

Oracle® Banking Platform Collections

Integration Guide

Release 2.6.2.0.0

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Oracle Banking Platform Collections Integration Guide, Release 2.6.2.0.0

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Preface

This document will help you to install the Oracle Banking Platform Collections 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

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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 Platform Collections 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 2.6.2.0.0
2. Update the environment.
3. Configure the WebLogic domain.

2.1 Prerequisites

Before you install the OBP Collections 2.6.2.0.0 Host Media Pack, you must have the following installed on the machine:

- OBP 2.6.2.0.0 Host Media Pack.
- OBP 2.6.2.0.0 Presentation Media Pack.
- Windows Secure Copy (WINS CP) to copy deliverables from Windows to Linux machine.
- Oracle Java Development Kit (JDK) 1.8 Update 101 (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.
- OBP Collections database must be installed. For more information on installing or configuring OBP Collections database, see the Oracle Banking Platform Collections Database Administrator (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 OBP Collections Host Media Pack

The OBP Collections 2.6.2.0.0 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/>

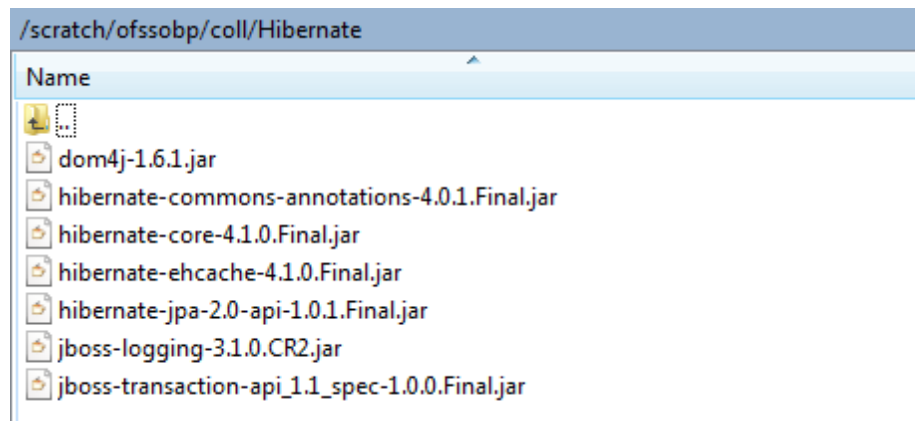
To install the OBP Host Media Pack:

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 OBP Collections 2.6.2.0.0 installation package, Collection_V[Build_Number].zip, which you have downloaded from the edelivery to Host Server by using WINS SCP 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-logging-3.1.0.CR2.jar
 - jboss-transaction-api_1.1_spec-1.0.0.Final.jar
 - dom4j-1.6.1.jar
 - c. Copy below jar from extracted hibernate-release-4.1.0/ lib/optional/ehcache folder to created hibernate_tmp path
hibernate-ehcache-4.1.0.Final.jar

Figure 2–1 Hibernate folder



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

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

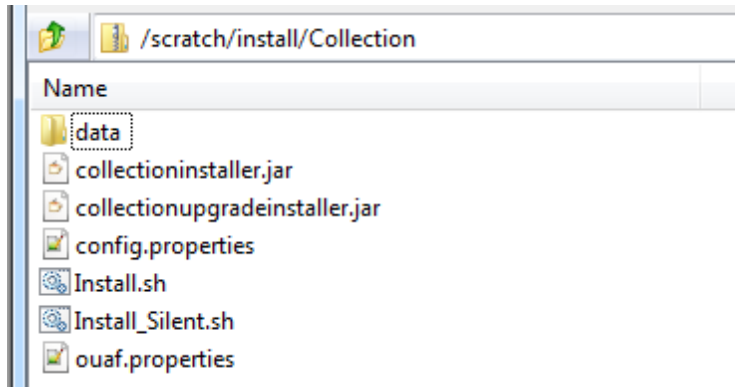
Where, <PATH> is the path where the TEMPDIR folder is located.

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. Start the XManager application on the Windows machine from where you have connected to the Host Server remotely and then click **XPassive**.

7. Export the XManager UI on the Host Server (Linux environment) using the following command:

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

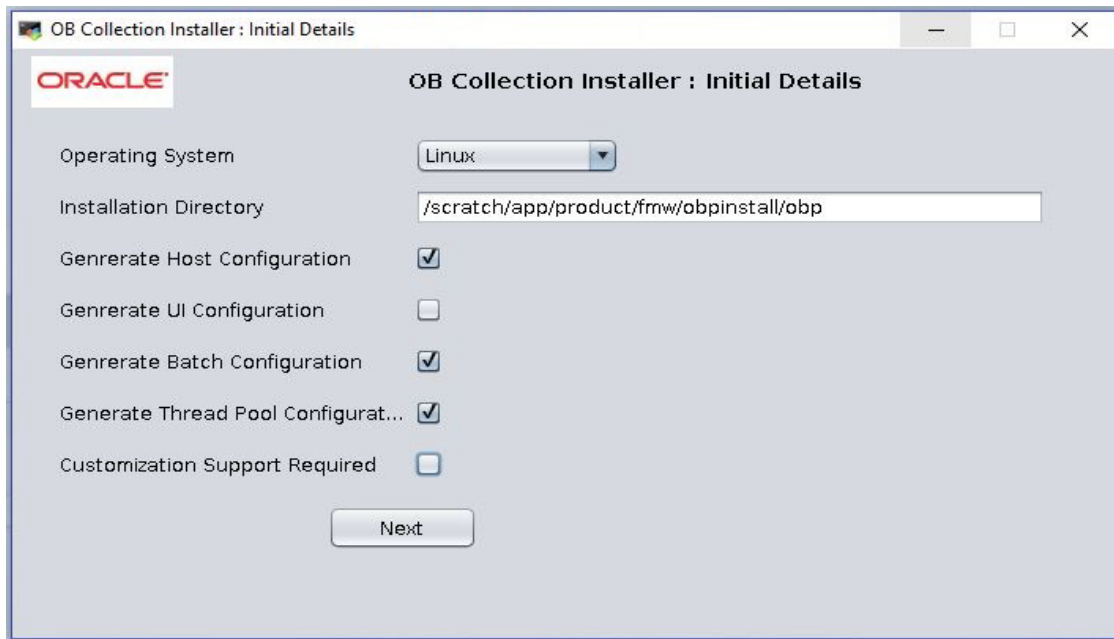
Where, <IP> is the IP address of the Windows machine.

8. Run the Collection installer using the following command:

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

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

Figure 2–3 OB Collection Installer: Initial Details



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

Table 2–1 OB Collection Installer: Initial Details

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

Field	Description
	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 this option is checked.

9. Select the **Generate Host Configuration** check box.
10. If you want to deploy the batch components on the host server, select the **Generate Batch Configuration** check box.
11. If you want to deploy the batch components on the host server, select the **Generate Threadpool Configuration** check box.

Click **Next**. The **OB Collection Installer: Host Configuration** screen appears.

Figure 2–4 OB Collection Installer: Host Configuration

12. The **OB Collection Installer: Host Configuration** wizard page contains the following fields:

Table 2–2 OB Collection 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, <code>/scratch/app/product/fmw/obpinstall/obp/fclogs/logs</code> 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, <code>/scratch/app/product/jdk1.8.0_101</code> 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 <code>/lib/required/</code> from extracted hibernate-release-4.1.0.Final.zip package by default, <code>/scratch/app/product/hibernate</code> 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.

13. Change the values in these fields, if required.
14. Click **Next**. The **OB Collection Installer: Host DB Configuration** screen appears.

Figure 2–5 OB Collection Installer: Host DB Configuration

The screenshot shows a configuration window titled "OB Collection Installer : Host DB configuration". It includes the Oracle logo and the same title. The form contains the following fields and values:

- Database IP address: < DB IP Address >
- Database port: 1521
- Database SID: V5DEV
- Database user name: fcrhdevsails40
- Database user password: *****
- Host Datasource name: jdbc/FCBDataSource NonXA
- Host IP address: < Host IP Address >
- Host port: 8001

At the bottom of the window, there are two buttons: "Previous" and "Next".

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

Table 2–3 OB Collection 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, V5DEV.
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.

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

Figure 2–6 OB Collection Installer: Batch Configuration

OB Collection Installer : Batch Configuration

ORACLE

OB Collection Installer : Batch Configuration

Database IP address: < DB IP Address >

Database port: 1521

Database SID: V5DEV

Database user name: fcrhdevsails40

Database user password: *****

Thread pool name: MT

Number of threads: 5

Batch user ID: SYSUSER

Batch log directory: /scratch/app/product/fmw/obpininstall/obp/fclogs/logs

Previous Next

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

Table 2–4 OB Collection 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/obpinstall/obp/fclogs/logs.

