

Installation Guide
Oracle Banking APIs
Patchset Release 21.1.2.0.0

Part No. F40802-01

August 2021

ORACLE®

Installation Guide

August 2021

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 © 2006, 2020, 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 | 1-1 |
| 1.1 Intended Audience..... | 1-1 |
| 1.2 Documentation Accessibility | 1-1 |
| 1.3 Access to Oracle Support..... | 1-1 |
| 1.4 Structure | 1-1 |
| 1.5 Related Information Sources..... | 1-1 |
| 2. Introduction | 2-1 |
| 2.1 Purpose of the Document..... | 2-1 |
| 3. Prerequisites | 3-1 |
| 4. Installation | 4-1 |
| 5. Installation using Silent Mode | 5-1 |
| 6. Installer Verification | 6-1 |
| 7. Installer Scope | 7-1 |
| 8. Post Installation Steps | 8-1 |
| 9. OBAPI Logging Configuration | 9-1 |
| 10. OBAPI Product Verification | 10-1 |
| 11. Multi Entity | 11-1 |
| 12. Multi-entity installation using Silent Mode | 12-1 |
| 13. OBAPI Product Security | 13-1 |
| 14. OBAPI Product – Best Practice | 14-1 |
| 14.1 Tablespace for AUDIT INDEX | 14-1 |
| 15. JPA and OBAPI multi-cluster | 15-1 |
| 16. Troubleshoot Overview | 16-1 |

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 describes following details:

- Introduction
- Preferences & Database
- Configuration / Installation.

1.5 Related Information Sources

For more information on Oracle Banking APIs Patchset Release 21.1.2.0.0, refer to the following documents:

- Oracle Banking APIs Installation Manuals

2. Introduction

2.1 Purpose of the Document

The purpose of the OBAPI 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 & OBAPI installer
- Setup of OBAPI 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
- Best Practice
- Troubleshoot Overview

[Home](#)

3. Prerequisites

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

For OBAPI pre-requisite software setup refers document “**Oracle Banking APIs Installer Pre-Requisite Setup Manual**” .

Installer Pre-requisite verification

Post installation of OBAPI 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@cfss-vm-170 ~]# rpm -qa | grep oracle
oracle-cloud-agent-1.11.4-5207.el8.x86_64
oraclelinux-release-8.3-1.0.4.el8.x86_64
oraclelinux-release-el8-1.0-16.0.1.el8.x86_64
oracle-cloud-agent-1.10.0-4792.el8.x86_64
oraclelinux-developer-release-el8-1.0-6.el8.x86_64
oracle-epel-release-el8-1.0-3.el8.x86_64
oracle-logos-80.5-1.0.6.el8.x86_64
oracle-instantclient19.10-basic-19.10.0.0-1.x86_64
[root@cfss-vm-170 ~]#
```

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

python3.8 -V

```
[root@cfss-vm-170 ~]# python3.8 -V
Python 3.8.0
[root@cfss-vm-170 ~]#
```

Note: Ensure Python 3.8.0 supported version is installed. Above command should reflect the same.

cx_Oracle & Urwid:

Step 1: Execute python command

python

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

Step 2: Import Urwid and check version

import urwid (Press Enter)

urwid.__version__

```
[root@cfm ~]# python3.8
Python 3.8.0 (default, Jun  8 2021, 11:06:31)
[GCC 8.4.1 20200928 (Red Hat 8.4.1-1.0.1)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import urwid
>>> urwid.__version__
'2.1.2'
>>>
```

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

Note: Ensure Urwid 2.1.2 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

```
[root@cfm ~]# python3.8
Python 3.8.0 (default, Jun  8 2021, 11:06:31)
[GCC 8.4.1 20200928 (Red Hat 8.4.1-1.0.1)] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import cx_Oracle
>>> cx_Oracle.version
'8.1.0'
>>>
```

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

Note: Ensure cx_Oracle 8.1.0 supported version is installed. Above command should reflect the same.

Python 3.8 for Linux Operating System : --

Step 1: Execute below commands to install the python 3.8.0

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

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

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

```
tar -xzvf Python-3.8.0.tgz
```

```
cd Python-3.8.0
```

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

```
make altinstall
```

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

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

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

```
pip3.8 install --upgrade pip
```

```
pip3.8 install cx-Oracle==8.1.0
```

```
root@~ - Python-3.8.0]# pip3.8 install cx-Oracle==8.1.0
Collecting cx-Oracle==8.1.0
  Downloading https://files.pythonhosted.org/packages/5f/3a/f63cf2cee42b32874af13f0a2deb5d4a1448b2fc39bfff36ab1e3369f00c/cx_Oracle-8.1.0-cp38-cp38-manylinux1_x86_64.whl (825kB)
    |#####| 829kB 138kB/s
Installing collected packages: cx-Oracle
Successfully installed cx-Oracle-8.1.0
```

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

```
[root@~ - Python-3.8.0]# pip3.8 install urwid==2.1.2
Collecting urwid==2.1.2
  Using cached urwid-2.1.2.tar.gz (634 kB)
  Using legacy 'setup.py install' for urwid, since package 'wheel' is not installed.
Installing collected packages: urwid
  Running setup.py install for urwid ... done
Successfully installed urwid-2.1.2
```

[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).
- Navigate to “<OBAPI 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 wlsserver,oracle_common
etc.
MIDDLEWARE_HOME=/home/devops/Oracle/Middleware/Oracle_Home

#JAVA home path. Example /home/obdxuser/jdk18 - where you have sub-directories like bin,jre,lib etc.
JAVA_HOME=/home/devops/jdk1.8.0_241

#GRADLE home path. Example /home/obdxuser/flyway - where you have sub-directories like bin,jre,lib etc.
FLYWAY_HOME=/scratch/obdx/flyway-7.5.1

#Path where OBDX config files needs to be installed. ****DO NOT KEEP INSTALLATION_HOME AS MIDDLEWARE_HOME or any existing directory.****
INSTALLATION_HOME=/scratch/obdx/INS

#Domain name. The domain will be created by the name specified.
WLS_DOMAIN_NAME=OBDX211TEST1

#Domain path. Example /home/obdxuser/domain.
WLS_DOMAIN_PATH=/home/devops/domain

#Domain user ID. The user id will be used to access the Weblogic Administration console.
WLS DOMAIN ADMIN USER=weblogic
```

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 **WLS_JDBC_DIGX_NAME**, **WLS_JDBC_DIGX_JNDI**, Flag values etc) available in “**Factory Shipped**” section.
- Ensure there is no blank space after “=” sign, except specific flavor specific configuration.
- Throughout this document consider UBS as UBS core banking with OBPM as payments engine.

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

| Component | Parameter | Description | Example |
|-------------------------------------|---------------------------------------|--|-----------------------|
| DB details (for OBAPI schema) | OBAPI_DATABASE_HOST NAME | Enter the hostname of the database server which would host the database schema for OBAPI | abc.xyc.com |
| | OBAPI_DATABASE_PORT | Enter the port number of the database listener | 1521 |
| | OBAPI_DATABASE_SID | Enter the Oracle Service Name for database instance | obapidb.in.oracle.com |
| | OBAPI_DATABASE_SYS_USER | Enter the username with 'sys' privileges | Sys |
| | POST_FIX | For OBAPI schema name like "OBAPI_DEV" POST FIX is 'DEV'. SHOULD BE IN UPPERCASE ONLY. | DEV |
| | OBAPI_DBA_DIRECTORY_NAME | Enter the directory name in which you want the OBAPI schema tablespace datafile to be created. Enter Logical name (i.e. DIRECTORY_NAME column) from DBA_DIRECTORIES table NOT the physical path. | OBAPI_DIR |
| | OBAPI_AUDIT_DBA_DIRECTORY_NAME | Enter the directory name in which you want the OBAPI AUDIT tablespace datafile to be created. Enter Logical name (i.e. DIRECTORY_NAME column) from DBA_DIRECTORIES table NOT the physical path. | OBAPI_AUDIT_DIR |

| Component | Parameter | Description | Example |
|--|--|---|---------------------------------|
| EHMS DB details (to be configured only in-case of FLAVOR as UBS,FCORE &OBPM) | EHMS_DATABASE_HOSTNAME | Enter the hostname for EHMS database server | abc.xyz.com |
| | EHMS_DATABASE_PORT | Enter the port number of EHMS database listener | 1521 |
| | EHMS_SCHEMA_NAME | Enter the Complete OBAPI-EXT (B1A1) HostInterfaceschema name you want installer to create as new schema. SHOULD BE IN UPPERCASE ONLY. | EHMS182S CHEMA |
| | EHMS_DBA_DIRECTORY_NAME | Enter the directory name in which you want the OBAPI-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_L OG_DIR |
| | EHMS_DATABASE_SYS_USER | Enter the username with 'sys' privileges | Sys |
| | EHMS_DATABASE_SID | Enter the EHMS database Service Name | obapiehms.i n.oracle.co m |
| | EHMS_HOST_SCHEMA_NAME | Enter the EXISTING EHMS HOST schema name | OBDXUBS |
| | EHMS_CCY(to be configured for UBS and OBPM HOST only) | Enter the Country code for EHMS HOME Branch | GB |
| | EHMS_HB (to be configured for UBS and OBPM HOST only) | Enter the Branch code for code for EHMS HOME Branch | AT3 |
| | EHMS_FCORE_FCUBS_SCHEMA_NAME (to be configured for FCORE HOST only) | FCORE-FCUBS schema name | FCRUBSHO ST |

| Component | Parameter | Description | Example |
|-------------------------|----------------------------------|---|---|
| Weblogic server details | MIDDLEWARE_HOME | Oracle Weblogic Server home path. Example /home/obapiuser/Oracle/Middleware/Oracle_Home - where you have sub-directories like wls_server,oracle_common etc. | /home/obapiuser/Oracle/Middleware/Oracle_Home |
| | JAVA_HOME | Path where JAVA (JDK) is installed | /home/obapiuser/jdk18 |
| | FLYWAY_HOME | Path where FLYWAY is installed | /home/obapiuser/flyway-7.9.2 |
| | INSTALLATION_HOME | Path where OBAPI 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/obapiuser/obapi |
| | WLS_DOMAIN_PATH | Path where OBAPI Weblogic domain should be created. Users can now enter custom path as per their requirements. | /home/obapiuser/domains |
| | WLS_CLUSTER_NAME | Name of cluster; this cluster would have one single managed server. | obapi_cluster |
| | WLS_CLUSTER_NODE_HOSTNAME | Host name or IP address of managed server participating in the cluster. Currently only single node is supported. | abc.xyz.com |
| | WLS_ADMIN_SERVER_PORT | Weblogic AdminServer port. It is the port to access the administration console of the Weblogic server. Generally port 7001 is used as the AdminServer port. Custom port are supported. | 7001 |
| | WLS_ADMIN_SERVER_SSL_PORT | AdminServer SSL port. It is the port used to securely access (https) the administration console of the Weblogic server. | 7002 |

| | | | |
|--|--|--|---------------------------|
| | WLS_NODE_PORT | Node Manager Port. It is the port used by Node Manager to be configured for OBAPI domain. Generally, 5556 is utilized as Node Manager Port. Custom ports are supported. | 5556 |
| | WLS_MS_SERVER_NAME | 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 clip1. | Clip |
| | WLS_MS_SERVER_PORT | Managed Server Port. Managed server will utilize this port for hosting OBAPI components and associated resources. Custom ports are supported. | 9001 |
| | WLS_DOMAIN_NAME | Enter Weblogic Domain name. | obapi_domain1 |
| | WLS_DOMAIN_ADMIN_USER | Domain user ID. The user id will be used to access the Weblogic Administration console. | weblogic |
| | WLS_JMS_FILEUPLOAD_PS (to be configured for all OBAPI supported HOST) | Set the paths for the persistent store of the FileUpload JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME. | /scratch/obapi/FileUpload |
| | WLS_JMS_AUDIT_PATHS (to be configured for all OBAPI supported HOST) | Set the paths for the persistent store of the Audit JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME. | /scratch/obapi/Audit |
| | WLS_JMS_REPORT_PATHS (to be configured for all OBAPI supported HOST) | Set the paths for the persistent store of the Reports JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME. | /scratch/obapi/Reports |
| | WLS_JMS_JPA_PATHS (to be configured for all OBAPI supported HOST) | Set the paths for the persistent store of the JPA JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub | /scratch/obapi/JPA |

| | | | |
|---|--|---|-----------------------------|
| | | directory inside INSTALLATION_HOME. | |
| | WLS_JMS_EXTSYS RECEIVER_PS (to be configured for all OBAPI supported HOST) | Set the paths for the persistent store of the ExtSystemReceiver JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME. | /scratch/obapi/R eceiver |
| | WLS_JMS_EXTSYSS ENDER_PS (to be configured for all OBAPI supported HOST) | Set the paths for the persistent store of the ExtSystemSender JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME. | /scratch/obapi/S ender |
| OBAPI Application Administrator user details | OBAPI_ADMIN_USE RNAME | Set username for OBAPI 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 |
| | OBAPI_ADMIN_EMA IL | Enter the Email ID for OBAPI application admin user. | superadmin@or acle.com |
| | OBAPI_ADMIN_CON TACT_NO | Enter the mobile number for OBAPI application admin user. COUNTRY CODE IS MUST. | +91 1234567890 |

