

Oracle® Banking Platform Collections
Integration Guide
Release 2.7.1.2.0
F38028-01

April 2021

Oracle Banking Platform Collections Integration Guide, Release 2.7.1.2.0

F38028-01

Copyright © 2011, 2021 Oracle and/or its affiliates.

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

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

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.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software" or "commercial computer software documentation" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. 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 or hardware and documentation may provide access to or information about 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 unless otherwise set forth in an applicable agreement between you and Oracle. 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, except as set forth in an applicable agreement between you and Oracle.

Contents

Preface	9
Audience	9
Documentation Accessibility	9
Organization of the Guide	9
Related Documents	10
Conventions	10
1 Introduction	12
2 Installing the Host Media Pack	14
2.1 Prerequisites	14
2.2 Installing the OB Collections and OB Recovery Host Media Pack	14
2.3 Configuring Weblogic Domain For Host	34
3 Installing the Presentation Media Pack	40
3.1 Prerequisites	40
3.2 Installing the Presentation Media Pack	40
3.3 Configuring Weblogic Domain for Presentation Server	52
3.4 Verifying the Presentation Server Deployment	56
4 External Interface Configuration	58
4.1 Oracle Identity Manager (OIM)	58
5 Installing Third-Party Software	60
5.1 Installing Oracle Java Development Kit (JDK)	60
6 User Creation in Oracle Internet Directory	62
6.1 User Creation in OID	62
7 Threadpool Configuration	74
7.1 Manage Requisite Files in lib	74

7.2 Recommendations for Threadpool Memory Configuration	75
7.3 Start Threadpoolworker	76
7.4 Verification	76
7.5 Submit the Batch	78
7.6 Stop Threadpoolworker	79
7.7 Command-Line Options	80
7.8 List of Batches to be Run on Standalone Threadpool or Weblogic	81

List of Tables

Table 2–1 Installer: Initial Details in config.properties	17
Table 2–2 Installer: Host Configuration in config.properties	18
Table 2–3 Installer: DB Configuration in config.properties	19
Table 2–4 Installer: Batch Configuration in config.properties	19
Table 2–5 Installer: Threadpool Configuration in config.properties	20
Table 2–6 Installer: Initial Details	24
Table 2–7 Installer: Host Configuration	26
Table 2–8 Installer: Host DB Configuration	27
Table 2–9 Installer: Batch Configuration	28
Table 2–10 Installer: Threadpool Configuration in config.properties	29
Table 2–11 Configuring Weblogic Domain for Host	36
Table 3–1 Installer: Initial Details in config.properties	42
Table 3–2 Installer: Host Configuration in config.properties	43
Table 3–3 Installer: UI Configuration in config.properties	44
Table 3–4 Installer: DB Configuration in config.properties	45
Table 3–5 Installer: Initial Details	48
Table 3–6 Installer: UI Configuration	49
Table 3–7 Configuring Weblogic Domain for Presentation	53
Table 3–8 Verifying the Presentation Server Deployment	57
Table 7–1 List of Batches to be Run on Standalone Threadpool	81
Table 7–2 List of Batches to be Run on Weblogic	82

List of Figures

Figure 2–1 Hibernate tmp folder	15
Figure 2–2 Collection_V[Build_Number].zip uncompressed	16
Figure 2–3 Installer: config.properties file	21
Figure 2–4 Weblogic Admin Console	22
Figure 2–5 Summary of servers	22
Figure 2–6 Force shutdown	22
Figure 2–7 Verify Server State	23
Figure 2–8 Installer: Initial Details	24
Figure 2–9 Installer: Host Configuration	25
Figure 2–10 Installer: Host DB Configuration	26
Figure 2–11 Installer: Batch Configuration	28
Figure 2–12 Installer: Threadpool Configuration	29
Figure 2–13 Installer: Confirm Installations Details	30
Figure 2–14 Installer: Confirm Installations Details	30
Figure 2–15 Data Source Connection Pool	31
Figure 2–16 Add XML Registry	31
Figure 2–17 Settings for XML Registry	32
Figure 2–18 Deploy XML Registry	33
Figure 2–19 Host Domain Security	33
Figure 2–20 Summary of servers	34
Figure 2–21 Force shutdown	34
Figure 2–22 Verify Server State	35
Figure 2–23 Weblogic Admin Console	35
Figure 2–24 Domain Configuration: Confirm	37

Figure 3–1 Collection_V[Build_Number].zip uncompressed	41
Figure 3–2 Installer: config.properties file	46
Figure 3–3 Weblogic Admin Console	47
Figure 3–4 Installer: Initial Details	48
Figure 3–5 Installer: UI configuration	49
Figure 3–6 Installer: Confirm Installation Details	50
Figure 3–7 Installer : Installing	51
Figure 3–8 XML Registry	52
Figure 3–9 Weblogic Admin Console	53
Figure 3–10 Domain Configuration: Confirm	55
Figure 3–11 Domain Configuration: Proceeding with the Process	55
Figure 6–1 Opening ODSM	62
Figure 6–2 Log in to OID	63
Figure 6–3 Navigating to Data Browser Tab	63
Figure 6–4 Creating New Entry	64
Figure 6–5 Adding Object Classes: Top	65
Figure 6–6 Adding Object Classes: Person	65
Figure 6–7 Adding Object Classes: Oracle User	66
Figure 6–8 Selecting Distinguished Name	66
Figure 6–9 Selecting Entry Properties	67
Figure 6–10 Selecting Mandatory Properties	67
Figure 6–11 Status Message	68
Figure 6–12 Selecting the User	68
Figure 6–13 Attributes Tab	69
Figure 6–14 Adding User Password	69
Figure 6–15 Setting User Password	70

Figure 6–16 Confirm Message	70
Figure 6–17 Adding to Administrator Group	71
Figure 6–18 Attributes Tab	71
Figure 6–19 Confirmation message	72
Figure 7–1 Command to Create wlfullclient.jar	74
Figure 7–2 Standalone lib	75
Figure 7–3 ThreadPool Worker Log	76
Figure 7–4 Executing OBP Initialisation Block	77
Figure 7–5 Verify Threadpool Worker: Check Connection	78
Figure 7–6 Submit the Batch	79

Preface

This document will help you to install Oracle Banking Collections and Oracle Banking Recovery as an integrated module of Oracle Banking Platform. This document assumes that Oracle Banking Platform Presentation and Host environment are pre-installed.

This preface contains the following topics:

- Audience
- Documentation Accessibility
- Organization of the Guide
- Related Documents
- Conventions

Audience

This document is intended for the following audience:

- IT Deployment Team
- Consulting Staff
- Administrators

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/us/corporate/accessibility/index.html>.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/us/corporate/accessibility/support/index.html#info> or visit <http://www.oracle.com/us/corporate/accessibility/support/index.html#trs> if you are hearing impaired.

Organization of the Guide

The information in this document is organized into the following chapters and appendices:

[Chapter 1 Introduction](#)

This chapter describes the Collections integration.

[Chapter 2 Installing the Host Media Pack](#)

This chapter describes the steps involved in installing the host media pack.

[Chapter 3 Installing the Presentation Media Pack](#)

This chapter describes the steps involved in installing the presentation media pack.

[Chapter 4 External Interface Configuration](#)

This chapter describes the steps involved in Oracle Identity Manager (OIM) Adapter configuration.

[Chapter 5 Installing Third-Party Software](#)

This chapter describes the required third-party software.

[Chapter 6 User Creation in Oracle Internet Directory](#)

This chapter describes the user creation in OID.

[Chapter 7 Threadpool Configuration](#)

This chapter provides information about threadpool configuration.

Related Documents

For more information, see the following documentation:

- For information on the configurations that are to be performed on day zero, see the Oracle Banking Platform Collections Day Zero Setup Guide.
- For a brief description about user provisioning in Collections, see the Oracle Banking Platform Collections User Provisioning Guide.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1 Introduction

This guide helps you to install Oracle Banking Collections and Oracle Banking Recovery for a seamless integration with Oracle Banking Platform.

2 Installing the Host Media Pack

You must follow the steps mentioned below to install the Host Media Pack:

1. Install the Host Media Pack 2.7.1.2.0
2. Update the environment.
3. Configure the WebLogic domain.

2.1 Prerequisites

Before you install the OB Collections and OB Recovery 2.7.1.2.0 Host Media Pack, you must have the following installed on the machine:

- OBP 2.7.1.2.0 Host Media Pack.
- OBP 2.7.1.2.0 Presentation Media Pack.
- Windows Secure Copy (WINSCP) to copy deliverables from Windows to Linux machine.
- Oracle Java Development Kit (JDK) 1.8 Update 281 (For more information on how to install Oracle JDK, see [Chapter 5 Installing Third-Party Software](#).)
- Manager, a PC X server that runs on the Windows platforms and helps launching X applications UI on a Windows desktop.
- OB Collections and OB Recovery database must be installed. For more information on installing or configuring database, see the Oracle Banking Platform Collections DBA Guide.
- Download the hibernate-release-4.1.0.Final.zip file from:

<http://sourceforge.net/projects/hibernate/files/hibernate4/>

It is very important that you download the exact version, as the product has only been certified with this exact release.

2.2 Installing the OB Collections and OB Recovery Host Media Pack

The OB Collections and OB Recovery 2.7.1.2.0 installation package is used for installing both the OBP Host and Presentation Media Packs. You can download the installation package from the following location:

<https://edelivery.oracle.com/>

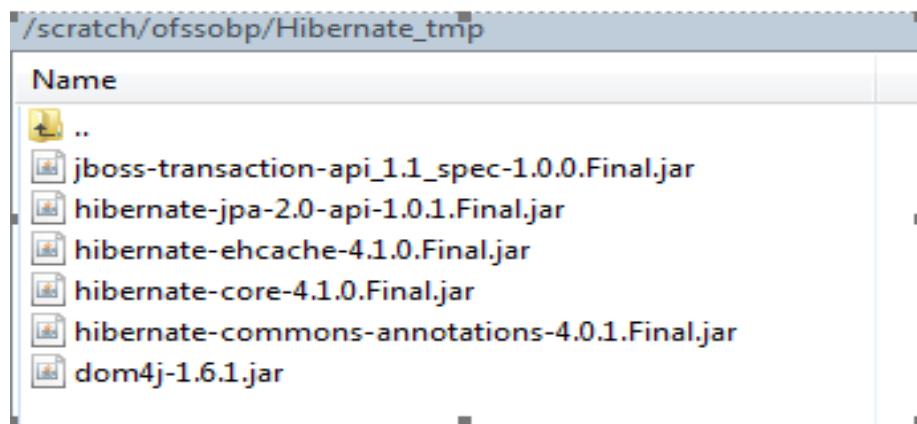
To install the OBP Host Media Pack:

1. Log in to the Host Server.
2. Create a temporary directory (for example, TEMPDIR) on the Host Server using the following command:

```
mkdir TEMPDIR
```

3. Copy the OB Collections and OB Recovery 2.7.1.2.0 installation package, Collection_V[Build_Number].zip, which you have downloaded from the edelivery to Host Server by using WINSSCP to created TEMPDIR folder.
4. Create a Hibernate_tmp directory and follow the below steps.
 - a. Extract downloaded hibernate-release-4.1.0.Final.zip package in temp directory.
 - b. Copy below jars from extracted hibernate-release-4.1.0/lib/required folder to created hibernate_tmp path
 - hibernate-commons-annotations-4.0.1.Final.jar
 - hibernate-core-4.1.0.Final.jar
 - hibernate-jpa-2.0-api-1.0.1.Final.jar
 - jboss-transaction-api_1.1_spec-1.0.0.Final.jar
 - dom4j-1.6.1.jar
 - c. Copy hibernate-ehcache-4.1.0.Final.jar from extracted hibernate-release-4.1.0/lib/optional/ehcache folder to created hibernate_tmp path

Figure 2–1 Hibernate tmp folder



5. Uncompress the Collection_V[Build_Number].zip file using the following command:

```
cd <PATH>/TEMPDIR  
unzip Collection_V[Build_Number].zip
```

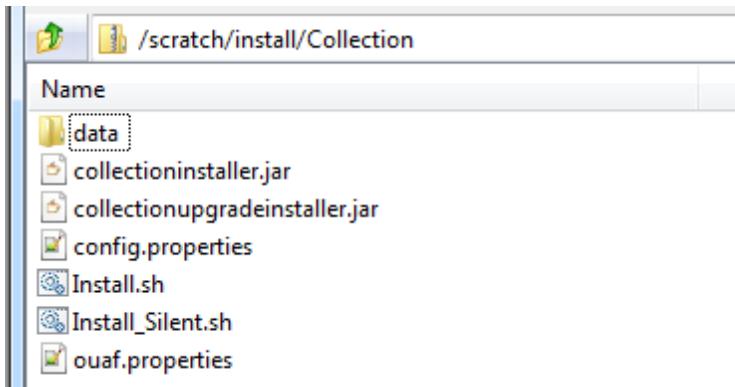
Where, <PATH> is the path where the TEMPDIR folder is located.

The contents of the zip file are extracted in the TEMPDIR folder. The following files / folders are extracted:

- config.properties
- ouaf.properties
- data
- Install.sh

- collectioninstaller.jar
- collectionupgradeinstaller.jar

Figure 2–2 Collection_V[Build_Number].zip uncompressed



6. Collection installer operates in two modes, go with either mode.

a. Silent mode:

- i. Update config.properties in the TEMPDIR directory
- ii. Update below sections in config.properties as shown in [Figure 2–3](#):

- INSTALLER DETAILS
 - IS_DEV_ENV=false
 - IS_UI_ENABLED=N
- INITIAL DETAILS
 - HOST_CONFIG=Y
 - UI_CONFIG=N
 - BATCH_CONFIG=Y
 - CUSTOM_SUPPORT=N
 - THREADPOOL_CONFIG=N
 - DOMAINNAME=HOST+BATCH
- HOST CONFIGURATION
- HOST DB CONFIGURATION
- BATCH CONFIGURATION
- THREADPOOL CONFIGURATION

In config.properties: **Initial Details** section contains the following fields

Table 2–1 Installer: Initial Details in config.properties

Field	Description
Operating System (OPERATING_SYSTEM)	<p>Used to indicate the operating system on which you want to install the OB Collections and OB Recovery Host Media Pack. The options are:</p> <ul style="list-style-type: none"> ■ Linux ■ Windows <p>You can only integrate OB Collections and OB Recovery with OBP on the Linux environment.</p>
Installation Directory (INSTALL_DIR)	<p>Used to specify the directory where you want to install the OB Collections and OB Recovery Host Media Pack. It should be same as the installation directory where OBP Host Media pack is installed.</p> <p>By default,/scratch/app/product/fmw/obpininstall/obp is specified in this field. You can change the path and directory name, if required.</p>
Generate Host Configuration (HOST_CONFIG)	Used to deploy the OB Collections and OB Recovery Host Media Pack components, if HOST_CONFIG is set to Y.
Generate UI Configuration (UI_CONFIG)	Used to deploy the OB Collections and OB Recovery Presentation Media Pack components, if UI_CONFIG is set to Y.
Generate Batch Configuration (BATCH_CONFIG)	<p>Used to deploy the batch components used for configuring the batch server, if BATCH_CONFIG option is set Y.</p> <p>If you want to deploy the batch components, you must always set the HOST_CONFIG and BATCH_CONFIG value to Y.</p>
Generate Thread Pool Configuration (THREADPOOL_CONFIG)	<p>Used to deploy the threadpool components used for configuring the threadpool, if this option is checked.</p> <p>If you want to deploy the threadpool components, you must always set the HOST_CONFIG , BATCH_CONFIG and THREADPOOL_CONFIG value to Y.</p>
Customization Support Required (CUSTOM_SUPPORT)	Used to enable the customization support, if CUSTOM_SUPPORT is set to Y.
Domain name (DOMAINNAME)	<p>Used to specify domain name. The options are:</p> <ul style="list-style-type: none"> ■ UI ■ HOST ■ HOST+BATCH <p>if BATCH_CONFIG option is set to Y then choose HOST+BATCH.</p>

In config.properties: **Host Configuration** section contains the following fields

Table 2–2 Installer: Host Configuration in config.properties

Field	Description
Host IP address (DB_IP_ADDRESS)	Used to specify the host IP address. For example, 10.180.6.11.
Host port (DB_PORT)	Used to specify the Host server WebLogic managed server port. For example, 8001.
Host Logs Directory (HOST_LOG_DIR)	Used to indicate the directory where the logs must be created on the host server. By default, /scratch/app/product/fmw/obpininstall/obp/fclo gs/logs is specified in this field. You can change the path and directory name, if required.
Java Home Path (JAVA_HOME)	Used to indicate the directory where Oracle JDK is installed. By default, /scratch/app/product/jdk1.8.0_281 is specified in this field. You can change the path and directory name, if required.
Hibernate Path (HIBERNATE_JAR_DIR)	Used to indicate the directory where Hibernate jars downloaded and copied jars from /lib/required/ from extracted hibernate-release-4.1.0.Final.zip package by default, /scratch/app/product/hibernate is specified in this field. You can change the path and directory name, if required. Installer will copy the jars from this directory to Third party directory.
Host weblogic user name (HOST_WEBLOGIC_PASSWORD)	Used to specify the host weblogic username.
Host weblogic password (HOST_WEBLOGIC_PASSWORD)	Used to specify the host weblogic password.
Host Admin server port (HOST_ADMINSERVERPORT)	Used to specify the Host server WebLogic admin server port. For example, 7001.

In config.properties: **Host DB Configuration** section contains the following fields:

Table 2–3 Installer: DB Configuration in config.properties

Field	Description
Database IP address (DB_IP_ADDRESS)	Used to specify the database IP address. For example, 10.180.7.77.
Database port (DB_PORT)	Used to specify the database port. For example, 1521.
Database System ID (DB_SID)	Used to specify the database SID. For example, ORA125.
Database user name (DB_USERNAME)	Used to specify the database user name.
Database user password (DB_PASSWORD)	Used to specify the database password.
Host Datasource name (HOST_DATASOURCE)	Used to specify the host NonXA data source name. For example, jdbc/FCBDataSource_NonXA.

In config.properties: **Batch Configuration** section contains the following fields:

Table 2–4 Installer: Batch Configuration in config.properties

Field	Description
Thread pool name (THREADPOOL_NAME)	Used to specify the name of the thread pool. For example, MT.
Number of threads (NUMBER_OF_THREADS)	Used to specify the number of the threads that the thread pool can support. For example, 10.
Batch user ID (BATCH_USER)	Used to specify the batch user ID. For example, SYSUSER.
Batch log directory (BATCH_LOG_DIR)	Used to specify the batch log directory. For example, /scratch/app/product/fmw/obpininstall/obp/fclogs/logs.

In config.properties: **Threadpool Configuration** section contains the following fields:

Table 2–5 Installer: Threadpool Configuration in config.properties

Field	Description
Weblogic Server Home (WEBLOGIC_SERVER_HOME)	Used to specify the weblogic server home path. For example, /scratch/app/product/fmw/wlserver.
RMI Port (RMI_PORT)	Used to specify the rmi port. For example, 2120.
Host Domain Path (HOST_DOMAIN_PATH)	Used to specify the Host Domain Path. For example, /scratch/app/product/fmw/user_projects/domains/host_domain.
Cluster Name (CLUSTER_NAME)	Used to specify the Threadpool cluster name. For example, Cluster1
Cluster IP Address (CLUSTER_MULTICAST_LISTNER_IP_ADDRESS)	Used to specify Threadpool cluster IP Address. For Example, 232.0.01
Cluster Port (CLUSTER_MULTICAST_LISTNER_PORT)	Used to specify Threadpool Cluster Port. For Example, 6660
Target JMS Module (TARGETTYPE)	Used to specify target JMS Module: <ul style="list-style-type: none"> ■ Server ■ Cluster
Target JMS Module name (TARGETJMSSERVER)	If TARGETTYPE set to 1 i.e Server then provide the name of the managed server. Eg(obphost_server1). If TARGETTYPE set to 2 i.e Cluster then provide the name of the cluster. Eg(obphost_cluster1).

