Oracle Banking Digital Experience

Installation Manual
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Installation Manual

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1. Preface

This document will help you to install the Oracle Banking Digital Experience Application using the Installer. The document discusses the usage steps and inputs required for Installer execution.

This preface contains the following topics:

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

1.1 Audience

This document is intended for the following audience:

- Development Teams
- Implementation Teams
- Implementation Partners

1.2 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at
http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit
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http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

1.3 Organization of the Guide

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

Chapter 1, "Introduction"

This chapter provides a brief overview of OBDX Application.

Chapter 2, "Network Diagram"

This chapter includes the Network Diagram used to explain the complete structure of the Application and the interactions amongst each component.

Chapter 3, "UML Diagram"

This chapter describes the Installer steps in a diagrammatic form.

Chapter 4, "OBDX Installer Execution Steps"

This chapter describes the pre-requisites and steps involved for Installer execution.

Chapter 5, "Conclusion"

1.4   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 Digital Experience Collections Day Zero Setup Guide.

For a brief description about user provisioning in OBDX Collections, see the Oracle Banking Digital Experience Collections User Provisioning Guide.

1.5   Abbreviations

The following abbreviations may be used within the document.

Abbreviation	Meaning
OBDX	Oracle Banking Digital Experience
DB	Database
IAM	Identity Access Management
OID	Oracle Internet Directory
OAM	Oracle Access Manager
OES	Oracle Entitlements Server
OHS	Oracle HTTP Server
RCU	Repository Creation Utility
SID	Service ID
SSL	Secured Socket Layer
DIGX	Digital Experience
MDS	Metadata Services
OPSS	Oracle Platform Security Services
LDAP	Lightweight Directory Access Protocol

1.6   Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates file names, commands and elements associated with actions, text that appears on screen or the inputs to be provided.
italic	Italic type indicates references or hints (notes) provided for user.
`monospace`	Monospace type indicates URLs.

Article I.

2. Introduction

This guide helps you to install the Oracle Banking Digital Experience Application. OBDX Installer is used to perform complete or partial setup for Oracle Banking Digital Experience products. The installer consists of product archive and configuration files and is shipped to the client as a single deliverable CD.

Oracle Banking Digital Experience Installer is executed on LINUX based environments.

On invocation, the installer performs the tasks based on the option selection and using configurations provided in property files. Some activities and features performed by the toolkit are explained here. More details about each task are explained in detail in following sections.

2.1 Verification of the Shipped Archive

This task verifies whether the delivered archive is tampered and audits the same. In case of any mismatch found the toolkit abort itself and logs the details.

2.2 Application Setup

- In case of Application Install option selected, the content of delivered archive is unzipped and copied to location relative to the application home.

- The configuration file update is then performed based on provided inputs through properties file. The properties file values to be are taken as input from the toolkit user, as explained in later chapters.

2.3 Database Setup

In case of DB Install option selected this activity performs the creation of application DB users, application related database entities. Additional information on DB activity details, steps for performing this activity individually and actions required post this activity will be explained in later chapters.

2.4 Auditing and Logging Action

All the user entries as well toolkit activities are logged on screen as well as user defined log location. The verification screen allows the user to verify the inputs post which the progress of the installer is displayed to end user appropriately.

3. Oracle Banking Digital Experience Installation Execution Steps

This chapter provides detailed information about the installer workflow and the result entities created in the process. User needs to follow the step by step details to successfully install the delivered OBDX setup.

- Pre-requisites

- Invoke Installer in Command Prompt

- Installing the Complete OBDX Application

- Installing Schema for OBDX Loans Module using RCU

- Configure Weblogic Domain for OBDX Loans Module Application Server

- Installing OBCP Schema using RCU

- Configure Weblogic Domain for OBDX Application Server

3.1 Pre-requisites

Following should be present prior to executing OBDX Installer:

- Adequate executable rights for application product installation directory creation, modification and deletion need to be present for the OBDX Installer user before execution of installation.

- Application files and Weblogic domain if present must be deleted before invoking the Installer.

- Also, stop any processes running on the ports mentioned for Weblogic configuration using the following steps :--

     netstat –tulpn | grep <port_number>

The above command will display the process id for the tasks running on the mentioned port in the following format,

tcp   0   0   127.0.0.1:<port_number>   0.0.0.0:*   LISTEN <process_id>/java

To stop the running task, type the command ***kill -9 <process_id>*** and press ***<Enter>***.

- Oracle Repository Creation Utility along with instance for OBDX primary database is present and setup on the OBDX Database Server. Adequate Db login credentials (SYSDBA login details as well as additional DB details) are present.

