides outside a WebLogic Server. It contains information that allows WebLogic Server to reach the remote JNDI provider. This way, a number of connection factory and destination objects (queues or topics) can be defined on one JMS foreign server.

Name: UBSForeignServer The name of this foreign server. More Info...

JNDI Initial Context Factory: weblogic.jndi.WLInitialConte: The name of the class that must be instantiated to access the JNDI provider. This cla the vendor that are being used. More Info...

JNDI Connection URL: t3://10.184.135.59:7860/ The URL that WebLogic Server will use to contact the JNDI provider. The syntax of th being used. For WebLogic JMS, leave this field blank if you are referencing WebLogic Info...

JNDI Properties Credential: Any Credentials that must be set for the JNDI provider. These Credentials will be part the constructor for the JNDI provider's InitialContext class. Note: For secure creden the Properties field results in the credential being stored and displayed as originaly e

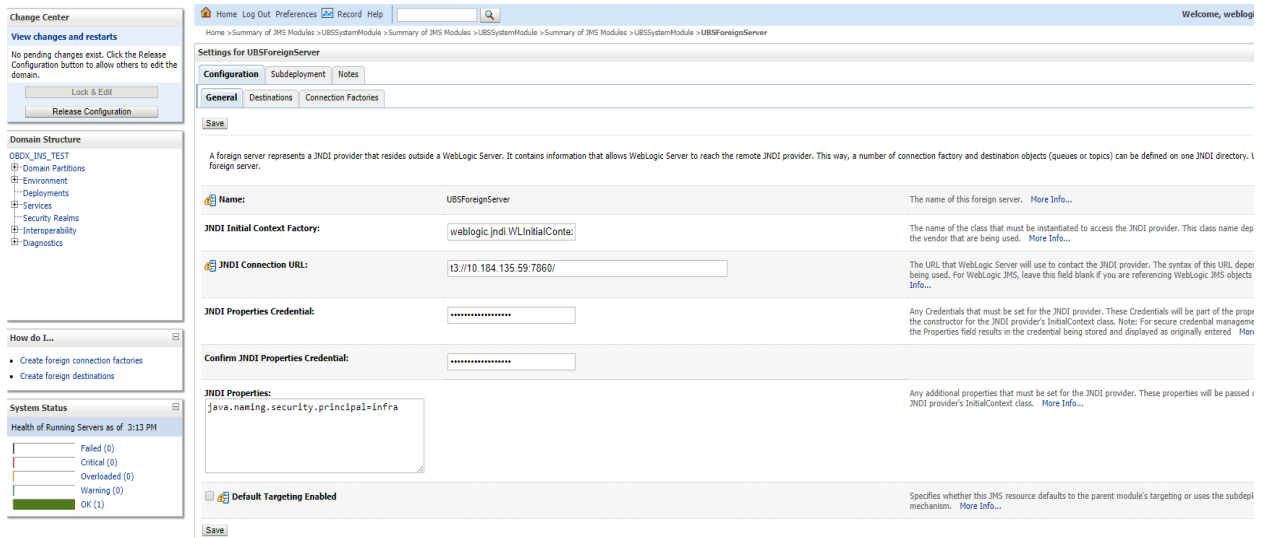
Confirm JNDI Properties Credential:

JNDI Properties: java.naming.security.principal=infra Any additional properties that must be set for the JNDI provider. These properties wi JNDI provider's InitialContext class. More Info...

Default Targeting Enabled Specifies whether this JMS resource defaults to the parent module's targeting or uses mechanism. More Info...

Save

Click the **Lock & Edit** button in the Change Center to modify the settings on this page.



Set below configurations with:

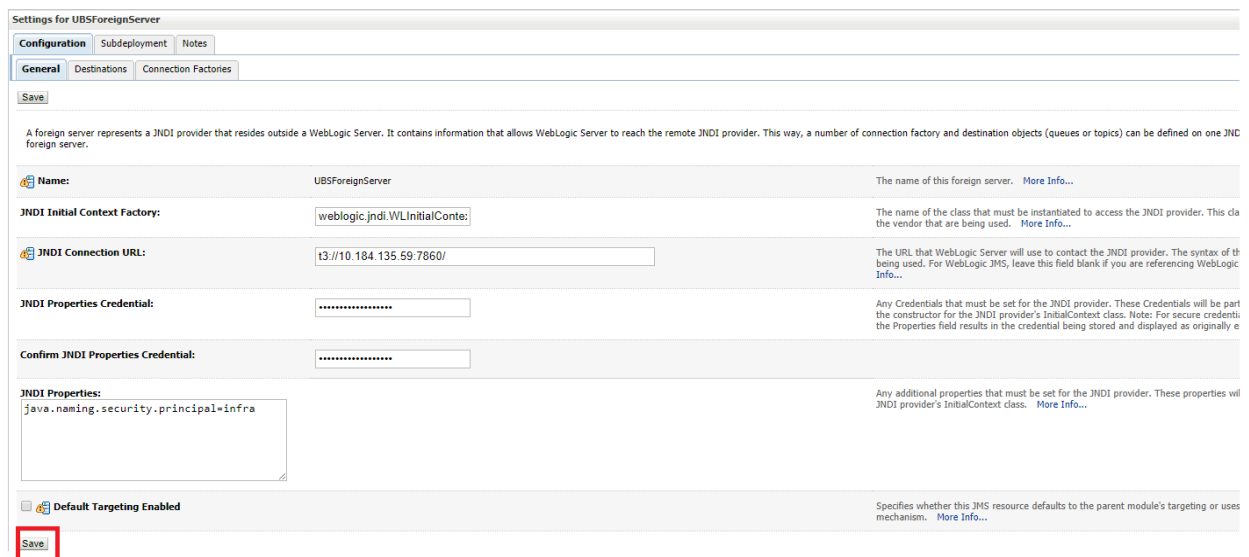
JNDI Connection URL – UBS HOST Weblogic t3 URL for Managed server (where NOTIFY_DEST_QUEUE and NOTIFY_DEST_QUEUE_FCDB are mapped)

JNDI Properties Credential – Password for username set in JNDI properties

Confirm JNDI Properties Credential – Confirm password for username set in JNDI properties

JNDI Properties – Value to be set as “java.naming.security.principal=<username>”, where username is the login user of UBS Weblogic Admin Console (user which created the primary local queues for UBS).

- Click on Save



Home > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSSystemModule > Summary of JMS Modules > UBSForeignServer > Configuration > NOTIFY_DEST_QUEUE_FQDN > UBSForeignServer

Messages
 ✓ Settings updated successfully.

Settings for UBSForeignServer

Configuration Subdeployment Notes

General Destinations Connection Factories

Save

A foreign server represents a JNDI provider that resides outside a WebLogic Server. It contains information that allows WebLogic Server to reach the remote JNDI provider. This way, a number of connection factory and destination objects (queues or topics) can be defined on one JNDI foreign server.

Name: UBSForeignServer The name of this foreign server. [More Info...](#)

JNDI Initial Context Factory: weblogic.jndi.WLInitialContextFactory The name of the class that must be instantiated to access the JNDI provider. This class the vendor that are being used. [More Info...](#)

JNDI Connection URL: t3://10.184.135.59:7860/ The URL that WebLogic Server will use to contact the JNDI provider. The syntax of this being used. For WebLogic JMS, leave this field blank if you are referencing WebLogic JMS Info...

JNDI Properties Credential: Any Credentials that must be set for the JNDI provider. These Credentials will be part of the constructor for the JNDI provider's InitialContext class. Note: For secure credential the Properties field results in the credential being stored and displayed as originally entered.

Confirm JNDI Properties Credential:

JNDI Properties: java.naming.security.principal=infra Any additional properties that must be set for the JNDI provider. These properties will JNDI provider's InitialContext class. [More Info...](#)

Default Targeting Enabled Specifies whether this JMS resource defaults to the parent module's targeting or uses its own mechanism. [More Info...](#)

Save

- Click on Activate Changes

Settings for UBSForeignServer x

ORACLE WebLogic Server Administration Console 12c

Home Log Out Preferences Record Help

Change Center

View changes and restarts

Pending changes exist. They must be activated to take effect.

✓ Activate Changes

Undo All Changes

Domain Structure

- ORDC_JMS_TEST
- Domain Partitions
- Environment
- Deployments
- Services
- Security Realms
- Interoperability
- Diagnostics

How do I...?

- Create foreign connection factories
- Create foreign destinations

System Status

Health of Running Servers as of 3:20 PM

- Failed (0)
- Critical (0)
- Overloaded (0)
- Warning (0)
- OK (1)

Messages
 ✓ Settings updated successfully.

Settings for UBSForeignServer

Configuration Subdeployment Notes

General Destinations Connection Factories

Save

A foreign server represents a JNDI provider that resides outside a WebLogic Server. It contains information that allows WebLogic Server to reach the remote JNDI provider. This way, a number of connection factory and destination objects (queues or topics) can be defined on one JNDI foreign server.

Name: UBSForeignServer The name of this foreign server. [More Info...](#)

JNDI Initial Context Factory: weblogic.jndi.WLInitialContextFactory The name of the class that must be instantiated to access the JNDI provider. This class the vendor that are being used. [More Info...](#)

JNDI Connection URL: t3://10.184.135.59:7860/ The URL that WebLogic Server will use to contact the JNDI provider. The syntax of this being used. For WebLogic JMS, leave this field blank if you are referencing WebLogic JMS Info...

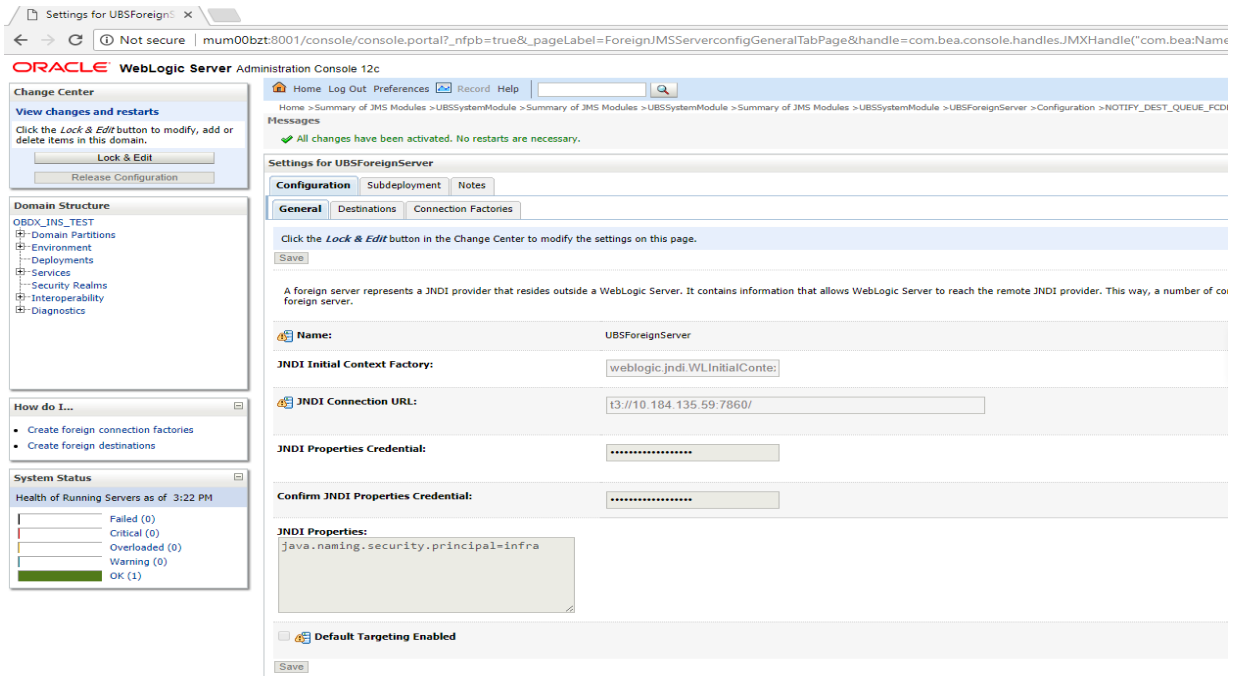
JNDI Properties Credential: Any Credentials that must be set for the JNDI provider. These Credentials will be part of the constructor for the JNDI provider's InitialContext class. Note: For secure credential the Properties field results in the credential being stored and displayed as originally entered.

Confirm JNDI Properties Credential:

JNDI Properties: java.naming.security.principal=infra Any additional properties that must be set for the JNDI provider. These properties will JNDI provider's InitialContext class. [More Info...](#)

Default Targeting Enabled Specifies whether this JMS resource defaults to the parent module's targeting or uses its own mechanism. [More Info...](#)

Save



Deployment of notification MDB application

Before deployment of obapis.externalsystem.ubs.notification.mdb.ear application, kindly perform below steps:

- Open the obapis.externalsystem.ubs.notification.mdb.ear (EAR file is available <OBAPIS INSTALLER DIR>/installables/app/components/ubs/deploy/obapis.externalsystem.ubs.notification.mdb.ear) using any archiving tools (i.e.: 7-zip)

Name	Size	Packed Size	Modified	Created	Accessed	Attributes	Encrypted	Comment
[APP-INF]	3 783 283	3 350 626	2017-05-19 11:57			D drwxr-xr-x	-	
[META-INF]	1 660	862	2017-07-21 11:29			D drwxr-xr-x	-	
com.ofss.extsystem.ubs.notification.jar	481 333	398 219	2017-07-21 11:29			-rw-r--r--	-	

- Double click on com.ofss.extsystem.ubs.notification.jar

Name	Size	Packed Size	Modified	Created	Accessed	Attributes	Encrypted	Comment
[com]	1 193 325	381 587	2017-07-21 11:27			D drwxr-xr-x	-	
[META-INF]	4 543	1 808	2017-07-21 11:27			D drwxr-xr-x	-	
wsconfig.properties	1 420	288	2017-07-21 11:27			-rw-r--r--	-	

- Open the wsconfig.properties to edit

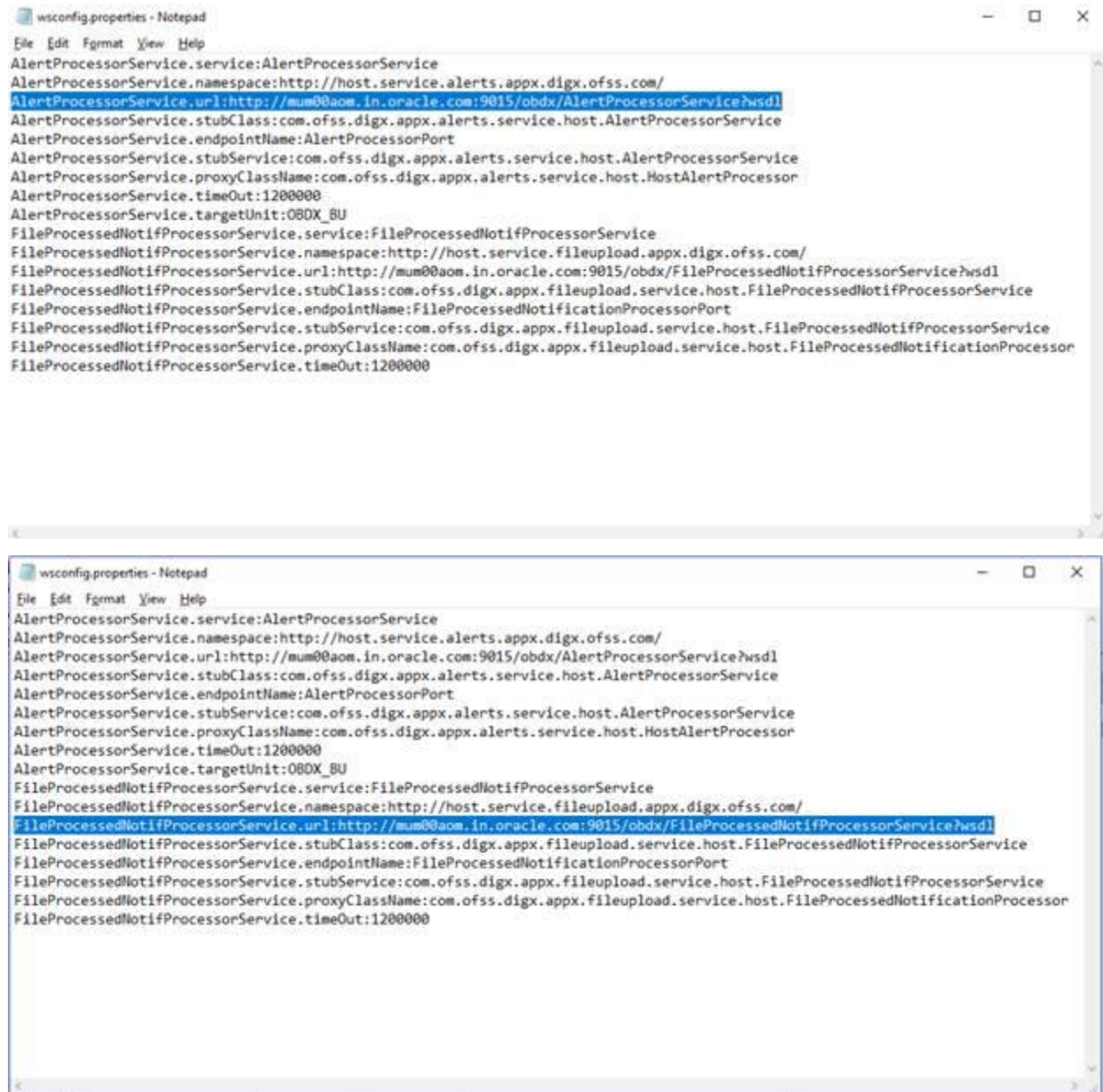
Name	Size	Packed Size	Modified	Created	Access
com	1 193 325	381 587	2017-07-21 11:27		
META-INF	4 543	1 808	2017-07-21 11:27		
wsconfig.properties	1 420	288	2017-07-21 11:27		