Figure 2–3 Installer: config.properties file

```

#INSTALLER DETAILS
IS_DEV_ENV=false
OBP_HOST_LIB=ob.host.app/ob.app.host.coll/APP-INF/lib
OBP_THIRDPARTY_LIB=ob.host.app/ob.app.host.tp/APP-INF/lib
IS_UI_ENABLED=N
IS_STANDALONE=N
#INITIAL DETAILS
OPERATING_SYSTEM =Linux
INSTALL_DIR=/scratch/app/product/fmw/obpininstall/obp
HOST_CONFIG=Y
UI_CONFIG=N
BATCH_CONFIG=Y
CUSTOM_SUPPORT=N
THREADPOOL_CONFIG=Y
DOMAINNAME=HOST+BATCH
#UI CONFIGURATION
UI_LOG_DIR=/scratch/app/product/fmw/obpininstall/obp/fclogs/logs
UI_IP_ADDRESS=[REDACTED]
UI_PORT=8001
UI_WEBLOGIC_USERNAME=weblogic
UI_WEBLOGIC_PASSWORD=[REDACTED]
UI_DATASOURCE=jdbc/FCBDataSource_NonXA
UI_ADMINSERVERPORT=7001
#HOST CONFIGURATION
HOST_IP_ADDRESS=[REDACTED]
HOST_PORT=8001
HOST_LOG_DIR=/scratch/app/product/fmw/obpininstall/obp/fclogs/logs
JAVA_HOME=/scratch/app/product/jdk1.8.0_172
HIBERNATE_JAR_DIR=/scratch/ofssobp/Hibernate_tmp
HOST_WEBLOGIC_USERNAME=weblogic
HOST_WEBLOGIC_PASSWORD=[REDACTED]
HOST_DATASOURCE=jdbc/FCBDataSource_NonXA
HOST_ADMINSERVERPORT=7001
#DB CONFIGURATION
DB_IP_ADDRESS=[REDACTED]
DB_PORT=1521
DB_SID=P26184B
DB_USERNAME=COL27
DB_PASSWORD=[REDACTED]
#BATCH CONFIGURATION
THREADPOOL_NAME=MT
NUMBER_OF_THREADS=5
BATCH_USER=SYSUSER
BATCH_LOG_DIR=/scratch/app/product/fmw/obpininstall/obp/fclogs/logs
#THREADPOOL CONFIGURATION
WEBLOGIC_SERVER_HOME=/scratch/app/product/fmw/wlserver
RMI_PORT=2020
DOMAIN_PATH=/scratch/app/product/fmw/user_projects/domains/
DOMAIN_NAME=host_domain
CLUSTER_NAME=IUT2
CLUSTER_MULTICAST_LISTNER_IP_ADDRESS=232.0.0.1
CLUSTER_MULTICAST_LISTNER_PORT=6660
TARGETTYPE=2
TARGETJMSERVER=obphost_cluster1

```

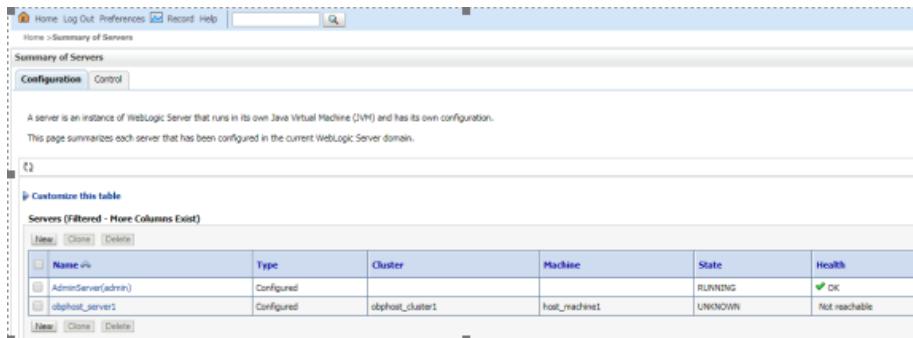
- iii. Save config.properties file.
- iv. Ensure that Admin server is in RUNNING state and Managed server is down.
- v. Check if Admin server is running. Access Weblogic Admin Console. If Weblogic Admin Console returns below screen Admin server is up.

Figure 2–4 Weblogic Admin Console

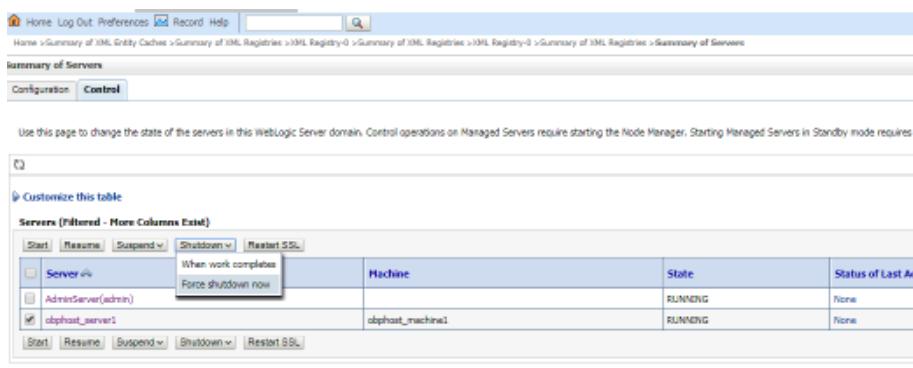
- vi. If Admin Server is down, start Admin Server. To start Admin server, use the following command:

```
 ${middleware_home}/user_projects/domains/{domain_name}/bin/ startWeblogic.sh
```

- vii. To check if managed server is running, navigate to servers tab.

Figure 2–5 Summary of servers

- viii. If managed server state is running, navigate to control tab and select managed server check box, click on shutdown button and select Force shutdown now.

Figure 2–6 Force shutdown

- ix. Click Yes on next screen.

Figure 2–7 Verify Server State

Server	Machine	State
AdminServer(admin)		RUNNING
obphost_server1	host_machine1	SHUTDOWN

- x. If only Admin server is running, run installer using below command.

```
sh Install_Silent.sh
```

Installation Completed..! is prompted at the end.

- b. GUI mode:

- i. Start the XManager application on the windows machine from where you have connected to the Host Server remotely and then click XPassive.
- ii. Export the XManager UI on the Host Server (Linux environment) using the following command:

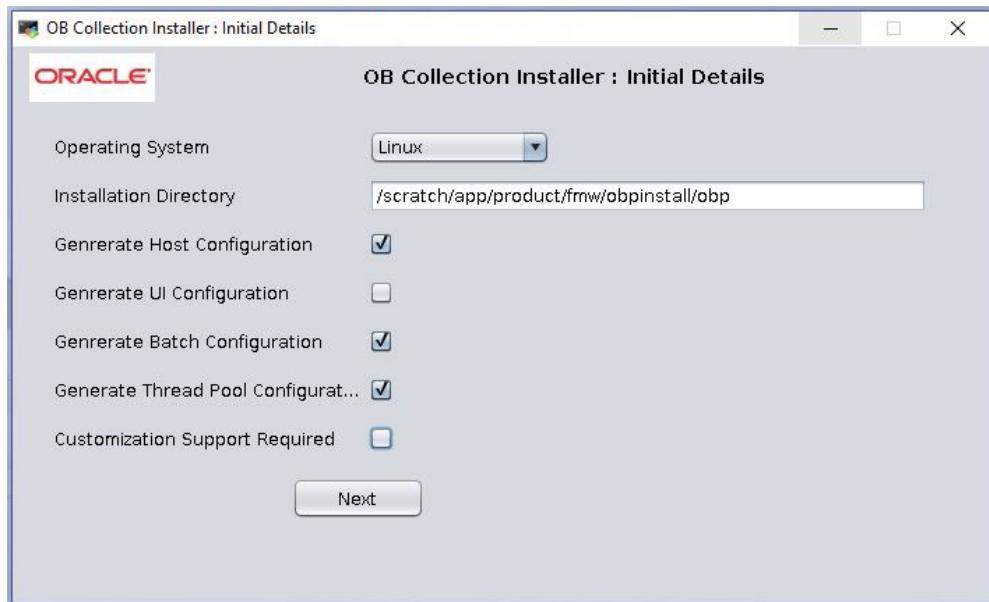
```
DISPLAY=<IP>:0.0;
export DISPLAY
```

Where, <IP> is the IP address of the windows machine.

- iii. Update config.properties in the TEMPDIR directory.
- iv. Set IS_UI_ENABLED=Y.
- v. Run installer using the following command:

```
java -jar collectioninstaller.jar
```

The **Installer: Initial Details** wizard page appears.

Figure 2–8 Installer: Initial Details

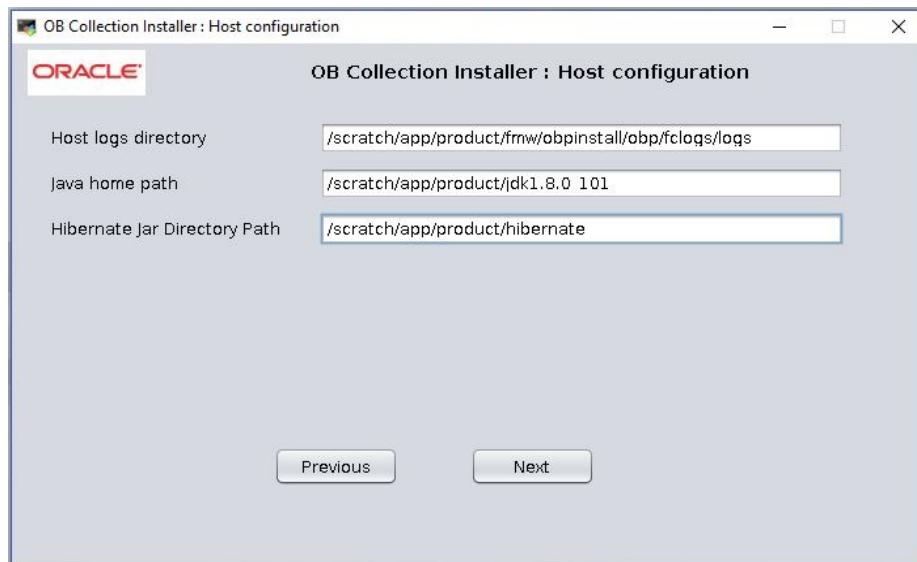
The **Installer: Initial Details** wizard page contains the following fields:

Table 2–6 Installer: Initial Details

Field	Description
Operating System	<p>Used to indicate the operating system on which you want to install the OB Collections and OB Recovery Host Media Pack. The options are:</p> <ul style="list-style-type: none"> ■ Linux ■ Windows <p>You can only integrate OB Collections and OB Recovery with OBP on the Linux environment.</p>
Installation Directory	<p>Used to specify the directory where you want to install the OB Collections and OB Recovery Host Media Pack. It should be same as the installation directory where OBP Host Media pack is installed.</p> <p>By default, /scratch/app/product/fmw/obpinstall/obp is specified in this field. You can change the path and directory name, if required.</p>
Generate Host Configuration	Used to deploy the OB Collections and OB RecoveryHost Media Pack components, if this option is checked.
Generate UI Configuration	Used to deploy the OB Collections and OB RecoveryPresentation Media Pack components, if this option is checked.

Field	Description
Generate Batch Configuration	Used to deploy the batch components used for configuring the batch server, if this option is checked. If you want to deploy the batch components, you must always select the Generate Host Configuration check box along with the Generate Batch Configuration check box.
Generate Thread Pool Configuration	Used to deploy the threadpool components used for configuring the threadpool, if this option is checked. If you want to deploy the threadpool components, you must always select the Generate Host Configuration check box and Generate Batch Configuration check box along with the Generate Threadpool Configuration check box.
Customization Support Required	Used to enable the customization support, if CUSTOM_SUPPORT is set to Y.

- vi. Select the **Generate Host Configuration** check box.
- vii. If you want to deploy the batch components on the host server, select the **Generate Batch Configuration** check box.
- viii. If you want to deploy the batch components on the host server, select the **Generate Threadpool Configuration** check box.
- ix. Click **Next**. The **Installer: Host Configuration** screen appears.

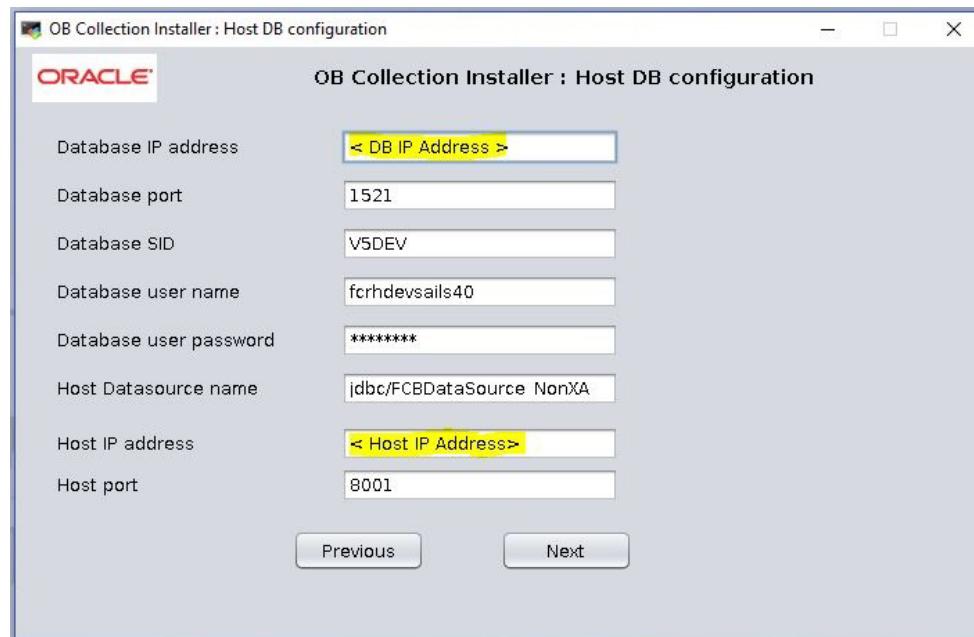
Figure 2–9 Installer: Host Configuration

The **Installer: Host Configuration** wizard page contains the following fields:

Table 2–7 Installer: Host Configuration

Field	Description
Host Logs Directory	Used to indicate the directory where the logs must be created on the host server. By default, /scratch/app/product/fmw/obpininstall/obp/fclogs/logs is specified in this field. You can change the path and directory name, if required.
Java Home Path	Used to indicate the directory where Oracle JDK is installed. By default, /scratch/app/product/jdk1.8.0_281 is specified in this field. You can change the path and directory name, if required.
Hibernate Path	Used to indicate the directory where Hibernate jars downloaded and copied jars from /lib/required/ from extracted hibernate-release-4.1.0.Final.zip package by default, /scratch/app/product/hibernate is specified in this field. You can change the path and directory name, if required. Installer will copy the jars from this directory to Third party directory.

- x. Change the values in these fields, if required.
- xi. Click **Next**. The **Installer: Host DB Configuration** screen appears.

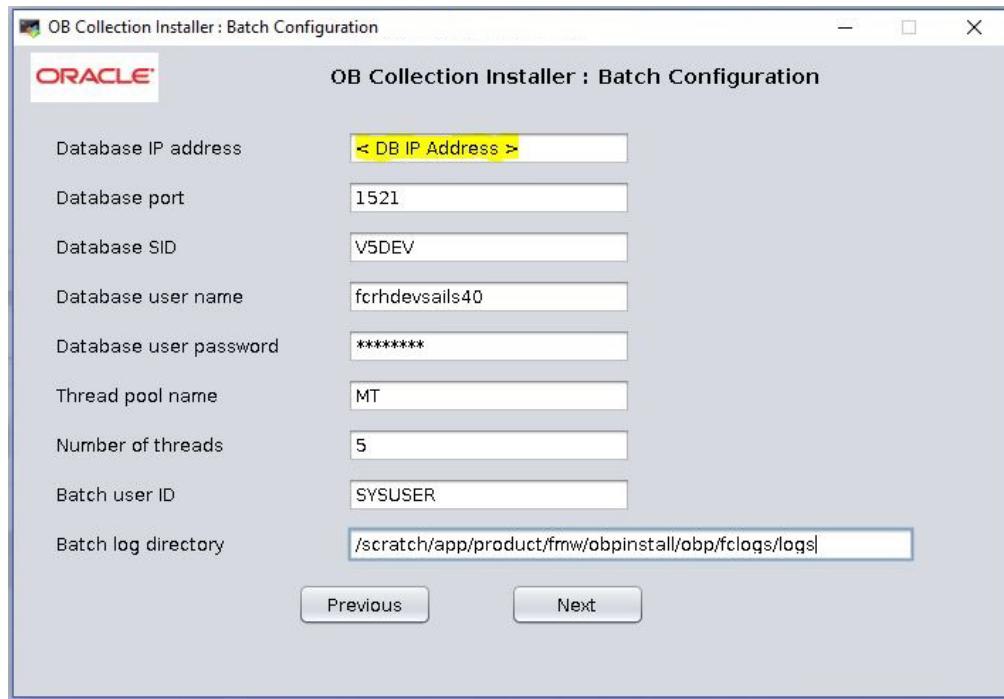
Figure 2–10 Installer: Host DB Configuration

The following fields appear in the **Installer: Host DB Configuration** screen:

Table 2–8 Installer: Host DB Configuration

Field	Description
Database IP address	Used to specify the database IP address. For example, 10.180.7.77.
Database port	Used to specify the database port. For example, 1521.
Database System ID (SID)	Used to specify the database SID. For example, ORA125.
Database user name	Used to specify the database user name.
Database user password	Used to specify the database password.
Host Datasource name	Used to specify the host NonXA data source name. For example, jdbc/FCBDataSource_NonXA.
Host IP address	Used to specify the host IP address. For example, 10.180.6.11
Host port	Used to specify the Host server WebLogic managed server port. For example, 8001.

- xii. Click **Next**. The **Installer: Batch Configuration** screen appears. This screen appears only if you have selected the **Generate Batch Configuration** option in the **Installer: Initial Details** screen.

Figure 2–11 Installer: Batch Configuration

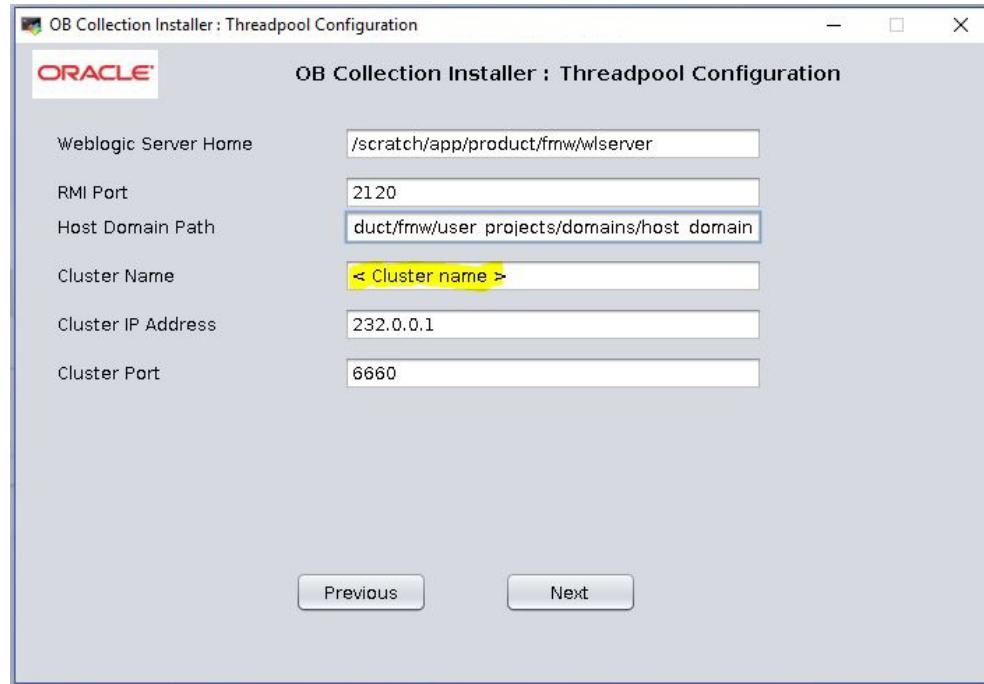
The following fields appear in the **Installer: Batch Configuration** screen:

Table 2–9 Installer: Batch Configuration

Field	Description
Database IP address	Used to specify the database IP address. For example, 10.180.7.77.
Database port	Used to specify the database port. For example, 1521.
Database System ID (SID)	Used to specify the database SID. For example, V5DEV.
Database user name	Used to specify the database user name.
Database user password	Used to specify the database password.
Thread pool name	Used to specify the name of the thread pool. For example, MT.
Number of threads	Used to specify the number of the threads that the thread pool can support. For example, 5.
Batch user ID	Used to specify the batch user ID. For example, SYSUSER.
Batch log directory	Used to specify the batch log directory. For example, /scratch/app/product/fmw/obpininstall/obp/fclogs/logs.

