Installation Guide Oracle Banking Digital Experience Patchset Release 22.1.2.0.0

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Table of Contents

1.	P	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.	In	ntroduction	2-1
	2.1	Purpose of the Document	2-1
3.	Ρ	Prerequisites	3-1
4.	In	nstallation	4-1
5.	In	nstallation using Silent Mode	5-1
6.	In	nstaller Verification	6-1
7.	In	nstaller Scope	7-1
8.	P	Post Installation Steps	8-1
9.	0	OBDX Logging Configuration	9-1
10)_	OBDX Product Verification	10–1
11		Multi Entity	11–1
12	2.	Multi-entity installation using Silent Mode	12–1
13	5.	OBDX Product Security	13–1
14	-	OBDX Product – Best Practice	14–1
	14.1	1 Tablespace for AUDIT INDEX	14–1
15	5.	JPA and OBDX 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 <u>Related Information Sources</u>

For more information on Oracle Banking Digital Experience Patchset Release 22.1.2.0.0, refer to the following documents:

Oracle Banking Digital Experience Installation Manuals



2. Introduction

2.1 Purpose of the Document

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

It includes:

- Reference to prerequisites software installation required for OBDX & OBDX installer
- Setup of OBDX with Oracle's own Core Banking and Origination Products along with Thirdparty 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

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

For OBDX pre-requisite software setup refers document "Oracle Banking Digital Experience Installer Pre-Requisite Setup Manual".

Installer Pre-requisite verification

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

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

Oracle Instant client

Step 1: Login using root user.

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

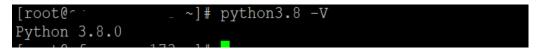
rpm -qa | grep oracle

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



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__

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@cl_______172 Python-3.8.0]# 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				
	170	ה וו		

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

pip3.8 install --upgrade pip

pip3.8 install cx-Oracle==8.3

root@o. _ Python-3.8.0]# pip3.8 install cx-Oracle==8.1.0 ..., _... / Sollecting cx-Oracle==8.1.0 Downloading https://files.pythonhosted.org/packages/5f/3a/f63cf2cee42b32874af13f0a2deb5d4a1448b2fc39bff36ab1le3369f00c/cx_Oracle-8.1.0-cp38-cp38-manylinux1 x86_64.wh1 (825kB) | 829kB 138kB/s | installing collected packages: cx-Oracle uccessfully installed cx-Oracle-8.1.0

pip3.8 install urwid==2.1.2

[root@c: ~~ 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)	
Jsing legacy 'setup.py install' for urwid, since packag	ge '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 "<OBDX INSTALLER DIR>/core/config"
- Open the "installer.properties" file to maintain key configurations for BASE ENTITY (OBDX_BU)



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
	OBDX_DATABASE_HOST NAME	Enter the hostname of the database server which would host the database schema for OBDX	abc.xyc.com
	OBDX_DATABASE_PORT	Enter the port number of the database listener	1521
	OBDX_DATABASE_SID	Enter the Oracle Service Name for database instance	obdxdb.in.oracle .com
	OBDX_DATABASE_SYS_U SER	Enter the username with 'sys' privileges	Sys
DB details (for OBDX	POST_FIX	For OBDX schema name like "OBDX_DEV" POST FIX is 'DEV'. SHOULD BE IN UPPERCASE ONLY.	DEV
schema)	OBDX_DBA_DIRECTORY_ NAME	Enter the directory name in which you want the OBDX schema tablespace datafile to be created. Enter Logical name (i.e. DIRECTORY_NAME column) from DBA_DIRECTORIES table NOT the physical path.	OBDX_DIR
	OBDX_AUDIT_DBA_DIREC TORY_NAME	Enter the directory name in which you want the OBDX AUDIT tablespace datafile to be created. Enter Logical name (i.e. DIRECTORY_NAME column) from DBA_DIRECTORIES table NOT the physical path.	OBDX_AUDIT_ DIR



Component	Parameter	Description	Example
	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 OBDX- EXT (B1A1) HostInterfaceschema name you want installer to create as new schema.	EHMS182S CHEMA
		SHOULD BE IN UPPERCASE ONLY.	
EHMS DB details (to be configured only in-case of FLAVOR as UBS,FCORE &OBPM)	EHMS_DBA_DIRECTORY_NAME	Enter the directory name in which you want the OBDX- EXT (B1A1) schema tablespace datafile to be created. Enter Logical name (i.e. DIRECTORY_NAME column) from DBA_DIRECTORIES table NOT the physical path.	OPATCH_L OG_DIR
	EHMS_DATABASE_SYS_USER	Enter the username with 'sys' privileges	Sys
	EHMS_DATABASE_SID	Enter the EHMS database Service Name	obdxehms.in .oracle.com
	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



			Install		
Component	Parameter	Description	Example		
	MIDDLEWARE_HOME	Oracle Weblogic Server home path. Example /home/obdxuser/Oracle/Middlewar e/Oracle_Home - where you have sub-directories like wlserver,oracle_common etc.	/home/obdxuser /Oracle/Middlew are/Oracle_Ho me		
	JAVA_HOME				
	FLYWAY_HOME	Path where FLYWAY is installed	/home/obdxuser /flyway-8.3		
	DB_WITH_FLYWAY_E XECUTION	Database execution type	YES or NO		
	GRADLE_HOME	Path where GRADLE is installed	/home/obdxuser /gradle-7.9		
	MavenRepositoryUrl	Path where maven-repo under installer folder	\$installerDir/inst allables/maven- repo		
Weblogic server	GradleRepositoryUrl	Path where gradle-repo under installer folder	\$installerDir/inst allables/gradle- repo		
details	INSTALLATION_HOME	Path where OBDX is to be installed. All configuration files will be copied as a sub-directory "config" under this directory. DO NOT KEEP INSTALLATION_HOME AS MiddlewareHome.	/home/obdxuser /obdx		
	WLS_DOMAIN_PATH	Path where OBDX Weblogic domain should be created. Users can now enter custom path as per their requirements.	/home/obdxuser /domains		
	WLS_CLUSTER_NAME	Name of cluster; this cluster would have one single managed server.	obdx_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	7001		



1		
	administration console of the Weblogic server. Generally port 7001 is used as the AdminServer port. Custom port are supported.	
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 OBDX domain. Generally, 5556 is utilized as Node Manager Port. Custom ports are supported.	5556
WLS_MS_SERVER_NA ME	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_PO RT	Managed Server Port. Managed server will utilize this port for hosting OBDX components and associated resources. Custom ports are supported.	9001
WLS_DOMAIN_NAME	Enter Weblogic Domain name.	obdx_domain1
WLS_DOMAIN_ADMIN _USER	Domain user ID. The user id will be used to access the Weblogic Administration console.	weblogic
WLS_JMS_FILEUPLOA D_PS (to be configured for all OBDX 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/obdx/ FileUpload
WLS_JMS_AUDIT_PS (to be configured for all OBDX 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/obdx/A udit



	WLS_JMS_REPORT_P S (to be configured for all OBDX 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/obdx/R eports
	WLS_JMS_JPA_PS (to be configured for all OBDX supported HOST)	Set the paths for the persistent store of the JPA JMS modules. DO NOT KEEP path as INSTALLATION_HOME or as sub directory inside INSTALLATION_HOME.	/scratch/obdx/J PA
	WLS_JMS_EXTSYSRE CEIVER_PS (to be configured for all OBDX 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/obdx/R eceiver
	WLS_JMS_EXTSYSSE NDER_PS (to be configured for all OBDX 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/obdx/S ender
OBDX Application Administrator user details	OBDX_ADMIN_USERN AME	Set username for OBDX application Admin user. USERNAME IS CASE SENSITIVE. In-case of OUD as provider username should be the User ID mentioned during user creation steps mentioned in pre-requisite document (refer To create User and mapping it to the Group section)	superadmin
	OBDX_ADMIN_EMAIL	Enter the Email ID for OBDX application admin user.	superadmin@or acle.com
	OBDX_ADMIN_CONTA CT_NO	Enter the mobile number for OBDX application admin user. COUNTRY CODE IS MUST.	+911234567890

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

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



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

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



Installation Steps:

[devops@obd total 8	lxw]	ls OBI	DX_In:	stalle	er]\$	ls	-la	
drwxrwxrwx	6	1002	1012	118	May	4	15:40	
drwxr-xr-x	5	1002	1012	77	May	4	15:39	
drwxrwxrwx	2	1002	1012	6	May	4	09:03	ExecInstances
rwxrwxrwx	1	1002	1012	0	May	4	09:05	init .py
lrwxrwxrwx	5	1002	1012	60	May	4	09:05	core
lrwxrwxrwx	5	1002	1012	69	May	4	09:03	framework
lrwxrwxrwx	17	1002	1012	223	May	4	11:11	installables
rwxrwxrwx	1	1002	1012	4372	May	4	09:05	runInstaller.py
devops@obd	lxwl	ls OBI	DX_In:	stalle	er]\$	pyt	chon3.8	8 runInstaller.py

• From your terminal navigate to <OBDX INSTALLER DIR>/

• Enter the following command

python3.8 runInstaller.py

Orac	le Banking Digital Exper	ience	Installer v22.2.0.0.0
Please select the installation type	from the options below		
	OBDX Installation		
	New Entity Creation		
	quit		
Use (†/1) to select between options			

Select the appropriate host system for Installation



Installation

	Oracle Banking	Digital Experience		Installer v22.2.0.0.0
Please select t		s listed below :		
	Oracle FLEXCUE	E Universal Banking		
		UBE Core Banking		
Back			Quit	
Use (†/1) to select between options				

Oracle FLEXCUBE Universal Banking (OBDX with UBS)

Select Installation mode

	Oracle Banking Digital Experience		Installer v22.2.0.0.0
Please select the inst	allation mode from the options listed below :		
	New Installation		
	Reinstall		
back		quit	
Use (+/i) to select between options			

Mode of Installation - New Installation

New installation

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



_							
			Oracle Bank		l Experience		Installer v22.2.0.0.0
Pl (d di	ease select the deployment moc igx-common.war,digx-admin.war, gx-shared-libs.war will be dep	ie from the o digx-infra.w bloyed by def	options listed below : war,digx-eurekaserver.war,com. fault.)	ofss.digx.	connector.rar,dig	x-coherence.war,digx-aut	h.war,digx-extxfacesimulator.war,
[<mark>X</mark>] digx-cms		digx-payments				
[X							
[X] digx-creditfacility						
[X							
[X] digx-liquiditymanagement						
[X] digx-loanapplication						
	submit		back			quit	
	Use (+/1) to select between or	otions					

Type of Deployment

Select the wars which you want to deploy. Some wars will be deployed by default. There are in total 25 wars.

Below screens would appear to taken end-user input

>>
Valid.
Enter password for the OBDX_schema 'OBDX_OBDX22DOM1' :
»·····
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 OBFM schema 'COD144_ITR' (Existing) :
»······
Valid.
Enter password for the OBFM schema 'BIA1_OBDX22DOM1' (new) :
»·····
Valid.
Enter password for the Admin User 'superadmin' :
>*******
Valid. Jse (1/i) keys to navigate between questions and press 'enter' after editing them

Enter below passwords:

- SYS privilege user password where OBDX schema would be created
- OBDX schema password
- Weblogic console administrator user password
- SYS privilege user password where UBS host schema exists



- Existing UBS HOST schema password
- New OBDX EHMS schema password
- Password for OBDX 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 (OBDX with THP)

Post Third Party System selection, enter the required credentials details

Oracle Banking Digital Experience	Installer v22.2.0.0.
>>****	
Valid.	
Enter password for the OBDX schema 'OBDX_TESTINSTINNV2' :	
»»••••••	
Valid.	
Enter password for the weblogic domain user id 'weblogic' :	
»	
Valid.	
Enter password for the Admin User 'superadmin' :	
»»*******	

Enter below passwords:

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

Oracle FLEXCUBE Core Banking (OBDX with FCORE)

Post Oracle FLEXCUBE Core Banking, enter the required credentials details



2,
Valid.
Enter password for the OBDX schema 'OBDX_OBDX221DEV' :
Shimm
Valid.
Enter password for the weblogic domain user id 'weblogic' :
»······
Valid.
2,
Valid.
Enter password for the FCORE schema 'BIA1_OBEX221DEV' (new) :
»······
Valid.
Enter password for the Admin User 'superadmin' :
»······
Valid.
Use $(1/1)$ keys to navigate between questions and press "enter" after editing them

Enter below passwords:

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

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

Enter the required credentials details



»
Valid.
Enter password for the OBDX schema 'OBDX_OBDX22DOM1' :
»·····
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 OBFM schema 'COD144_ITR' (Existing) :
»······
Valid.
Enter password for the OBFM schema 'BIA1_OBDX22DOM1' (new) :
»·····
Valid.
Enter password for the Admin User 'superadmin' :
»······
Valid. Use ($_{1/1}$) keys to navigate between questions and press 'enter' after editing them

Enter below passwords:

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

Mode of Installation – Reinstall

Please select the installation mode from the options listed below :				
	New Installation			
	Reinstall			
		quit		

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

Pre-requisites



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

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

Key pointers

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

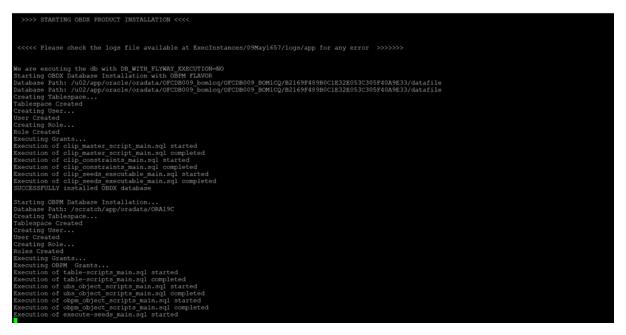
Note: All input screens are similar to new installation option and as per the host system opted.



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.

If DB_WITH_FLYWAY_EXECUTION set to NO



If DB_WITH_FLYWAY_EXECUTION set to YES

[devops@obdxwls OBDX_Installer]\$ python3.8 runInstaller.py ['BASE', 'OBPM', 'New', 'MODULE']
>>>> STARTING OBDX PRODUCT INSTALLATION <<<<
<<<< Please check the logs file available at ExecInstances/09May1817/logs/app for any error >>>>>>
We are excuting the db with DB_WITH_FLYWAY_EXECUTION=YES Starting OBDX Database Installation with OBEW FLAVOR Database Path: /u02/app/oracle/oradata/OFCDB009_bomlcq/OFCDB009_BOM1CQ/B2169F489B0C1E32E053C305F40A9E33/datafile Creating Tablespace Tablespace Created Creating User User Created Creating Role Role Created Executing Grants OBDX Scripts execution on progessPlease hold on it might take sometime OBDX Scripts execution Successfully SUCCESSFULLY installed OBDX database
Starting OBPM Database Installation Database Path: /scratch/app/oradata/ORA19C Creating Tablespace C. Tablespace Created User Created Creating Role Roles Created Executing Grants Executing OBPM Grants Executing OBPM Grants



Database Path: /u02/app/oracle/oradata/OFCDB009_bomlcq/OFCDB009_BCM1CQ/B2169F489B0C1E32E053C305F40A9E33/datafile Database Path: /u02/app/oracle/oradata/OFCDB009_bomlcq/OFCDB009_BCM1CQ/B2169F489B0C1E32E053C305F40A9E33/datafile Creating Tablespace Tablespace Created Creating User User Created Executing Grants Executing Grants Execution of clip_master_script_main.sql started Execution of clip_constraints_min.sql started Execution of clip_constraints_min.sql started Execution of clip_seds_executable_main.sql completed Execution of clip_seds_executable_main.sql completed
Starting OBFM Database Installation Database Path: /scratch/app/oradata/ORA19C Creating Tablespace Tablespace Created Creating Role Roles Created Executing Grants Executing OBFM Grants Executing OBFM Grants Execution of table-scripts_main.sql started Execution of table-scripts_main.sql started Execution of table-scripts_main.sql completed Execution of table-scripts_main.sql started Execution of bus_object_scripts_main.sql started Execution of obm_object_scripts_main.sql completed Execution of of execute-seeds_main.sql started Execution of execute-seeds_main.sql started Execution of execute-seeds_main.sql started
Execution of obpa-seeds main.sql completed SUCCESSFULLY installed OBPM database Executed DIGK FW, CONFIG ALL, 0.sql successfully Executed DIGK FW, CONFIG USA, B.sql successfully Executed DIGK FW, CONFIG USA, D.sql successfully Executed DIGK FW, CONFIG USA, D.sql successfully Policy seeding execution processing

When the installation completes, the below message is displayed



Home

5. Installation using Silent Mode

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

What is silent-mode installation?