Open	Enter
Open Inside	Ctrl+PgDn
Open Outside	Shift+Enter
View	F3
Edit	F4
Rename	F2
Copy To...	F5
Move To...	F6
Delete	Del

```

wsconfig.properties - Notepad
File Edit Format View Help
AlertProcessorService.service.AlertProcessorService
AlertProcessorService.namespace:http://host.service.alerts.appx.digx.ofss.com/
AlertProcessorService.url:http://<OBDX_HOSTNAME_OR_IP>:<OBDX_WLS_MANAGED_PORT>/obdx/AlertProcessorService?wsdl
AlertProcessorService.stubClass:com.ofss.digx.appx.alerts.service.host.AlertProcessorService
AlertProcessorService.endpointName:AlertProcessorPort
AlertProcessorService.stubService:com.ofss.digx.appx.alerts.service.host.AlertProcessorService
AlertProcessorService.proxyClassName:com.ofss.digx.appx.alerts.service.host.HostAlertProcessor
AlertProcessorService.timeOut:1200000
AlertProcessorService.targetUnit:OBDX_BU
FileProcessedNotifProcessorService.service.FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.namespace:http://host.service.fileupload.appx.digx.ofss.com/
FileProcessedNotifProcessorService.url:http://<OBDX_HOSTNAME_OR_IP>:<OBDX_WLS_MANAGED_PORT>/obdx/FileProcessedNotifProcessorService?wsdl
FileProcessedNotifProcessorService.stubClass:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.endpointName:FileProcessedNotificationProcessorPort
FileProcessedNotifProcessorService.stubService:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.proxyClassName:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotificationProcessor
FileProcessedNotifProcessorService.timeOut:1200000
    
```

- Change the URL for AlertProcessorService.url and FileProcessedNotifProcessorService.url (Note the hostname and port should be of OBAPIs managed server created by installer)



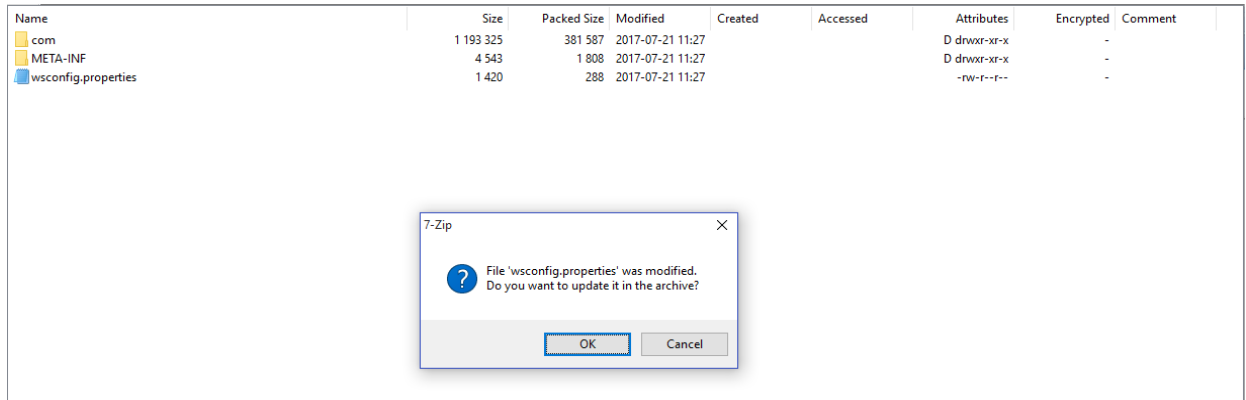
```

wsconfig.properties - Notepad
File Edit Format View Help
AlertProcessorService.service:AlertProcessorService
AlertProcessorService.namespace:http://host.service.alerts.appx.digx.ofss.com/
AlertProcessorService.url:http://mum00aom.in.oracle.com:9015/obdx/AlertProcessorService?wsdl
AlertProcessorService.stubClass:com.ofss.digx.appx.alerts.service.host.AlertProcessorService
AlertProcessorService.endpointName:AlertProcessorPort
AlertProcessorService.stubService:com.ofss.digx.appx.alerts.service.host.AlertProcessorService
AlertProcessorService.proxyClassName:com.ofss.digx.appx.alerts.service.host.HostAlertProcessor
AlertProcessorService.timeOut:1200000
AlertProcessorService.targetUnit:OB0X_BU
FileProcessedNotifProcessorService.service:FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.namespace:http://host.service.fileupload.appx.digx.ofss.com/
FileProcessedNotifProcessorService.url:http://mum00aom.in.oracle.com:9015/obdx/FileProcessedNotifProcessorService?wsdl
FileProcessedNotifProcessorService.stubClass:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.endpointName:FileProcessedNotificationProcessorPort
FileProcessedNotifProcessorService.stubService:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.proxyClassName:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotificationProcessor
FileProcessedNotifProcessorService.timeOut:1200000

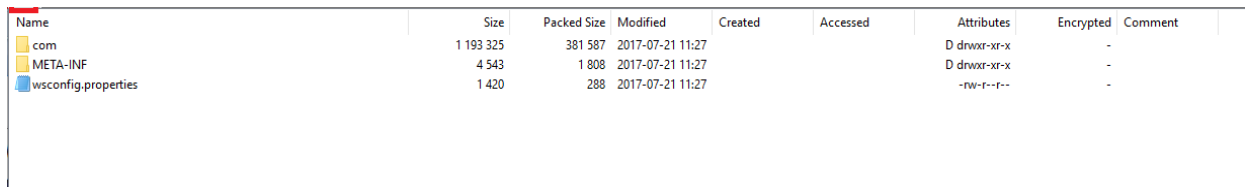
wsconfig.properties - Notepad
File Edit Format View Help
AlertProcessorService.service:AlertProcessorService
AlertProcessorService.namespace:http://host.service.alerts.appx.digx.ofss.com/
AlertProcessorService.url:http://mum00aom.in.oracle.com:9015/obdx/AlertProcessorService?wsdl
AlertProcessorService.stubClass:com.ofss.digx.appx.alerts.service.host.AlertProcessorService
AlertProcessorService.endpointName:AlertProcessorPort
AlertProcessorService.stubService:com.ofss.digx.appx.alerts.service.host.AlertProcessorService
AlertProcessorService.proxyClassName:com.ofss.digx.appx.alerts.service.host.HostAlertProcessor
AlertProcessorService.timeOut:1200000
AlertProcessorService.targetUnit:OB0X_BU
FileProcessedNotifProcessorService.service:FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.namespace:http://host.service.fileupload.appx.digx.ofss.com/
FileProcessedNotifProcessorService.url:http://mum00aom.in.oracle.com:9015/obdx/FileProcessedNotifProcessorService?wsdl
FileProcessedNotifProcessorService.stubClass:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.endpointName:FileProcessedNotificationProcessorPort
FileProcessedNotifProcessorService.stubService:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotifProcessorService
FileProcessedNotifProcessorService.proxyClassName:com.ofss.digx.appx.fileupload.service.host.FileProcessedNotificationProcessor
FileProcessedNotifProcessorService.timeOut:1200000

```

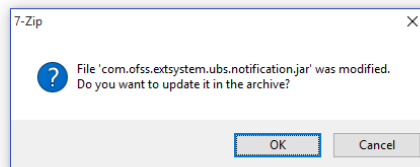
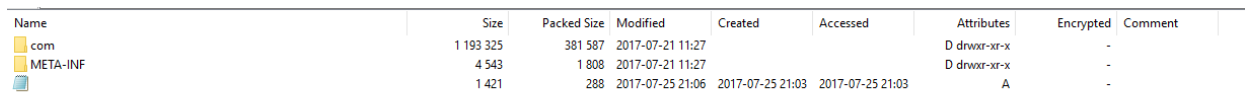
- Save changes.
- Click OK.



- Navigate back to obapis.externalsystem.ubs.notification.mdb.ear



- Click OK

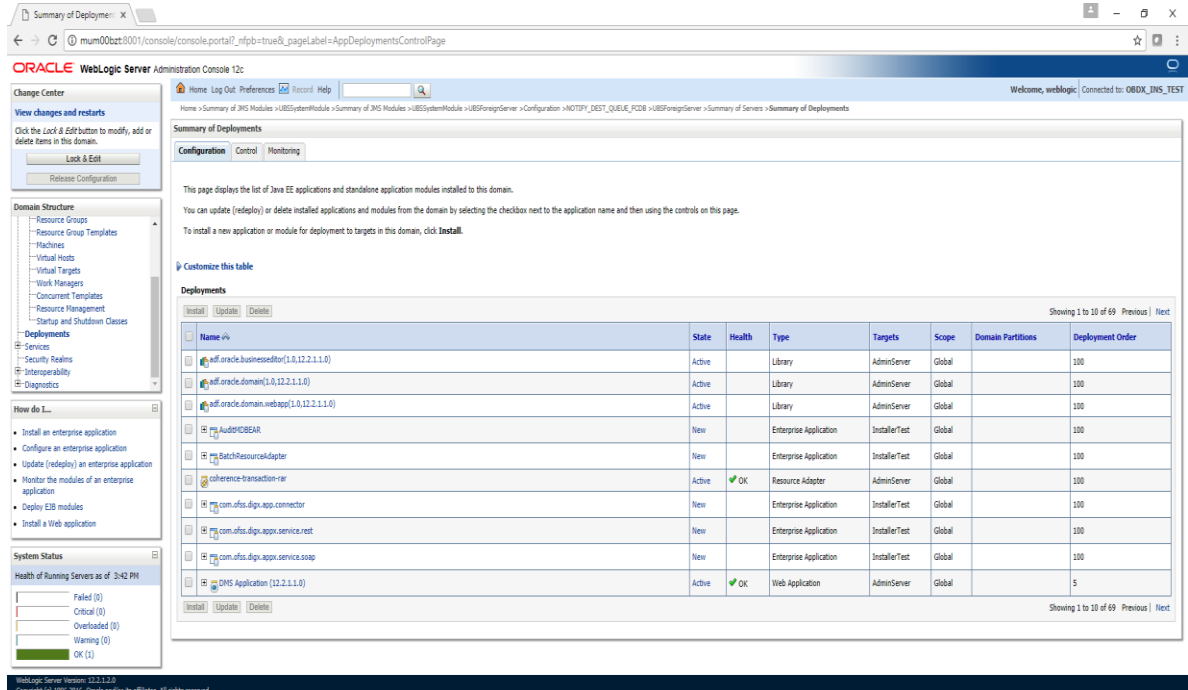


Name	Size	Packed Size	Modified	Created	Accessed	Attributes	Encrypted	Comment
APP-INF	3 783 283	3 350 626	2017-05-19 11:57			D drwxr-xr-x	-	
META-INF	1 660	862	2017-07-21 11:29			D drwxr-xr-x	-	
com.offss.extsystem.ubs.notification.jar	481 369	398 685	2017-07-25 21:07	2017-07-25 21:07	2017-07-25 21:07	A	-	

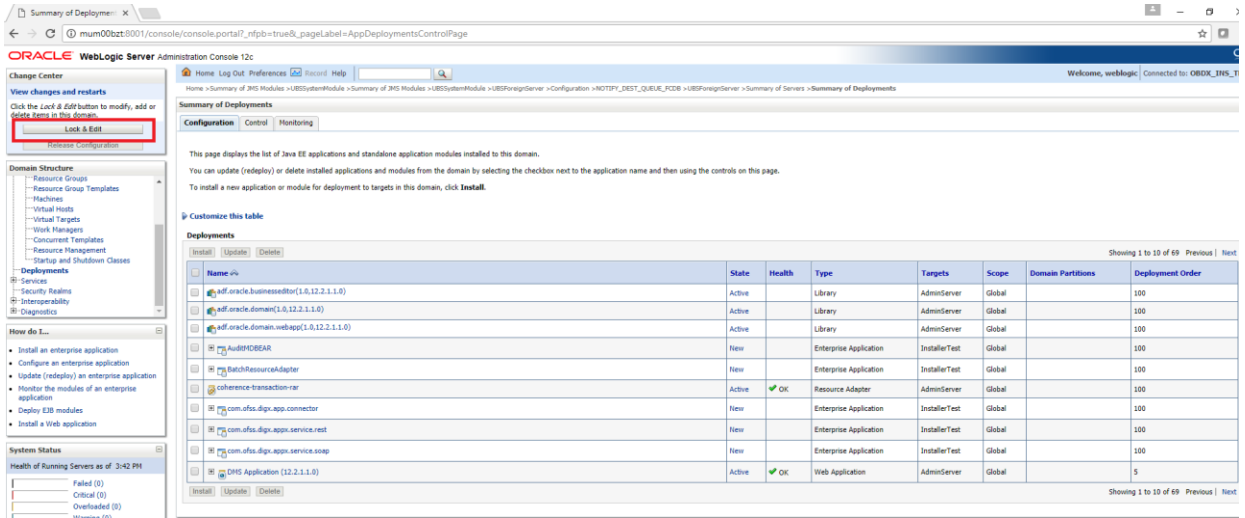
0 object(s) selected

Deploy the updated obapis.externalsystem.ubs.notification.mdb.ear using below steps.

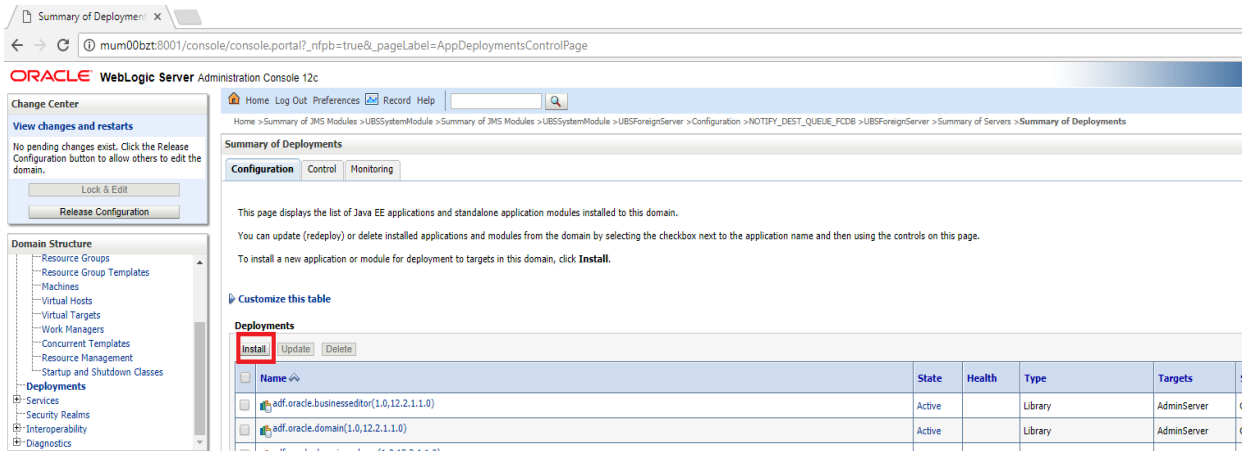
- Login into Weblogic Admin Console (OBAPIs domain created using installer) and navigate to Deployments



