Oracle Banking Digital Experience

Installation Guide
Release 18.1.0.0.0

Part No. E92727-01

January 2018

ORACLE®

Installation Guide

January 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/

Table of Contents

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 Digital Experience Release 18.1.0.0.0, refer to the following documents:

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

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

2. Introduction

2.1 Purpose of the Document

The purpose of the OBDX 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 OBDX & OBDX installer
- Setup of OBDX 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

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

For OBDX pre-requisite software setup refers document “Oracle Banking Digital Experience Installer Pre-Requisite Setup Manual” mentioned in section 1.5 Related Information Sources.

Installer Pre-requisite verification

Post installation of OBDX 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 “<OBDX INSTALLER DIR>/core/config”
- Open the “installer.properties” file to maintain key configurations for BASE ENTITY (OBDX_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 wlserver,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).
```

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 OBDX schema)	DatabaseHostName	Enter the hostname of the database server which would host the database schema for OBDX and RCU	ofss310759
	DatabaseHostPort	Enter the port number of the database listener	1521
	DatabaseHostSID	Enter the Oracle Service Name for database instance	OBDXSID
	DB_SYS_USER	Enter the username with 'sys' privileges	sys
	POST_FIX	For OBDX schema name like "OBDX_DEV" POST FIX is 'DEV'. **SHOULD BE IN UPPERCASE ONLY.**	DEV
	DIRECTORY_NAME	Enter the directory name in which you want the OBDX 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 OBDX-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 OBDX-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	OBDXUBS
	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/obdxuser/Oracle/Middleware/Oracle_Home - where you have directories like wlserver,oracle_common etc.	/home/obdxuser/Oracle/Middleware/Oracle_Home
	JAVA_HOME	Path where JAVA (JDK) is installed	/home/obdxuser/jdk18
	INSTALLATION_HOME	Path where OBDX 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/obdxuser/obdx
	DOMAIN_PATH	Path where OBDX Weblogic domain should be created. Users can now enter custom path as per their requirements.	/home/obdxuser/domains
	ClusterName	Name of cluster; this cluster would have one single managed server.	obdx_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 OBDX 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 OBDX components and associated resources.	9001
	DomainName	Enter Weblogic Domain name.	obdx_domain1
	DomainUserID	Domain user ID. The user id will be used to access the Weblogic Administrative console.	weblogic
	FileUploadFileStore (to be configured for all OBDX 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/obdx/ FileUpload
	AuditFileStore (to be configured for all OBDX 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/obdx/Audit
	ReportsFileStore (to be configured for all OBDX supported	Set the paths for the persistence stores of the Reports JMS modules. **DO NOT KEEP path as**	/scratch/obdx/Repo rts

	HOST)	**INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME.**	
	ExtSystemReceiverFileStore (to be configured for Third-party OBDX 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/obdx/Receiver
	ExtSystemSenderFileStore (to be configured for Third-party OBDX 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/obdx/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 OBDX – UBS flavor**)	10.184.135.59:7860
RCU	STBSchemaPrefix	STB schema name prefix. If schema pre-fix is 'OBDX' then 'OBDX_STB' would be the STB schema name.	OBDX_STB
OBDXAuthenticator Admin user details	DBAuthUser	Set username for OBDX application Admin user. **USERNAME IS CASE SENSITIVE. In-case of OUD as provider username should be the User ID mentioned during user creation steps mentioned in pre-requisite document (refer To create User and mapping it to the Group section)**	superadmin
	DBAuthMailID	Enter the Email ID for OBDX application admin user.	superadmin@oracle.com
	DBAuthPhoneNo	Enter the mobile number for OBDX application admin user. **COUNTRY CODE IS MUST.**	+911234567890

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.

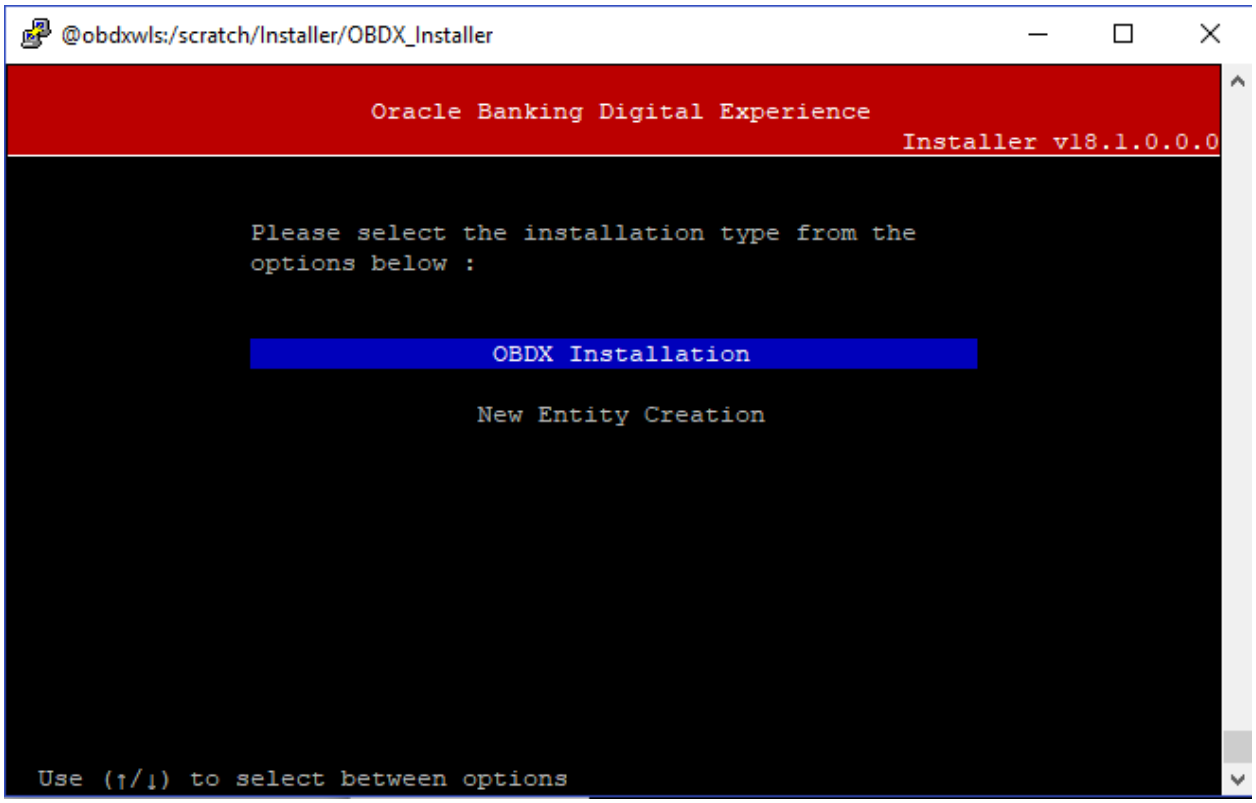
Login with OS user which was used to perform OBDX pre-requisite software installation (or has ownership on Oracle Weblogic home directory)

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

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

python runInstaller.py

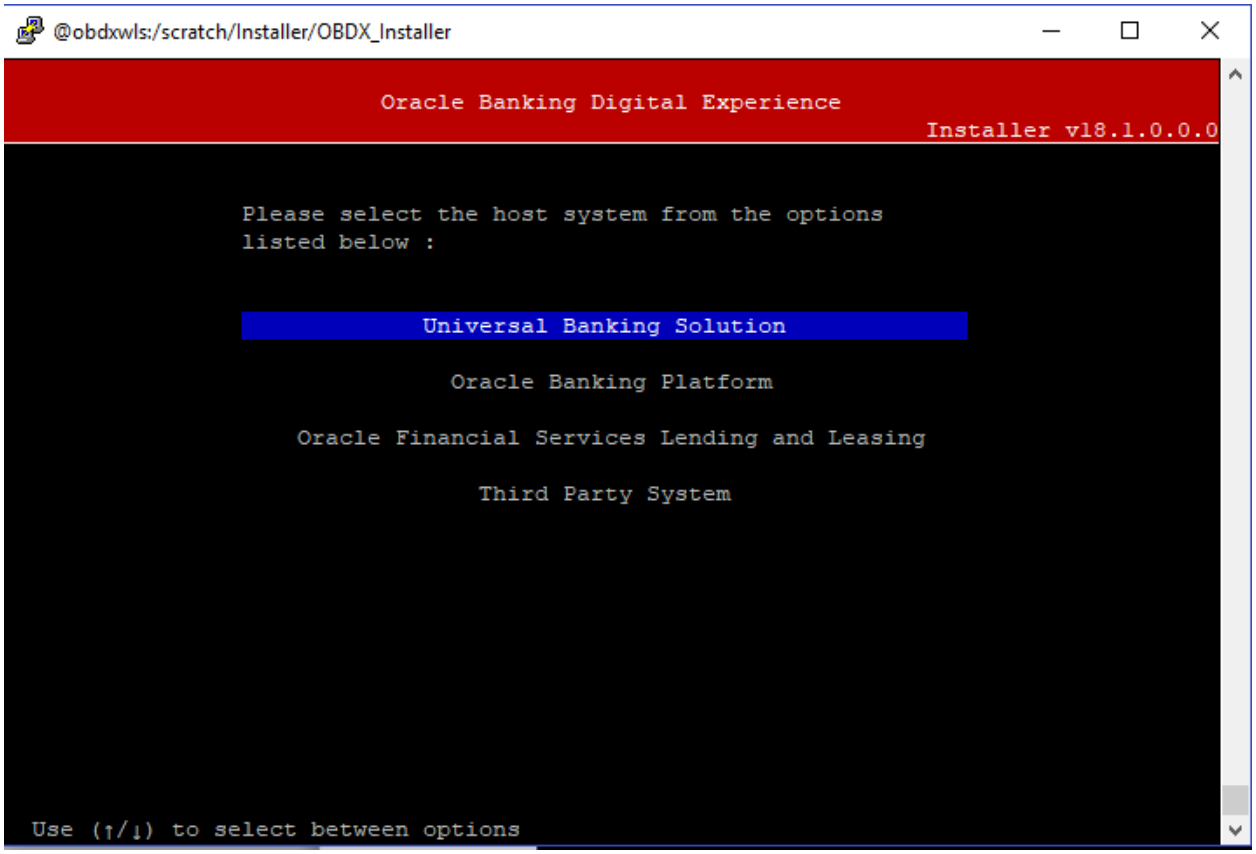
Select the appropriate type of Installation



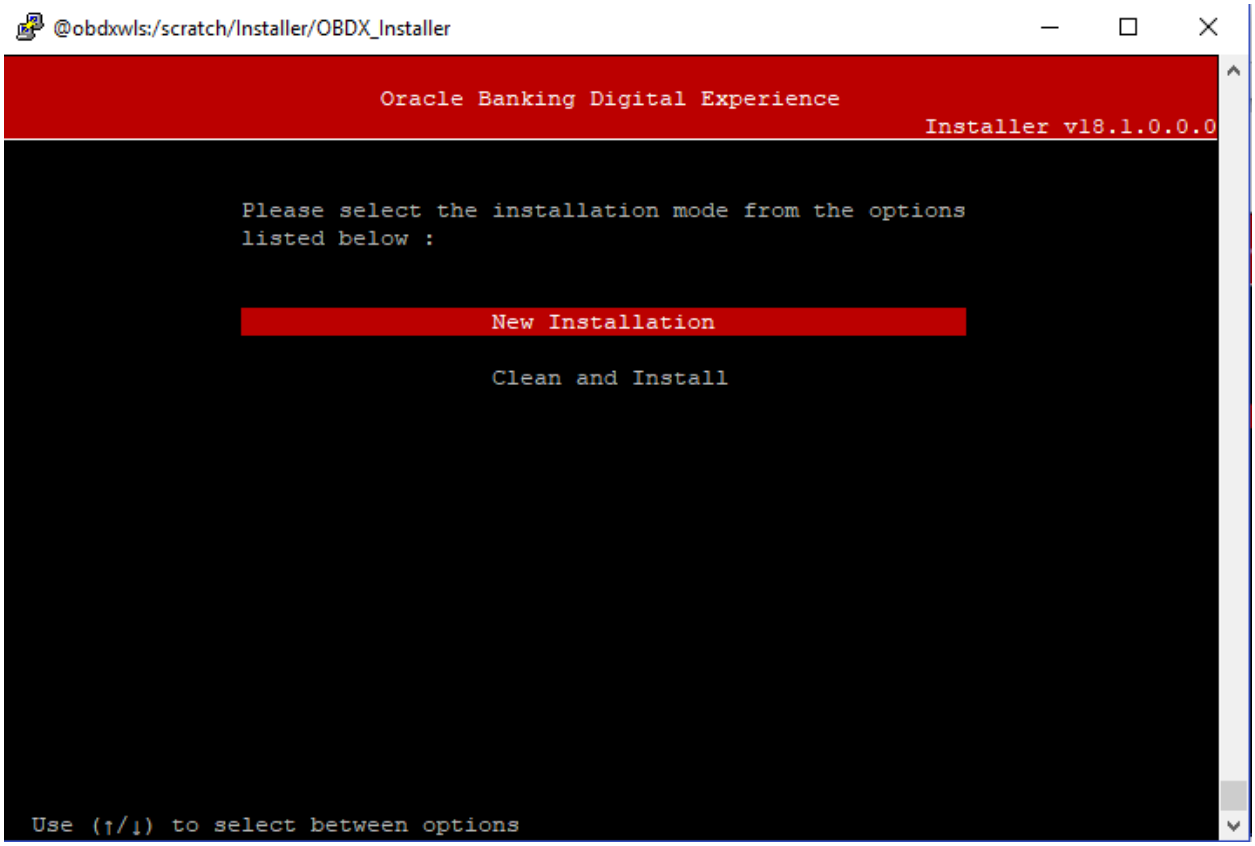
- OBDX Installation: This option should be used for first-time installation or for first entity only. Existing installation should not utilize this option unless performing “Clean and Install” on already installed environment.
- New Entity Creation: This option should be used for multi-entity installation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

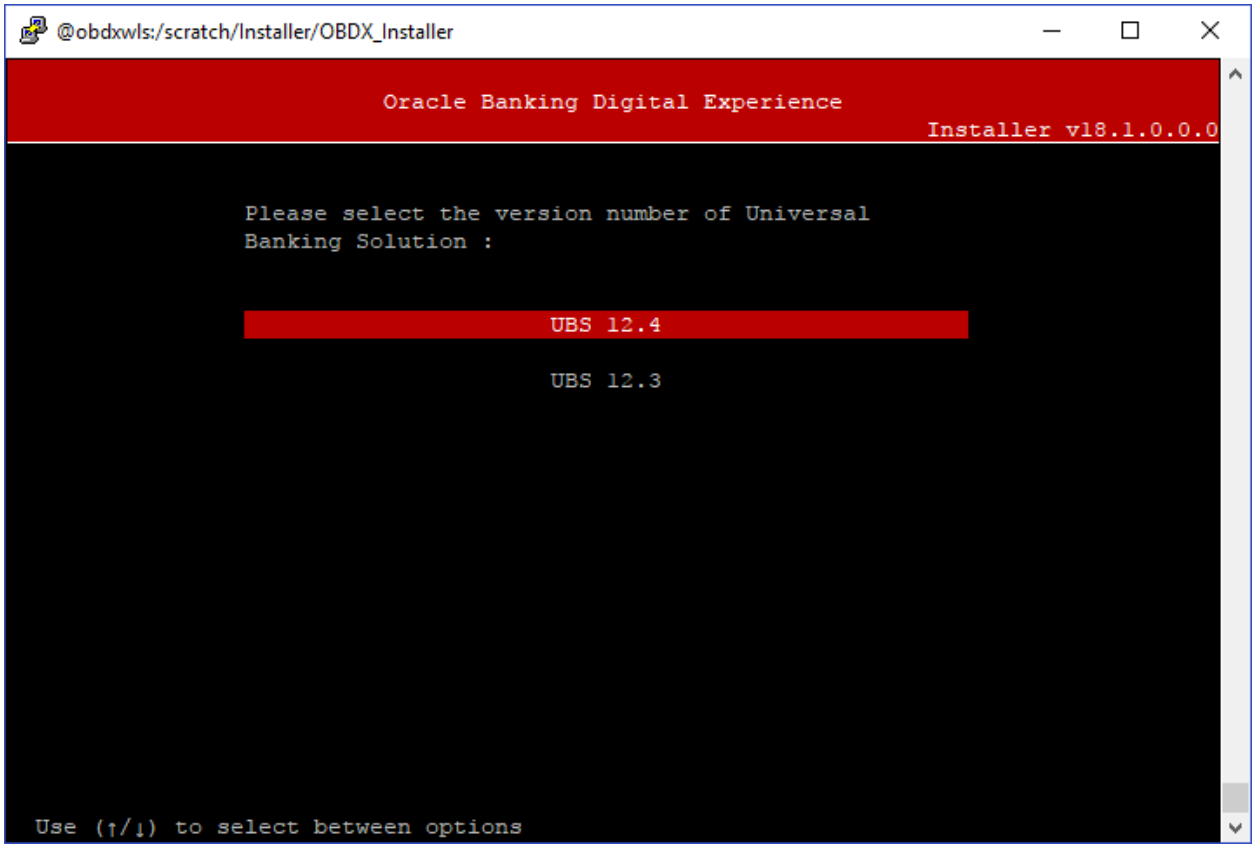
- New installation

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

Below screens would appear with respective to host selected

Universal Banking Solution (OBDX 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 OBDX schema would be created
- OBDX schema password
- OBDX STB schema password
- Weblogic console administrator user password
- SYS privilege user password where UBS host schema exists
- Existing UBS HOST schema password
- New OBDX EXT schema password
- Password for OBDX 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 (OBDX with OBP)

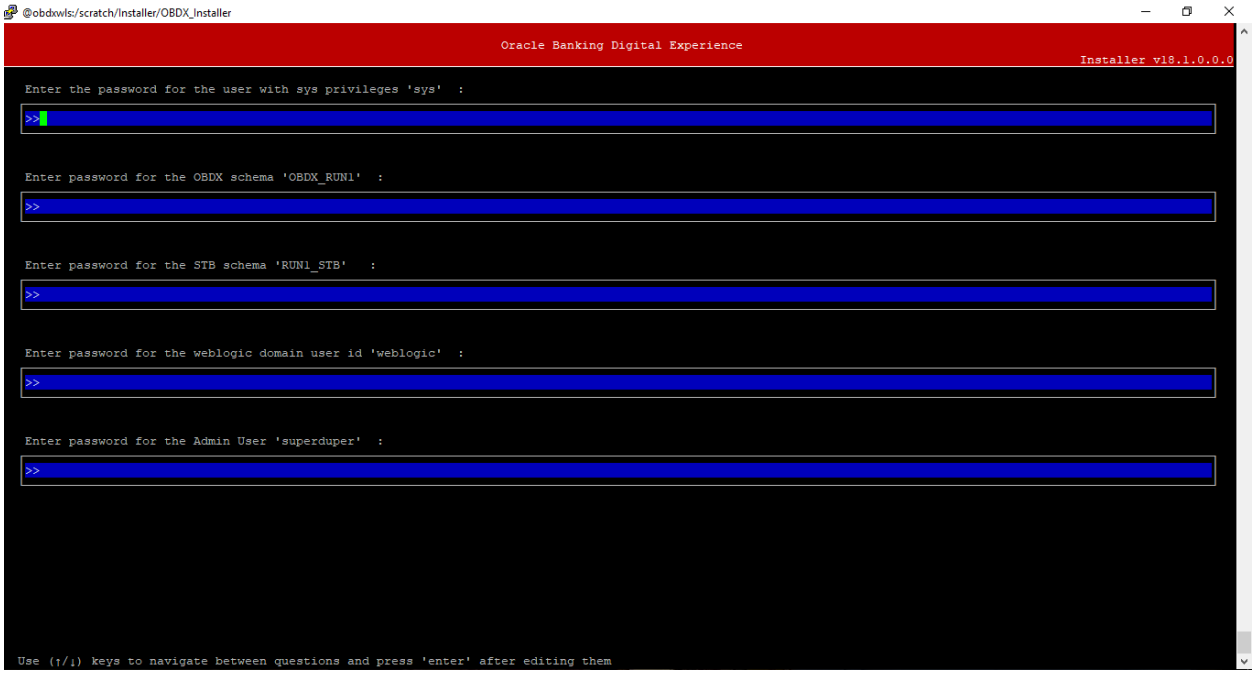
No additional input required. Screen is same as available in Third Party System.

Oracle Financial Services Lending and Leasing (OBDX with OFSLL)

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

Third Party System (OBDX with THP)

Post Third Party System selection, enter the required credentials details



Enter below passwords:

- SYS privilege user password where OBDX schema would be created
- OBDX schema password
- OBDX STB schema password
- Weblogic console administrator user password
- OBDX 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 OBDX 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 OBDX database schema (and OBDX EXT schema in-case of OBDX UBS flavor) and RCU schema.

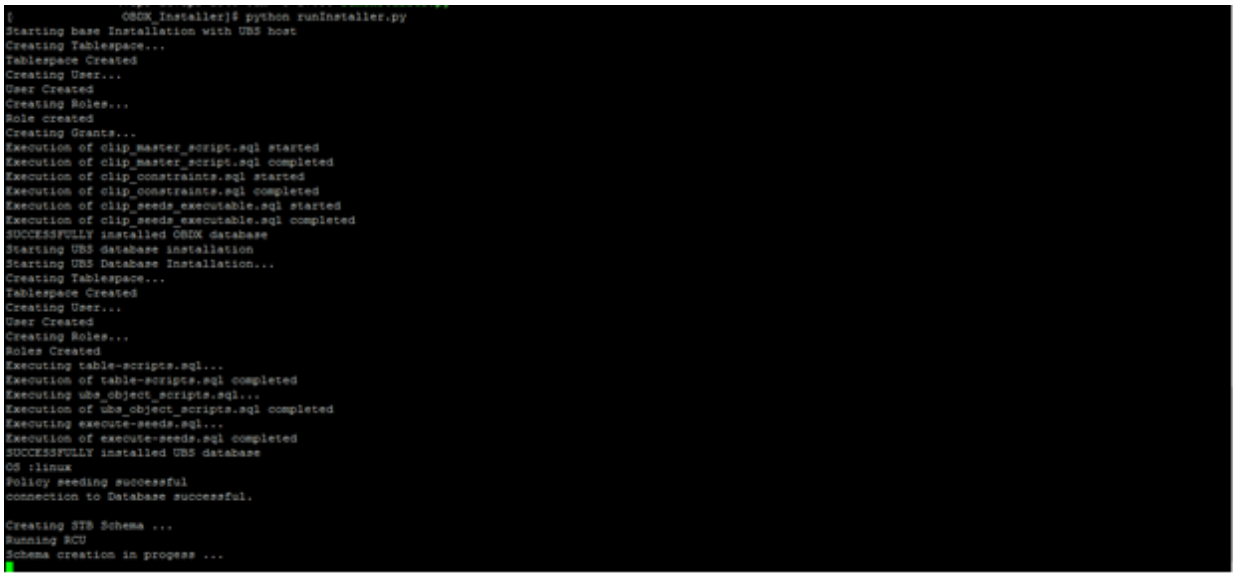
Key pointers

- OBDX schema (and OBDX EXT schema in-case of OBDX 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.

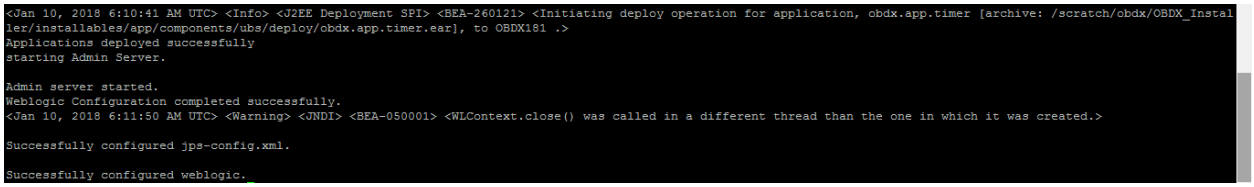
Note: All input screens are similar to new installation option and as per the host system opted.

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.



When the installation completes, the below message is displayed



Home

5. Installation In Silent Mode

This chapter describes how to run the OBDX 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 (OBDX 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 OBDX for the first run on server '**Clean**' in-case of an existing OBDX installation that you want to overwrite OR in case of a previously failed installation
	DB_SYS_PASSWORD	Sys password of OBDX database (Existing)
	SCHEMA_PASS	Password for new schema on OBDX 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 (OBDX with OBP)/ Oracle Financial Services Lending and Leasing (OBDX with OFSLL) / Third Party System (OBDX with THP)	FLAVOUR	Flavour for installation '**OBP**' for Oracle Banking Platform (OBDX with OBP)' **OBDX**' for Third Party System (OBDX with THP) '**FLL**' for Oracle Financial Services Lending and Leasing (OBDX with OFSLL)
	Mode	Mode of installation. '**New**' in-case of a fresh installation of OBDX for the first run on server '**Clean**' in-case of an existing OBDX installation that you want to overwrite OR in case of a previously failed installation
	DB_SYS_PASSWORD	Sys password of OBDX database (Existing)
	SCHEMA_PASS	Password for new schema on OBDX database
	STBPassword	Password for STB schema
	DomainPassword	Password for weblogic admin console
	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))

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 progess ...
```

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 <OBDX INSTALLER DIR>/ExecInstances directory where output logs as describe are stored.

Log Description	PATH
Summarized Installer Activity Log	<OBDX INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/obdx_installer.log
Summarized Database Logs	<OBDX INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/db/DB_installation.log
Detailed OBDX DB Logs per SQL file	<OBDX INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/db/OBDX/*
Detailed UBS DB Logs per SQL file (specific to UBS host system only)	<OBDX INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/db/UBS/*
RCU Logs	<OBDX INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/app/obdx_stb_rcu_1600.log
Weblogic Configuration Logs	<OBDX INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/app/obdx_wls_post.log
Detailed policy seeding logs per SQL Statement	<OBDX 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.	<OBDX INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/db/error.log
Policy seeding jar failure Log	<OBDX INSTALLER DIR>/ExecInstances/<DDMonthHHMM> /logs/db/seedPolicies.log

Check all the logs for any errors.

Home

7. Installer Scope

OBDX Installer currently covers below activities:

Flavor: Third Party system (OBDX with THP)

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
OBDX (Installation with Third Party System)	OBDX 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	√	√
	OBDX Configuration	Copy Config files into OBDX Installation Home	√	√ (Delete old and copy new from installer zip)

Flavor: Universal Banking Solution (OBDX with UBS)

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
OBDX with UBS (Installation with Universal Banking Solution)	OBDX DB Setup			
		Create Tablespace	√	NA
		Create Schema and Role	√	√ (drop and create)
		Grants	√	√
		Load DB object (DDL's and DML's)	√	√
		Compile Schema	√	√
	OBDX 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 OBDX 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	√	√
	OBDX Configuration	Copy Config files into OBDX Installation Home and configure Preferences.xml (set AdapterFactories)	√	√ (Delete old and copy new from installer zip)

Flavor: Oracle Banking Platform (OBDX with OBP)

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
OBDX with OBP (Installation with Oracle Banking Platform)	OBDX 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	√	√
	OBDX	Copy Config files into OBDX	√	√ (Delete old

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
	Configuration	Installation Home		and copy new from installer zip)

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

Flavor	Activity	Detailed Activity List	New Installation	Clean and Install
OBDX with OFSLL (Installation with Oracle Financial Services Lending and Leasing)	OBDX 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	√	√
	OBDX Configuration	Copy Config files into OBDX 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.

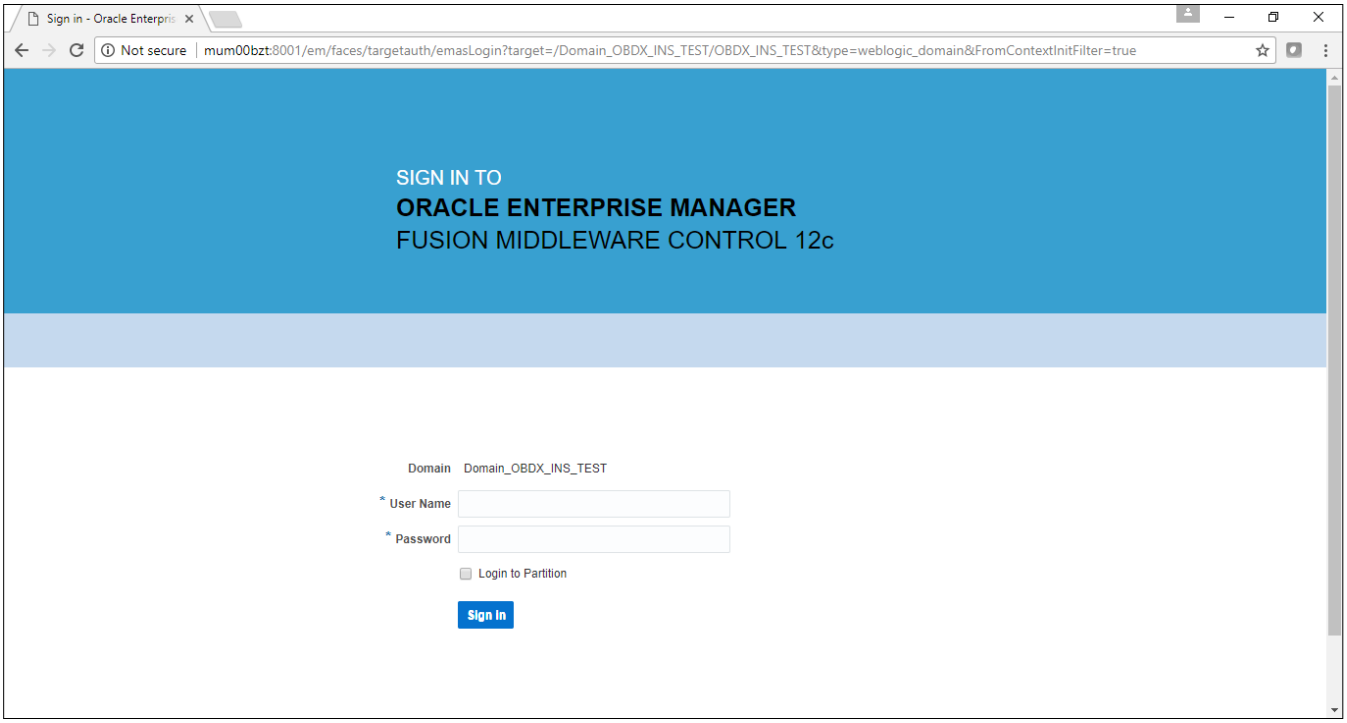
Apply JRF Template

To apply JRF template follow below steps.