During installation in silent mode, the installation program reads the details for your configuration 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 "<OBDX 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

[obdxdevops@ofss-mum-715 OBDX	Installer]\$ export	FLAVOUR=OBPM
[obdxdevops@ofss-mum-715 OBDX	Installer]\$ export	MODE-New
[obdxdevops@ofss-mum-715 OBDX	Installer]\$ export	DB SYS PASSWORD=welcome1
[obdxdevops@ofss-mum-715 OBDX	Installer]\$ export	SCHEMA PASS=welcome1
[obdxdevops@ofss-mum-715 OBDX		
[obdxdevops@ofss-mum-715 OBDX	Installer]\$ export	DomainPassword=welcome1
		EHMS_DATABASE_SYS_PASS=ECM_sn12#
[obdxdevops@ofss-mum-715 OBDX	Installer]\$ export	EHMS HOST SCHEMA NAME FASS=COD144 ITRASDF
[obdxdevops@ofss-mum-715 OBDX		
[obdxdevops@ofss-mum-715 OBDX		
	[Installer]\$ export	wars_to_deploy=digx-cms.war,digx-corporateloan.war,digx-edx.war,digx-payments.war,digx-pfm.war,digx-pm.war,d
igg-retail.war		

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 UBS for Oracle FLEXCUBE Universal Banking 146.0.0.0 (OBDX with UBS) FCORE for Oracle FLEXCUBE Core Banking 11.8.0.0.0	export FLAVOUR=OBPM or export FLAVOUR=FCORE
		(OBDX with FCORE)	



MODE	Mode of installation.	export MODE=New
	' New ' in-case of a fresh installation of OBDX for the first run on server	or export MODE=Clean
	'Clean' in-case of an existing OBDX installation that you want to overwrite OR in case of a previously failed installation or re- installation	
DB_SYS_PASSWORD	Sys user password of OBDX database (Existing)	export DB_SYS_PASSWORD=obdx18 2sys
SCHEMA_PASS	Password for new schema on OBDX database	export SCHEMA_PASS=obdx#182
DomainPassword	Password for Weblogic Administrator console	export DomainPassword=wlsadmn
EHMS_DATABASE_SY S_PASS	Sys user password of EHMS HOST database (Existing)	export EHMS_DATABASE_SYS_PASS =obdxehmssys
EHMS_HOST_SCHEM A_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 =obdxehmshost
EHMS_SCHEMA_PASS	Password for new OBDX EHMS schema on EHMS HOST database	export EHMS_SCHEMA_PASS=obdx1 82ehms
wars_to_deploy	Mention the optional wars to be deployed	export wars_to_deploy=digx- cms.war,digx- corporateloan.war,digx- payments.war



	DBAuthPassword	Password for new OBDX Administrator user of OBDX application (In-case of OUD as provider, password should similar to one used while user creation in OUD(or User Password field))	export DBAuthPassword=obdxadmn
	FLAVOUR	Flavour for installation 'OBDX' for Third Party System 1.0 (OBDX with THP)	export FLAVOUR=OBDX
Environment variables to set for flavor:	Mode	Mode of installation. 'New' in-case of a fresh installation of OBDX for the first run on server 'Clean' in-case of an existing OBDX installation that you want to overwrite OR in case of a previously failed installation or re- installation	export MODE=New or export MODE=Clean
OBDX (Third-party HOST)	DB_SYS_PASSWORD	Sys user password of OBDX database (Existing)	export DB_SYS_PASSWORD= obdx182sys
	SCHEMA_PASS	Password for new schema on OBDX database	export SCHEMA_PASS=obdx#182
	DomainPassword	Password for Weblogic Administrator console	export DomainPassword=wlsadmn
	wars_to_deploy	Mention the optional wars to deployed	export wars_to_deploy=digx- cms.war,digx- corporateloan.war,digx- payments.war



DBAuthPassword	Password for new OBDX Administrator user of OBDX application (In-case of OUD as provider, password should similar to one used while user creation in OUD(or User Password field))	export DBAuthPassword=obdxadmn
----------------	--	-----------------------------------

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

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

Installation Status

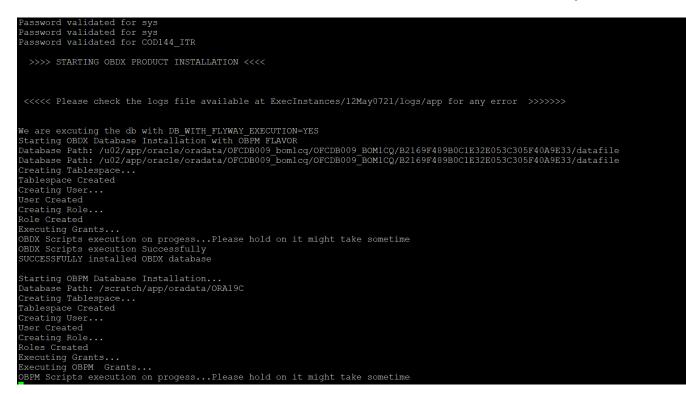
The status is displayed on the terminal to indicate the progress of the installation.

If DB_WITH_FLYWAY_EXECUTION set to NO

>>>> STARTING OBDX FRODUCT INSTALLATION <<<<
<<
We are excuting the db with DB WITH FLYWAY EXECUTION=NO
Starting OBDX Database Installation with OBPM FLAVOR
Database Path: /u02/app/oracle/oradata/OFCDB009 bomlcq/OFCDB009 BOM1CQ/B2169F489B0C1E32E053C305F40A9E33/datafile
Database Path: /u02/app/oracle/oradata/OFCDB009 bom1cg/OFCDB009 BOM1CQ/B2169F489B0C1E32E053C305F40A9E33/datafile
Creating Tablespace
Tablespace Created
Creating User
User Created
Creating Role
Role Created
Executing Grants
Execution of clip master script main.sql started
Execution of clip master script main.sql completed
Execution of clip constraints main.sql started
Execution of clip constraints main.sql completed
Execution of clip seeds executable main.sql started
Execution of clip_seeds_executable_main.sql completed
SUCCESSFULLY installed OBDX database
Starting OBPM Database Installation
Database Path: /scratch/app/oradata/ORA19C
Creating Tablespace
Tablespace Created
Creating User
User Created
Creating Role
Roles Created
Executing Grants
Executing OBPM Grants
Execution of table-scripts_main.sql started
Execution of table-scripts_main.sql completed
Execution of ubs_object_scripts_main.sql started
Execution of ubs_object_scripts_main.sql completed
Execution of obpm_object_scripts_main.sql started
Execution of obpm_object_scripts_main.sql completed
Execution of execute-seeds_main.sql started

If DB_WITH_FLYWAY_EXECUTION set to YES





When the installation completes, the below message is displayed

Gradle Build Created Successfully Starting Weblogic Domain Creation
Starting WEBLOGIC Setup and Configuration Weblogic Domain Created Successfully Senerating 2,048 bit DSA key pair and self-signed certificate (SHA256withDSA) with a validity of 9,999 days for: CN=Developer, OU=Department, O=Company, L=City, ST=State, C=CA [Storing /home/devops/domain/OBDX211TEST11/authserver.keystore]
<pre>Marning: The JCEKS keystore uses a proprietary format. It is recommended to migrate to PKCS12 which is an industry standard format using "keytool -importkeystore -src keystore /home/devops/domain/OBDX211TEST11/authserver.keystore -destkeystore /home/devops/domain/OBDX211TEST11/authserver.keystore -deststoretype pkcs12". Starting Datasource Created Successfully Starting VBS Created Successfully Starting UBS Created Successfully Starting Deployemt Creation DMS created Successfully</pre>
Successfully Setup and Configured WEBLOGIC
>>>> OBDX PRODUCT INSTALLATION COMPLETED SUCCESSFULLY <<<<
[devops@obdxwls OBDX_Installer]\$