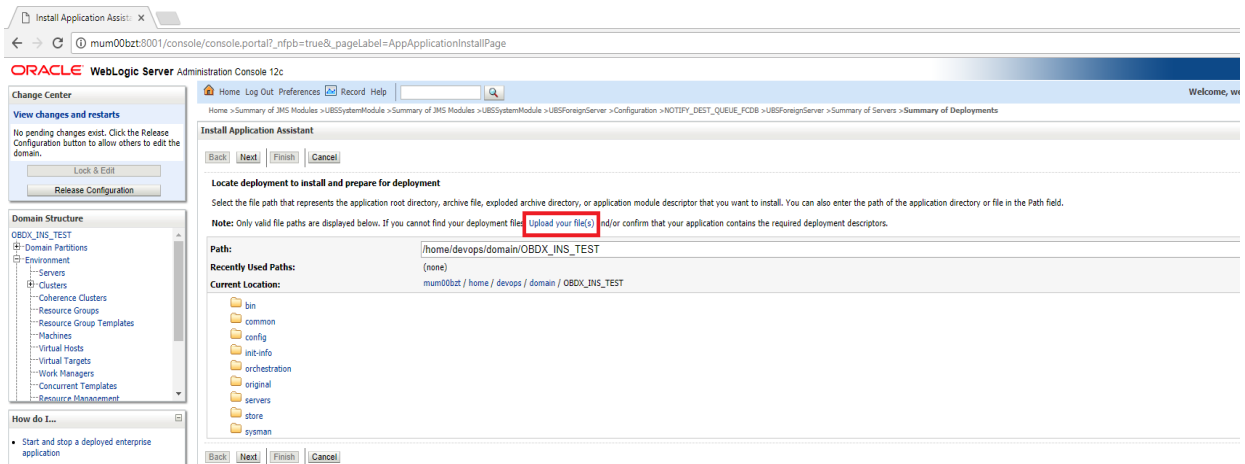
- Click Lock & Edit



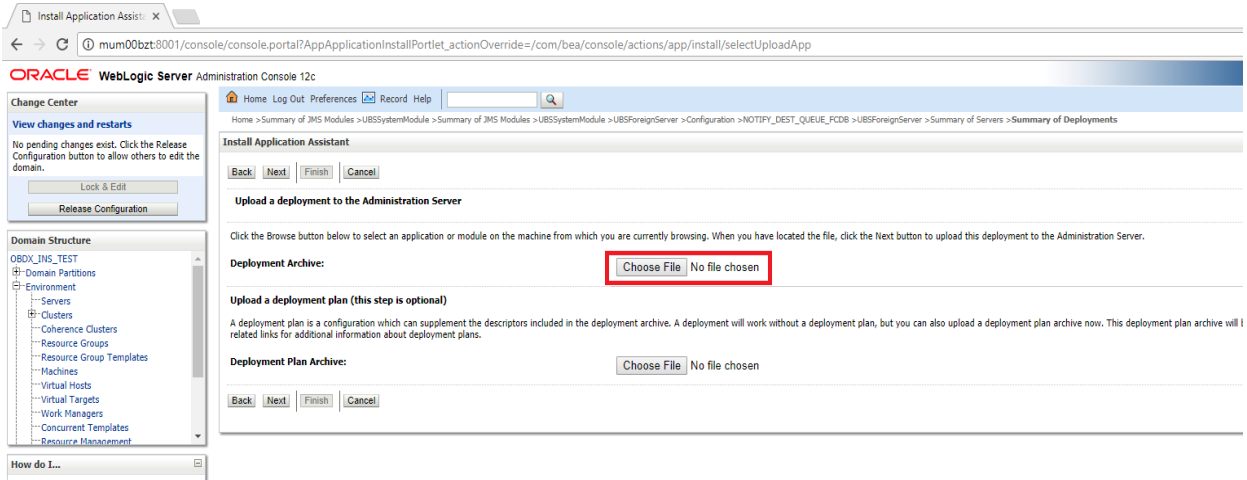
- Click on Install



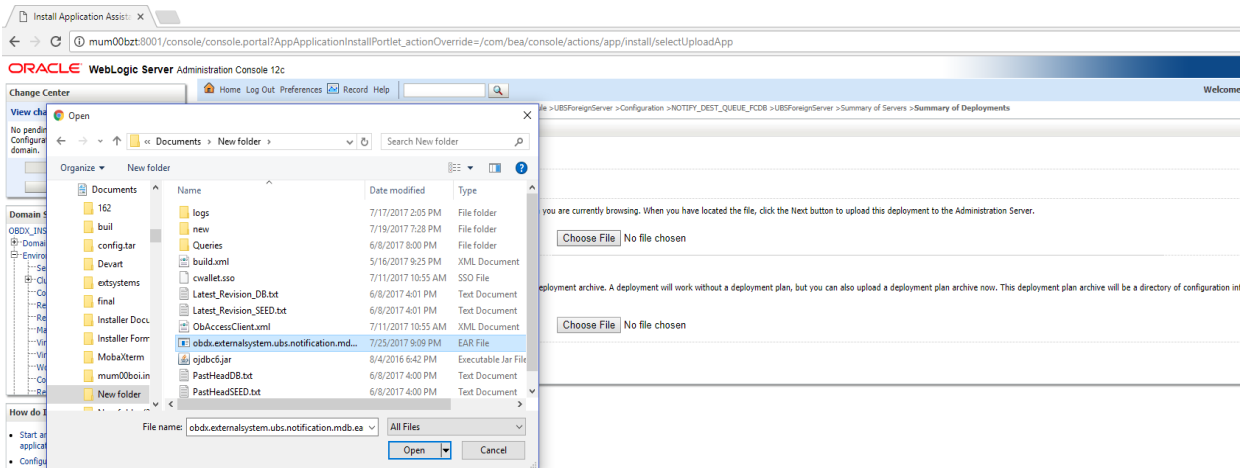
- Click on Upload your file(s)



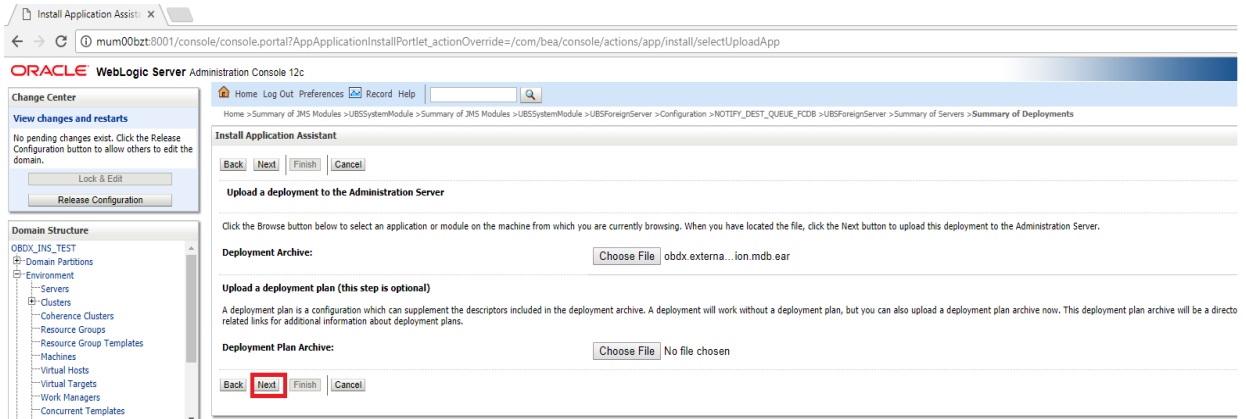
- Click on Choose File



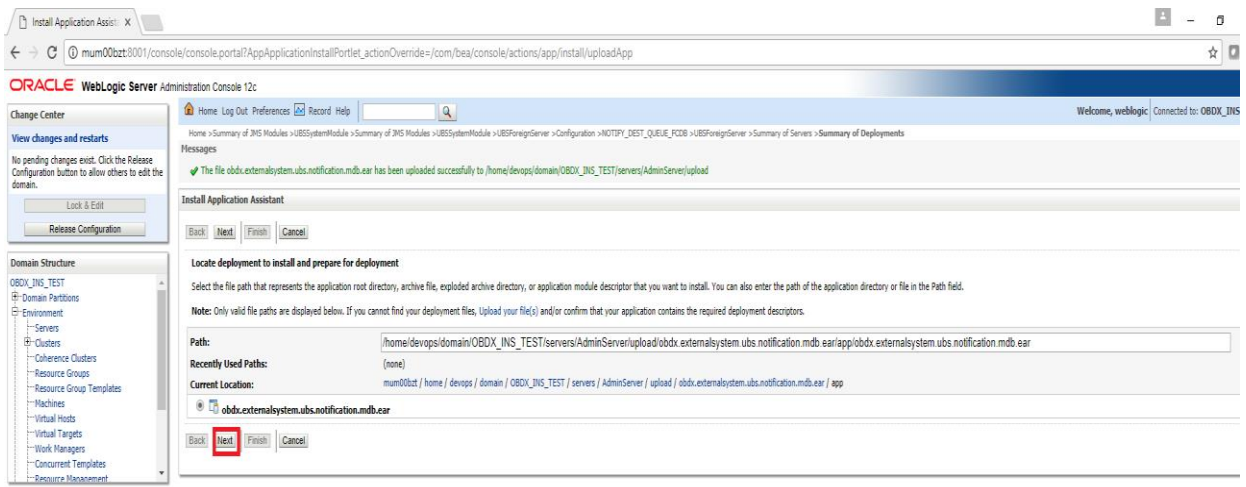
- Navigate to customized obapis.externalsystem.ubs.notification.mdb.ear and click Open



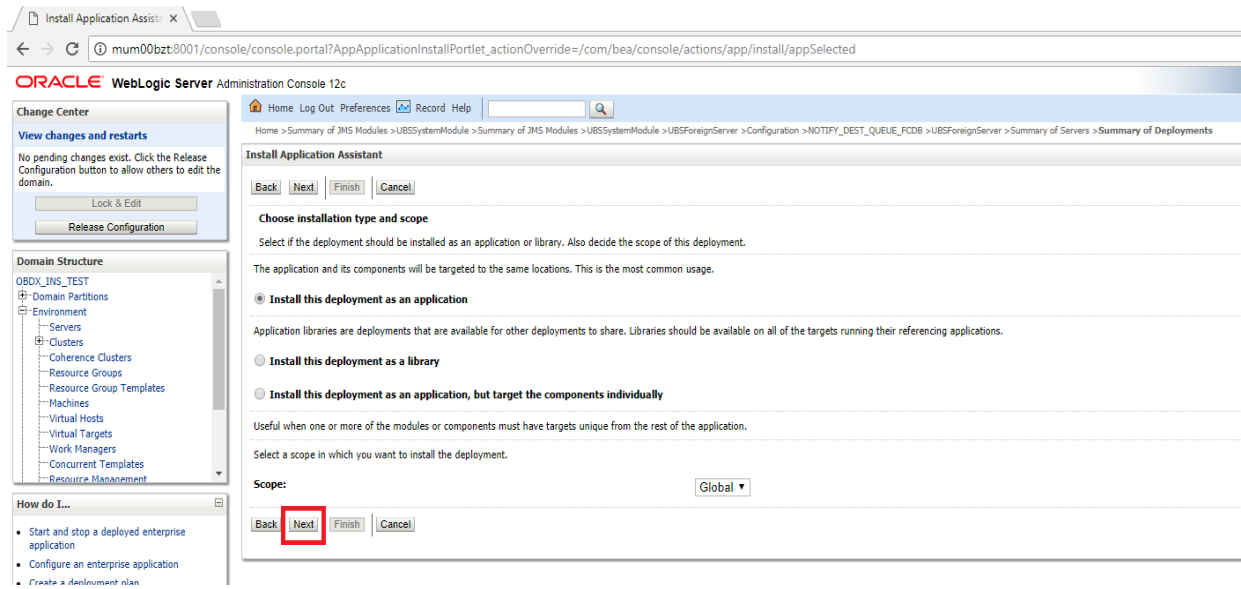
- Click Next



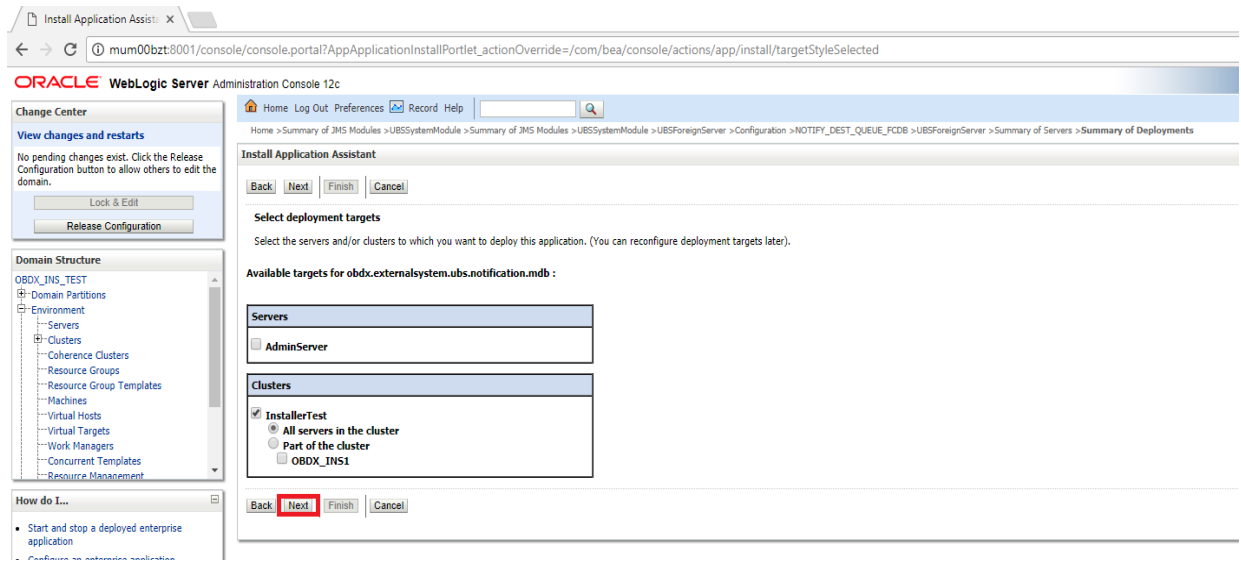
- Click Next



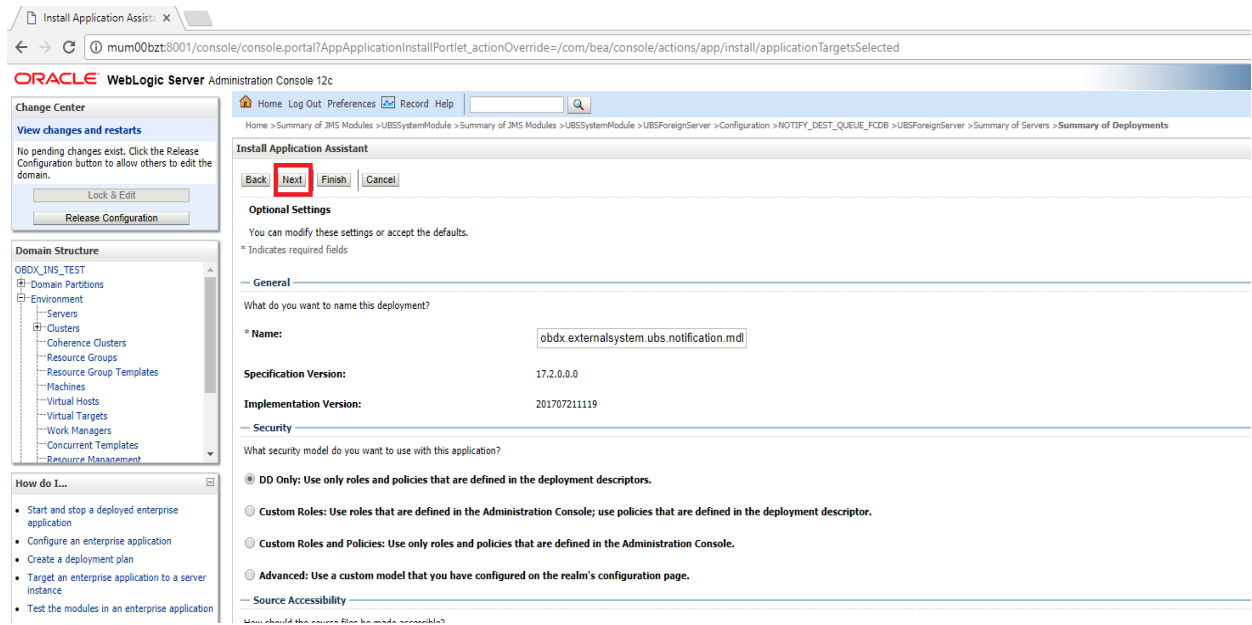
- Select “Install this deployment as an application” and click Next



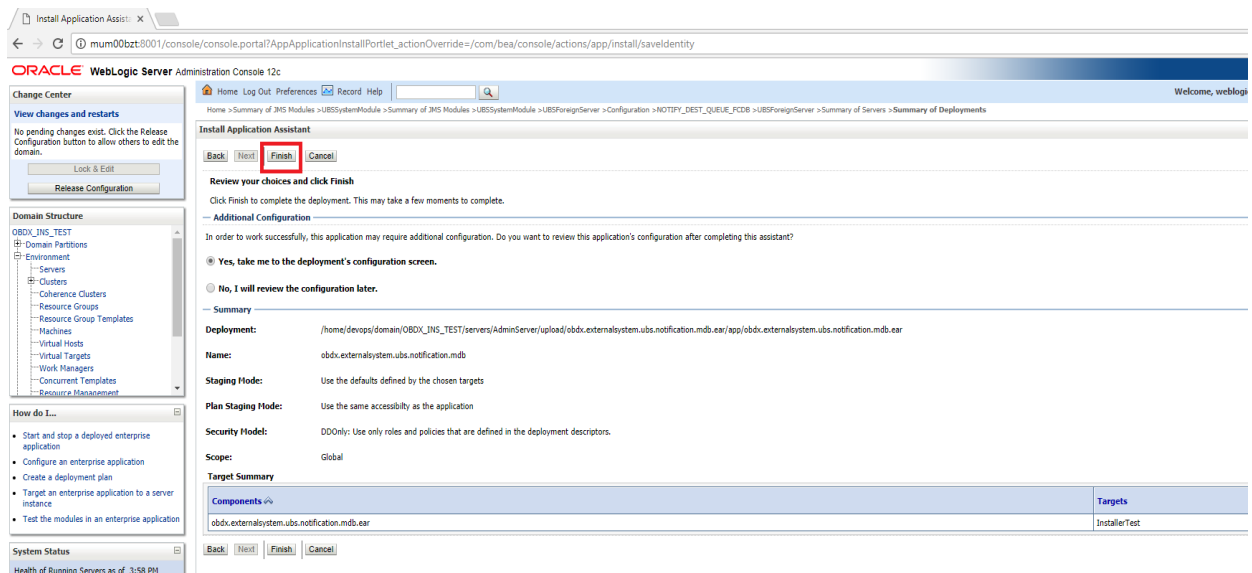
- Select Cluster as target and click Next