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 OBAPI pre-requisite software installation (or has ownership on Oracle Weblogic home directory)

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

Installation Steps:

- From your terminal navigate to <OBAPI INSTALLER DIR>/

```
[ OBDX_Installer]$ pwd
/scratch/OPSFE/OBDX_Installer
[ OBDX_Installer]$ ls -ltr
total 20
-rwxrwxrwx 1 54323 wheel 2569 Jun 28 12:04 runInstaller.py
drwxrwxrwx 12 54323 wheel 4096 Jun 28 12:04 installables
-rwxrwxrwx 1 54323 wheel  0 Jun 28 12:04 init__.py
drwxrwxrwx 5 54323 wheel 4096 Jun 29 13:15 core
drwxrwxrwx 5 54323 wheel 4096 Jun 29 13:15 framework
drwxrwxrwx 7 54323 wheel 4096 Jul  2 10:47 ExecInstances
[ OBDX_Installer]$
```

- Enter the following command

python3.8 runInstaller.py

Select the appropriate host system for Installation

```
Oracle Banking Digital Experience Installer v21.1.1.0.0

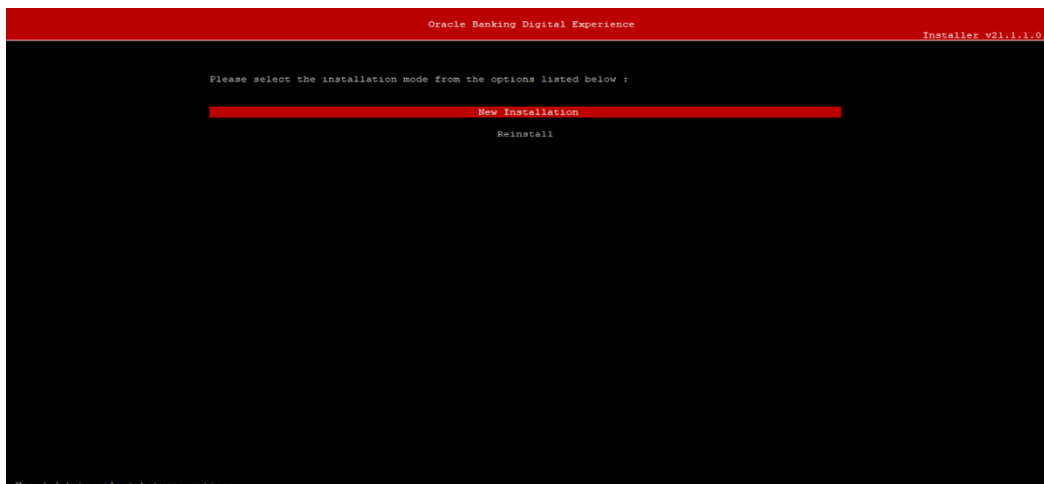
Please select the host system from the options listed below :

Oracle FLEXCUBE Universal Banking
Oracle FLEXCUBE Core Banking
Third Party System

Use (↑/↓) to select between options
```

Oracle FLEXCUBE Universal Banking (OBAPI with UBS)

Select Installation mode



Mode of Installation - New Installation

- New installation

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

Below screens would appear to taken end-user input



Enter below passwords:

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

Third Party System (OBAPI with THP)

Post Third Party System selection, enter the required credentials details



```
Oracle Banking Digital Experience Installer_v21.1.1.0.0
Enter the password for the user with sys privileges 'sys' :
>>*****
Valid.
Enter password for the OBDX schema 'OBDX_FINS2111' :
>>*****
Valid.
Enter password for the weblogic domain user id 'weblogic' :
>>*****
Valid.
Enter password for the Admin User 'superadmin' :
>>*****
Valid.
Use (r/l) keys to navigate between questions and press 'enter' after editing them
```

Enter below passwords:

- SYS privilege user password where OBAPI schema would be created
- OBAPI schema password
- Weblogic console administrator user password
- OBAPI application admin user password

Oracle FLEXCUBE Core Banking (OBAPI with FCORE)

Post Oracle FLEXCUBE Core Banking, enter the required credentials details

```

Oracle Banking Digital Experience
Installer v21.1.1.0.0

Enter the password for the user with sys privileges 'sys' :
>>*****
Valid.
Enter password for the OBDX schema 'OBDX_PINS2111' :
>>*****
Valid.
Enter password for the weblogic domain user id 'weblogic' :
>>*****
Valid.
Enter the password for the user with sys privileges of FCR database 'sys' :
>>*****
Valid.
Enter password for the FCOBE schema 'BIA1_OBDXP2111INS' (new) :
>>*****
Valid.
Enter password for the Admin User 'superadmin' :
>>*****
Valid.

Use (t/) keys to navigate between questions and press 'enter' after editing them

```

Enter below passwords:

- SYS privilege user password where OBAPI schema would be created
- OBAPI schema password
- Weblogic console administrator user password
- SYS privilege user password where FCOBE host schema exists
- New OBAPI EHMS schema password
- Password for OBAPI application administrative user

Oracle FLEXCUBE Universal Banking with Oracle Banking Payments (OBAPI with OBPM)

Enter the required credentials details

```

Oracle Banking Digital Experience
Installer v21.1.1.0.0

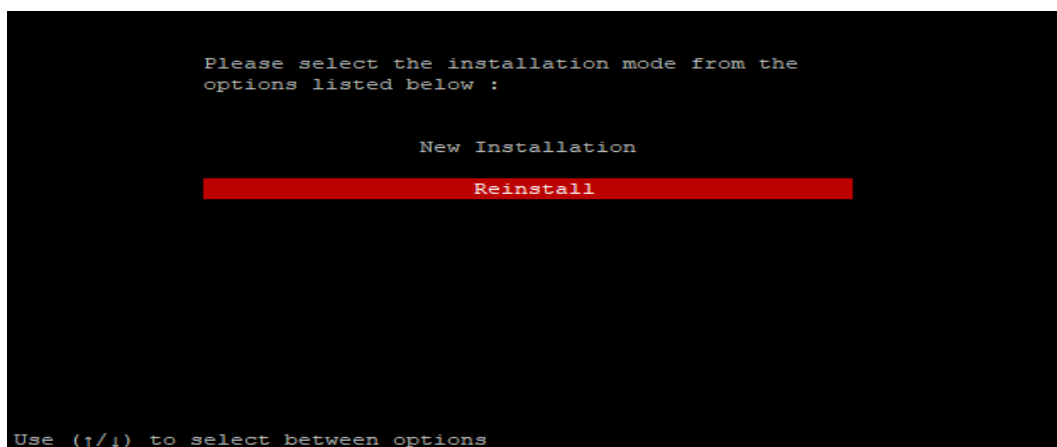
>>*****
Valid.
Enter password for the OBDX schema 'OBDX_PINS2111' :
>>*****
Valid.
Enter password for the weblogic domain user id 'weblogic' :
>>*****
Valid.
Enter the password for the user with sys privileges of OBPM database 'sys' :
>>*****
Valid.
Enter password for the OBPM schema 'COD144_ITR' (Existing) :
>>*****
Valid.
Enter password for the OBPM schema 'BIA1_OBDXP2111INS' (new) :
>>*****
Valid.
Enter password for the Admin User 'superadmin' :
>>*****
Valid.

Use (t/) keys to navigate between questions and press 'enter' after editing them

```

Enter below passwords:

- SYS privilege user password where OBAPI schema would be created
- OBAPI schema password
- Weblogic console administrator user password
- SYS privilege user password where OBPM host schema exists
- Existing OBPM HOST schema password
- New OBAPI EHMS schema password
- Password for OBAPI application administrative user

Mode of Installation – Reinstall

In-case of an existing OBAPI 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 OBAPI database schema (and OBAPI EHMS schema in-case of OBAPI UBS;OBPM and FCORE flavor).

Over-write the policies files (Day0Policy.csv; Entitlement.csv; Resources.csv and Task.csv) from OBAPI Product zip into <OBAPI INSTALLER DIR>/installables/policies directory

Key pointers

- OBAPI schema (and OBAPI EHMS schema in-case of OBAPI UBS flavor) 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 (all files/ sub-directories would be deleted) and re-created again.

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.

```

[devops@obdxwls OBDX_Installer]$ python3.8 runinstaller.py

>>>> STARTING OBX PRODUCT INSTALLATION <<<<

Starting OBX Database Installation with OBPM FLAVOR
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Role...
Role Created
Executing Grants...
OBX Scripts execution on progress...Please hold on it might take sometime
OBX Scripts execution Successfully
SUCCESSFULLY installed OBX database

Starting OBPM Database Installation...
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Role...
Roles Created
Executing Grants...
Executing OBPM Grants...
OBPM Scripts execution on Progress...Please hold on it might take sometime
Scripts execution Successfully
SUCCESSFULLY installed OBPM database
Executed DIGX_FW_CONFIG_ALL_0.sql successfully
Executed DIGX_FW_CONFIG_OBPM.sql successfully
Executed DIGX_FW_CONFIG_VAR_B.sql successfully
Executed DIGX_FW_CONFIG_UBS_ALL_0.sql successfully
Policy seeding successful

Starting WEBLOGIC Setup and Configuration...
Initializing WebLogic Scripting Tool (WLST) ...

Python scans all the jar files it can find at first startup. Depending on the system, this process may take a few minutes to complete, and WLST may not return a prompt
right away.