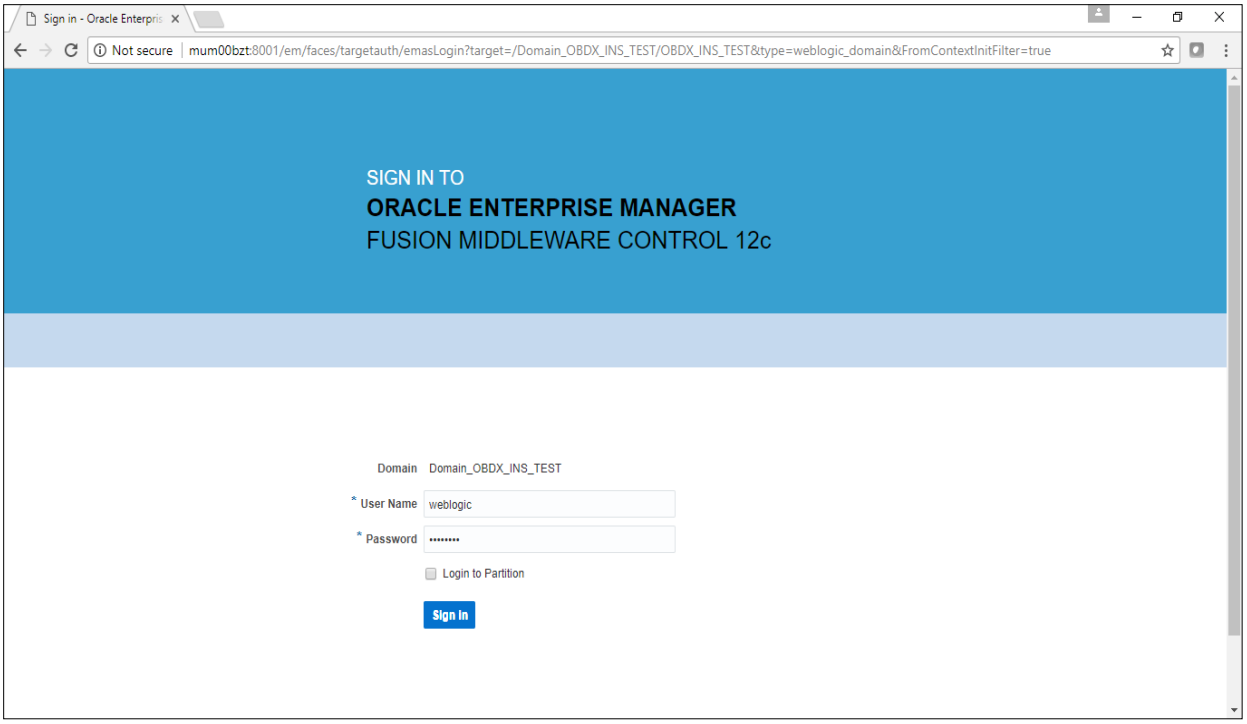
- To do this, ensure that the Admin Server is running. Login to the EM (Enterprise Manager) Console using the following URL:

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

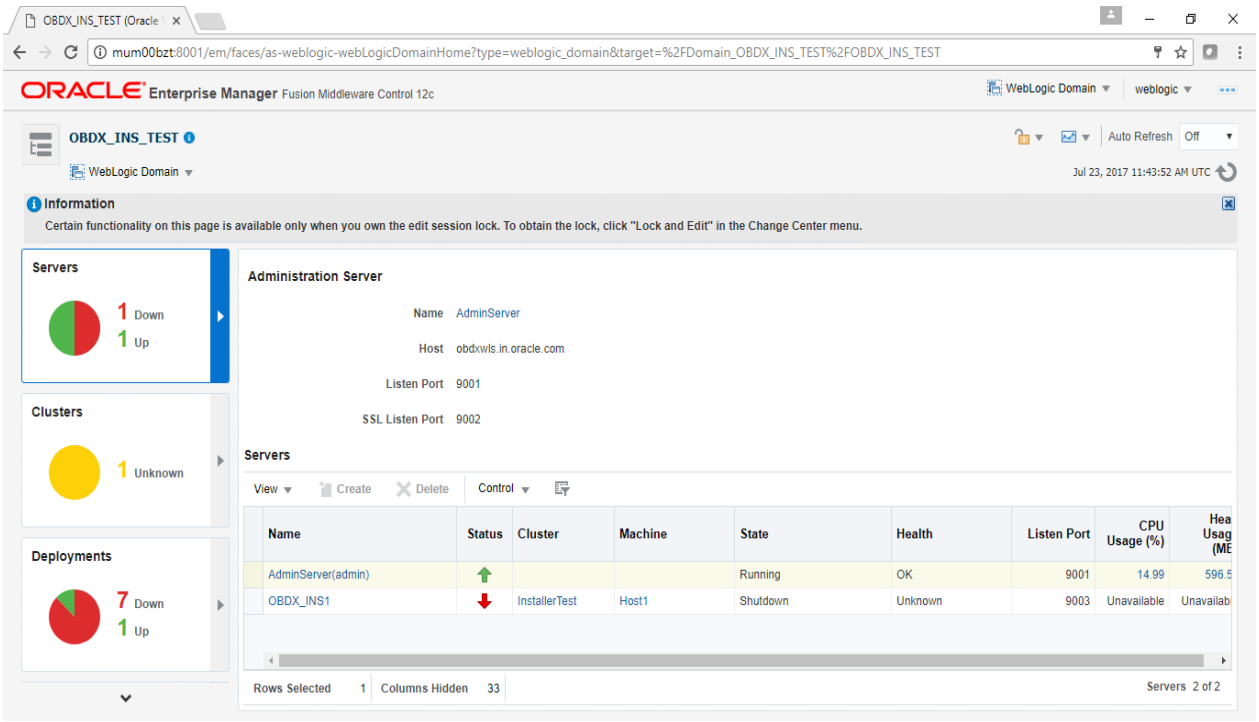
Note: EM console would be available on same hostname and port which was used for Weblogic Admin Console for OBDX domain (created via installer), just replace the "/console" with "/em".



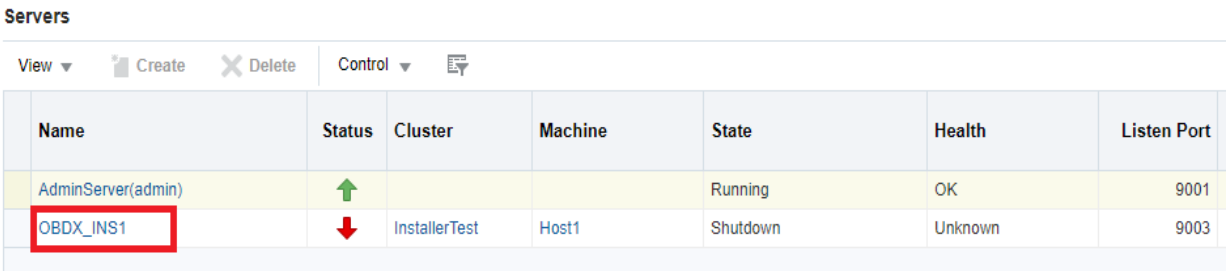
- Enter Weblogic administrator username and password (same used for Weblogic administrator console login)



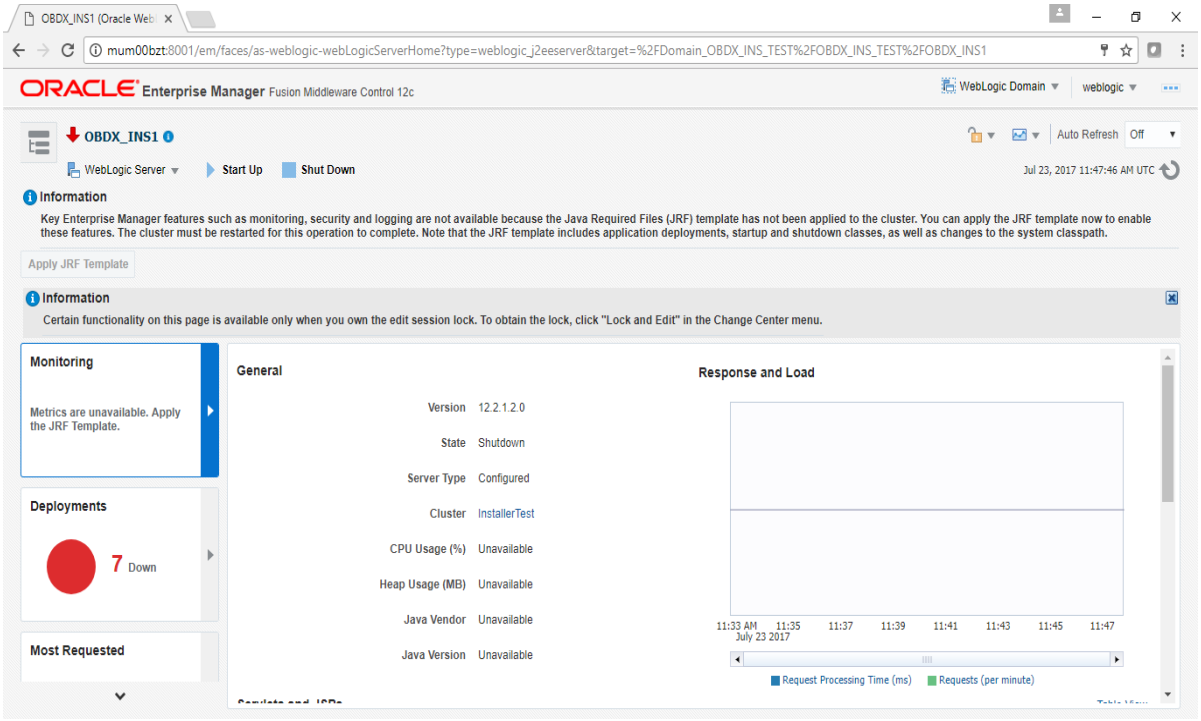
Click on Sign In



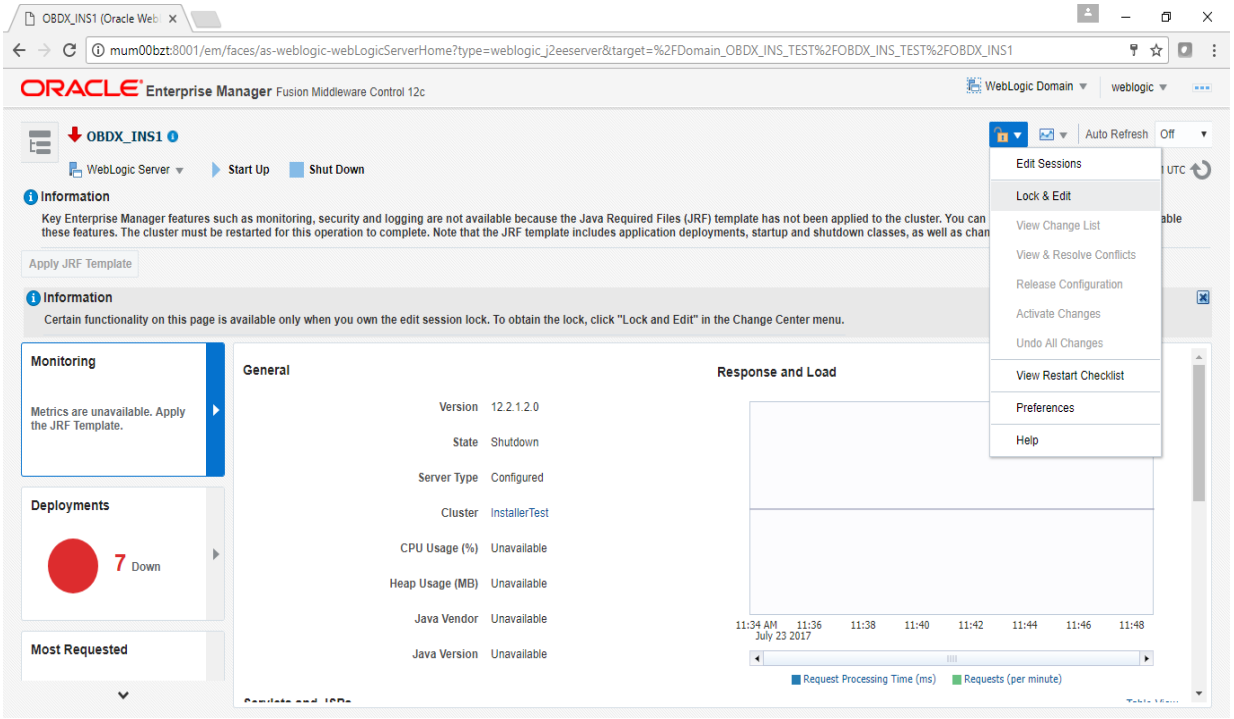
- Click on the Managed Server (as highlighted below)



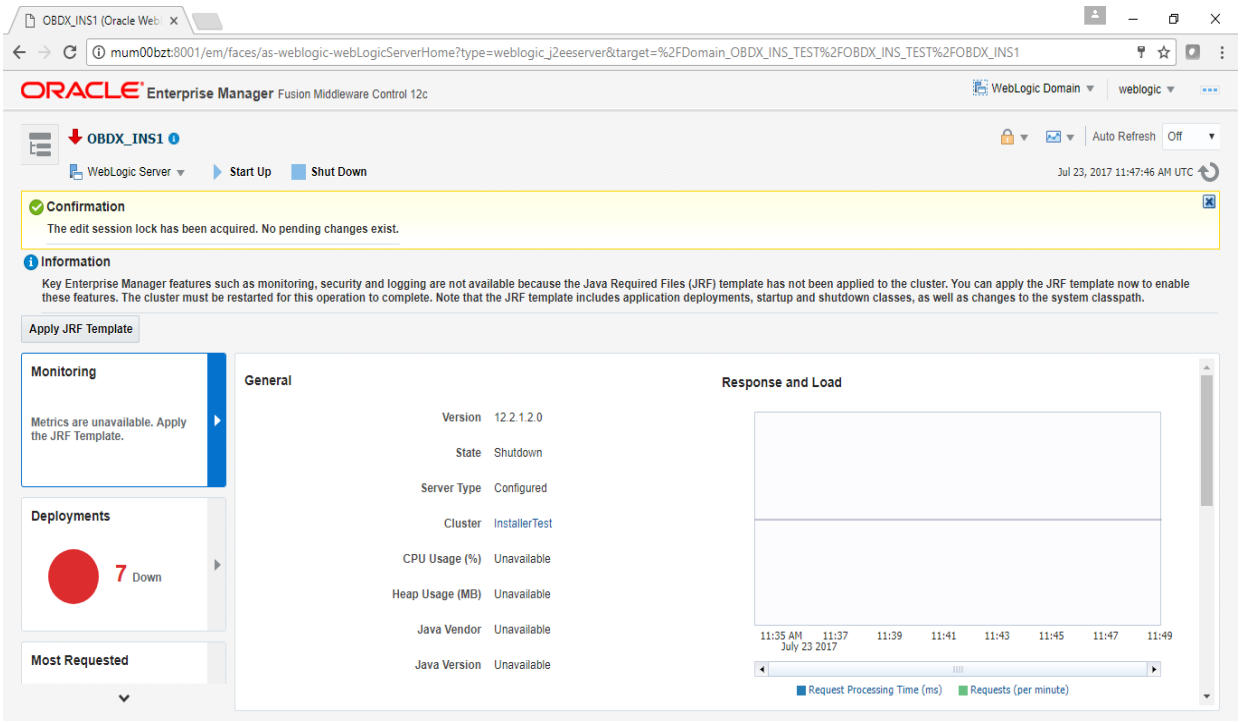
Note : Depending on installer.properties, Managed server will differ from above screenshot.



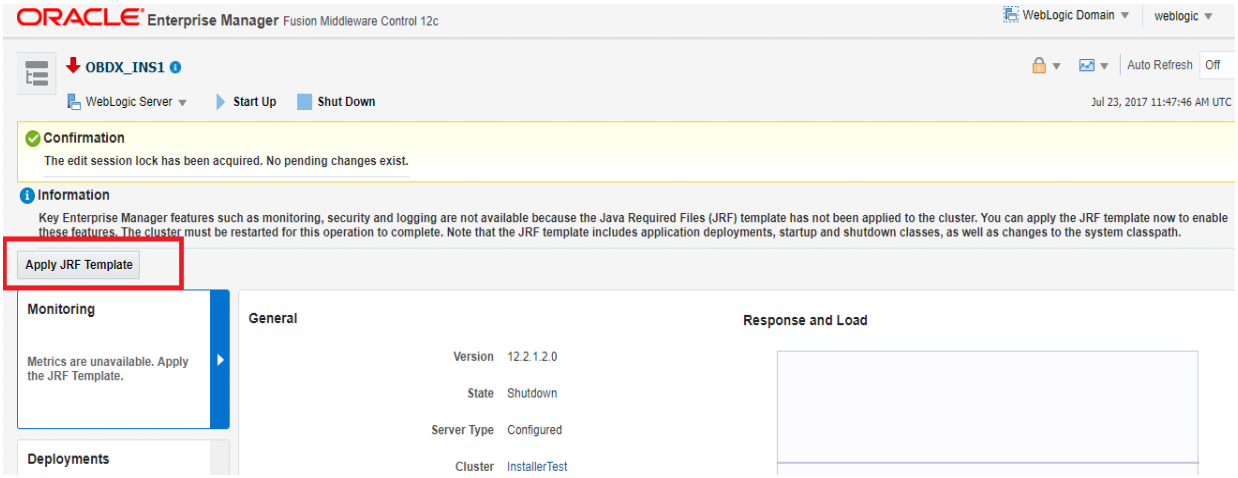
- Click on “Lock and Edit” option (as shown in screenshot).



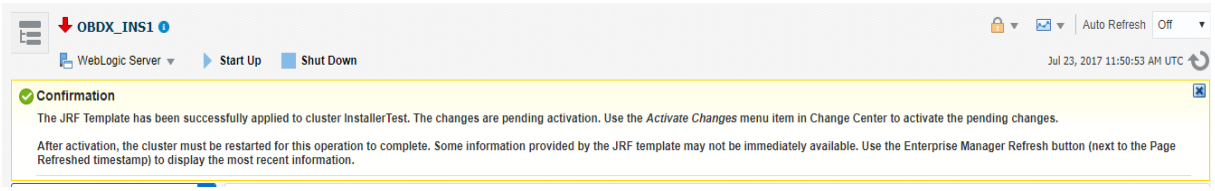
You will see below screen stating the edit session confirmation



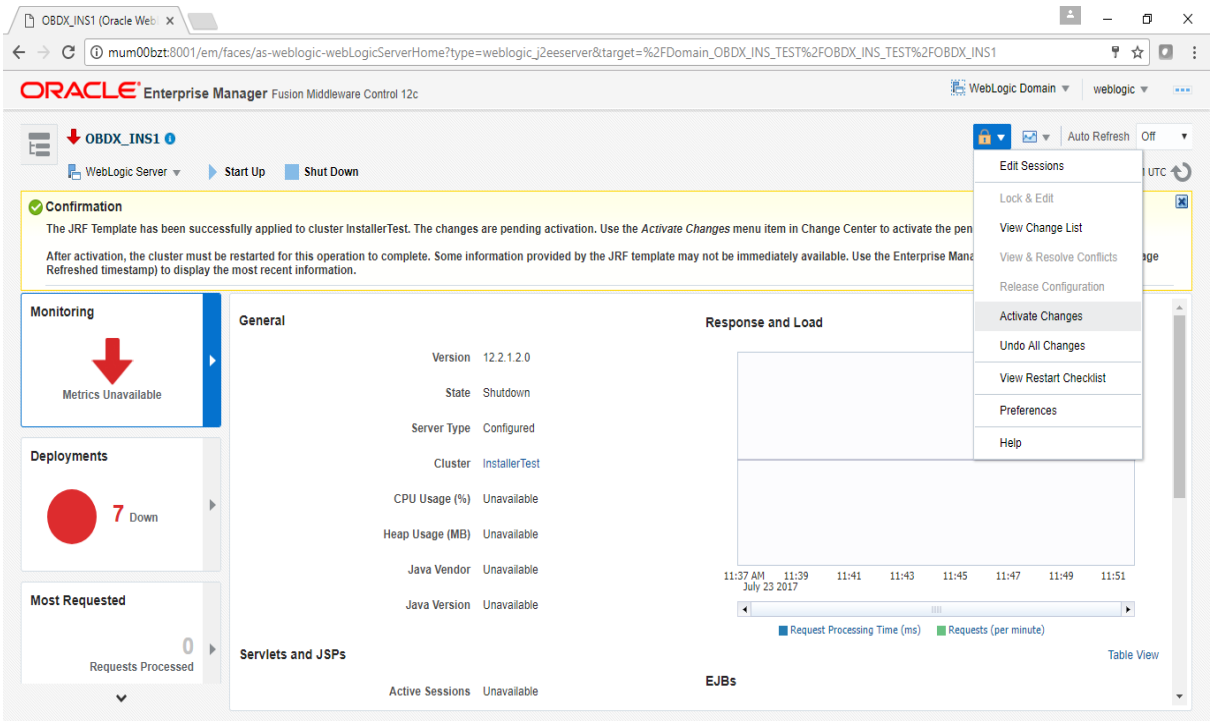
- Click on “Apply JRF Template” option (as shown in screenshot).



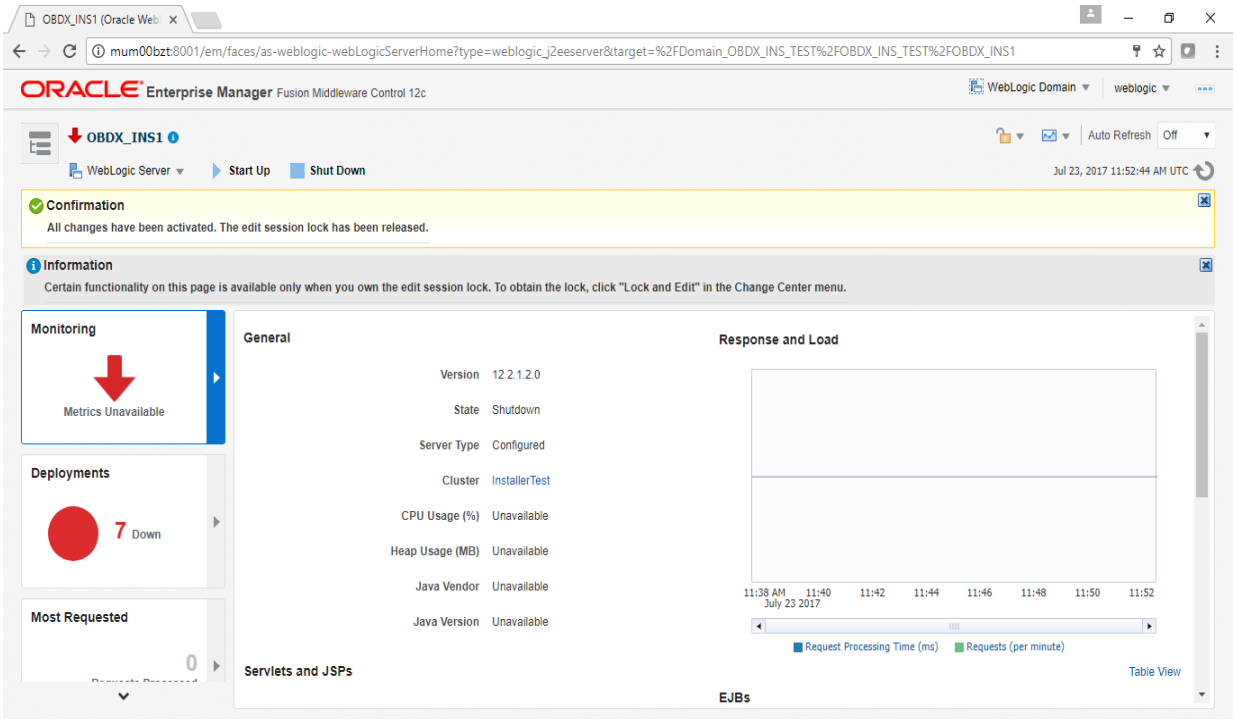
Is JRF successfully applied, you will get below Confirmation.



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



Post activation you will receive below Confirmation.



Configure User Lockout attributes in Weblogic

The User Lockout attributes in Weblogic under Home>Security Realms>myrealm need to be in sync with the Password Policy Maintained in LDAP or DBAuthenticator.In case of DBAuthenticator it has to be in sync with Password Policy Maintenance in OBDX.

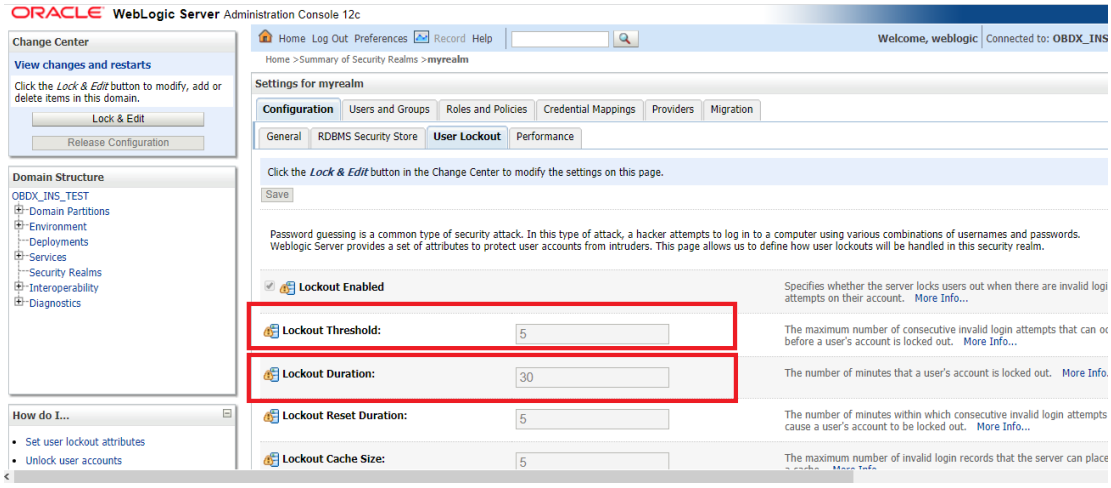
Check for below values & change accordingly.

1]Lockout Threshold : It should be equal to Invalid attempts of Password Policy Maintenance.

2]Lockout Duration : It should be equal to property under prop_id "USER_LOCK_PERIOD" maintained in DIGX_FW_CONFIG_ALL_B table.

In case of OUD or other LDAP it needs to be sync with the Password Policy configured in LDAP. For e.g.: Refer to below values configured in OUD.

Once the values are available, make appropriate change in respective highlighted configuration.