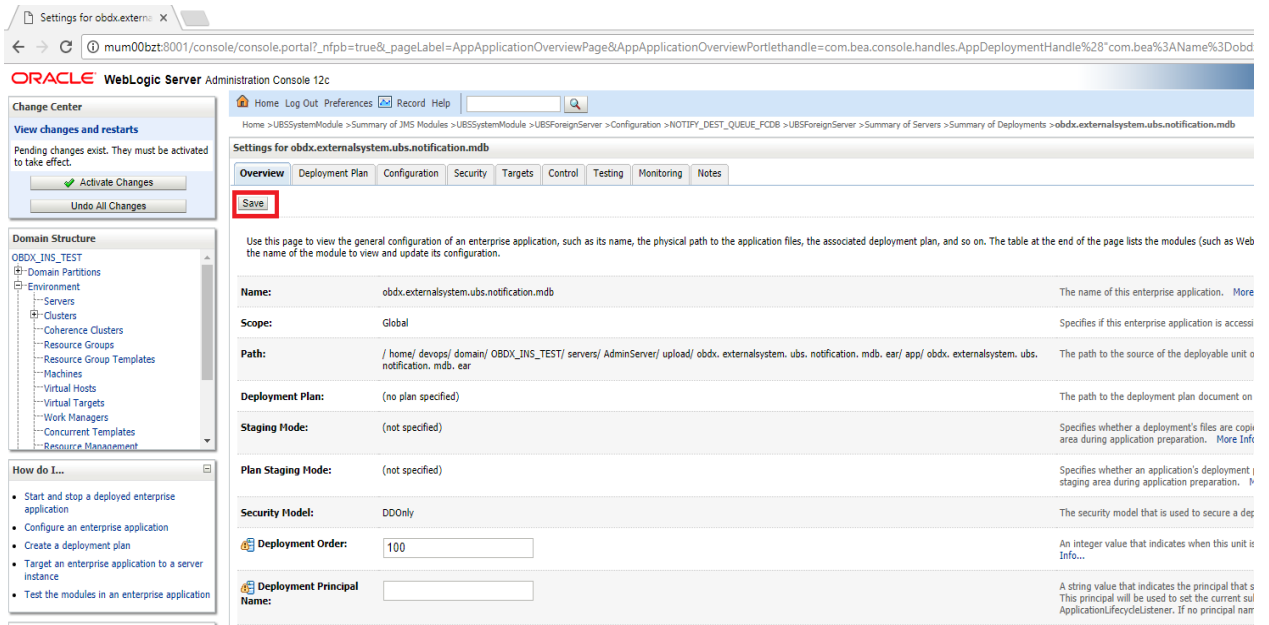
- Click Next



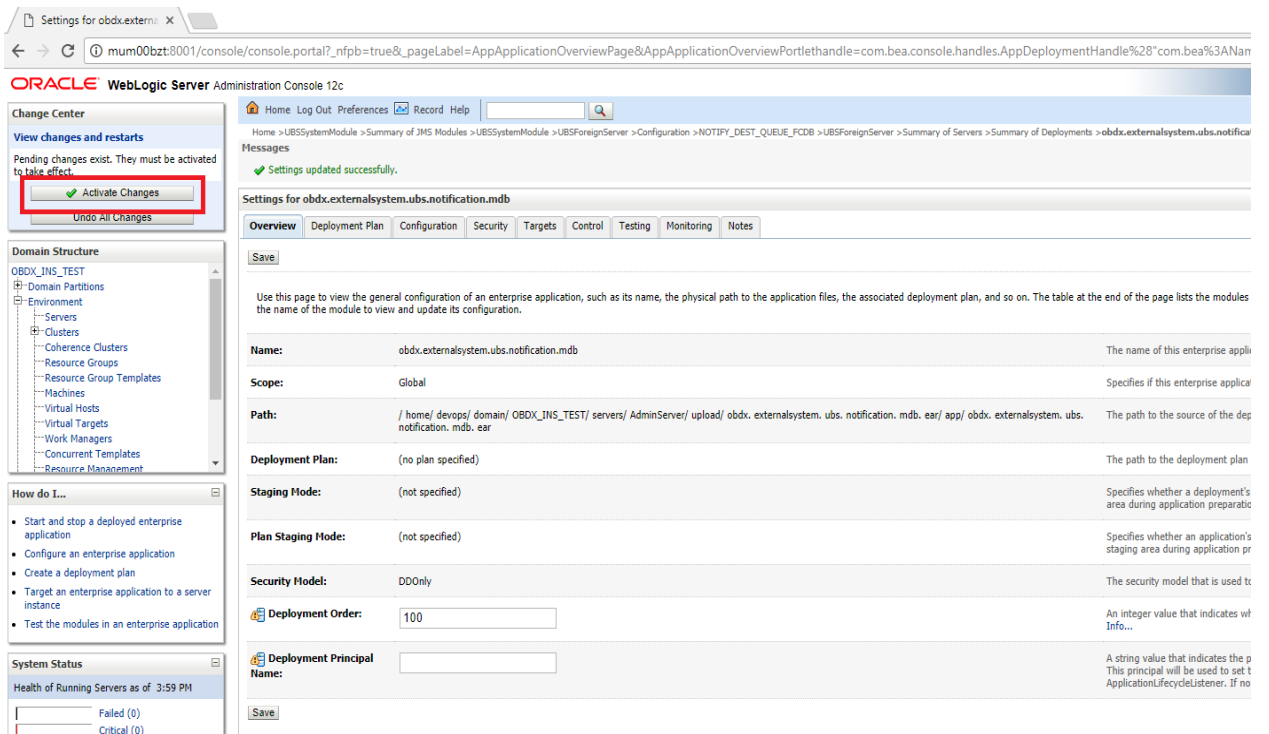
- Click Finish.



- Click Save.



- Click Activate Changes



The screenshot displays the Oracle WebLogic Server Administration Console interface. The main content area shows the configuration for the application `obdx.externalSystem.ubs.notification.mdb`. The configuration is organized into several sections:

- Overview:** Contains a message stating "All changes have been activated. No restarts are necessary." and a "Save" button.
- Configuration:** A table listing various properties:

Name:	obdx.externalSystem.ubs.notification.mdb	The name of this enterprise application. More
Scope:	Global	Specifies if this enterprise application is accessible to all servers in the domain.
Path:	/home/devops/domain/OBDX_INS_TEST/servers/AdminServer/upload/obdx.externalSystem.ubs.notification.mdb.ear/app/obdx.externalSystem.ubs.notification.mdb.ear	The path to the source of the deployable unit.
Deployment Plan:	(no plan specified)	The path to the deployment plan document on the server.
Staging Mode:	(not specified)	Specifies whether a deployment's files are copied to the staging area during application preparation. More Info
Plan Staging Mode:	(not specified)	Specifies whether an application's deployment is staged to the staging area during application preparation. More Info
Security Model:	DDOnly	The security model that is used to secure a deployment.
Deployment Order:	100	An integer value that indicates when this unit is installed.
Deployment Principal Name:		A string value that indicates the principal that is used to set the current sul. This principal will be used to set the current sul. ApplicationLifecycleListener. If no principal name is specified, the default principal name is used.

Fileupload with UBS

Refer below document for File upload configuration with UBS

Oracle Banking APIs File Upload Report Configuration

Origination with UBS

Refer below document (section 5 and 6) for enabling Origination with UBS

Oracle Banking APIs UBS Origination Setup and Configuration

OBAPIs with OBP Base (Installation with Oracle Banking Platform)

Refer below document (section 5.2 OUD configurations in OBP) for User Authentication required for integration with OBP

Oracle Banking APIs OBP Base Setup and Configuration

OBAPIs US LZN with OBP US LZN (Installation with Oracle Banking Platform US LZN)

Once OBP Base setup and configuration is complete, refer below document to apply LZN Installer required for integration with OBP 2.5.0.2 US LZN.

Oracle Banking APIs OBP US LZN Setup and Configuration

OBAPIs with OFSL (Installation with Oracle Services Lending and Leasing)

Refer below document for OFSLL Installer required for integration with OFSLL

Oracle Banking APIs OFSLL Setup Configuration

OFSLL supports social media integration. Refer Oracle Banking Digital Experience Origination Social Media Integration document.

OHS

OHS server needs to be configured for all FLAVOR's as a mandatory activity.

To configure OHS server follow steps mentioned in below document before proceeding further.

Oracle Banking APIs OHS User Interface Configuration

[Home](#)

9. OBAPIs Product Verification

Start managed server and verify all deployed applications are in Active state (as shown below).

<input type="checkbox"/>	AuditMDBEAR	Active	✔ OK	Enterprise Application	InstallerDev	Global		100
<input type="checkbox"/>	BatchResourceAdapter	Active	✔ OK	Enterprise Application	InstallerDev	Global		100
<input type="checkbox"/>	coherence-transaction-rar	Active	✔ OK	Resource Adapter	AdminServer, InstallerDev	Global		100
<input type="checkbox"/>	com.ofss.digx.app.connector	Active	✔ OK	Enterprise Application	InstallerDev	Global		100
<input type="checkbox"/>	com.ofss.digx.appx.chatbot.rest	Active	✔ OK	Enterprise Application	InstallerDev	Global		100
<input type="checkbox"/>	com.ofss.digx.chatbot(18.1.0.0.0,201801090518)	Active		Library	InstallerDev	Global		100

<input type="checkbox"/>	obdx.app.core.domain(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
<input type="checkbox"/>	obdx.app.core.patch(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
<input type="checkbox"/>	obdx.app.domain(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
<input type="checkbox"/>	obdx.app.rest.idm	Active	✔ OK	Enterprise Application	InstallerDev	Global		0
<input type="checkbox"/>	obdx.app.security(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
<input type="checkbox"/>	obdx.app.soap	Active	✔ OK	Enterprise Application	InstallerDev	Global		100
<input type="checkbox"/>	obdx.app.timer	Active	✔ OK	Enterprise Application	InstallerDev	Global		100
<input type="checkbox"/>	obdx.extsystem.domain(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
<input type="checkbox"/>	obdx.thirdparty.app.domain(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0

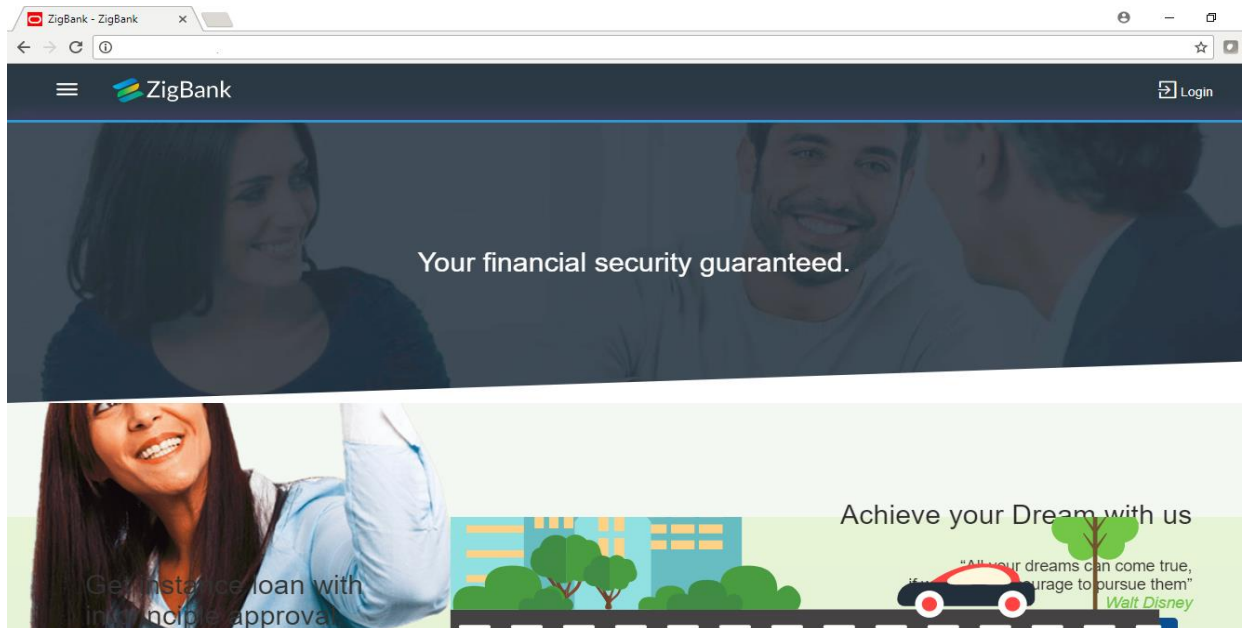
<input type="checkbox"/>	ReportsMDBEAR	Active	✔ OK	Enterprise Application	InstallerDev	Global		100
--------------------------	---------------	--------	------	------------------------	--------------	--------	--	-----

To login into application, new user needs to be created (if not already done) in OUD refer section Creating the Attributes, Object Class, Users, Groups and Adding Optional Attributes on LDAP Server of document “Oracle Banking APIs Installer Pre-Requisite Setup Manual” mentioned in section 1.5 Related Information Sources.

To verify the installation, launch below URL

`http://<OHS server ip or hostname>:<OHS port>`

Check if the page loads successfully.



Day1 Configuration

Universal Banking Solution (OBAPIs with UBS)

Refer below document (Section 3. System Configuration) for Day1 configuration required for integration with UBS

Oracle Banking APIs System Configuration

Once day1 is completed, application is available for end-user transactions.

Note: Post Day1 restart of Managed server is mandatory

Third Party System (OBAPIs with THP)

Refer below document (Section 5. System Configuration – Host System as Third Party) for Day1 configuration required for integration with Third-party System

Oracle Banking APIs System Configuration

Once day1 is completed, application is available for end-user transactions.

Note: Post Day1 restart of Managed server is mandatory

Oracle Banking Platform (OBAPIs with OBP)

Refer below document (Section 4 System Configuration – Host System as OBP Base and US LZN) for Day1 configuration required for integration with OBP

Oracle Banking APIs System Configuration

Once day1 is completed, application is available for end-user transactions.

Note: Post Day1 restart of Managed server is mandatory

Oracle Banking Platform US LZN (OBAPIs with OBP US LZN)

Refer below document (Section 4 System Configuration – Host System as OBP Base and US LZN) for Day1 configuration required for integration

Oracle Banking APIs System Configuration

Once day1 is completed, application is available for end-user transactions.

Note: Post Day1 restart of Managed server is mandatory

Oracle Financial Services Lending and Leasing (OBAPIs with OFSLL)

Refer below document (section 5.1 System Configuration) for Day1 configuration required for integration with OFSLL

Oracle Banking APIs OFSLL Setup Configuration

Once day1 is completed, application is available for end-user transactions.

Note: Post Day1 restart of Managed server is mandatory

Chat Bot Configuration:

Refer below document for Chat Bot configuration.

Oracle Banking APIDigital Experience Chatbot Configuration

Mobile Application Builder:

Refer below documents for Mobile Applications build and setup.

Oracle Banking APIDigital Experience Mobile Application Builder-Android

Oracle Banking APIDigital Experience Mobile Application Builder-iOS

[Home](#)

10. Configuration for OUD/OAM

In-case installation needs to be done using OUD/ OAM provider, below steps needs to be performed manually.

Weblogic configuration

- **REST EAR deployment:**

Undeploy obapis.app.rest.idm from deployments.

Deploy obapis.app.rest from Installer zip (<OBAPIS INSTALLER DIR>\installables\app\components\obapi\deploy).

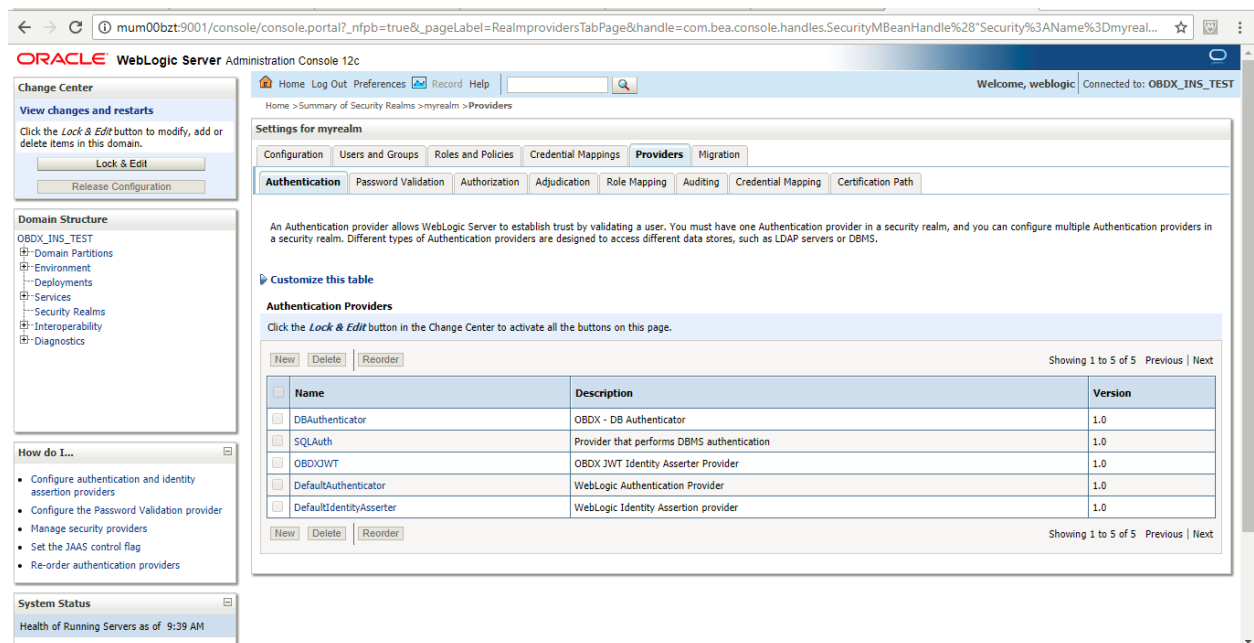
- **Security Realms**

To configure your own Oracle 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 for OBAPIS domain (created by Installer) using the following URL:

http://<hostname>:<admin_port>/console

- Now, go to Security Realms > myrealm > Providers

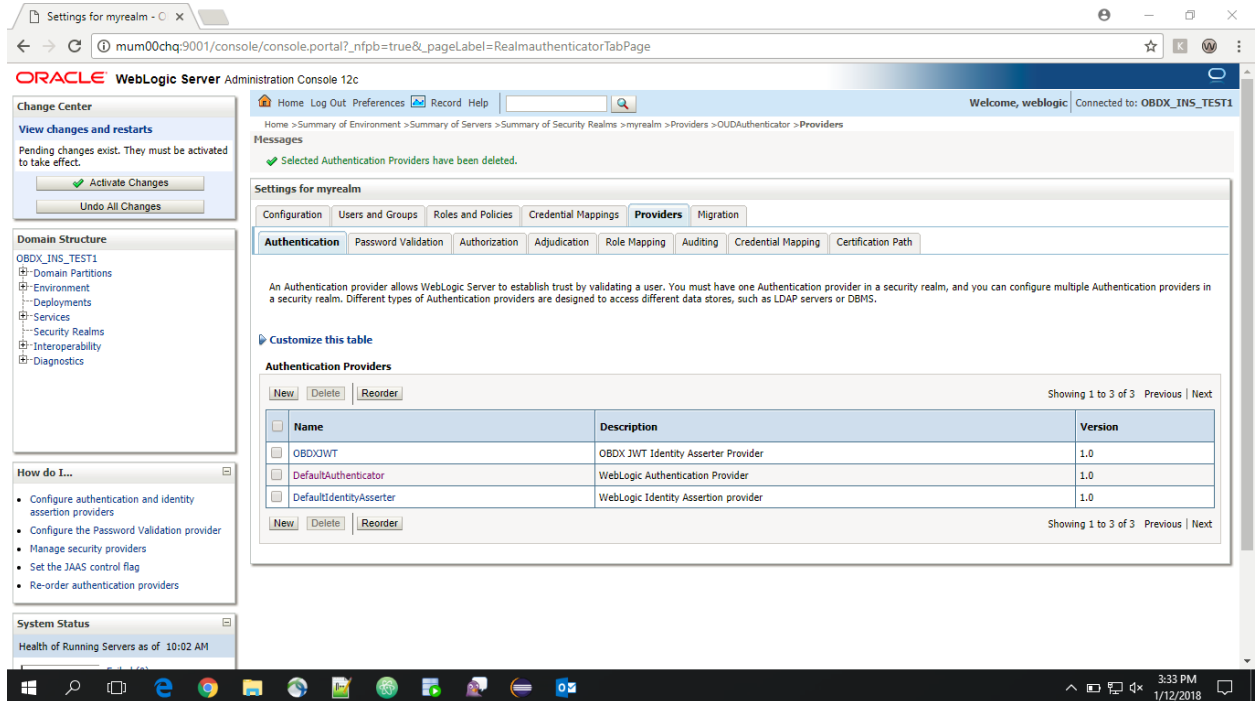
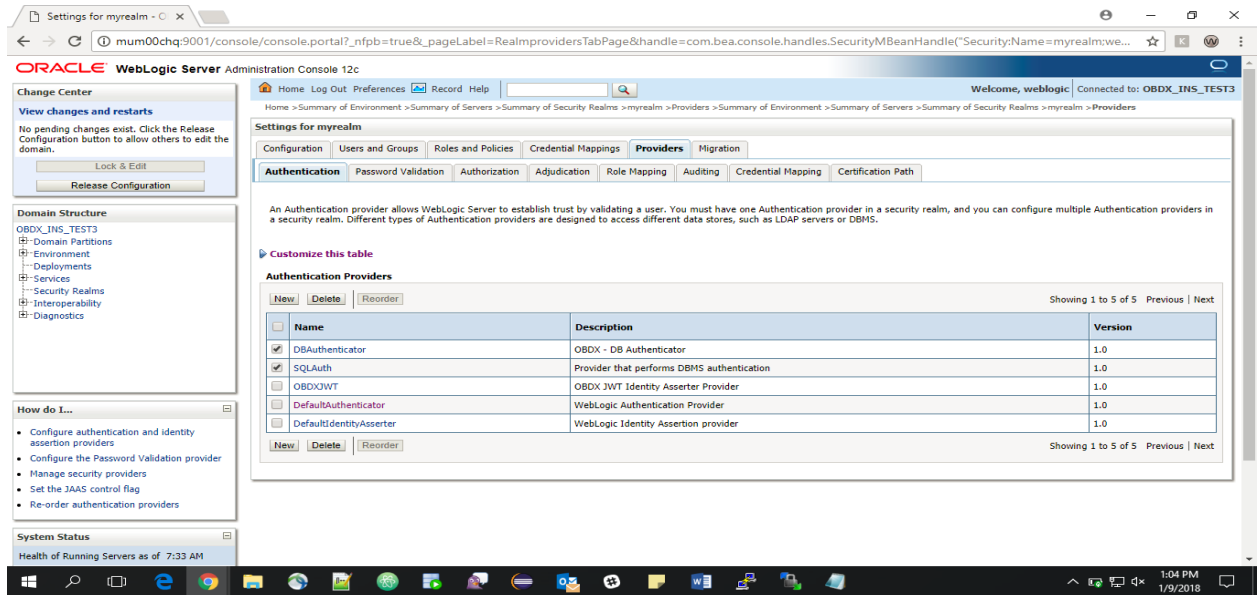


The screenshot shows the Oracle WebLogic Server Administration Console interface. The main content area is titled "Settings for myrealm" and is under the "Providers" tab. It contains a table of Authentication Providers. The table has three columns: Name, Description, and Version. The providers listed are:

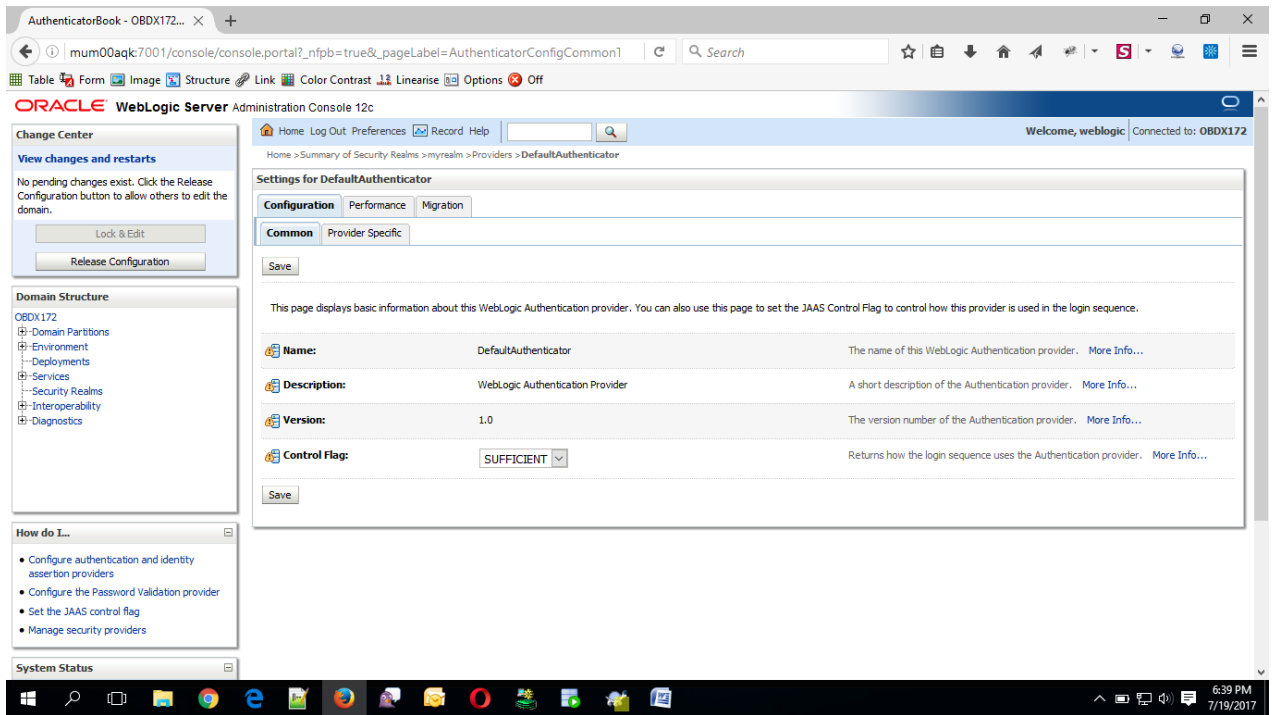
Name	Description	Version
DBAuthenticator	OBDX - DB Authenticator	1.0
SQLAuth	Provider that performs DBMS authentication	1.0
OBXJWT	OBDX JWT Identity Asserter Provider	1.0
DefaultAuthenticator	WebLogic Authentication Provider	1.0
DefaultIdentityAsserter	WebLogic Identity Assertion provider	1.0

- Now click on “**Lock & Edit**” in order to edit the details.
- Delete the following authenticators under providers->authenticators:
DBAuthenticator

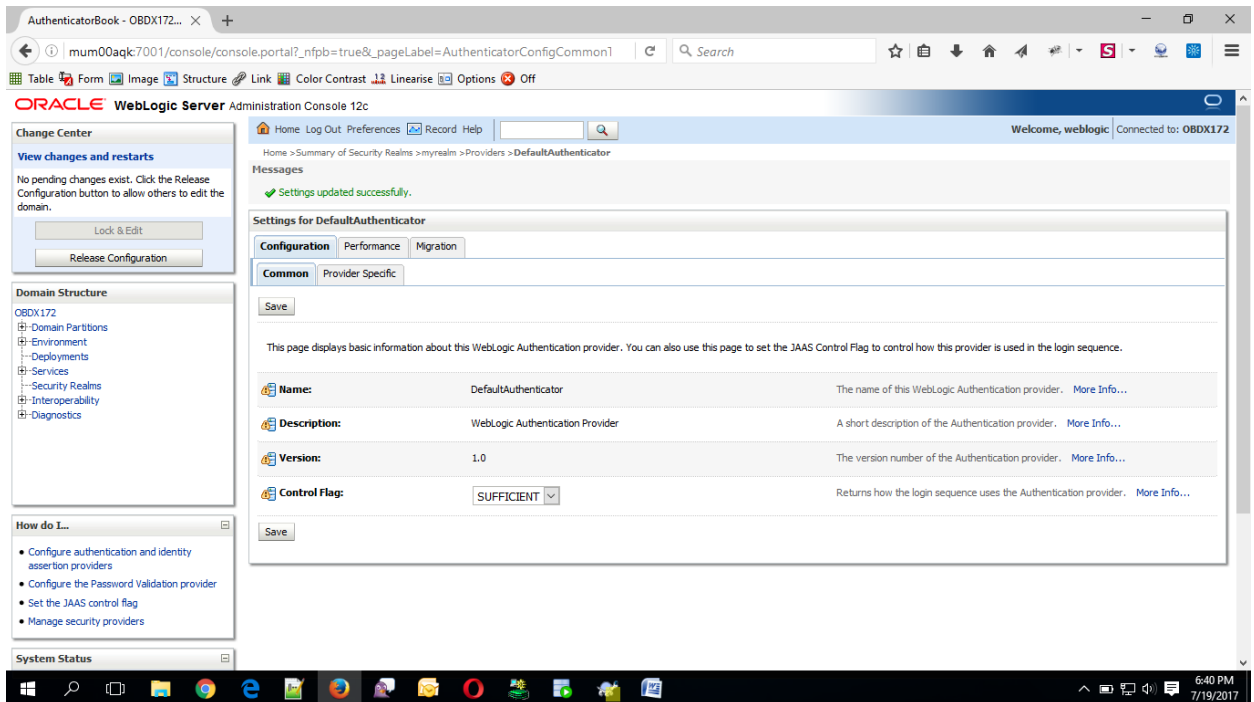
SQLAuth



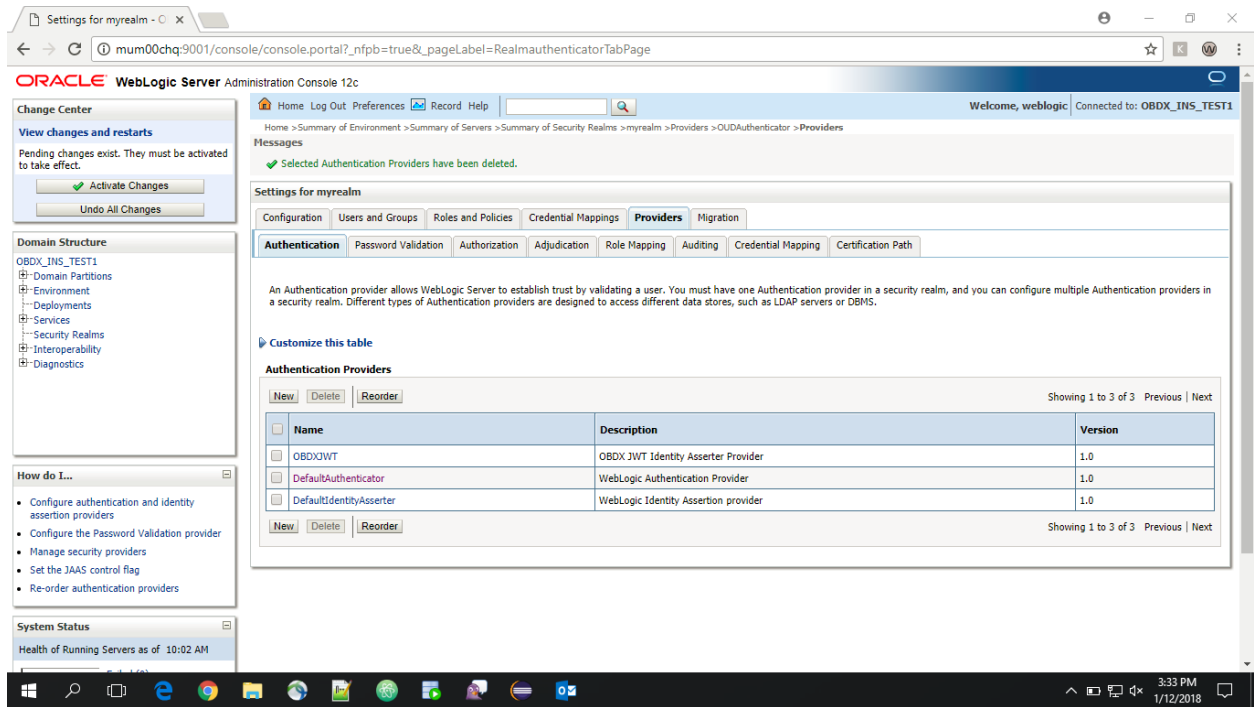
- Click on 'DefaultAuthenticator' provider and change the Control Flag to SUFFICIENT



- Click on Save button to save the changes



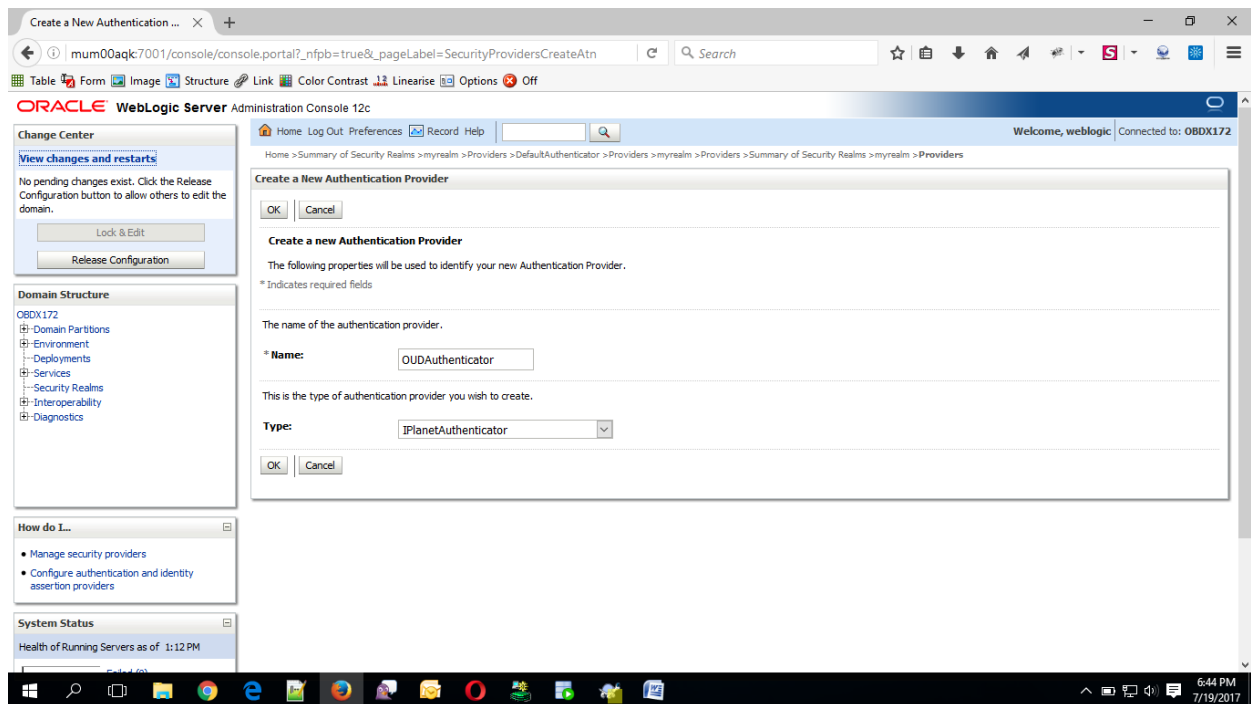
- Navigate Back to Security Realms > myrealm > Providers



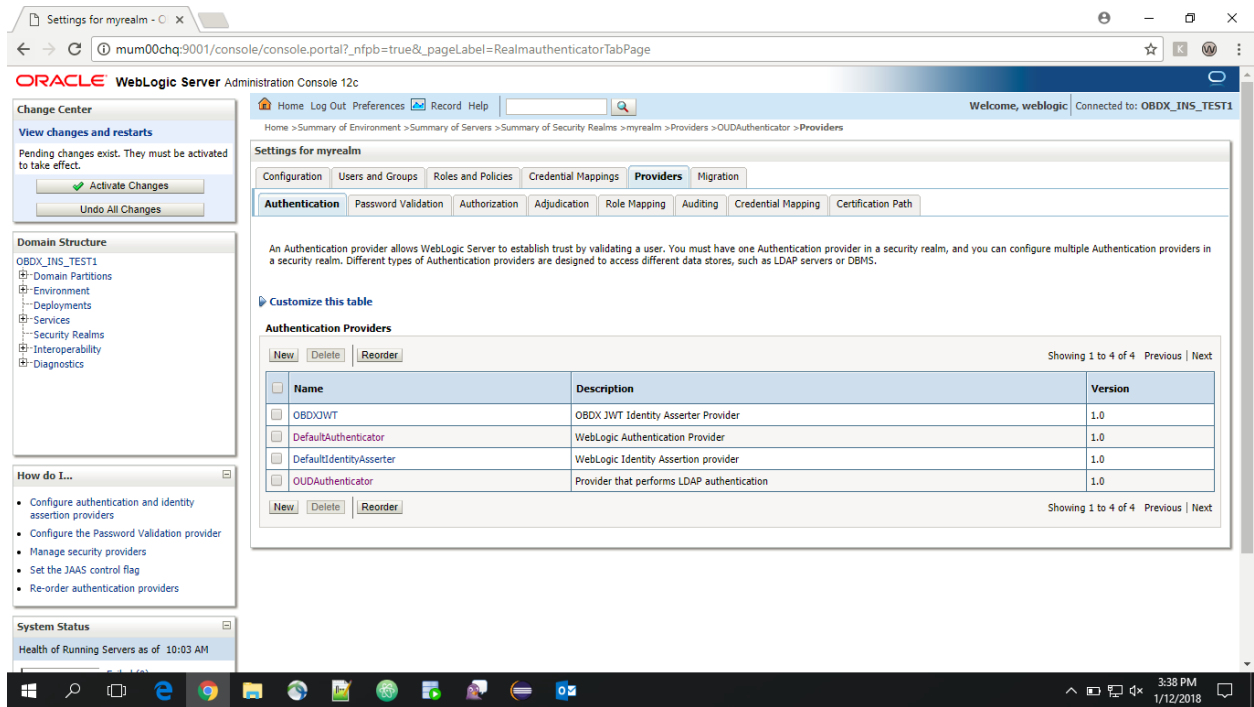
- Now, click on New and enter the below details and click Save.