```

When the installation completes, the below message is displayed

```

.../installables/app/components/individuals/digx-ecf.war], to obdx_cluster .>
Jun 4, 2021 11:47:11 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-security [archive: /scratch/obdx/OBDX_Install
er/installables/app/components/individuals/digx-security.war], to obdx_cluster .>
Jun 4, 2021 11:47:19 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-ems [archive: /scratch/obdx/OBDX_Installer/in
stallables/app/components/individuals/digx-ems.war], to obdx_cluster .>
Jun 4, 2021 11:47:24 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-smsbanking [archive: /scratch/obdx/OBDX_Insta
ler/installables/app/components/individuals/digx-smsbanking.war], to obdx_cluster .>
Jun 4, 2021 11:47:27 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-social [archive: /scratch/obdx/OBDX_Installer
/installables/app/components/individuals/digx-social.war], to obdx_cluster .>
Jun 4, 2021 11:47:32 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-spendanalysis [archive: /scratch/obdx/OBDX_In
staller/installables/app/components/individuals/digx-spendanalysis.war], to obdx_cluster .>
Jun 4, 2021 11:47:40 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-sr [archive: /scratch/obdx/OBDX_Installer/in
stallables/app/components/individuals/digx-sr.war], to obdx_cluster .>
Jun 4, 2021 11:47:49 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-td [archive: /scratch/obdx/OBDX_Installer/in
stallables/app/components/individuals/digx-td.war], to obdx_cluster .>
Jun 4, 2021 11:47:58 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-tradefinance [archive: /scratch/obdx/OBDX_Ins
taller/installables/app/components/individuals/digx-tradefinance.war], to obdx_cluster .>
Jun 4, 2021 11:48:07 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-ukaisp [archive: /scratch/obdx/OBDX_Installer
/installables/app/components/individuals/digx-ukaisp.war], to obdx_cluster .>
Jun 4, 2021 11:48:15 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-ukobpii [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-ukobpii.war], to obdx_cluster .>
Jun 4, 2021 11:48:23 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-ukpisp [archive: /scratch/obdx/OBDX_Installer
/installables/app/components/individuals/digx-ukpisp.war], to obdx_cluster .>
Jun 4, 2021 11:48:31 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-user [archive: /scratch/obdx/OBDX_Installer/i
nstallables/app/components/individuals/digx-user.war], to obdx_cluster .>
Jun 4, 2021 11:48:40 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-vam [archive: /scratch/obdx/OBDX_Installer/in
stallables/app/components/individuals/digx-vam.war], to obdx_cluster .>
Jun 4, 2021 11:48:48 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-wallet [archive: /scratch/obdx/OBDX_Installer
/installables/app/components/individuals/digx-wallet.war], to obdx_cluster .>
Jun 4, 2021 11:48:57 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-wm [archive: /scratch/obdx/OBDX_Installer/in
stallables/app/components/individuals/digx-wm.war], to obdx_cluster .>
Applications deployed successfully
Starting AdminServer
AdminServer started
Successfully created and configured OBDX11TEST1 domain
Jun 4, 2021 11:49:25 AM UTC <Warning> <JNDI> <BEA-050001> <WLContext.close() was called in a different thread than the one in which it was created.>

Successfully Setup and Configured WEBLOGIC...

>>>> OBX PRODUCT INSTALLATION COMPLETED SUCCESSFULLY <<<<

```

[Home](#)

5. Installation using Silent Mode

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

What is silent-mode installation?

During installation in silent mode, the installation program reads the details for your configuration parameters (flavor; mode; passwords etc) from the environment variables (same session in which installer is executed) and installer.properties that you set before beginning the installation. The installation program does not display any configuration options during the installation process.

Steps for Silent-Mode Installation

- Download and extract the installer zip file (Base – non localization version).
- Navigate to “<OBAPI INSTALLER DIR>/core/config”
- Open the “installer.properties” file to maintain key configurations for BASE ENTITY (OBDX_BU)
**Refer to page 9 to 14 (step 4) for filling up installer.properties.
- Set the environment variables , as shown below

```
[devops@obdxwls OBDX_Installer]$ export FLAVOUR=OBPM
[devops@obdxwls OBDX_Installer]$ export MODE=New
[devops@obdxwls OBDX_Installer]$ export DB_SYS_PASSWORD=welcome1
[devops@obdxwls OBDX_Installer]$ export SCHEMA_PASS=welcome1
[devops@obdxwls OBDX_Installer]$ export DomainPassword=welcome1
[devops@obdxwls OBDX_Installer]$ export EHMS_DATABASE_SYS_PASS=welcome1
[devops@obdxwls OBDX_Installer]$ export EHMS_HOST_SCHEMA_NAME_PASS=welcome1
[devops@obdxwls OBDX_Installer]$ export EHMS_SCHEMA_PASS=welcome1
[devops@obdxwls OBDX_Installer]$ export DBAuthPassword=welcome1
[devops@obdxwls OBDX_Installer]$ export LD_LIBRARY_PATH=/usr/lib/oracle/19.10/client64/lib/;$LD_LIBRARY_PATH
```

Below parameters should be set as environment variables, depending on the Host system the installer should be executed.

| Host | Parameter | Description | Example |
|---|-----------|--|--|
| Environment variables to set for flavor:UBSFC ORE | FLAVOUR | Flavour for installation | export FLAVOUR=OBPM or export FLAVOUR=FCORE |
| | | UBS for Oracle FLEXCUBE Universal Banking 14.4.0.0.0 (OBAPI with UBS) | |
| | | FCORE for Oracle FLEXCUBE Core Banking 11.8.0.0.0 (OBAPI with FCORE) | |

| | | |
|---|---|---|
| MODE | Mode of installation. 'New' in-case of a fresh installation of OBAPI for the first run on server 'Clean' in-case of an existing OBAPI installation that you want to overwrite OR in case of a previously failed installation or re-installation | export MODE=New or export MODE=Clean |
| DB_SYS_PASSWORD | Sys user password of OBAPI database (Existing) | export DB_SYS_PASSWORD=obapi182sys |
| SCHEMA_PASS | Password for new schema on OBAPI database | export SCHEMA_PASS=obapi#182 |
| | | |
| DomainPassword | Password for Weblogic Administrator console | export DomainPassword=wlsadm |
| EHMS_DATABASE_SYS_PASS | Sys user password of EHMS HOST database (Existing) | export EHMS_DATABASE_SYS_PASS=obapiehmssys |
| EHMS_HOST_SCHEMA_NAME_PASS ** Only required for UBS & OBPM Host. Ignore this parameter in-case of FCORE Host | Password of existing EHMS HOST schema (Existing) | export EHMS_HOST_SCHEMA_NAME_PASS =obapiehmshost |
| EHMS_SCHEMA_PASS | Password for new OBAPI EHMS schema on EHMS HOST database | export EHMS_SCHEMA_PASS=obapi182ehms |

| | | | |
|---|------------------------|---|---|
| | DBAuthPassword | Password for new OBAPI Administrator user of OBAPI application (In-case of OUD as provider, password should similar to one used while user creation in OUD(or User Password field)) | export DBAuthPassword=obapiadmn |
| Environment variables to set for flavor: | FLAVOUR | Flavour for installation 'OBAPI' for Third Party System 1.0 (OBAPI with THP) | export FLAVOUR=OBAPI |
| | Mode | Mode of installation. 'New' in-case of a fresh installation of OBAPI for the first run on server 'Clean' in-case of an existing OBAPI installation that you want to overwrite OR in case of a previously failed installation or re-installation | export MODE=New or export MODE=Clean |
| | DB_SYS_PASSWORD | Sys user password of OBAPI database (Existing) | export DB_SYS_PASSWORD=obapi182sys |
| | SCHEMA_PASS | Password for new schema on OBAPI database | export SCHEMA_PASS=obapi#182 |
| | | | |
| OBAPI (Third-party HOST) | DomainPassword | Password for Weblogic Administrator console | export DomainPassword=wlsadmn |

| | | | |
|--|------------------------------|--|--|
| | <p>DBAuthPassword</p> | <p>Password for new OBAPI Administrator user of OBAPI application (In-case of OUD as provider, password should similar to one used while user creation in OUD(or User Password field))</p> | <p>export DBAuthPassword=obapiadmn</p> |
|--|------------------------------|--|--|

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

```
[devops@obdxwls OBDX_Installer]$ python3.8 runInstaller.py --silent
```

Installation Status

The status is displayed on the terminal to indicate the progress of the installation.

```
devops@obdxwls OBDX_Installer]# python3.8 runInstaller.py
>>>> STARTING OBDX PRODUCT INSTALLATION <<<<

Starting OBDX Database Installation with OBPM FLAVOR
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Role...
Role Created
Creating Grants...
OBDM Scripts execution on progress...Please hold on it might take sometime
OBDM Scripts execution Successfully
SUCCESSFULLY installed OBDM database

Starting OBPM Database Installation...
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Role...
Role Created
Creating Grants...
Creating OBPM GRANTS...
OBPM Scripts execution on progress...Please hold on it might take sometime
Scripts execution Successfully
SUCCESSFULLY installed OBPM database
Executed DIGX_FW_CONFIG_ALL_0.sql successfully
Executed DIGX_FW_CONFIG_CMS.sql successfully
Executed DIGX_FW_CONFIG_VAR_B.sql successfully
Executed DIGX_FW_CONFIG_USD_ALL_0.sql successfully
Policy loading successful

Starting WEBLOGIC Setup and Configuration...
Initializing WebLogic Scripting Tool (WLST) ...

Python scans all the jar files it can find at first startup. Depending on the system, this process may take a few minutes to complete, and WLST may not return a prompt right away.
```

When the installation completes, the below message is displayed

```
.../installables/app/components/individuals/digx-secf.war], to obdx_cluster ->
Sun 4, 2021 11:47:11 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-security [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-security.war], to obdx_cluster ->
Sun 4, 2021 11:47:19 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-sma [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-sma.war], to obdx_cluster ->
Sun 4, 2021 11:47:24 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-embanking [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-embanking.war], to obdx_cluster ->
Sun 4, 2021 11:47:27 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-social [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-social.war], to obdx_cluster ->
Sun 4, 2021 11:47:32 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-spandanalysis [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-spandanalysis.war], to obdx_cluster ->
Sun 4, 2021 11:47:40 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-er [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-er.war], to obdx_cluster ->
Sun 4, 2021 11:47:49 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-td [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-td.war], to obdx_cluster ->
Sun 4, 2021 11:47:59 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-tradefinance [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-tradefinance.war], to obdx_cluster ->
Sun 4, 2021 11:48:07 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-ukaisp [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-ukaisp.war], to obdx_cluster ->
Sun 4, 2021 11:48:15 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-ukobpii [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-ukobpii.war], to obdx_cluster ->
Sun 4, 2021 11:48:23 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-ukpiisp [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-ukpiisp.war], to obdx_cluster ->
Sun 4, 2021 11:48:31 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-user [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-user.war], to obdx_cluster ->
Sun 4, 2021 11:48:40 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-vam [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-vam.war], to obdx_cluster ->
Sun 4, 2021 11:48:48 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-wallet [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-wallet.war], to obdx_cluster ->
Sun 4, 2021 11:48:57 AM UTC <Info> <J2EE Deployment SPI> <BEA-260121> <Initiating deploy operation for application, digx-wa [archive: /scratch/obdx/OBDX_Installe
r/installables/app/components/individuals/digx-wa.war], to obdx_cluster ->
Applications deployed successfully
Starting AdminServer

AdminServer started
Successfully created and configured OBDX11TEST1 domain
Sun 4, 2021 11:49:25 AM UTC <Warning> <JNDI> <BEA-050001> <WLContext.close() was called in a different thread than the one in which it was created.>
Successfully Setup and Configured WEBLOGIC...

>>>> OBDM PRODUCT INSTALLATION COMPLETED SUCCESSFULLY <<<<
```


[Home](#)

6. Installer Verification

Each execution creates a new directory as <DDMonthHHMM> under <OBAPI INSTALLER DIR>/ExecInstances directory where installer execution logs as described below are stored.

| Log Description | PATH |
|--|--|
| Summarized Installer Activity Log | <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/obapi_installer.log |
| Summarized Database Logs | <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/DB_installation.log |
| Detailed OBAPI DB Logs per SQL file | <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/OBAPI/OBAPI.log |
| Detailed EHMS schema Logs per SQL file (specific to EHMS host system only) | <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/<EHMSHOST>/<EHMSHOST>.log <EHMSHOST> - values such as; FCORE; OBPM; |
| Weblogic Configuration Logs | <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/app/obapi_wls_post.log |
| Detailed OBAPI policy seeding logs | <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/Entitlement.log <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/Task.log <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/Dashboard_seed.log Note: Check for SEVERE keyword; If found refer to Troubleshoot section to re-run the policy |
| Policy seeding execution Log | <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/seedPolicies.log Note: Should be empty if no errors during policy execution. In-case non-empty refer to Troubleshoot section to re-run the policy |

Check all the logs for any errors.