Home



6. Installer Verification

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

Log Description	РАТН
Summarized Installer Activity Log	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/obdx_installer.log</ddmonthhhmm></obdx>
Summarized Database Logs	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/db/DB_installation.log</ddmonthhhmm></obdx>
Detailed OBDX DB Logs per SQL file	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/db/OBDX/OBDX.log</ddmonthhhmm></obdx>
Detailed EHMS schema Logs per	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/db/<ehmshost>/<ehmshost>.log</ehmshost></ehmshost></ddmonthhhmm></obdx>
SQL file (specific to EHMS host system only)	<ehmshost> - values such as; FCORE; OBPM;</ehmshost>
	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/app/app_debug.log</ddmonthhhmm></obdx>
	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/app/domain.log</ddmonthhhmm></obdx>
	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/app/datasource.log</ddmonthhhmm></obdx>
	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/app/jms.log</ddmonthhhmm></obdx>
Weblogic Configuration Logs	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/app/deployment.log</ddmonthhhmm></obdx>
	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/db/Entitlement.log</ddmonthhhmm></obdx>
	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/db/Task.log</ddmonthhhmm></obdx>
	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/db/Dashboard_seed.log</ddmonthhhmm></obdx>
Detailed OBDX policy seeding logs	Note: Check for SEVERE keyword; If found refer to Troubleshot section to re-run the policy
	<obdx dir="" installer="">/ExecInstances/<ddmonthhhmm> /logs/db/seedPolicies.log</ddmonthhhmm></obdx>
Policy seeding execution Log	



Note: Should be empty if no errors during policy execution In-case non-empty refer to Troubleshot section to re-run policy
--

Check all the logs for any errors.

<u>Home</u>

7. Installer Scope

OBDX Installer currently covers below activities:

Flavor: Third Party system (OBDX with THP)

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



Flavor: Oracle FLEXCUBE Core Banking (OBDX with FCORE)

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



Flavor	Activity	Detailed Activity List	New Installation	Reinstall
		Start AdminServer and NodeManager	\checkmark	\checkmark
	OBDX Configuration	Copy config files into OBDX Installation Home	\checkmark	$\sqrt{(\text{Delete old and copy new from installer zip)}}$



	Flavor: Oracle FLEXCUBE Universal	Banking with Oracle Banking	Payments (OBDX with OBPM)
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Flavor	Activity	Detailed Activity List	New Installation	Reinstall
		Create Tablespace	\checkmark	NA
		Create Schema and Role		(drop and recreate objects)
		Grants	\checkmark	\checkmark
	OBDX DB Setup	Load DB object (DDL's and DML's)		\checkmark
		Execute OBPM HOST specific scripts	\checkmark	\checkmark
		Compile Schema	\checkmark	\checkmark
		Policy Seeding	\checkmark	\checkmark
OBDX with OBPM (14.6.0.00 version)		Create Tablespace	\checkmark	NA
	EHMS DB Setup	Create Schema and Role	\checkmark	(drop and recreate objects)
		Grants	\checkmark	\checkmark
		Load DB object (DDL's and DML's)		\checkmark
		Compile Schema	\checkmark	\checkmark
		Create and Configure AdminServer, Machine, Managed Server and Cluster	1	1
		Configure NodeManager		\checkmark
	Weblogic Setup	Configure JDBC	\checkmark	\checkmark
	and Configuration	JMS servers, Persistent stores and JMS Modules		\checkmark
		Application Deployment	\checkmark	\checkmark
		JTA	\checkmark	\checkmark
		Enable Production Mode		



Flavor	Activity	Detailed Activity List	New Installation	Reinstall
		Start AdminServer and NodeManager	\checkmark	\checkmark
	OBDX Configuration	Copy config files into OBDX Installation Home	\checkmark	$\sqrt{(\text{Delete old and copy new from installer zip)}}$

<u>Home</u>



8. Post Installation Steps

Outbound credential mappings

Login Weblogic Admin Console. Click on Deployments.

Change Center	î Home Log Out Preferences 🔤 Record Help	Q	Welcome, weblogic Connected to:			
View changes and restarts	Home >Summary of Deployments >com.ofss.digx.app.co Deployments >com.ofss.digx.connector.rar >Summary	nnector >Roles >com.ofss.digx.connector.rar >Summary of De of Environment	eployments >com.ofss.digx.connector.rar >Roles >Summary of			
lick the Lock & Edit button to modify, a lelete items in this domain.	dd or Home Page					
Lock & Edit	- Information and Resources					
Release Configuration	Helpful Tools	General Information				
omain Structure	Configure applications	Configure applications Common Administration Task Descriptions				
BDX INS TEST	 Configure GridLink for RAC Data Source 	 Read the documentation 				
Domain Partitions	 Configure a Dynamic Cluster 	 Ask a question on My Oracle Support 				
Environment	 Recent Task Status 					
Deployments	 Set your console preferences 					
-Services Security Realms	 Oracle Enterprise Manager 					
-Interoperability	- Domain Configurations					
Diagnostics	Domain	Resource Group Templates	Interoperability			
	Domain	 Resource Group Templates 	WTC Servers			
			Jolt Connection Pools			
	Domain Partitions	Resource Groups				
	Domain Partitions	Resource Groups	Diagnostics			
ow do I	 Partition Work Managers 		Log Files			
		Deployed Resources	Diagnostic Modules			
Search the configuration	Environment	Deployments	 Built-in Diagnostic Modules 			
Use the Change Center	Servers		Diagnostic Images			

Click on com.ofss.digx.connector

Click on Security Tab > Outbound Credential Mappings

ORACLE' WebLogic Server Adm	ninistratior	Console 14.1.1							
Change Center	🚹 Hor	🟦 Home Log Out Preferences 🔤 Record Help							
View changes and restarts	Home	Home >Summary of Deployments >com.ofss.digr.connector >Roles >Summary of Deployments							
Click the Lock & Edit button to modify, add or delete items in this domain.	_	ummary of Deployments							
Lock & Edit Release Configuration	Configuration Control Monitoring This page displays the list of Java EE applications and standalone application modules installed to this domain. Installed to this domain.								
OBDX211TEST1	You o	an update (redeploy) or delete	installed app	olications and modules from the domain by selecting	the check	oox next to t	he application name an	d then using the o	control
Environment	To install a new application or module for deployment to targets in this domain, click Install .								
Interoperability Diagnostics	Deplo	yments							
	Install Update Delete Showing 1 to 10				to 10				
		Name 🙈			State	Health	Туре	Targets	Dej
		orm.ofss.digx.connector			Active	🖋 ОК	Resource Adapter	obdx_cluster	0
		🗄 🥫 digx-access			Active	🖋 ОК	Web Application	obdx_cluster	100
How do I		🗄 🥫 digx-account			Active	🖋 ОК	Web Application	obdx_cluster	100



ORACLE' WebLogic Server Ad	ministration Console 1	4.1.1					
Change Center	🔒 Home Log Out Preferences 🖾 Record Help						
View changes and restarts	Home >Summary of	of Deployments >com.ofss.digx	connector >F	Roles >Summary of Dep	oloyments >com.o	ofss.digx.connect	or >Roles > com.ofss.dig :
Click the Lock & Edit button to modify, add or delete items in this domain.	Settings for com.o	fss.digx.connector					
Lock & Edit	Overview Deplo	yment Plan Configuration	Security	Targets Control	Testing Mo	nitoring Notes	
Release Configuration	Roles Policies	Outbound Credential Ma	ppings Int	bound Principal Mappin	gs Principals		
Domain Structure OBDX211TEST1 DEnvironment Deployments Deployments Security Realms Defineroperability Defineroperability Defineroperability Defineroperability		table					
	WLS User	ŵ		EIS User		Out	ound Connection Poo
					1	There are no iter	ns to display
	New Delete						