Name : OUDAuthenticator

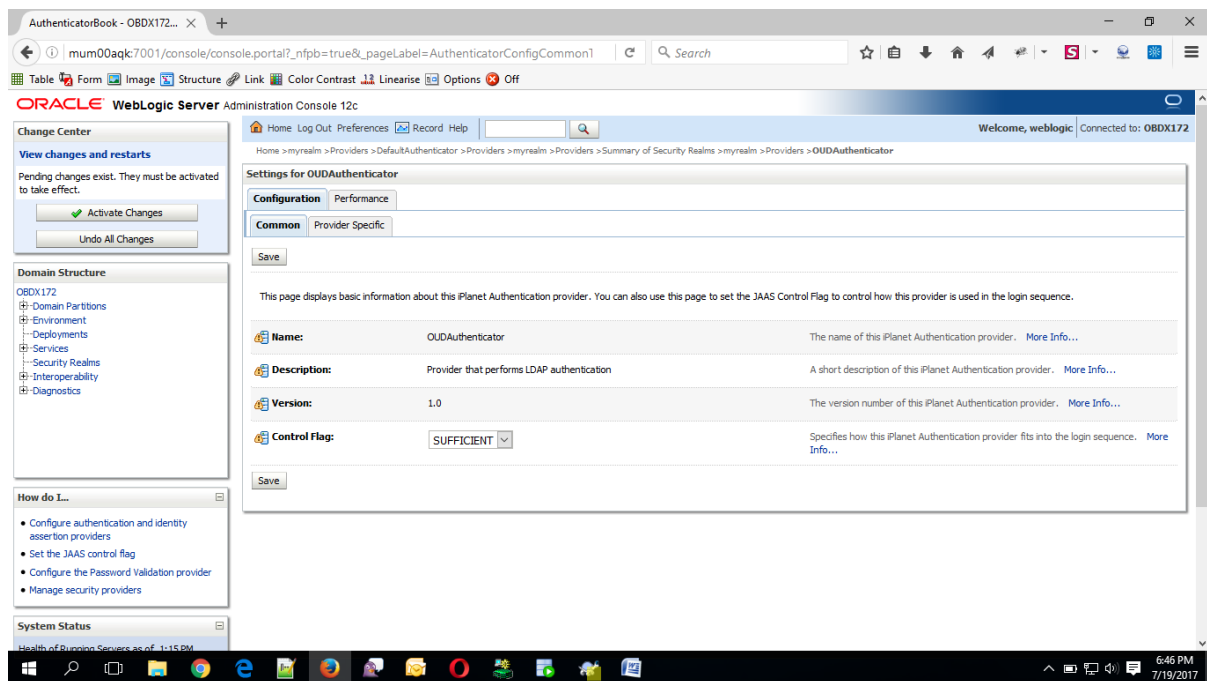
Type : IPlanetAuthenticator



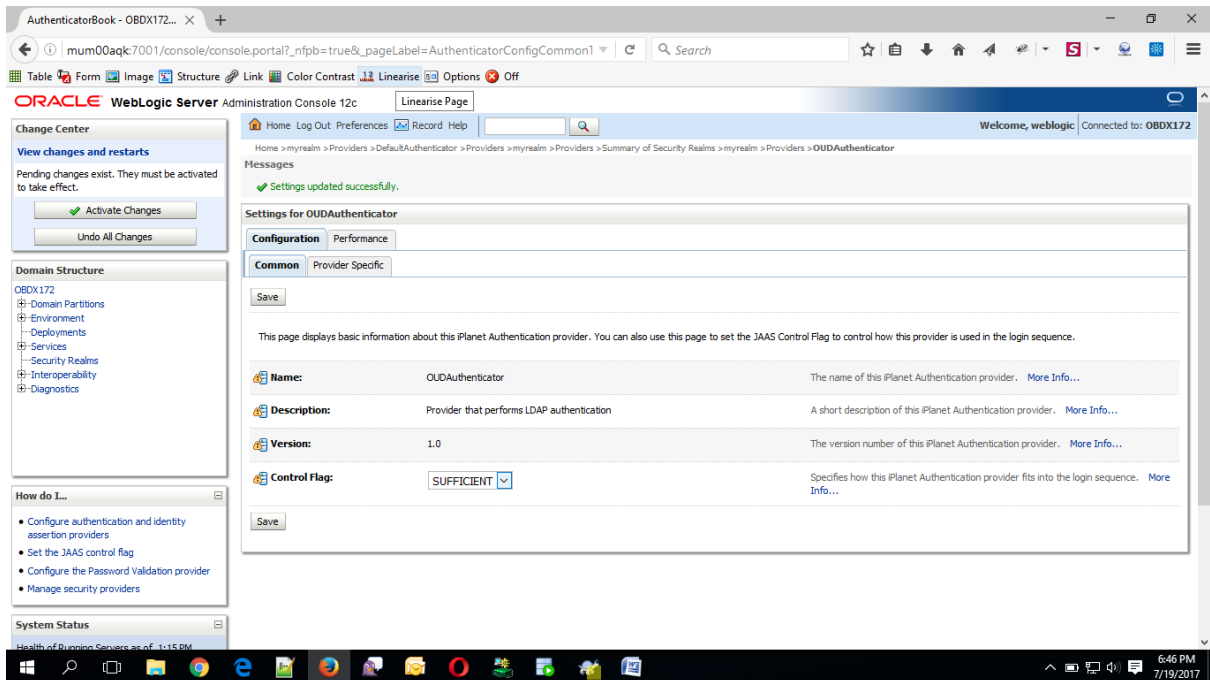
- Click on OK Button.



Now Click on OUDAuthenticator and select Control Flag as “SUFFICIENT”

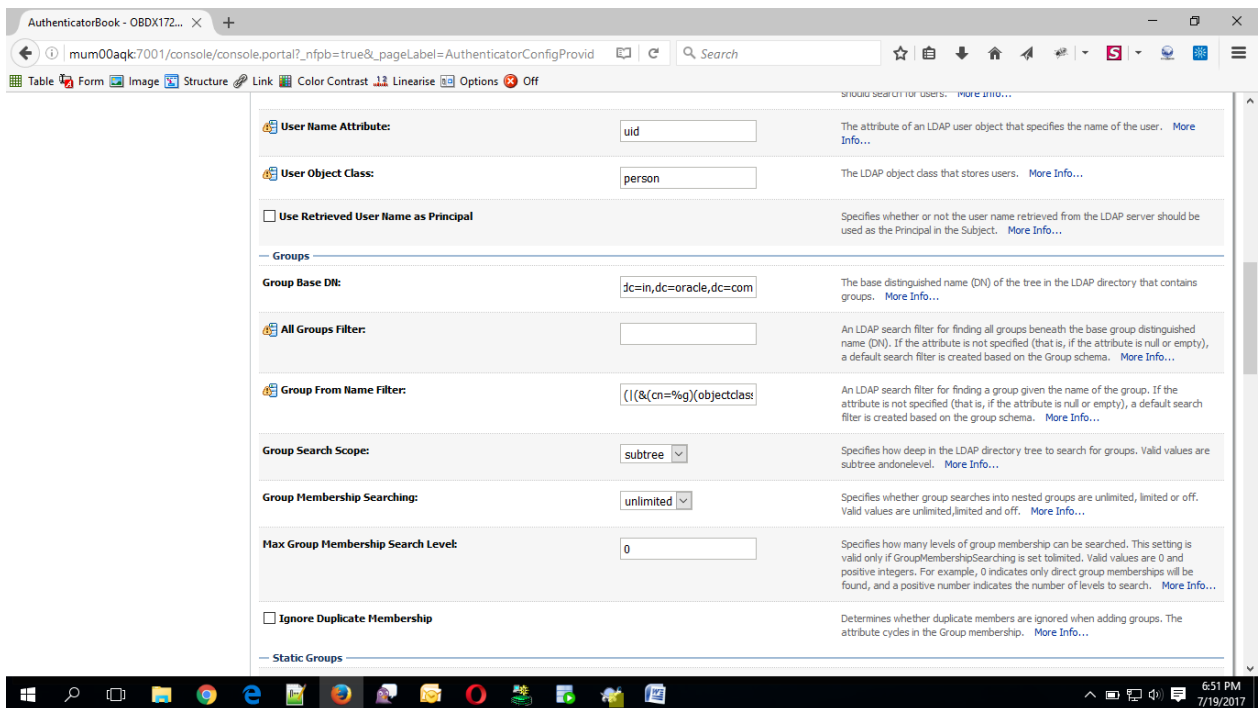
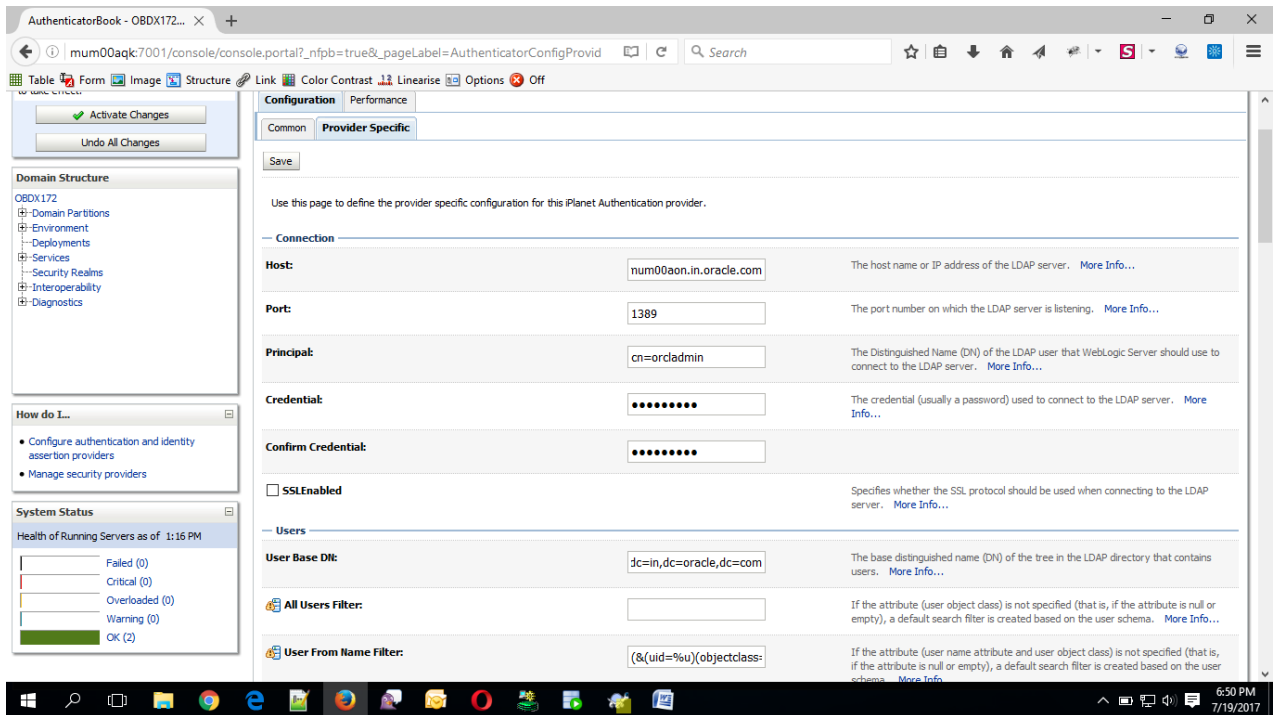


- Click on Save Button.

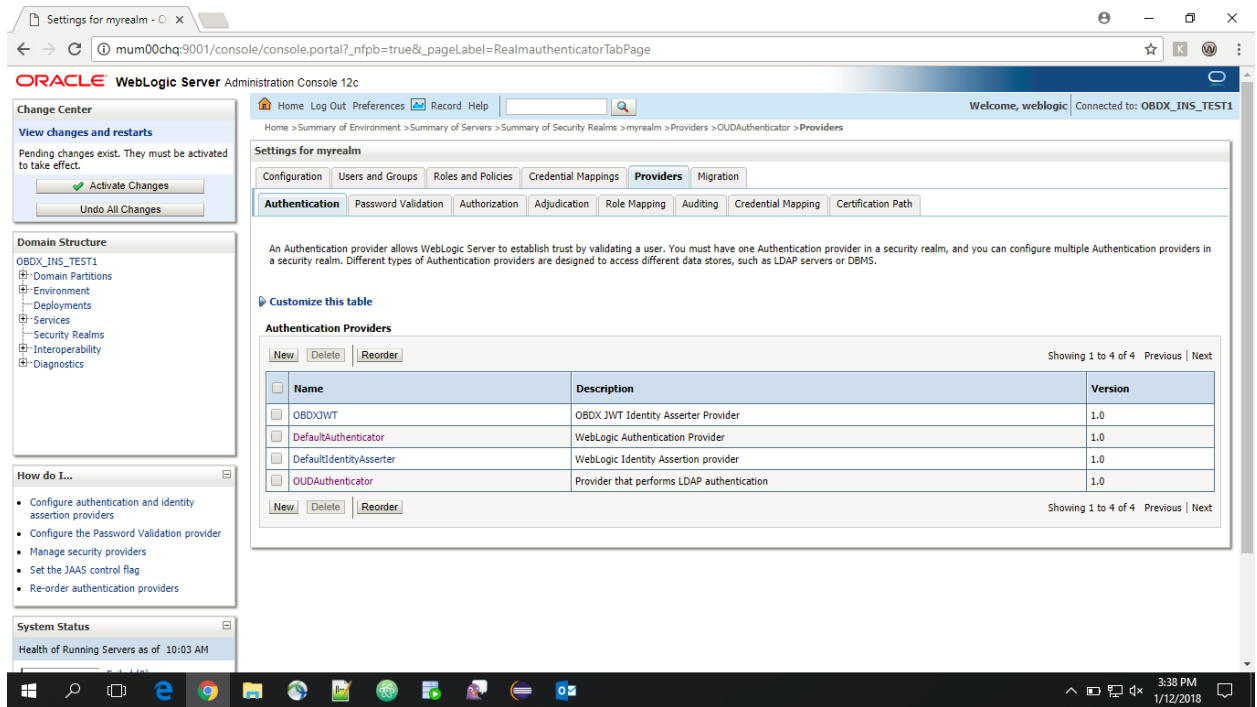


- Now under Provider Specific tab set the details of LDAP where the server should point. Refer to the following table for more information:

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



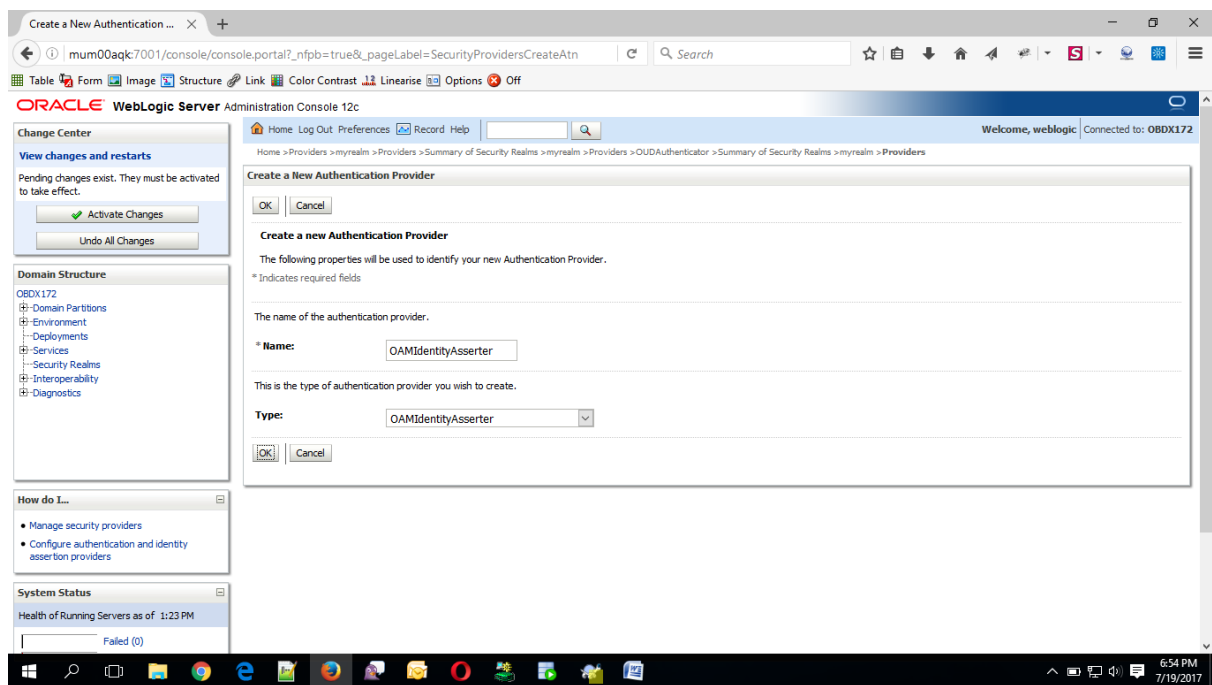
- Click on Save to update the changes.
- Navigate Back to Security Realms > myrealm > Providers