[Home](#)

7. Installer Scope

OBAPI Installer currently covers below activities:

Flavor: Third Party system (OBAPI with THP)

| Flavor | Activity | Detailed Activity List | New Installation | Reinstall |
|----------------|----------------------------------|---|------------------|--|
| OBAPI with THP | OBAPI DB Setup | Create Tablespace | √ | NA |
| | | Create Schema and Role | √ | √ (drop and re-create objects) |
| | | Grants | √ | √ |
| | | Load DB object (DDL's and DML's) | √ | √ |
| | | Compile Schema | √ | √ |
| | | Policy Seeding | √ | √ |
| | Weblogic Setup and Configuration | Create and Configure AdminServer, Machine, Managed Server and Cluster | √ | √ |
| | | Configure NodeManager | √ | √ |
| | | Configure JDBC | √ | √ |
| | | JMS servers, Persistent stores and JMS Modules | √ | √ |
| | | Application Deployment | √ | √ |
| | | JTA | √ | √ |
| | | Enable Production Mode | √ | √ |
| | | Start AdminServer and NodeManager | √ | √ |
| | OBAPI Configuration | Copy config files into OBAPI Installation Home | √ | √ (Delete old and copy new from installer zip) |

Flavor: Oracle FLEXCUBE Core Banking (OBAPI with FCORE)

| Flavor | Activity | Detailed Activity List | New Installation | Reinstall |
|-------------------------|----------------------------------|---|------------------|--------------------------------|
| OBAPI with FCORE | OBAPI DB Setup | Create Tablespace | √ | NA |
| | | Create Schema and Role | √ | √ (drop and re-create objects) |
| | | Grants | √ | √ |
| | | Load DB object (DDL's and DML's) | √ | √ |
| | | Compile Schema | √ | √ |
| | | Policy Seeding | √ | √ |
| | EHMS DB Setup | Create Tablespace | √ | NA |
| | | Create Schema and Role | √ | √ (drop and re-create objects) |
| | | Grants | √ | √ |
| | | Load DB object (DDL's and DML's) | √ | √ |
| | | Compile Schema | √ | √ |
| | Weblogic Setup and Configuration | Create and Configure AdminServer, Machine, Managed Server and Cluster | √ | √ |
| | | Configure NodeManager | √ | √ |
| | | Configure JDBC | √ | √ |
| | | JMS servers, Persistent stores and JMS Modules | √ | √ |
| | | Application Deployment | √ | √ |
| | | JTA | √ | √ |
| Enable Production Mode | | √ | √ | |

| Flavor | Activity | Detailed Activity List | New Installation | Reinstall |
|--------|---------------------|--|------------------|--|
| | | Start AdminServer and NodeManager | √ | √ |
| | OBAPI Configuration | Copy config files into OBAPI Installation Home | √ | √ (Delete old and copy new from installer zip) |

Flavor: Oracle FLEXCUBE Universal Banking with Oracle Banking Payments (OBAPI with OBPM)

| Flavor | Activity | Detailed Activity List | New Installation | Reinstall |
|---|----------------------------------|---|------------------|--------------------------------|
| OBAPI with OBPM (14.4.0.0.0 version) | OBAPI DB Setup | Create Tablespace | √ | NA |
| | | Create Schema and Role | √ | √ (drop and re-create objects) |
| | | Grants | √ | √ |
| | | Load DB object (DDL's and DML's) | √ | √ |
| | | Execute OBPM HOST specific scripts | √ | √ |
| | | Compile Schema | √ | √ |
| | | Policy Seeding | √ | √ |
| | EHMS DB Setup | Create Tablespace | √ | NA |
| | | Create Schema and Role | √ | √ (drop and re-create objects) |
| | | Grants | √ | √ |
| | | Load DB object (DDL's and DML's) | √ | √ |
| | | Compile Schema | √ | √ |
| | Weblogic Setup and Configuration | Create and Configure AdminServer, Machine, Managed Server and Cluster | √ | √ |
| | | Configure NodeManager | √ | √ |
| | | Configure JDBC | √ | √ |
| | | JMS servers, Persistent stores and JMS Modules | √ | √ |
| | | Application Deployment | √ | √ |
| | | JTA | √ | √ |
| Enable Production Mode | | √ | √ | |

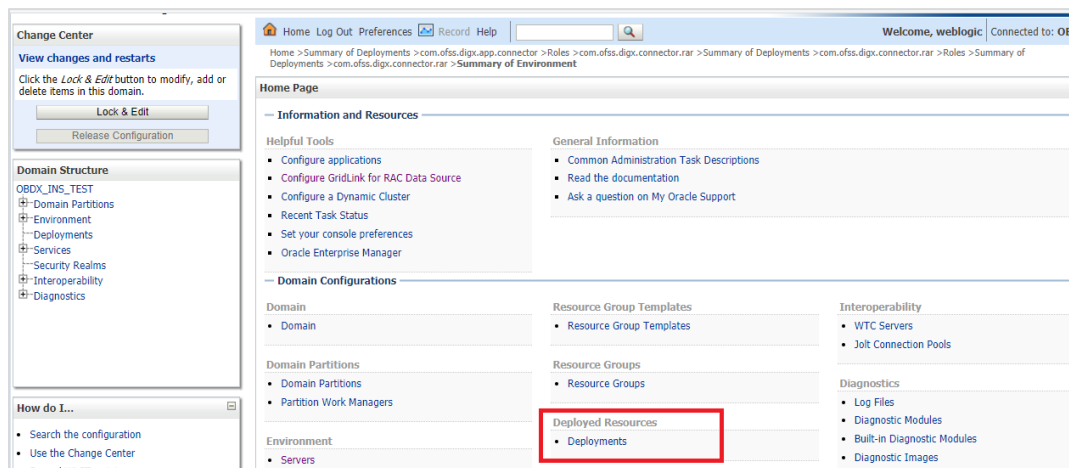
| Flavor | Activity | Detailed Activity List | New Installation | Reinstall |
|--------|---------------------|--|------------------|--|
| | | Start AdminServer and NodeManager | √ | √ |
| | OBAPI Configuration | Copy config files into OBAPI Installation Home | √ | √ (Delete old and copy new from installer zip) |

[Home](#)

8. Post Installation Steps

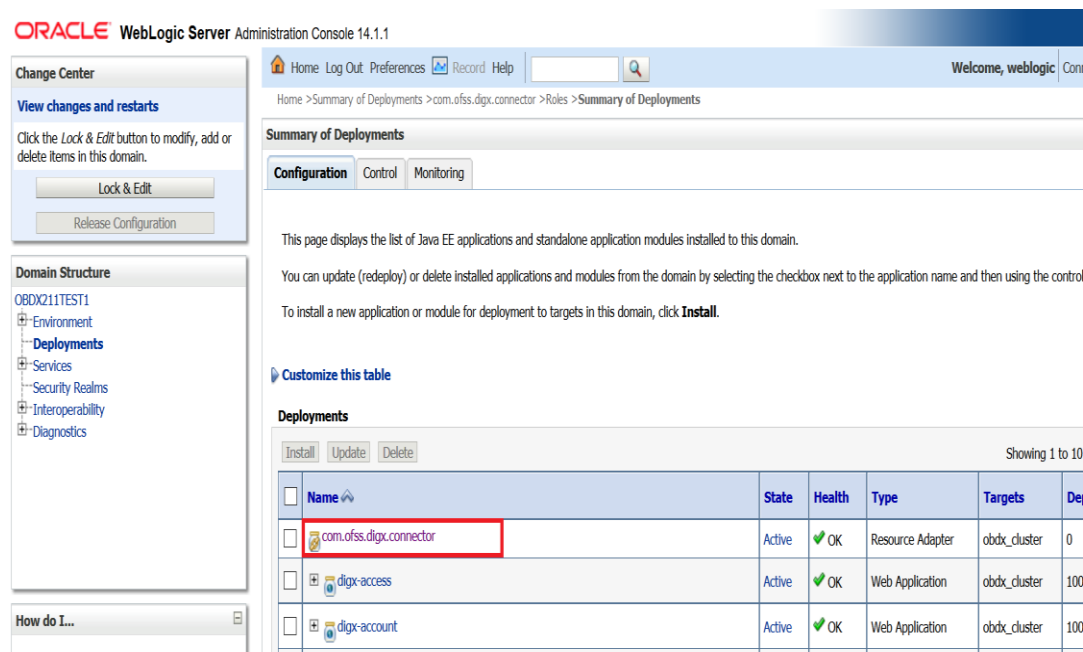
Outbound credential mappings

Login Weblogic Admin Console. Click on Deployments.



Click on com.ofss.digx.connector

Click on **Security Tab > Outbound Credential Mappings**



ORACLE WebLogic Server Administration Console 14.1.1

Home > Summary of Deployments > com.ofss.digx.connector > Roles > Summary of Deployments > com.ofss.digx.connector > Roles > com.ofss.digx.connector

Settings for com.ofss.digx.connector

Overview | Deployment Plan | Configuration | **Security** | Targets | Control | Testing | Monitoring | Notes

Roles | Policies | **Outbound Credential Mappings** | Inbound Principal Mappings | Principals

Outbound credential mappings let you map WebLogic Server usernames to usernames in the Enterprise Information System (EIS) to which credential mappings for all outbound connection pools in the resource adapter, or specify particular outbound credential mappings for individual for this resource adapter.

Customize this table

Outbound Credential Mappings

| | WLS User | EIS User | Outbound Connection Pool |
|-------------------------------|----------|----------|--------------------------|
| There are no items to display | | | |

Click on **New**

ORACLE WebLogic Server Administration Console 14.1.1

Home > Summary of Deployments > com.ofss.digx.connector > Roles > Summary of Deployments > com.ofss.digx.connector > Roles

Settings for com.ofss.digx.connector

Overview | Deployment Plan | Configuration | **Security** | Targets | Control | Testing | Monitoring | Notes

Roles | Policies | **Outbound Credential Mappings** | Inbound Principal Mappings | Principals

Outbound credential mappings let you map WebLogic Server usernames to usernames in the Enterprise Information System (EIS) to which credential mappings for all outbound connection pools in the resource adapter, or specify particular outbound credential mappings for individual for this resource adapter.

Customize this table

Outbound Credential Mappings

| | WLS User | EIS User | Outbound Connection Pool |
|-------------------------------|----------|----------|--------------------------|
| There are no items to display | | | |

Select **ra/DIGXConnectorAES > Next**

Home > Summary of Deployments > com.ofss.digx.connector.rar > Roles > Summary of Deployments > com.ofss.digx.connector.rar > Summary of Environment > Summary of Deployments > com.ofss.digx.app.connector > Summary of Deployments > com.ofss.digx.connector.rar

Create a New Security Credential Mapping

Back Next Finish Cancel

Outbound Connection Pool

Which Outbound Connection Pool would you like the credential map to be associated with? Selecting Resource Adapter Default will configure the credential mapping for all Outbound Connection Pools in this resource adapter. Each Outbound Connection Pool can then configure themselves to override these credentials.

Customize this table

Create a New Security Credential Map Entry for:

Showing 1 to 10 of 11 Previous

| | |
|-------------------------------------|------------------------------|
| <input type="checkbox"/> | Outbound Connection Pool |
| <input checked="" type="checkbox"/> | ra/DIGXConnectorAES |
| <input type="checkbox"/> | ra/DIGXConnectorAPNS |
| <input type="checkbox"/> | ra/DIGXConnectorBIREPORTS |
| <input type="checkbox"/> | ra/DIGXConnectorFCM |
| <input type="checkbox"/> | ra/DIGXConnectorFILEUPLOAD |
| <input type="checkbox"/> | ra/DIGXConnectorGENERICREST |
| <input type="checkbox"/> | ra/DIGXConnectorIPM_OBDX_BU |
| <input type="checkbox"/> | ra/DIGXConnectorIPM_OBDX_BU1 |
| <input type="checkbox"/> | ra/DIGXConnectorJWTOKEN |
| <input type="checkbox"/> | ra/DIGXConnectorMERCHANT |

Select "Default User" > Next

Home > Summary of Deployments > com.ofss.digx.connector.rar > Roles > Summary of Deployments > com.ofss.digx.connector.rar > Summary of Environment > Summary of Deployments > com.ofss.digx.app.connector > Summary of Deployments > com.ofss.digx.connector.rar

Create a New Security Credential Mapping

Back Next Finish Cancel

WebLogic Server User

Select the WebLogic Server user that you would like to map an EIS user to. Selecting 'User for creating initial connections' will configure the user that will be used for creating connections when the resource adapter is first started. Selecting 'Default User' will configure the user that will be used as the default for any authenticated WebLogic Server user that does not have a credential mapping specifically for them. Selecting 'User for unauthenticated user' will configure the user that will be used for an unauthenticated WebLogic Server user. Selecting 'Configured User' you must type in the WebLogic Server user that you are configuring. This user must be a configured WebLogic Server user.