- Schemas for MDS, OES, OID and OAM are present and setup on the above DB Server or on different servers.

- The server on which the OBDX Application will be installed should have following :---

     - Weblogic Installation with the Patch of

     - IAM (Identity Access Management)

- Independent Installation of Simple OHS for GUI on the same machine or different machine.

- Installations for OID (Oracle Internet Directory), OAM (Oracle Access Manager) and OES (Oracle Entitlements Server) individually on the same machine or on different machines.

- Independent Installation of OHS (Oracle HTTP Server) Web tier on same machine or on different machine with the Patch of
  - Webgate for OAM (Oracle Access Manager)

Note: Please refer the Table 1-1 and 1-2 below for specific versions for respective software.

Table 1–1 OBDX Installer: Software Versions on installation machine

Srl. #	Software	Version
1.	JDK	1.7
2.	Oracle Repository Creation Utility (RCU)	11.1.2.2
3.	Oracle Weblogic Server	10.3.6
4.	Oracle Identity Access Management (IAM)	11.1.2.2
5.	Oracle HTTP Server Web tier (GUI)	11.1.1.7

Table 1–2 OBDX Installer: Software Versions on same/different machines

Srl. #	Software	Version
1.	Oracle Repository Creation Utility (RCU) for OID	11.1.1.7
2.	Oracle Repository Creation Utility (RCU) for OAM	11.1.2.2
3.	Oracle Repository Creation Utility (RCU) for OES	11.1.1.9
4.	Oracle OPSS Client (LDAP-based or DB-based policy store)	11.1.2.2
5.	Oracle Entitlement Server (LDAP-based or DB-based policy store)	11.1.2.2
6.	Oracle Access Manager	11.1.2.2
7.	Oracle Internet Directory	11.1.1.7
8.	Oracle HTTP Server Web tier	11.1.1.7
9.	Oracle HTTP Server Webgate	11.1.2.2

3.2   Invoke the Installer in Command Prompt

You must follow the below steps to invoke the Installer:

- Copy the installation content from the deliverable (CD) to a temporary installation location on the server where OBDX product is required to be deployed. This location can be purged after successful execution of the installation. Also delete the contents if already present before copy.

- Modify the installer.properties files placed in property_files folder of respective setup i.e. OBDX. Table 2-1 and 2-2 provides a list of inputs to be modified before invoking the Installer for respective setup.

Table 2-1 OBDX Installer Properties: Initial Details

Field	Description
INSTALLERHOME	Location on the server where the installation files are stored.
WEBLOGICHOME	Location on the server where the Weblogic is installed
CLIHOME	Location on the server where OBDX application files are stored.
RCUHOME	Location on the server where the RCU is placed.
DATABASEIP	Used to specify the database host IP address. For example, 10.180.6.11.
DATABASEPORT	Used to specify the database port. For example, 1521.
DATABASENAME	Used to specify the database SID. For example, ORCL.
PRODUCTVERSION	Used to specify the version of OBDX. For example, 15.1.0.0.0
TABLESPACE	Used to specify the tablespace path.
DATABASEPOSTFIX	Used to specify the schema postfix. For example, APP.
RCU_CLASSPATH	Used to specify the path of RCU configuration folder.
WeblogicUsername	Used to specify the Weblogic Server Admin user name.
DomainName	Used to specify the Weblogic Domain Name
AdminServer Details	Used to specify Admin server details i.e. Name, Non-SSL and SSL Listen port.

Field	Description
ManagedServer Details	Used to specify Managed server details i.e. Name and Listen port
MachineName	Used to specify the Machine Name
NodeManagerPort	Used to specify the port of Node Manager
Data Source Name	Used to specify the names of various Datasources to be created i.e. DIGX, MDS and OPSS.
JNDI Name	Used to specify the JNDI Names of various databases used for Datasource creation.
JDBC URL Details	Used to specify the IP, Port and Service ID of various databases used for Datasource creation.
Schema Name	Used to specify the Schema names for Datasource.
WALLETHOME	Used to specify the path where the file "ewallet.p12" exists.
OHSPATH	Used to specify path of the file "httpd.conf" (OHS setup) exists.
ALIAS	Used to specify Application link alias.
POLICYSTORE_TYPE	Used to specify target servertype as DB server. For example, DB_ORACLE.
LDAP_URL	Used to specify the LDAP server URL.

Table 2-2 OBCP Installer Properties: Initial Details

Field	Description
INSTALLERHOME	Location on the server where the installation files are stored.
WEBLOGICHOME	Location on the server where the Weblogic is installed
OBCP_HOME	Location on the server where OBDX application files are stored.
RCUHOME	Location on the server where the RCU is placed.