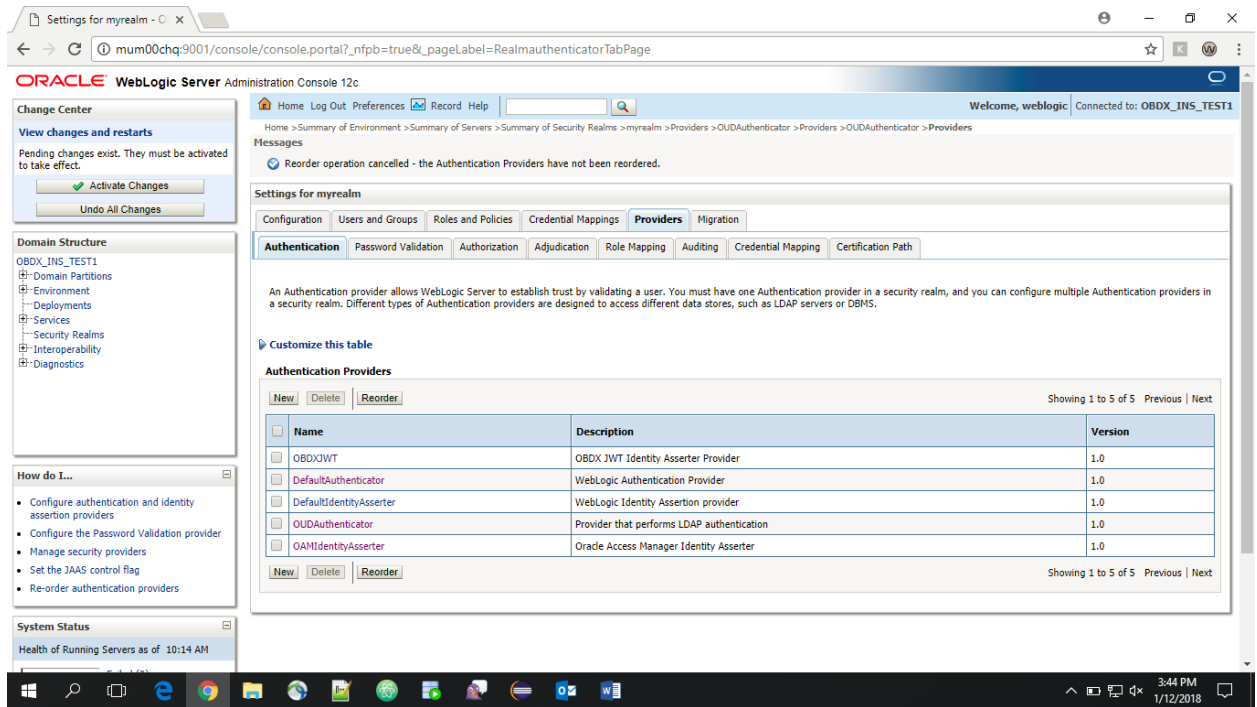
- Now, click on New and enter the below details and click Save.

Name : OAMIdentityAsserter

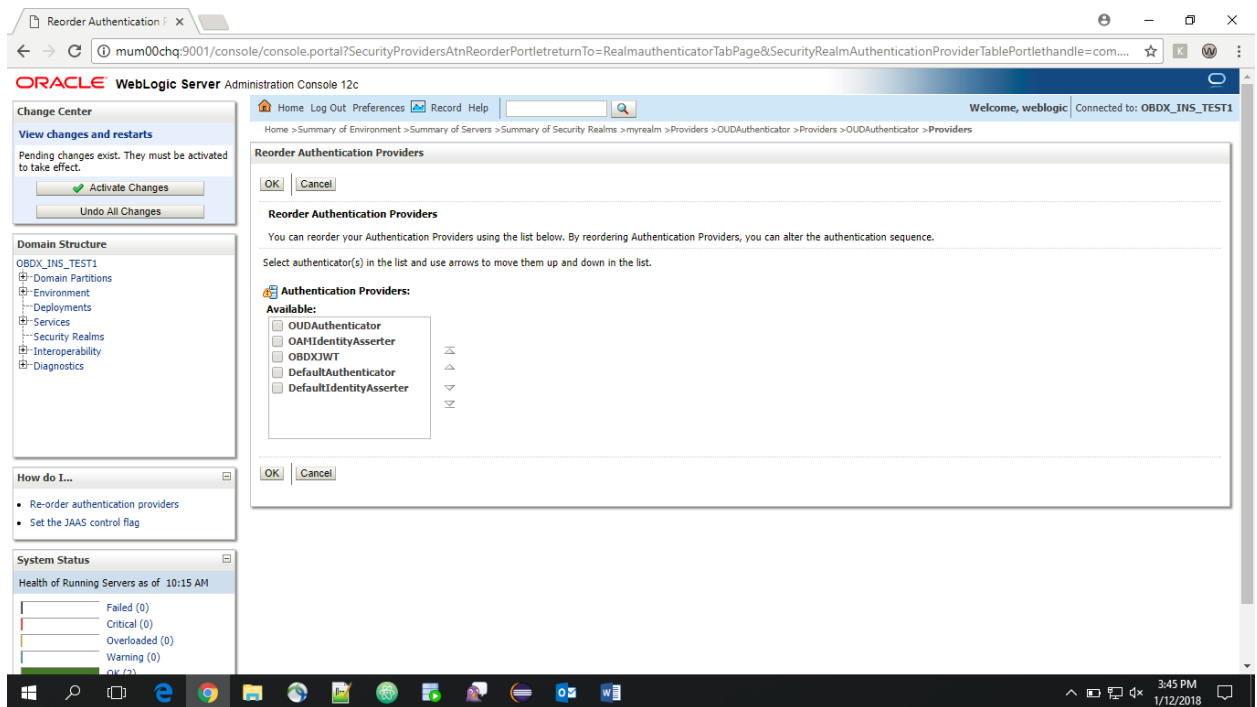
Type : OAMIdentityAsserter



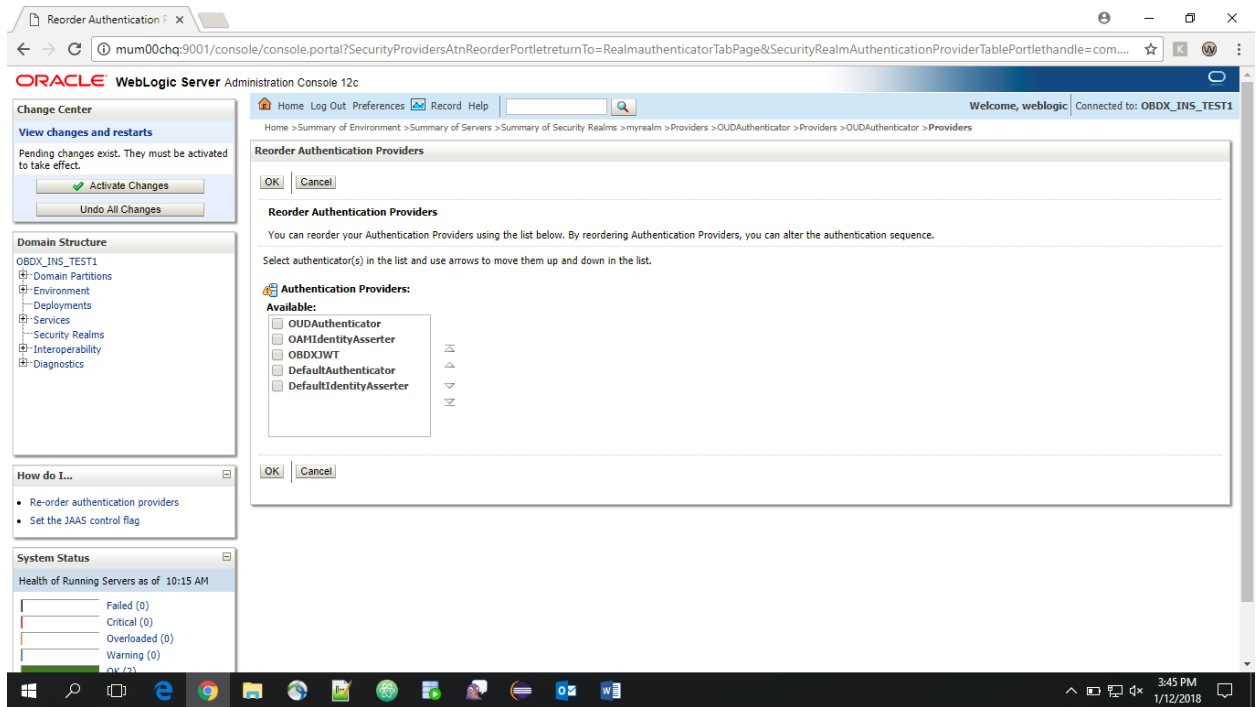
- Click on OK Button.



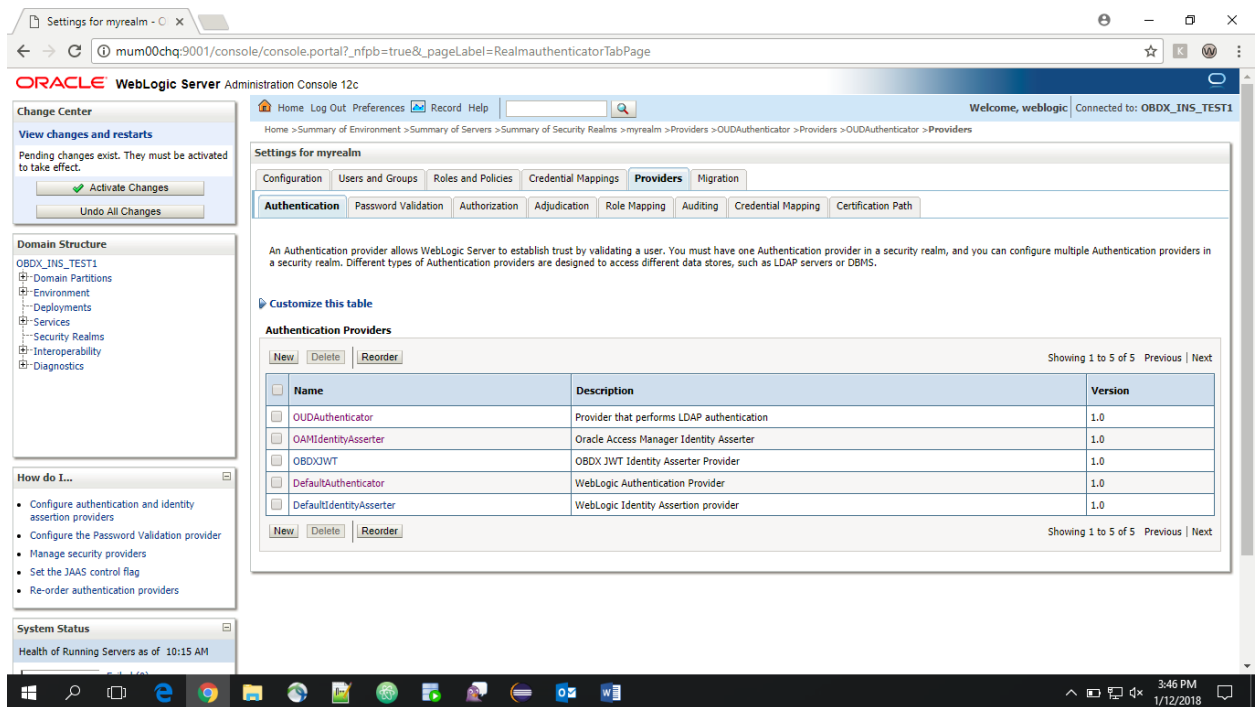
- Click on Reorder Button.



- Reorder the providers so that LDAP Provider (OUDAuthenticator) gets highest priority followed by OAMIdentityAsserter, OBAPISJWT, DefaultAuthenticator, DefaultIdentityAsserter.



- Click on OK Button.



- Click on Activate Changes to apply the changes.

The screenshot shows the Oracle WebLogic Server Administration Console. The main content area is titled "Settings for myrealm" and is under the "Providers" tab. It lists several authentication providers in a table:

Name	Description	Version
OUDAuthenticator	Provider that performs LDAP authentication	1.0
OAMIdentityAsserter	Oracle Access Manager Identity Asserter	1.0
OBDXJWT	OBDX JWT Identity Asserter Provider	1.0
DefaultAuthenticator	WebLogic Authentication Provider	1.0
DefaultIdentityAsserter	WebLogic Identity Asserter provider	1.0

- Now go to the <DOMAIN_PATH>/<DOMAIN_NAME>/config/fmwconfig/
- Open jps-config.xml

Replace the line: <serviceInstanceRef ref="idstore.custom"/>

With <serviceInstanceRef ref="idstore.ldap"/>

```

</serviceInstance>
<serviceInstance name="policystore.db" provider="policystore.provider">
  <propertySetRef ref="props.db.1"/>
</serviceInstance>
</serviceInstances>
<jpsContexts default="default">
  <jpsContext name="default">
    <serviceInstanceRef ref="credstore.db"/>
    <serviceInstanceRef ref="keystore.db"/>
    <serviceInstanceRef ref="policystore.db"/>
    <serviceInstanceRef ref="audit.db"/>
    <serviceInstanceRef ref="trust"/>
    <serviceInstanceRef ref="pdp.service"/>
    <serviceInstanceRef ref="attribute"/>
    <serviceInstanceRef ref="idstore.custom"/>
  </jpsContext>
  <jpsContext name="bootstrap_credstore_context">
    <serviceInstanceRef ref="bootstrap_credstore"/>
    <serviceInstanceRef ref="keystore"/>
  </jpsContext>
  <jpsContext name="bootstrap_credstore_context_local">
    <serviceInstanceRef ref="bootstrap_credstore.local"/>
  </jpsContext>
</jpsContexts>
</jpsConfig>

```

```

    <serviceInstance name="policystore.db" provider="policystore.provider">
      <propertySetRef ref="props.db.1"/>
    </serviceInstance>
  </serviceInstances>
  <jpsContexts default="default">
    <jpsContext name="default">
      <serviceInstanceRef ref="credstore.db"/>
      <serviceInstanceRef ref="keystore.db"/>
      <serviceInstanceRef ref="policystore.db"/>
      <serviceInstanceRef ref="audit.db"/>
      <serviceInstanceRef ref="trust"/>
      <serviceInstanceRef ref="pdp.service"/>
      <serviceInstanceRef ref="attribute"/>
      <serviceInstanceRef ref="idstore.ldap"/>
    </jpsContext>
    <jpsContext name="bootstrap_credstore_context">
      <serviceInstanceRef ref="bootstrap_credstore"/>
      <serviceInstanceRef ref="keystore"/>
    </jpsContext>
    <jpsContext name="bootstrap_credstore_context_local">
      <serviceInstanceRef ref="bootstrap_credstore_local"/>
    </jpsContext>
  </jpsContexts>
</jpsConfig>
INSERT

```

- Now Shutdown the Admin server.
- Now, again start the Admin Server using the command,
 <DOMAIN_PATH>/<DOMAIN_NAME>/bin/startWeblogic.sh

➤ Run the following script into OBAPIs Schema:

```

update DIGX_FW_CONFIG_ALL_B set
prop_value='com.ofss.digx.app.sms.adapter.impl.user.OUDUserAdapterFactory' where
PROP_ID='USER_MANAGEMENT_ADAPTER_FACTORY' and
CATEGORY_ID='adapterfactoryconfig'; commit;

```

- Restart Managed Server

Verification

Post Admin and Managed Servers restart, login into Admin Console and browse to Security Realms > myrealm > Users and Groups.

Under Users tab additional LDAP users would be populated and additional LDAP groups can be seen under Groups tab.

Oracle WebLogic Server Administration Console 12c

Home > Summary of Security Realms > myrealm > Providers > Users and Groups

Welcome, weblogic | Connected to: OBDX_INS_TEST

Settings for myrealm

Configuration **Users and Groups** Roles and Policies Credential Mappings Providers Migration

Users Groups

This page displays information about each user that has been configured in this security realm.

Some results are not displayed because there are too many matches. Please customize this table to specify more specific criteria. Note: The authentication provider named OAMIdentityAsserter does not support viewing or managing its users through the WebLogic console.

Customize this table

Users (Filtered - More Columns Exist)

New Delete Showing 1 to 10 of 1000 Previous | Next

Name	Description	Provider
000800		OUD
000801		OUD
1207payday1@o.com		OUD
1207payday2@o.com		OUD
1207payday3@o.com		OUD
1207savings1@o.com		OUD
12jun.d1@ora.com		OUD
12jun.d2@ora.com		OUD
12jun.d3@ora.com		OUD
171040		OUD

New Delete Showing 1 to 10 of 1000 Previous | Next

Oracle WebLogic Server Administration Console 12c

Home > Summary of Security Realms > myrealm > Providers > Users and Groups

Welcome, weblogic | Connected to: OBDX_INS_TEST

Settings for myrealm

Configuration **Users and Groups** Roles and Policies Credential Mappings Providers Migration

Users **Groups**

This page displays information about each group that has been configured in this security realm.

Note: The authentication provider named OAMIdentityAsserter does not support viewing or managing its groups through the WebLogic console.

Customize this table

Groups

New Delete Showing 1 to 10 of 22 Previous | Next

Name	Description	Provider
AdminChannelUsers	AdminChannelUsers can access the admin channel.	DefaultAuthenticator
AdminChecker		OUD
Administrator		OUD
Administrators		OUD
Administrators	Administrators can view and modify all resource attributes and start and stop servers.	DefaultAuthenticator
AdminMaker		OUD
AppTesters	AppTesters group.	DefaultAuthenticator
AuthAdmin		OUD
Checker		OUD
CorporateAdminChecker		OUD

New Delete Showing 1 to 10 of 22 Previous | Next

[Home](#)

11. Multi Entity

To add entity to existing OBAPIs with supported host system follow below steps.

- Add entity through OBAPIs Web application, using User Manual Oracle Banking APIs System Configuration User Manual
- Run OBAPIs installer

Ensure that managed server should be down and admin server should be running.

Ensure ORACLE_HOME, JAVA_HOME variable are set and their binaries are available in PATH variable before proceeding.