Click on New

	ministration Console 14.1.1				
Change Center	😰 Home Log Out Preferences 🔤 Record Help				
View changes and restarts	Home >Summary of Deployments >com.ofss.digx.connector >Roles >Summary of Deployments >com.ofss.digx.co	onnector >Roles			
Click the Lock & Edit button to modify, add or delete items in this domain.	Settings for com.ofss.digx.connector				
Lock & Edit		Notes			
Release Configuration Roles Policies Outbound Credential Mappings Inbound Principal Mappings Principals Domain Structure Outbound credential mappings let you map WebLogic Server usernames to usernames in the Enterprise Info credential mappings for al outbound connection pools in the resource adapter, or specify particular outbound for this resource adapter. Outbound connection pools in the resource adapter, or specify particular outbound for this resource adapter.					
	New Delete				
	EIS User	Outbound Connection			
	There are no tems to display				
	New Delete				
How do I					

Select ra/DIGXConnectorAES > Next



View changes and restarts	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					
Click the Lock & Edit button to modify, add or delete items in this domain.	Create a New Security Credential Mapping					
Lock & Edit Release Configuration	Back Next Finish Cancel Outbound Connection Pool					
Domain Structure OBDX_INS_TEST	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.					
Environment Services	Create a New Security Credential Map Entry for:					
Security Realms	Showing 1 to 10 of 11	Previo				
Interoperability Diagnostics	Outbound Connection Pool 🗞					
	✓ ra/DIGXConnectorAES					
	a/DIGXConnectorAPNS					
	a/DIGXConnectorBIREPORTS					
	a/DIGXConnectorFCM					
How do I 🗉	a/DIGXConnectorFILEUPLOAD					
	a/DIGXConnectorGENERICREST					
Create outbound credential mappings	a ra/DIGXConnectorIPM_OBDX_BU					
System Status	ra/DIGXConnectorIPM_OBDX_BU1					
	ra/DIGXConnectorJWTOKEN					
Health of Running Servers as of 10:57 AM	a/DIGXConnectorMERCHANT					

Select "Default User" > Next

View changes and restarts	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.connector.rar
Click the Lock & Edit button to modify, add or delete items in this domain.	Create a New Security Credential Mapping
Lock & Edit Release Configuration	Back Next Finish Cancel WebLogic Server User
Domain Structure OBDX_INS_TEST Domain Partitions Environment	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 i does not have a credential mapping specifically for them. Selecting 'User authenticated webLogic 'will configure the user that will be accessed of an unauthenticated webLogic 'will configure the user that will be accessed for an unauthenticated webLogic 'will configured User' you must type in the WebLogic Server user that you are configuring. This user must be a configured WebLogic Server user.
Deployments Services Security Realms Interoperability	User for creating initial connections Default User
-Diagnostics	O Unauthenticated WLS User
	Configured User Name
	WebLogic Server User Name:
How do I	Back Next Finish Cancel
Create outbound credential mappings	
System Status	
Health of Running Servers as of 10:59 AM	

Enter "EIS User Name" should be set to AES_KEY

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

Change Center	🏦 Home Log Out Preferences 🔤 Record Help
View changes and restarts	Home >Summary of Deployments >com.ofss.digx.connector >Roles >Summary of Deployments >com.ofss.digx.connector >Role
Click the Lock & Edit button to modify, add or delete items in this domain.	Create a New Security Credential Mapping
Lock & Edit	Back Next Finish Cancel
Release Configuration	EIS User Name and Password
Domain Structure OBDX211TEST1	Configure the EIS User Name and Password that you would like to map the WebLogic Server User to: * Indicates required fields
Deployments	Enter the EIS User Name:
Services Security Realms There are a security for the secure security for the security for the security for the	* EIS User Name:
	Enter the EIS Password:
	* EIS Password:
	* Confirm Password::
How do I	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 Cancel				

Check AES_KEY mapping is created successfully.

Outbound Credential Mappings				
New Delete				
🔲 WLS User 🗞	EIS User	Outbound Connection Pool		
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 OBDX application.

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

Functionality / Module	OutBound Connection Pool Name
VAM	ra/DIGXConnectorOBVAM

Fileupload with UBS

Refer below document for File upload configuration with UBS

• Oracle Banking Digital Experience File Upload Report Configuration

Origination with OBO

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

Oracle Banking Digital Experience OBO Mid-Office and Third Party Setup and Configuration
 Guide



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

<u>OHS</u>

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

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

Oracle Banking Digital Experience OHS User Interface Configuration

Feedback module:

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

	Domainwise deployments			
Sr No	Module	Mandatory (Y/N)		
1	digx-admin	Y		
2	digx-common	Υ		
3	digx-auth	Υ		
4	digx-infra	Υ		
5	digx-coherence	Υ		
6	digx-eurekaserver	Υ		
7	digx-shared-libs	Υ		
8	digx-extxfacesimulator	Υ		
9	digx-cms	Ν		
10	digx-corporateloan	Ν		
11	digx-creditfacility	Ν		
12	digx-edx	Ν		
13	digx-kafkanotification	Ν		
14	digx-liquiditymanagement	Ν		
15	digx-loanapplication	Ν		
16	digx-payments	N		
17	digx-pfm	N		
18	digx-pm	Ν		
19	digx-processmanagement	Ν		

WAR deployments



20	digx-retail	Ν
21	digx-scf	Ν
22	digx-scfcm	Ν
23	digx-tradefinance	Ν
24	digx-virtual-account	Ν

Home



9. OBDX 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 OBDX Application can be achieved with below Steps

- 1. Go to the OBDX Application Server à Click Logging
- 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)

Configuration button to allow others to edit the domain.	Configuration Protocols Logging Debug Monitoring Control Deployn	ments Services Security Notes						
Look & Edit	General HTTP Data Source Diagnostic Images							
Release Configuration	Save							
Domain Structure bdx_domain D=Environment	Use this page to define the general logging settings for this server.							
Deployments 9 -Services Security Realms	🖞 Log file name:	logs/obdx_server1.log	The name of the file that stores current log messages. Usually it is a computed value based on the name of the parent of this Milean. For example, for a server log, it is SERVER_NAME.log. More info					
Ð - Sintersperability B - Diagnostics	- Rotation							
	👸 Rotation type:	By Size 🗸	Criteria for moving old log messages to a separate file. More Info					
	Rotation file size:	5000	The six (1 - 2027)55 (likelysta) that triggers the server to move togeneouspet to a separate file. The default is 505 kikelyster, After the toget meaches the specification moments rate, the neutron toget server toget sets for kines, set to means the correct object sets for kines, set to means the correct object sets for kines and the correct object sets that you specify a file installant tope of Size 3. There is for					
iow do I B	Begin rotation time:	00.00	Determines the start time (hour and minute) for a time-based rotation sequence. More $\inf \rho_{\rm em}$					
View and configure logs Configure java.util.logging logger levels	Rotation interval:	24	The interval (in hours) at which the server saves old log messages to another file. (Requires that you specify a file rotation type of TBHE) More Info					
Change server log file name and location Specify messages for standard out Rotate log files	Limit number of retained files		Indicates whether to limit the number of log files that this server instance creates to store old messages. (Requires that you specify a file rotation type of SIZE orTINE.) Hore Infs					
Forward messages to the domain log Specify severity level for loggers	Files to retain:	100	The maximum number of log files that the server creates when it retates the log. This number does not include the file that the server soes to store current messages. (Requires that you enable Number of Files Limited.) More Info					
Redirect JVM output Filter log messages	🖞 Log file rotation directory:		The directory where the rotated log files will be stored. By default the rotated files are stored in the same directory where the log file is stored. More Infi					
iystem Status 🛛	at Rotate log file on startup		Specifies whether a server rotates its log file during its startup cycle. The default value in production mode is failse. More Info					
Health of Running Servers as of 2:31 PM	- V Advanced							
Failed (0) Ortical (0)	Date Format Pattern:	MMM d, yyyy h:mm:ss,SSS a z	The date format pattern used for rendering dates in the log. The DateFormatPattern string conforms to the specification of the paratext.SimpleDateFormat class. Here Info					
Overloaded (0) Warning (0)	Hinimum severity to log:	Info 🗸	The minimum seventy of log messages going to all log destinations. More Info					
OK (2)	dE Loger severity properties: 001.com.ofs.fec.info com.ofs.etrror Com.ofs.etrror		The configuration of the different logars resortings loss (I) was an an ensure of the problem (Soverly strings savely Darageney, Alec, Orac, Error, Vienney, Notes, Elfe, Dolog, Trees. Here Erfu-					