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

Figure 2–7 OB Collection Installer: Threadpool Configuration

OB Collection Installer : Threadpool Configuration

ORACLE

OB Collection Installer : Threadpool Configuration

Weblogic Server Home: /scratch/app/product/fmw/wlserver

RMI Port: 2120

Host Domain Path: /scratch/app/product/fmw/user_projects/domains/host_domain

Cluster Name: < Cluster name >

Cluster IP Address: 232.0.0.1

Cluster Port: 6660

Previous Next

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

Table 2–5 OB Collection Installer: Threadpool Configuration

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

17. Click **Next**. The **OB Collection Installer: Confirm installation details** screen appears.

Figure 2–8 OB Collection Installer: Confirm Installations Details

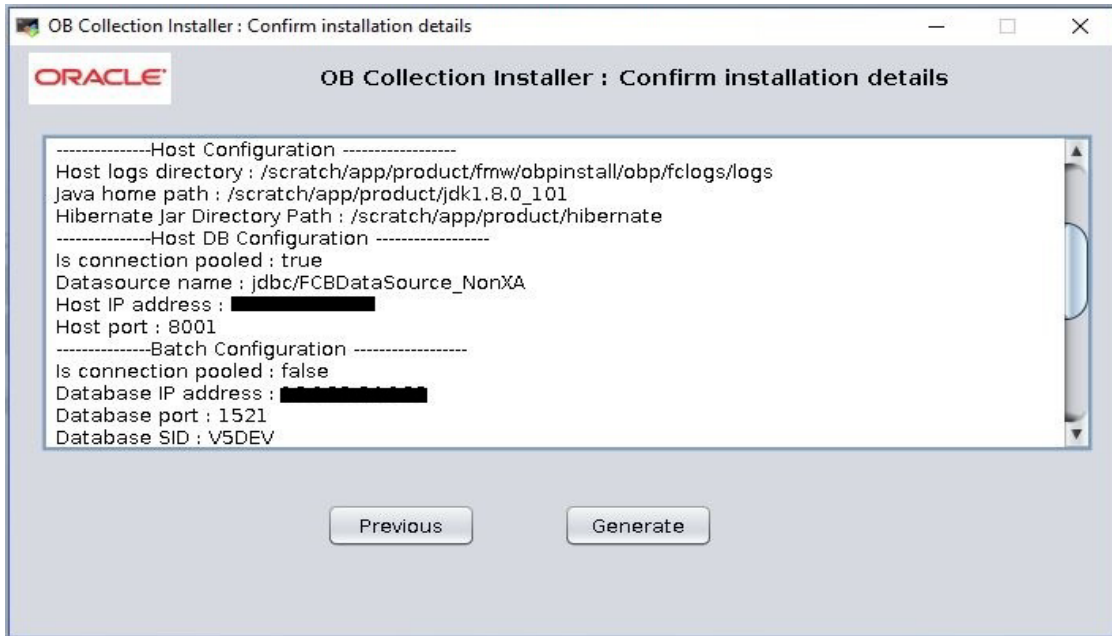
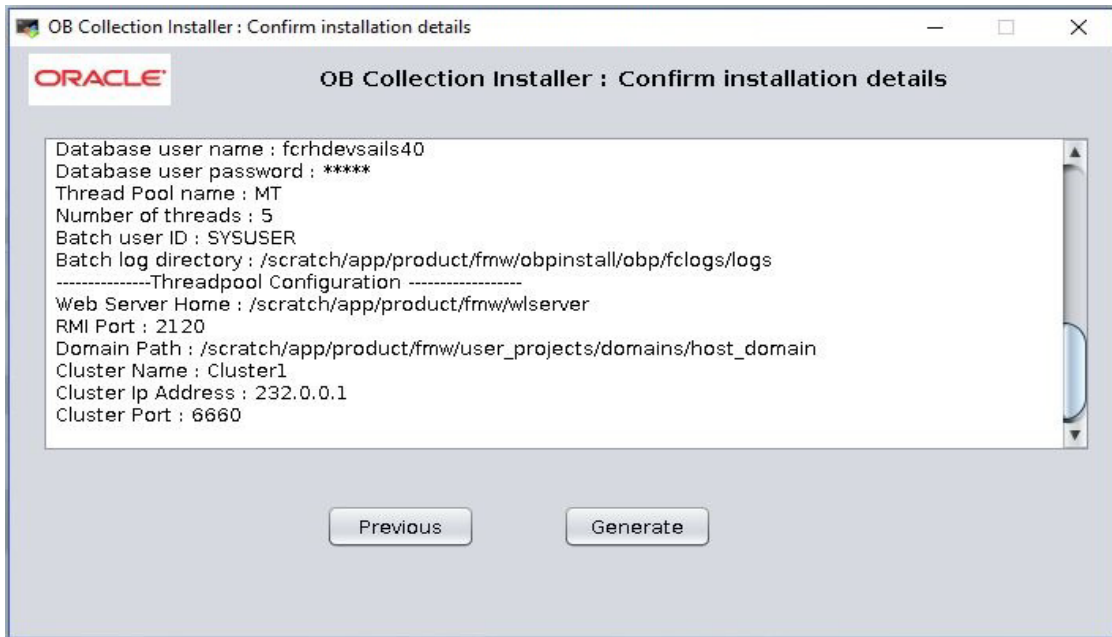


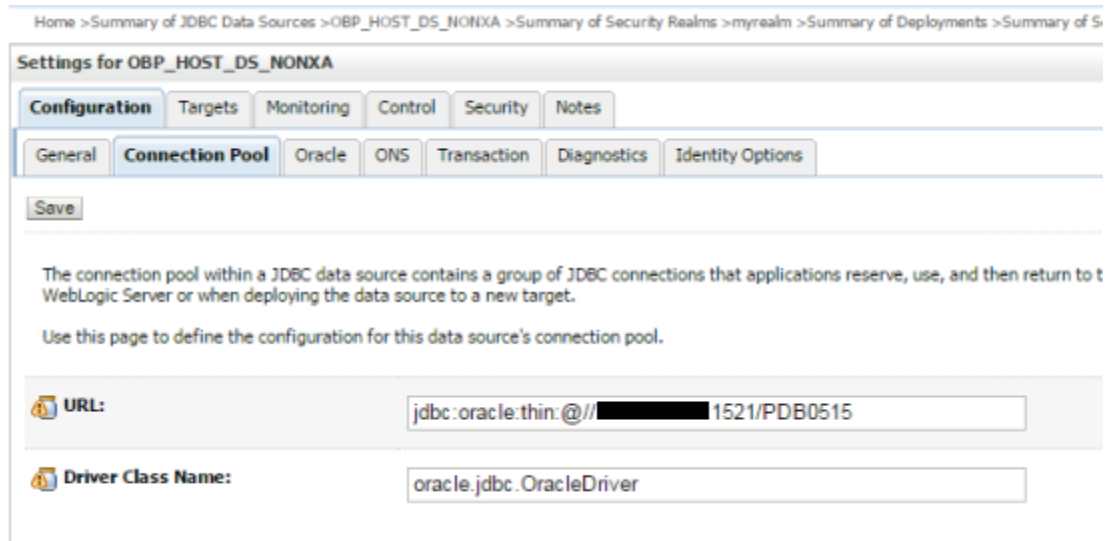
Figure 2–9 OB Collection Installer: Confirm Installations Details



18. Click **Generate**. The **OB Collection Installer: Installing** screen appears.
19. Click **Done**.

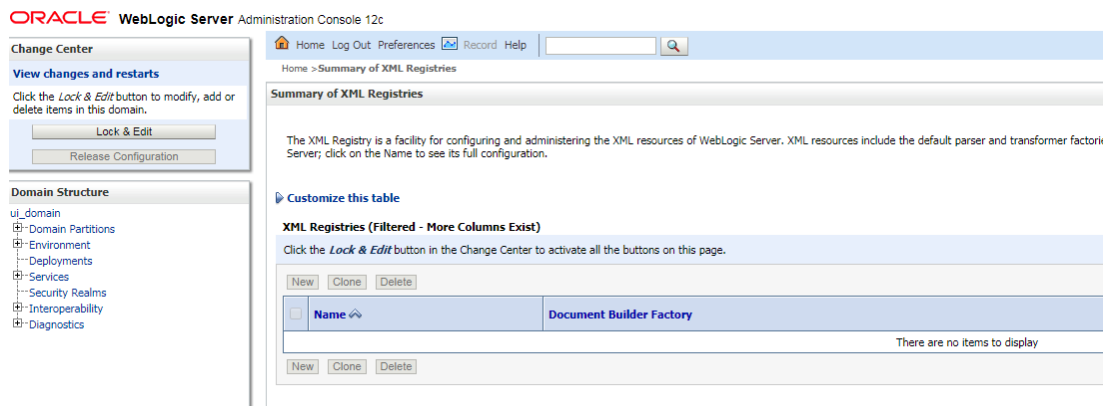
20. Delete cglib.cglib-nodep.jar from <Weblogic Home>\modules\ if present. For example, delete from /scratch/app/product/fmw/wlserver/modules
21. Log in to Weblogic console and navigate to Data Sources-> OBP_HOST_DS_NONXA -> Connection Pool.
22. Change Driver Class Name = oracle.jdbc.OracleDriver if it is different.

Figure 2–10 Data Source Connection Pool



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

Figure 2–11 Add XML Registry



25. 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 2–12 Settings for XML Registry

Home Log Out Preferences Record Help

Home > Summary of XML Registries > XML Registry-0 > Summary of XML Registries > XML Registry-0

Settings for XML Registry-0

Configuration Targets Contents Notes

Save

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

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

Figure 2–13 Deploy XML Registry

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

Figure 2–14 Host Domain Security

2.3 Configuring Weblogic Domain For Host

The following steps explain how to configure weblogic domain for host:

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 2–15 Summary of servers

Summary of Servers

A server is an instance of WebLogic Server that runs in its own Java Virtual Machine (JVM) and has its own configuration. This page summarizes each server that has been configured in the current WebLogic Server domain.

Customize this table

Servers (Filtered - More Columns Exist)

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 2–16 Force shutdown

Summary of Servers

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 Standby mode requires th

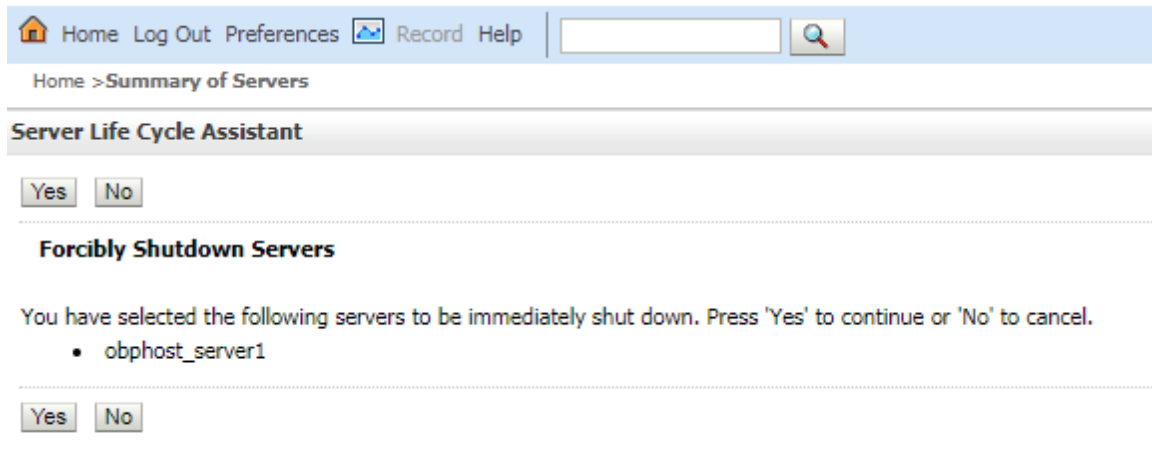
Customize this table

Servers (Filtered - More Columns Exist)

Server	Machine	State	Status of Last Act
AdminServer(admin)		RUNNING	None
<input checked="" type="checkbox"/> obphost_server1	obphost_machine1	RUNNING	None

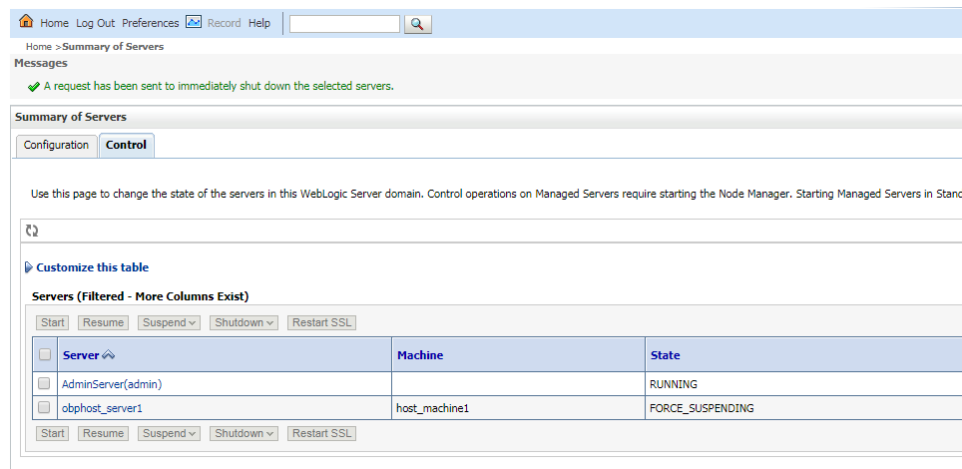
4. Click Yes on next screen.