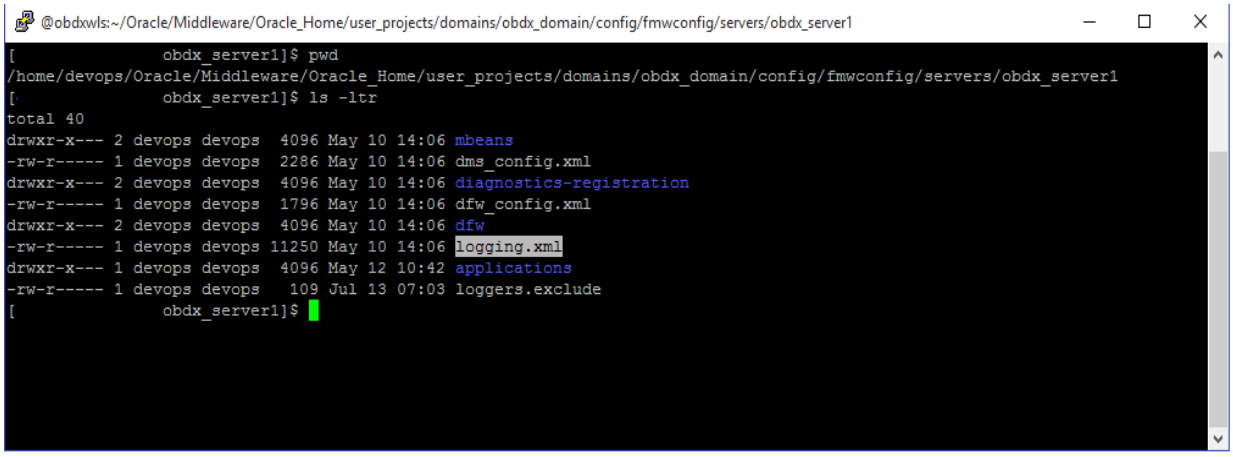


Save and Activate Changes

Restart AdminServer

OBDX Application logging

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



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

<log_handler name='obdx-handler' level='**<LOGLEVEL>**'
class='oracle.core.ojdl.logging.ODLHandlerFactory'>

<property name='path' value='**<path for OBDX log>/<OBDX 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='obdx-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' />

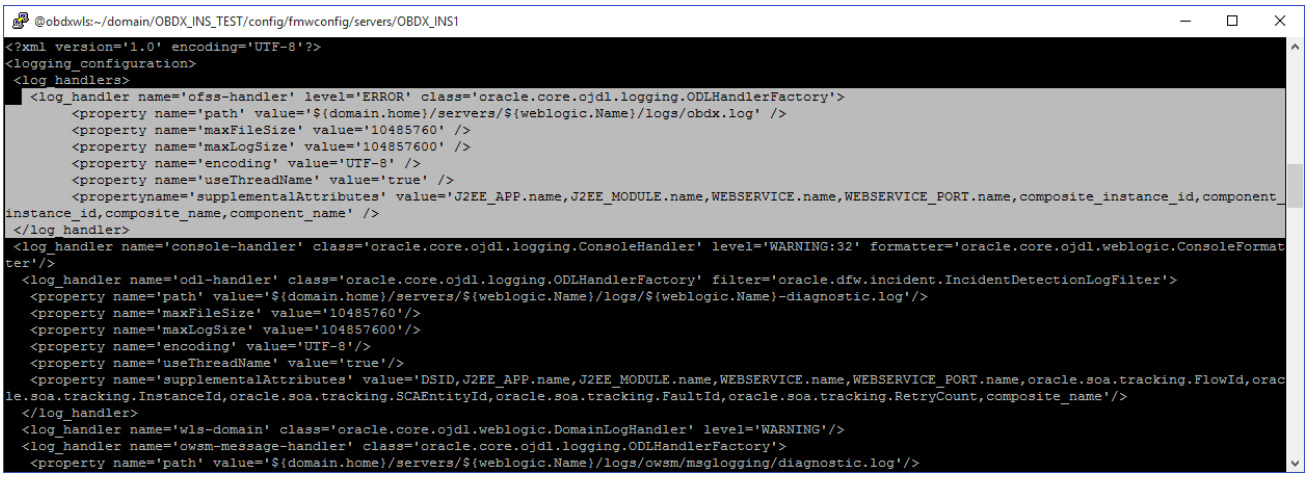
<property name='maxLogSize' value='104857600' />

<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>



Add loggers under <loggers> tag using below template:

<logger name='com.ofss' level='ERROR' useParentHandlers='false'>

<handler name='obdx-handler' />

</logger>

<logger name='#BANKCODE#.com.ofss' level='ERROR' useParentHandlers='false'>

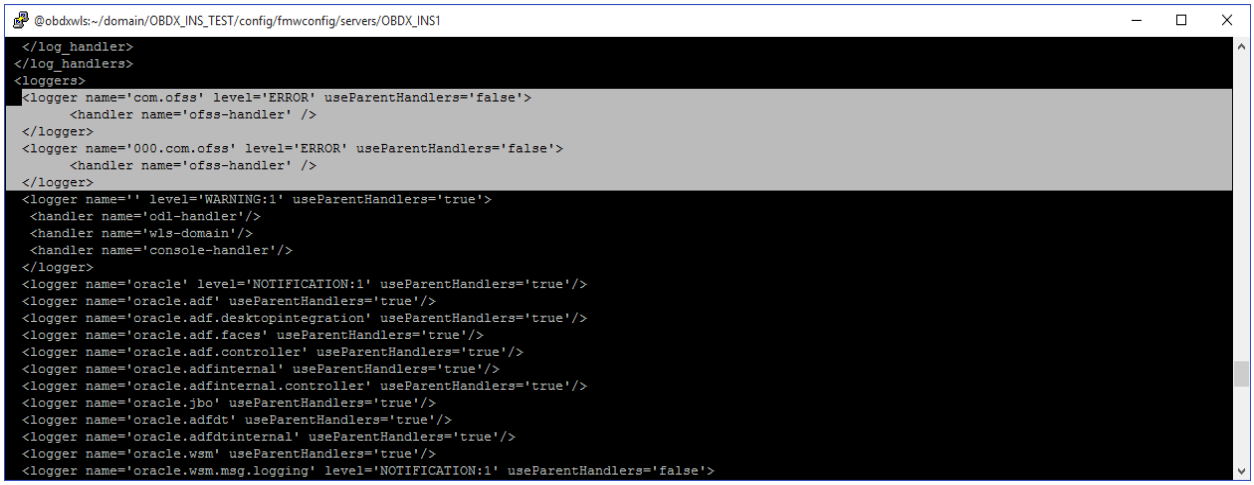
<handler name='obdx-handler' />

</logger>

Note: Replace the #BANKCODE# with bank code.

Below is a sample implementation for loggers file

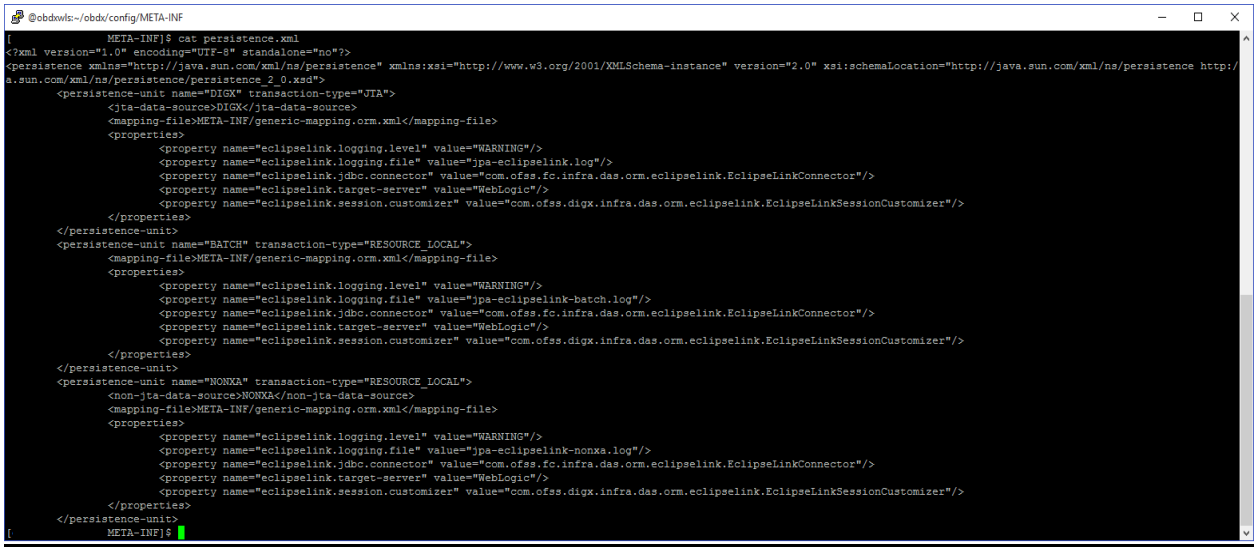
```
<logger name='com.ofss' level='ERROR' useParentHandlers='false'>
      <handler name='obdx-handler' />
 </logger>
 <logger name='000.com.ofss' level='ERROR' useParentHandlers='false'>
          <handler name='obdx-handler' />
 </logger>
```



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



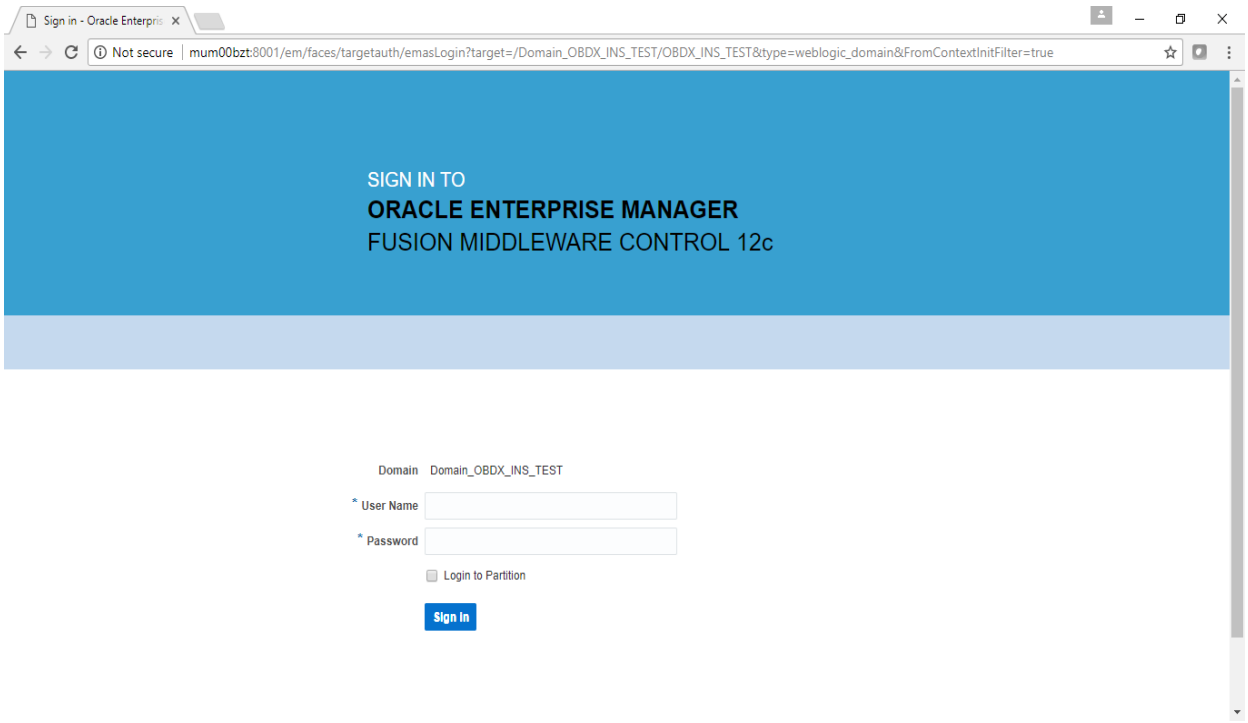
Change logging level during runtime

To change OBDX application logging level at runtime (when OBDX 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:

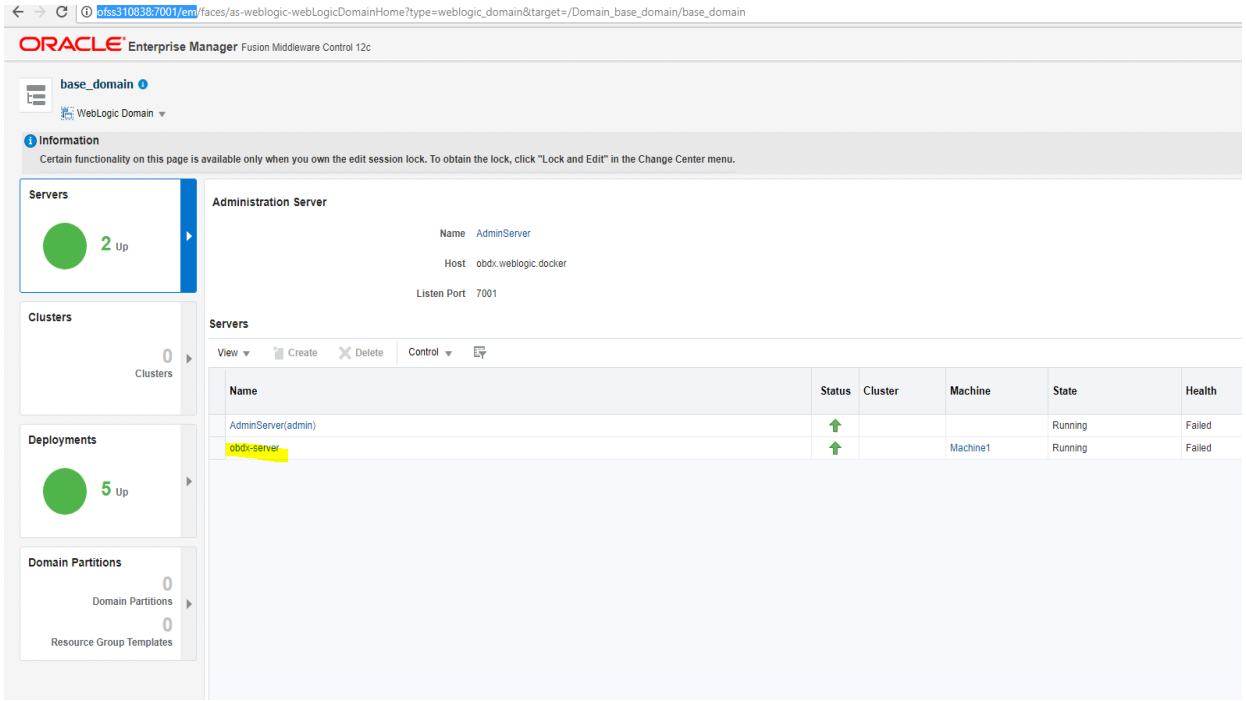
http://<hostname>:<admin_port>/em

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

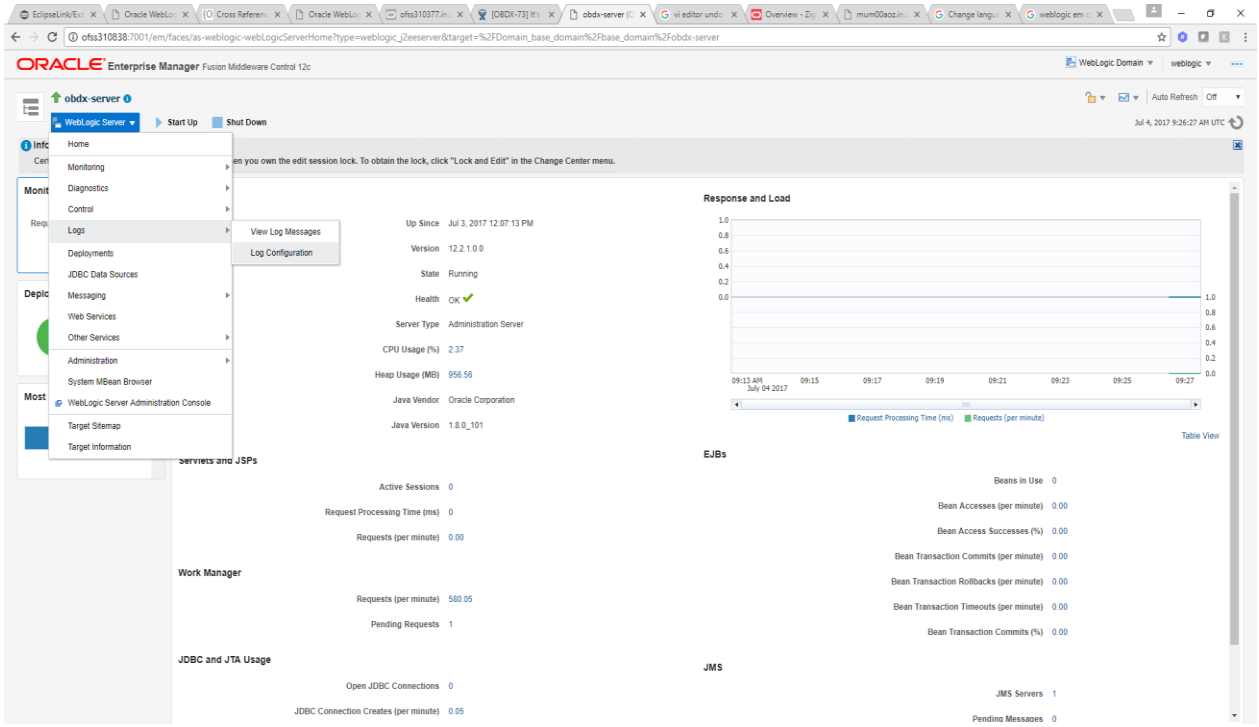


- Click on obdx-server

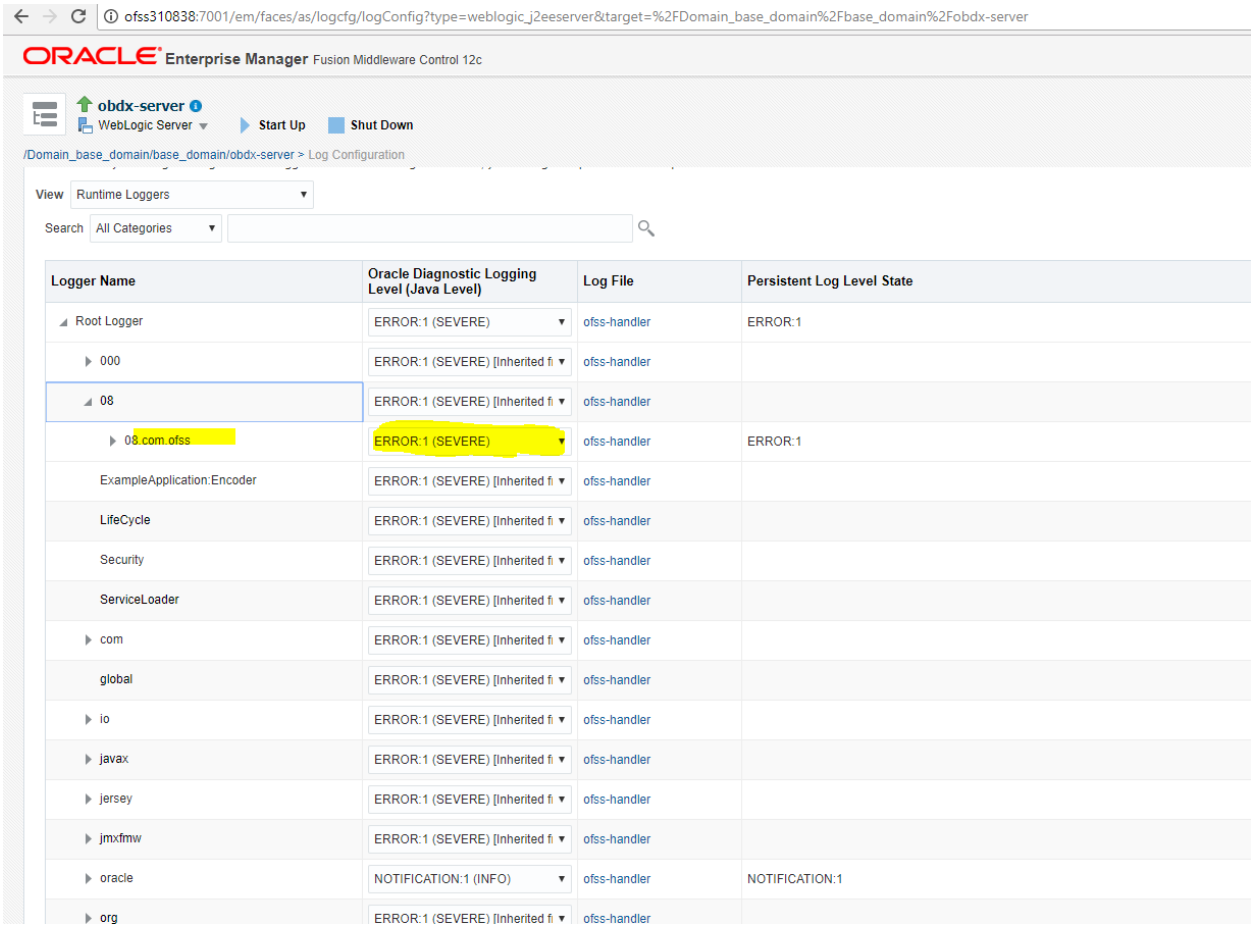
Note : Depending on installer.properties, Managed server will differ from above screenshot.



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



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



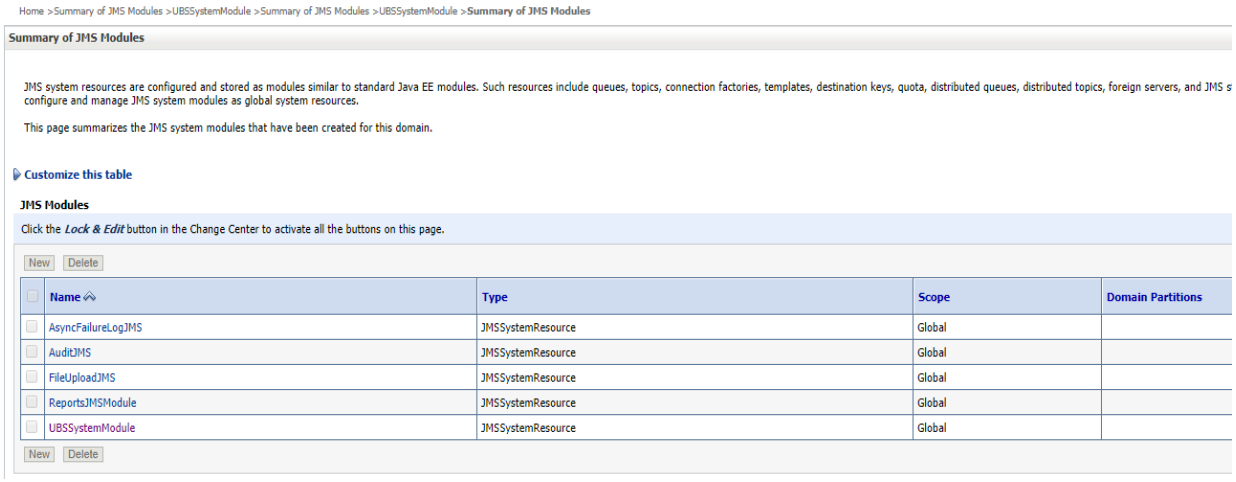
Note : Logger name should be defined in logging.xml.

Universal Banking Solution (OBDX_with_UBS)

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

Foreign Server

- Login into Weblogic Admin console (OBDX 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

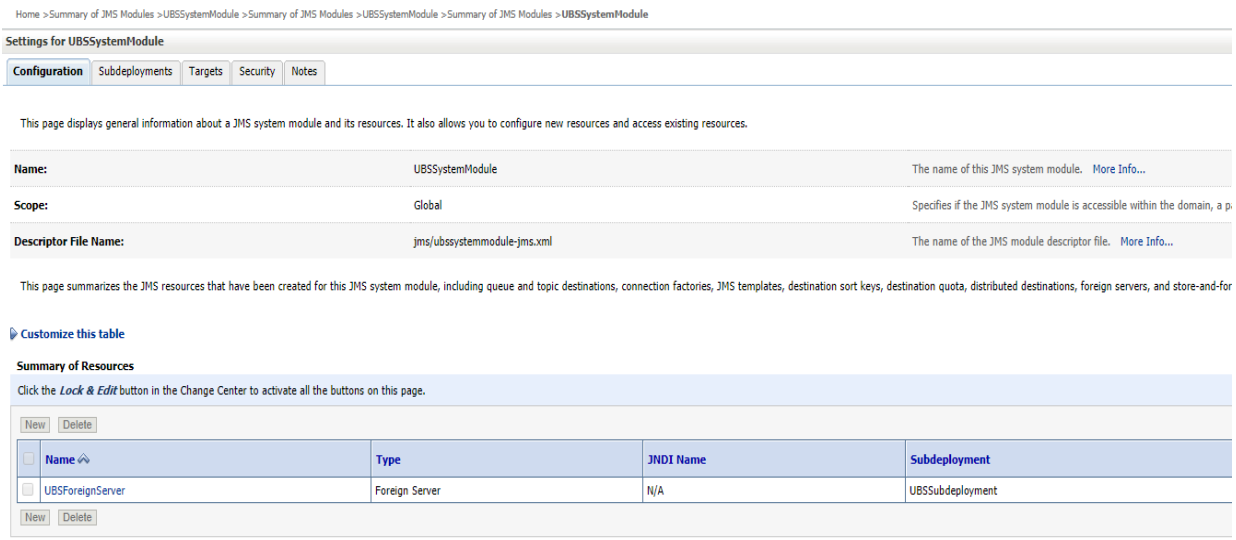
JMS Modules

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

New Delete

	Name	Type	Scope	Domain Partitions
	AsyncFailureLogJMS	JMSSystemResource	Global	
	AuditJMS	JMSSystemResource	Global	
	FileUploadJMS	JMSSystemResource	Global	
	ReportsJMSModule	JMSSystemResource	Global	
	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

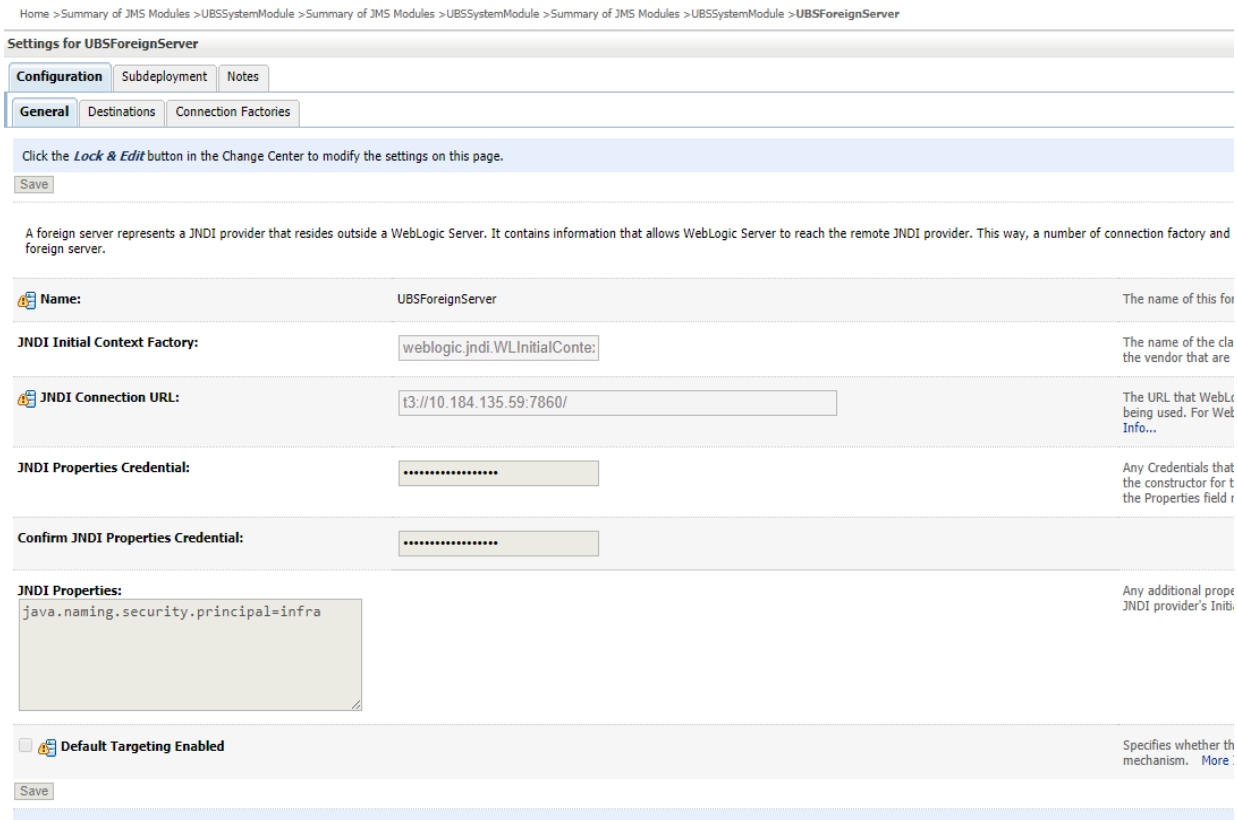
Click the ***Lock & Edit*** button in the Change Center to activate all the buttons on this page.