10. OBDX Product Verification

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

Domainwise deployment wars status

Install Update Delete Showing 1 to 25 of 25 Previous Ne					
Name 🗞	State	Health	Туре	Targets	Deployment Order
Scom.ofss.digx.connector	Active	🖋 ОК	Resource Adapter	obdx_cluster	0
🗄 🦲 digx-admin	Active	🖋 ОК	Web Application	obdx_cluster	100
🗄 👩 digx-auth	Active	🖋 ок	Web Application	obdx_cluster	100
E digx-cms	Active	🖋 ок	Web Application	obdx_cluster	100
E digx-coherence	Active	🖋 ОК	Web Application	obdx_cluster	0
E digx-common	Active	🖋 ок	Web Application	obdx_cluster	100
E digx-corporateloan	Active	🖋 ок	Web Application	obdx_cluster	100
🗄 🥫 digx-creditfacility	Active	🖋 ОК	Web Application	obdx_cluster	100
🗄 🥫 digx-edx	Active	🖋 ок	Web Application	obdx_cluster	100
eurekaserver	Active	🖋 ОК	Web Application	obdx_cluster	100
🗄 🐻 digx-extxfacesimulator	Active	🖋 ОК	Web Application	obdx_cluster	100
🗈 🐻 digx-infra	Active	🖋 ОК	Web Application	obdx_cluster	100
e digx-kafkanotification	Active	🖋 ОК	Web Application	obdx_cluster	100
🗈 🥫 digx-liquiditymanagement	Active	🖋 ОК	Web Application	obdx_cluster	100
e digx-loanapplication	Active	🖋 ОК	Web Application	obdx_cluster	100
e digx-payments	Active	🖋 ОК	Web Application	obdx_cluster	100
	Name Rame Rame	Name À State Name À State À consolis digx.connector Active B à digx-admin Active B à digx-admin Active B à digx-admin Active B à digx-admin Active B à digx-coherence Active B à digx-conmon Active B à digx-corporateloan Active B à digx-creditfacility Active B à digx-creditfacility Active B à digx-exetsfacesimulator Active B à digx-lanafification Active B à digx-lanafification Active B à digx-lanapplication Active	Name À State Health à connofss.digx.connector Active I active	Name \diamond StateHealthType \Diamond com.ofss.digx.connectorActive \checkmark OKResource Adapter \square digx.adminActive \checkmark OKWeb Application \square digx.adminActive \checkmark OKWeb Application \square digx.authActive \checkmark OKWeb Application \square digx.connectorActive \checkmark OKWeb Application \square digx.consActive \checkmark OKWeb Application \square digx.conrenceActive \checkmark OKWeb Application \square digx.conronActive \checkmark OKWeb Application \square digx.conronActive \checkmark OKWeb Application \square digx.conrontiteloanActive \checkmark OKWeb Application \square digx.conretifacilityActive \checkmark OKWeb Application \square digx.eurekaserverActive \checkmark OKWeb Application \square digx.tafkanotificationActive \checkmark OKWeb Application \square digx.tafkanotificationActive \checkmark OKWeb Application \square digx.laquiditymanagementActive \checkmark OKWeb Application	Name AStateHealthTypeTargets@corn.ofss.digx.connectorActiveP OKResource Adapterobdx_clusterB @digx.adminActiveP OKWeb Applicationobdx_clusterB @digx.authActiveP OKWeb Applicationobdx_clusterB @digx.consActiveP OKWeb Applicationobdx_clusterB @digx.consActiveP OKWeb Applicationobdx_clusterB @digx.consActiveP OKWeb Applicationobdx_clusterB @digx.conmonActiveP OKWeb Applicationobdx_clusterB @digx.conportatioanActiveP OKWeb Applicationobdx_clusterB @digx.conportatioanActiveP OKWeb Applicationobdx_clusterB @digx.conterineActiveP OKWeb Applicationobdx_clusterB @digx.conportatioanActiveP OKWeb Applicationobdx_clusterB @digx.conterineActiveP OKWeb Applicationobdx_clusterB @digx.co

-						
	€	Active	🖋 ОК	Web Application	obdx_cluster	100
	😢 🥫 digx-infra	Active	🖋 ок	Web Application	obdx_cluster	100
	e 👩 digx-kafkanotification	Active	🖋 ок	Web Application	obdx_cluster	100
	e odigx-liquiditymanagement	Active	🖋 ок	Web Application	obdx_cluster	100
	e digx-loanapplication	Active	🖋 ок	Web Application	obdx_cluster	100
	e digx-payments	Active	🖋 ок	Web Application	obdx_cluster	100
	🖻 🥫 digx-pfm	Active	🖋 ок	Web Application	obdx_cluster	100
	🗄 🥫 digx-pm	Active	🖋 ок	Web Application	obdx_cluster	100
	e digx-processmanagement	Active	🖋 ок	Web Application	obdx_cluster	100
	🛨 🥫 digx-retail	Active	🖋 ок	Web Application	obdx_cluster	100
	e odigx-scf	Active	🖋 ок	Web Application	obdx_cluster	100
	🕑 🥫 digx-scfcm	Active	🖋 ок	Web Application	obdx_cluster	100
	ngdigx-shared-libs (22.2.0.0.0,4208)	Active		Library	AdminServer, obdx_cluster	0
	€	Active	🛩 ок	Web Application	obdx_cluster	100
	e digx-virtual-account	Active	🖋 ок	Web Application	obdx_cluster	100
Ins	all Update Delete				Showing 1 to 25	of 25 Previous Next



To verify the installation, launch below URL

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

Check if the page loads successfully.

	ATM/Branch English \checkmark UBS OBPM 14.4 HEL Branch \checkmark
≡ @futura bank	Login
'Hey Alexa, ask Futura Bank how much is my Account balance?'	

Day1 Configuration

Universal Banking Solution (OBDX with UBS)

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

Oracle Banking Digital Experience System Configuration

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

Note: Post Day1 restart of Managed server is mandatory

Third Party System (OBDX with THP)

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

Oracle Banking Digital Experience System Configuration

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

Note: Post Day1 restart of Managed server is mandatory



Chat Bot Configuration:

Refer below document for Chat Bot configuration.

Oracle Banking Digital Experience Chatbot Configuration

Mobile Application Builder:

Refer below documents for Mobile Applications build and setup.

Oracle Banking Digital Experience Mobile Application Builder-Android

Oracle Banking Digital Experience Mobile Application Builder-iOS

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. OBDX 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_0 (PROP_ID, PREFERENCE_NAME, PROP_VALUE,
DETERMINANT_VALUE, CREATED_BY, CREATION_DATE, LAST_UPDATED_BY,
LAST_UPDATED_DATE)
values
('obdx.host.account.uniqueness','ExtSystemsConfig','BRANCH','<ENTITY_ID>','ofssu
ser',sysdate,'ofssuser',sysdate);
Insert into DIGX_FW_CONFIG_ALL_0 (PROP_ID, PREFERENCE_NAME, PROP_VALUE,
DETERMINANT_VALUE, CREATED_BY, CREATION_DATE, LAST_UPDATED_BY,
LAST_UPDATED_DATE)
values
('obdx.host.accountbranch.delimiter','ExtSystemsConfig','@~','<ENTITY_ID>','ofss
user',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 OBDX with supported host system follow below steps.