- xiii. Click **Next**. The **Installer: Threadpool Configuration** screen appears. This screen appears only if you have selected the **Generate Threadpool Configuration** option in the **Installer: Initial Details** screen.

Figure 2–12 Installer: Threadpool Configuration

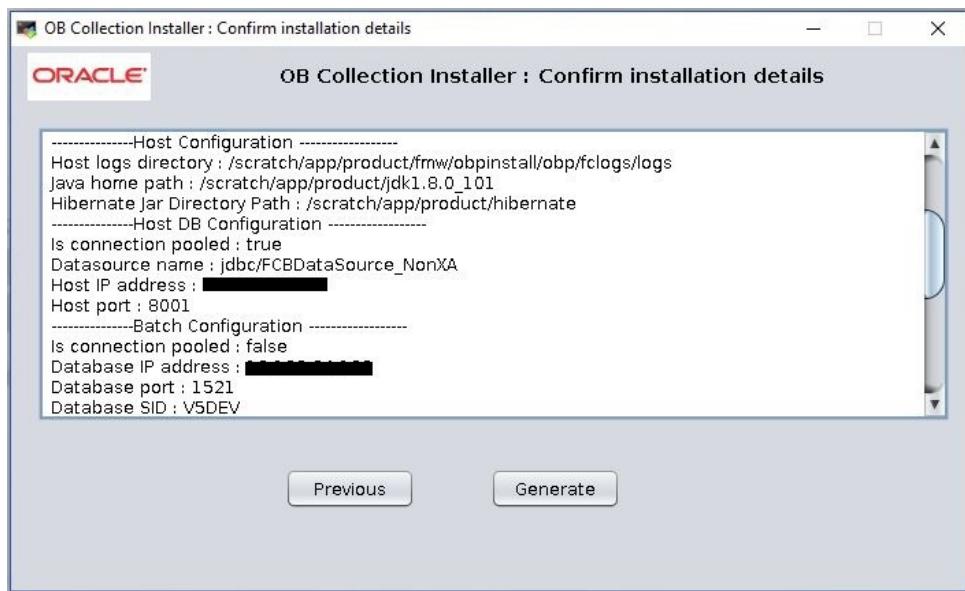
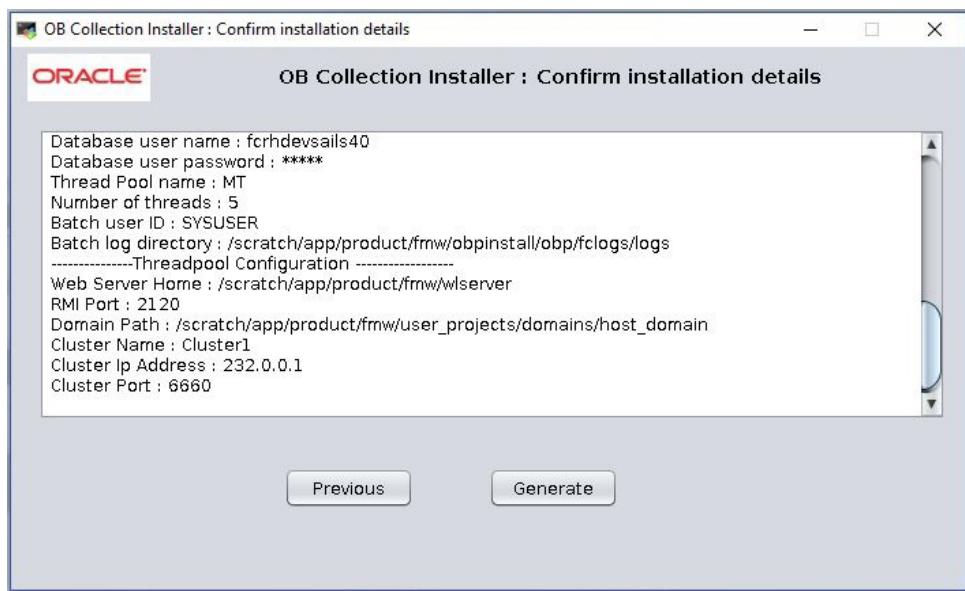


The following fields appear in the **Installer: Threadpool Configuration** screen:

Table 2–10 Installer: Threadpool Configuration in config.properties

Field	Description
Weblogic Server Home	Used to specify the weblogic server home path. For example, /scratch/app/product/fmw/wlserver.
RMI Port	Used to specify the rmi port. For example, 2120.
Host Domain Path	Used to specify the Host Domain Path. For example, /scratch/app/product/fmw/user_projects/domains/host_domain.
Cluster Name	Used to specify the Threadpool cluster name. For example, Cluster1
Cluster IP Address	Used to specify Threadpool cluster IP Address. For Example, 232.0.01
Cluster Port	Used to specify Threadpool Cluster Port. For Example, 6660

- xiv. Click **Next**. The **Installer: Confirm installation details** screen appears.

Figure 2–13 Installer: Confirm Installations Details**Figure 2–14 Installer: Confirm Installations Details**

- xv. Click **Generate**. The **Installer: Installing** screen appears.
 - xvi. Click **Done**.
7. Delete **cglib.cglib-nodep.jar** from <Weblogic Home>\modules\ if present. For example, delete from:
 /scratch/app/product/fmw/wlserver/modules
 OR

2.2 Installing the OB Collections and OB Recovery Host Media Pack

/scratch/app/product/fmw/oracle_common/modules/thirdparty

8. Log in to Weblogic console and navigate to Data Sources-> OBP_HOST_DS_NONXA -> Connection Pool.
9. Change Driver Class Name = oracle.jdbc.OracleDriver if it is different.

Figure 2–15 Data Source Connection Pool

The screenshot shows the 'Settings for OBP_HOST_DS_NONXA' page in the Oracle WebLogic Server Administration Console. The 'Connection Pool' tab is selected. A note states: 'The connection pool within a JDBC data source contains a group of JDBC connections that applications reserve, use, and then return to the WebLogic Server or when deploying the data source to a new target.' Below this, a note says: 'Use this page to define the configuration for this data source's connection pool.' There are two configuration fields: 'URL:' set to 'jdbc:oracle:thin:@//[REDACTED] 1521/PDB0515' and 'Driver Class Name:' set to 'oracle.jdbc.OracleDriver'.

10. Log in to Weblogic console and navigate to XML Registries.
11. Add new XML Registry Properties. If New button is disabled click on Lock & Edit button.

Figure 2–16 Add XML Registry

The screenshot shows the 'Summary of XML Registries' page in the Oracle WebLogic Server Administration Console. It includes a note: 'The XML Registry is a facility for configuring and administering the XML resources of WebLogic Server. XML resources include the default parser and transformer factories.' Below this is a table titled 'XML Registry (Filtered - More Columns Exist)'. The table has columns for 'Name' and 'Document Builder Factory'. There are no items displayed. The 'Name' column has a dropdown arrow icon.

12. Change the following properties while adding XML Registry Properties and save changes.
 - Document Builder Factory =
com.sun.org.apache.xerces.internal.jaxp.DocumentBuilderFactoryImpl

- SAX Parser Factory = com.sun.org.apache.xerces.internal.jaxp.SAXParserFactoryImpl
- Transformer Factory = com.sun.org.apache.xalan.internal.xsltc.trax.TransformerFactoryImpl

Figure 2–17 Settings for XML Registry

The screenshot shows a configuration page for an XML Registry. At the top, there's a navigation bar with links for Home, Log Out, Preferences, Record, and Help. Below the navigation is a breadcrumb trail: Home > Summary of XML Registries > XML Registry-0 > Summary of XML Registries > XML Registry-0. The main title is 'Settings for XML Registry-0'. A tab bar at the top of the form includes 'Configuration' (which is selected), Targets, Contents, and Notes. A 'Save' button is located at the bottom left of the form.

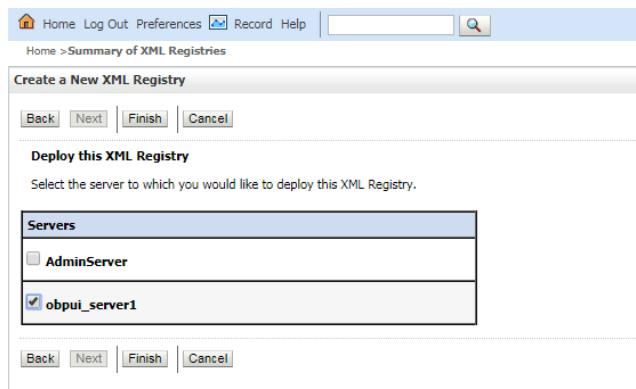
Use this page to configure an XML registry, in particular to specify the implementation classes that WebLogic Server uses, by default, for the factories used to obtain

Name:	XML Registry-0
Document Builder Factory:	com.sun.org.apache.xerces.internal.jaxp.DocumentBuilderFactoryImpl
SAX Parser Factory:	com.sun.org.apache.xerces.internal.jaxp.SAXParserFactoryImpl
Transformer Factory:	com.sun.org.apache.xalan.internal.xsltc.trax.TransformerFactoryImpl
XPath Factory:	weblogic.xml.jaxp.WebLogicXPathFactory
Schema Factory:	weblogic.xml.jaxp.WebLogicSchemaFactory
XML Input Factory:	weblogic.xml.jaxp.WebLogicXMLInputFactory
XML Output Factory:	weblogic.xml.jaxp.WebLogicXMLOutputFactory
XML Event Factory:	weblogic.xml.jaxp.WebLogicXMLEventFactory
When To Cache:	cache-on-reference ▾

Save

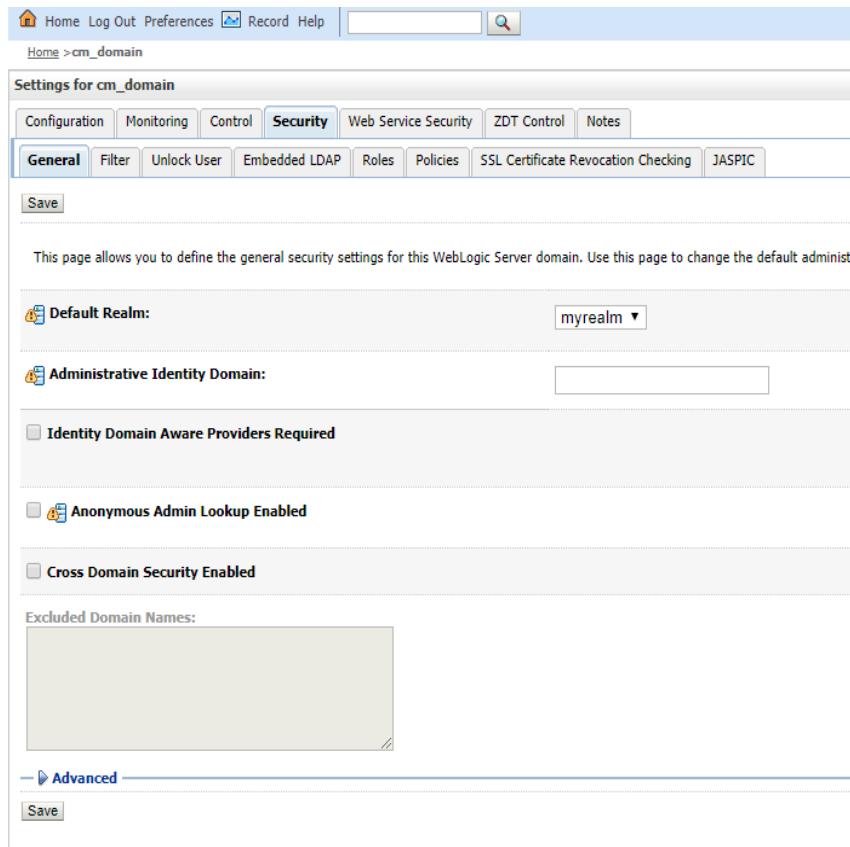
13. Click Next if available and Deploy XML Registry to managed server.

Figure 2–18 Deploy XML Registry



14. Log in to Weblogic console and navigate to Domain -> host_domain (if multiple domains available) -> Security tab.
15. Verify **Cross Domain Security Enabled** check box is unchecked.

Figure 2–19 Host Domain Security



2.3 Configuring Weblogic Domain For Host

The following steps explain how to configure weblogic domain for host. These steps are already integrated in Silent mode of installer so continue from step 11. For GUI mode follow all steps.

1. To perform domain configuration, you must run Admin server. Ensure that managed server is not running.
2. To check if managed server is running, login to Weblogic console and navigate to servers tab.

Figure 2–20 Summary of servers

Name	Type	Cluster	Machine	State	Health
AdminServer(admin)	Configured			RUNNING	OK
obphost_server1	Configured	obphost_cluster1	host_machine1	UNKNOWN	Not reachable

3. If managed server state is running, navigate to control tab and select managed server check box, click on shutdown button and select Force shutdown now.

Figure 2–21 Force shutdown

Server	When work completes	Machine	State	Status of Last Act
AdminServer(admin)	When work completes		RUNNING	None
obphost_server1	Force shutdown now	obphost_machine1	RUNNING	None

4. Click Yes on next screen.

2.3 Configuring Weblogic Domain For Host

Figure 2–22 Verify Server State

The screenshot shows the Oracle WebLogic Admin Console interface. At the top, there's a navigation bar with links like Home, Log Out, Preferences, Record, Help, and a search bar. Below that is a breadcrumb trail: Home > Summary of Servers. A 'Summary of Servers' section has tabs for Configuration and Control, with Control being selected. A note below says: 'Use this page to change the state of the servers in this WebLogic Server domain. Control operations on Managed Servers require starting the Node Manager. Starting Managed Servers in this domain requires the Node Manager to be running.' Below this is a table titled 'Servers (Filtered - More Columns Exist)'. The table has columns for Server, Machine, and State. It lists two servers: 'AdminServer(admin)' is listed under 'Machine' as 'host_machine1' and 'State' as 'RUNNING'; 'obphost_server1' is listed under 'Machine' as 'host_machine1' and 'State' as 'SHUTDOWN'. There are also buttons for Start, Resume, Suspend, Shutdown, and Restart SSL.

5. Check if Admin server is running. Access Weblogic Admin Console. If Weblogic Admin Console returns below screen Admin server is up.

Figure 2–23 Weblogic Admin Console



6. If Admin Server is down, start Admin Server. To start Admin server, use the following command:

```
 ${middleware_home}/user_projects/domains/{domain_name}/bin/startWeblogic.sh
```

7. Browse the folder where you have extracted the Installation package.

8. Run the following command:

```
 cd <PATH>/TEMPDIR
```

9. Execute the Install.sh file as below:

```
 ./Install.sh
```

The install file prompts for the following input:

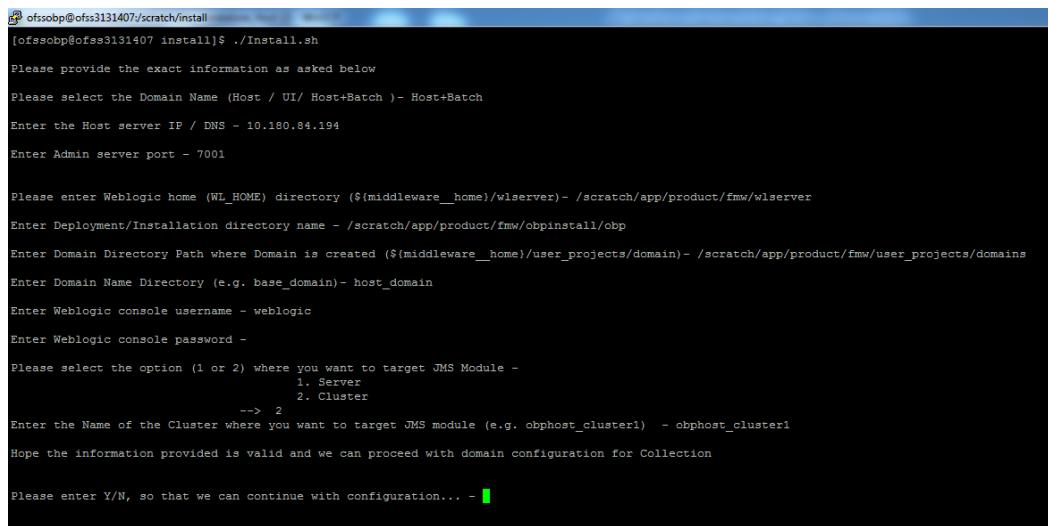
Table 2–11 Configuring Weblogic Domain for Host

Field	Description
Select the Domain Name (Host / UI)	Indicates whether to configure Host or UI domain. To set up host domain, enter host.
Enter the Host IP/DNS (Domain Name Server)	Indicates the host IP address or DNS name.
Enter Admin Server Port	Indicates the port number of admin server.
Enter Weblogic home (WL_HOME) directory (\${middleware_home}/wlserver)	Indicates the home path of Weblogic. For example, /scratch/app/product/fmw/wlserver
Enter Deployment/Installation directory name	Used to specify the directory where you want to install the OB Collections and OB Recovery Host Media Pack. By default, /scratch/app/product/fmw/obpinstall/obp is specified in this field. You can change the path and directory name, if required.
Enter Domain Directory Path where Domain is created (\${middleware_home}/user_projects/domain)	Indicates the generic domain_home path.
Enter Domain Name Directory (for example, host_domain)	Provide the domain name configured on weblogic and the directory present in domain_home.
Enter Weblogic console username	Indicates the username of weblogic console.
Enter Weblogic console password	Indicates the password of weblogic console.
Select the option (1 or 2) where you want to target JMS Module: 1. Server 2. Cluster	Select the option 1 or 2 as per requirement or configuration in OBP.
Enter the Name of Server where you want to target JMS module (for example, obphost_server1) -	If option 1 is selected then provide the name of the managed server.
Enter the Name of the Cluster where you want to target JMS module (For example, obphost_cluster1) -	If option 2 is selected then provide the name of the cluster.