New Delete

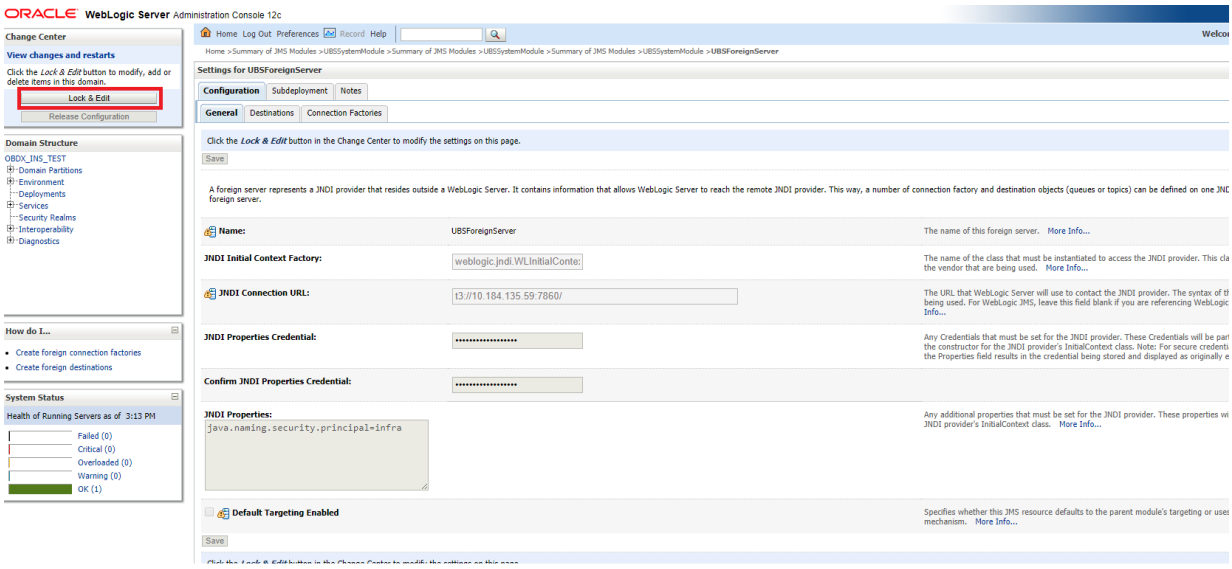
	Name	Type	JNDI Name	Subdeployment
	UBSForeignServer	Foreign Server	N/A	UBSSubdeployment

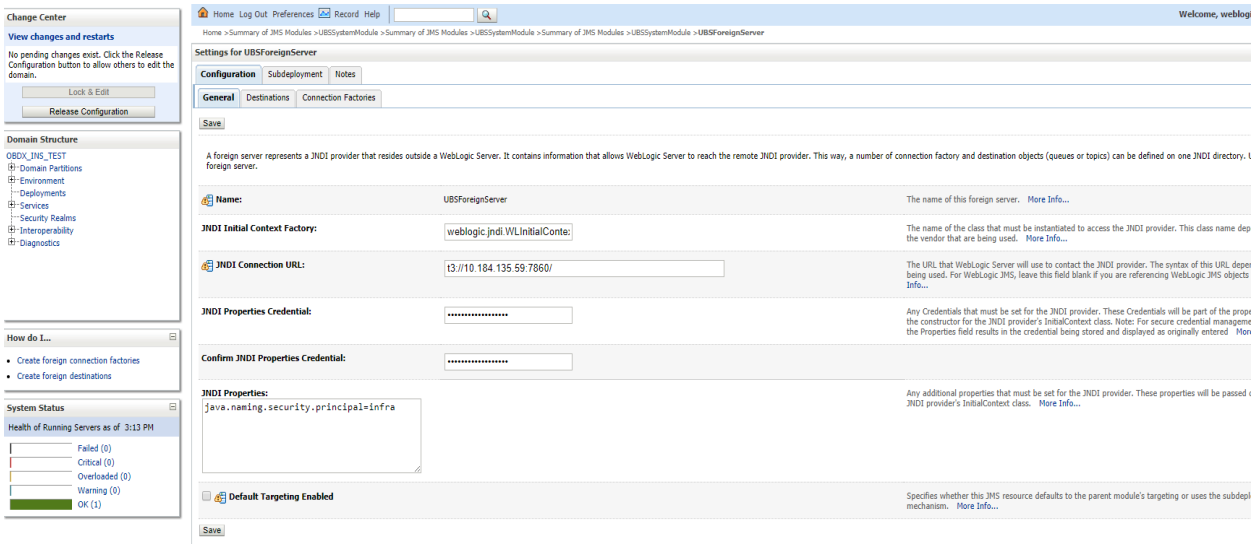
New Delete

- Click on UBSForeignServer



- Click on Lock & Edit





Set below configurations with:

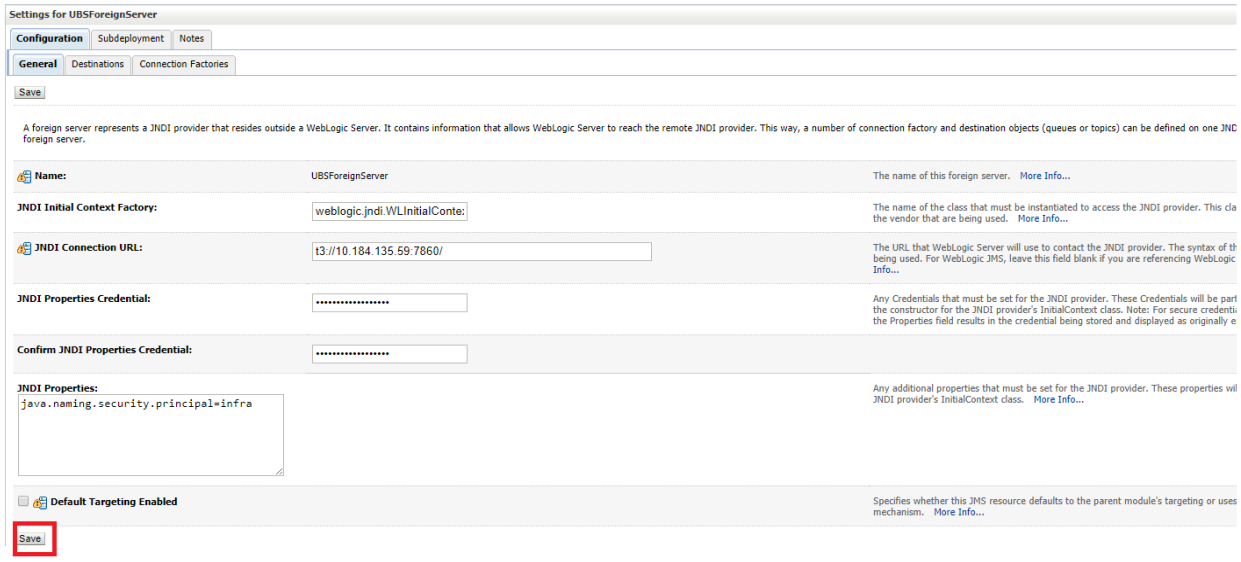
JNDI Connection URL – UBS HOST Weblogic t3 URL for Managed server (where NOTIFY_DEST_QUEUE and NOTIFY_DEST_QUEUE_FCDB are mapped)

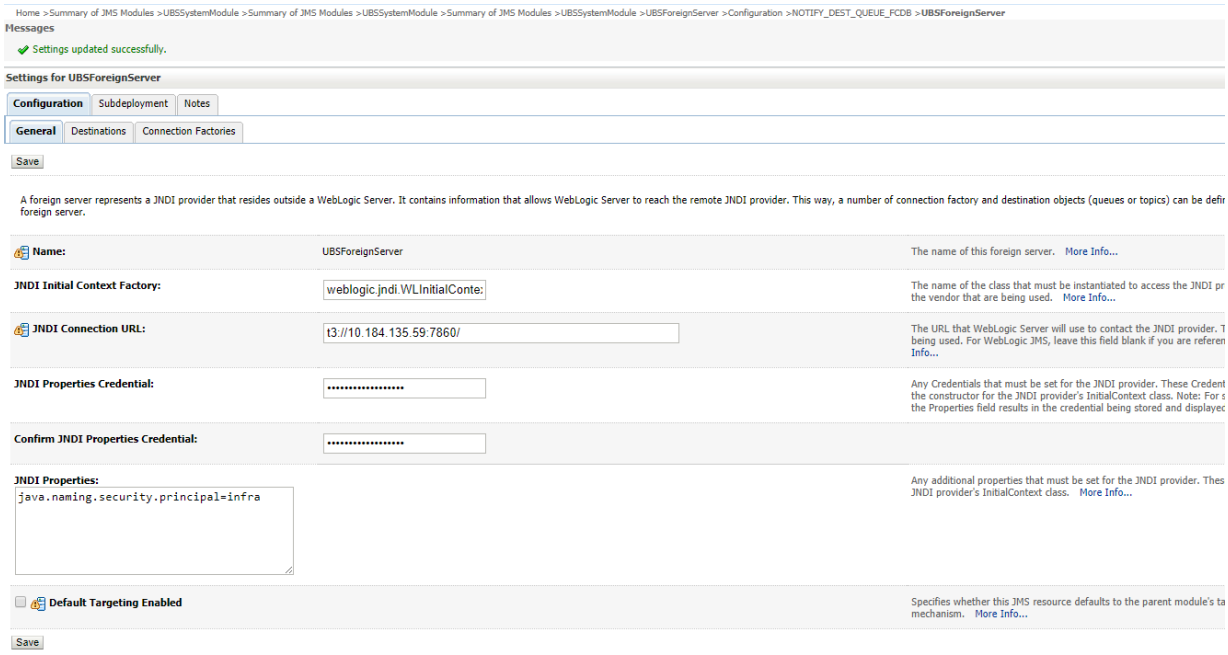
JNDI Properties Credential – Password for username set in JNDI properties

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

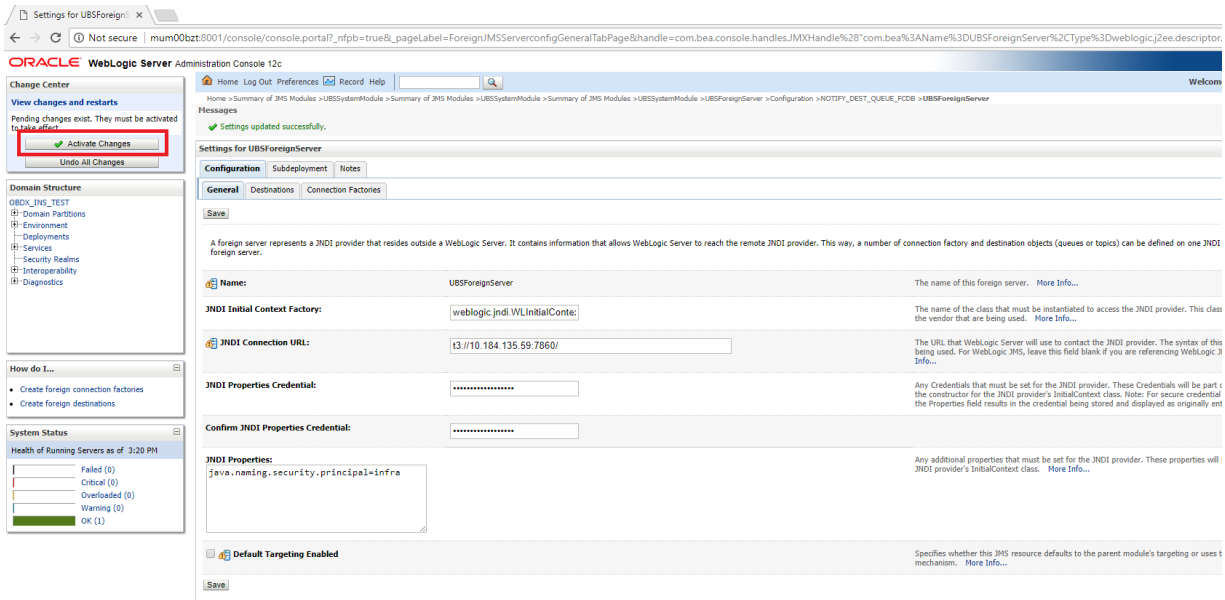
JNDI Properties – Value to be set as “java.naming.security.principal=<username>”, where username is the login user of UBS Weblogic Admin Console (user which created the primary local queues for UBS).

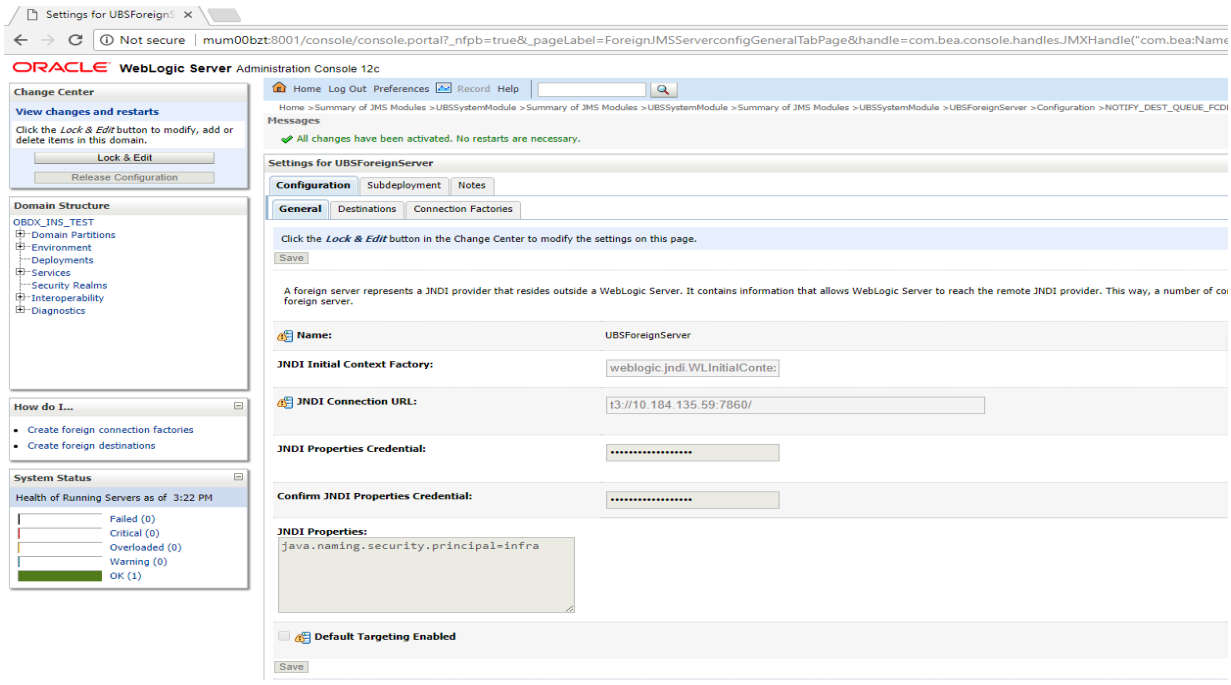
- Click on Save





- Click on Activate Changes

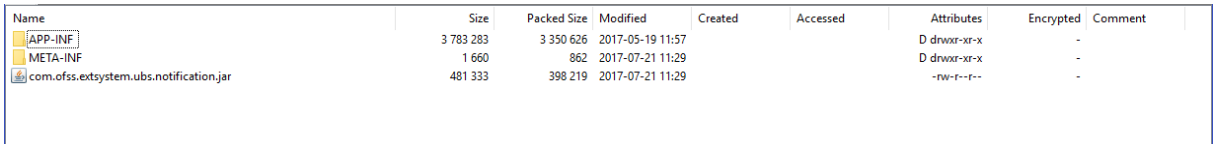




Deployment of notification MDB application

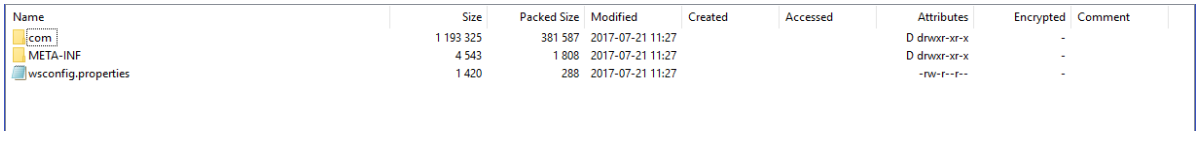
Before deployment of obdx.externalsystem.ubs.notification.mdb.ear application, kindly perform below steps:

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



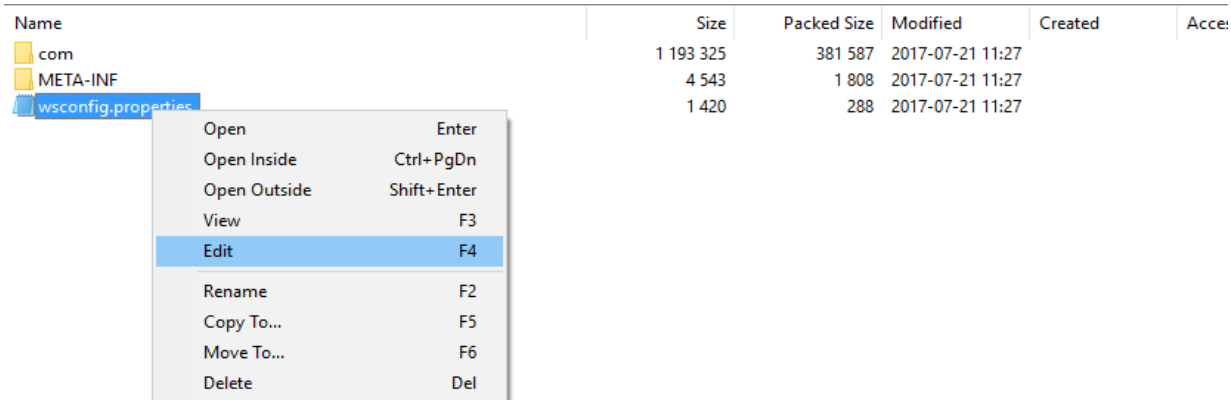
Name	Size	Packed Size	Modified	Created	Accessed	Attributes	Encrypted	Comment
APP-INF	3 783 283	3 350 626	2017-05-19 11:57			D drwxr-xr-x	-	
META-INF	1 660	862	2017-07-21 11:29			D drwxr-xr-x	-	
com.ofss.extsystem.ubs.notification.jar	481 333	398 219	2017-07-21 11:29			-rw-r--r--	-	

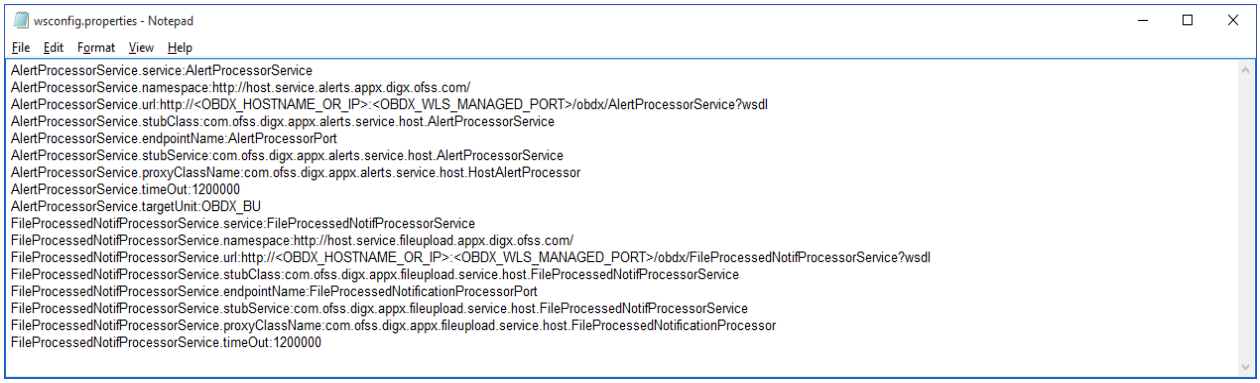
- Double click on com.ofss.extsystem.ubs.notification.jar



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--	-	

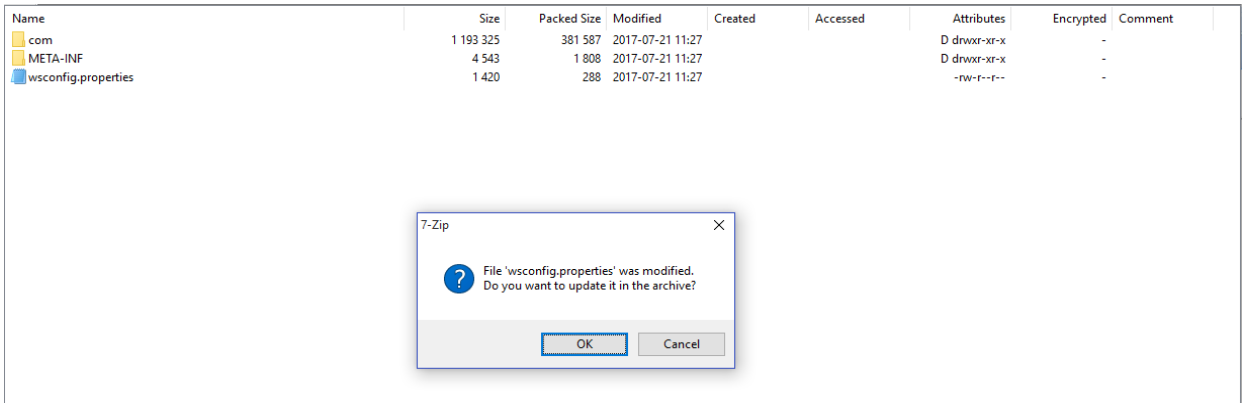
- Open the wsconfig.properties to edit



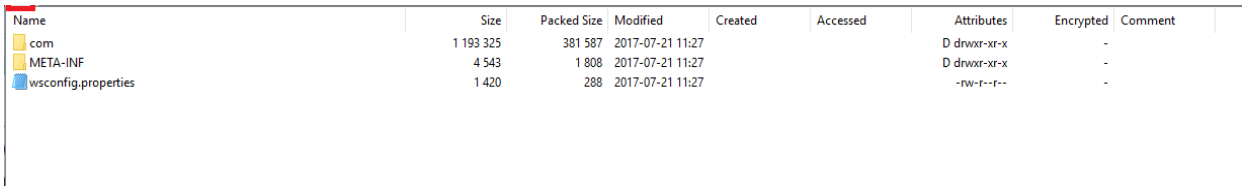


- Change the URL for AlertProcessorService.url and FileProcessedNotifProcessorService.url (Note the hostname and port should be of OBDX managed server created by installer)

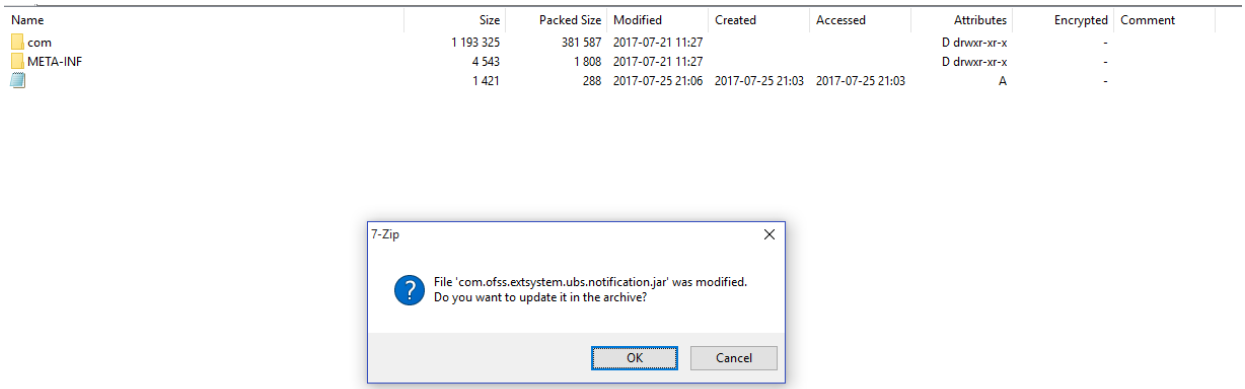
- Save changes.
- Click OK.

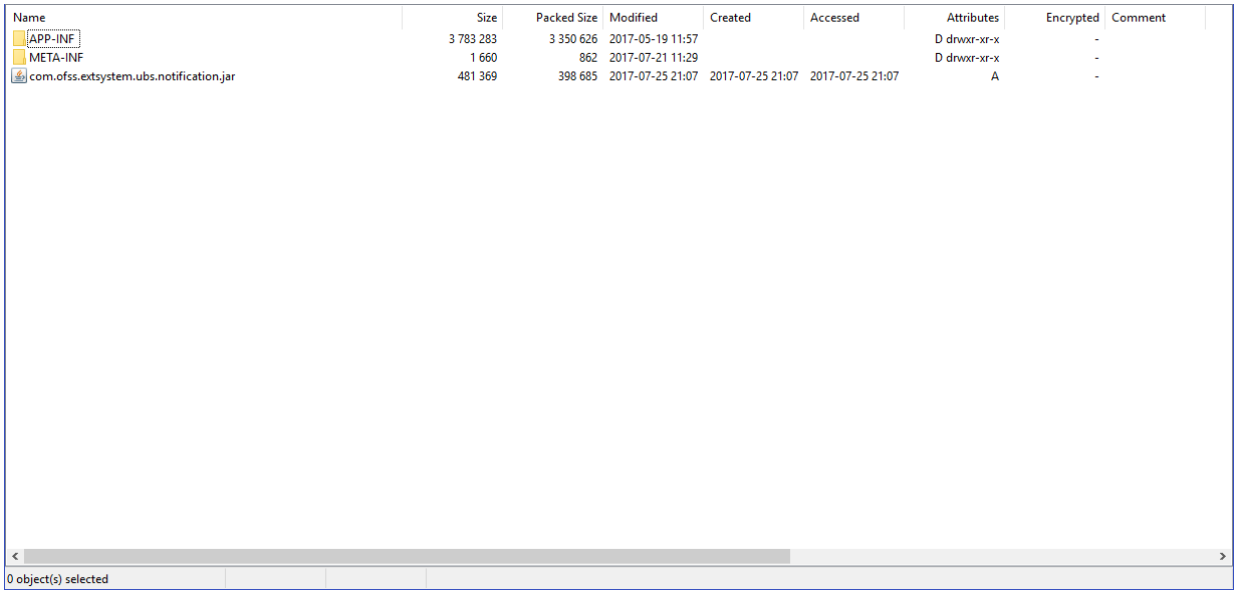


- Navigate back to obdx.externalsystem.ubs.notification.mdb.ear



- Click OK



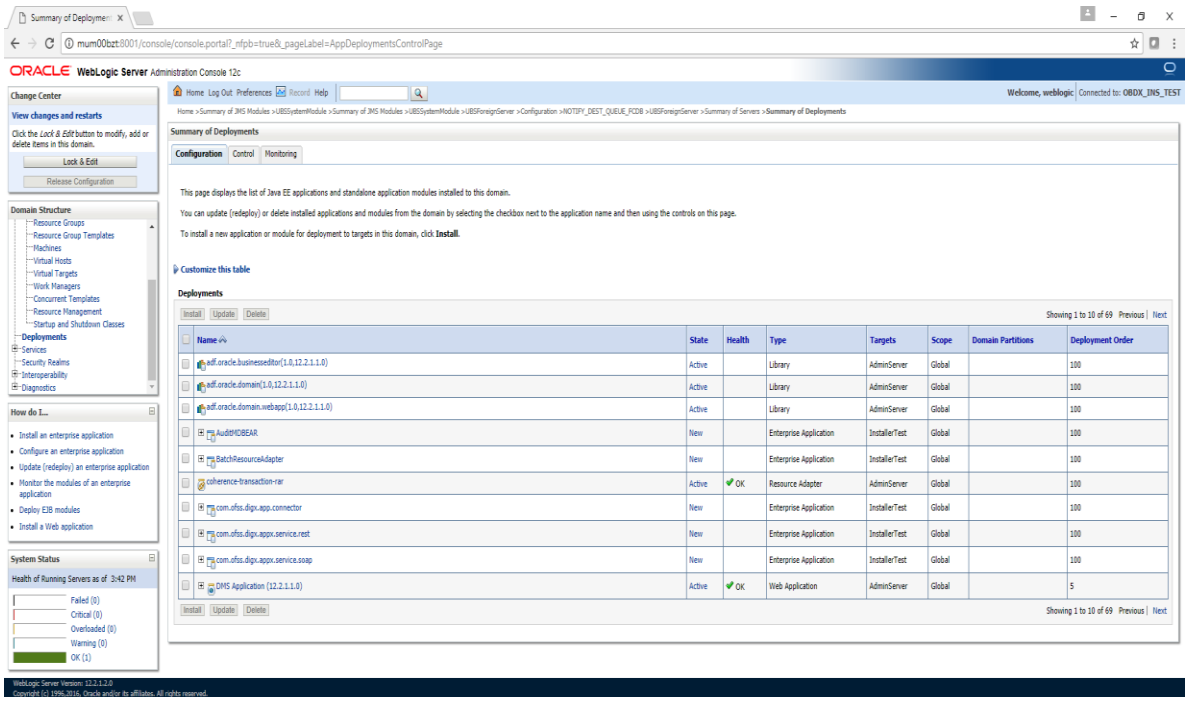


Name	Size	Packed Size	Modified	Created	Accessed	Attributes	Encrypted	Comment
APP-INF	3 783 283	3 350 626	2017-05-19 11:57			D drwxr-xr-x	-	
META-INF	1 660	862	2017-07-21 11:29			D drwxr-xr-x	-	
com.ofss.extsystem.ubs.notification.jar	481 369	398 685	2017-07-25 21:07	2017-07-25 21:07	2017-07-25 21:07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

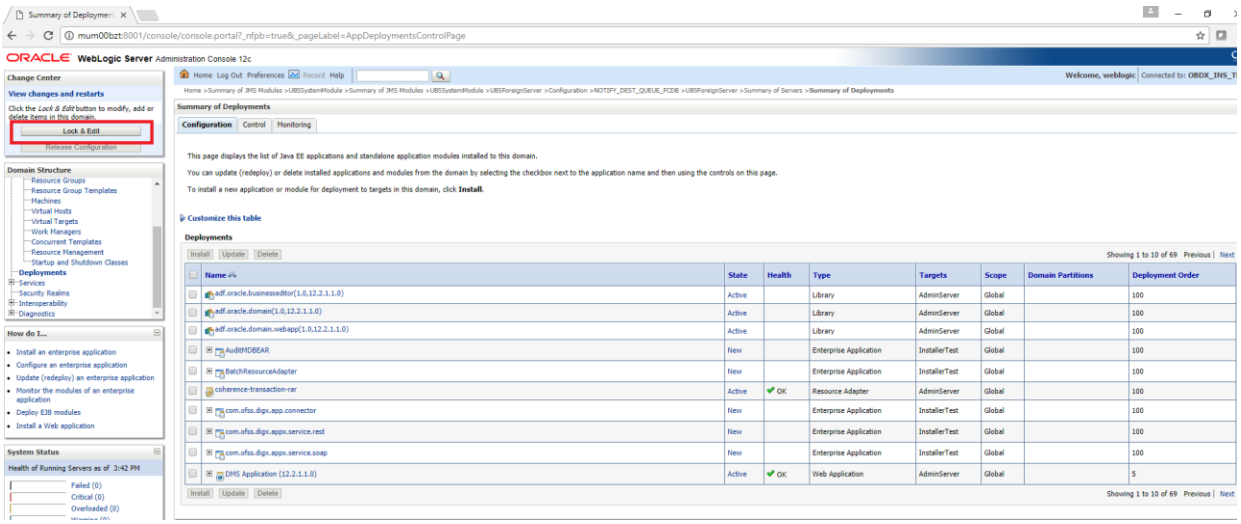
0 object(s) selected

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

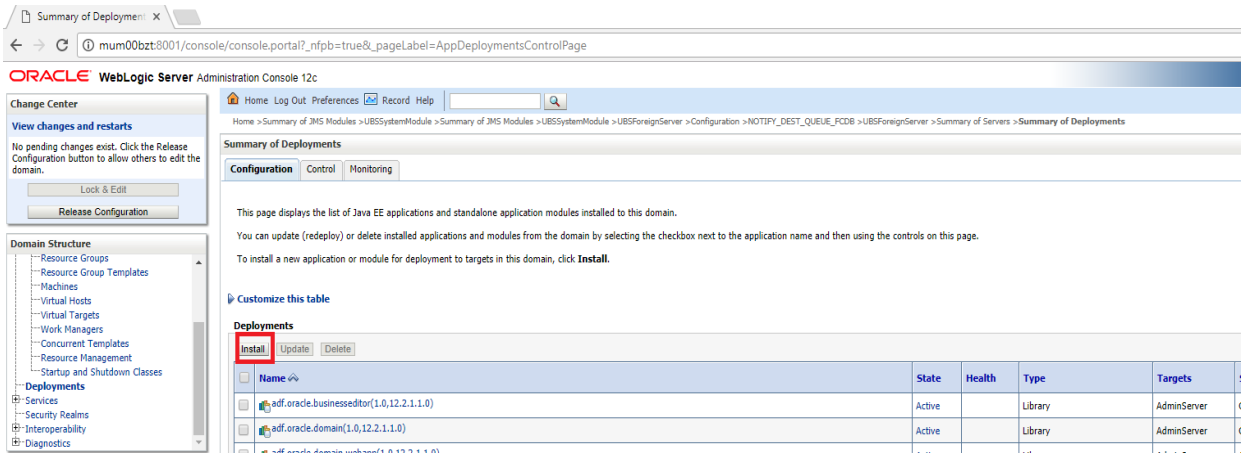
- Login into Weblogic Admin Console (OBDX domain created using installer) and navigate to Deployments