Figure 2–17 Force Shutdown Confirmation Message



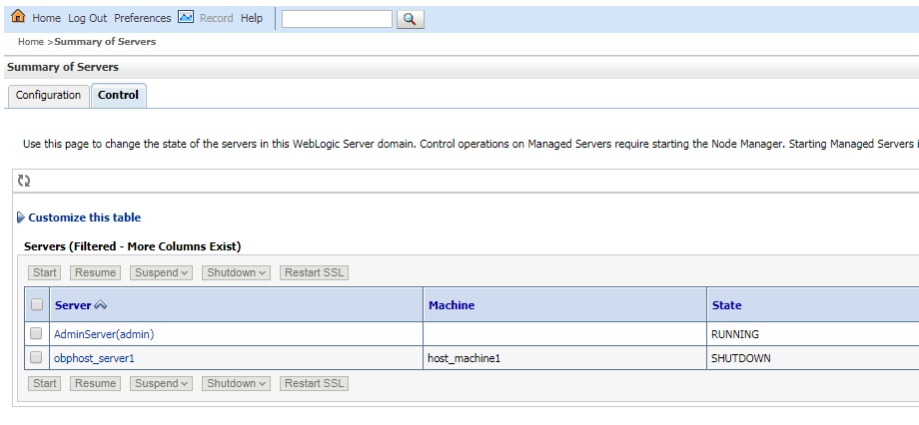
Weblogic will try to force shutdown managed server. You can see below message.

Figure 2–18 Force Shutdown Acknowledgement Message



5. Refresh the screen and wait till state of managed server changes to Shutdown.

Figure 2–19 Verify Server State



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

Figure 2–20 Weblogic Admin Console



7. 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
```

8. Browse the folder where you have extracted the Installation package.
9. Run the following command:

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

10. Execute the Install.sh file as below:

```
./Install.sh
```

The install file prompts for the following input:

Table 2–6 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 (<code>\${middleware_home}/wlserver</code>)	Indicates the home path of Weblogic. For example, <code>/scratch/app/product/fmw/wlserver</code>
Enter Deployment/Installation directory name	Used to specify the directory where you want to install the OBP Collections Host Media Pack. By default, <code>/scratch/app/product/fmw/obpinstall/obp</code> is specified in this field. You can change the path and directory name, if required.
Enter Domain Directory Path where Domain is created (<code>\${middleware_home}/user_projects/domain</code>)	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: <ul style="list-style-type: none"> ■ Server ■ 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.

11. 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:

Figure 2–21 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/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)- 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... - Y

```

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 default management 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 collection 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 Collection Installation:

```

EXTRA_JAVA_PROPERTIES=" -
Djavax.xml.parsers.DocumentBuilderFactory=com.sun.org.apache.
xerces.internal.jaxp.DocumentBuilderFactoryImpl -

```

```
Djavax.xml.transform.TransformerFactory=com.sun.org.apache.xalan.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}"
```

Before Collection Installation:

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

After Collection 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
```


- After the Admin server is up, perform the following manual changes.

Table 2–7 Changes to be made in splEnv.sh file if not present

File Name	File Path	Change From	Change To
splEnv.sh	\${Installation_Directory} \collectionenv\properties	export JAVA_HOME=/scratch/app/product/jdk1.8.0_101 LD_LIBRARY_PATH=\$JAVA_HOME/jre/lib/amd64/server:\$JAVA_HOME/jre/lib/amd64/native_threads	export JAVA_HOME=/scratch/app/product/jdk1.8.0_101/jre LD_LIBRARY_PATH=\$JAVA_HOME/jre/lib/amd64/server:\$JAVA_HOME/jre/lib/amd64/native_threads:\$JAVA_HOME/lib/amd64/server:\$JAVA_HOME/lib/amd64/native_threads
splEnv.sh	\${Installation_Directory} \collectionenv\standalone\bin	export JAVA_HOME=/scratch/app/product/jdk1.8.0_101 LD_LIBRARY_PATH=\$JAVA_HOME/jre/lib/amd64/server:\$JAVA_HOME/jre/lib/amd64/native_threads	export JAVA_HOME=/scratch/app/product/jdk1.8.0_101/jre LD_LIBRARY_PATH=\$JAVA_HOME/jre/lib/amd64/server:\$JAVA_HOME/jre/lib/amd64/native_threads:\$JAVA_HOME/lib/amd64/server:\$JAVA_HOME/lib/amd64/native_threads

- 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 2.6.2.0.0 Host Media Pack.
- OBP 2.6.2.0.0 Presentation Media Pack.
- OBP Collections 2.6.2.0.0 Host Media Pack.

Note

Oracle JDK 1.8 Update 101 is required to run the OBP Collections V2.6 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 OBP Collections 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 OBP Collections Media Pack Collection_V[Build_Number].zip downloaded from edelivery to presentation Linux server using WINSOCP.
5. Copy the OBP Collections Media Pack Collection_V[Build_Number].zip into the <TEMPDIR>.

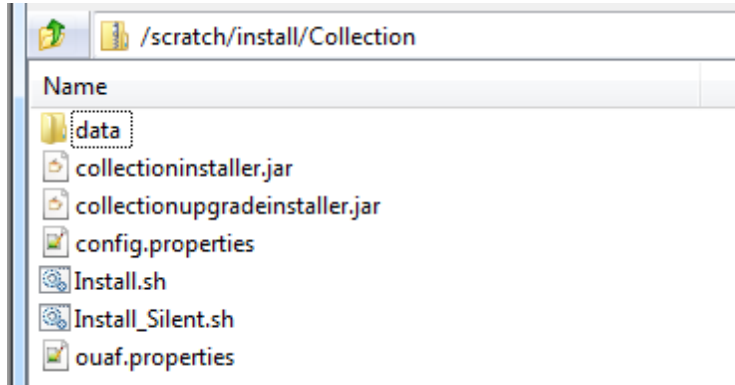
6. Uncompress the OBP Collections Media Pack `Collection_V[Build_Number].zip` by running the following commands:

```
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. Run XManager application on Windows machine.
8. To export the XManager UI on the Linux environment, run the following command:

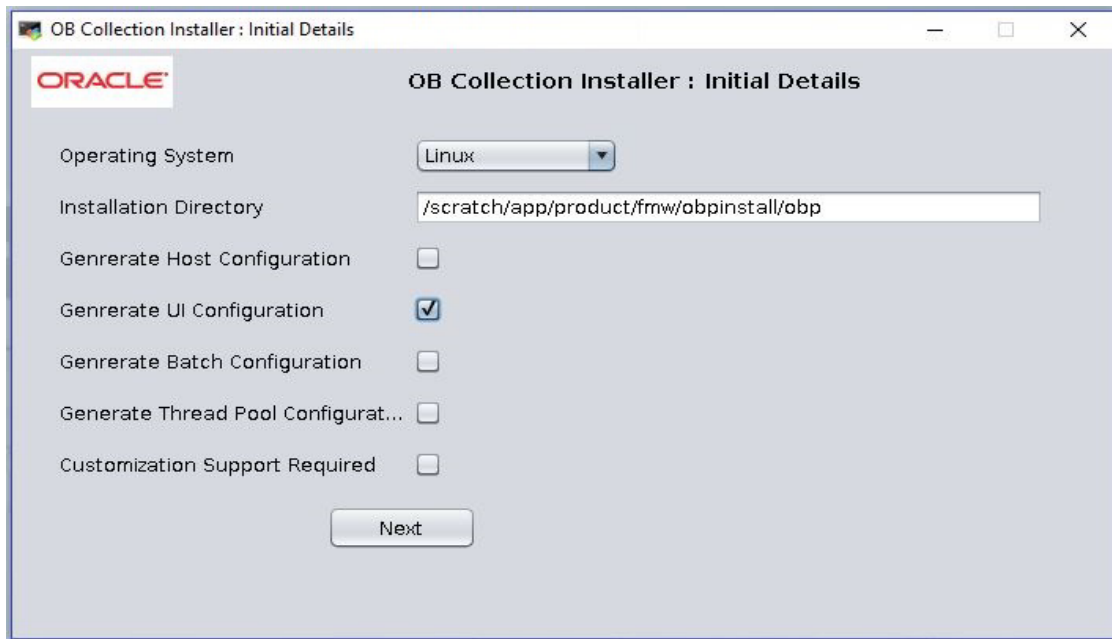
```
DISPLAY=<IP>:0.0;
export DISPLAY
```

Where, IP is the IP address of your machine.

9. Run the following command to start the OBP Collections installer. The OB Installer: Initial Details screen appears.

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

10. In the OB Collection Installer: Initial Details screen, select the Installation directory and Host Configurations.

Figure 3–2 OB Collection Installer: Initial Details

The following fields appear in the OB Collection Installer: Initial Details screen:

Table 3–1 OB Collection 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 OBP Collections 2.6 should be installed. Note that this is the same the 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.

- Click Next. The OB Collection Installer: UI configuration screen appears.

Figure 3–3 OB Collection Installer: UI configuration

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

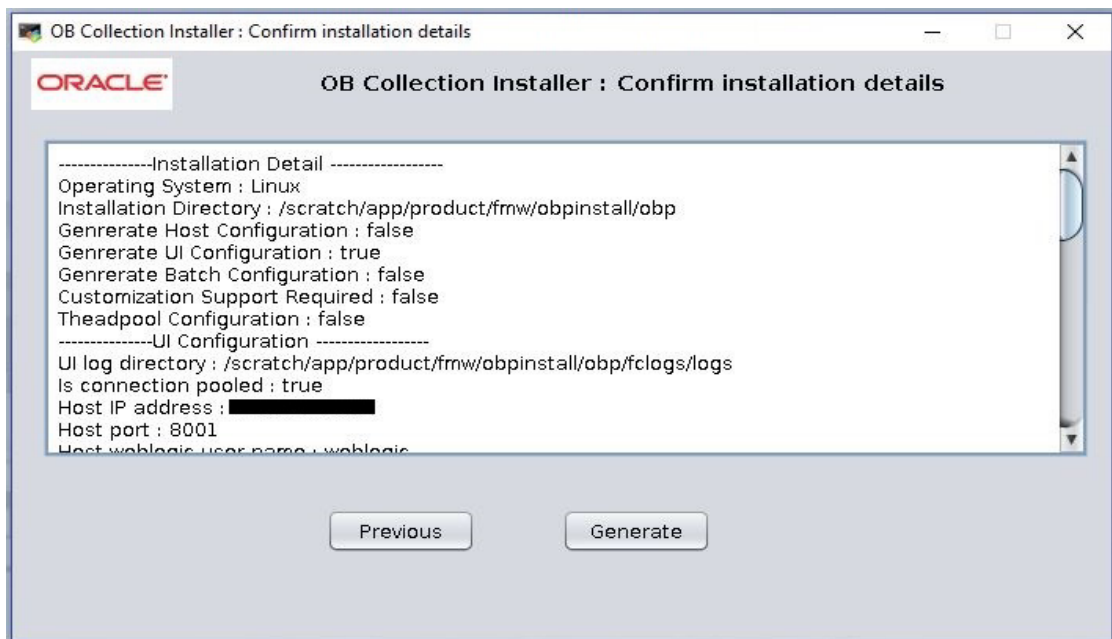
Table 3–2 OB Collection Installer: UI Configuration

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.

Field	Description
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.
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.