10. Verify whether the information passed is correct and enter 'Y' to continue the configuration or 'N' to avoid domain configuration as shown in the following screenshot:

2.3 Configuring Weblogic Domain For Host

Figure 2–24 Domain Configuration: Confirm



```
ofssobp@ofss3131407:/scratch/install
[ofssobp@ofss3131407 install]$ ./Install.sh
Please provide the exact information as asked below
Please select the Domain Name (Host / UI/ Host+Batch ) - Host+Batch
Enter the Host server IP / DNS - 10.180.84.194
Enter Admin server port - 7001

Please enter Weblogic home (WL_HOME) directory (${middleware_home}/wlserver)- /scratch/app/product/fmw/wlserver
Enter Deployment/Installation directory name - /scratch/app/product/fmw/obpininstall/obp
Enter Domain Directory Path where Domain is created (${middleware_home}/user_projects/domain)- /scratch/app/product/fmw/user_projects/domains
Enter Domain Name Directory (e.g. base_domain)- host_domain
Enter Weblogic console username - weblogic
Enter Weblogic console password -
Please select the option (1 or 2) where you want to target JMS Module -
      1. Server
      2. Cluster
--> 2
Enter the Name of the Cluster where you want to target JMS module (e.g. obphost_cluster1) - obphost_cluster1
Hope the information provided is valid and we can proceed with domain configuration for Collection

Please enter Y/N, so that we can continue with configuration... - [
```

Once you have completed the execution steps listed above, perform the following steps:

1. Connect to the database and execute below two statements to enable collection bootstrap.

You must set the collection bootstrap to true for the Collections module to function properly.

```
update flx_fw_config_all_b set prop_value='true' where
prop_id='collection.bootstrap' and category_id='root';
update flx_fw_config_all_b set prop_value='true' where
prop_id='collection.webservice.bootstrap' and category_
id='root';
```

2. Need to update setDomainEnv.sh file to append EXTRA_JAVA_PROPERTIES and append PRE_CLASSPATH as following, if not present:

EXTRA_JAVA_PROPERTIES before installation:

```
EXTRA_JAVA_PROPERTIES=" -
Djavax.xml.parsers.DocumentBuilderFactory=com.sun.org.apache.
xerces.internal.jaxp.DocumentBuilderFactoryImpl -
Djavax.xml.transform.TransformerFactory=com.sun.org.apache.xa
lan.internal.xsltc.trax.TransformerFactoryImpl -
Dweblogic.configuration.schemaValidationEnabled=false -
DentityExpansionLimit=1000 -Duser.home=${OBP_ORACLE_
HOME}/config -Dfc.io.dir=${OBP_ORACLE_HOME} ${ORACLE_MEM_ARGS}
${EXTRA_JAVA_PROPERTIES}"
```

After Installation:

```
EXTRA_JAVA_PROPERTIES=" -
Djavax.xml.parsers.DocumentBuilderFactory=com.sun.org.apache.
xerces.internal.jaxp.DocumentBuilderFactoryImpl -
Djavax.xml.transform.TransformerFactory=com.sun.org.apache.xa
lan.internal.xsltc.trax.TransformerFactoryImpl -
```

```
Djax.xml.parsers.SAXParserFactory=com.sun.org.apache.xerces
.internal.jaxp.SAXParserFactoryImpl -
Dweblogic.configuration.schemaValidationEnabled=false -
Dweblogic.configuration.schemaValidationEnabled=false -
DentityExpansionLimit=1000 -Duser.home=${OBP_ORACLE_
HOME}/config -Dfc.io.dir=${OBP_ORACLE_HOME} ${ORACLE_MEM_ARGS}
${EXTRA_JAVA_PROPERTIES}"
```

Before Installation:

```
PRE_CLASSPATH="${OBP_ORACLE_HOME}/config:${OBP_ORACLE_
HOME}/config/security/oaam:${PRE_CLASSPATH}"
export PRE_CLASSPATH
```

After Installation:

```
PRE_CLASSPATH="${OBP_ORACLE_HOME}/config:${OBP_ORACLE_
HOME}/config/security/oaam:${OBP_ORACLE_
HOME}/obp.thirdparty.app.domain/APP-INF/lib/xmlparserv2-
12.1.0.2.0.jar:${PRE_CLASSPATH}"
export PRE_CLASSPATH
```

3. Restart the admin server. To restart the Admin server, first stop the Admin server and then start it again.

- a. To stop the Admin server, use the following command:

```
 ${middleware_home}/user_projects/domain/{domain_
name}/bin/stopWeblogic.sh
```

- b. Delete tmp, cache directories present inside the server directory.

For example,

```
 ${middleware_home}/user_projects/domain/{domain_
name}/servers/{server_name}/cache
 ${middleware_home}/user_projects/domain/{domain_
name}/servers/{server_name}/tmp
```

- c. Delete the stage folder also if it is present under the following location:

```
 ${middleware_home}/user_projects/domain/{domain_
name}/servers/{server_name}/stage
```

Where {server_name} indicates all the servers that are available in the domain, such as AdminServer, Managed server (obphost_server1).

- d. Then start Admin server by using the following command:

```
 ${middleware_home}/user_projects/domain/{domain_
name}/bin/startWeblogic.sh
```

4. Start the managed servers.

Ignore the below error while starting host managed server.

ERROR (support.license.ModuleInfoCache) Module feature configuration not found; no modules will be disabled. To resolve this error add a feature configuration of type F1MD and associated options for disabled modules.

3 Installing the Presentation Media Pack

You must follow the steps mentioned below to install the Presentation Media Pack:

1. Install the Presentation Media Pack.
2. Configure the web logic domain.
3. Deploy the Collections module.

3.1 Prerequisites

You must install the following software prior to installing the Presentation Media Pack:

- OBP 2.7.1.2.0 Host Media Pack.
- OBP 2.7.1.2.0 Presentation Media Pack.
- OB Collections and OB Recovery 2.7.1.2.0 Host Media Pack.

Note

Oracle JDK 1.8 Update 281 is required to run the OB Collections and OB Recovery V2.7 installer. For more information on JDK installation, see [Chapter 5 Installing Third-Party Software](#).

3.2 Installing the Presentation Media Pack

To install the Presentation Media Pack, you must download the installation package from the following link:

<https://edelivery.oracle.com/>

Note

Ensure that the node manager is not running on any of the target installation machines. Also, ensure that there are no processes running on the listener ports for any of the OBP domain servers that are to be installed.

To install the Presentation Media Pack, perform the following steps:

1. Download the appropriate OB Collections and OB Recovery Media Pack. The media pack is available in this format: Collection_V[Build_Number].zip
2. Log in to the presentation server.
3. Create a temporary directory on the presentation server. For example, <TEMPDIR>.
4. Copy the OB Collections and OB Recovery Media Pack Collection_V[Build_Number].zip downloaded from edelivery to presentation Linux server using WINSCP.
5. Copy the OB Collections and OB Recovery Media Pack Collection_V[Build_Number].zip into the <TEMPDIR>.

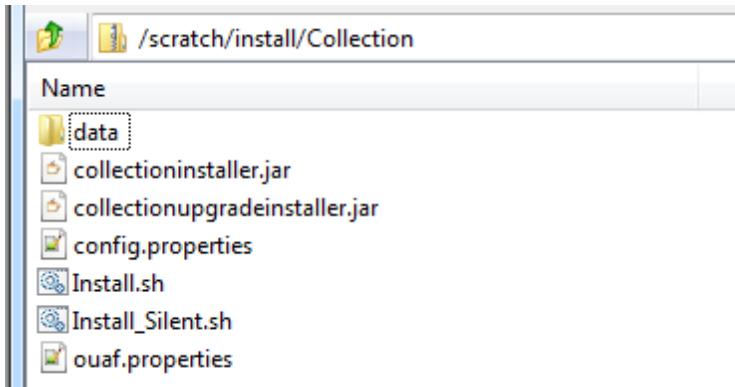
6. Uncompress the OB Collections and OB Recovery Media Pack Collection_V[Build_Number].zip by running the following commands:

```
cd <TEMPDIR>
unzip Collection_V[Build_Number].zip
```

The contents of the zip file are extracted in the TEMPDIR folder. The following files/folders are extracted:

- config.properties
- ouaf.properties
- data
- Install.sh
- collectioninstaller.jar
- collectionupgradeinstaller.jar

Figure 3–1 Collection_V[Build_Number].zip uncompressed



7. Collection installer operates in two modes. Go with either mode.

- a. Silent Mode:

- i. Update config.properties in the TEMPDIR directory.
- ii. Update below sections in config.properties as shown in [Figure 2–3](#):

- INSTALLER DETAILS
 - IS_DEV_ENV=false
 - IS_UI_ENABLED=N
- INITIAL DETAILS
 - HOST_CONFIG=N
 - UI_CONFIG=Y
 - BATCH_CONFIG=N

- CUSTOM_SUPPORT=N
- THREADPOOL_CONFIG=N
- HOST CONFIGURATION
- UI CONFIGURATION
- DB CONFIGURATION

In config.properties: Initial Details section contains the following fields

Table 3–1 Installer: Initial Details in config.properties

Field	Description
Operating System (OPERATING_SYSTEM)	<p>Used to indicate the operating system on which you want to install the OB Collections and OB Recovery Host Media Pack. The options are:</p> <ul style="list-style-type: none"> • Linux • Windows <p>You can only integrate OB Collections and OB Recovery with OBP on the Linux environment.</p>
Installation Directory (INSTALL_DIR)	<p>Used to specify the directory where you want to install the OB Collections and OB Recovery Host Media Pack. It should be same as the installation directory where OBP Host Media pack is installed.</p> <p>By default, /scratch/app/product/fmw/obpininstall/obp is specified in this field. You can change the path and directory name, if required.</p>
Generate Host Configuration (HOST_CONFIG)	Used to deploy the OB Collections and OB Recovery Host Media Pack components, if this option is true.
Generate UI Configuration (UI_CONFIG)	Used to deploy the OB Collections and OB Recovery Presentation Media Pack components, if this option is true.
Generate Batch Configuration (BATCH_CONFIG)	<p>Used to deploy the batch components used for configuring the batch server, if this option is true.</p> <p>If you want to deploy the batch components, you must always set the HOST_CONFIG and BATCH_CONFIG value to true.</p>
Generate Thread Pool Configuration	Used to deploy the threadpool components used for configuring the threadpool, if this option is checked.

Field	Description
(THREADPOOL_CONFIG)	If you want to deploy the threadpool components, you must always set the HOST_CONFIG , BATCH_CONFIG and THREADPOOL_CONFIG value to true.
Customization Support Required (CUSTOM_SUPPORT)	Used to enable the customization support, if this option is true.
Domain name (DOMAINNAME)	Used to specify domain name, possible options are: <ul style="list-style-type: none"> • UI • HOST • HOST + BATCH Select UI for presentation mediapack.

In config.properties: Host Configuration section contains the following fields:

Table 3–2 Installer: Host Configuration in config.properties

Field	Description
Host IP address (DB_IP_ADDRESS)	Used to specify the host IP address. For example, 10.180.6.11.
Host port (DB_PORT)	Used to specify the Host server WebLogic managed server port. For example, 8001.
Host Logs Directory (HOST_LOG_DIR)	Used to indicate the directory where the logs must be created on the host server. By default, /scratch/app/product/fmw/obpininstall/obp/fclogs/logs is specified in this field. You can change the path and directory name, if required.
Java Home Path (JAVA_HOME)	Used to indicate the directory where Oracle JDK is installed. By default, /scratch/app/product/jdk1.8.0_281 is specified in this field. You can change the path and directory name, if required.
Hibernate Path (HIBERNATE_JAR_DIR)	Used to indicate the directory where Hibernate jars downloaded and copied jars from /lib/required/ from extracted hibernate-release-4.1.0.Final.zip package by default, /scratch/app/product/hibernate is specified in this field. You can change the path and

Field	Description
	directory name, if required. Installer will copy the jars from this directory to Third party directory.
Host weblogic user name (HOST_WEBLOGIC_PASSWORD)	Used to specify the host weblogic username.
Host weblogic password (HOST_WEBLOGIC_PASSWORD)	Used to specify the host weblogic password.
Host Datasource name (HOST_DATASOURCE)	Used to specify the host NonXA data source name. For example, jdbc/FCBDataSource_NonXA.
Host Admin server port (HOST_ADMINSERVERPORT)	Used to specify the Host server WebLogic admin server port. For example, 7001.

The following fields appear in the Installer: UI Configuration screen:

Table 3–3 Installer: UI Configuration in config.propertiesies

Field	Description
UI log directory (UI_LOG_DIR)	Used to specify the log directory for the presentation server. For example, /oracle/deployable/sails/fclogs/logs.
UI IP Address (UI_IP_ADDRESS)	Used to specify the host IP address. For example, 10.180.6.12.
UI Port (UI_PORT)	Used to specify the UI server WebLogic managed server port. For example, 8001.
UI Weblogic user name (UI_WEBLOGIC_)	Used to specify the UI WebLogic server admin user name.

Field	Description
USERNAME)	
UI Weblogic password (UI_WEBLOGIC_ PASSWORD)	Used to specify the UI WebLogic server admin password.
Host Datasource name (UI_DATASOURCE)	Used to specify the host NonXA data source name. For example, jdbc/FCBDataSource_NonXA.
UI Admin server port (HOST_ ADMINSERVERPORT)	Used to specify the UI server WebLogic admin server port. For example, 7001.

In config.properties: DB Configuration section contains the following fields:

Table 3–4 Installer: DB Configuration in config.properties

Field	Description
Database IP address (DB_IP_ ADDRESS)	Used to specify the database IP address. For example, 10.180.7.77.
Database port (DB_PORT)	Used to specify the database port. For example, 1521
Database System ID (DB_SID)	Used to specify the database SID. For example, ORA125.
Database user name (DB_USERNAME)	Used to specify the database user name.
Database user password (DB_PASSWORD)	Used to specify the database password.

Figure 3–2 Installer: config.properties file

```
IS_DEV_ENV=false
OBP_HOST_LIB=ob.host.app/ob.app.host.coll/APP-INF/lib
OBP_THIRDPARTY_LIB=ob.host.app/ob.app.host.tp/APP-INF/lib
IS_UI_ENABLED=N
IS_STANDALONE=N
#INITIAL DETAILS
OPERATING_SYSTEM =Linux
INSTALL_DIR=/scratch/app/product/fmw/obpininstall/obp
HOST_CONFIG=N
UI_CONFIG=Y
BATCH_CONFIG=N
CUSTOM_SUPPORT=N
THREADPOOL_CONFIG=N
DOMAINNAME=UI
#UI CONFIGURATION
UI_LOG_DIR=/scratch/app/product/fmw/obpininstall/obp/fclogs/logs
UI_IP_ADDRESS=[REDACTED]
UI_PORT=8001
UI_WEBLOGIC_USERNAME=weblogic
UI_WEBLOGIC_PASSWORD=[REDACTED]
UI_DATASOURCE=jdbc/FCBDataSource_NonXA
UI_ADMINSERVERPORT=7001
#HOST CONFIGURATION
HOST_IP_ADDRESS=[REDACTED]
HOST_PORT=8001
HOST_LOG_DIR=/scratch/app/product/fmw/obpininstall/obp/fclogs/logs
JAVA_HOME=/scratch/app/product/jdk1.8.0_172
HIBERNATE_JAR_DIR=/scratch/ofssobp/Hibernate_tmp
HOST_WEBLOGIC_USERNAME=weblogic
HOST_WEBLOGIC_PASSWORD=[REDACTED]
HOST_ADMINSERVERPORT=7001
#DB CONFIGURATION
DB_IP_ADDRESS=[REDACTED]
DB_PORT=1521
DB_SID=P26184B
DB_USERNAME=COL27
DB_PASSWORD=[REDACTED]
HOST_DATASOURCE=jdbc/FCBDataSource_NonXA
#BATCH CONFIGURATION
THREADPOOL_NAME=MT
NUMBER_OF_THREADS=5
BATCH_USER=SYSUSER
BATCH_LOG_DIR=/scratch/app/product/fmw/obpininstall/obp/fclogs/logs
#THREADPOOL CONFIGURATION
WEBLOGIC_SERVER_HOME=/scratch/app/product/fmw/wlserver
RMI_PORT=2020
DOMAIN_PATH=/scratch/app/product/fmw/user_projects/domains/
DOMAIN_NAME=ui_domain
CLUSTER_NAME=IUT2
CLUSTER_MULTICAST_LISTNER_IP_ADDRESS=232.0.0.1
CLUSTER_MULTICAST_LISTNER_PORT=6660
TARGETTYPE=1
TARGETJMSERVER=obpui_server1
```

- iii. Save config.properties file.

- iv. Check if Admin server is running and Managed is down. Access Weblogic Admin Console. If Weblogic Admin Console returns below screen Admin server is up.

Figure 3–3 Weblogic Admin Console



- v. If Weblogic Admin Server is down, start Admin server, use the following command:

```
 ${middleware_home}/user_projects/domain/${domain_home}/bin/startWeblogic.sh
```

- vi. If only Admin Server is up , run installer using below commands:

```
 sh Install_Silent.sh
```

Installation Completed..! is prompted at the end.

b. GUI Mode:

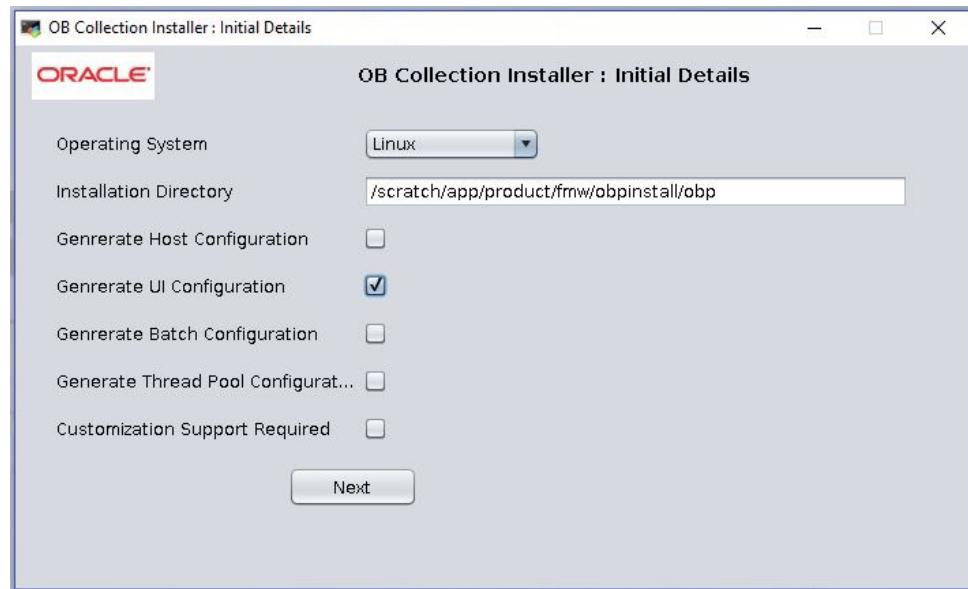
- i. Run XManager application on Windows machine.
- ii. To export the XManager UI on the Linux environment, run the following command:

```
DISPLAY=<IP>:0.0;
export DISPLAY
```

Where, IP is the IP address of your machine.
- iii. Update config.properties in the TEMPDIR directory
- iv. Set IS_UI_ENABLED=Y
- v. Run the following command to start the OB Collections and OB Recovery installer. The Installer: Initial Details screen appears.

```
java -jar collectioninstaller.jar
```

- vi. In the Installer: Initial Details screen, select the Installation directory and UI Configurations.

Figure 3–4 Installer: Initial Details

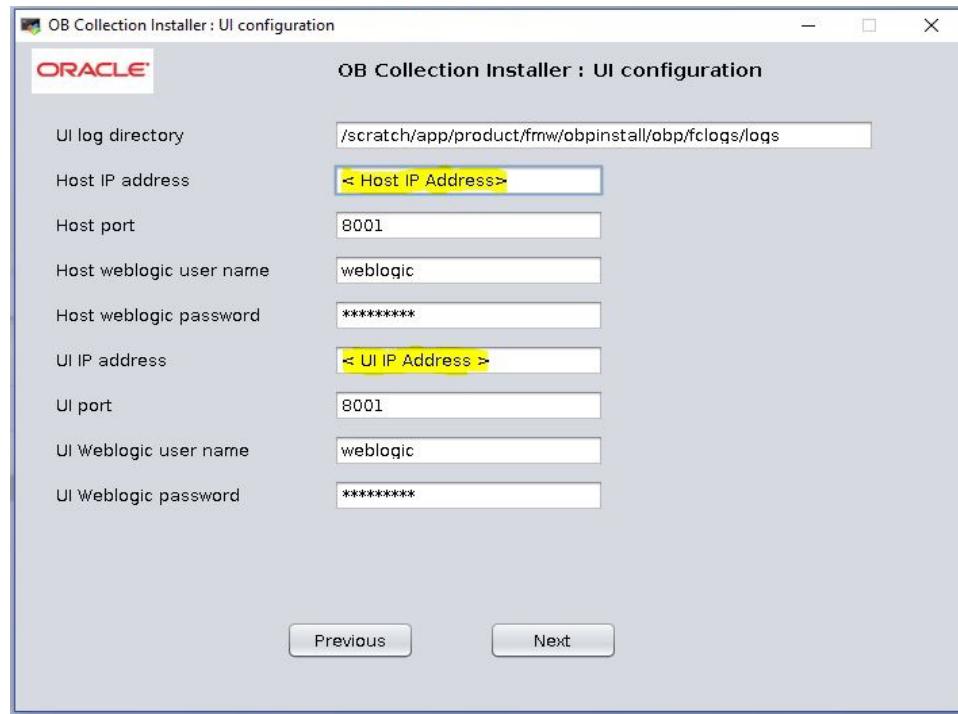
The following fields appear in the *Installer: Initial Details* screen:

Table 3–5 Installer: Initial Details

Field	Description
Operating System	Used to specify the operating system platform on which the installation is to be done. For example, Linux.
Installation Directory	Used to specify the directory where OB Collections and OB Recovery 2.7 should be installed. Note that this is the same directory where the OBP presentation or host media packs are installed. For example, /oracle/deployables/sails/fclogs/logslogs scratch/app/product/fmw/obpinstall/obp.
Generate Host Configuration	Deploys the host media pack components.
Generate UI Configuration	Deploys the presentation media pack components.
Generate Batch Configuration	Deploys the host media pack components. Note that host configuration must also be selected when batch components are to be enabled on the host that is used for configuring the batch server.
Generate Thread Pool Configuration	Deploys the Host media pack components. Note that host configuration must also be selected when Thread Pool components are to be enabled on the host that is used for configuring the Thread Pool Node.
Customization Support Required	Enables the customization support.

vii. Click Next. The **Installer: UI configuration** screen appears.