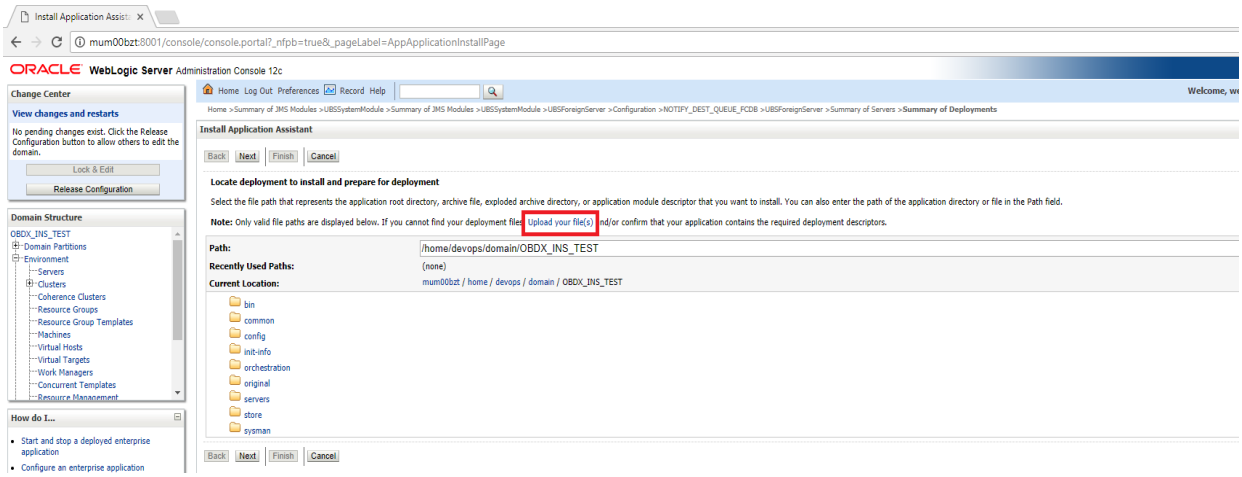
- Click Lock & Edit



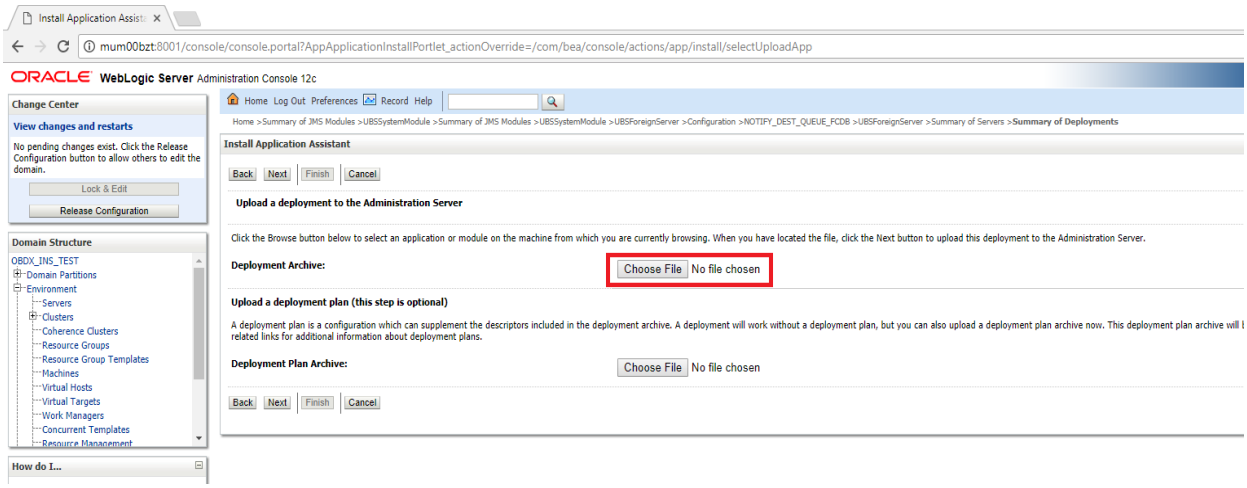
- Click on Install



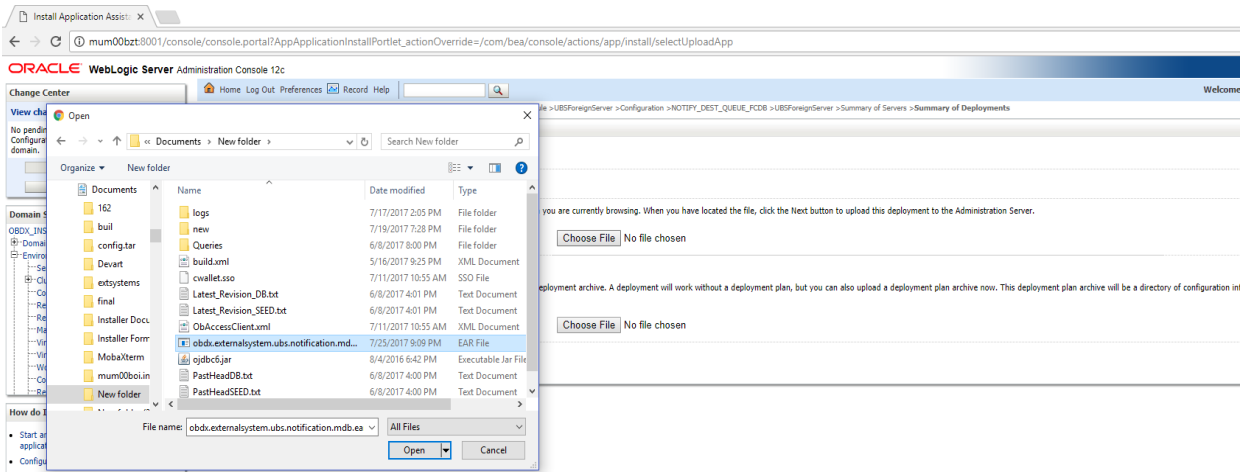
- Click on Upload your file(s)



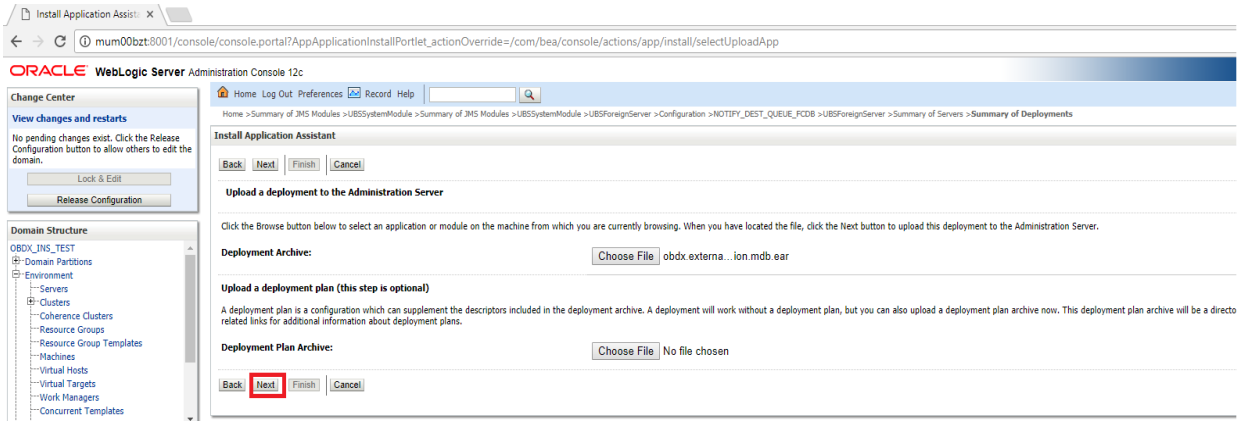
- Click on Choose File



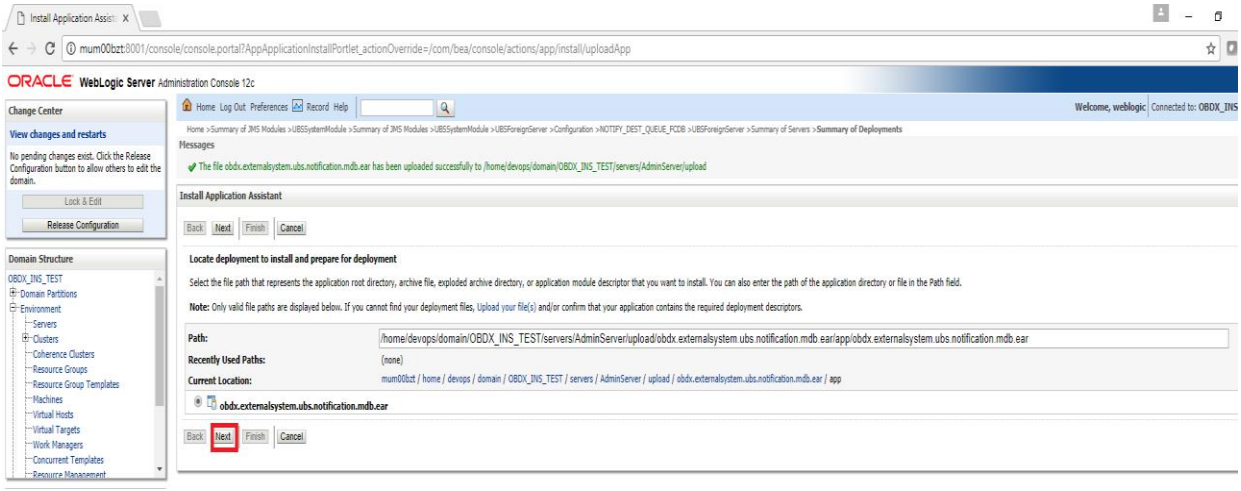
- Navigate to customized obdx.externalsystem.ubs.notification.mdb.ear and click Open



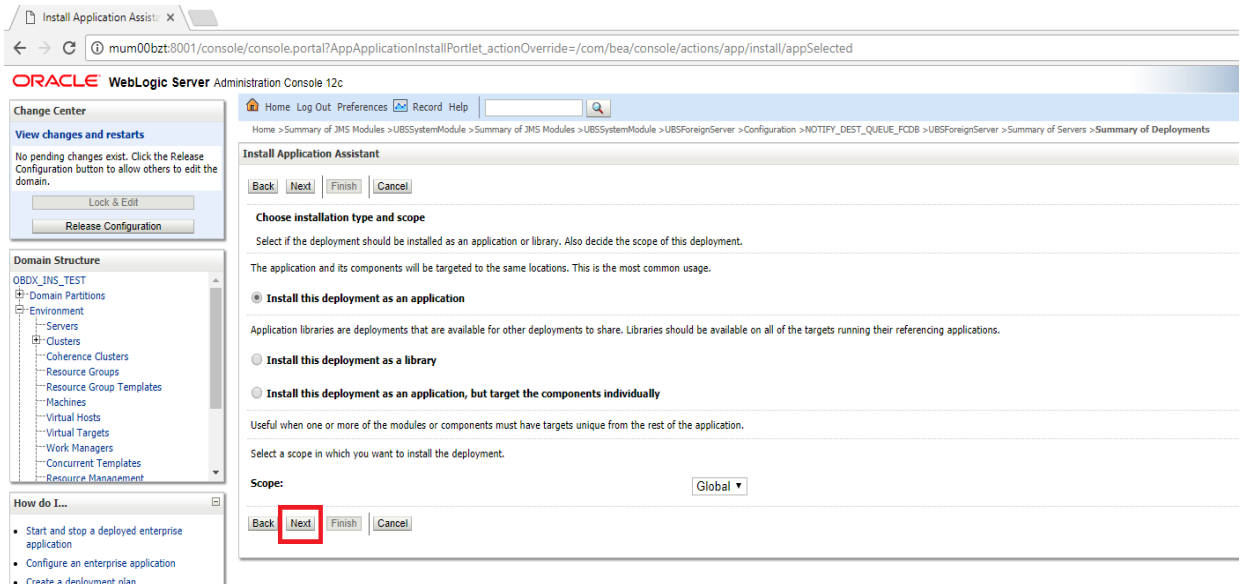
- Click Next


Install Application Assist
mum00bzt:8001/console/console.portal?AppApplicationInstallPortlet_actionOverride=/com/bea/console/actions/app/install/selectUploadApp
ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.
Lock & Edit
Release Configuration
Domain Structure
OBDX_INS_TEST
Domain Partitions
Environment
Servers
Clusters
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Home Log Out Preferences Record Help
Home >Summary of JMS Modules >UBSSystemModule >Summary of JMS Modules >UBSSystemModule >UBSForeignServer >Configuration >NOTIFY_DEST_QUEUE_FCDB >UBSForeignServer >Summary of Servers >Summary of Deployments
Install Application Assistant
Back Next Finish Cancel
Upload a deployment to the Administration Server
Click the Browse button below to select an application or module on the machine from which you are currently browsing. When you have located the file, click the Next button to upload this deployment to the Administration Server.
Deployment Archive:
Choose File obdx.externa...ion.mdb.ear
Upload a deployment plan (this step is optional)
A deployment plan is a configuration which can supplement the descriptors included in the deployment archive. A deployment will work without a deployment plan, but you can also upload a deployment plan archive now. This deployment plan archive will be a directo
related links for additional information about deployment plans.
Deployment Plan Archive:
Choose File No file chosen
Back Next Finish Cancel

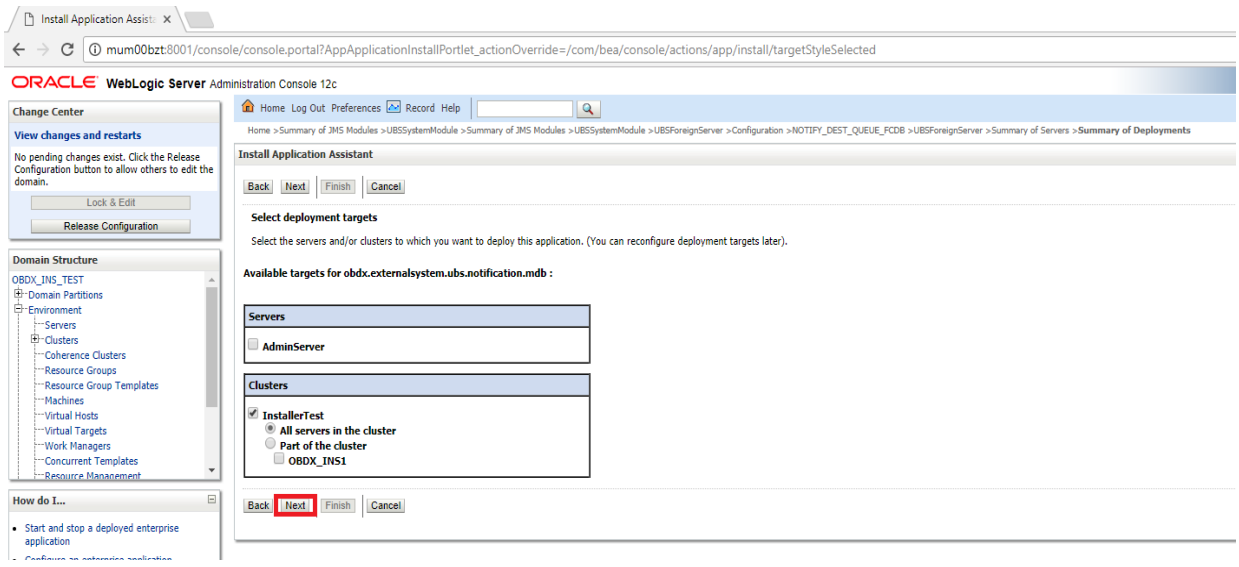
- Click Next


Install Application Assist
mum00bzt:8001/console/console.portal?AppApplicationInstallPortlet_actionOverride=/com/bea/console/actions/app/install/uploadApp
ORACLE WebLogic Server Administration Console 12c
Change Center
View changes and restarts
No pending changes exist. Click the Release Configuration button to allow others to edit the domain.
Lock & Edit
Release Configuration
Domain Structure
OBDX_INS_TEST
Domain Partitions
Environment
Servers
Clusters
Coherence Clusters
Resource Groups
Resource Group Templates
Machines
Virtual Hosts
Virtual Targets
Work Managers
Concurrent Templates
Home Log Out Preferences Record Help
Welcome, weblogic Connected to: OBDX_INS
Home >Summary of JMS Modules >UBSSystemModule >Summary of JMS Modules >UBSSystemModule >UBSForeignServer >Configuration >NOTIFY_DEST_QUEUE_FCDB >UBSForeignServer >Summary of Servers >Summary of Deployments
Messages
The file obdx.externalsystem.ubs.notification.mdb.ear has been uploaded successfully to /home/devops/domain/OBDX_INS_TEST/servers/AdminServer/upload
Install Application Assistant
Back Next Finish Cancel
Locate deployment to install and prepare for deployment
Select the file path that represents the application root directory, archive file, exploded archive directory, or application module descriptor that you want to install. You can also enter the path of the application directory or file in the Path field.
Note: Only valid file paths are displayed below. If you cannot find your deployment files, Upload your file(s) and/or confirm that your application contains the required deployment descriptors.
Path:
/home/devops/domain/OBDX_INS_TEST/servers/AdminServer/upload/obdx.externalsystem.ubs.notification.mdb.ear/app/obdx.externalsystem.ubs.notification.mdb.ear
Recently Used Paths:
(none)
Current Location:
mum00bzt / home / devops / domain / OBDX_INS_TEST / servers / AdminServer / upload / obdx.externalsystem.ubs.notification.mdb.ear / app
obdx.externalsystem.ubs.notification.mdb.ear
Back Next Finish Cancel

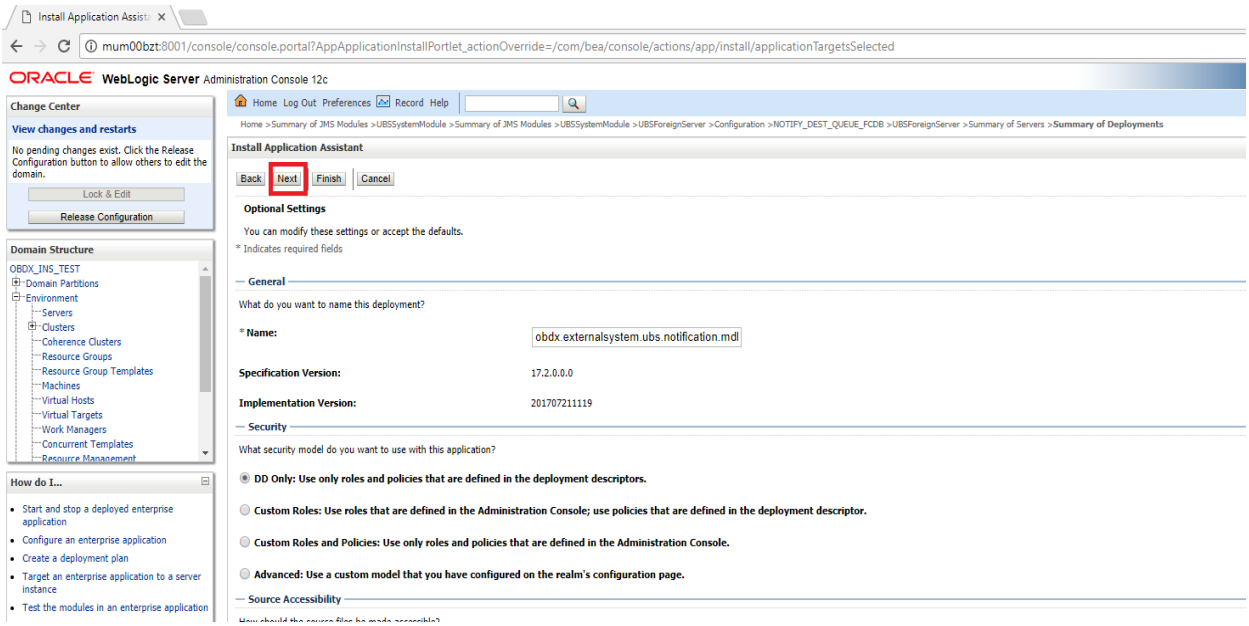
- Select “Install this deployment as an application” and click Next



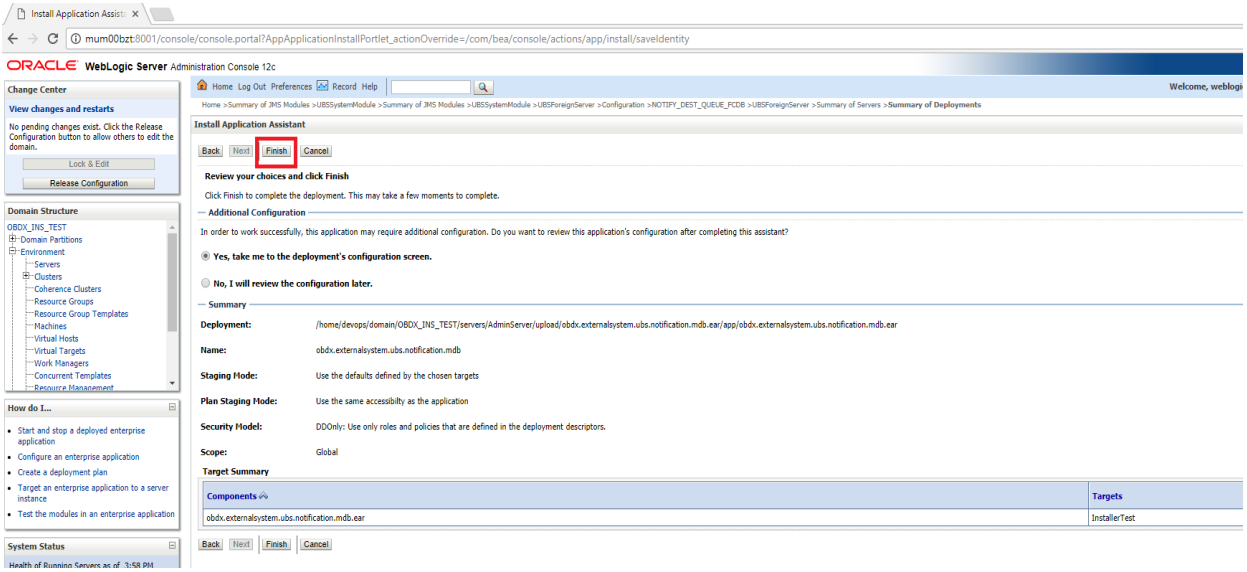
- Select Cluster as target and click Next



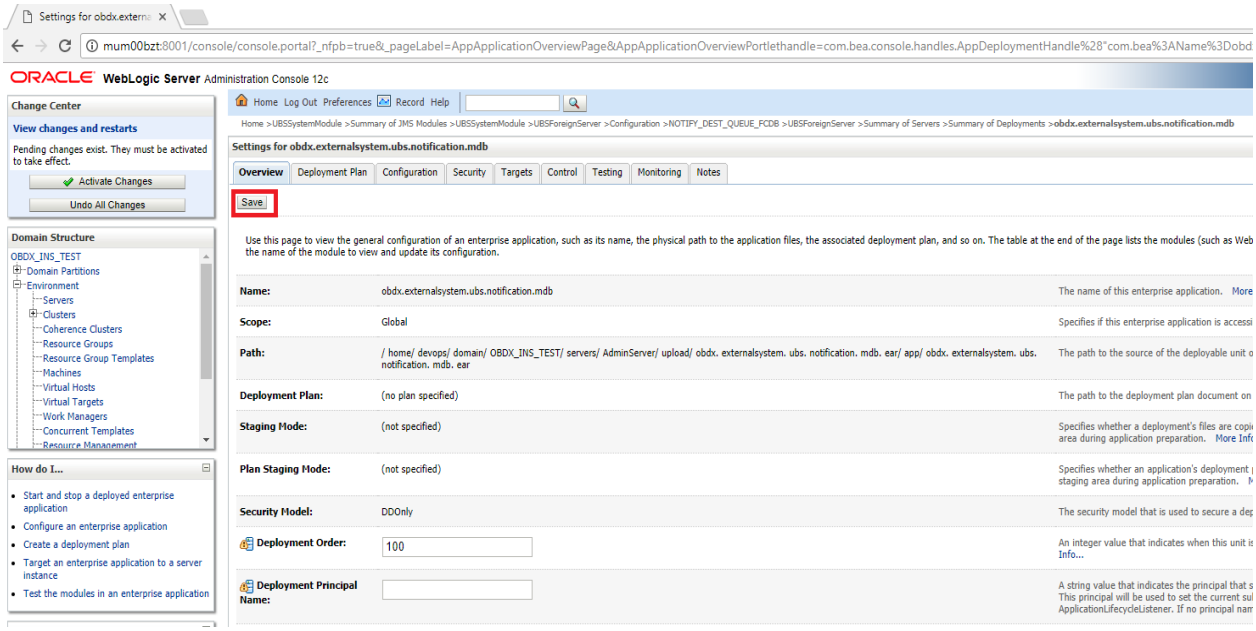
- Click Next



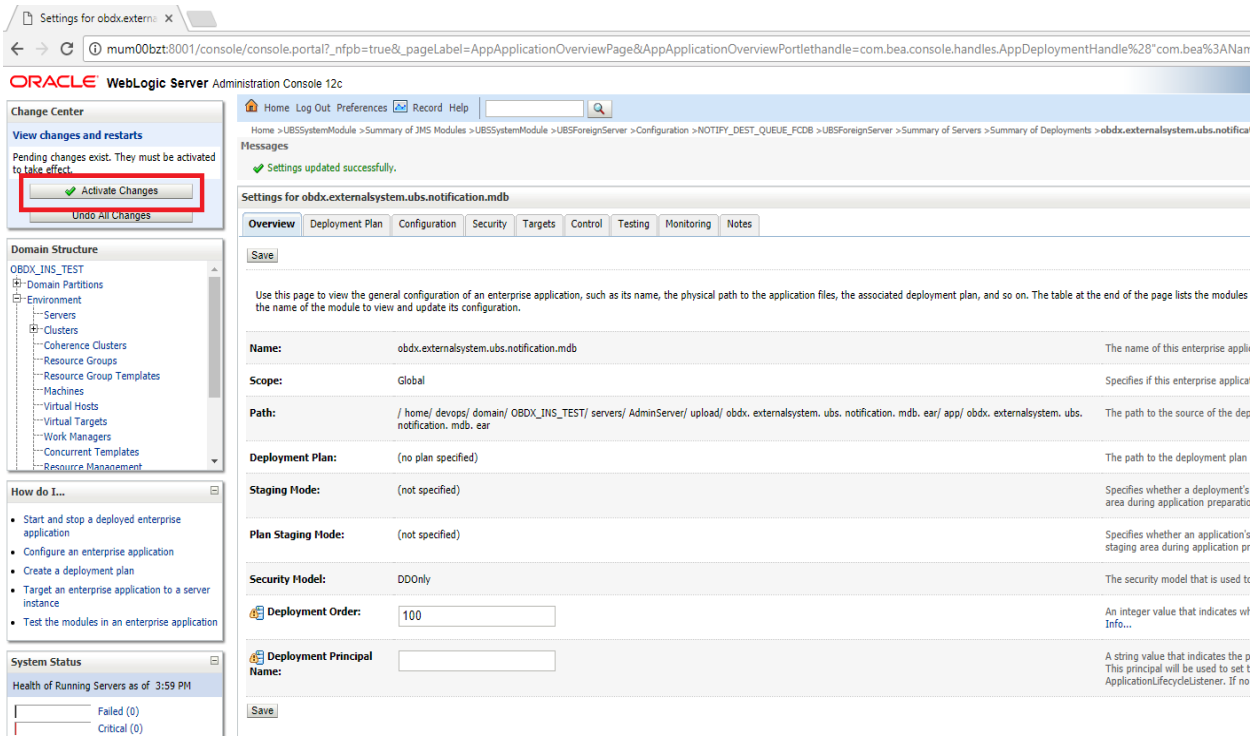
- Click Finish.

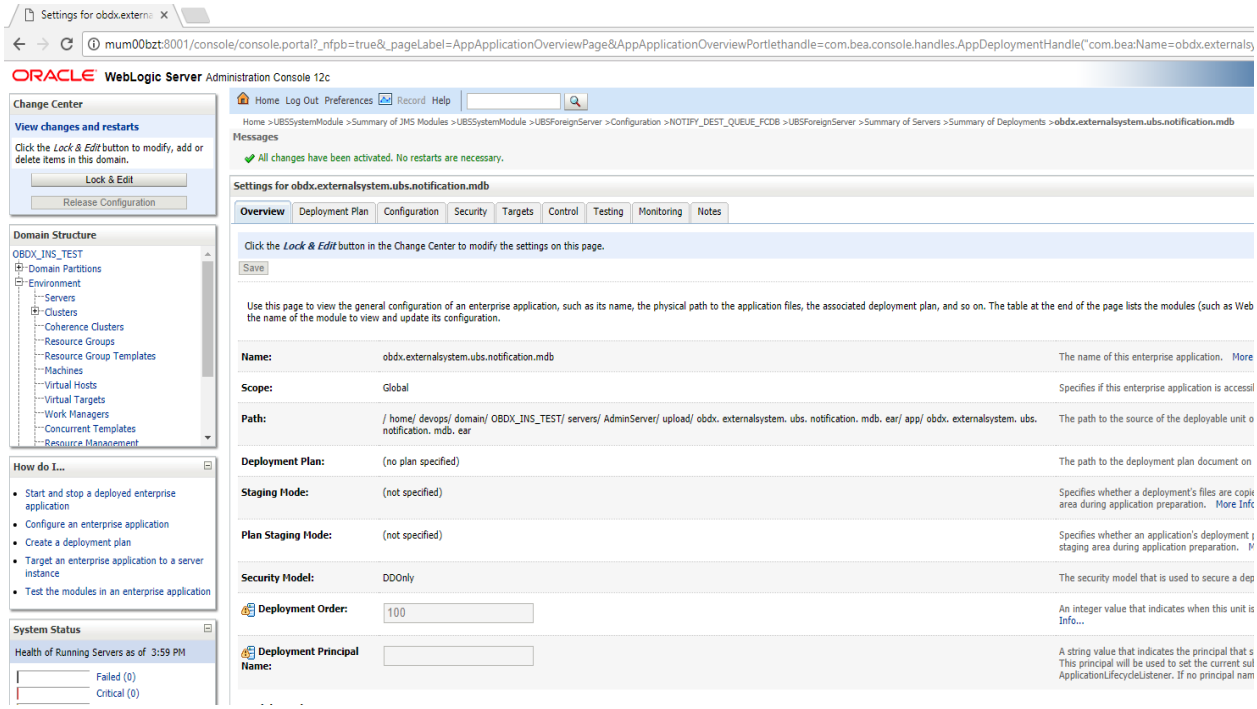


- Click Save.