- Add entity through OBDX Web application, using
 - > User Manual Oracle Banking Digital Experience System Configuration User Manual
- In case of OBTFPM integration, following document should be referred.
- Oracle Banking Mid-Office Product Setup and Configuration Guide Running OBDX 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 OBDX software installation (or has ownership on Oracle Weblogic home directory)

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

- From your terminal navigate to <OBDX 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
- OBDX 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 OBFM DB hostname :
22
Enter the OBFM DB port :
»
Enter the OBFM 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 :
Vs (1/1) keys to navigate between questions and press 'enter' after editing them
Enter the OBEM DB hostname :
Enter the OBPM DB hostname : >>whf00jml@in.oracle.com
>>whf00jml_in.oracle.com
≫>whf00jml∰in.oracle.com Valid.
>>whf00jmljin.oracle.com Valid. Enter the OBFM DB port :
>>whf00jmlfin.oracle.com Valid. Enter the OBFM DB port : >>1522
>>whf00jmldin.oracle.com Valid. Enter the OBFM DB port : >>1522 Valid.
>>>hf00jml@in.oracle.com Valid. >>522 Valid. Enter the OBFM SID :
>>>hf00jml@in.oracle.com Valid. Enter the OBFM DB port : >>1522 Valid. Enter the OBFM SID : >>oral9c.in.oracle.com
>>>hf00jml@in.oracle.com Valid. Enter the OBFM DB port : >>1522 Valid. Enter the OBFM SID : >>oral9c.in.oracle.com Valid.
<pre>>>whf00jml@in.oracle.com Valid. Enter the OBEM DB port : >>1522 Valid. Enter the OBEM SID : >>oral9c.in.oracle.com Valid. Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) : >>TBS_DIR</pre>
>>>hf00jml@in.oracle.com Valid. Enter the OBEM DB port : >>1522 Valid. Enter the OBEM SID : >>oral9c.in.oracle.com Valid. Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) : >>TBS_DIR Valid.
>>>hf00jml@in.oracle.com Valid. Enter the OBEM DB port : >>1522 Valid. Enter the OBEM SID : >>oral9c.in.oracle.com Valid. Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) : >>TBS_DIR Valid. Enter the username with 'sys' privileges :
<pre>>>whf0gjml@in.oracle.com Valid. Enter the OBEM DB port : >>1522 Valid. Enter the OBEM SID : >>oral9c.in.oracle.com Valid. Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) : >>TBS_DIR Valid. Enter the username with 'sys' privileges : >>sys</pre>
<pre>>>whf0yml#in.oracle.com Valid. Enter the OBEM DB port : >>1522 Valid. Enter the OBEM SID : >>oracle.com Valid. Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) : >>TBS_DIR Valid. Enter the username with 'sys' privileges : >>xss Valid. Enter the username with 'sys' privileges : >>xss</pre>
<pre>>>whf0gjml@in.oracle.com Valid. Enter the OBEM DB port : >>1522 Valid. Enter the OBEM SID : >>oral9c.in.oracle.com Valid. Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) : >>TSBS_DIR Valid. Enter the username with 'sys' privileges : >>sys Valid. Enter the username with 'sys privileges :</pre>
<pre>>>whf0gjml@in.oracle.com Valid. Enter the OBEM DB port : >>1522 Valid. Enter the OBEM SID : >>oral9c.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 the user with sys privileges : >>ivertify the user with sys privileges : >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>></pre>
>>>hf00jml@in.oracle.com Valid. Enter the OBEM DB port : >>1522 Valid. Enter the OBEM SID : >>oral9c.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 password for the user with sys privileges : >======= >===== Valid. Enter password for the user with sys privileges : >====== >===== >===== >===== >==== >==== Valid.

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 OBFM host schema name :
Enter the password for existing OBFM host schema :
Enter new OBPM BlAl 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.

```
[chinduspectant controls of DBDX_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 progess...Please hold on it might take sometime
Scripts execution Successfully
SUCCESSFULLY installed OBPM database
Executed DIGX_FW_CONFIG_ALL_0.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 13://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_BIAI 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_BIAI 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 (OBDX with UBS)).

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

[Jbdsdown_SC-ght wm 202 OBDX_Installer]\$ python3 runInstaller.py Execution of DB script for OBDXBU4 started Executed DIGX_FW_CONFIG_ALL_O.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 :
>
se ($\uparrow/$) keys to navigate between questions and press 'enter' after editing them

Enter the FCORE DB hostname :
>>mumaa012.in.oracle.com
Valid.
Enter the FCORE DB port :
\$>1520
Valid.
Enter the FCORE SID :
S>obd#hst.in.oracle.com
Valid.
Enter the Directory name for Tablespace creation (DBA_DIRECTORIES) :
>>TB5_DIR
Valid.
Enter the username with 'sys' privileges :
Səyə
Valid.
Enter password for the user with sys privileges :
»······
Valid.
Enter existing weblogic admin password :
»······
Valid. Use (1/1) 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 :	
8	
Enter the existing FCUBS schema name :	
>	
Enter new FCORE schema name :	
»	
Enter new schema password :	
<i>"</i>	
Use $(1/1)$ keys to navigate between questions and press 'enter' after editing them	
Enter the existing FCR schema name :	
Enter the existing FCR schema name : >>FCRHOST	
>>FCRHOST Valid.	
>>FCRHOST Valid. Enter the existing FCUBS schema name :	
>>FCRHOST Valid. Enter the existing FCUBS schema name : >>FCRUBSHOST	
<pre>>>FCRHOST Valid. Enter the existing FCUBS schema name : >>FCRUBSHOST Valid.</pre>	
>>FCRHOST Valid. Enter the existing FCUBS schema name : >>FCRUBSHOST Valid. Enter new FCORE schema name :	
SPECEROST Valid. Enter the existing FCUBS schema name : SPECRUBSHOST Valid. Enter new FCORE schema name : SPECRUSTIST	
>>FCRNOST Valid. Enter the existing FCUBS schema name : >>FCRUBSHOST Valid. Enter new FCORE schema name : >>FCRNOSTIST Valid. Enter new schema password : >>	
>>FCRNOST Valid. Enter the existing FCUBS schema name : >>FCRUBSHOST Valid. Enter new FCORE schema name : >>FCRNOSTIST Valid. Enter new schema password : >>	
>>FCRNOST Valid. Enter the existing FCUBS schema name : >>FCRUBSHOST Valid. Enter new FCORE schema name : >>FCRNOSTIST Valid. Enter new schema password : >>	
>>FCRNOST Valid. Enter the existing FCUBS schema name : >>FCRUBSHOST Valid. Enter new FCORE schema name : >>FCRNOSTIST Valid. Enter new schema password : >>	
>>FCRNOST Valid. Enter the existing FCUBS schema name : >>FCRUBSHOST Valid. Enter new FCORE schema name : >>FCRNOSTIST Valid. Enter new schema password : >>	

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.

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 sucessfully.

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 (OBDX with OBPM)).



12. Multi-entity installation using Silent Mode

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

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

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

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

Steps for Silent-Mode Installation

• Set the environment variables, as shown below.

OBDX_Installer]\$ expo	ort Entity_Code=OBDX_BU7
OBDX_Installer]\$ expo	ort SCHEMA PASS=welcome1
OBDX Installer]\$ expo	rt ENTITY_EHMS_DATABASE_HOSTNAME=hostanme.in.oracle.com
OBDX_Installer]\$ expo	ort ENTITY EHMS DATABASE PORT=1520
OBDX_Installer]\$ expo	ort ENTITY_EHMS_DATABASE_SID=obdxdb.in.oracle.com
OBDX_Installer]\$ expo	ort ENTITY_EHMS_DBA_DIRECTORY_NAME=TBS_DIR
OBDX_Installer]\$ expo	ort ENTITY_EHMS_DATABASE_SYS_USER=sys
OBDX_Installer]\$ expo	ort ENTITY_EHMS_DATABASE_SYS_PASS=welcomel
OBDX_Installer]\$ expo	ort ENTITY_EHMS_SCHEMA_NAME=welcomel
OBDX_Installer]\$ expo	ort ENTITY_EHMS_SCHEMA_PASS=welcome1
OBDX_Installer]\$ expo	ort ENTITY_EHMS_HOST_SCHEMA_NAME=FCUBS140
OBDX_Installer]\$ expo	ort ENTITY_EHMS_HOST_SCHEMA_NAME_PASS=welcome1
OBDX_Installer]\$ expo	ort WLS_DOMAIN_PASS=welcome1
OBDX_Installer]\$ expo	ort ENTITY_EHMS_HOST_SCHEMA_NAME_PASS=FCUBS140
OBDX_Installer]\$ expo	ort ENTITY_EHMS_CCY=GB
OBDX_Installer]\$ pyth	on runInstaller.pysilentaddEntity

Below parameters should be set in environment variables

	Parameter	Description	Example
Environment variables to set for flavor: FCORE UBS (14.6.0.00 release) OBPM (14.6.0.00 release)	Entity_Code	Entity code which has been entered from screen	export Entity_Code=OBDX_BU7
	SCHEMA_PASS	Password for existing OBDX schema	export SCHEMA_PASS=devops#ob dx182
	ENTITY_EHMS_DAT ABASE_HOSTNAM E	Hostname of the EHMS HOST database host server	export ENTITY_EHMS_DATABASE_ HOSTNAME=xx.xx.xx.xx



	Parameter	Description	Example
	ENTITY_EHMS_DAT ABASE_PORT	Port of the EHMS HOST database host server	export ENTITY_EHMS_DATABASE_ PORT=1521
	ENTITY_EHMS_DAT ABASE_SID	EHMS Host database Service Name	export ENTITY_EHMS_DATABASE_ SID=obdxdb.in.oracle.com
	ENTITY_EHMS_DB A_DIRECTORY_NA ME	Oracle Directory name in which you want the EHMS (HostInterface) schema datafile (dbf). Enter only the name	export ENTITY_EHMS_DBA_DIREC TORY_NAME=TBS_DIR
		and NOT the path	
	ENTITY_EHMS_DAT ABASE_SYS_USER	Username with 'sys' privileges	export ENTITY_EHMS_DATABASE_ SYS_USER=sys
	ENTITY_EHMS_DAT ABASE_SYS_PASS	Password for EHMS sys user	export ENTITY_EHMS_DATABASE_ SYS_PASS=devops@sys
	ENTITY_EHMS_SCH EMA_NAME	Complete EHMS (HostInterface) schema name you want installer to create as new schema.	export ENTITY_EHMS_SCHEMA_N AME=OBDXEHMS
	ENTITY_EHMS_SCH EMA_PASS	Password for new EHMS schema on EHMS HOST database	export ENTITY_EHMS_SCHEMA_P ASS=devops#ehms
	ENTITY_EHMS_HO ST_SCHEMA_NAME	EXISTING EHMS Host schema name	export ENTITY_EHMS_HOST_SCHE MA_NAME=EHMSHOST



	Parameter	Description	Example
	ENTITY_EHMS_HO ST_SCHEMA_NAME _PASS	Password of existing HOST EHMS schema (Existing)	export ENTITY_EHMS_HOST_SCHE MA_NAME_PASS=ehmshst
	**This parameter is only required for UBS & OBPM Host		
	WLS_DOMAIN_PAS S	Password for Weblogic admin console	export WLS_DOMAIN_PASS=weblo gic182
	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_FCO RE_FCUBS_SCHEM A_NAME **This parameter is only required for	FCORE-FCUBS HOST schema name	export ENTITY_EHMS_FCORE_FCU BS_SCHEMA_NAME=FCRU BSHOST
	FCORE		
Environment variables to set for flavor: OBDX (Third- party HOST)	Entity_Code	Entity code which has been entered from screen	export Entity_Code=OBDX_BU1
	SCHEMA_PASS	Password for existing OBDX 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@	<pre>/]\$ export ENTITY_EHMS_DATABASE_HOSTNAME= ××.××.××.××</pre>
[devops@	<pre>/]\$ export ENTITY_EHMS_DATABASE_PORT=1521</pre>
[devops@	<pre>/]\$ export ENTITY_EHMS_DATABASE_SID=obdxdb.in.oracle.com</pre>
[devops@	<pre>/]\$ export ENTITY_EHMS_DBA_DIRECTORY_NAME=TBS_DIR</pre>
[devops@	/]\$ export ENTITY_EHMS_DATABASE_SYS_USER=sys
[devops@	/]\$ export ENTITY_EHMS_DATABASE_SYS_PASS=devops@sys
[devops@	<pre>/]\$ export ENTITY_EHMS_SCHEMA_NAME=OBDXEHMS</pre>
[devops@	/]\$ export ENTITY_EHMS_SCHEMA_PASS=devops#ehms
[devops@	<pre>/]\$ export ENTITY_EHMS_HOST_SCHEMA_NAME=FCUBS140</pre>
[devops@	<pre>/]\$ export ENTITY EHMS_HOST_SCHEMA_NAME_PASS=FCUBS140HST</pre>
[devops@	/]\$ export WLS_DOMAIN_PASS=weblogic182
[devops@	/]\$ export ENTITY_EHMS_CCY=GB
[devops@	/]\$ python runInstaller.pysilentaddEntity

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 13://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_BIAL Starting an edit session ... Started edit session ... Started edit session ... The edit lock associated with this edit session is released once the activation is completed. Activation completed OBDXBU2_BIAL 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 (OBDX with UBS))
- OBPM additional entity (sub-section: Oracle FLEXCUBE Universal Banking with Oracle Banking Payments (OBDX 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] OBEX_Installer]6 python runInstaller.py --silent --addEntity
Password validated for OBEX_183INS
Execution of DB script for OBEX_BUI started
Executed DIGX_FW_CONFIG_ALL_O.sql successfully
Execution completed.
```