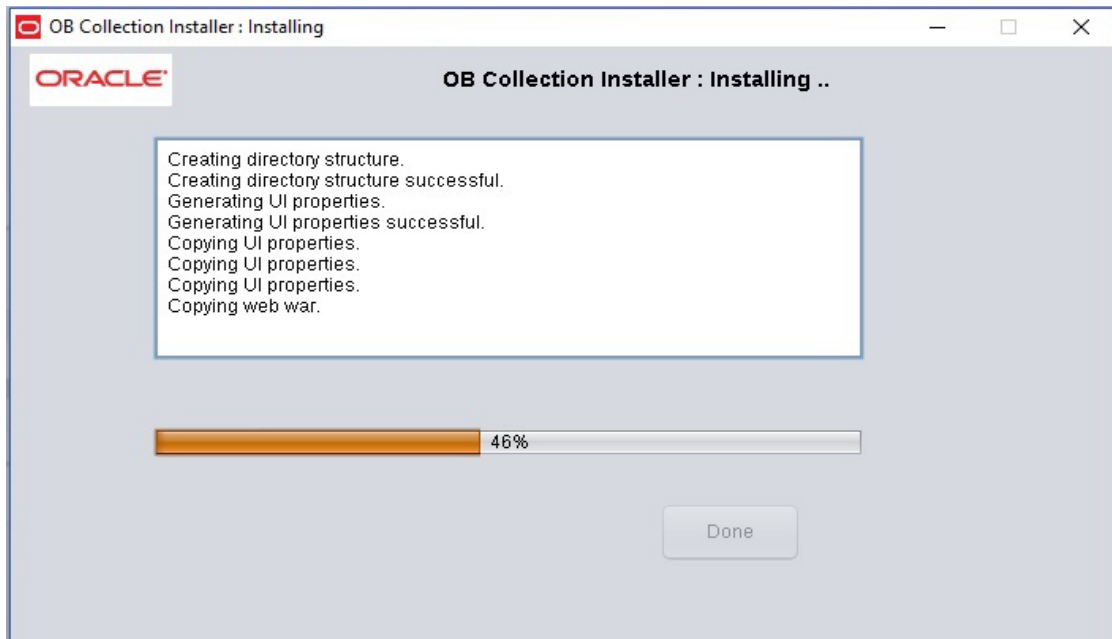
- Click Next. The OB Collection Installer: Confirm Installation details screen appears.

Figure 3–4 OB Collection Installer: Confirm Installation Details



- Click Generate.

Figure 3–5 OB Collection Installer : Installing



14. Click Done.
15. Log in to Weblogic console and navigate to XML Registries.
16. Add new XML Registry Properties.
17. 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 3–6 XML Registry

Home > Summary of XML Registries > XML Registry-0

Settings for XML Registry-0

Configuration Targets Contents Notes

Save

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

Name: XML Registry-0

Document Builder Factory:

SAX Parser Factory:

Transformer Factory:

XPath Factory:

Schema Factory:

XML Input Factory:

XML Output Factory:

XML Event Factory:

When To Cache:

Save

18. In the OB Collection Installer: Installing screen, 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:

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 3–7 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 3–3 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 OBP Collections 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.
Select the option (1 or 2) where you want to target Datasource and CollectionWeb application: Server 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.

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

Figure 3–8 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 )- UI
Enter the UI server IP / DNS - 10.180.84.153
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... - █

```

Figure 3–9 Domain Configuration: Proceeding with the Process

```
[ofasobp@rns00bgr 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 (${middleware_home}/wlserver.
3)- /scratch/app/product/fmw/wlserver
Enter Deployment/Installation directory name - /scratch/app/product/fmw/obpinstall/obp
Enter Domain Directory Path where Domain is created (${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 -