User for creating initial connections
 Default User
 Unauthenticated WLS User
 Configured User Name

WebLogic Server User Name:

Back Next Finish Cancel

Enter "EIS User Name" should be set to AES_KEY

Enter "EIS Password" . Password should be any 16 characters.

Home > Summary of Deployments > com.ofss.digx.connector > Roles > Summary of Deployments > com.ofss.digx.connector > Role

Create a New Security Credential Mapping

Back Next Finish Cancel

EIS User Name and Password

Configure the EIS User Name and Password that you would like to map the WebLogic Server User to:

* Indicates required fields

Enter the EIS User Name:

* EIS User Name:

Enter the EIS Password:

* EIS Password:

* Confirm Password:

Back Next Finish Cancel

Click **'Finish'**

Back Next **Finish** Cancel

EIS User Name and Password
 Configure the EIS User Name and Password that you would like to map the WebLogic Server User to:
 * Indicates required fields

Enter the EIS User Name:
 * EIS User Name: AES_KEY

Enter the EIS Password:
 * EIS Password:

* Confirm Password::

Back Next Finish Cancel

Check AES_KEY mapping is created successfully.

Customize this table

Outbound Credential Mappings

New Delete

| | EIS User | Outbound Connection Pool |
|-------------------------------------|----------|--------------------------|
| <input type="checkbox"/> WLS User ↕ | | |
| <input type="checkbox"/> Default | AES_KEY | ra/DIGXConnectorAES |

New Delete

Configuring the Connector Credential Store

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

For more information, refer the **Oracle Banking APIs Connector Credential Store Guide.pdf**

| Functionality / Module | OutBound Connection Pool Name |
|------------------------|-------------------------------|
| VAM | ra/DIGXConnectorOBVAM |

Oracle FLEXCUBE Universal Banking (OBAPI with UBS)

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

Foreign Server

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

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 destinations, and foreign servers. This page summarizes the JMS system modules that have been created for this domain.

[Customize this table](#)

JMS Modules (Filtered - More Columns Exist)

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

New Delete

| <input type="checkbox"/> | Name ↕ | Type |
|--------------------------|------------------|-------------------|
| <input type="checkbox"/> | AuditJMS | JMSSystemResource |
| <input type="checkbox"/> | FileUploadJMS | JMSSystemResource |
| <input type="checkbox"/> | ReportsJMSModule | JMSSystemResource |
| <input type="checkbox"/> | UBSSystemModule | JMSSystemResource |

New Delete

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 partition, or a resource group template.

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-forward parameters.

[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 Showing 1 to 1 of 1

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

New Delete Showing 1 to 1 of 1

- Click on 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. The foreign server.

Name: UBSForeignServer

JNDI Initial Context Factory: weblogic.jndi.WLInitialConte;

JNDI Connection URL: t3://<EHMS_WLS_SERVER>:<EHMS_WLS_SERVER_PORT>/

JNDI Properties Credential:

Confirm JNDI Properties Credential:

JNDI Properties:

```
java.naming.security.principal=
<EHMS_WLS_USERNAME>
```

- Click on Lock & Edit

Set below configurations with:

- **JNDI Connection URL** – Replace <EHMS_WLS_SERVER> with hostname or IP address of UBS HOST Weblogic server and <EHMS_WLS_SERVER_PORT> with port number of UBS HOST Weblogic 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=<EHMS_WLS_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 > NOTIPPY_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 a 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 must be in the classpath of the vendor that is 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 URL is described in the Oracle JMS documentation. For WebLogic JMS, leave this field blank if you are referencing a WebLogic JMS resource. More 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. More Info...

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 be part of the constructor for the 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

ORACLE WebLogic Server Administration Console 12c

Change Center Home Log Out Preferences Record Help

View changes and restarts
 Pending changes exist. They must be activated.
 ✓ Activate Changes
 Undo All Changes

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 must be in the classpath of the vendor that is being used. More Info...

JNDI Connection URL: t3://x.x.x.x:7860/ The URL that WebLogic Server will use to contact the JNDI provider. The syntax of this URL is described in the Oracle JMS documentation. For WebLogic JMS, leave this field blank if you are referencing a WebLogic JMS resource. More 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. More Info...

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 be part of the constructor for the 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

ORACLE WebLogic Server Administration Console 12c

Change Center Home Log Out Preferences Record Help

View changes and restarts
 Click the Lock & Edit button to modify, add or delete items in this domain.
 Lock & Edit
 Release Configuration

Settings for UBSForeignServer

Configuration Subdeployment Notes

General Destinations Connection Factories

Save

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

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 must be in the classpath of the vendor that is being used. More Info...

JNDI Connection URL: t3://x.x.x.x:7860/ The URL that WebLogic Server will use to contact the JNDI provider. The syntax of this URL is described in the Oracle JMS documentation. For WebLogic JMS, leave this field blank if you are referencing a WebLogic JMS resource. More 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. More Info...

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 be part of the constructor for the 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

Oracle FLEXCUBE Universal Banking with Oracle Banking Payments (OBAPI with OBPM)

If during installer execution Oracle FLEXCUBE Universal Banking with Oracle Banking Payments (OBAPI with OBPM) is selected, then below steps needs to be done manually.

Foreign Server

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

| Name | Type | JNDI Name | Subdeployment |
|-------------------|----------------|-----------|-------------------|
| OBPMForeignServer | Foreign Server | N/A | OBPMSubdeployment |

Refer to earlier steps mentioned for **UBS HOST UBSForeignServer** and make similar changes in **OBPMForeignServer**.

Deployment of notification MDB application

Before deployment of obapi.externalsystem.obpm.notification.mdb.ear application, make changes similar to obapi.externalsystem.ubs.notification.mdb.ear before deployment.

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**

Trade Finance (LC and BG) with OBTFPM

Refer below document for enabling 'Letter Of Credit' issuance and 'Bank Guarantee' issuance with Oracle Banking Trade Finance Management.

Oracle Banking Mid-Office Product Setup and Configuration Guide

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**

Feedback module:

In order to enable Scale (Rating) icons please refer the section **Creating Procedure of Oracle Banking APIs Content Upload Guide** user manual.

WAR deployments and dependencies

| Mandatory deployment | | |
|-----------------------------|--------------------|--|
| Sr No | Module | Description |
| 1 | digx-alerts | Alerts configuration and management |
| 2 | digx-approval | Transaction approvals for admin and corporate business user |
| 3 | digx-audit | Audit logging for all transactions |
| 4 | digx-auth | Login authentication & oAuth functionality |
| 5 | digx-brand | Brand Management |
| 6 | digx-common | Common REST APIs used across all modules like enumerations |
| 7 | digx-config | System configuration & dashboard management |
| 8 | digx-cutoff | Transaction cutoff management |
| 9 | digx-eureka-server | Service registration of modules |
| 10 | digx-finlimit | Limits Maintenance and Utilization |
| 11 | digx-login | Manages user login and logout functionality |
| 12 | digx-me | Multientity management |
| 13 | digx-party | Party management |
| 14 | digx-security | Authorization and Authentication management |
| 15 | digx-shared-libs | Common framework libraries shared across all modules |
| 16 | digx-sms | User & Credential management |
| 17 | digx-user | User profile management |
| 18 | digx-account | Accounts framework |
| 19 | digx-dda | Demand deposits |
| 20 | digx-connector | Weblogic connector to store secure information / credentials |

| Optional WAR deployment | | | |
|-------------------------|--------------------------|----------------------|--|
| Sr. No | War | Dependent Modules | Functionality |
| 1 | digx-access | | Account and transaction access management for party and user |
| 2 | digx-oauth | | oAuth Maintenance |
| 3 | digx-accountaggregation | | Account aggregation feature allows retail users to link their external bank accounts to OBAPI. |
| 4 | digx-accountrelationship | | To set up the transaction access logic for Bank's retail customers from OBAPI based on their account -mode of operation or relationship. |
| 5 | digx-analytics | | Capturing UI events for analytics |
| 6 | digx-associatedparty | digx-content | Associated Party Management for corporate user |
| | | digx-scf | |
| 7 | digx-berlinaisp | digx-obc | Berlin Open Banking Accounts |
| 8 | digx-berlinpiisp | digx-obc | Berlin Open Banking Funds Confirmation |
| 9 | digx-berlinpisp | digx-obc | Berlin Open Banking Payments |
| 10 | digx-budget | digx-common | Budget management for retail user |
| | | digx-payment | |
| | | digx-spendanalysis | |
| 11 | digx-bulkadmin | | File upload maintenances for admin |
| 12 | digx-bulkcms | digx-bulkadmin | File upload in Cash management for corporate user |
| 13 | digx-bulkinvoice | digx-bulkadmin | File upload in Invoice management for corporate user |
| 14 | digx-bulkpayment | digx-bulkadmin | File upload in Payments for corporate user |
| 15 | digx-bulkscf | digx-bulkadmin | File upload in Supply chain finance for corporate user |
| 16 | digx-bulktradefinance | digx-bulkadmin | File upload in Trade finance for corporate user |
| | | digx-tradefinance | |
| 17 | digx-bulkvam | digx-bulkadmin | File upload in Virtual account management for corporate user |
| | | digx-vam | |
| 18 | digx-card | digx-payment | Credit card operations for retail user |
| | | digx-dda | |
| | | digx-location | |
| 19 | digx-chatbot | | Chatbot functionality for retail and corporate user |
| 20 | digx-cms | digx-associatedparty | Cash management module for corporate user |
| | | digx-dda | |
| | | digx-forexdeal | |
| | | digx-invoice | |
| | | digx-pm | |

| | | | |
|----|--------------------------|--|---|
| | | digx-vam | |
| 21 | digx-collaboration | digx-content | Mailers are information or messages published by the Bank, to communicate about the Bank's Products, services and other information to its users. |
| 22 | digx-content | | File document upload , read and deletion related operation by retail, corporate and admin users. |
| 23 | digx-creditfacility | digx-processmanagement digx-content | Credit facility module for corporate user |
| 24 | digx-ebpp | digx-dda digx-account digx-content digx-location digx-card | Electronic bill payments for retail user |
| 25 | digx-extxfacesimulator | | Simulator for Third Party Host Implementation |
| 26 | digx-feedback | digx-security | Feedback module for retail and corporate user |
| 27 | digx-forexdeal | digx-payment digx-pm | Forex deal for corporate user |
| 28 | digx-goal | digx-common digx-content digx-payment digx-dda | Goal module for retail user |
| 29 | digx-insight | | Provides insight to retail user according to his activities |
| 30 | digx-invoice | digx-associatedparty digx-cms digx-scf | Invoice management module for corporate user |
| 31 | digx-liquiditymanagement | digx-forexdeal | Liquidity management module for corporate user |
| 32 | digx-loan | digx-dda digx-location digx-payment | Loan module for retail and corporate user |
| 33 | digx-loanapplication | digx-loan digx-account digx-content digx-creditfacility digx-processmanagement | Loan origination module for corporate user |
| 34 | digx-location | | Location module for retail and corporate user |
| 35 | digx-mobile | | Mobile module |
| 36 | digx-nlp | digx-content digx-invoice digx-scf | Enables corporate users to perform operations like Automatic Invoice Creation and Automatic |