- Click Activate Changes





Fileupload with UBS

Refer below document for File upload configuration with UBS

Oracle Banking Digital Experience File Upload Report Configuration

Origination with UBS

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

Oracle Banking Digital Experience UBS Origination Setup and Configuration

OBDX 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 Digital Experience OBP Base Setup and Configuration

OBDX 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 Digital Experience OBP US LZN Setup and Configuration

OBDX with OFSLL (Installation with Oracle Services Lending and Leasing)

Refer below document for OFSLL Installer required for integration with OFSLL

Oracle Banking Digital Experience 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 Digital Experience OHS User Interface Configuration

Home

9. Configuring the Connector Credential Store

This step is required to setup the encryption key required for encryption of certain sensitive data within the OBDX application.

For more information, refer the **Oracle Banking Digital Experience Connector Credential Store Guide.docx**

10. OBDX Product Verification

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

☐	AuditMDBEAR	Active	OK	Enterprise Application	InstallerDev	Global		100
☐	BatchResourceAdapter	Active	OK	Enterprise Application	InstallerDev	Global		100
☐	coherence-transaction-rar	Active	OK	Resource Adapter	AdminServer, InstallerDev	Global		100
☐	com.ofss.digx.app.connector	Active	OK	Enterprise Application	InstallerDev	Global		100
☐	com.ofss.digx.appx.chatbot.rest	Active	OK	Enterprise Application	InstallerDev	Global		100
☐	com.ofss.digx.chatbot(18.1.0.0.0,201801090518)	Active		Library	InstallerDev	Global		100

☐	obdx.app.core.domain(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
☐	obdx.app.core.patch(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
☐	obdx.app.domain(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
☐	obdx.app.rest.idm	Active	OK	Enterprise Application	InstallerDev	Global		0
☐	obdx.app.security(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
☐	obdx.app.soap	Active	OK	Enterprise Application	InstallerDev	Global		100
☐	obdx.app.timer	Active	OK	Enterprise Application	InstallerDev	Global		100
☐	obdx.extsystem.domain(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0
☐	obdx.thirdparty.app.domain(18.1.0.0.0,201801090518)	Active		Library	AdminServer, InstallerDev	Global		0

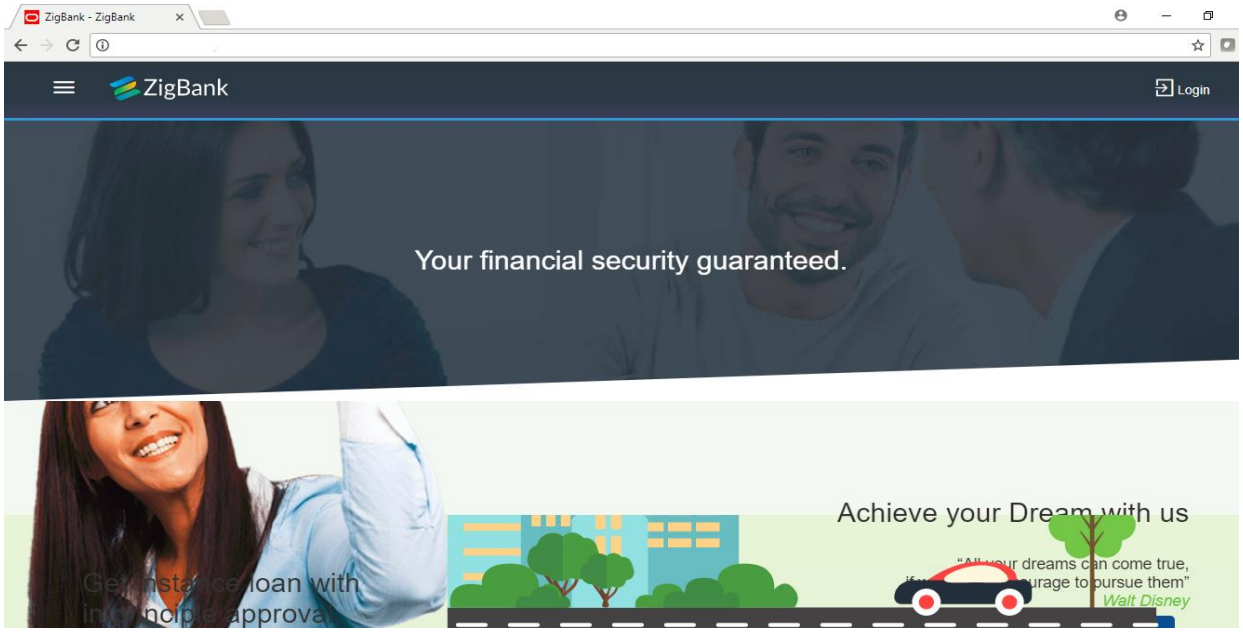
☐	ReportsMDBEAR	Active	OK	Enterprise Application	InstallerDev	Global		100

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 Digital Experience 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 (OBDX with UBS)

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

Oracle Banking Digital Experience 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 (OBDX 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 Digital Experience 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 (OBDX 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 Digital Experience 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 (OBDX 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 Digital Experience 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 (OBDX with OFSLL)

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

Oracle Banking Digital Experience 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 Digital Experience Chatbot Configuration

Mobile Application Builder:

Refer below documents for Mobile Applications build and setup.

Oracle Banking Digital Experience Mobile Application Builder-Android

Oracle Banking Digital Experience Mobile Application Builder-iOS

Home

11. 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 obdx.app.rest.idm from deployments.

  Deploy obdx.app.rest from Installer zip (<OBDX INSTALLER DIR> \installables\app\components\obdx\deploy\).

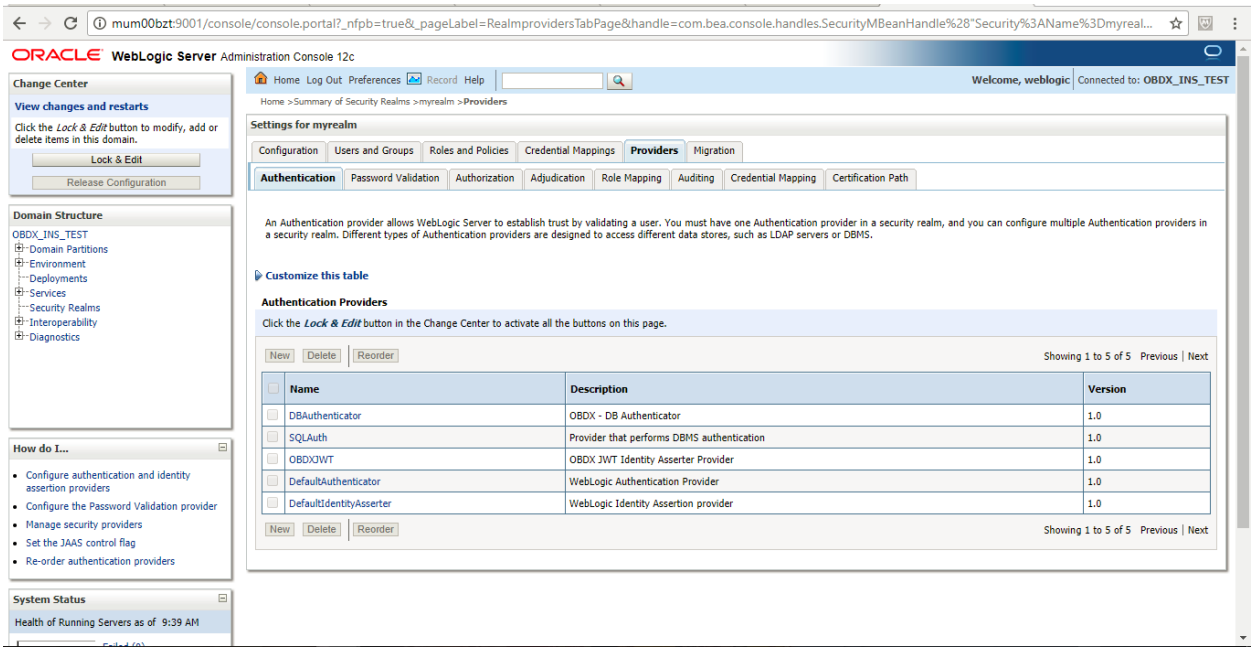
- **Security Realms**

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 OBDX domain (created by Installer) using the following URL:

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

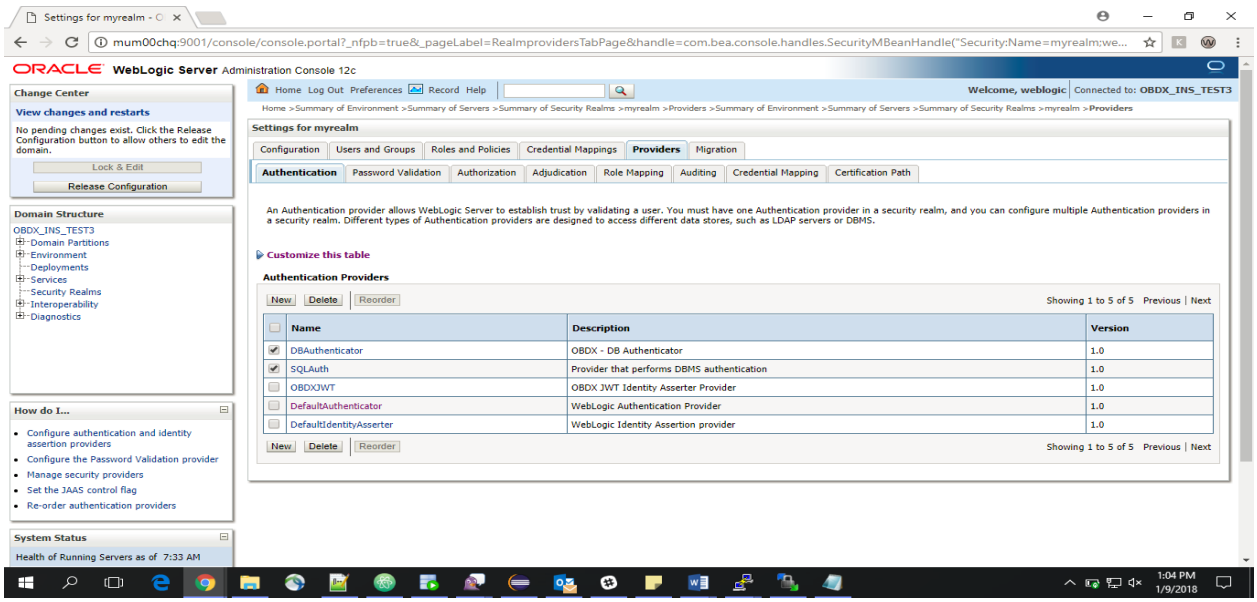
- Now, go to Security Realms > myrealm > Providers

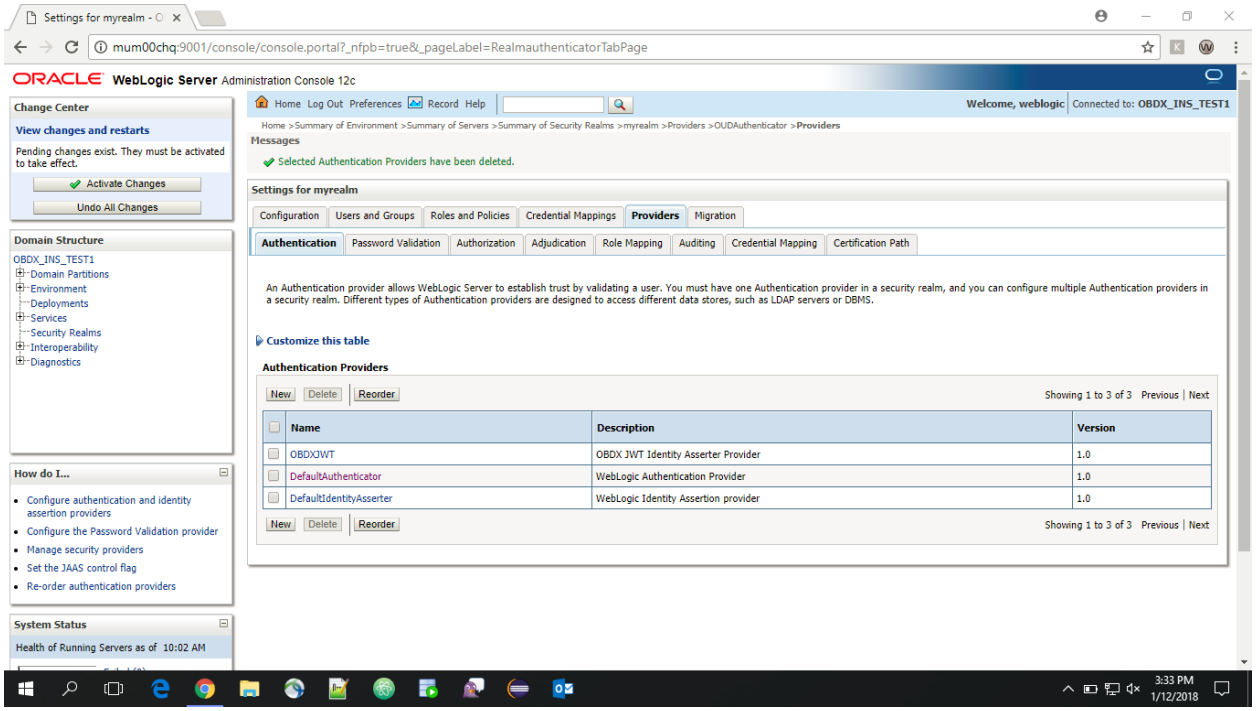


- Now click on **"Lock & Edit"** in order to edit the details.
- Delete the following authenticators under providers->authenticators:

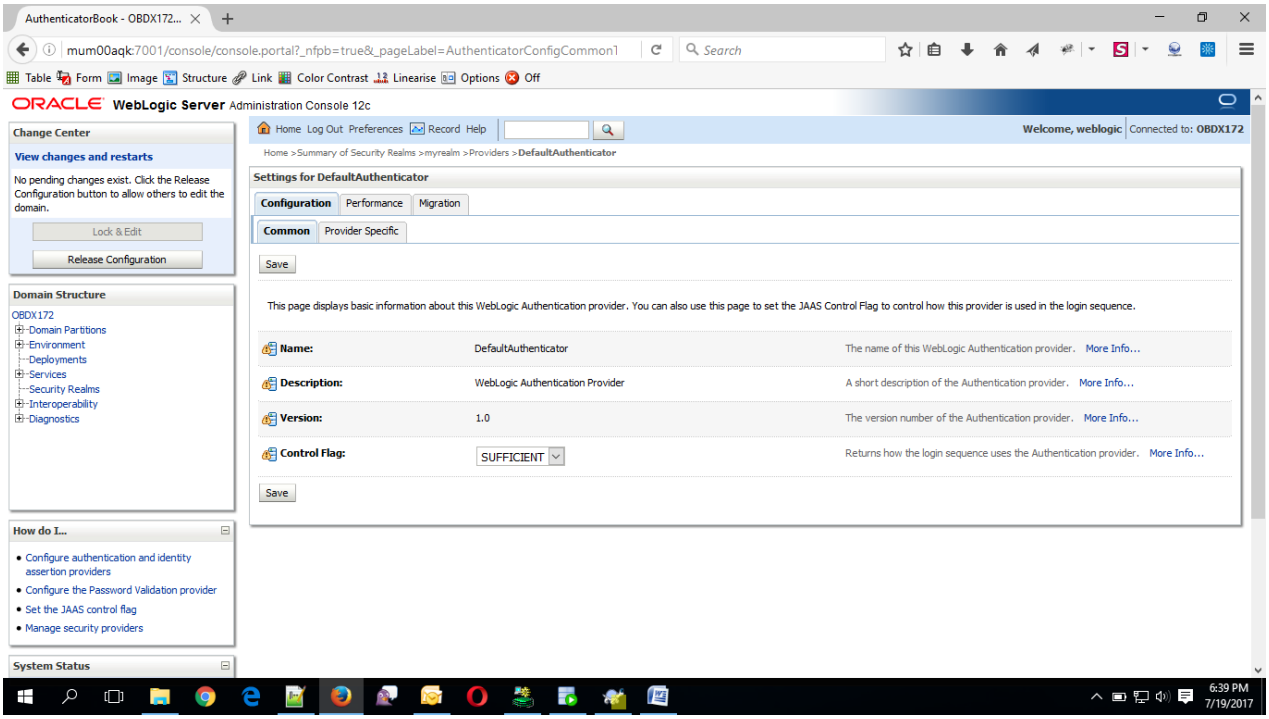
  DBAuthenticator

SQLAuth

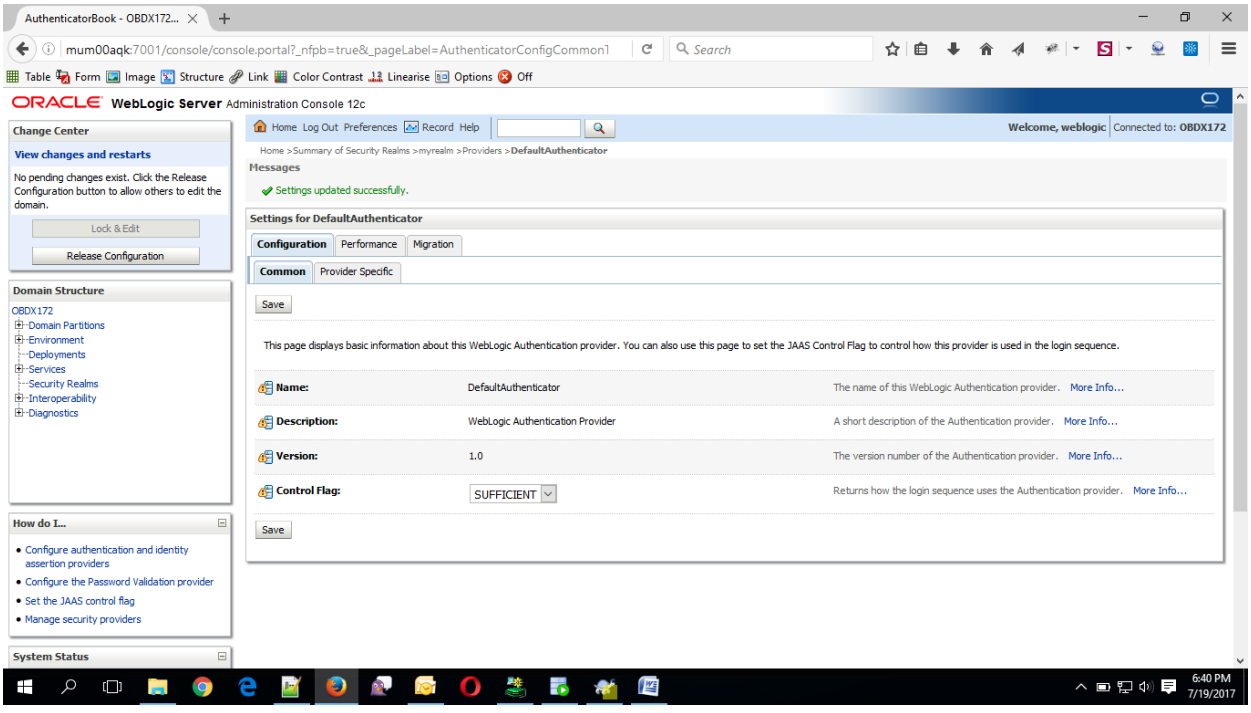




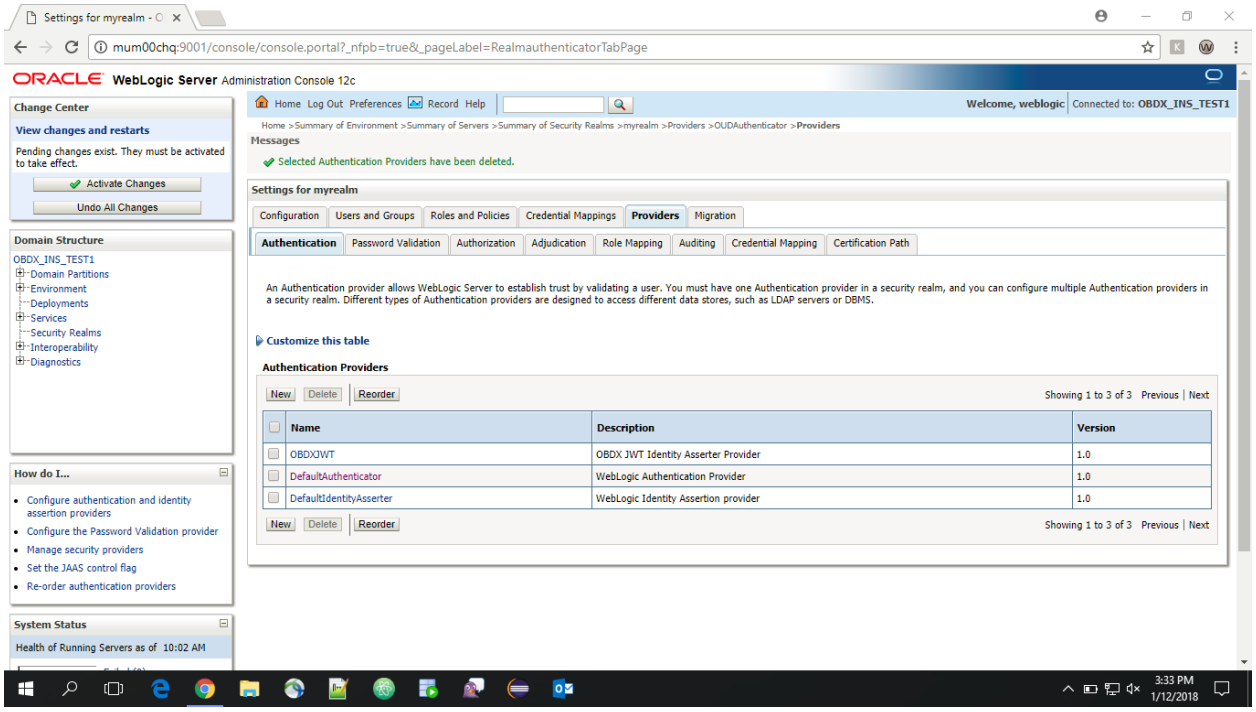
- Click on '**DefaultAuthenticator**" provider and change the Control Flag to SUFFICIENT



- Click on Save button to save the changes



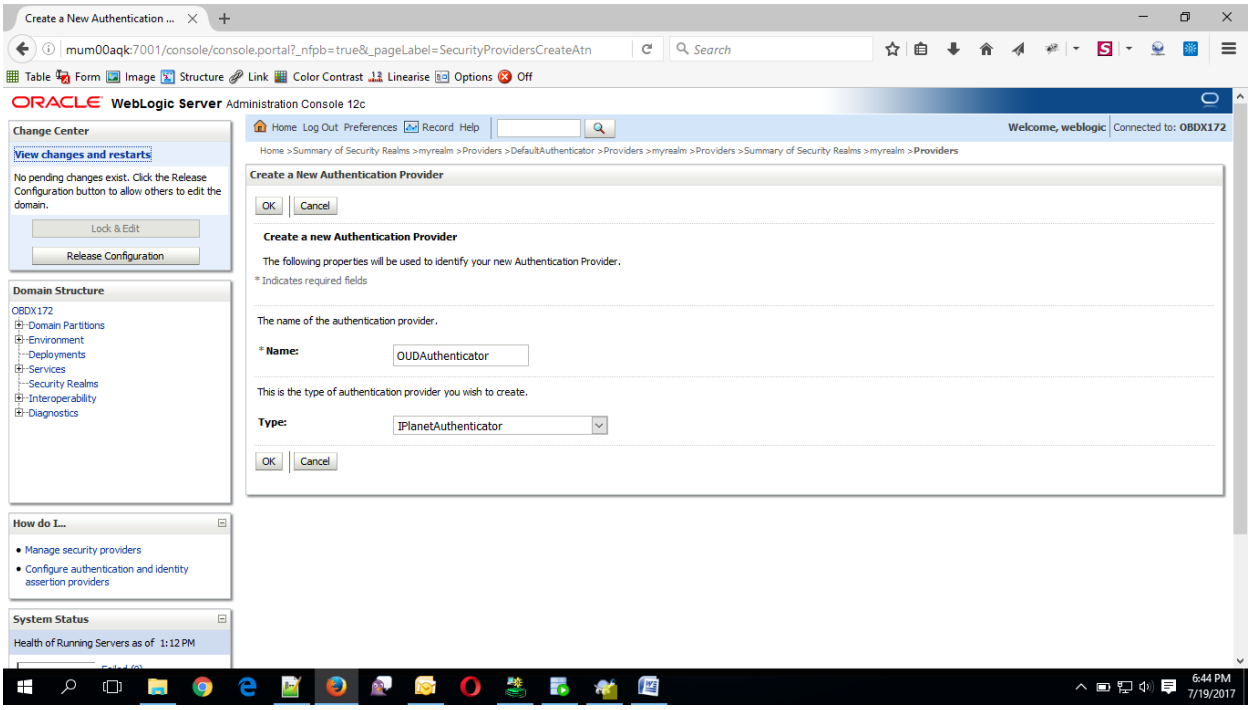
- Navigate Back to Security Realms > myrealm > Providers



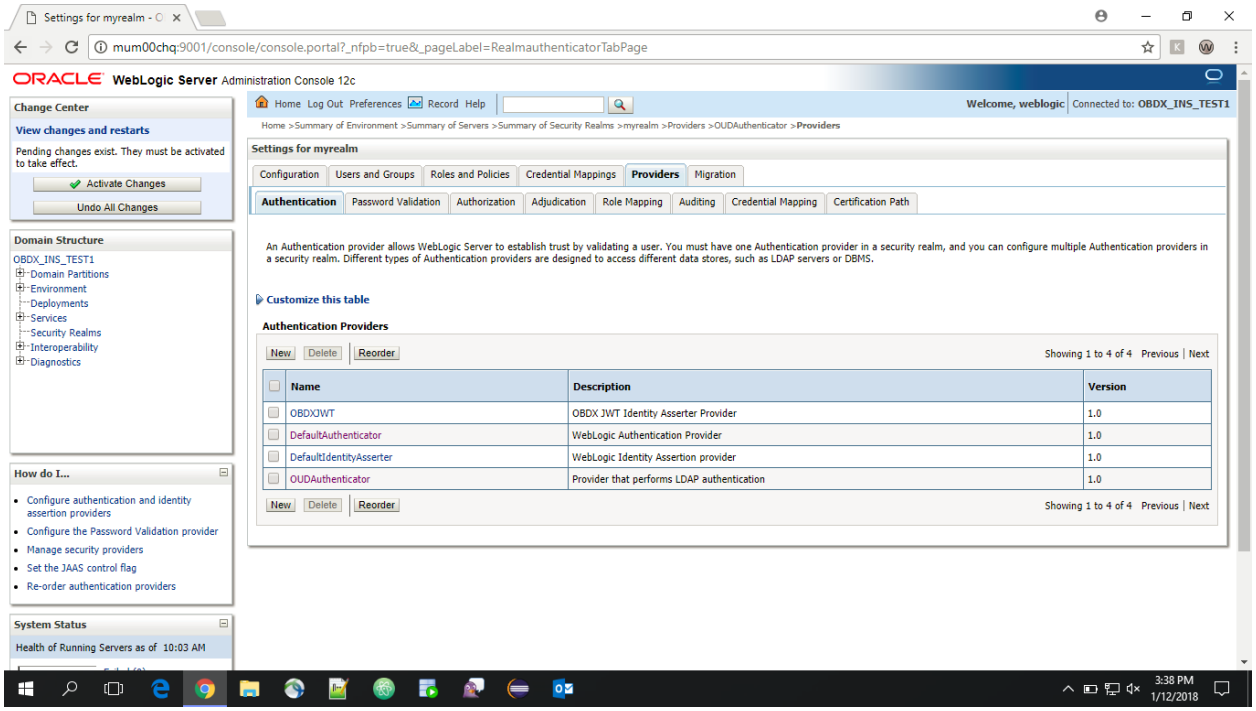
- Now, click on New and enter the below details and click Save.