Login with OS user which was used to perform OBAPIs software installation (or has ownership on Oracle Weblogic home directory)

Ensure OBAPIs Installation home and filestore path maintained in installer.properties exists and user running the installer has read-write permissions.

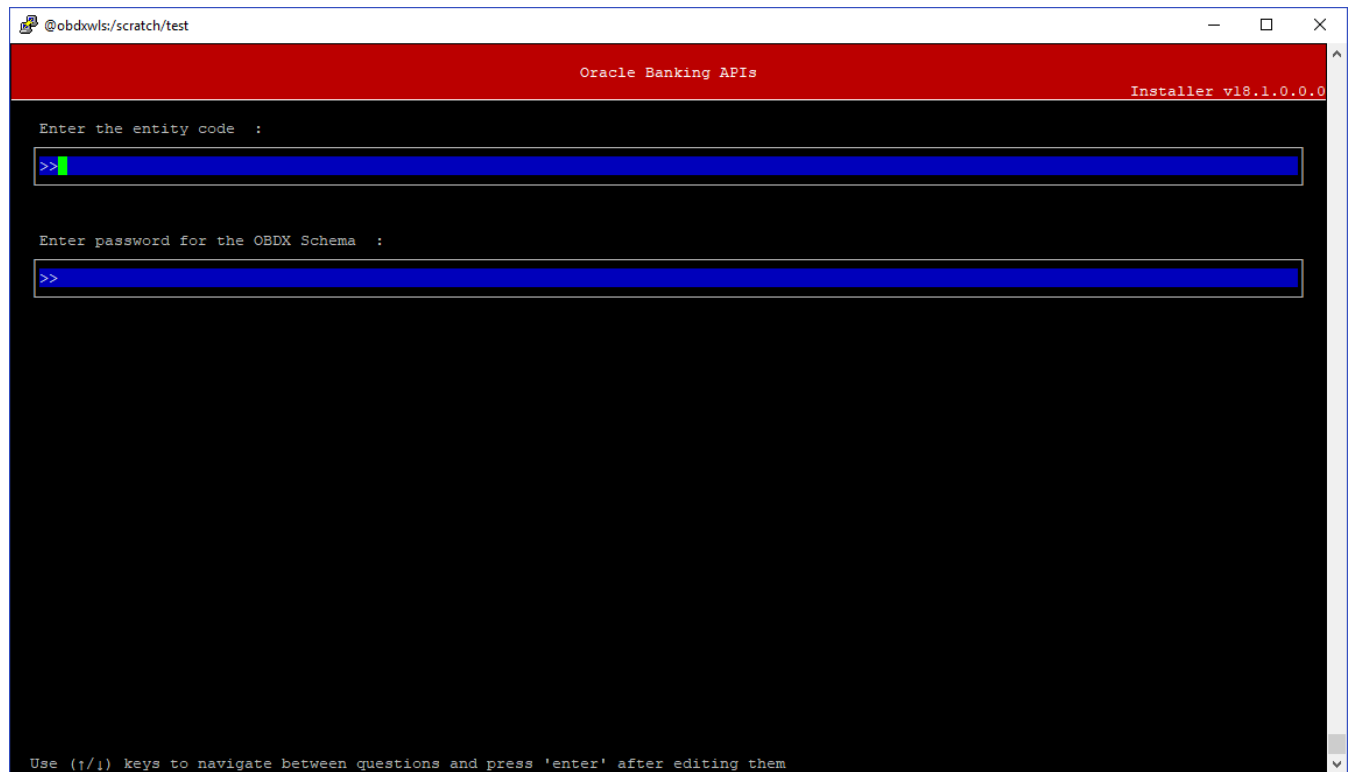
- From your terminal navigate to <OBAPIs INSTALLER DIR>
- Enter the following command

```
python runInstaller.py
```

Select installation type as 'New Entity Creation'



Below screen will appear after selecting add entity



Enter below information:

- Entity code which has been added from screen
- OBAPIs schema password

If an entity code belongs to UBS host following screen will appear:

```

Enter the UBS DB hostname :
>>

Enter the UBS DB port :
>>

Enter the UBS SID :
>>

Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) :
>>

Enter the username with 'sys' privileges :
>>

Enter password for the user with sys privileges :
>>

Enter existing weblogic admin password :
>>

Use (↑/↓) keys to navigate between questions and press 'enter' after editing them

```

Enter below details:

- Hostname of the UBS database host server
- Port of the UBS database host server
- UBS Host database Service Name
- Oracle directory name in which you want the database datafile (dbf) to be created. Enter only the name NOT the path.
- Username with 'sys' privileges
- SYS privilege user password where UBS schema would be created
- Weblogic console administrator user password

```

Enter the existing UBS schema name :
>>

Enter the password for existing UBS schema :
>>

Enter new UBS schema name :
>>

Enter new schema password :
>>

Enter country code :
>>

Use (↑/↓) keys to navigate between questions and press 'enter' after editing them

```

Enter below details:

- EXISTING UBS Host schema name
- Password for EXISTING UBS schema
- Complete UBS B1A1 (HostInterface) schema name you want installer to create as new schema
- Password for New UBS schema
- Country Code of entity branch

Installation Status in case of UBS

After entering all required details, the status is displayed (as shown below) on the terminal to indicate the progress of the installation.

```
[_Installer]$ python runInstaller.py
Starting Multi-Entity Installation for OBCX_BUI entity and US0123 host
Starting UBS Database Installation...
Log Path Location : ExecInstances\10Jan0706
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Roles...
Roles Created
Executing table-scripts.sql...
Execution of table-scripts.sql completed
Executing uba_object_scripts.sql...
```



```

@obdxwls/scratch/obdx/OBDX_Installer
<Jan 10, 2018 6:10:40 AM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, obdx.app.soap [archive: /scratch/obdx/OBDX_Instal
er/installables/app/components/ubs/deploy/obdx.app.soap.ear], to OBDX181 .>
<Jan 10, 2018 6:10:41 AM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, obdx.app.timer [archive: /scratch/obdx/OBDX_Instal
ler/installables/app/components/ubs/deploy/obdx.app.timer.ear], to OBDX181 .>
Applications deployed successfully
starting Admin Server.
Admin server started.
Weblogic Configuration completed successfully.
<Jan 10, 2018 6:11:50 AM UTC> <Warning> <JNDI> <BEA-050001> <WLContext.close() was called in a different thread than the one in which it was created.>
Successfully configured jps-config.xml.
Successfully configured weblogic.
[devops@obdxwls OBDX_Installer]$ python runInstaller.py
Starting Multi-Entity Installation for OBDX_BUI entity and UBS123 host
Starting UBS Database Installation...
Log Path Location : ExecInstances/10Jan0706
Creating Tablespace...
Tablespace Created...
Creating User...
User Created
Creating Roles...
Roles Created
Executing table-scripts.sql...
Execution of table-scripts.sql completed
Executing ubs_object_scripts.sql...
Execution of ubs_object_scripts.sql completed
Executing execute-seeds.sql...
Execution of execute-seeds.sql completed
SUCCESSFULLY installed UBS database
Starting Entity Configuration
Calling WLST
Initializing WebLogic Scripting Tool (WLST) ...
Welcome to WebLogic Server Administration Scripting Shell
Type help() for help on available commands

```

When the installation completes, the below message is displayed

```

Warning: An insecure protocol was used to connect to the server.
To ensure on-the-wire security, the SSL port or Admin port should be used instead.

Location changed to edit tree.
This is a writable tree with DomainMBean as the root.
To make changes you will need to start an edit session via startEdit().
For more help, use help('edit').

Creating Data source OBDX_BUI_BIA1
Starting an edit session ...
Started edit session, be sure to save and activate your changes once you are done.
Activating all your changes, this may take a while ...
The edit lock associated with this edit session is released once the activation is completed.
Activation completed
OBDX_BUI_BIA1 created successfully.

Exiting WebLogic Scripting Tool.

Entity successfully configured.

```

Installation Status in case of other hosts

After entering all required details (Entity code and OBAPIs schema password), the status is displayed (as shown below) on the terminal to indicate the progress of the installation.

```

[devops@obdxwls OBDX_Installer]$ python runInstaller.py
No additional BIA1 and weblogic configuration
[devops@obdxwls OBDX_Installer]$

```

[Home](#)

12. Multi-entity installation In Silent Mode

This chapter describes how to run the OBAPIs installer for add entity in silent mode.

Ensure that managed server should be down and admin server should be running.

Ensure ORACLE_HOME, JAVA_HOME variable are set and their binaries are available in PATH variable before proceeding.

Login with OS user which was used to perform OBAPIs software installation (or has ownership on Oracle Weblogic home directory)

Steps for Silent-Mode Installation

- Set the environment variables

```
[ OBDX_Installer]$
[ OBDX_Installer]$
[ OBDX_Installer]$ export Entity_Code=OBDX_BU1
[ OBDX_Installer]$ export SCHEMA_PASS=welcome1
[ OBDX_Installer]$ export ENTITY_UBS_HOSTNAME=mum00bzt
[ OBDX_Installer]$ export ENTITY_UBS_PORT=1522
[ OBDX_Installer]$ export ENTITY_UBS_SID=ubs
[ OBDX_Installer]$ export ENTITY_DIRECTORY_NAME_UBS=DATA_PUMP_DIR
[ OBDX_Installer]$ export ENTITY_SYS_USER=sys
[ OBDX_Installer]$
```

Below parameters should be set in environment variables

	Parameter	Description
Add entity with UBS (Installation with Universal Banking Solution)	Entity_Code	Entity code which has been entered from screen
	SCHEMA_PASS	Password for existing schema on OBAPIs database
	ENTITY_UBS_HOSTNAME	Hostname of the UBS database host server
	ENTITY_UBS_PORT	Port of the UBS database host server
	ENTITY_UBS_SID	UBS Host database SID or Service Name
	ENTITY_DIRECTORY_NAME_UBS	Oracle Directory name in which you want the UBS B1A1 (HostInterface) schema datafile (dbf). Enter only the name and NOT the path
	ENTITY_SYS_USER	username with 'sys' privileges
	ENTITY_SYS_PASS	
	ENTITY_NEW_SCHEMA_NAME	Complete UBS B1A1 (HostInterface) schema name you want installer to create as new schema.
	ENTITY_NEW_SCHEMA_PASS	Password for new B1A1 schema on UBS database
	ENTITY_UBS_SCHEMA	EXISTING UBS Host schema name
	ENTITY_UBS_SCHEMA_PASS	Password of existing HOST UBS schema (Existing)
	ENTITY_DomainPassword	Password for weblogic admin console
	ENTITY_UBS_CCY	Country Code for entity home branch
Add entity with other hosts	Entity_Code	Entity code which has been entered from screen
	SCHEMA_PASS	Password for existing schema on OBAPIs database

- Run the runInstaller.py file with '--silent' argument along with '--addEntity'

```
[ OBDX_Installer]$
[ OBDX_Installer]$ python runInstaller.py --silent --addEntity
```

Installation Status in case of UBS

After entering all required details, the status is displayed (as shown below) on the terminal to indicate the progress of the installation.

```
@obdxwls/scratch/obdx/OBDX_Installer
<Jan 10, 2018 6:10:40 AM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, obdx.app.soap [archive: /scratch/obdx/OBDX_Instal
er/installables/app/components/ubs/deploy/obdx.app.soap.ear], to OBDX181 .>
<Jan 10, 2018 6:10:41 AM UTC> <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, obdx.app.timer [archive: /scratch/obdx/OBDX_Instal
ler/installables/app/components/ubs/deploy/obdx.app.timer.ear], to OBDX181 .>
Applications deployed successfully
starting Admin Server.
Admin server started.
Weblogic Configuration completed successfully.
<Jan 10, 2018 6:11:50 AM UTC> <Warning> <JNDI> <BEA-050001> <WLContext.close() was called in a different thread than the one in which it was created.>
Successfully configured jps-config.xml.
Successfully configured weblogic.
[devops@obdxwls OBDX_Installer]$ python runInstaller.py
Starting Multi-Entity Installation for OBDX_BUI entity and UBS123 host
Starting UBS Database Installation...
Log Path Location : ExecInstances/10Jan0706
Creating Tablespace...
Tablespace Created...
Creating User...
User Created
Creating Roles...
Roles Created
Executing table-scripts.sql...
Execution of table-scripts.sql completed
Executing ubs_object_scripts.sql...
Execution of ubs_object_scripts.sql completed
Executing execute-seeds.sql...
Execution of execute-seeds.sql completed
SUCCESSFULLY installed UBS database
Starting Entity Configuration
Calling WLST
Initializing WebLogic Scripting Tool (WLST) ...
Welcome to WebLogic Server Administration Scripting Shell
Type help() for help on available commands
█
```

When the installation completes, the below message is displayed

```
Warning: An insecure protocol was used to connect to the server.
To ensure on-the-wire security, the SSL port or Admin port should be used instead.

Location changed to edit tree.
This is a writable tree with DomainMBean as the root.
To make changes you will need to start an edit session via startEdit().
For more help, use help('edit').

Creating Data source OBDX_BUI_BIA1
Starting edit session ...
Started edit session, be sure to save and activate your changes once you are done.
Activating all your changes, this may take a while ...
The edit lock associated with this edit session is released once the activation is completed.
Activation completed
OBDX_BUI_BIA1 created successfully.

Exiting WebLogic Scripting Tool.
Entity successfully configured. █
```

Installation Status in case of other hosts

After entering all required details, the status is displayed (as shown below) on the terminal to indicate the progress of the installation.

```
OBDX_Installer]$ python runInstaller.py
No additional BIA1 and weblogic configuration
OBDX_Installer]$ █
```

[Home](#)

13. OBAPIs Product Security

Refer below document for OBAPIs product security configuration

Oracle Banking APIs Security Guide

[Home](#)

14. Troubleshoot Overview

This section describes how to troubleshoot OBAPIs setup.

Invalid database password

This topic contains troubleshooting information if you receive an error when attempting to connect to the database server.

If you get the following error:

```

Enter the password for the user with sys privileges 'sys' :
>>password
Invalid input. Please enter a valid password.
Enter password for the OBDX schema 'OBDX_UBSNT2' :
>>

```

Try one of the following:

- Verify that the database is running.
- Check Network connectivity between Weblogic Server and Database server.
- Check the database configuration in installer.properties file
- Verify that the entered password is correct.

cx_oracle module

This topic contains troubleshooting information about problems with cx_Oracle python module.

If you get the following error:

```

[ opt]# python
Python 2.7.5 (default, Sep  5 2016, 02:30:38)
[GCC 4.8.5 20150623 (Red Hat 4.8.5-9)] on linux2
Type "help", "copyright", "credits" or "license" for more information.
>>> import cx_Oracle
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
ImportError: libclntsh.so.12.1: cannot open shared object file: No such file or directory
>>> exit()

```

Execute the below command:

```
export LD_LIBRARY_PATH=/usr/lib/oracle/12.2/client64/lib:$ LD_LIBRARY_PATH
```

```

[ opt]# export LD_LIBRARY_PATH=/usr/lib/oracle/12.2/client64/lib:$LD_LIBRARY_PATH
[ opt]# python
Python 2.7.5 (default, Sep  5 2016, 02:30:38)
[GCC 4.8.5 20150623 (Red Hat 4.8.5-9)] on linux2
Type "help", "copyright", "credits" or "license" for more information.
>>> import cx_Oracle
>>> cx_Oracle.__version__
'5.2.1'
>>>

```

Failed Database Scripts

This topic contains troubleshooting information in case of database script failures.

If you get the following error in DB_installation.log:

```
2017-07-13 13:45:41,747 DEBUG Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/MSTENTITYUSERTYPELANG.sql successful
2017-07-13 13:45:41,796 ERROR Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/mstlang.sql failed
2017-07-13 13:45:41,796 DEBUG total scripts=15
2017-07-13 13:45:41,797 DEBUG scripts successfully executed=14
```

Check the detailed log of the failed SQL file at <OBAPIS INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/db folder.

Failure of Policy Seeding

This topic contains troubleshooting information if policy seeding fails during installation.

If you get the following error:

```

Starting base Installation with UBS123 host
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Roles...
Role created
Creating Grants...
Execution of clip_master_script.sql started
Execution of clip_master_script.sql completed
Execution of clip_constraints.sql started
Execution of clip_constraints.sql completed
Execution of clip_seeds_executable.sql started
Execution of clip_seeds_executable.sql completed
SUCCESSFULLY installed OBDX database
Starting UBS database installation
Starting UBS Database Installation...
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Roles...
Roles Created
Executing table-scripts.sql...
Execution of table-scripts.sql completed
Executing ubs_object_scripts.sql...
Execution of ubs_object_scripts.sql completed
Executing execute-seeds.sql...
Execution of execute-seeds.sql completed
SUCCESSFULLY installed UBS database
Policy seeding failed. Please see logs for more details

```

Try one of the following:

- Check if error.log is created on following path <OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/error.log. This log contains runtime SQL execution errors.
- If the above mentioned file does not exist, then check the seedPolicies.log on <OBAPIs INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/seedPolicies.log. This log file contains errors generated during execution of the seed policies jar.

Fix the problem by following below steps:

- Login to OBAPIs installer server
- Browse to <OBAPIs INSTALLER DIR>\installables\policies
- Run below command manually

```
java -jar SeedPolicies.jar "Clip.csv,Admin.csv" "CLIP,ADMIN" "<Directory where logs needs to be created>" "INS-oracle.jdbc.OracleDriver,<OBAPIs Schema name>,<OBAPIs Schema
```



```
password>,jdbc:oracle:thin:@<OBAPIs DB hostname or IP>:<OBAPIs DB listener port>/<OBAPIs  
Service Name>"
```

for e.g.:

```
java -jar SeedPolicies.jar "Clip.csv,Admin.csv" "CLIP,ADMIN" "/tmp/" "INS-  
oracle.jdbc.OracleDriver,OBAPIs_THP181,Welcome#1,jdbc:oracle:thin:@10.44.169.255:1521/OBAPIs"
```

- Post successfully execution, restart Managed server.

[Home](#)