| | | | |
|----|------------------------|----------------------|---|
| | | | Purchase Order Creation in Invoice Management and Supply Chain Finance. |
| 37 | digx-obc | | Openbanking Fine Graining Of Consent |
| 38 | digx-origination | digx-content | Origination module for retail user |
| | | digx-payment | |
| | | digx-td | |
| | | digx-dda | |
| | | digx-config | |
| | | digx-common | |
| | | digx-user | |
| 39 | digx-payment | digx-forexdeal | Payments module for retail and corporate user |
| | | digx-party | |
| | | digx-location | |
| | | digx-pm | |
| | | digx-content | |
| | | digx-vam | |
| | | digx-social | |
| | | digx-wallet | |
| 40 | digx-pm | | Product maintenance related operations |
| 41 | digx-processmanagement | | |
| 42 | digx-report | digx-security | Report module for retail and corporate user |
| | | digx-user | |
| | | digx-sms | |
| | | digx-payment | |
| | | digx-party | |
| | | digx-dda | |
| 43 | digx-rewards | | Rewards module for retail user |
| 44 | digx-scf | digx-associatedparty | Supply chain finance module for corporate user |
| | | digx-invoice | |
| | | digx-pm | |
| 45 | digx-smsbanking | | SMS banking |
| 46 | digx-social | | Twitter Payments |
| 47 | digx-spendanalysis | digx-dda | Spend analysis module for retail user |
| | | digx-payment | |
| 48 | digx-sr | digx-dda | Service request module |
| | | digx-content | |
| 49 | digx-td | digx-dda | Term deposit module for retail and corporate user |
| | | digx-location | |
| | | digx-payment | |
| 50 | digx-tradefinance | digx-content | Trade finance module for corporate user |
| | | digx-creditfacility | |
| | | digx-dda | |
| | | digx-forexdeal | |
| 51 | digx-ukaisp | digx-obc | UK Open Banking Accounts |

| | | | |
|----|--------------|---------------|---|
| 52 | digx-ukcbpii | digx-obc | UK Open Banking Funds Confirmation |
| 53 | digx-ukpisp | digx-obc | UK Open Banking Payments |
| 54 | digx-vam | digx-location | Virtual account management for corporate user |
| | | digx-account | |
| 55 | digx-wallet | digx-payment | Wallet module for retail user |
| | | digx-dda | |
| | | digx-sms | |
| 56 | digx-wm | digx-party | Wealth management module for retail user |
| | | digx-pm | |
| | | digx-user | |
| | | digx-dda | |

[Home](#)

9. OBAPI Logging Configuration

Logging Configuration in WebLogic Standard Edition

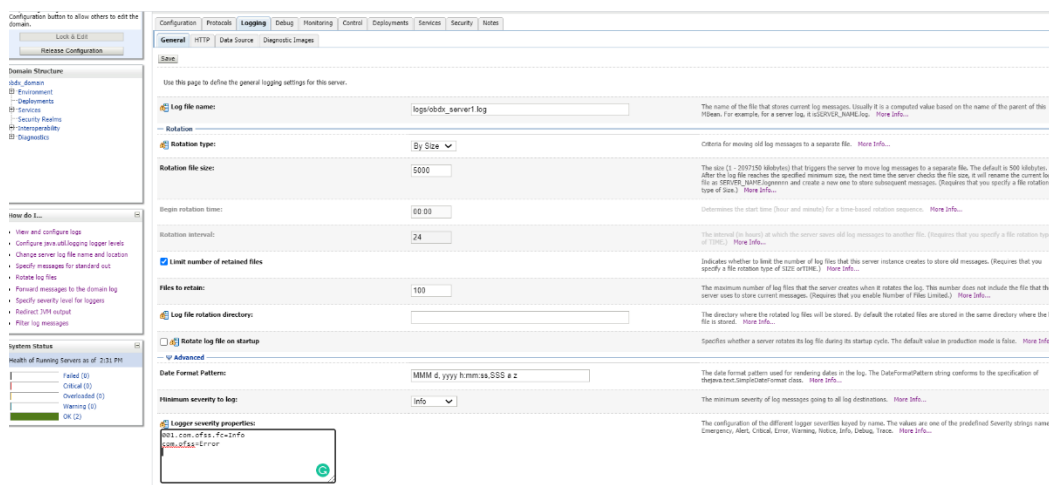
WebLogic converts the **java.util.logging** levels into WebLogic Logging Levels when we use Platform Loggers. Refer Table (Fig-A) for Logging Level conversion. (**Case Sensitive**)

To change the logging level at package level in OBAPI Application can be achieved with below Steps

1. Go to the OBAPI Application Server à Click Logging
2. Go to **Advance** and set the values in **Platform Loggers Levels** as per the Package level logging requirements.
e.g. To set the logging level for package **<bankcode>.com.ofss.fc** and **com.ofss.digx**
 - i. <bankcode>.com.ofss.fc=Info
 - ii. com.ofss.digx=Error
3. **Save and Restart** the server




















| JAVA | WebLogic |
|---------|----------|
| SEVERE | Error |
| WARNING | Warning |
| INFO | Info |
| CONFIG | Debug |
| FINE | Debug |
| FINER | Trace |
| FINEST | Trace |




















(Fig-A)



10. OBAPI Product Verification

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

| | | | | | | |
|--------------------------|--|--------|------|------------------|--------------|-----|
| <input type="checkbox"/> |  com.ofss.digx.connector | Active | ✔ OK | Resource Adapter | obdx_cluster | 0 |
| <input type="checkbox"/> |  digx-access | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-account | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-accountaggregation | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-accountrelationship | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-alerts | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-analytics | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-approval | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-associatedparty | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-audit | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-auth | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-berlinaisp | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-berlinpiisp | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-berlinpisp | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-brand | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-budget | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-bulkadmin | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-bulkcms | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-bulkinvoice | Active | ✔ OK | Web Application | obdx_cluster | 100 |

| | | | | | | |
|--------------------------|---|--------|------|-----------------|--------------|-----|
| <input type="checkbox"/> |  digx-bulkpayment | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-bulkscf | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-bulktradefinance | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-bulkvam | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-card | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-chatbot | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-cms | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-collaboration | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-common | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-config | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-content | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-creditfacility | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-cutoff | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-dda | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-ebpp | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-eurekaserver | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-extfacesimulator | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-feedback | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> |  digx-finlimit | Active | ✔ OK | Web Application | obdx_cluster | 100 |

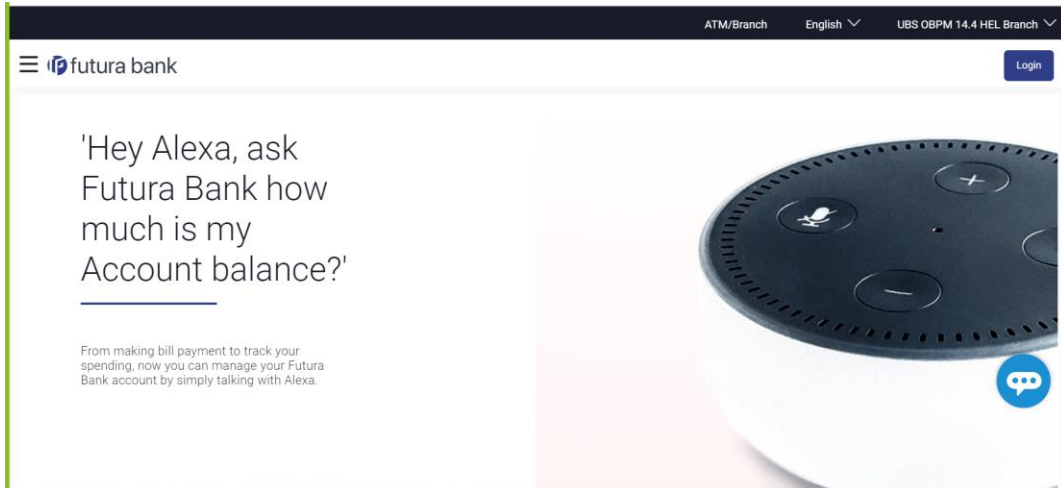
| | | | | | | | |
|--------------------------|--|--------------------------|--------|------|-----------------|--------------|-----|
| <input type="checkbox"/> | | digx-forexdeal | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-goal | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-insight | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-invoice | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-liquiditymanagement | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-loan | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-loanapplication | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-location | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-login | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-me | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-mobile | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-nlp | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-oauth | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-obc | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-origination | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-party | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-payment | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-pm | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-processmanagement | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-report | Active | ✔ OK | Web Application | obdx_cluster | 100 |

| | | | | | | | |
|--------------------------|--|----------------------------------|--------|------|-----------------|---------------------------|-----|
| <input type="checkbox"/> | | digx-rewards | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-scf | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-security | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-sharedlibs (21.1.0.0.0,312) | Active | | Library | AdminServer, obdx_cluster | 0 |
| <input type="checkbox"/> | | digx-sms | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-smsbanking | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-social | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-spendanalysis | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-sr | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-td | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-tradefinance | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-ukaisp | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-ukcbpii | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-ukpisp | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-user | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-vam | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-wallet | Active | ✔ OK | Web Application | obdx_cluster | 100 |
| <input type="checkbox"/> | | digx-wm | Active | ✔ OK | Web Application | obdx_cluster | 100 |

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 (OBAPI 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 (OBAPI 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

Chat Bot Configuration:

Refer below document for Chat Bot configuration.

Oracle Banking APIs 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

Mid Office Configuration:

Refer below document for Mid Office Configurations i.e. Trade Finance, Corporate Lending.

Oracle Banking Mid-Office Product Setup and Configuration Guide.

Account Uniqueness Configuration:

Some core banking systems support same account number in multiple branches within the entity. OBAPI has support for such core banking systems. However, the configuration is not enabled by default. In case the Bank has core banking system which supports and provides same account numbers across multiple branches, the following scripts should be executed per entity for enabling the support.

```

Insert into DIGX_FW_CONFIG_ALL_O (PROP_ID, PREFERENCE_NAME, PROP_VALUE,
DETERMINANT_VALUE, CREATED_BY, CREATION_DATE, LAST_UPDATED_BY,
LAST_UPDATED_DATE)
values
('obapi.host.account.uniqueness', 'ExtSystemsConfig', 'BRANCH', '<ENTITY_ID>', 'ofss
user', sysdate, 'ofssuser', sysdate);

Insert into DIGX_FW_CONFIG_ALL_O (PROP_ID, PREFERENCE_NAME, PROP_VALUE,
DETERMINANT_VALUE, CREATED_BY, CREATION_DATE, LAST_UPDATED_BY,
LAST_UPDATED_DATE)
values
('obapi.host.accountbranch.delimiter', 'ExtSystemsConfig', '@~', '<ENTITY_ID>', 'ofs
suser', sysdate, 'ofssuser', sysdate);

```

Note: Please ensure that <ENTITY_ID> has been replaced with correct Entity ID for the corresponding entity.

[Home](#)

11. Multi Entity

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

- Add entity through OBAPI Web application, using
 - User Manual Oracle Banking APIs System Configuration User Manual
- In case of OBTFPM integration, following document should be referred.
- Oracle Banking Mid-Office Product Setup and Configuration Guide Running OBAPI installer

Ensure that Managed server should be down and Admin server should be running state.

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

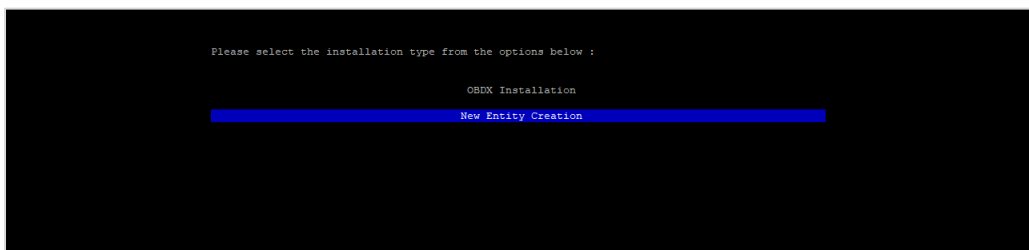
Login with OS user which was used to perform OBAPI software installation (or has ownership on Oracle Weblogic home directory)

Ensure OBAPI installation details (OBAPI DB; WLS etc) are maintained in installer.properties and user running the installer has read-write permissions.