  Name : OUDAuthenticator

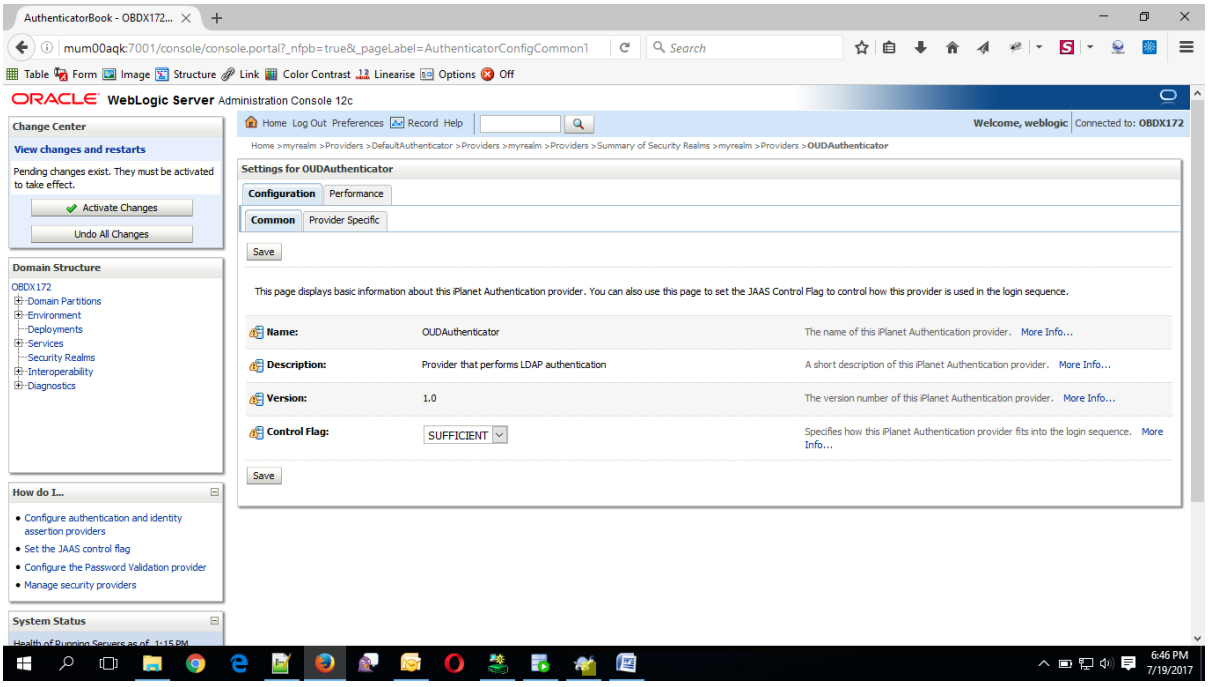
  Type : IPlanetAuthenticator



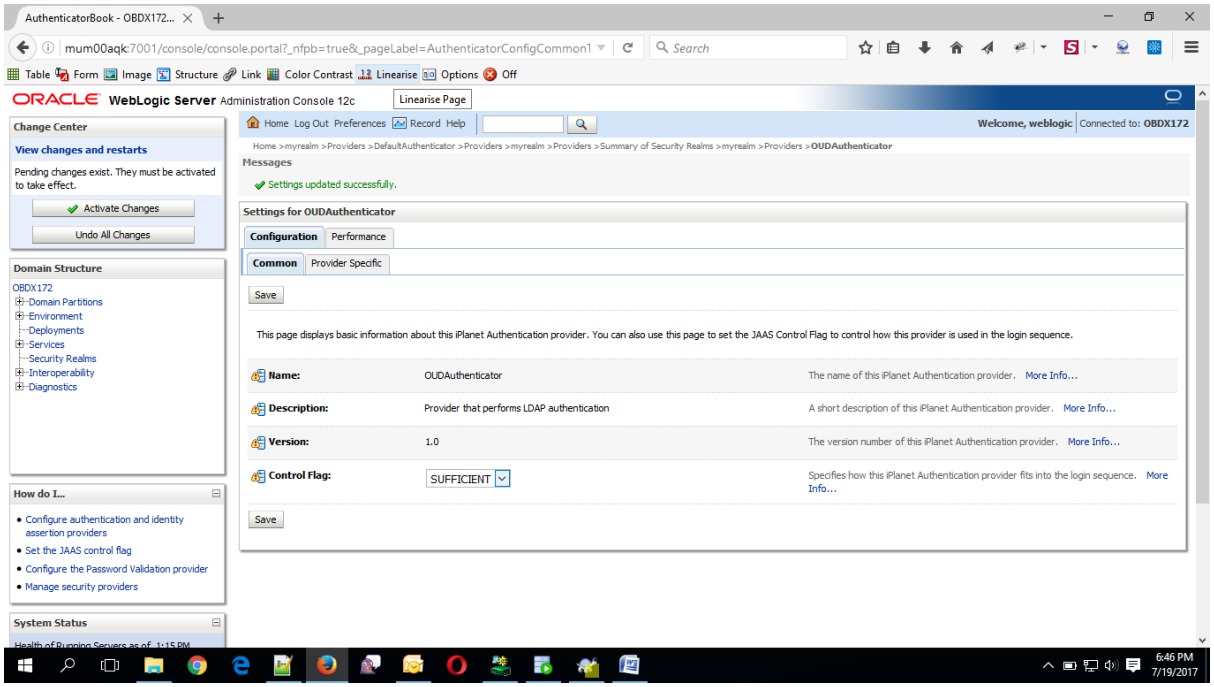
- Click on OK Button.



Now Click on OUDAuthenticator and select Control Flag as **"SUFFICIENT"**

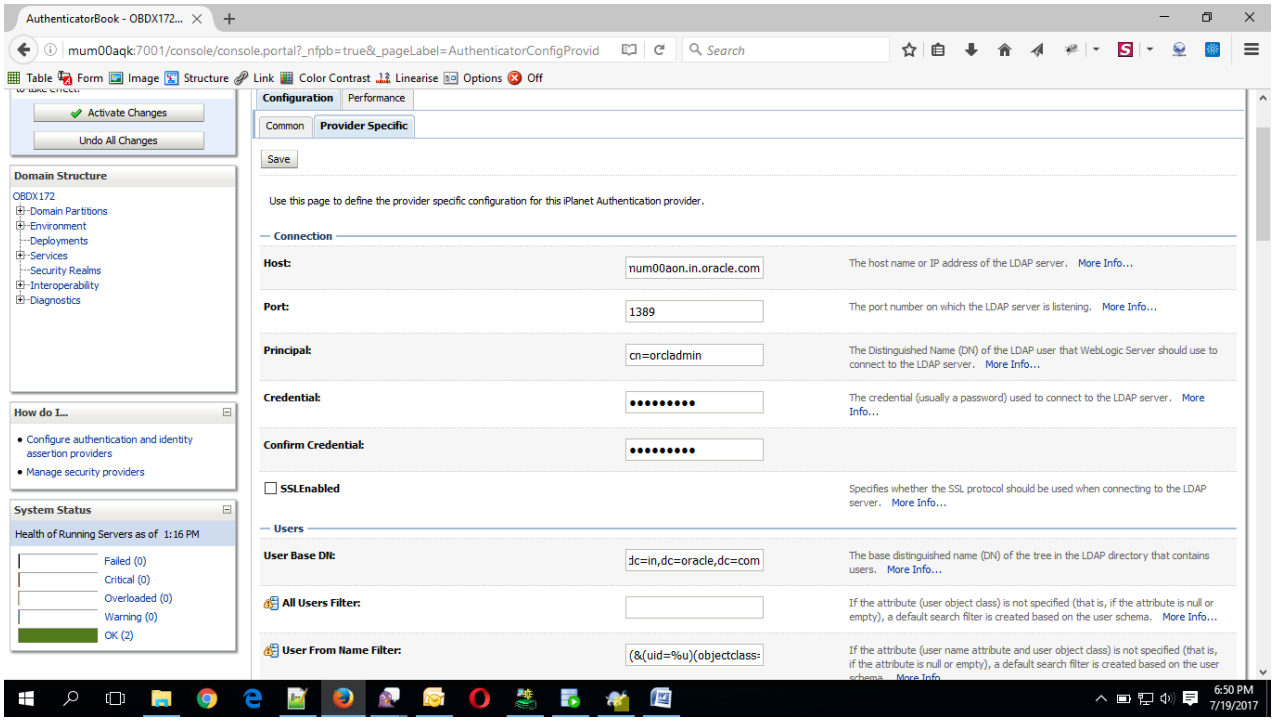


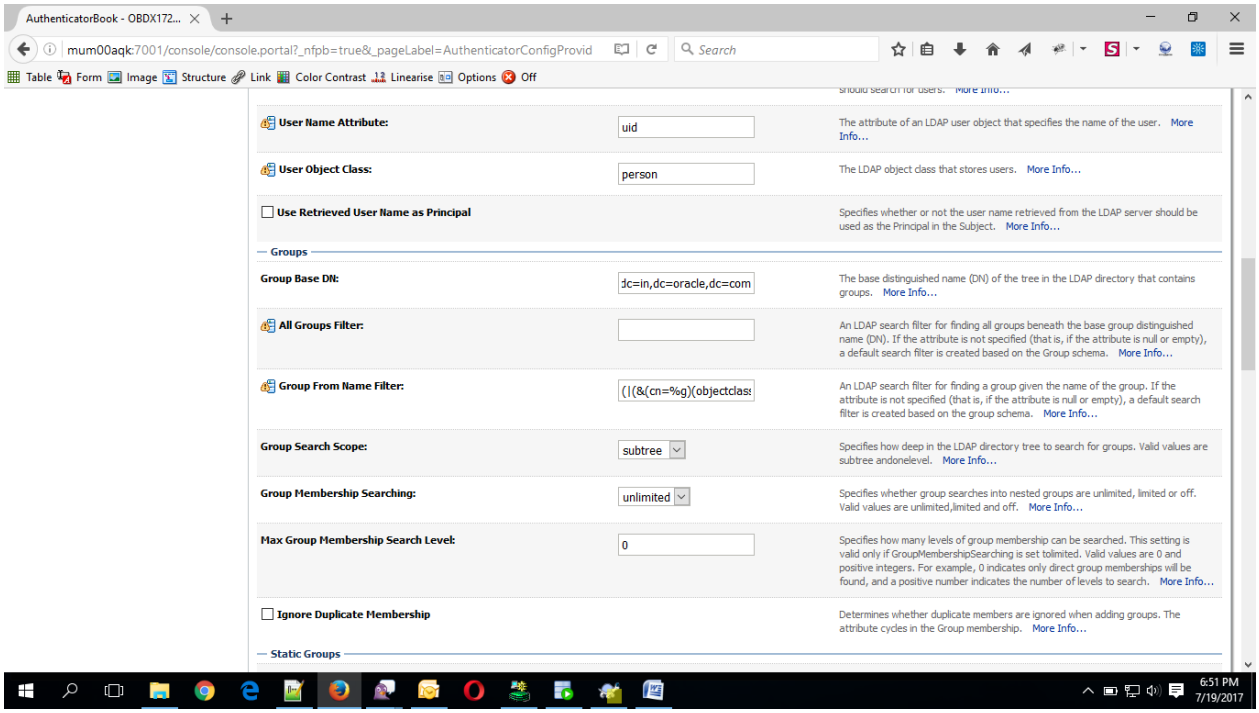
- Click on Save Button.



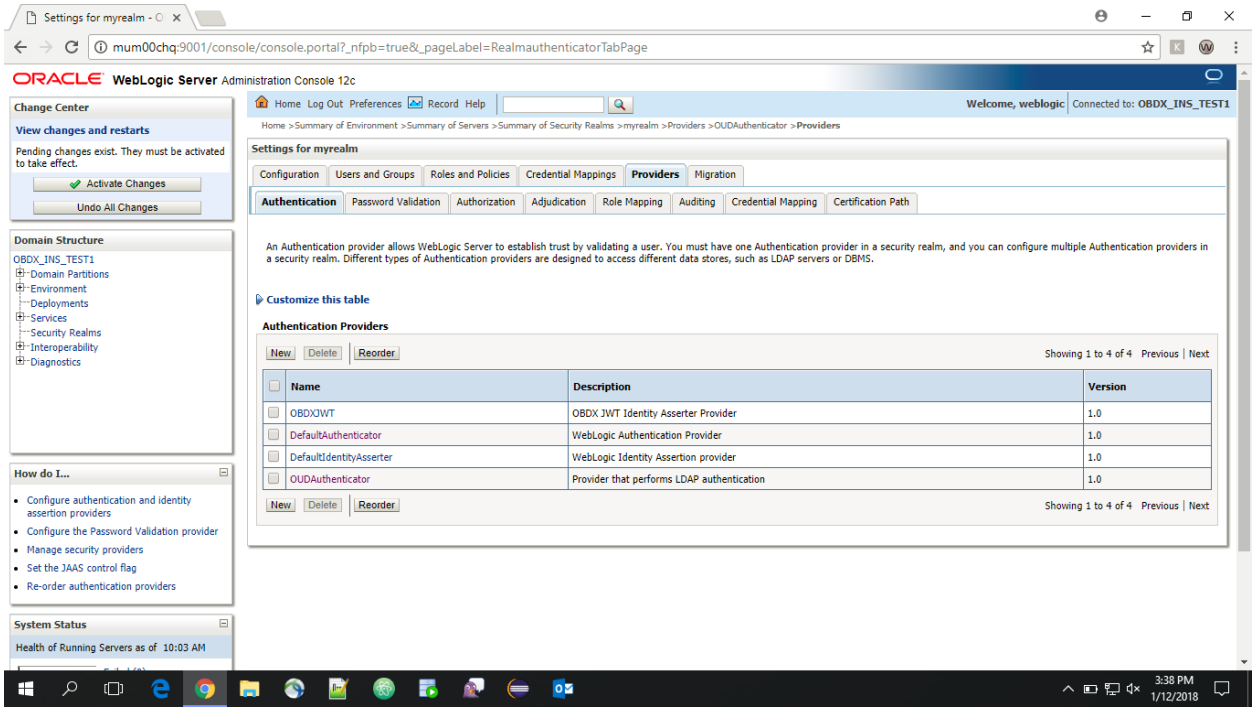
- Now under Provider Specific tab set the details of LDAP where the server should point. Refer to the following table for more information:

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





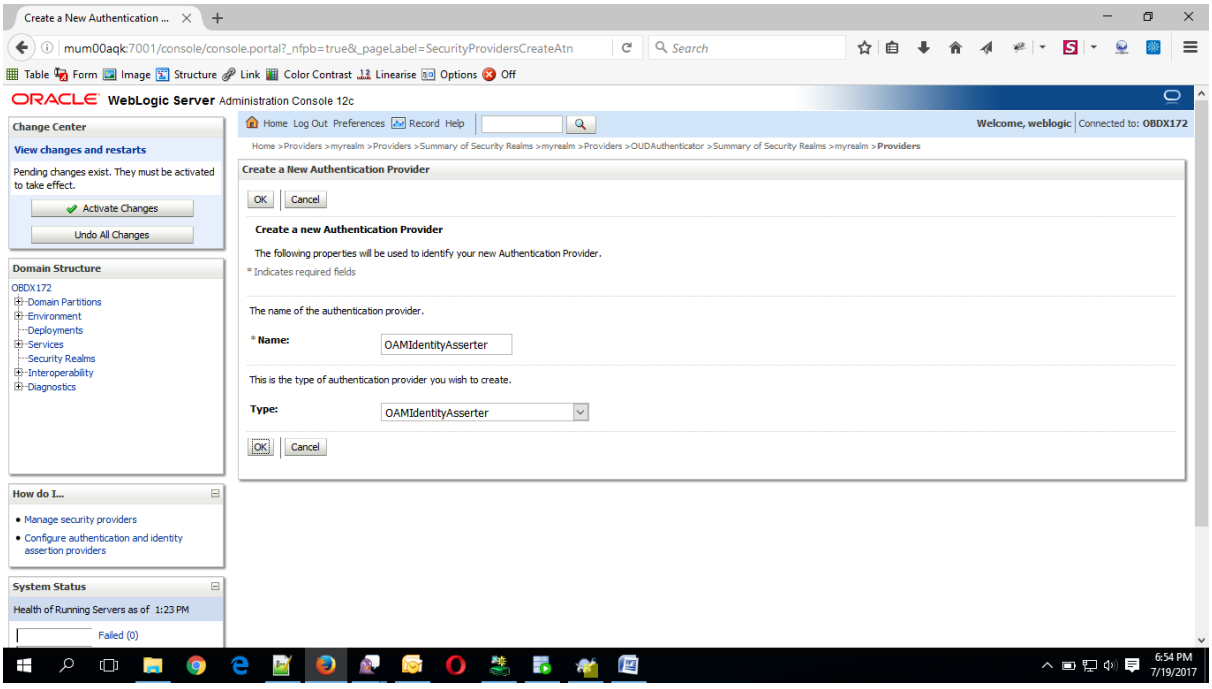
- Click on Save to update the changes.
- Navigate Back to Security Realms > myrealm > Providers



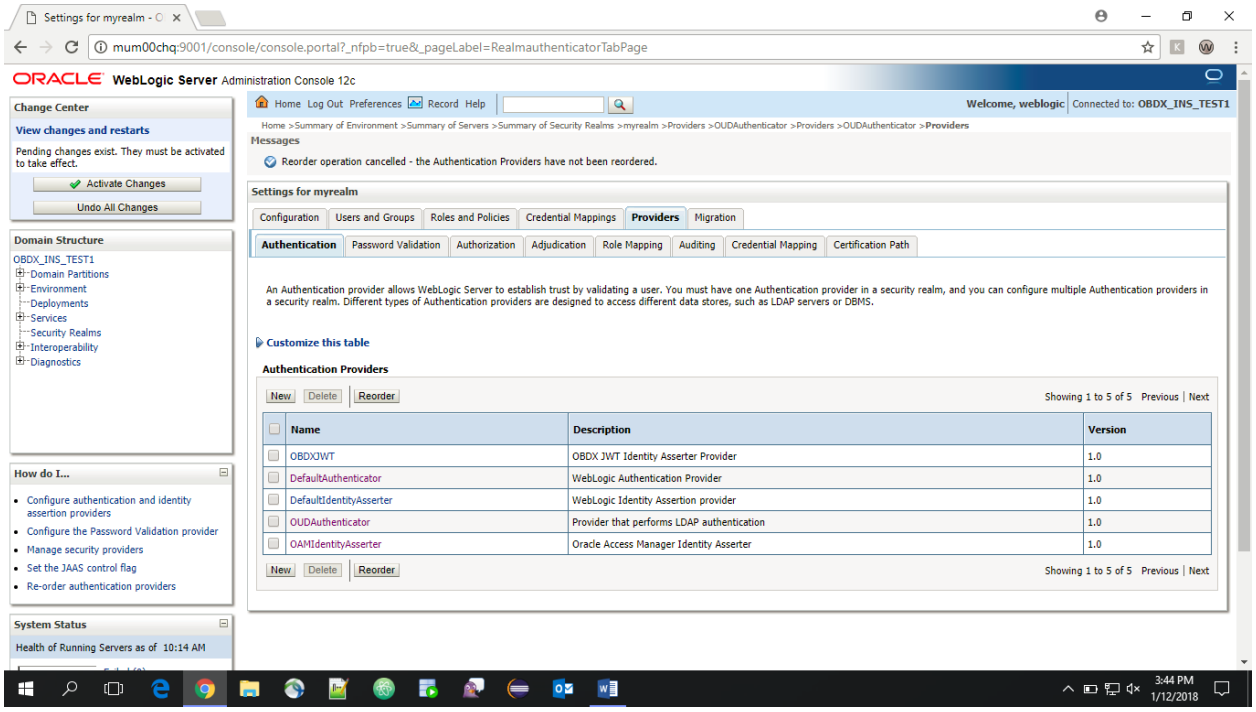
- Now, click on New and enter the below details and click Save.

  Name : OAMIdentityAsserter

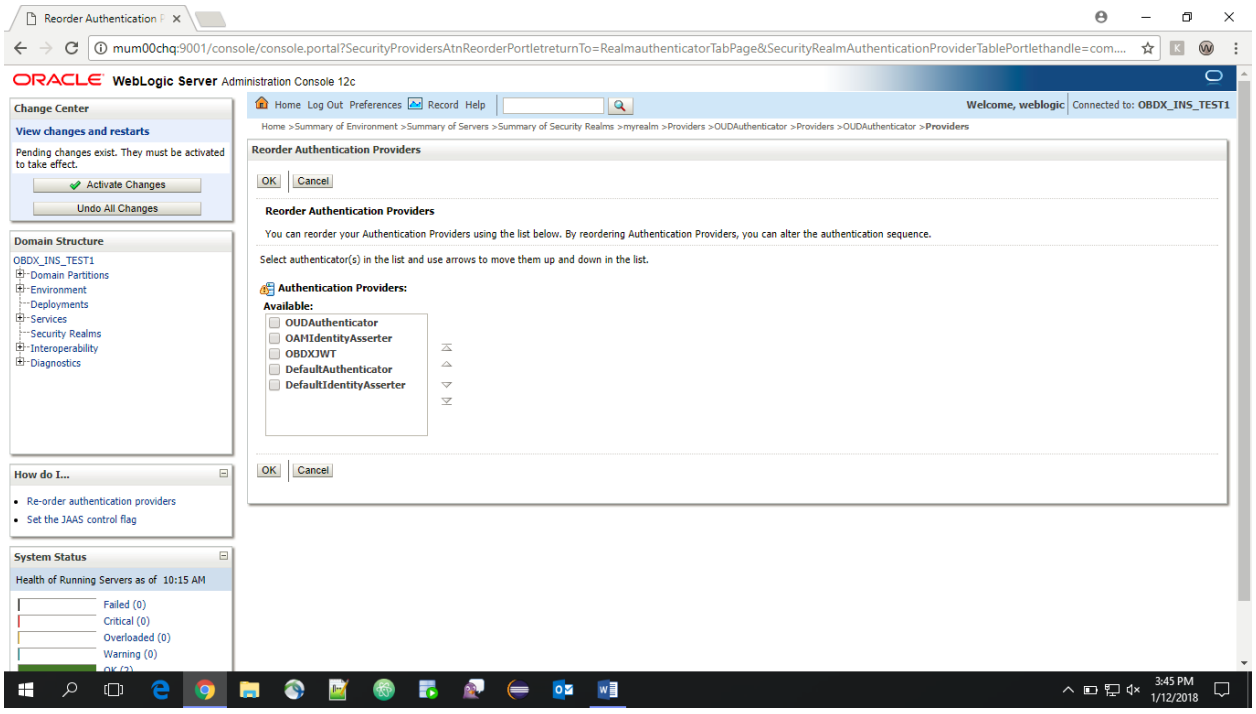
  Type : OAMIdentityAsserter



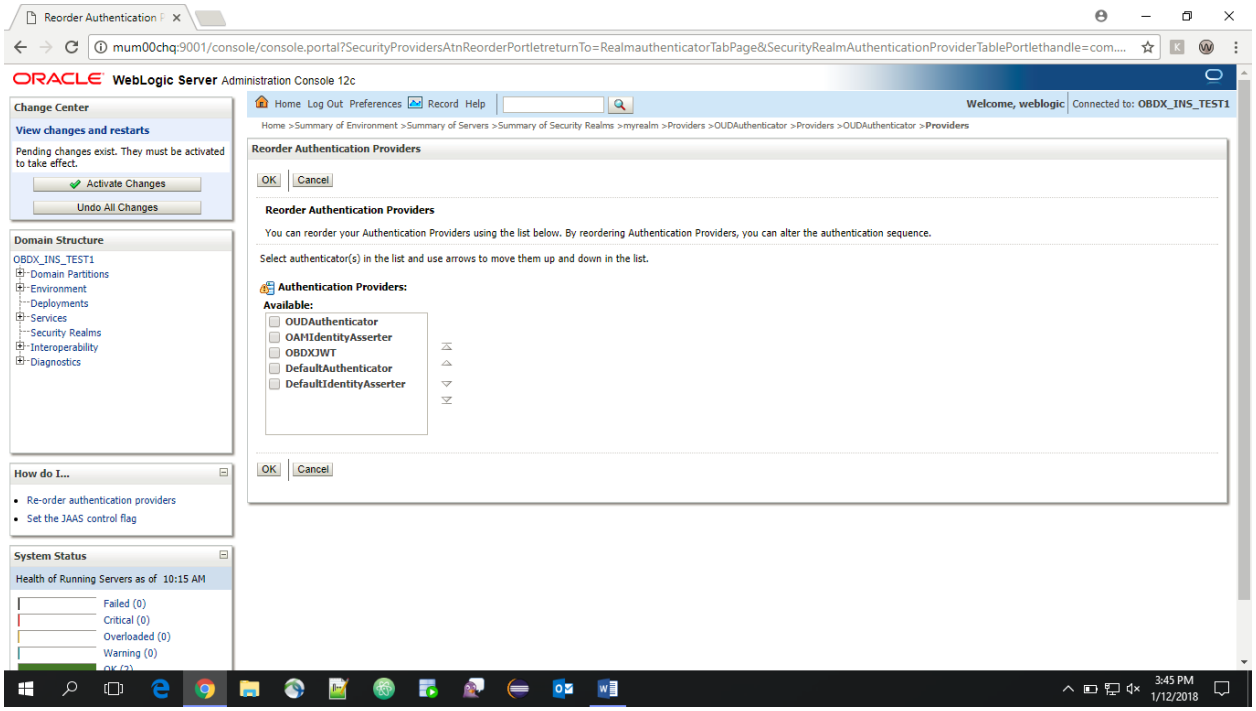
- Click on OK Button.



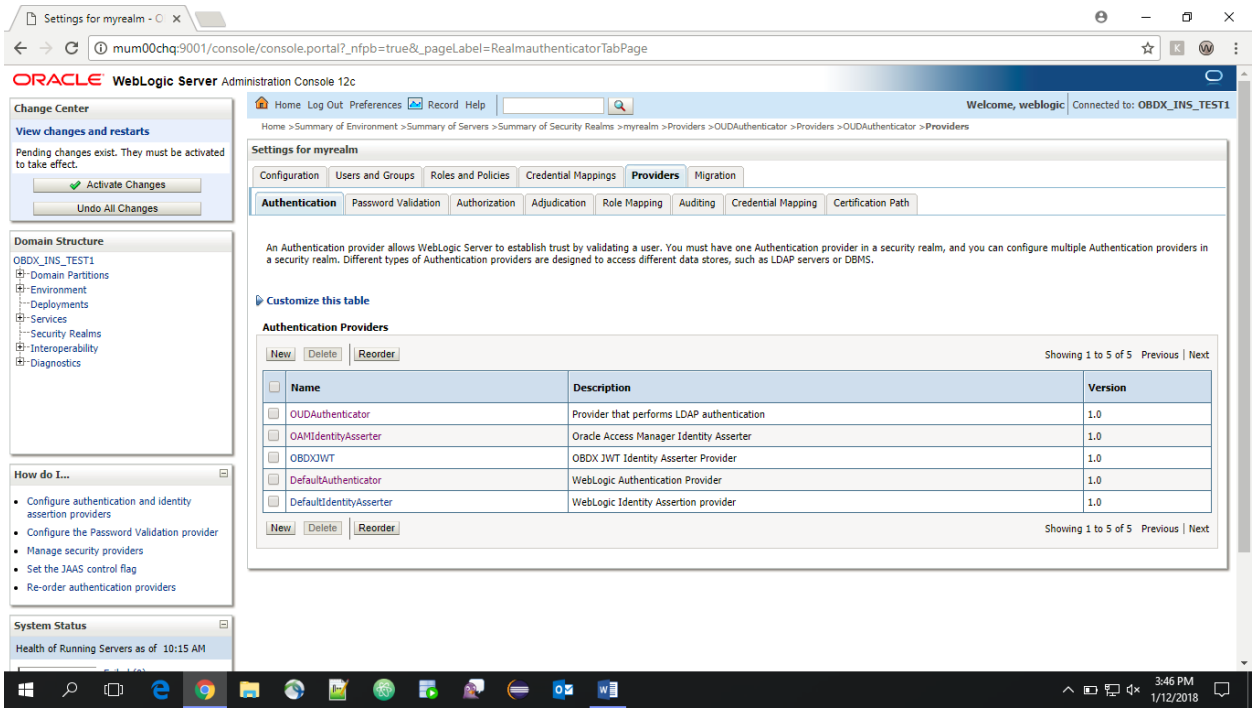
- Click on Reorder Button.



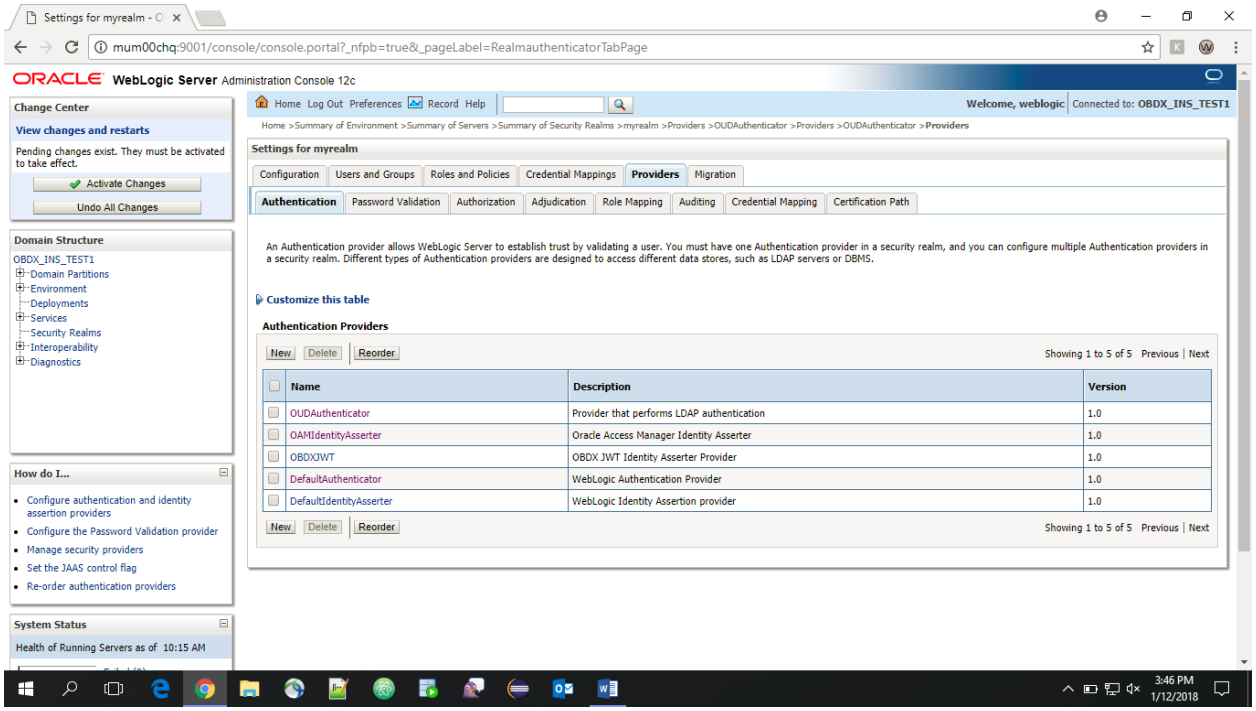
- Reorder the providers so that LDAP Provider (OUDAuthenticator) gets highest priority followed by OAMIdentityAsserter, OBDXJWT, DefaultAuthenticator, DefaultIdentityAsserter.



- Click on OK Button.



- Click on Activate Changes to apply the changes.