Field	Description
DATABASEIP	Used to specify the database host IP address. For example, 10.180.6.11.
DATABASEPORT	Used to specify the database port. For example, 1521.
DATABASENAME	Used to specify the database SID. For example, ORCL.
PRODUCTVERSION	Used to specify the version of OBDX. For example, 15.1.0.0.0
TABLESPACE	Used to specify the tablespace path.
DATABASEPOSTFIX	Used to specify the schema postfix. For example, APP.
RCU_CLASSPATH	Used to specify the path of RCU configuration folder.
APPSCHEMA	Used to specify App Schema name. For example, OBCPAPP.
ADMINNICKNAME	Used to specify the nick name for ADMIN Schema. For example, SUPERADMIN.
SALUTATION	Used to specify the salutation. For example, Mr.
FIRST_NAME	Used to specify the FIRST Name. For example, SUPERADMIN.
LAST_NAME	Used to specify the LAST Name. For example, SUPERADMIN.
EMAILID	Used to specify the email id.
SUPERADMIN_ROLE	Used to specify the Super Admin Role. For example, SUPERAMDIN.
CHANNEL_USERID	Used to specify the Channel User ID. For example, SUPERADMIN.
TIME_ZONE	Used to specify the time zone. For example, Asia/Calcutta.
ENTITYSCHEMANAME	Used to specify the Entity Schema Name. For example, OBCPB001.

Field	Description
IDENTITY	Used to specify the identity. For example, B001.
ADMIN_SCHEMA	Used to specify Admin Schema Name. For example, OBDXADMIN.
HOST_SCHEMA	Used to specify the Host Schema username. For example, OBDX1501.
HOST_SCHEMA_PWD	Used to specify the Host Schema password. For example, OBDX1501.
HOST_SCHEMA_HOS TNAME	Used to specify the Host's IP. For example, 10.180.6.11
HOST_SCHEMA_POR T	Used to specify the Host Schema Port. For example, 1521.
HOST_SCHEMA_SID	Used to specify the Host Schema Service ID. For example, orcl.
WeblogicUsername	Used to specify the Weblogic Server Admin user name.
DomainName	Used to specify the Weblogic Domain Name
AdminServer Details	Used to specify Admin server details i.e. Name, Non-SSL and SSL Listen port.
ManagedServer Details	Used to specify Managed server details i.e. Name and Listen port
MachineName	Used to specify the Machine Name
NodeManagerPort	Used to specify the port of Node Manager
Data Source Name	Used to specify the names of various Datasource to be created i.e. A1 and A1B1.
JNDI Name	Used to specify the JNDI Names of various databases used for Datasource creation.
JDBC URL Details	Used to specify the IP, Port and Service ID of various databases used for Datasource creation.
Schema Name	Used to specify the Schema names for Datasource.

Field	Description
FCON.A1.USER	Used to specify the username of App Schema.
FCON.A1.LDB.URL	Used to specify the LDB URL in the format HOSTNAME:DATABASEPORT/SERVICEID. For example, 10.180.6.11:1521/orcl.
<ehms\ user>	Used to specify Entity Schema username.
host_name	Used to specify the Host Server IP. For example, 10.180.6.11
Port	Used to specify the Managed server port.

- Modify app_server_classpath.txt (contains Classpath for OBDX Application Server) and app_server_arguments.txt (contains Arguments for OBDX Application Server) placed in property_files folder for the respective setup i.e. OBDX and OBCP.

- Modify oid.properties, groups.ldif and users.ldif from obdx/user_group folder. These files contain details used to create LDAP Users and Groups during OBDX Loans Module Application Setup.

- On completion of above steps, invoke **installer.sh** as follows,

The Installer provides command mode of execution. Command mode accepts the input on system command prompt. In order to run the executable provide the path of directory where the executable resides and then invoke it as shown below and press **<Enter>**

For Linux: **sh installer.sh**

This option invokes the installer in command prompt. All inputs will be sequentially asked by command line prompts.

Note: The OBDX Installer can be aborted by doing Ctrl+C button and restarted in case of any detail missing or incorrect in installer.properties file or on command line.

3.3   Installing the Complete Application

Follow the below mentioned steps to install the entire OBDX Application:

- On invoking the installer.sh, the following screen is displayed to the user.

- • Installer Home path will appear and user will have to choose the option for Installation to be done.