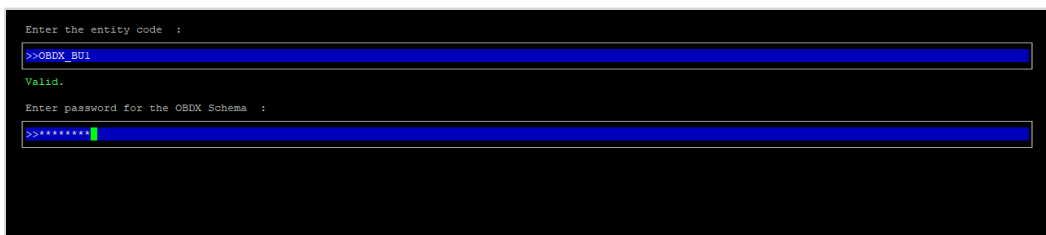
- From your terminal navigate to <OBAPI INSTALLER DIR>
- Enter the following command

python3 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
- OBAPI schema password

If an entity code belongs to UBS / OBPM host following screen (below screenshot are for OBPM ; for UBS same input are required) will appear:

```

Enter the OBPM DB hostname :
>>

Enter the OBPM DB port :
>>

Enter the OBPM 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 (t/;) keys to navigate between questions and press 'enter' after editing them

```

```

Enter the OBPM DB hostname :
>>whf00jml.in.oracle.com
Valid.
Enter the OBPM DB port :
>>1522
Valid.
Enter the OBPM SID :
>>ora19c.in.oracle.com
Valid.
Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) :
>>TBS_DIR
Valid.
Enter the username with 'sys' privileges :
>>sys
Valid.
Enter password for the user with sys privileges :
>>*****
Valid.
Enter existing weblogic admin password :
>>*****
Use (t/;) keys to navigate between questions and press 'enter' after editing them

```

Enter below details:

- Hostname of the database host server
- Port of the database host server
- 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 OBPM host schema name :

>>

Enter the password for existing OBPM host schema :

>>

Enter new OBPM BIAL schema name :

>>

Enter new schema password :

>>

Enter country code :

>>

Enter below details:

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

Installation Status in case of UBS / OBPM

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

```
[c:\devel\ops\bin\... \?2\OBDX_Installer]$ python3 runInstaller.py
Starting OBPM Database Installation...
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Role...
Roles Created
Executing Grants...
Executing OBPM Grants...
OBPM Scripts execution on progress...Please hold on it might take sometime
Scripts execution Successfully
SUCCESSFULLY installed OBPM database
Executed DIGX_FW_CONFIG_ALL_O.sql successfully
Executed DIGX_FW_CONFIG_UBS_ALL_O.sql successfully
```

When the installation completes, the below message is displayed

```

Starting Entity Configuration
Calling WLST
Initializing WebLogic Scripting Tool (WLST) ...
Welcome to WebLogic Server Administration Scripting Shell
Type help() for help on available commands
Connecting to t3://100.76.133.230:7001 with userid weblogic ...
Successfully connected to Admin Server "AdminServer" that belongs to domain "OBDX211TEST".
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 OBDXBU2_B1A1
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
OBDXBU2_B1A1 created successfully.

Exiting WebLogic Scripting Tool.

Entity successfully configured.

```

Post successful installation refer to “Section 8: Post Installation steps” for manual steps to be performed for UBS additional entity (sub-section : Oracle FLEXCUBE Universal Banking (OBAPI with UBS)).

If an entity code belongs to Third-party host following screen will appear:

```

[obdx@obdx_2022 OBDX_Installer]$ python3 runInstaller.py
Execution of DB script for OBDXBU4 started
Executed DIGX_FW_CONFIG_ALL_0.sql successfully
Execution completed.

```

No additional steps/ configuration are required.

If an entity code belongs to Oracle FLEXCUBE Core Banking host following screen will appear:

```

Enter the FCORE DB hostname :
>>

Enter the FCORE DB port :
>>

Enter the FCORE 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 the FCORE DB hostname :
>>mumasa012.in.oracle.com
Valid.

Enter the FCORE DB port :
>>1520
Valid.

Enter the FCORE SID :
>>obdxhst.in.oracle.com
Valid.

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

Enter the username with 'sys' privileges :
>>sys
Valid.

Enter password for the user with sys privileges :
>>*****
Valid.

Enter existing weblogic admin password :
>>*****
Valid.

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

```

Enter below details:

- Hostname of the FCORE database host server
- Port of the FCORE database host server
- FCORE 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 FCORE schema would be created
- Weblogic console administrator user password

```
Enter the existing FCR schema name :
>>

Enter the existing FCUBS schema name :
>>

Enter new FCORE schema name :
>>

Enter new schema password :
>>

Use (r/i) keys to navigate between questions and press 'enter' after editing them
```

```
Enter the existing FCR schema name :
>>FCRHOST
Valid.
Enter the existing FCUBS schema name :
>>FCRUBSHOST
Valid.
Enter new FCORE schema name :
>>FCRHSTTST
Valid.
Enter new schema password :
>>*****
Valid.

Use (r/i) keys to navigate between questions and press 'enter' after editing them
```

Enter below details:

- EXISTING FCORE HOST schema name
- EXISTING FCORE FCUBS schema name
- Complete EHMS (HostInterface) schema name you want installer to create as new schema
- Password for New EHMS schema

Installation status for FCORE Add entity

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

```
[obdx211test@obdx211test ~]$ python3 runInstaller.py

Starting FCORE Database Installation...
Creating Tablespace...
Tablespace Created
Creating User...
User Created
Creating Role...
Roles Created
Executing Grants...
FCORE Scripts execution on progress...Please hold on it might take sometime
Scripts execution Successfully
SUCCESSFULLY installed FCORE database
Executed DIGX_FW_CONFIG_ALL_O.sql successfully
```

```
Starting Entity Configuration
Calling WLST

Initializing WebLogic Scripting Tool (WLST) ...

Welcome to WebLogic Server Administration Scripting Shell

Type help() for help on available commands

Connecting to t3://100.76.133.230:7001 with userid weblogic ...
Successfully connected to Admin Server "AdminServer" that belongs to domain "OBDX211TEST".

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 OBDXBU3_B1A1
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
OBDXBU3_B1A1 created successfully.

Exiting WebLogic Scripting Tool.

Entity successfully configured.
```

No additional steps/ configuration are required.

Post successful installation refer to “Section 8: Post Installation steps” for manual steps to be performed for OBPM additional entity (sub-section: Oracle FLEXCUBE Universal Banking with Oracle Banking Payments (OBAPI with OBPM)).

12. Multi-entity installation using Silent Mode

This chapter describes how to run the OBAPI 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 OBAPI software installation (or has ownership on Oracle Weblogic home directory)

Steps for Silent-Mode Installation

- Set the environment variables, as shown below.

```

OBDX_Installer]$ export Entity_Code=OBDX_BU7
OBDX_Installer]$ export SCHEMA_PASS=welcomel
OBDX_Installer]$ export ENTITY_EHMS_DATABASE_HOSTNAME=hostname.in.oracle.com
OBDX_Installer]$ export ENTITY_EHMS_DATABASE_PORT=1520
OBDX_Installer]$ export ENTITY_EHMS_DATABASE_SID=obdxdb.in.oracle.com
OBDX_Installer]$ export ENTITY_EHMS_DBA_DIRECTORY_NAME=TBS_DIR
OBDX_Installer]$ export ENTITY_EHMS_DATABASE_SYS_USER=sys
OBDX_Installer]$ export ENTITY_EHMS_DATABASE_SYS_PASS=welcomel
OBDX_Installer]$ export ENTITY_EHMS_SCHEMA_NAME=welcomel
OBDX_Installer]$ export ENTITY_EHMS_SCHEMA_PASS=welcomel
OBDX_Installer]$ export ENTITY_EHMS_HOST_SCHEMA_NAME=FCUBS140
OBDX_Installer]$ export ENTITY_EHMS_HOST_SCHEMA_NAME_PASS=welcomel
OBDX_Installer]$ export WLS_DOMAIN_PASS=welcomel
OBDX_Installer]$ export ENTITY_EHMS_HOST_SCHEMA_NAME_PASS=FCUBS140
OBDX_Installer]$ export ENTITY_EHMS_CCY=GB
OBDX_Installer]$ python runInstaller.py --silent --addEntity
  
```

Below parameters should be set in environment variables

| | Parameter | Description | Example |
|--|--------------------------------------|--|---|
| Environment variables to set for flavor: FCORE UBS (14.4.0.0.0 release) OBPM (14.4.0.0.0 release) | Entity_Code | Entity code which has been entered from screen | export Entity_Code=OBDX_BU7 |
| | SCHEMA_PASS | Password for existing OBAPI schema | export SCHEMA_PASS=devops#obapi182 |
| | ENTITY_EHMS_DATABASE_HOSTNAME | Hostname of the EHMS HOST database host server | export ENTITY_EHMS_DATABASE_HOSTNAME=xx.xx.xx.xx |

| | Parameter | Description | Example |
|--|--|---|--|
| | ENTITY_EHMS_DATABASE_PORT | Port of the EHMS HOST database host server | export ENTITY_EHMS_DATABASE_PORT=1521 |
| | ENTITY_EHMS_DATABASE_SID | EHMS Host database Service Name | export ENTITY_EHMS_DATABASE_SID=obapidb.in.oracle.com |
| | ENTITY_EHMS_DATABASE_DIRECTORY_NAME | Oracle Directory name in which you want the EHMS (HostInterface) schema datafile (dbf). Enter only the name and NOT the path | export ENTITY_EHMS_DATABASE_DIRECTORY_NAME=TBS_DIR |
| | ENTITY_EHMS_DATABASE_SYS_USER | Username with 'sys' privileges | export ENTITY_EHMS_DATABASE_SYS_USER=sys |
| | ENTITY_EHMS_DATABASE_SYS_PASS | Password for EHMS sys user | export ENTITY_EHMS_DATABASE_SYS_PASS=devops@sys |
| | ENTITY_EHMS_SCHEMA_NAME | Complete EHMS (HostInterface) schema name you want installer to create as new schema. | export ENTITY_EHMS_SCHEMA_NAME=OBDXEHMS |
| | ENTITY_EHMS_SCHEMA_PASS | Password for new EHMS schema on EHMS HOST database | export ENTITY_EHMS_SCHEMA_PASS=devops#ehms |
| | ENTITY_EHMS_HOST_SCHEMA_NAME | EXISTING EHMS Host schema name | export ENTITY_EHMS_HOST_SCHEMA_NAME=EHMSHOST |

| | Parameter | Description | Example |
|--|--|---|--|
| | ENTITY_EHMS_HOST_SCHEMA_NAME_PASS **This parameter is only required for UBS & OBPM Host | Password of existing HOST EHMS schema (Existing) | export ENTITY_EHMS_HOST_SCHEMA_NAME_PASS=ehmshst |
| | WLS_DOMAIN_PAS S | Password for Weblogic admin console | export WLS_DOMAIN_PASS=weblogic182 |
| | ENTITY_EHMS_CCY **This parameter is only required for UBS & OBPM Host | Country Code for new or additional entity home branch | export ENTITY_EHMS_CCY=GB |
| | ENTITY_EHMS_FCORE_FCUBS_SCHEMA_NAME **This parameter is only required for FCORE | FCORE-FCUBS HOST schema name | export ENTITY_EHMS_FCORE_FCUBS_SCHEMA_NAME=FCRUBSHOST |
| Environment variables to set for flavor: OBAPI (Third-party HOST) | Entity_Code | Entity code which has been entered from screen | export Entity_Code=OBDX_BU1 |
| | SCHEMA_PASS | Password for existing OBAPI schema | export SCHEMA_PASS=welcome1 |

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

```

[devops@ /]$
[devops@ /]$ export Entity_Code=OBDX_BU7
[devops@ /]$ export SCHEMA_PASS=devops#obdx182
[devops@ /]$ export ENTITY_EHMS_DATABASE_HOSTNAME=XX.XX.XX.XX
[devops@ /]$ export ENTITY_EHMS_DATABASE_PORT=1521
[devops@ /]$ export ENTITY_EHMS_DATABASE_SID=obdxdb.in.oracle.com
[devops@ /]$ export ENTITY_EHMS_DBA_DIRECTORY_NAME=TBS_DIR
[devops@ /]$ export ENTITY_EHMS_DATABASE_SYS_USER=sys
[devops@ /]$ export ENTITY_EHMS_DATABASE_SYS_PASS=devops@sys
[devops@ /]$ export ENTITY_EHMS_SCHEMA_NAME=OBDXEHMS
[devops@ /]$ export ENTITY_EHMS_SCHEMA_PASS=devops#ehms
[devops@ /]$ export ENTITY_EHMS_HOST_SCHEMA_NAME=FCUBS140
[devops@ /]$ export ENTITY_EHMS_HOST_SCHEMA_NAME_PASS=FCUBS140HST
[devops@ /]$ export WLS_DOMAIN_PASS=weblogic182
[devops@ /]$ export ENTITY_EHMS_CCY=GB
[devops@ /]$ python runInstaller.py --silent --addEntity

```

Installation Status in case of Oracle FLEXCUBE Core Banking, Oracle FLEXCUBE Universal Banking, Oracle FLEXCUBE Universal Banking with Oracle Banking Payments

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

```

Starting Entity Configuration
Calling WLST
Initializing WebLogic Scripting Tool (WLST) ...
Welcome to WebLogic Server Administration Scripting Shell
Type help() for help on available commands
Connecting to t3://100.76.133.230:7001 with userid weblogic ...
Successfully connected to Admin Server "AdminServer" that belongs to domain "OBDX211TEST".
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 OBDXBU2_B1A1
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
OBDXBU2_B1A1 created successfully.
Exiting WebLogic Scripting Tool.
Entity successfully configured.