Figure 3–5 Installer: UI configuration



The following fields appear in the Installer: UI Configuration screen:

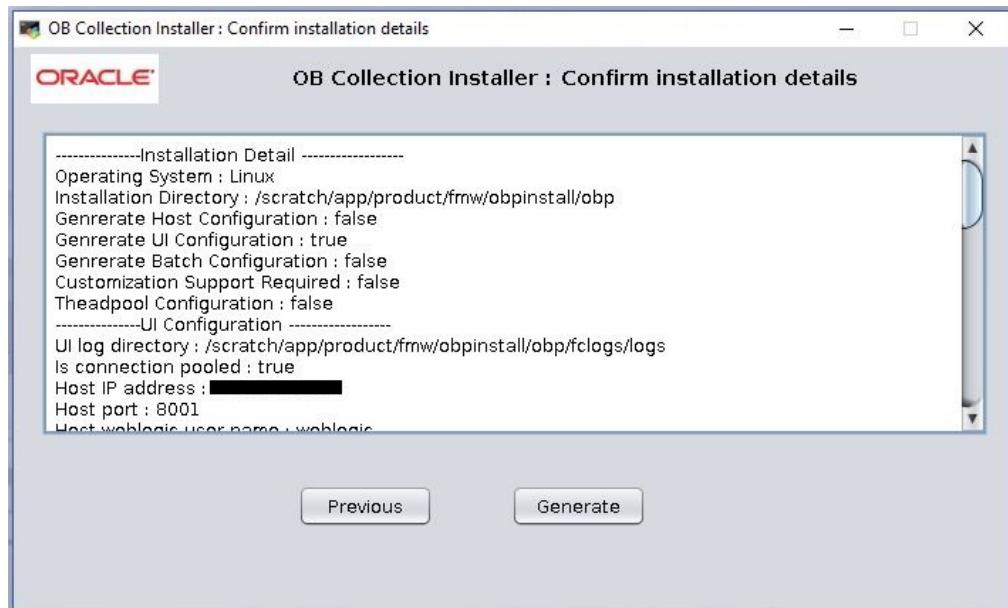
Table 3–6 Installer: UI Configuration

Field	Description
UI log directory	Used to specify the log directory for the presentation server. For example, /oracle/deployable/sails/fclogs/logs.
Host IP address	Used to specify the host IP address. For example, 10.180.6.11.
Host port	Used to specify the Host server WebLogic managed server port. For example, 8001.
Host Weblogic user name	Used to specify the Host WebLogic server admin user name.
Host Weblogic password	Used to specify the Host WebLogic server admin password.
UI IP Address	Used to specify the host IP address. For example, 10.180.6.12.
UI Port	Used to specify the UI server WebLogic managed server port. For example, 8001.

Field	Description
UI Weblogic user name	Used to specify the UI WebLogic server admin user name.
UI Weblogic password	Used to specify the UI WebLogic server admin password.

- viii. Click Next. The Installer: Confirm Installation details screen appears.

Figure 3–6 Installer: Confirm Installation Details



- ix. Click Generate.

Figure 3–7 Installer : Installing



- x. Click Done
8. Log in to Weblogic console and navigate to XML Registries.
9. Add new XML Registry Properties
10. Change the following properties while adding XML Registry Properties and save changes.
 - Document Builder Factory =
`com.sun.org.apache.xerces.internal.jaxp.DocumentBuilderFactoryImpl`
 - SAX Parser Factory =
`com.sun.org.apache.xerces.internal.jaxp.SAXParserFactoryImpl`
 - Transformer Factory =
`com.sun.org.apache.xalan.internal.xsltc.trax.TransformerFactoryImpl`

Figure 3–8 XML Registry

The screenshot shows the 'Settings for XML Registry-0' configuration page. At the top, there are tabs for Configuration, Targets, Contents, and Notes, with Configuration selected. Below the tabs is a 'Save' button. The main content area contains the following configuration parameters:

- Name:** XML Registry-0
- Document Builder Factory:** com.sun.org.apache.xerces.internal.jaxp.DocumentBuilderFactoryImpl
- SAX Parser Factory:** com.sun.org.apache.xerces.internal.jaxp.SAXParserFactoryImpl
- Transformer Factory:** com.sun.org.apache.xalan.internal.xsltc.trax.TransformerFactoryImpl
- XPath Factory:** weblogic.xml.jaxp.WebLogicXPathFactory
- Schema Factory:** weblogic.xml.jaxp.WebLogicSchemaFactory
- XML Input Factory:** weblogic.xml.jaxp.WebLogicXMLInputFactory
- XML Output Factory:** weblogic.xml.jaxp.WebLogicXMLOutputFactory
- XML Event Factory:** weblogic.xml.jaxp.WebLogicXMLEventFactory
- When To Cache:** cache-on-reference

At the bottom of the form is another 'Save' button.

11. In the Installer: Installingscreen, confirm the following:
 - Under the InstallDir, collectionenv directory is created.
 - Collectionenv folder contains the properties folder and properties folder contains the web directory.

3.3 Configuring Weblogic Domain for Presentation Server

The following steps explain how to configure weblogic domain for presentation server. These steps are already integrated in Silent mode of installer so continue from step 8. For GUI mode follow all steps.

1. To perform domain configuration, Admin server must be running. Check if Admin server is running. Access Weblogic Admin Console. If Weblogic Admin Console returns below screen Admin server is up.

Figure 3–9 Weblogic Admin Console

2. If Weblogic Admin Server is down, start Admin server, use the following command:

```
 ${middleware_home}/user_projects/domain/${domain_home}/bin/startWeblogic.sh
```

3. Browse the folder where you have extracted the Installation package.

4. Run the following command:

```
 cd <PATH>/TEMPDIR
```

5. Execute the Install.sh file as mentioned below:

```
 ./Install.sh
```

6. The install file prompts for input. Enter the following details when prompted:

Table 3–7 Configuring Weblogic Domain for Presentation

Field	Description
Please select the Domain Name (Host / UI)	Enter UI to setup host domain.
Enter the Host IP/DNS	Enter UI IP address or DNS name.
Enter Admin server port	Enter Admin server port number.
Please enter Weblogic home (WL_HOME) directory (\${middleware_home}/wlserver)	Its Weblogic home path. For example, /scratch/app/product/fmw/wlserver
Enter Deployment/Installation directory name	Used to specify the directory where you want to install the OB Collections and OB Recovery Host Media Pack. By default, /scratch/app/product/fmw/obpinstall/obp is specified in this field. You can change the path and directory name, if required.
Enter Domain Directory Path where Domain is created (\${middleware_home}/user_projects/domain)	Its generic domain_home path.
Enter Domain Name Directory (for	Provide the domain name configured on weblogic and the

Field	Description
example, base_domain)	directory present in domain_home.
Enter Weblogic console username	Username of weblogic console.
Enter Weblogic console password	Password of weblogic console.
Enter Database URL	Provide database connection URL.
Enter Database user name	Provide database user name.
Enter Database password	Provide password for the user.
Select the option (1 or 2) where you want to target Datasource and CollectionWeb application: 1. Server 2. Cluster	Select the option 1 or 2 as per requirement or configuration in OBP.
Enter the Name of Server where you want to target data source and collectionweb application (for example, obpui_server1)	If option 1 is selected then provide the name of the managed server.
Enter the Name of Cluster where you want to target data source and collectionweb application (for example, obpui_cluster01)	If option 2 is selected then provide the name of the cluster.

- Verify whether the information passed is correct and enter 'Y' to continue the configuration or 'N' to avoid domain configuration.

3.3 Configuring Weblogic Domain for Presentation Server

Figure 3–10 Domain Configuration: Confirm

```
collection@collection-linux:/scratch/app/product/fmw/obpinstall_test/Installer
[collection@collection-linux Installer]$ sh Install.sh
Please provide the exact information as asked below
Please select the Domain Name (Host / UI/ Host+Batch )- UI
Enter the UI server IP / DNS - 10.180.26.288
Enter Admin server port - 7001

Please enter Weblogic home (WL_HOME) directory (${middleware_home}/wlserver_10.3)- /scratch/app/product/fmw/wlserver
Enter Deployment/Installation directory name - /scratch/app/product/fmw/obpinstall/obp
Enter Domain Directory Path where Domain is created (${middleware_home}/user_projects/domain)- /scratch/app/product/fmw/user_projects/domains
Enter Domain Name Directory (e.g. base_domain)- ui_domain
Enter Weblogic console username - weblogic
Enter Weblogic console password -
Enter Database url (DB_IP:PORT/SID eg: 10.10.10.10:1521/HR) - 10.180.84.34:1523/P843422B
Enter Database username - OBPEXA271
Enter Database password -
Please select the option (1 or 2) where you want to target CollectionWeb application -
      1. Server
      2. Cluster
--> 2
Enter the Name of Cluster where you want to target data source and collectionweb application (e.g. obpui_cluster1) - obpui_cluster1
Hope the information provided is valid and we can proceed with domain configuration for Collection

Please enter Y/N, so that we can continue with configuration... - Y
```

Figure 3–11 Domain Configuration: Proceeding with the Process

```
[ofssobp@mun00bgr Collections]$ ./Install.sh
Please provide the exact information as asked below
Please select the Domain Name (Host / UI/ Host+Batch )- UI
Enter the UI server IP / DNS - 10.180.34.173
Enter Admin server port - 7001

Please enter Weblogic home (WL_HOME) directory (${middleware_home}/wlserver
)- /scratch/app/product/fmw/wlserver
Enter Deployment/Installation directory name - /scratch/app/product/fmw/obpinstall/obp
Enter Domain Directory Path where Domain is created (${middleware_home}/user_projects/domain)- /scratch/app/product/fmw/user_projects/domains/
Enter Domain Name Directory (e.g. base_domain)- ui_domain
Enter Weblogic console username - weblogic
Enter Weblogic console password -
Please select the option (1 or 2) where you want to target CollectionWeb application -
      1. Server
      2. Cluster
--> 1
Enter the Name of Server where you want to target data source and collectionweb application (e.g. obpui_server1) - obpui_server1
Hope the information provided is valid and we can proceed with domain configuration for Collection

Please enter Y/N, so that we can continue with configuration... - y
Start Deploying Collection as Enterprises application on weblogic
Collection web deployment is successful, please re-start the servers now.
Will be adding entry into setDomainEnv.sh
[jofssobp@mun00bgr Collections]$
```

8. Need to update setDomainEnv.sh file to append EXTRA_JAVA_PROPERTIES, if not present.

EXTRA_JAVA_PROPERTIES before installation:

```

EXTRA_JAVA_PROPERTIES=" - 
Djavax.xml.parsers.DocumentBuilderFactory=com.sun.org.apache.
xerces.internal.jaxp.DocumentBuilderFactoryImpl - 
Djavax.xml.transform.TransformerFactory=com.sun.org.apache.xa
lan.internal.xsltc.trax.TransformerFactoryImpl - 
Dweblogic.configuration.schemaValidationEnabled=false - 
DentityExpansionLimit=1000 -Duser.home=${OBP_ORACLE_
HOME}/config -Dfc.io.dir=${OBP_ORACLE_HOME} ${ORACLE_MEM_ARGS}
${EXTRA_JAVA_PROPERTIES}"

```

After Installation:

```

EXTRA_JAVA_PROPERTIES=" - 
Djavax.xml.parsers.DocumentBuilderFactory=com.sun.org.apache.
xerces.internal.jaxp.DocumentBuilderFactoryImpl - 
Djavax.xml.transform.TransformerFactory=com.sun.org.apache.xa
lan.internal.xsltc.trax.TransformerFactoryImpl - 
Djavax.xml.parsers.SAXParserFactory=com.sun.org.apache.xerces
.internal.jaxp.SAXParserFactoryImpl - 
Dweblogic.configuration.schemaValidationEnabled=false - 
Dweblogic.configuration.schemaValidationEnabled=false - 
DentityExpansionLimit=1000 -Duser.home=${OBP_ORACLE_
HOME}/config -Dfc.io.dir=${OBP_ORACLE_HOME} ${ORACLE_MEM_ARGS}
${EXTRA_JAVA_PROPERTIES}"

```

9. Restart Admin server. Before restarting, stop Admin server.

- a. To stop the Admin server, use the following command:

```

${middleware_home}/user_projects/domain/{domain_
name}/bin/stopWeblogic.sh

```

- b. Delete tmp, cache directories present inside the server directory.

For example,

```

${middleware_home}/user_projects/domain/{domain_
name}/servers/{server_name}/cache
${middleware_home}/user_projects/domain/{domain_
name}/servers/{server_name}/tmp

```

Where {server_name} indicates all the servers that are available in the domain, such as AdminServer, Managed server (obphost_server1).

- c. Then start Admin server by using the following command:

```

${middleware_home}/user_projects/domain/{domain_
name}/bin/startWeblogic.sh

```

10. Once the Admin server is up, then start the managed servers.

3.4 Verifying the Presentation Server Deployment

Before you start verifying the presentation server deployment, configure SYSUSER on OID server as per the steps mentioned in [Chapter 6 User Creation in Oracle Internet Directory](#).

To verify successful deployment, log on to the following URL:

3.4 Verifying the Presentation Server Deployment

http://IPADDRESS:PORT/CollectionAdmin/cis.jsp

Following are the components of the URL:

Table 3–8 Verifying the Presentation Server Deployment

Components	Description
IPAddress	Indicates the IP address of the presentation WebLogic server.
Port	Indicates the Presentation WebLogic managed server port number.

For example,

http://10.180.11:8001/CollectionAdmin/cis.jsp

4 External Interface Configuration

This chapter explains the OB Collections and OB Recovery external interface configuration details.

4.1 Oracle Identity Manager (OIM)

You can download the OIM Adapter configuration files from the following location:

<http://edelivery.oracle.com>

To extract the OIM Adapter configuration files, perform the following steps:

1. Download the appropriate OB Collections and OB Recovery Media Pack. The media pack is available in the following format: Collection_V[Build_Number].zip
2. Copy the Collection_V[Build_Number].zip into the <TEMPDIR>.
3. Uncompress Collection_V[Build_Number].zip by running the following commands:

```
cd <TEMPDIR>
unzip Collection_V[Build_Number].zip
```

The contents of the zip file are extracted in the TEMPDIR folder. The following files and folders are extracted:

- config.properties
 - ouaf.properties
 - data
 - Install.sh
 - collectioninstaller.jar
 - collectionupgradeinstaller.jar
4. You can locate the OIM adapter configuration files under the following location: data/extxface/OIM/ folder. Following files are available:
 - collections_oim_export.xml
 - com.ofss.fc.extxface.oim.jar
 - com.ofss.fc.extxface.wsdl.client.jar

Note

For detailed configuration of the OIM Adapter, see the Oracle Banking Platform Collections User Provisioning Guide.

5 Installing Third-Party Software

You must install the Oracle JDK before you install the OB Collections and OB Recovery media packs, if not already installed on the servers.

5.1 Installing Oracle Java Development Kit (JDK)

You must install the JDK for 64-bit Linux operating system before you install presentation or host media pack.

To download, install and use JDK, follow the steps mentioned below:

1. Download the JDK file to any directory for which you have write permission. The file appears in the following format:

```
jdk-8u  
<version>-linux-x64.bin  
<version>jdk-8u<version>-linux-x64.bin
```

Note

Only the root user has the privilege to displace the system version of the Java platform that is supplied by Linux.

2. To set the execute permission, run the following command:

```
% chmod +x 8u <version>-linux-x64.bin
```

3. Change the directory location to the location where you want to install the files.

4. To execute the self-extract binary file, run the following command and then press Enter:

```
% ./jdk-8u<version>-linux-x64.bin
```

5. You must agree to the terms of the binary code license. This installs the JDK files in the following directory under the current directory: jdk.8.0_<version>

6 User Creation in Oracle Internet Directory

This chapter provides information about user creation in Oracle Internet Directory.

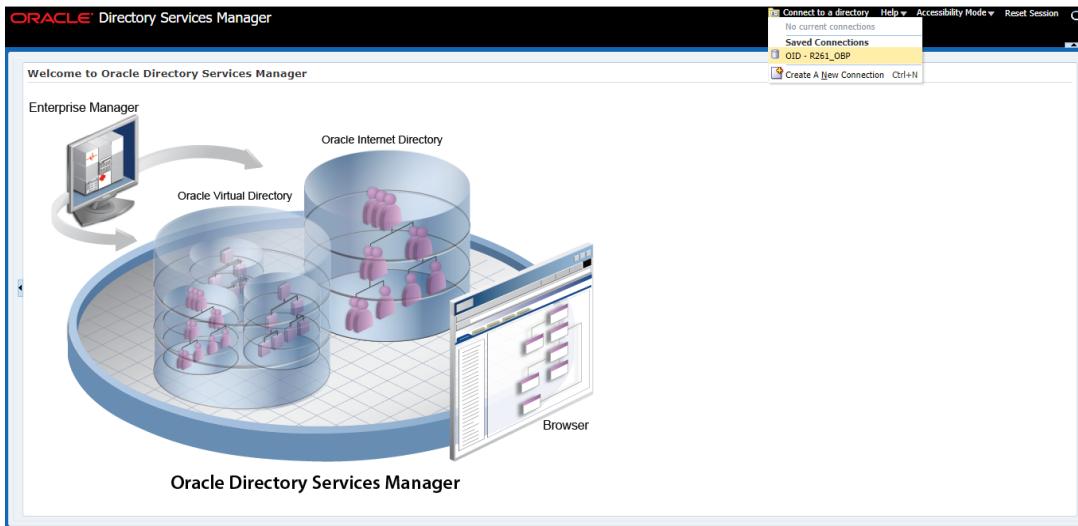
6.1 User Creation in OID

SYSUSER has to be created in Oracle Internet Directory (OID). It is used as default login into the CollectionAdmin. Follow the below steps to create a user:

1. Access the appropriate ODSM and select the required OID.

ODSM URL: <OID_IP>:7005/odsm.

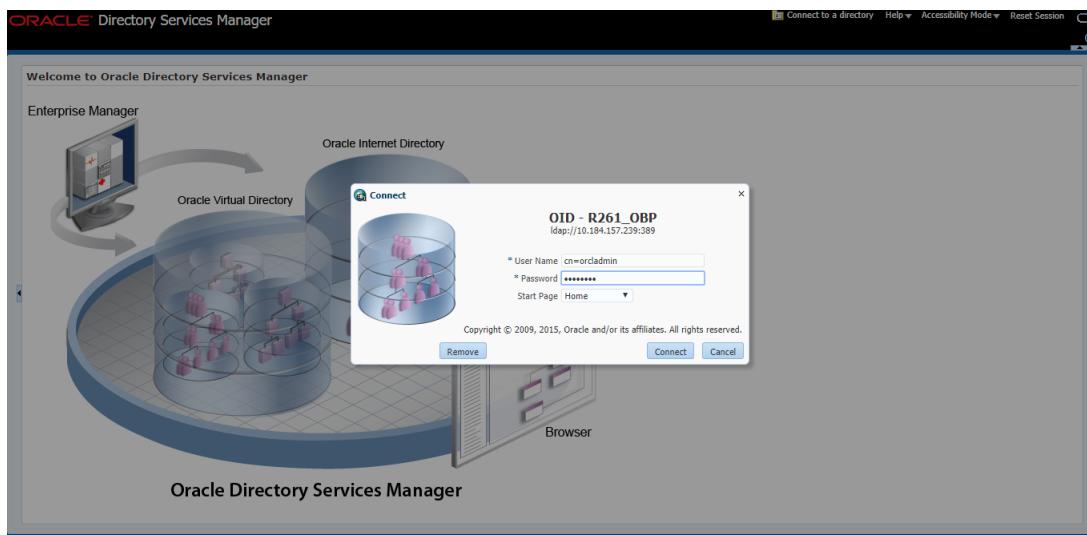
Figure 6–1 Opening ODSM



2. Log in to the OID.

6.1 User Creation in OID

Figure 6–2 Log in to OID



3. Click the **Data Browser** tab, in the Data tree panel navigate to Root -> dc=com -> dc=oracle -> dc=in -> cn=Users as shown in below screen. Right click on any user already present and select **Create** option.