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
[ofasobp@rns00bgr Collections]$
```

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

EXTRA_JAVA_PROPERTIES before collection 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 Collection 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:

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

Following are the components of the URL:

Table 3–4 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 OBP Collections 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 OBP Collections 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.wsdclient.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 OBP Collections 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-8u101-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.

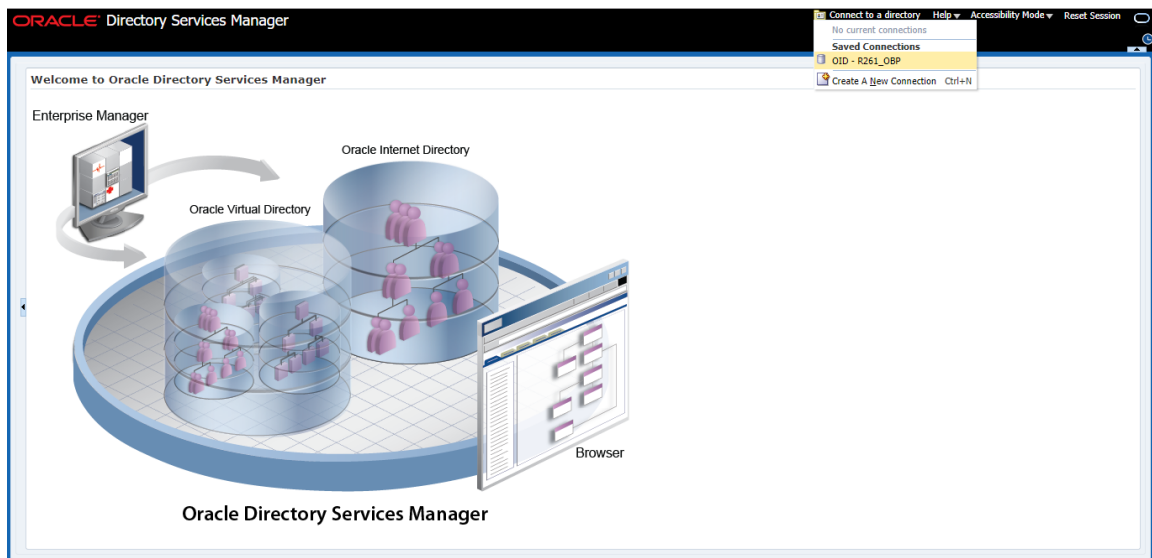
6.1 User Creation in OID

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.

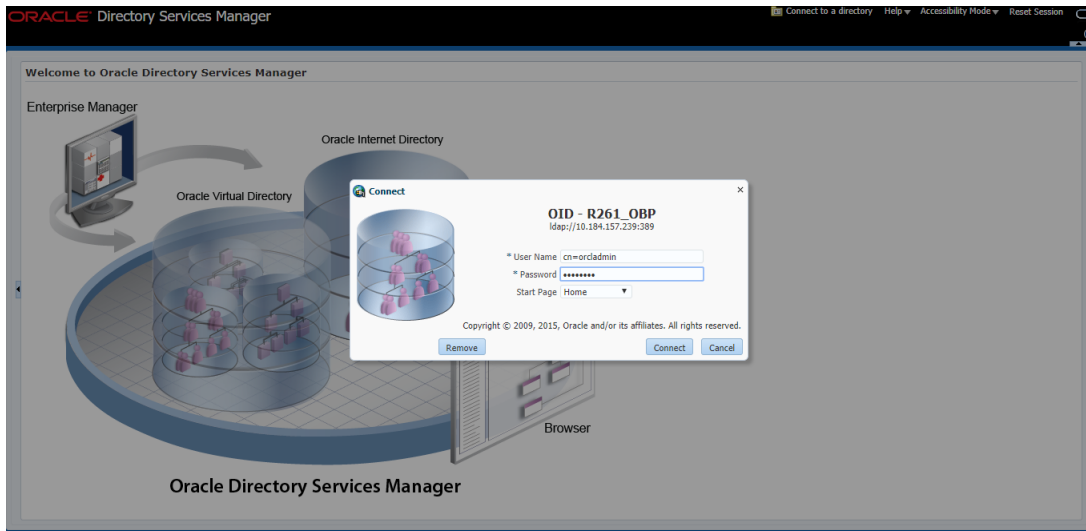
ODSM URL: <OID_IP>:7005/odsm.

Figure 6–1 Opening ODSM



2. Log in to the OID.

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

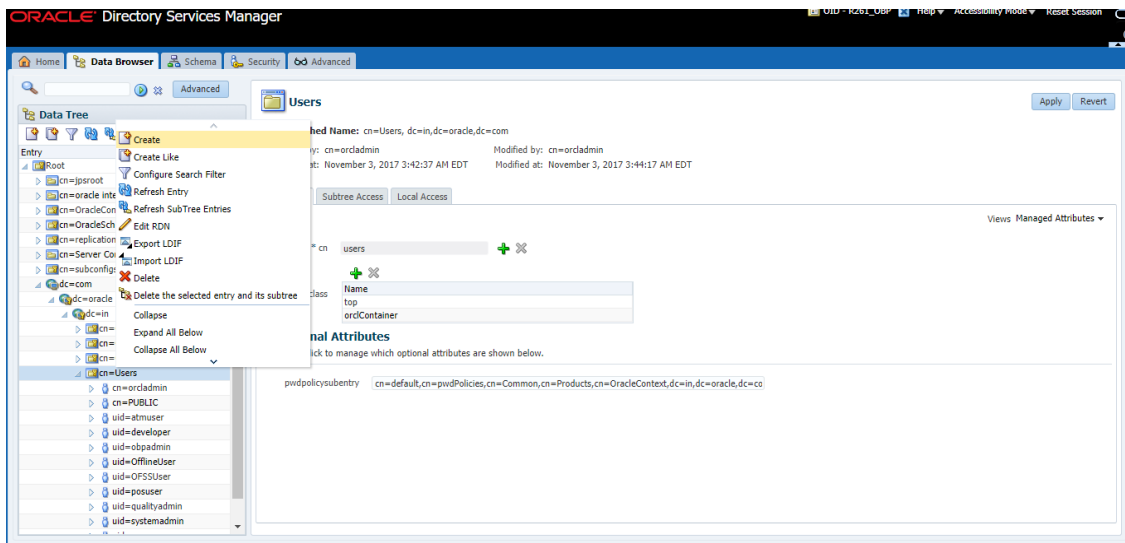
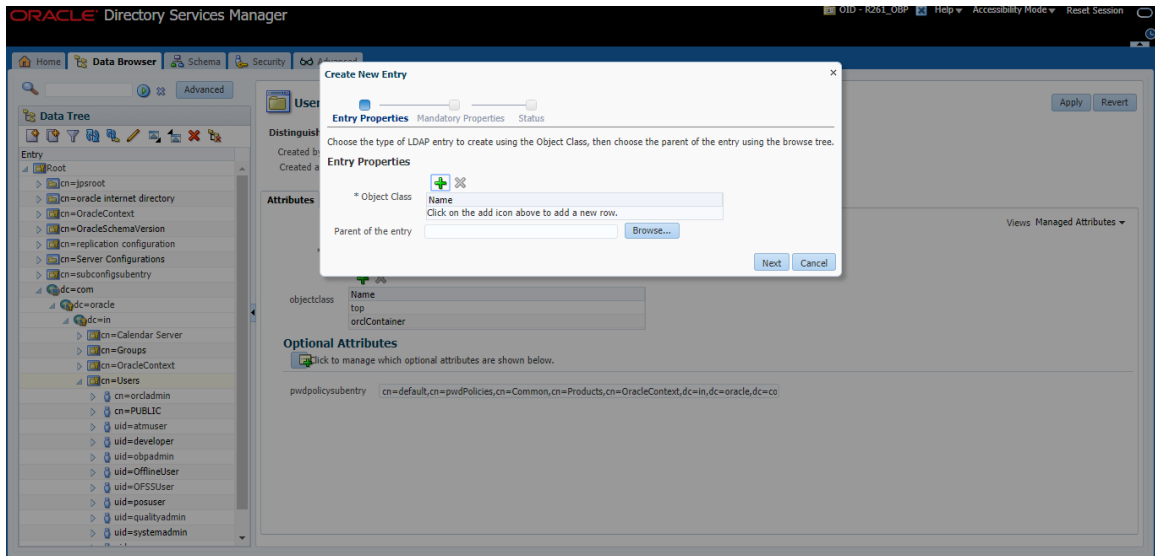


Figure 6–4 Creating New Entry



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

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