```

Post successful installation refer to “Section 8: Post Installation steps” for manual steps to be performed for

- UBS additional entity (sub-section : Oracle FLEXCUBE Universal Banking Solution (OBAPI with UBS))
- OBPM additional entity (sub-section: Oracle FLEXCUBE Universal Banking with Oracle Banking Payments (OBAPI with OBPM))

Installation Status in case of other hosts as Add Entity

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

- THP(third party as entity)

```
[devops@... CSOX_Installer]$ python runInstaller.py --silent --addEntity
Password validated for CSOX_183INS
Execution of DB scripts for CSOX_BUI started
Executed BIXX_FW_CONFIG_ALL_0.sql successfully
Execution completed.
```

13. OBAPI Product Security

Refer below document for OBAPI product security configuration

Oracle Banking APIs Security Guide

[Home](#)

14. OBAPI Product – Best Practice

14.1 Tablespace for AUDIT INDEX

The index's used by AUDIT table should be moved into new tablespace from current AUDIT tablespace.

Follow below steps

- Create a new tablespace
- Give quota to OBAPI schema

```
alter user <OBAPI_SCHEMA> quota unlimited on  
<OBAPI_AUDIT_INDEX_TABLESPACE>;
```

- Drop and create below index by mapping the newly created tablespace
 - OBAPI_Installer\installables\db\OBAPI\ddl\oracle\audit\
IDX_DIGX_AL_API_AUDIT_LOGGING.sql
 - OBAPI_Installer\installables\db\OBAPI\ddl\oracle\audit\
IDX_DIGX_AL_API_AUDIT_LOG_HIST.sql
 - OBAPI_Installer\installables\db\OBAPI\ddl\oracle\audit\IDX_DIGX_AL_AUDIT_LOGGIN
G.sql
 - OBAPI_Installer\installables\db\OBAPI\ddl\oracle\audit\
IDX_DIGX_AL_AUDIT_LOGGING_1.sql
 - OBAPI_Installer\installables\db\OBAPI\ddl\oracle\audit\
IDX_DIGX_AL_AUDIT_LOGGING_2.sql
 - OBAPI_Installer\installables\db\OBAPI\ddl\oracle\audit\
IDX_DIGX_AL_AUDIT_LOGGING_3.sql
 - OBAPI_Installer\installables\db\OBAPI\ddl\oracle\audit\
IDX_DIGX_AL_AUDIT_LOGGING_4.sql
 - OBAPI_Installer\installables\db\OBAPI\ddl\oracle\audit\IDX_DIGX_AL_AUDIT_LOGGIN
G_DETAILS.sql

[Home](#)

15. JPA and OBAPI multi-cluster

In a multi-cluster environment, below JPA related changes should be implemented

- Go to Weblogic server
- Open config\META-INF\persistence.xml
- Append below configuration for all data-source

```
<property name="eclipselink.cache.coordination.jms.host" value="t3://<WEBLOGIC-HOST-NAME OR IP>:<MANAGED-SERVER-PORT>/" />
```

Replace with respective hostname or IP and Port no (this should be the managed server port number which hosts the JPA queues in the cluster)

Key pointers;

- Multi-cluster here refer's to :
 - Single cluster with multiple nodes (2 or more physical servers hosting the OBAPI product)
 - 2 or more Weblogic cluster's
- Ensure these (persistence.xml) changes are available to all Managed server by maintaining appropriate classpath

[Home](#)


16. Troubleshoot Overview

This section describes how to troubleshoot OBAPI 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:



```

Oracle Banking Digital Experience

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

```

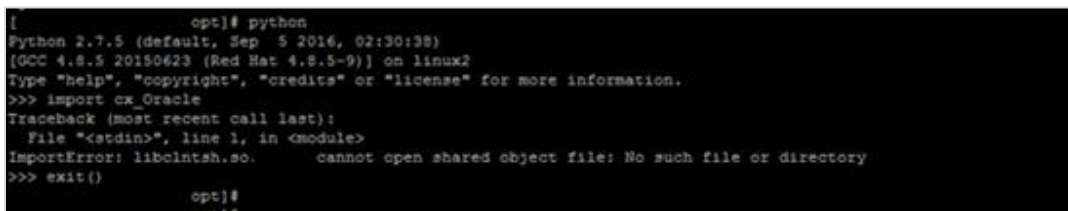
Try one of the following:

- 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.11.1: cannot open shared object file: No such file or directory
>>> exit()

[ opt]#

```

Execute the below command:

```
export LD_LIBRARY_PATH=/usr/lib/oracle/19.10/client64/lib:$LD_LIBRARY_PATH
```

```
python
```

```
import cx_Oracle
```

```
cx_Oracle.__version__
```

```
[devops@ /]$ export LD_LIBRARY_PATH=/usr/lib/oracle/18.3/client64/lib:$LD_LIBRARY_PATH
[devops@ /]$ python
Python 2.7.5 (default, Apr 11 2018, 17:41:36)
[GCC 4.8.5 20150623 (Red Hat 4.8.5-28.0.1)] on linux2
Type "help", "copyright", "credits" or "license" for more information.
>>> import cx_Oracle
>>> cx_Oracle.__version__
'7.3.0'
```

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 13:45:41,051 DEBUG Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/MSTFORMATS.sql successful
2017-07-13 13:45:41,081 DEBUG Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/mstdevice.sql successful
2017-07-13 13:45:41,747 DEBUG Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/MSTENTITYUSERYPELANG.sql successful
2017-07-13 13:45:41,796 ERROR Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/mstlang.sql failed
```

Check the detailed log of the failed SQL file at <OBAPI 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:

```
Policy seeding failed. Please see logs for more details
```

Try one of the following:

Check if Entitlement.log is created on following path <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/ and contains any SEVERE errors for Entitlement policy seeding.

Check if Task.log is created on following path <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/ and contains any SEVERE errors for Task policy seeding.

Check if Dashboard_seed.log is created on following path <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/ and contains any SEVERE errors for Dashboard policy seeding.

- Check the seedPolicies.log in <OBAPI INSTALLER DIR>/ExecInstances/<DDMonthHHMM>/logs/db/ directory if it contains any runtime errors generated during execution of the policies Seeding in OBAPI schema

Fix the problem by following below steps:

- Login to OBAPI installer server
- Over-write the policies files (Day0Policy.csv; Entitlement.csv; Resources.csv and Task.csv) from OBAPI Product zip into <OBAPI INSTALLER DIR>/installables/policies directory
- Browse to <OBAPI INSTALLER DIR>\installables\policies
- Edit Entitlement_log4j.properties , Task_log4j.properties & Dashboard_seed_log4j.properties . Replace <logs_path> with directory where policy seeding logs will be generated

e.g

```

#####
# default file output is in user's home directory.
#java.util.logging.FileHandler.pattern = %h/java%.log
java.util.logging.FileHandler.pattern = <logs_path>/Task.log
java.util.logging.FileHandler.limit = 50000
java.util.logging.FileHandler.count = 1
#java.util.logging.FileHandler.formatter = java.util.logging.XMLFormatter
java.util.logging.FileHandler.formatter = java.util.logging.SimpleFormatter
java.util.logging.SimpleFormatter.format= [%1$tc] %4$s: %2$s - %5$s %6$s%n

# Limit the message that are printed on the console to INFO and above.
java.util.logging.ConsoleHandler.level = OFF
java.util.logging.ConsoleHandler.formatter = java.util.logging.SimpleFormatter

#####
# default file output is in user's home directory.
#java.util.logging.FileHandler.pattern = %h/java%.log
java.util.logging.FileHandler.pattern = /scratch/Task.log
java.util.logging.FileHandler.limit = 50000
java.util.logging.FileHandler.count = 1
#java.util.logging.FileHandler.formatter = java.util.logging.XMLFormatter
java.util.logging.FileHandler.formatter = java.util.logging.SimpleFormatter
java.util.logging.SimpleFormatter.format= [%1$tc] %4$s: %2$s - %5$s %6$s%n

```

- Run below command manually if “SEVERE” error logs are found in Task.log

```
java -jar -Djava.util.logging.config.file='<logs.properties>' com.ofss.digx.utils.feed.data.task.jar
"Task.csv" "oracle.jdbc.OracleDriver,<OBAPI Schema name>,<OBAPI Schema
password>,jdbc:oracle:thin:@<OBAPI DB hostname or IP>:<OBAPI DB listener port>/<OBAPI
Service Name>"
```

for e.g.:

```
java -jar -Djava.util.logging.config.file='Task_log4j.properties'
com.ofss.digx.utils.feed.data.task.jar 'Task.csv'
"oracle.jdbc.OracleDriver,OBAPI_THP181,Welcome#1,jdbc:oracle:thin:@
xx.xx.xx.xx:1521/OBAPI"
```

- Run below command manually if “SEVERE” error logs are found in Entitlement.log

```
java -jar -Djava.util.logging.config.file='<logs.properties>'
com.ofss.digx.utils.entitlement.feed.data.jar 'Resources.csv,Entitlement.csv,Day0Policy.csv'
'KERNEL' "oracle.jdbc.OracleDriver,<OBAPI Schema name>,<OBAPI Schema
password>,jdbc:oracle:thin:@<OBAPI DB hostname or IP>:<OBAPI DB listener port>/<OBAPI
Service Name>"
```

for e.g.:

```
java -jar -Djava.util.logging.config.file='Entitlement_log4j.properties'
com.ofss.digx.utils.entitlement.feed.data.jar 'Resources.csv,Entitlement.csv,Day0Policy.csv'
'KERNEL' "oracle.jdbc.OracleDriver,OBAPI_THP201,Welcome#1,jdbc:oracle:thin:@
xx.xx.xx.xx:1521/OBAPI"
```

Note: Please remove the space between multiple csv's if there is any.

- Run below command manually if “SEVERE” error logs are found in Dashboard_seed.log

```
java -jar -Djava.util.logging.config.file='<logs.properties>' com.ofss.digx.utils.dashboard.jar
'<path>/ dashboard_json' "oracle.jdbc.OracleDriver,<OBAPI Schema name>,<OBAPI Schema
password>,jdbc:oracle:thin:@<OBAPI DB hostname or IP>:<OBAPI DB listener port>/<OBAPI
Service Name>"
```

for e.g.:

```
java -jar -Djava.util.logging.config.file= Dashboard_seed_log4j.properties'
com.ofss.digx.utils.dashboard.jar '/installables/policies/dashboard_json'
"oracle.jdbc.OracleDriver,OBAPI_THP201,Welcome#1,jdbc:oracle:thin:@xx.xx.xx.xx:1521/OBAPI
"
```

- Post successfully execution, restart Managed server.

[Home](#)