Figure 6–3 Navigating to Data Browser Tab

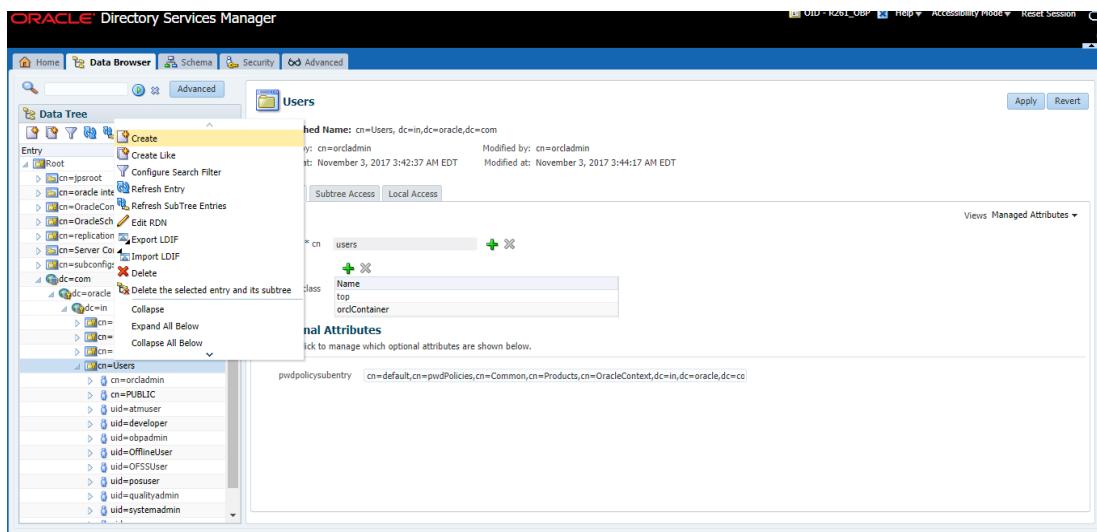
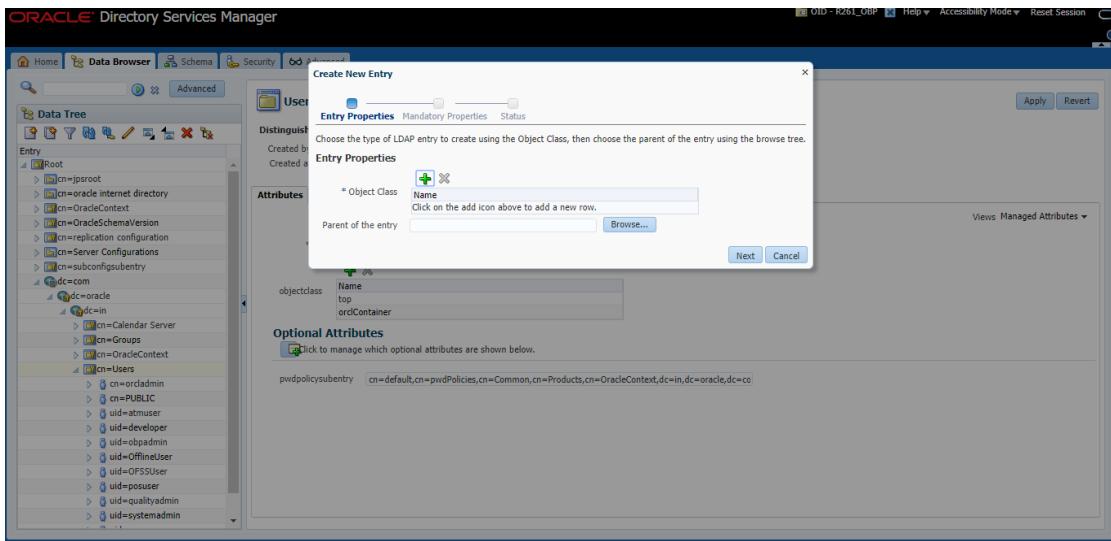


Figure 6–4 Creating New Entry

4. Create new entry in **Users** tab and add the following Object classes:

- top
- person
- fcPerson
- organisationalPerson
- inetOrgPerson
- orclUser
- orclUserV2

6.1 User Creation in OID

Figure 6–5 Adding Object Classes: Top

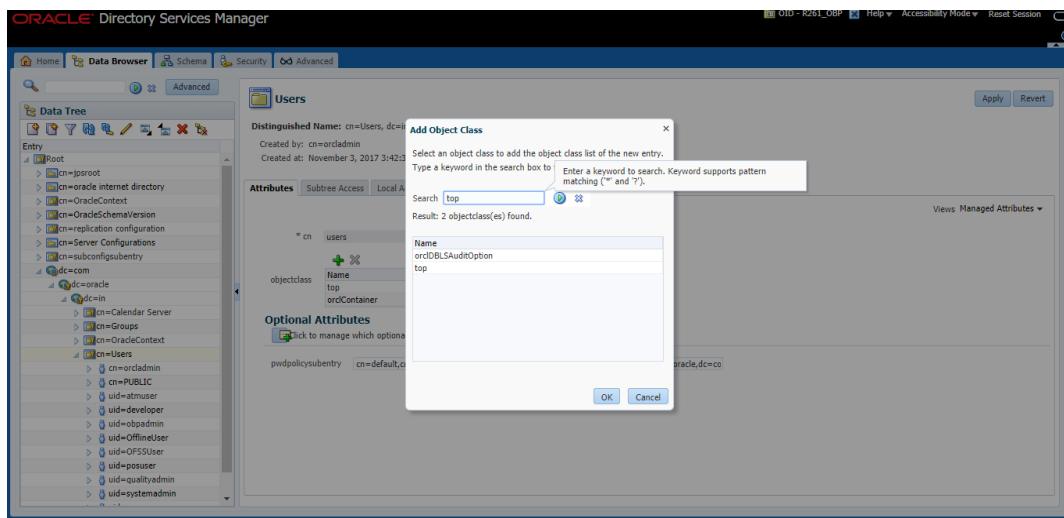


Figure 6–6 Adding Object Classes: Person

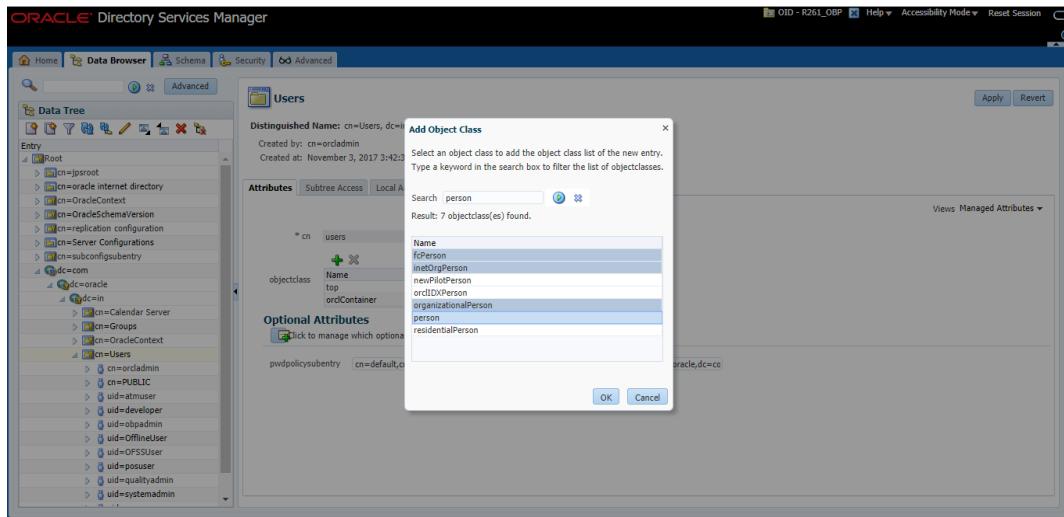
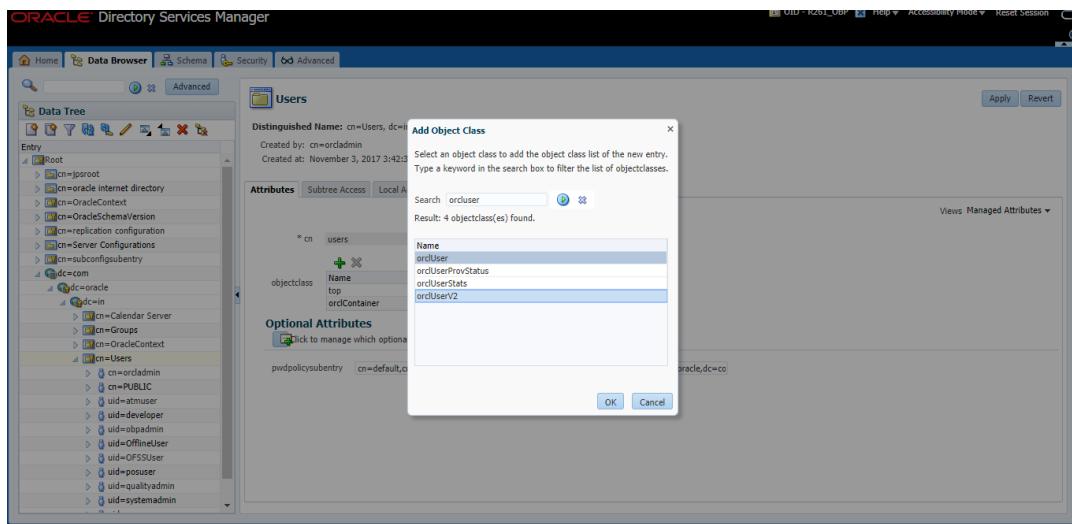
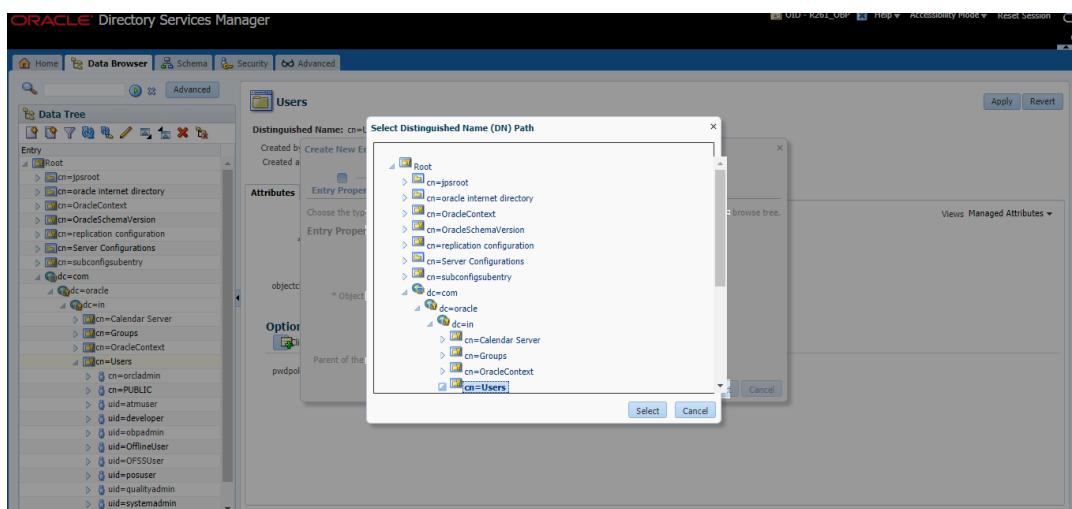


Figure 6–7 Adding Object Classes: Oracle User

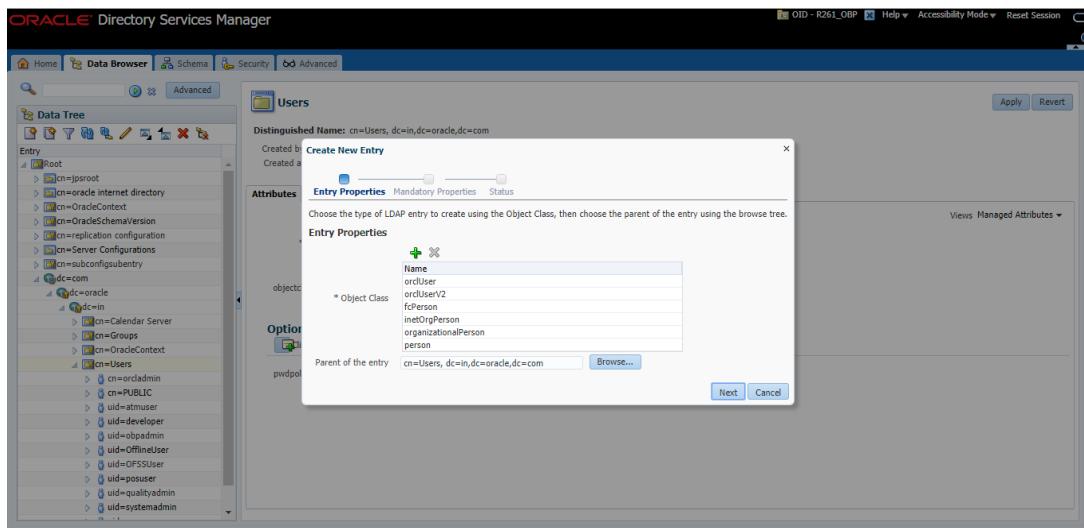
5. Select the Parent of the entry (**Distinguished Name DN**) by clicking the **Browse** button. Select the path as Root -> dc=com -> dc=oracle -> dc=in -> cn=Users

Figure 6–8 Selecting Distinguished Name

6. Click the **Next** button.

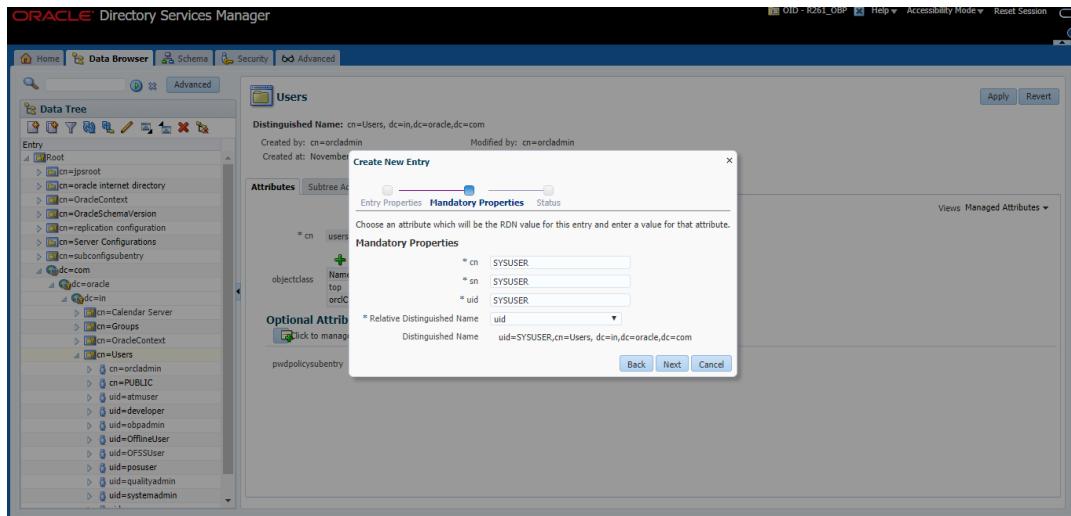
6.1 User Creation in OID

Figure 6–9 Selecting Entry Properties

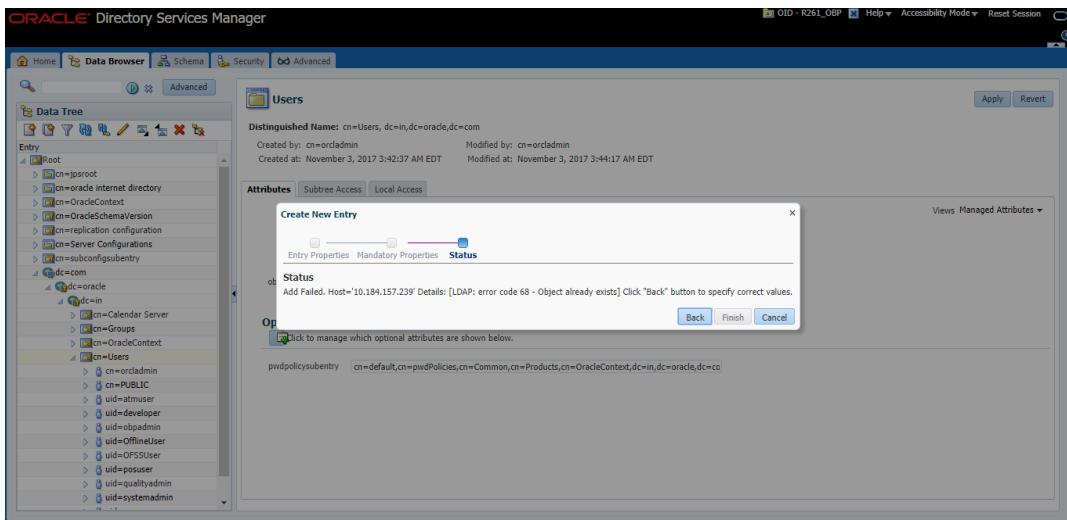


7. Select the **Relative Distinguished Name** as **uid**. Then enter the values of **cn**, **sn** and **uid** as **SYSUSER**.

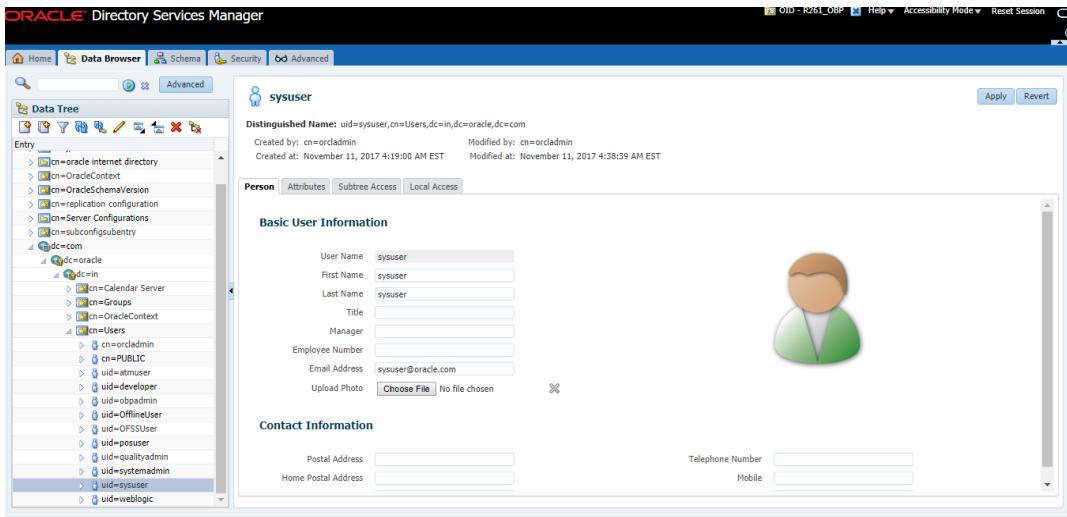
Figure 6–10 Selecting Mandatory Properties



8. Click Next. The new user is created in OID and a message appears as shown in Figure 6–11.

Figure 6–11 Status Message

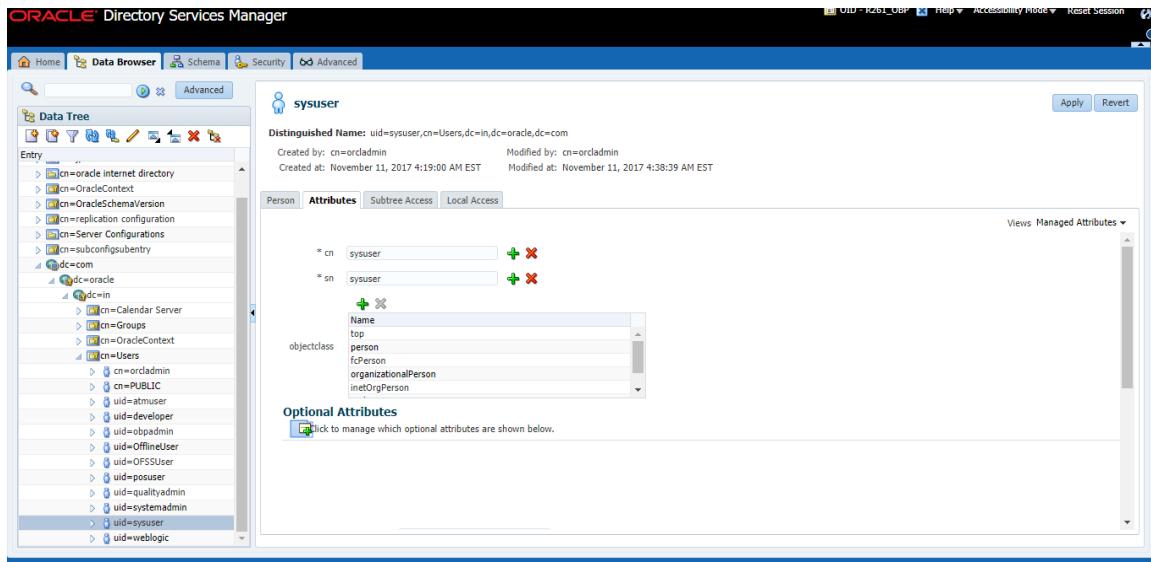
- Select that user 'uid=SYSUSER' from the Data tree list.