Figure 6–5 Adding Object Classes: Top

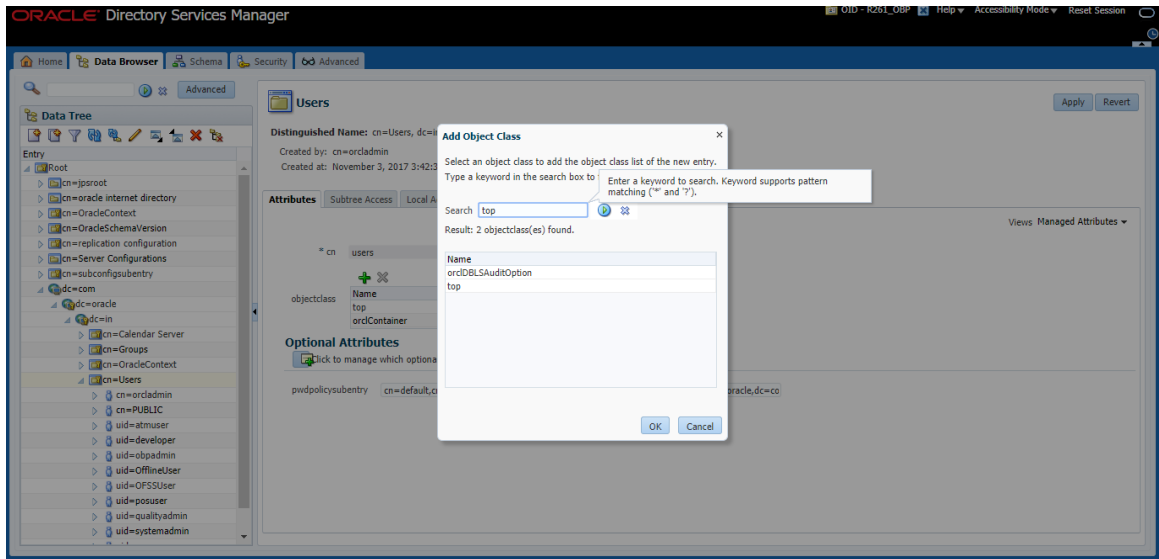


Figure 6–6 Adding Object Classes: Person

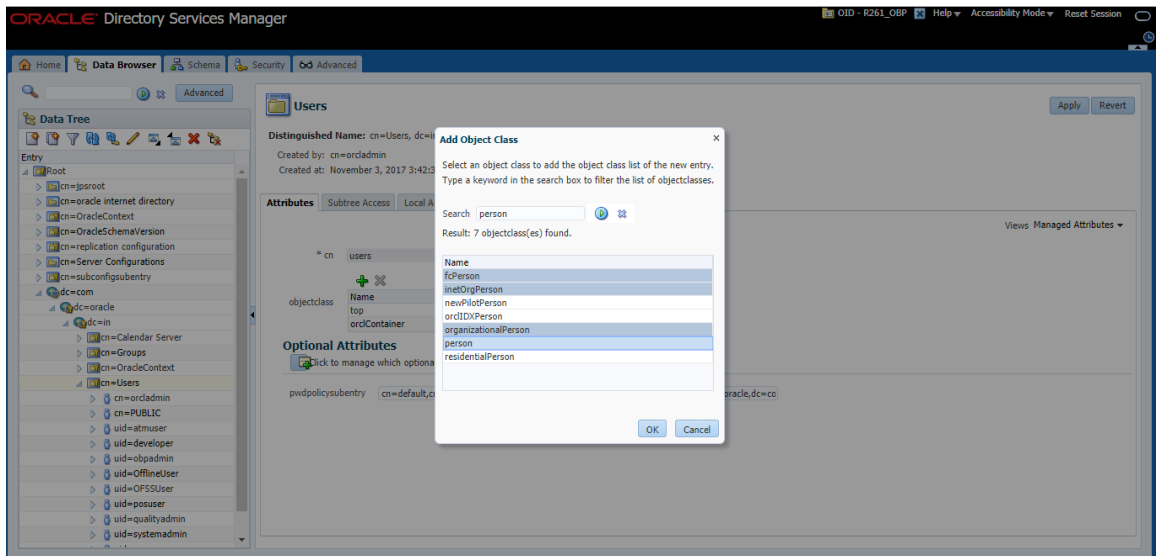
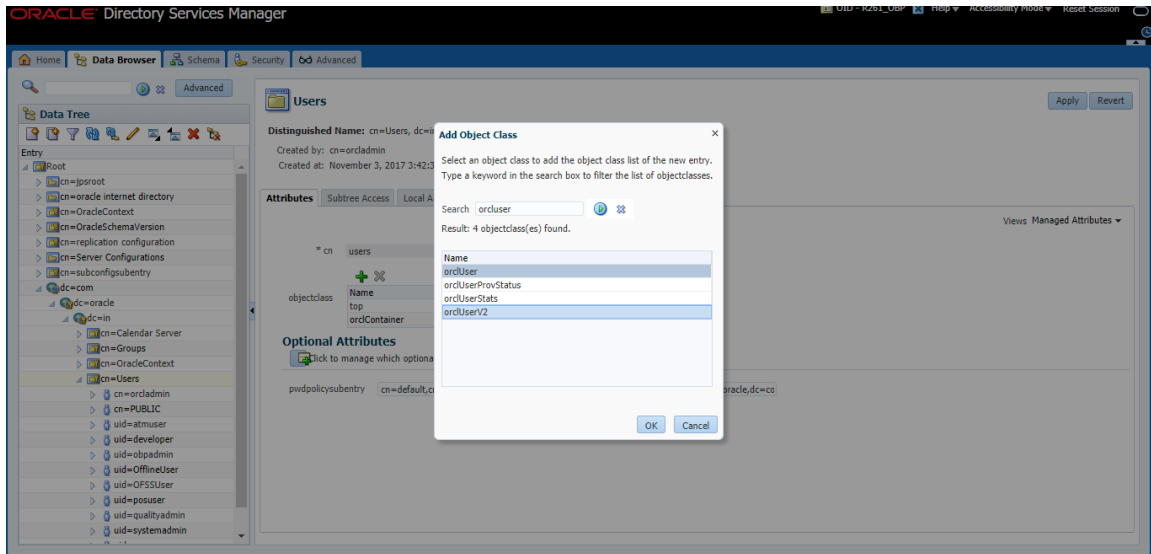
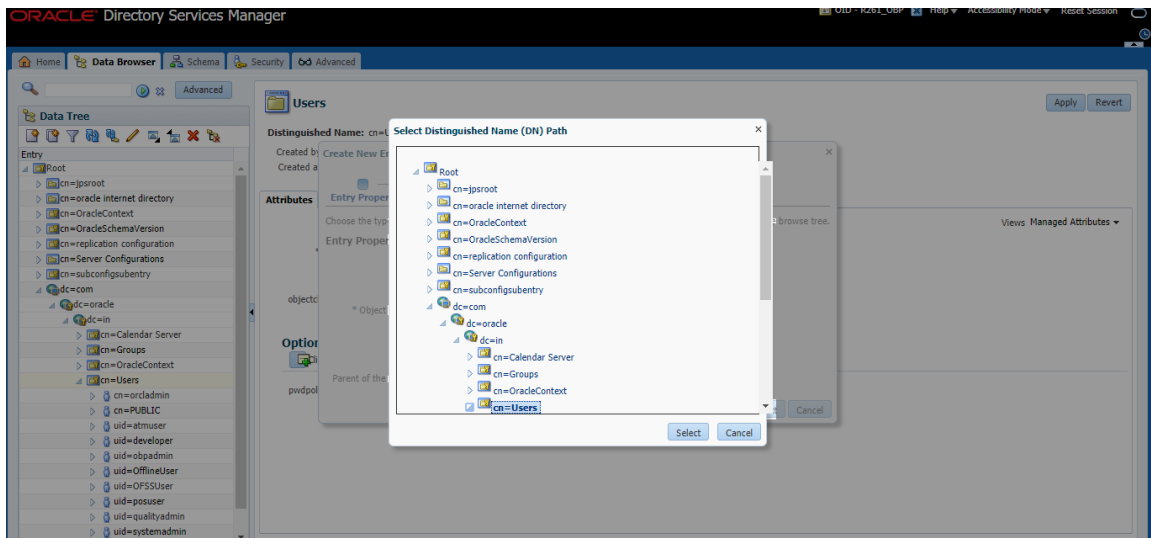


Figure 6–7 Adding Object Classes: Oracle User



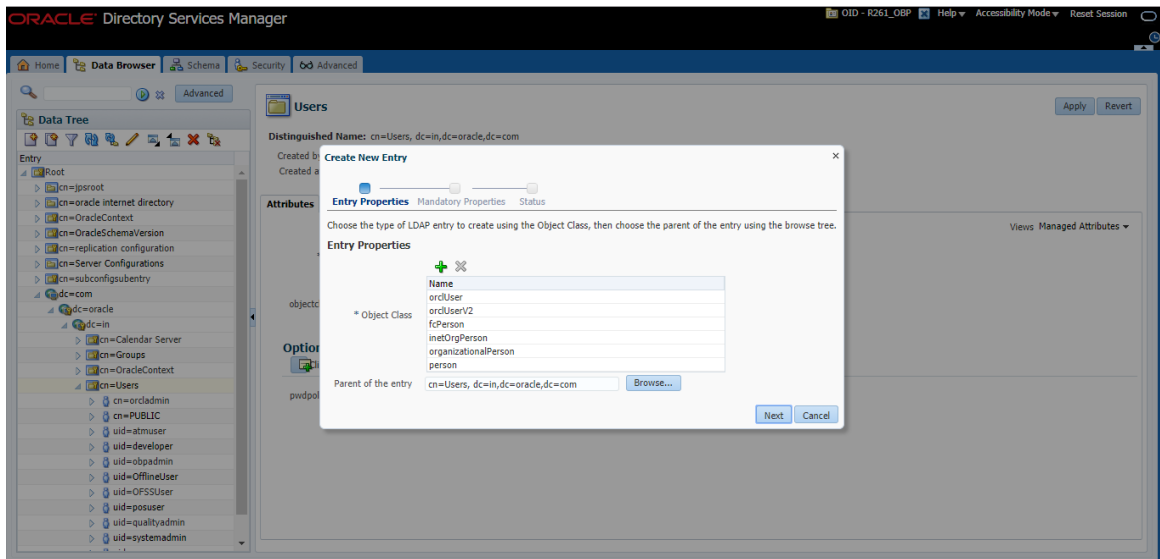
5. Select the Parent of the entry (**Distinguished Name DN**) by clicking the **Browse** button. Select the path as Root -> dc=com -> dc-oracle -> dc=in -> cn=Users

Figure 6–8 Selecting Distinguished Name



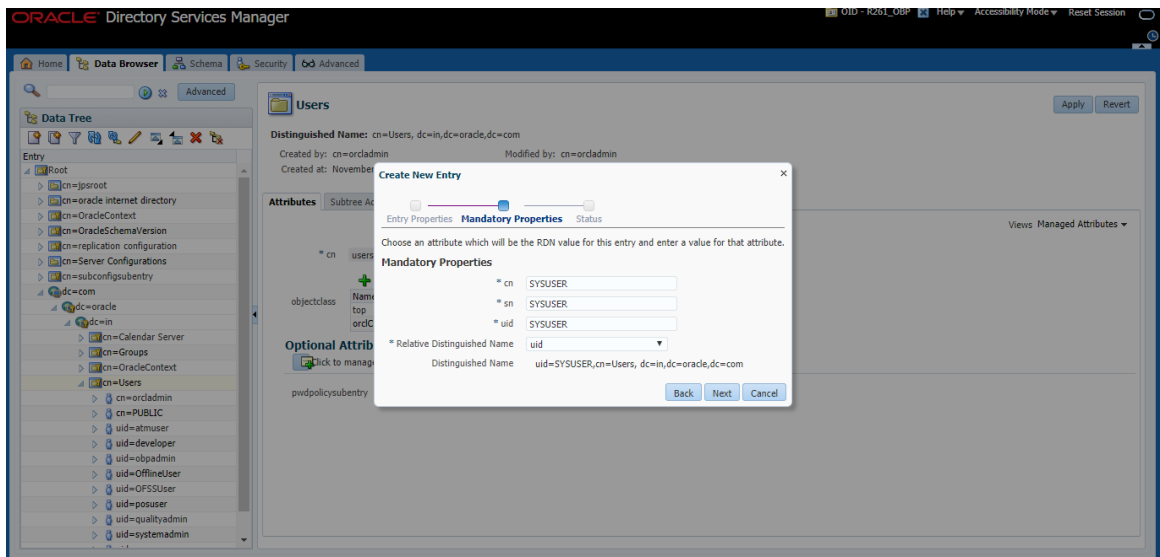
6. Click the **Next** button.

Figure 6–9 Selecting Entry Properties



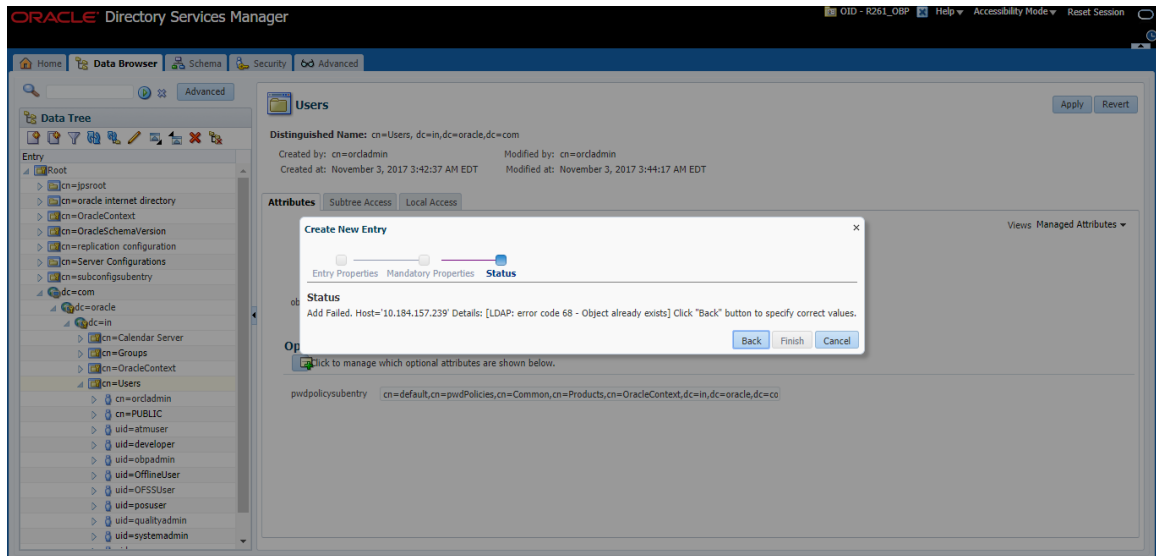
7. Select the **Relative Distinguished Name** as **uid**. Then enter the values of **cn**, **sn** and **uid** as **SYSUSER**.

Figure 6–10 Selecting Mandatory Properties



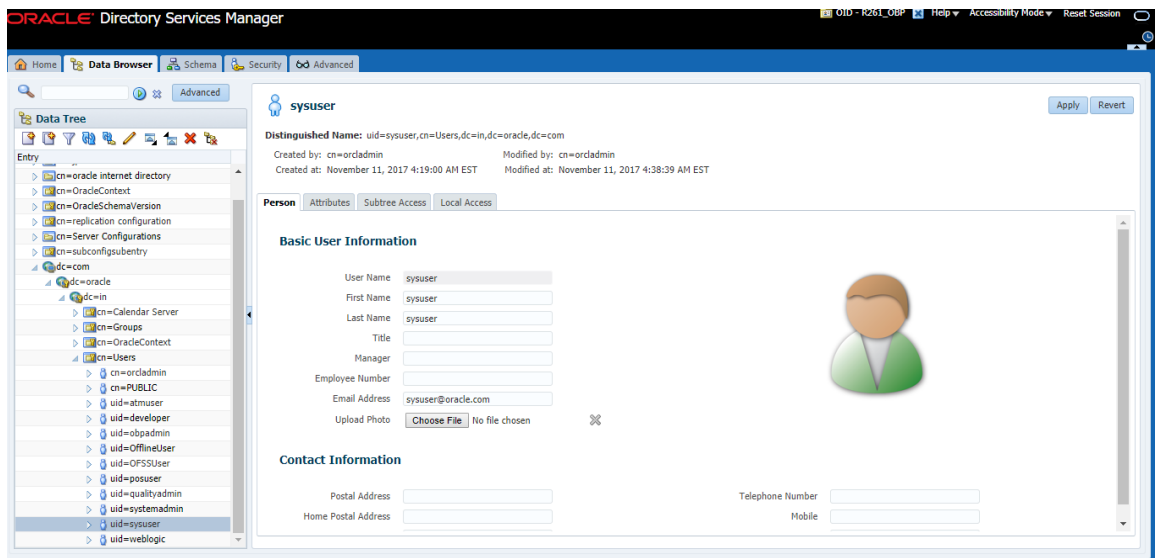
8. Click Next. The new user is created in OID and a message appears as shown in Figure 6–11.

Figure 6–11 Status Message



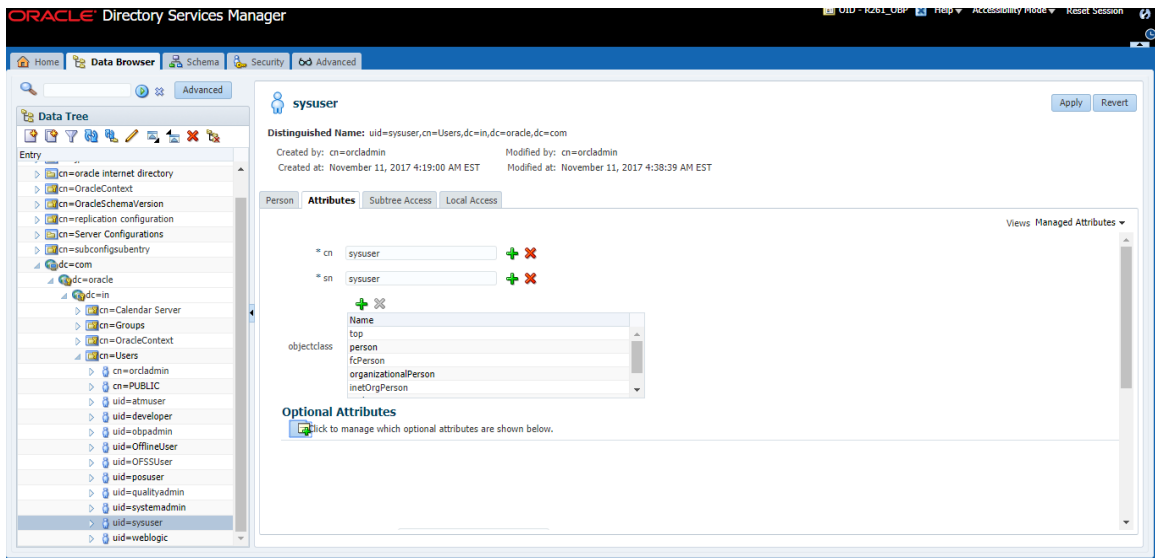
9. Select that user 'uid=SYSUSER' from the Data tree list.

Figure 6–12 Selecting the User



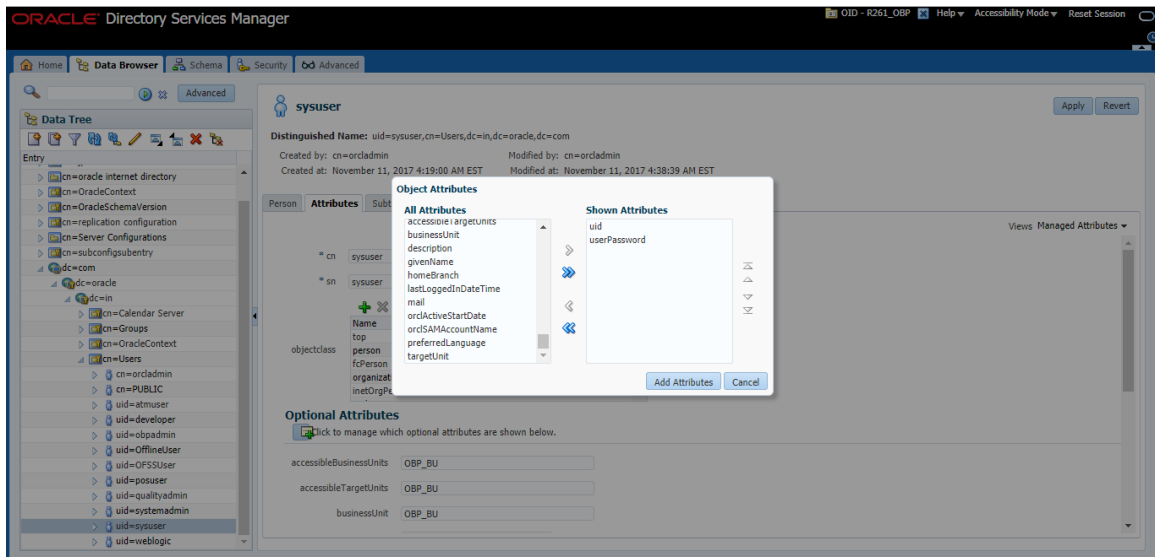
10. Click the **Attributes** tab, and then click the **Add** symbol under **Optional Attributes** section.

Figure 6–13 Attributes Tab