- 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>
```

- 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 OBDX Schema:

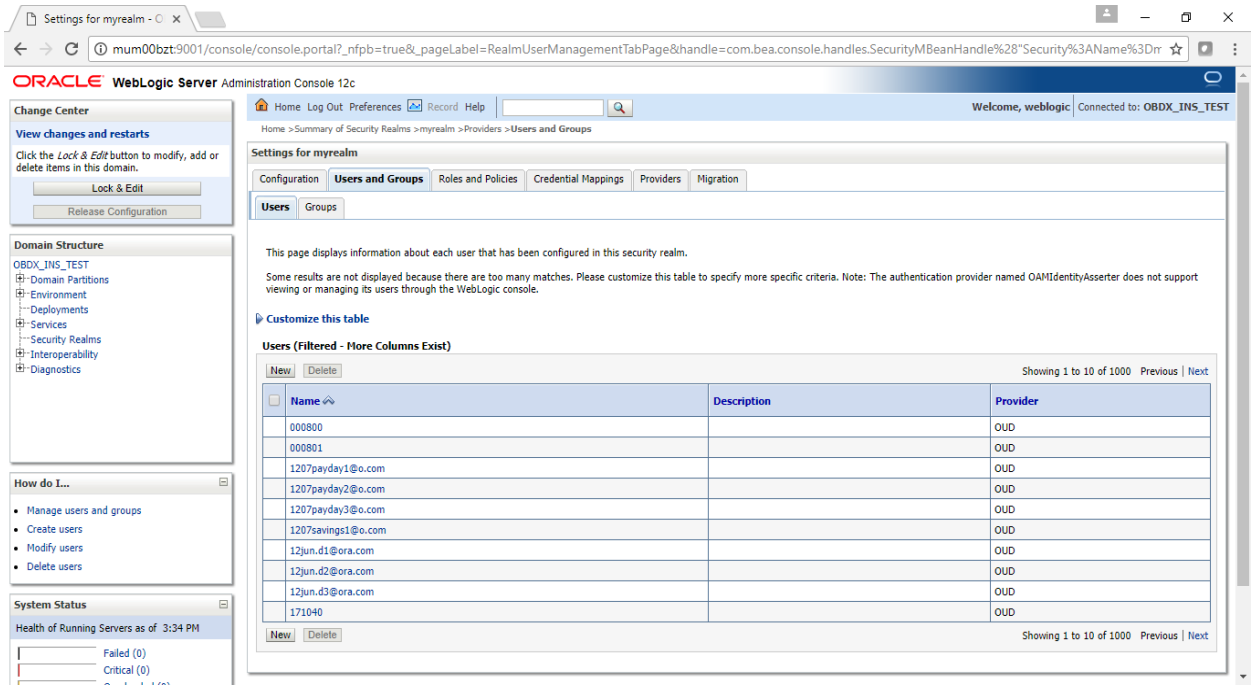
update DIGX_FW_CONFIG_ALL_B set prop_value='com.ofss.digx.app.sms.adapter.impl.user.OUDUserAdapterFactory' where PROP_ID='USER_MANAGEMENT_ADAPTER_FACTORY' and CATEGORY_ID='adapterfactoryconfig'; commit;

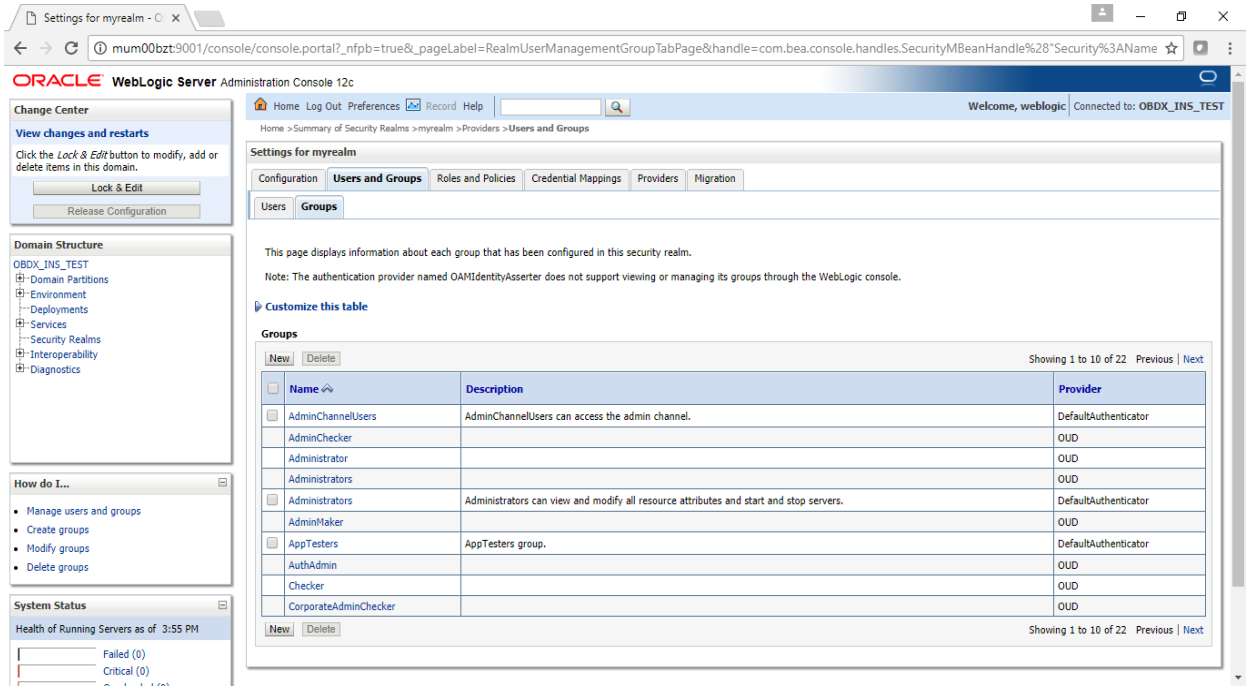
- Restart Managed Server

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.





Home

12. Multi Entity

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

- Add entity through OBDX Web application, using User Manual Oracle Banking Digital Experience System Configuration User Manual
- Run OBDX 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.

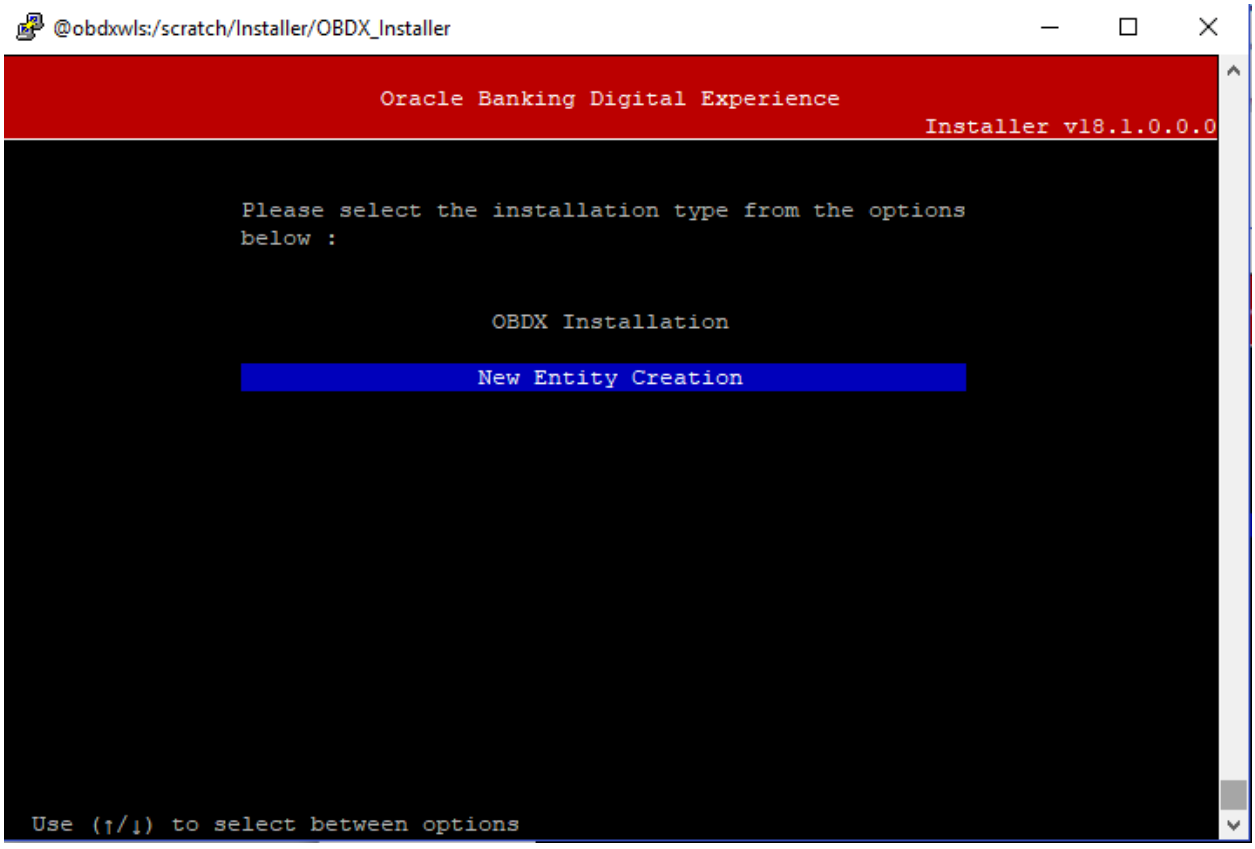
Login with OS user which was used to perform OBDX software installation (or has ownership on Oracle Weblogic home directory)

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

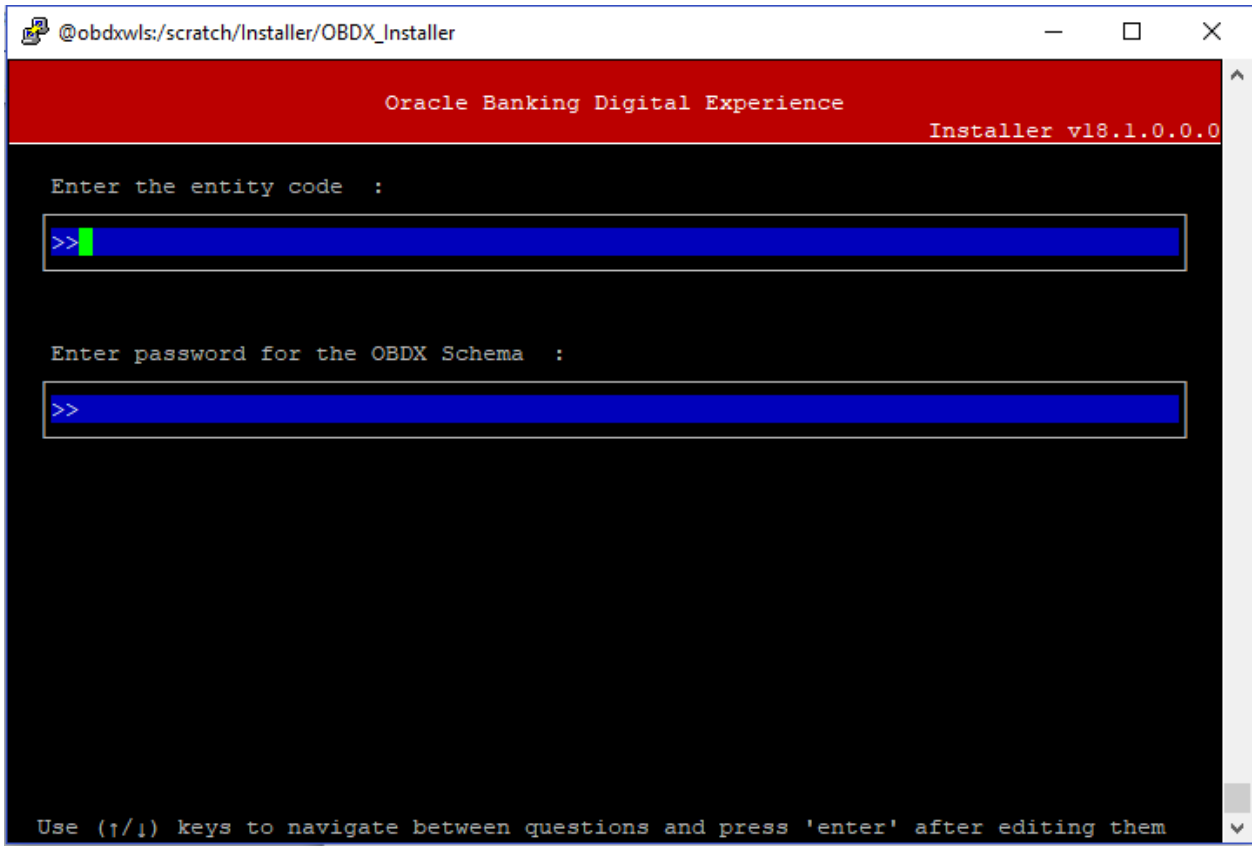
- From your terminal navigate to <OBDX INSTALLER DIR>
- Enter the following command

  python runInstaller.py

Select installation type as 'New Entity Creation'



Below screen will appear after selecting add entity



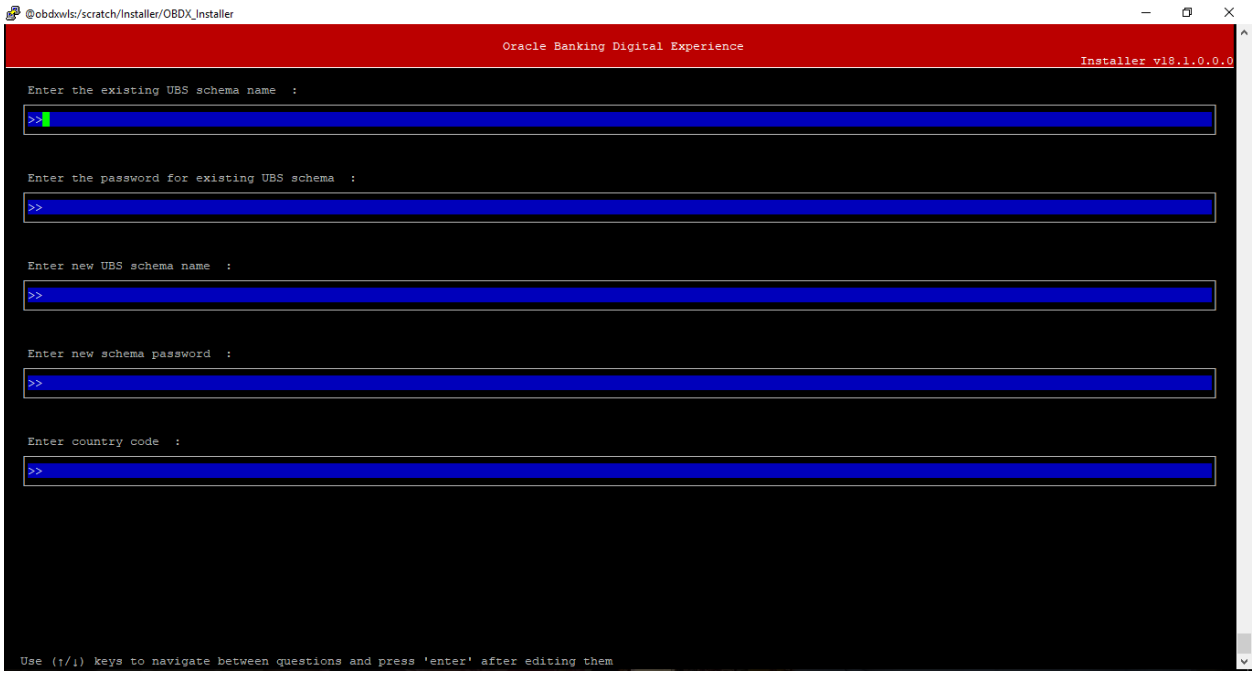
Enter below information:

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

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

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

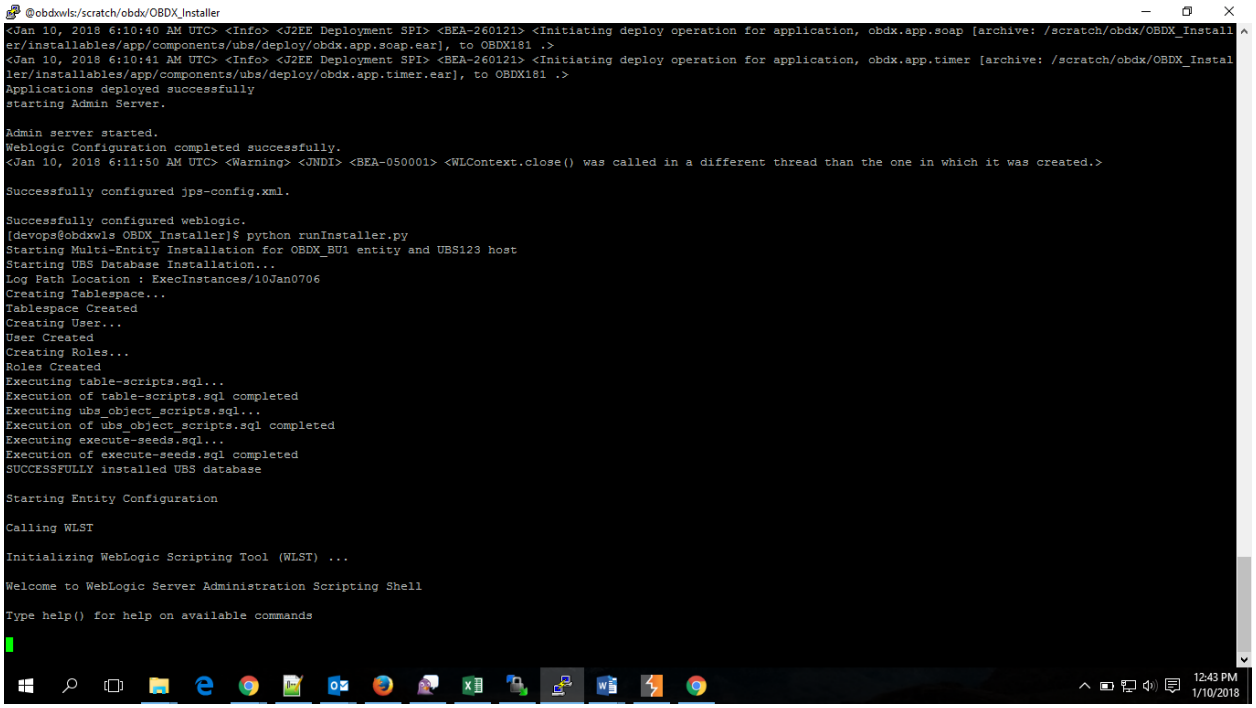


Enter below details:

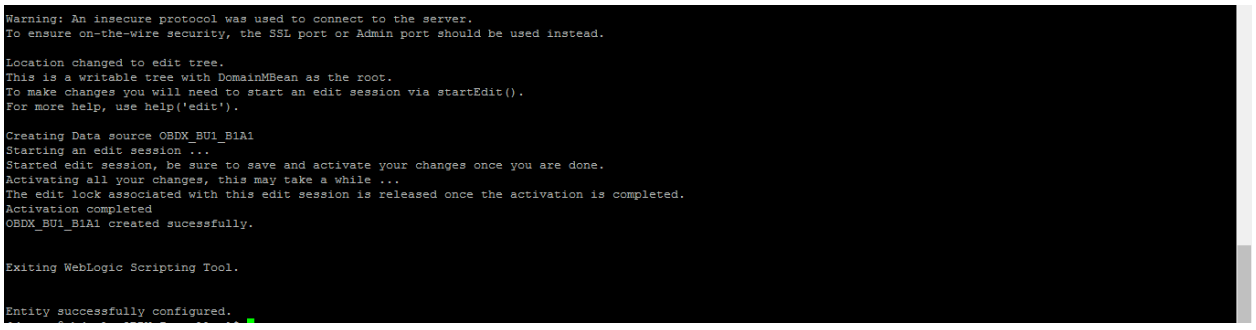
- EXISTING UBS Host schema name
- Password for EXISTING UBS schema
- Complete UBS B1A1 (HostInterface) schema name you want installer to create as new schema
- Password for New UBS schema
- Country Code of entity branch

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.



When the installation completes, the below message is displayed



Installation Status in case of other hosts

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

Home

13. Multi-entity installation In Silent Mode

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

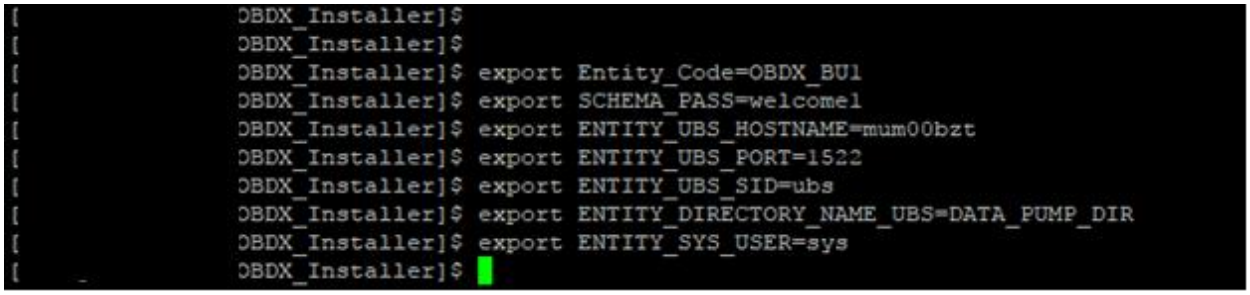
Ensure that managed server should be down and admin server should be running.

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 OBDX software installation (or has ownership on Oracle Weblogic home directory)

Steps for Silent-Mode Installation

- Set the environment variables



Below parameters should be set in environment variables

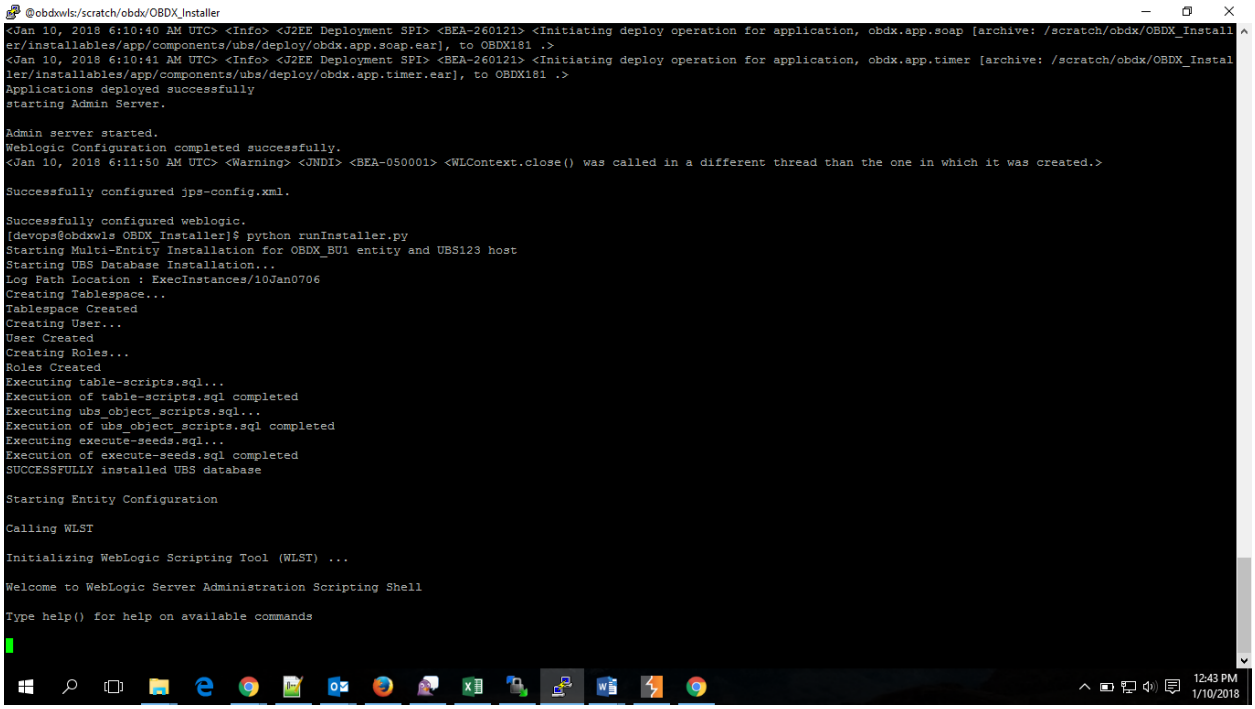
	Parameter	Description
Add entity with UBS (Installation with Universal Banking Solution)	Entity_Code	Entity code which has been entered from screen
	SCHEMA_PASS	Password for existing schema on OBDX database
	ENTITY_UBS_HOSTNAME	Hostname of the UBS database host server
	ENTITY_UBS_PORT	Port of the UBS 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 OBDX database

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

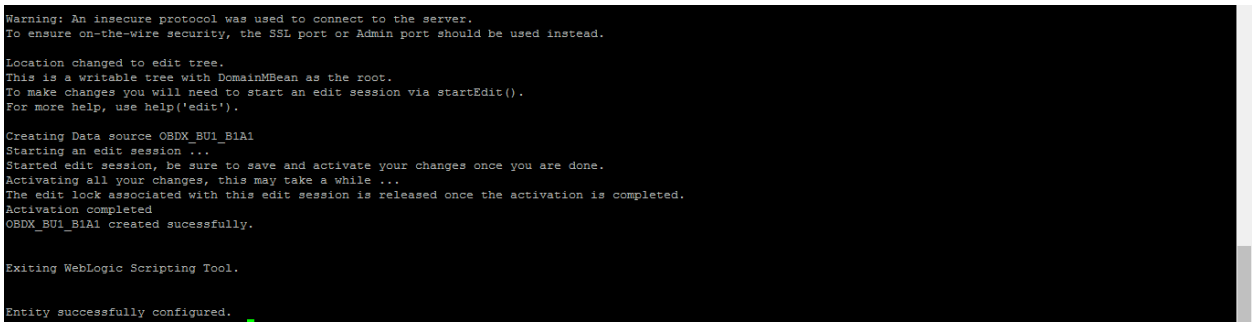
```
[                OBDX_Installer]$
[                OBDX_Installer]$ python runInstaller.py --silent --addEntity
```

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.



When the installation completes, the below message is displayed



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.

Home

14. OBDX Product Security

Refer below document for OBDX product security configuration

Oracle Banking Digital Experience Security Guide

Home

15. Troubleshoot Overview

This section describes how to troubleshoot OBDX 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:

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:

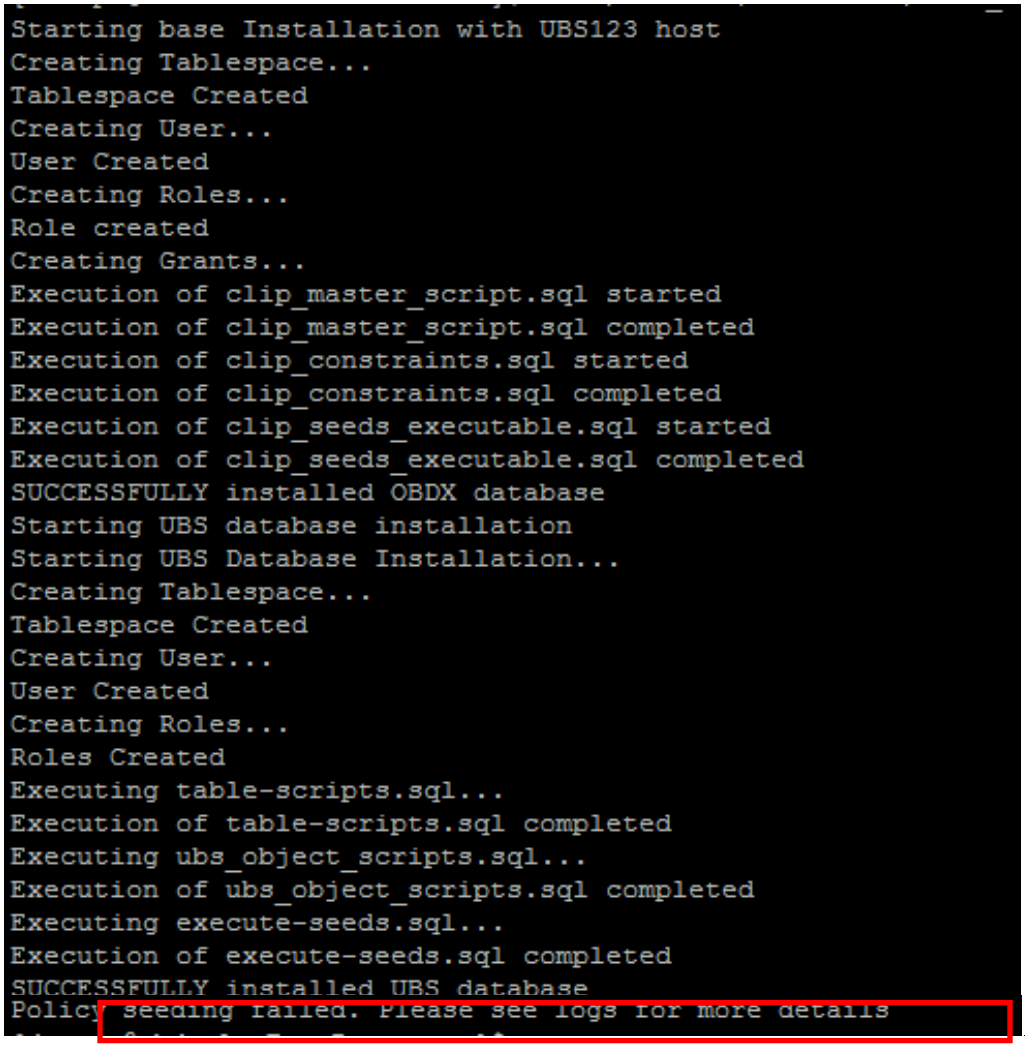
```
2017-07-13 13:45:41,747 DEBUG Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/MSTENTITYUSERTYPELANG.sql successful
2017-07-13 13:45:41,796 ERROR Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/mstlang.sql failed
2017-07-13 13:45:41,796 DEBUG 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 <OBDX 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:



Try one of the following:

- Check if error.log is created on following path <OBDX 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 <OBDX 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 OBDX installer server
- Browse to <OBDX 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,<OBDX Schema name>,<OBDX Schema

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

for e.g.:

java -jar SeedPolicies.jar "Clip.csv,Admin.csv" "CLIP,ADMIN" "/tmp/" "INS-oracle.jdbc.OracleDriver,OBDX_THP181,Welcome#1,jdbc:oracle:thin:@10.44.169.255:1521/OBDX"

- Post successfully execution, restart Managed server.

Home