Figure 6–12 Selecting the User

- Click the **Attributes** tab, and then click the **Add** symbol under **Optional Attributes** section.

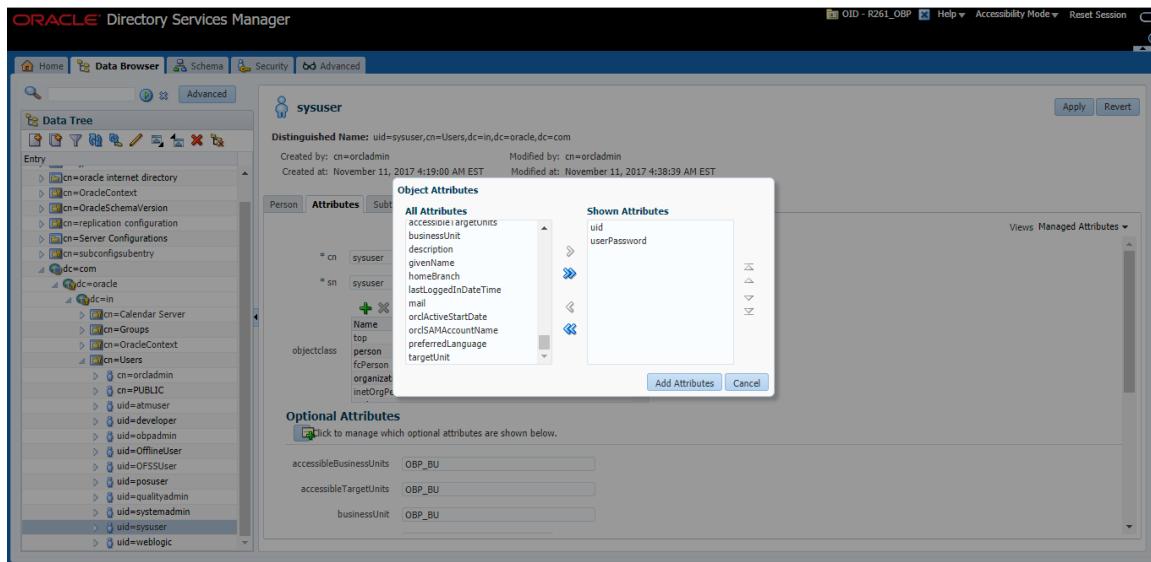
6.1 User Creation in OID

Figure 6–13 Attributes Tab

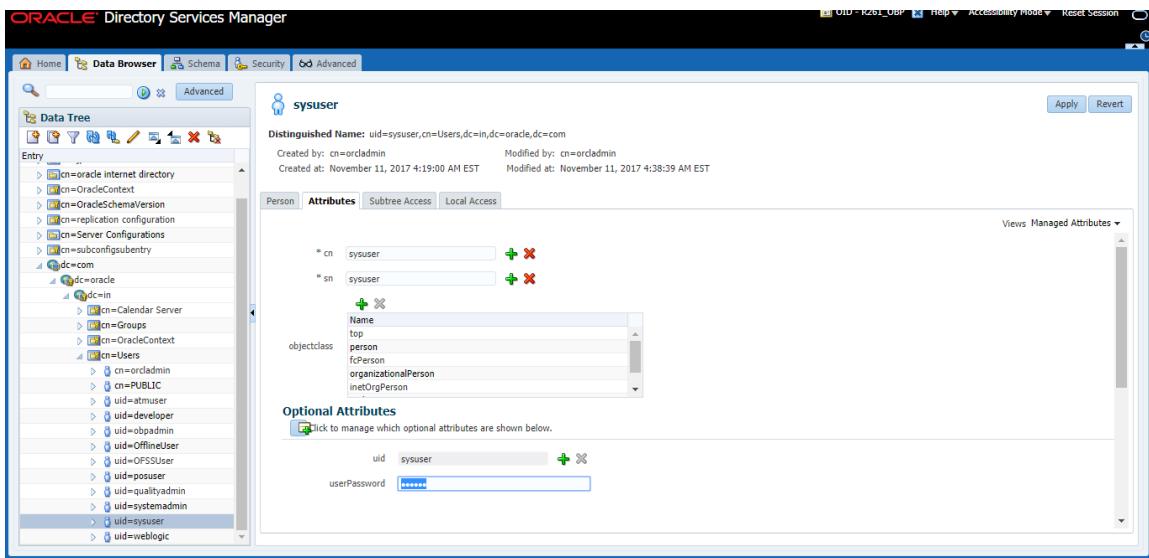


11. Click on Add button under Optional Attributes and add the 'userPassword' attribute from the All Attribute list and click the Add Attribute button.

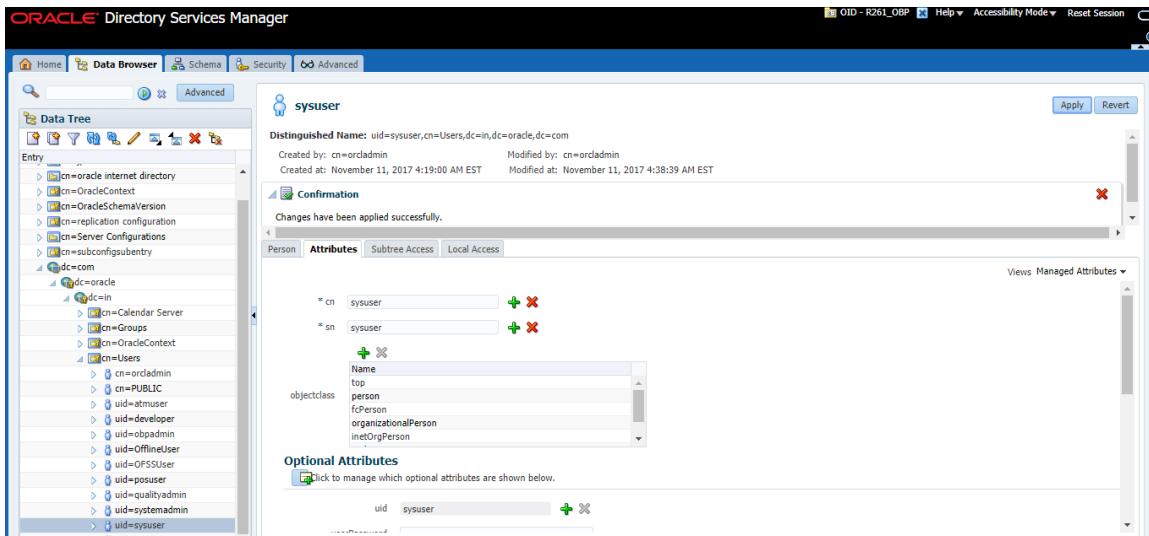
Figure 6–14 Adding User Password



12. Enter the value in the **userPassword** field and click the **Apply** button in right hand corner.

Figure 6–15 Setting User Password

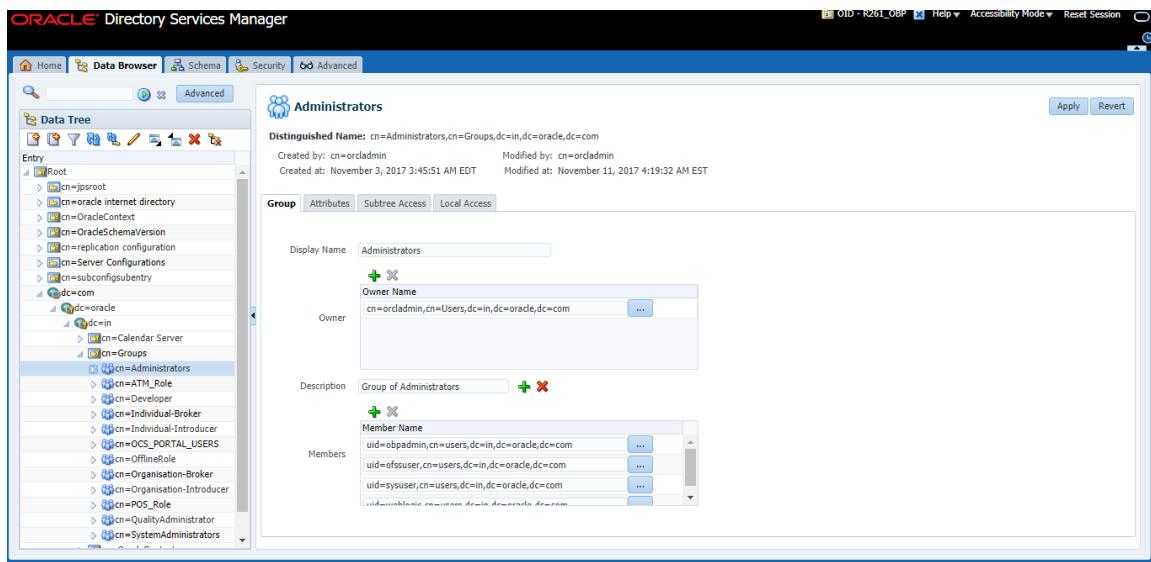
The confirmation message appears as "Changes have been applied successfully." as shown in Figure 6–16.

Figure 6–16 Confirm Message

13. Once user is created, add it into **Administrator group**. Navigate in Data tree as Root -> dc=com -> dc=oracle -> dc=in -> cn=Groups.

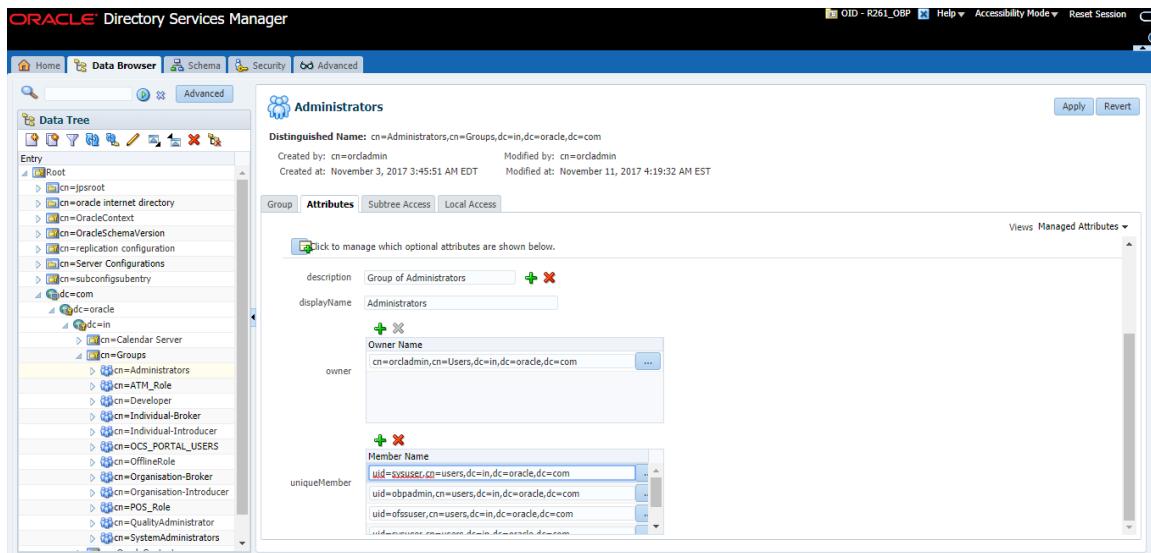
6.1 User Creation in OID

Figure 6–17 Adding to Administrator Group

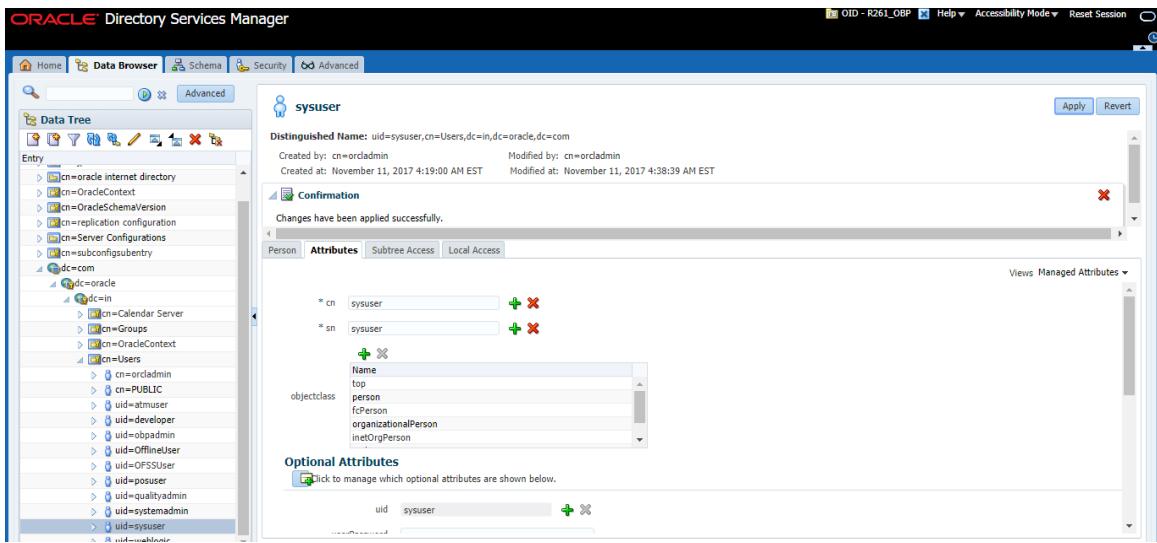


14. Click the **Attributes** tab and click the **Add** button in 'uniqueMember' table. Add the below entry into it.
uid=SYSUSER,cn=users,dc=in,dc=oracle,dc=com

Figure 6–18 Attributes Tab



15. Click the **Apply** button. The confirmation message appears as "Changes have been applied successfully."

Figure 6–19 Confirmation message

16. Run the following query to ensure that Collection Dashboard is shown as the default page after logging in.

```
update flx_fw_config_all_b set prop_value='Role' where prop_id='collection.roles' and CATEGORY_ID='BROPConfig';
```

where **Role** = configured user role in step 14.

7 Threadpool Configuration

This chapter provides information about threadpool configuration.

7.1 Manage Requisite Files in lib

To manage the requisite files in lib:

1. Go to Putty and change directories to/obpininstall/obp/collectionenv/standalone/lib/ext.
2. If wlfullclient.jar, dms.jar and ojdl.jar are present in this directory, then go to step 8.
3. If this directory is empty, change directories to the server/lib directory.

..../app/product/fmw/wlserver/server/lib

4. Use the following command to create wlfullclient.jar in the server/lib directory:

java -jar wljarbuilder.jar

Figure 7–1 Command to Create wlfullclient.jar

```
Integrating jar -->(1)/(37265) //scratch/app/product/fmw/modules/com.bea.core.http.pubsub.mbean_1.7.0.0.jar
Integrating jar <--(1)/(37269) / (4) //scratch/app/product/fmw/modules/com.bea.core.http.pubsub.mbean_1.7.0.0.jar
Integrating jar -->(1)/(37269) //scratch/app/product/fmw/modules/com.bea.core.diagnostics.accessor_1.5.0.0.jar
Integrating jar <--(1)/(37365) / (96) //scratch/app/product/fmw/modules/com.bea.core.diagnostics.accessor_1.5.0.0.jar
Created new jar file: 7scratch/app/product/fmw/wlserver_10.3/server/lib/wlfullclient.jar
[ofssobp@mum00are lib]$
```

5. Copy the generated wlfullclient.jar to path:

..../obpininstall/obp/collectionenv/standalone/lib/ext/

6. Copy **dms.jar** to path/obpininstall/obp/collectionenv/standalone/lib/ext from

..../app/product/fmw/oracle_common/modules/oracle.dms/

7. Copy **ojdl.jar** to path/obpininstall/obp/collectionenv/standalone/lib/ext from

..../app/product/fmw/oracle_common/modules/oracle.odl/

8. Add below properties to **setDomainEnv.sh** if not present.

```
WLS_JDBC_REMOTE_ENABLED="-Dweblogic.jdbc.remoteEnabled=true"
export WLS_JDBC_REMOTE_ENABLED
```

9. In ThreadpoolEnv.sh file at/obpininstall/obp/collectionenv/standalone/lib, verify that the following properties are according to the environment:

export JAVA_HOME=/scratch/app/product/jdk1.8.0_281/jre

```

export SPLEBASE=....product/fmw/obpininstall/obp/collectionenv
export OBPBASE=....product/fmw/obpininstall/obp
export com_ofss_standalone_executor_filterId=XXXXXX
#specify com_ofss_standalone_executor_filterId property if there is any filter defined.
#Check from FLX_RL_FILTER_TEXTS TABLE in DB for filter defined.