13. OBDX Product Security

Refer below document for OBDX product security configuration

Oracle Banking Digital Experience Security Guide

Home



14. OBDX 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 OBDX schema

alter user <OBDX_SCHEMA> quota unlimited on <OBDX_AUDIT_INDEX_TABLESPACE>;

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

<u>Home</u>



15. JPA and OBDX 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 OBDX 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 OBDX setup.

Invalid database password

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

If you get the following error:



Try one of the following:

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

cx oracle module

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

If you get the following error:





Execute the below command:

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

python

import cx_Orace

cx_Oracle.__version__

[devops@ /]\$ export LD_LIBRARY_PATH=/usr/lib/oracle/18.3/client64/lib/:\$LD_LIBRARY_PATH
[devops@ /	/]\$ python
Python 2.7.5 (def	Fault, Apr 11 2018, 17:41:36)
[GCC 4.8.5 201506	523 (Red Hat 4.8.5-28.0.1)] on linux2
Type "help", "cop	pyright", "credits" or "license" for more information.
>>> import cx_Ora	acle
>>> cx_Oraclev	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/MSTENTITYUSERTYPELANG.sql successful 2017-07-13 13:45:41,747 DEBUG Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/MSTENTITYUSERTYPELANG.sql successful 2017-07-13 13:45:41,796 ERROR Executed /scratch/jenkins/OBDX_Installer/ExecInstances/13Jul1338/db/UBS/seed/mstlang.sql failed

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

Failure of Policy Seeding

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

If you get the following error:

Policy seeding failed. Please see logs for more details

Try one of the following:

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

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



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

Fix the problem by following below steps:

- Login to OBDX installer server
- Over-write the policies files (Day0Policy.csv; Entitlement.csv; Resources.csv and Task.csv) from OBDX Product zip into <OBDX INSTALLER DIR>/installables/policies directory
- Browse to <OBDX 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.atil.logging.Filchandler.puttern %"/java%a.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$s%n
# Limit the message that are printed on the console to INFO and above.
java.util.logging.ConsoleHandler.level = OFF
java.util.logging.ConsoleHandler.formatter = java.util.logging.SimpleFormatter
# default file output is in user's home directory.
#java.util.logging.FileHandler.pattern = %h/java%u.log
java.util.logging.FileHandler.pattern = /scratch/Task.log
java.util.logging.FileHandler.limit = 50000
Java.utll.logging.FileHandler.count = 1
#java.util.logging.FileHandler.formatter = java.util.logging.XMLFormatter
java.util.logging.FileHandler.formatter = java.util.logging.SimpleFormatter
java.util.logging.SimpleFormatter.format= [%1$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,<OBDX Schema name>,<OBDX Schema password>,jdbc:oracle:thin:@<OBDX DB hostname or IP>:<OBDX DB listener port>/<OBDX Service Name>"



for e.g.:

java -jar -Djava.util.logging.config.file='Task_log4j.properties' com.ofss.digx.utils.feed.data.task.jar 'Task.csv' "oracle.jdbc.OracleDriver,OBDX_THP181,Welcome#1,jdbc:oracle:thin:@ xx.xx.xx:1521/OBDX"

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

for e.g.:

java -jar -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,OBDX_THP201,Welcome#1,jdbc:oracle:thin:@ xx.xx.xx:1521/OBDX"

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

for e.g.:

java -jar -Djava.util.logging.config.file= Dashboard_seed_log4j.properties' com.ofss.digx.utils.dashboard.jar '/installables/policies/dashboard_json' "oracle.jdbc.OracleDriver,OBDX_THP201,Welcome#1,jdbc:oracle:thin:@xx.xx.xx:1521/OBDX"

> Post successfully execution, restart Managed server.

Home