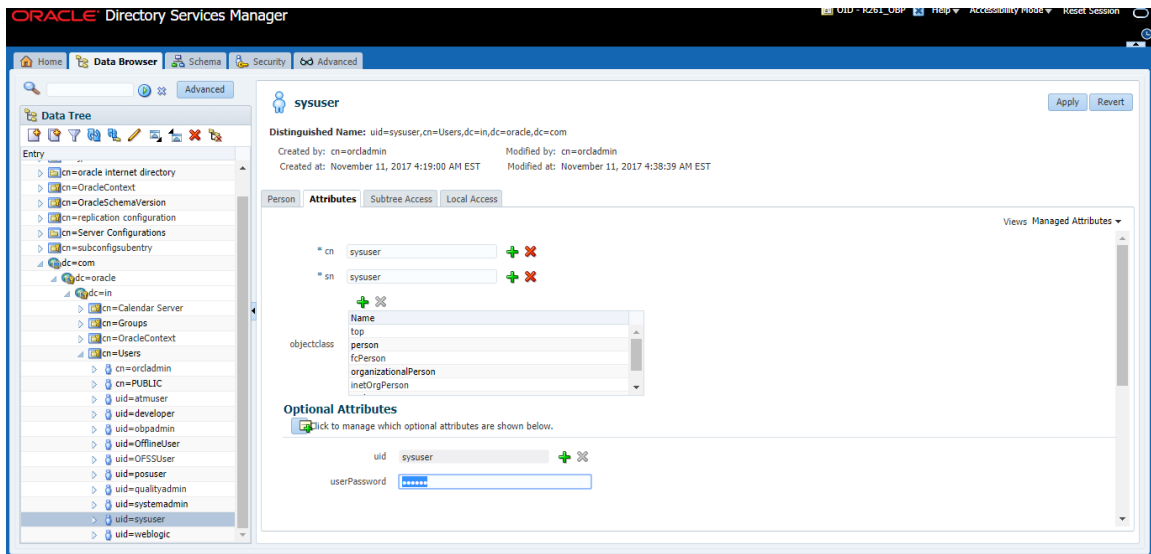
11. Click on Add button under Optional Attributes and add the 'userPassword' attribute from the All Attribute list and click the Add Attribute button.

Figure 6–14 Adding User Password



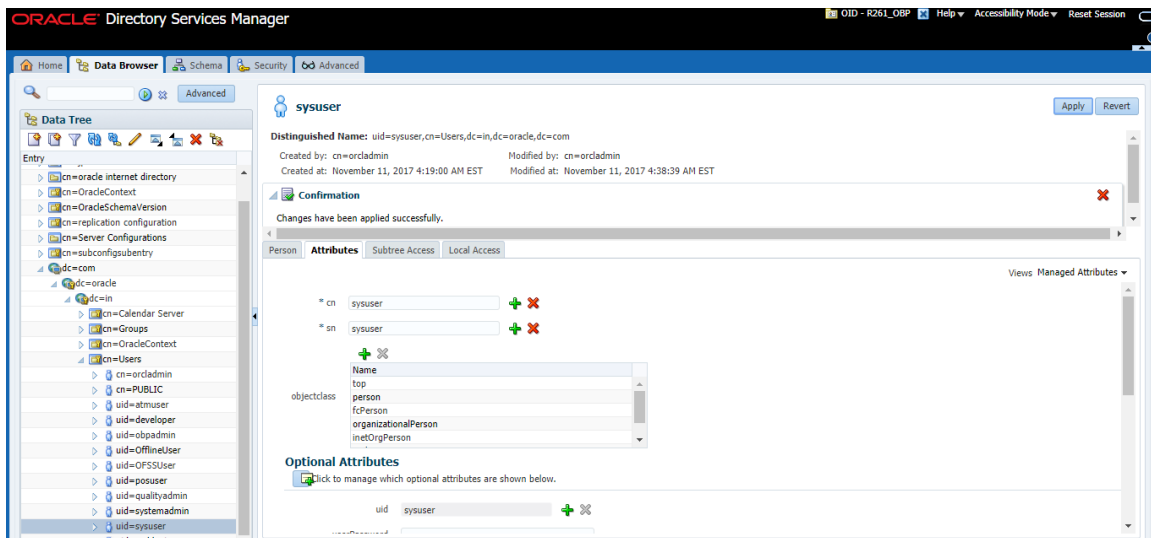
12. Enter the value in the **userPassword** field and click the **Apply** button in right hand corner.

Figure 6–15 Setting User Password



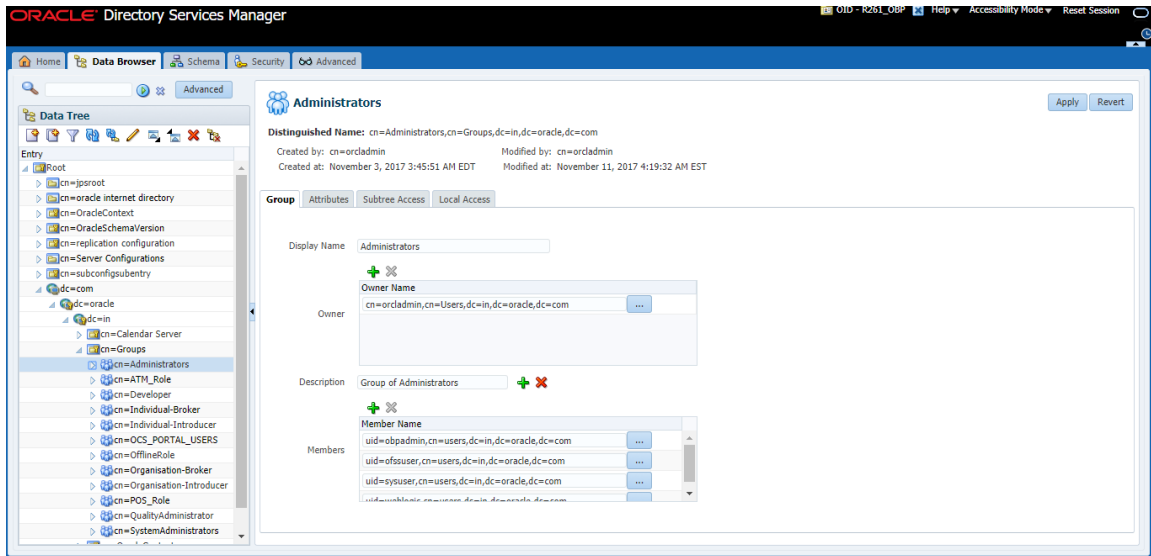
The confirmation message appears as "Changes have been applied successfully." as shown in Figure 6–16.

Figure 6–16 Confirm Message



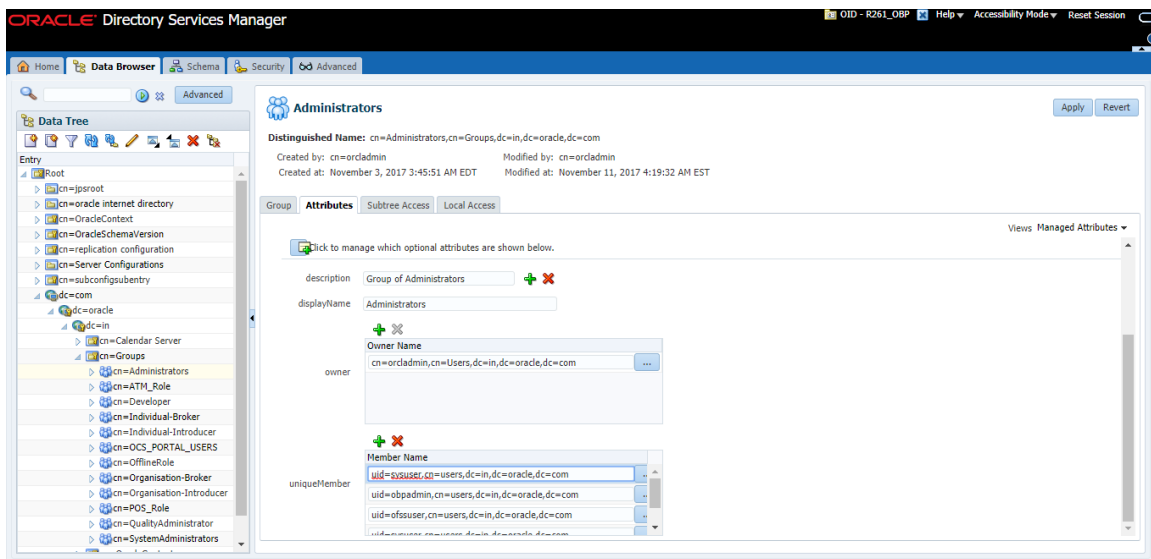
- Once user is created, add it into **Administrator group**. Navigate in Data tree as Root -> dc=com -> dc=oracle -> dc=in -> cn=Groups.

Figure 6–17 Adding to Administrator Group



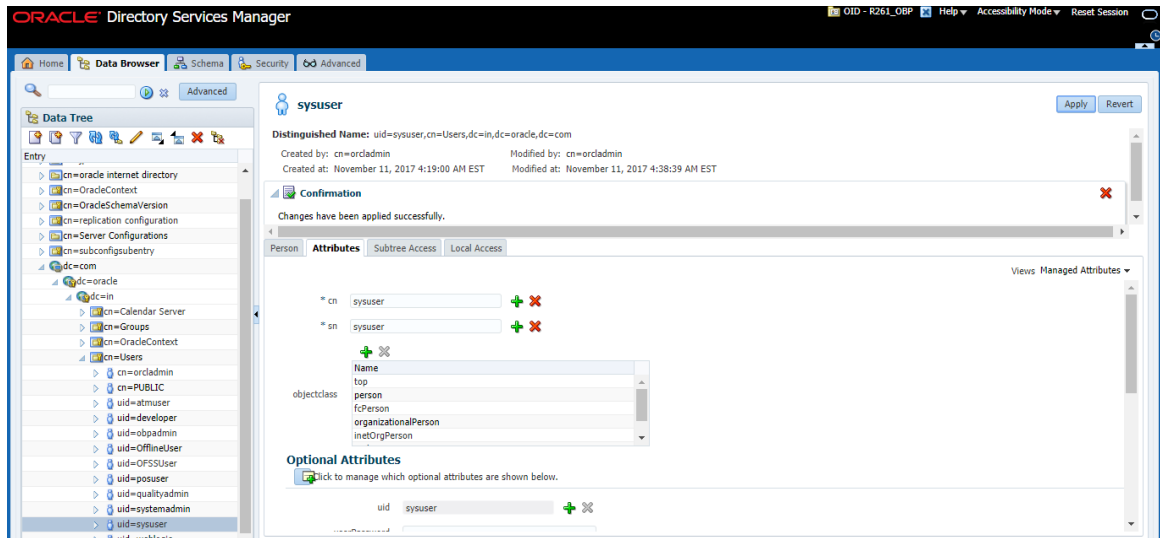
- Click the **Attributes** tab and click the **Add** button in 'uniqueMember' table. Add the below entry into it.
uid=SYSUSER,cn=users,dc=in,dc=oracle,dc=com

Figure 6–18 Attributes Tab



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

Figure 6–19 Confirmation message



- 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 the server/lib directory.

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

2. Use the following command to create wfullclient.jar in the server/lib directory:

```
java -jar wljarbuilder.jar
```

Figure 7–1 Command to Create wfullclient.jar

```
Integrating jar -->(1)/(37265)//scratch/app/product/fmw/modules/com.bea.core.htt
p.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.dia
gnostics.accessor_1.5.0.0.jar
Integrating jar <--(1)/(37365)/(96)//scratch/app/product/fmw/modules/com.bea.cor
e.diagnostics.accessor_1.5.0.0.jar
Created new jar file: /scratch/app/product/fmw/wlserver_10.3/server/lib/wfullcl
ient.jar
[ofsobp@mum00are lib]$ █
```

3. Copy the generated wfullclient.jar to path:

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

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

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

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

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

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

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

```
export WLS_JDBC_REMOTE_ENABLED
```

7. 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/jdk1.7.0_67/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.

8. Verify threadpoolworker.properties.

- To modify threadpoolworker.properties:

a. Go to the path:

```
../obpinstall/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

Name	Ext	Size	Changed	Rights	Owner
..			3/18/2016 6:52:21 PM	rw-r-xr-x	ofssobp
wfullclient.jar		53,718 KiB	1/29/2016 2:16:42 PM	rw-r-xr-x	ofssobp
dms.jar		1,603 KiB	1/25/2016 3:17:51 PM	rw-r-xr-x	ofssobp
ojdl.jar		192 KiB	12/30/2015 12:16:49 PM	rw-r-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 `.../obpinstall/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/obpinstall/obp/fclogs/logs
```

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

```
.../fmw/obpinstall/obp/fclogs/logs/standalone/obp/logs
```

(Use root collection log path in place of `.../fmw/obpinstall/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
Executing OBP initialisation block....
SessionContext used during OBP initialisation SessionContext [bankCode=10, transactionBranch=1000, localDateText=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
system property [org.owasp.esapi.devteam] 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/obpinstall/obp/fclogs/logs/ESAPI.properties
Not found in SystemResourceDirectory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpinstall/obp/fclogs/logs/file:/sgra
Not found in 'user.home' (/scratch/app/product/fmw/obpinstall/obp/collectionConfig) directory: /scratch/app/product/fmw/obpinstall/obp/collection
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!
SecurityConfigurationForValidator.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/obpinstall/obp/fclogs/logs/validation.properties
Not found in SystemResourceDirectory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpinstall/obp/fclogs/logs/file:/sgra
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
SessionContext used during OBP initialisation SessionContext [bankCode=10, transactionBranch=1000, localDateText=20170331114107, externalRef
Filter defin is -->((OUTSTANDING_AMT) > ('0')) AND ((MATURITY_DT) < (to_date(sysdate)))
Exit filter service
Done with OBP initialisation...
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpinstall/obp/collectionenv/standalone/config/sp1.properties from classpath: {com.oracle.ouaf.system.k
SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpinstall/obp/obp.host.app.domain/APP-INF/lib/sp1-shared-4.3.0.1.0.jar!/org/slf4j/impl/St
SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpinstall/obp/obp.host.app.domain/APP-INF/lib/sp1-shared-4.3.0.1.0.jar!/org/slf4j/impl
SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpinstall/obp/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.SLF4JLoggerFactory]

```

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

Figure 7–4 Executing OBP Initialisation Block


```

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=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
System property [org.owasp.esapi.devteam] 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/obpinstall/obp/fclogs/logs/ESAPI.properties
Not found in SystemResourceDirectory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpinstall/obp/fclogs/logs/file:/sca
Not found in 'user.home' (/scratch/app/product/fmw/obpinstall/obp/collectionConfig) directory: /scratch/app/product/fmw/obpinstall/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 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/obpinstall/obp/fclogs/logs/validation.properties
Not found in SystemResourceDirectory/resourceDirectory (this should never happen): /scratch/app/product/fmw/obpinstall/obp/fclogs/logs/file:/sca
Not found in 'user.home' (/scratch/app/product/fmw/obpinstall/obp/collectionConfig) directory: /scratch/app/product/fmw/obpinstall/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 149094
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 11490940668231
Done with OBP initialisation...
INFO: Loaded file:/scratch/app/product/fmw/obpinstall/obp/collectionenv/standalone/config/spl.properties from classpath: {com.oracle.uaaf.system.k
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/scratch/app/product/fmw/obpinstall/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/obpinstall/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/obpinstall/obp/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.SLF4JToolLoggerFactory]

```

To verify whether the Threadpoolworker has started successfully:

1. Check for connection to:

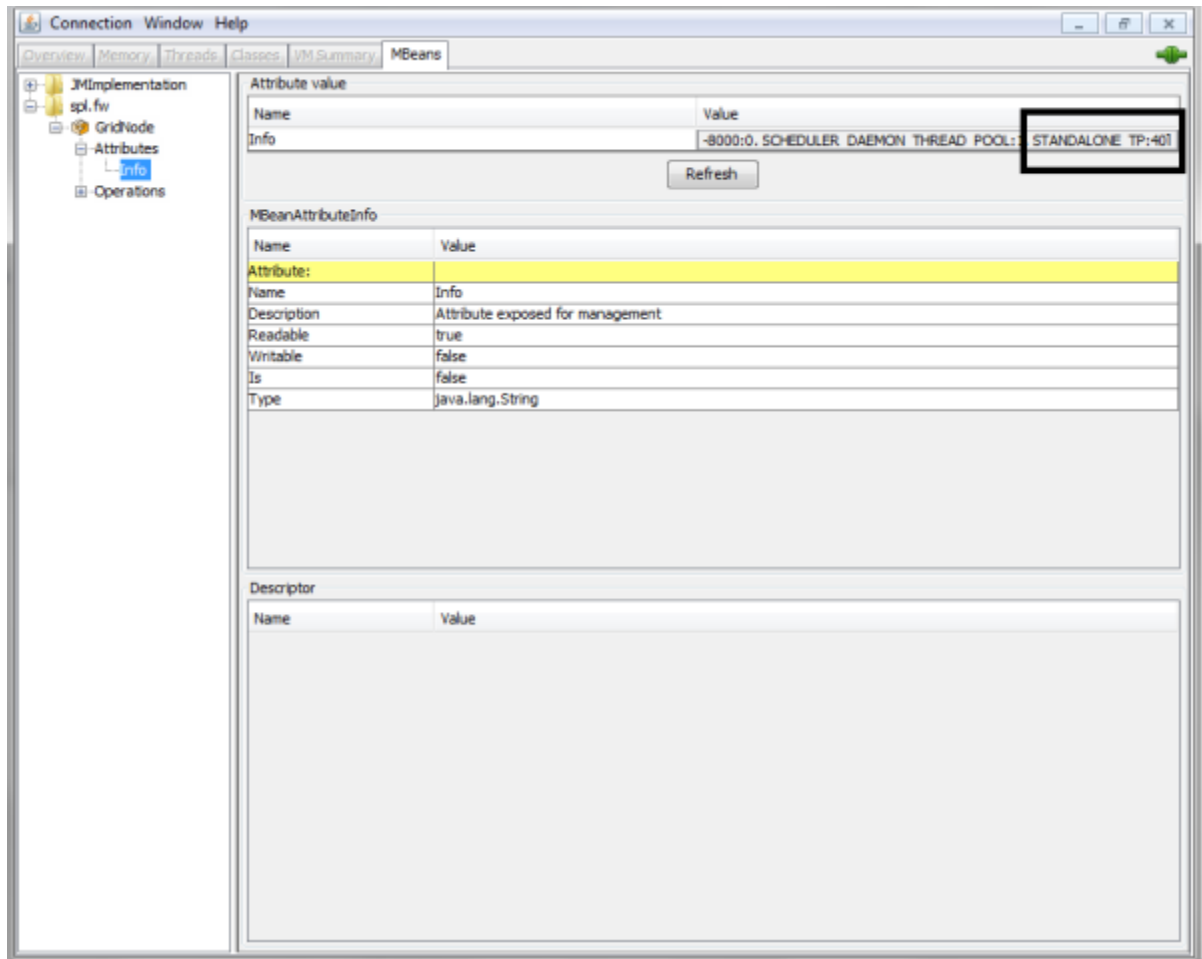
service:jmx:rmi:///jndi/rmi://<server-name>:<rmi_port>/spl/fw/jmxConnector

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:

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

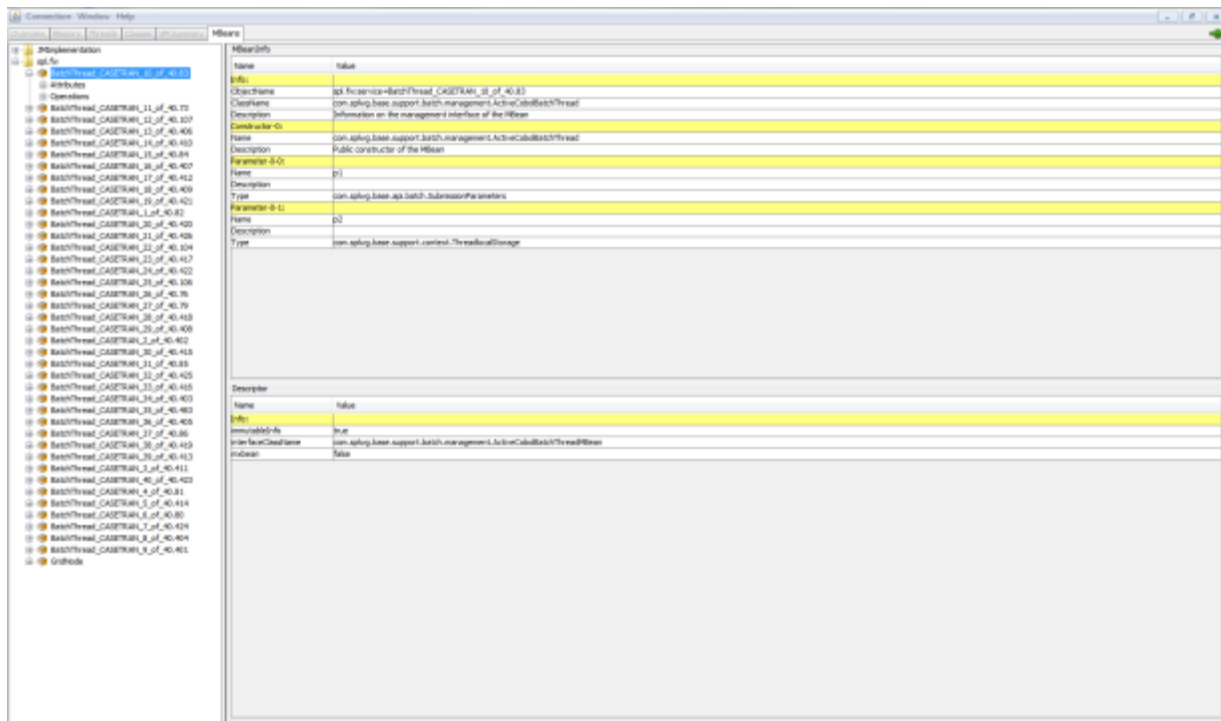
Where:

-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=[FJOCSON-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 = FJOCSON-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
DatTimeStarted 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

#	Batch	Batch Code
9	Bulk Contact Creation	C1-BLKCC
10	Contact Processing	C1-CNTPR
11	Strategy Monitor	C1-CSMB
12	Case Life Cycle Tracking	CASETTRAN
13	Queue Allocation Monitor	C1-ALOCM
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