```

10. Verify threadpoolworker.properties.

- To modify threadpoolworker.properties:

- a. Go to the path:

```
.../obpininstall/obp/collectionenv/standalone/config/threadpoolworker.properties
```

- b. Verify the rmi_port and Server Name--

```

com.splwg.grid.distThreadPool.threads.ThreadPool_Name=<Maximum Thread count>
spl.runtime.management.rmi.port=<rmi_port>
spl.runtime.management.connector.url.default=service:jmx:rmi://jndi/rmi://< server-
name>:<rmi_port>/spl/fw/jmxConnector

```

Where:

rmi_port= RMI port used for JMX. To manage each instance of the pool an unique port number should be used.

server-name = host server IP

For Example:

```

com.splwg.grid.distThreadPool.threads.STANDALONE_TP=40
spl.runtime.management.rmi.port=9999
spl.runtime.management.connector.url.default=service:jmx:rmi://jndi/rmi://XX.XX.XX.
XX:
9999/spl/fw/jmxConnector
XX.XX.XX.XX= host IP

```

Figure 7–2 Standalone lib

/scratch/app/product/fmw/obpininstall/obp/collectionenv/standalone/lib/ext						
Name	Ext		Size	Changed	Rights	Owner
wlfullclient.jar			53,718 KiB	3/18/2016 6:52:21 PM	rwxr-xr-x	ofssobp
dms.jar			1,603 KiB	1/29/2016 2:16:42 PM	rwxr-xr-x	ofssobp
ojdl.jar			192 KiB	1/25/2016 3:17:51 PM	rwxr-xr-x	ofssobp
				12/30/2015 12:16:49 PM	rwxr-xr-x	ofssobp

7.2 Recommendations for Threadpool Memory Configuration

Consider setting the Threadpool JVM memory arguments as mentioned below. This needs to be modified in **threadpoolworker.sh**

```
MEM_ARGS="-Xms4096m-Xmx8192m -XX:MaxPermSize=1024m -XX:+UseParallelGC -
XX:ParallelGCThreads=16"
```

7.3 Start Threadpoolworker

To start the threadpool worker:

1. Open the putty and go to/obpininstall/obp/collectionenv/standalone/bin
2. Run the command:

..../threadpoolworker.sh

- Logs related to threadpool are generated as **threadpoolworker.2017XXX.XXX.log** and **ThreadPool.log** along with collection.log and specific Batch related logs will be generated at:

.../fmw/obpininstall/obp/fclogs/logs

- Logs of OBP related to ThreadPool will be generated at:

.../fmw/obpininstall/obp/fclogs/logs/standalone/obp/logs

(Use root collection log path in place of .../fmw/obpininstall/obp/fclogs)

7.4 Verification

To verify OBP context is successfully up:

1. Check **threadpoolworker.2017XXX.XXX.log** and search for **Done with OBP initialisation.**

Figure 7–3 ThreadPool Worker Log

```

Java HotSpot(TM) 64-Bit Server VM warning: ignoring option MaxPermSize=4096m; support was removed in 8.0
Listening for transport dt_socket at address: 8990
Attempting OBP initialisation block...
Session Context used during OBP initialisation SessionContext [bankcode=10, transactionBranch=1000, localDateTimeText=20170331114058, externalRef
[EL Severe]: 2017-03-31 11:40:58.937--Failed to load: orm/eclipselink/cfg/core-adapter-query-mapping.cfg.xml
[EL Warning]: 2017-03-31 11:40:59.014--Warning: Cant find bundle for base name orm/eclipselink/cfg/lz-module-cfg, locale en_US
[EL Warning]: 2017-03-31 11:40:59.016--Warning: Cant find bundle for base name orm/eclipselink/cfg/cz-module-cfg, locale en_US
System property [org.owasp.esapi.opsteam] is not set
Attempting to load org.owasp.esapi.devteam is not set
Attempting to load org.owasp.esapi.properties via file I/O.
Attempting to load ESAPI.properties as resource file via file I/O.
Not found in 'org.owasp.esapi.resources' directory or file not readable: /scratch/app/product/fmw/obpininstall/obp/fclogs/logs/ESAPI.properties
Not found in systemResource directory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpininstall/obp/fclogs/logs/file:/scr
Not found in 'user.home' ('/scratch/app/product/fmw/obpininstall/obp/collectionConfig') directory: /scratch/app/product/fmw/obpininstall/obp/collectionC
Loading ESAPI.properties via file I/O failed. Exception was: java.io.FileNotFoundException
Attempting to load ESAPI.properties via the classpath.
SUCCESSFULLY LOADED ESAPI.properties via the CLASSPATH from '.esapi/' using current thread context class loader!
SecurityConfiguration loaded from Configuration file. Multivalued not found in ESAPI.properties. Using default: false
Attempting to load validation properties via file I/O.
Attempting to load validation properties as resource file via file I/O.
Not found in 'org.owasp.esapi.resources' directory or file not readable: /scratch/app/product/fmw/obpininstall/obp/fclogs/logs/validation.properties
Not found in systemResource directory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpininstall/obp/fclogs/logs/file:/scr
Not found in 'user.home' ('/scratch/app/product/fmw/obpininstall/obp/collectionConfig') directory: /scratch/app/product/fmw/obpininstall/obp/collectionC
Loading validation.properties via file I/O failed.
Attempting to load validation.properties via the classpath.
SUCCESSFULLY LOADED validation.properties via the CLASSPATH from '.esapi/' using current thread context class loader!
Calling OBP service to verify OBP initialisation 1490940667453.
Calling FilterDerivationApplicationService dummy service to fetch filter Information for filter --> debitBalance
Session Context used during OBP initialisation SessionContext [bankcode=10, transactionBranch=1000, localDateTimeText=20170331114107, externalRef
filter defin is -->((OUTSTANDING_AMT) > ('0')) AND ((MATURITY_DT) < (to_date(sysdate)))
Exit filter service
End time for service 149094066835
Done with OBP initialisation...

```

SLF4J: Class path contains multiple SLF4J bindings.
 SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpininstall/obp/collectionenv/standalone/lib/spl-shared-4.3.0.1.0.jar!/:org/slf4j/impl/st
 SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpininstall/obp/obp.host.app.domain/APP-INF/lib/spl-shared-4.3.0.1.0.jar!/:org/slf4j/impl
 SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpininstall/obp/thirdparty.app.domain/APP-INF/lib/slf4j-jdk14-1.6.1.jar!/:org/slf4j/i
 SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
 SLF4J: Actual binding is of type [org.slf4j.impl.SLF4JToFWLoggerFactory]

2. If filter is configured in ThreadpoolEnv.sh, with com_ofss_standalone_executor_filterId property then check filter logs for verification.

7.4 Verification

Figure 7–4 Executing OBP Initialisation Block



The screenshot shows the Java HotSpot(TM) 64-Bit Server VM running on port 8990. The console output displays various log messages related to the execution of the OBP Initialisation Block. Key messages include:

- Java HotSpot(TM) 64-Bit Server VM warning: ignoring option MaxPermSize=4096m; support was removed in 8.0
- Listening for transport dt_socket at address: 8990
- Executing OBP initialisation block.
- Session Context used during OBP initialisation SessionContext [bankCode=10, transactionBranch=1000, localDateTimeText=201703311114058, externalRef [EL Severe]: 2017-03-31 11:40:58.937--Failed to load: orm/eclipselink/cfg/core-adapter-query-mapping.cfg.xml]
- [EL Warning]: 2017-03-31 11:40:59.014--Warning: cant find bundle for base name orm/eclipselink/cfg/lz-module-cfg, locale en_US
- System property [org.owasp.esapi.opsteam] is not set
- System property [org.owasp.esapi.validation] is not set
- Attempting to load ESAPI properties via file I/O.
- Attempting to load ESAPI.properties as resource file via file I/O.
- Not found in 'org.owasp.esapi.resources' directory or file not readable: /scratch/app/product/fmw/obpininstall/obp/fclogs/logs/ESAPI.properties
- Not found in systemResource Directory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpininstall/obp/fclogs/logs/file:/scr...
- Loading ESAPI.properties via file I/O failed. Exception was: java.io.FileNotFoundException
- Attempting to load validation.properties via classpath.
- SUCCESSFULLY LOADED validation.properties via the CLASSPATH from 'esapi/' using current thread context class loader!
- SecurityConfiguration for Validator.ConfigurationFile.Multivalued not found in ESAPI.properties. Using default: false
- Attempting to load validation.properties via file I/O.
- Attempting to load validation.properties as resource file via file I/O.
- Not found in 'org.owasp.esapi.resources' directory or file not readable: /scratch/app/product/fmw/obpininstall/obp/fclogs/logs/validation.properties
- Not found in systemResource Directory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpininstall/obp/fclogs/logs/file:/scr...
- Not found in systemResource Directory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpininstall/obp/collectionConfig directory: /scratch/app/product/fmw/obpininstall/obp/collectionConfig
- Loading validation.properties via file I/O failed.
- Attempting to load validation properties via the classpath.
- SUCCESSFULLY LOADED validation.properties via the CLASSPATH from 'esapi/' using current thread context class loader!
- Calling OBP service to verify OBP initialisation 1490940668231
- Calling FilterDerivationApplicationService dummy service to fetch filter information for filter --> debitBalance
- Session Context used during OBP initialisation SessionContext [bankCode=10, transactionBranch=1000, localDateTimeText=201703311114058, externalRef [EL Severe]: 2017-03-31 11:40:58.937--Failed to load: orm/eclipselink/cfg/core-adapter-query-mapping.cfg.xml]
- Filter def is ((OUTSTANDING_AMT > ('0')) AND ((MATURITY_DT < (to_date(sysdate)))
- Exit filter Service
- end time for service 11490940668231
- Done with OBP initialisation...
- INFO: Loaded file:/scratch/app/product/fmw/obpininstall/obp/collectionenv/standalone/config/spl.properties from classpath: {com.oracle.ouaf.system.k}
- SLF4J: Class path contains multiple SLF4J bindings.
- SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpininstall/obp/collectionenv/standalone/lib/spl-shared-4.3.0.1.0.jar!/:org/slf4j/impl/st...
- SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpininstall/obp/host/app.domain/APP-INF/lib/spl-shared-4.3.0.1.0.jar!/:org/slf4j/impl/st...
- SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpininstall/obp/thirdparty/app.domain/APP-INF/lib/slf4j-jdk14-1.6.1.jar!/:org/slf4j/i...
- SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
- SLF4J: Actual binding is of type [org.slf4j.impl.SLF4JToFWLoggerFactory]

To verify whether the Threadpoolworker has started successfully:

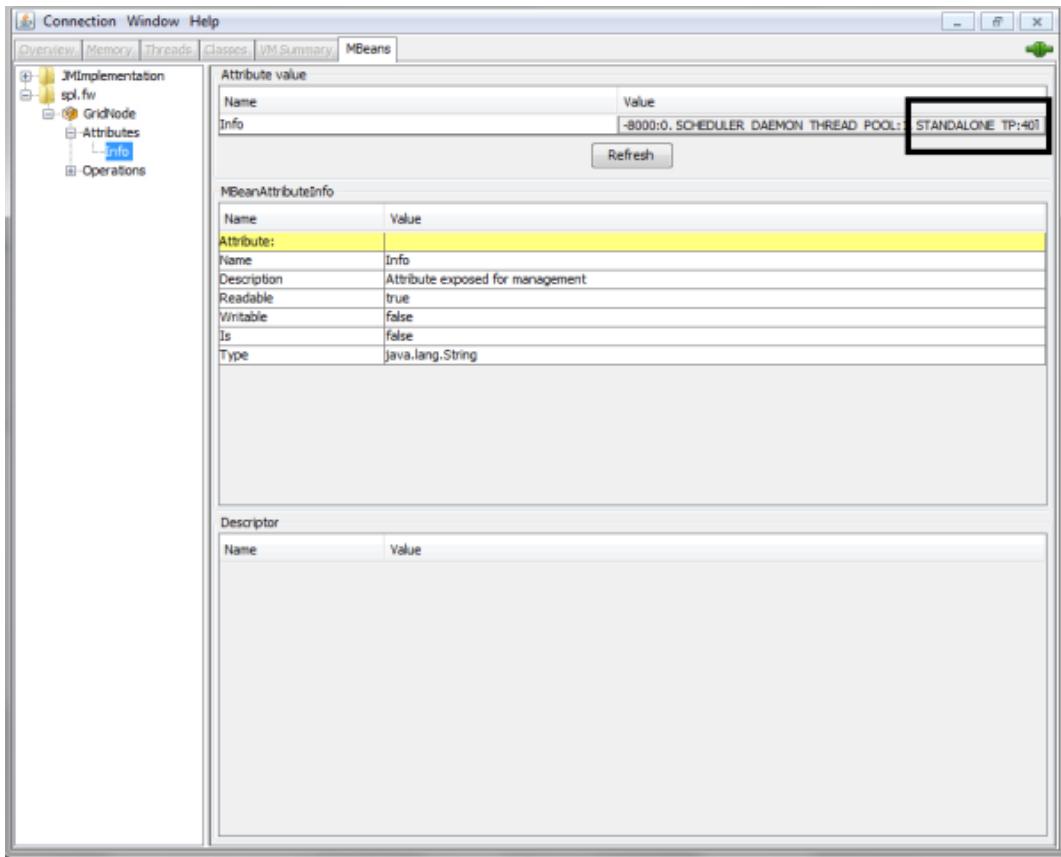
1. Check for connection to:

service:jmx:rmi:///jndi/rmi://<server-name>:<rmi_port>/spl/fw/jmxConnector

By using any VM tool (For example, jconsole).

Note

Ensure this poolname is same as what is mentioned in `threadpoolworker.properties` (as `com.splwg.grid.distThreadPool.threads.STANDALONE_TP=40`) and also in `jconsole`.

Figure 7–5 Verify Threadpool Worker: Check Connection

2. Search for the following text with latest time stamp in **ThreadPool.log**:

2017-03-24 16:15:51,381 [main] INFO (grid.node.DistributedGridNode) Distributed node 7621b973d7669cd8:3cdc534f:15affeb62a5:-7ff6 joined grid

3. Verify that the following properties are present in <INSTALLATION_DIR>/collectionenv/standalone/bin/spl.properties.

If HOST OS is Linux

```
export SERVER_ROLE_BATCH=true
export OBPBASE=<INSTALLATION DIR PATH>
```

If Host OS is Windows

```
set SERVER_ROLE_BATCH=true
set OBPBASE=<INSTALLATION DIR PATH>
```

7.5 Submit the Batch

Run the CSMB and CASETRAN batch with Thread pool name specified in **threadpoolworker.properties** (as com.splwg.grid.distThreadPool.threads.STANDALONE_TP=40)

by using -p

For example:

7.6 Stop Threadpoolworker

./submitjob.sh -b CASETRAN -t 0 -c 8 -p STANDALONE_TP

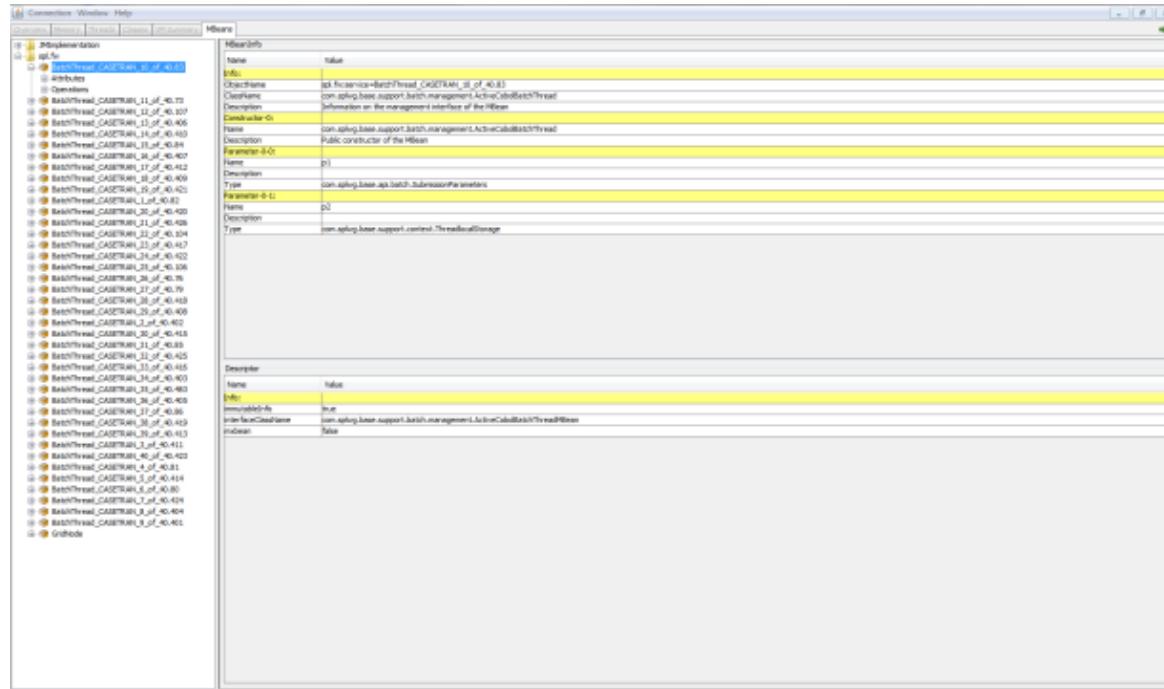
Where:

-c - No. of threads

-t - Thread Number

-p - ThreadPool Name

Figure 7–6 Submit the Batch



7.6 Stop Threadpoolworker

jmxbatchclient.sh: This script will wrap the JMXCommandLineClient java class so that it can be executed just like any operating scripts. The only option required is the JMX URL to connect. By default, it will only display information. For example, supplying only the required JMX connection information would result in as follows:

```
Options: -j
service:jmx:rmi:///jndi/rmi://myserver:9999/spl/fw/jmxConnector
Connecting to
service:jmx:rmi:///jndi/rmi://myserver:9999/spl/fw/jmxConnector
ActiveGridNode
threadPools=[DEFAULT:5, SCHEDULER_DAEMON_THREAD_POOL:1, LOCAL_
THREAD_POOL:b9835d11f15fd71b:1df6824f:120011dc94e:-8000:0]
BatchThread_ZZQABAT2_1_of_1.36
```

This shows that the thread pools defined, separated by commas, and that there is currently an active batch thread.

7.7 Command-Line Options

The following options can be specified when executing script **jmxbatchclient.usage**:

```
com.splwg.base.api.batch.JMXCommandLineClient
-h Show this usage information.
-j <JMX URL> The JMX URL to connect to.
-d display details
-k Kill threadpool worker.
-s Display summary
```

Show usage (-h)

Display the available options and their descriptions.

Show usage (-j)

Required. Specify the JMX URL to connect to. This should match the `spl.runtime.management.connector.url.default` property specified in the `threadpoolworker.properties`.

```
jmxbatchclient.sh -j service:jmx:rmi:///jndi/rmi://myserver:9999/spl/fw/jmxConnector
```

Display details (-d)

Display the details of the currently active threads.

```
Options: -j
service:jmx:rmi:///jndi/rmi://myserver:9999/spl/fw/jmxConnector -d
Connecting to
service:jmx:rmi:///jndi/rmi://myserver:9999/spl/fw/jmxConnector
ActiveGridNode
threadPools=[FJOSON-US:5, SCHEDULER_DAEMON_THREAD_POOL:1, LOCAL_
THREAD_POOL:b9835d11f15fd71b:1df6824f:120011dc94e:-8000:0]
BatchThread_ZZQABAT2_1_of_1.36
ElapsedTime = 0 yrs. 0 days 00:00:20
BatchCd = ZZQABAT2
ThreadCount = 1
ThreadNumber = 1
RerunNumber = 0
ProcessDate = 2009-03-13
MaximumCommitRecords = 200
MaximumTimeoutMinutes = 0
UserId = SYSUSER
LanguageCd = ENG
SoftParameters = []
MaxExecutionAttempts = 1
DateTimeStarted = 2009-03-13-11.54.02
DistThreadPool = FJOSON-US
BatchNumber = 4
Status = Running
ProgramType = Java
ProgramName = com.splwg.cm.domain.qa.batch.QaBatch2
RunType = New Run
```

Kill threadpoolworker (-k)

Specifying this option will result in the cancellation of all currently running threads and the stoppage of the threadpoolworker process.

After successful stoppage of threadpoolworker message will be displayed on command line as:

"Successfully stopped threadpoolworker..."

"Distributed Grid stopped successfully"

Display summary (-s)

Display the summary of the currently active threads is a listing format.

```
Options: -j
service:jmx:rmi:///jndi/rmi://myserver:9999/spl/fw/jmxConnector -s
Connecting to service:jmx:rmi:///jndi/rmi://fjocson-
us:9999/spl/fw/jmxConnector
ActiveGridNode
threadPools=[FJOCSON-US:5, SCHEDULER_DAEMON_THREAD_POOL:1, LOCAL_
THREAD_POOL:b9835d11f15fd71b:-60bf2fc1:120115996cc:-8000:0]
JMX Id DistThreadPool BatchNumber
DateTimeStarted ElapsedTime
BatchThread_ZZQABAT1_1_of_1.29 FJOCSON-US 32 2009-03-16-17.07.29 0 yrs. 0 days 00:03:49
```

7.8 List of Batches to be Run on Standalone Threadpool or Weblogic

The following table refers to the list of batches to be run on standalone threadpool:

Table 7-1 List of Batches to be Run on Standalone Threadpool

#	Batch	Batch Code
1	Update Entity	C1-UPENT
2	Delinquency Identification	C1-DELID
3	Move Delinquent Accounts to RMB Feeder Tables	C1-MVDEL
4	Validate Incoming Data from Host	C1-VALFD
5	Create Entity	C1-CRENT
6	Increment DPD	C1-INCDP
7	Derived Fields	C1-DRFLD
8	Suspend Activity Monitor	C1-SUSMN
9	Bulk Contact Creation	C1-BLKCC
10	Contact Processing	C1-CNTPR
11	Strategy Monitor	C1-CSMB
12	Case Life Cycle Tracking	CASETRAN
13	Queue Allocation Monitor	C1-ALOCM

#	Batch	Batch Code
14	Display Priority Monitor	C1-PRMON
15	User Allocation Monitor	C1-USALC
16	Treatment Activity Monitor	C1-TRMON
17	Dialer and IVR (O/B Robot) Extracts	C1-DIEXT
18	Batch to unlock cases	C1-CSCL
19	ToDo Creation for Locked cases	C1-CSTD
20	PTP Tracking	C1-PTPM
21	Collection Statistics	C1-COLST

The following table refers to the list of batches to be run on weblogic:

Table 7–2 List of Batches to be Run on Weblogic

#	Batch	Batch Code
1	Payment Handling	C1-FDPAY
2	Event Manager	C1-EVENT
3	Dialer Results Upload	C1-DLRRS
4	Vendor/ Agency Upload Batch	C1-VNDUP
5	Cure Monitor	C1-FINCO
6	Write-off Monitor/ Account abandon monitor	WRITEOFF