1. Install OBDX Loans Module Application.

2. Install OBCP Application.

3. Exit.

On Entering option 1 following screen will appear.
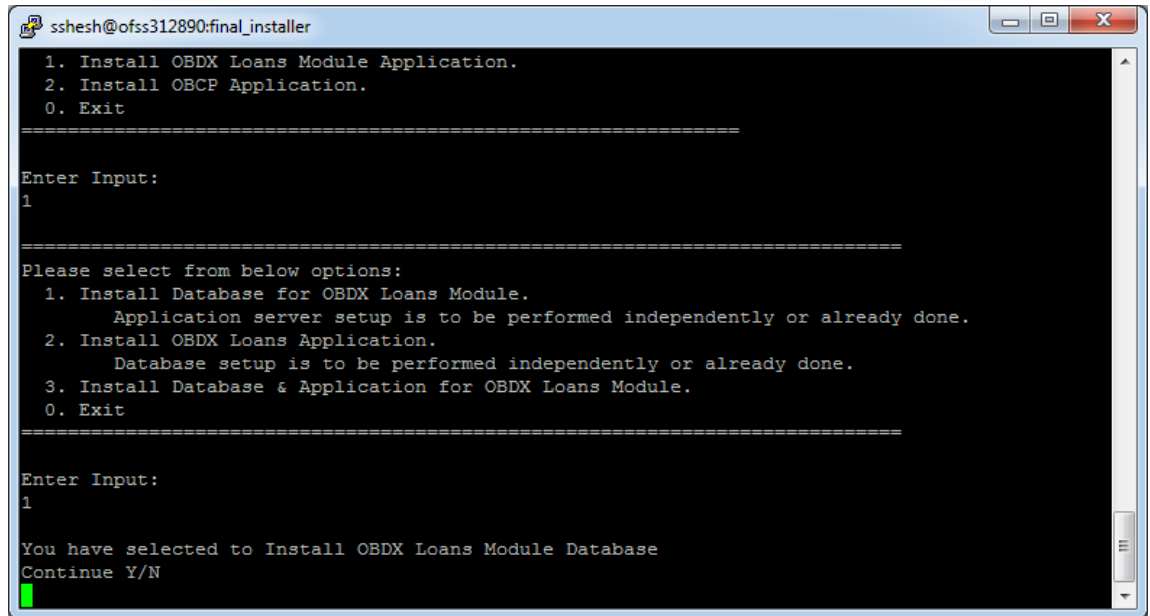
Option 1 : Setup full Database for Loans Module Application.

Option 2 : Implement Weblogic configuration for Loans Module Application.

Option 3 : Setup full database and Loans Module Application Weblogic configuration.

Note: On choosing option 3 the below mentioned screens will appear in succession.

On choosing Option 1 following screen appears:
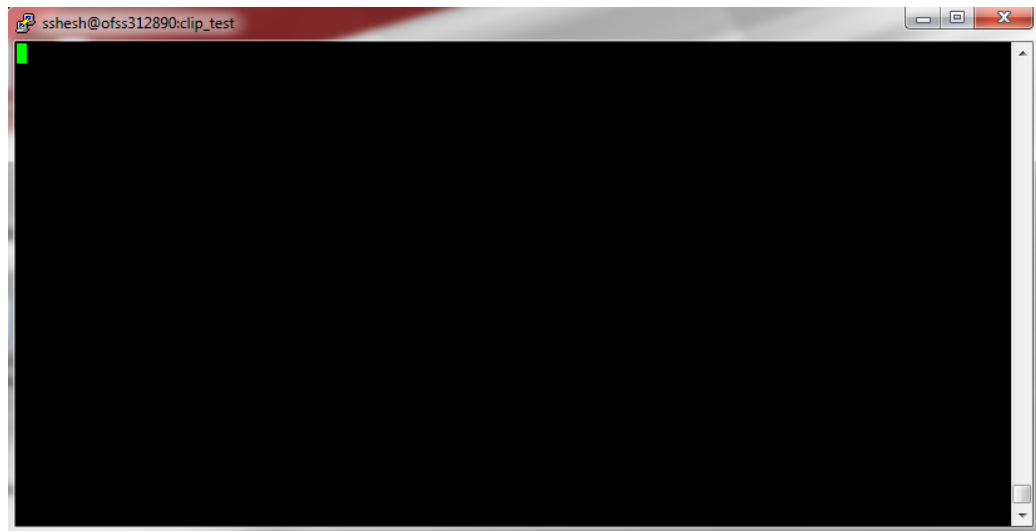
To proceed press <Y> and <Enter>.

The installation begins with the execution of RCU for creating schema user for Loans Module and it is noticed that the complete console screen goes blank as shown below.

RCU does not display or prompt any message on command window, but simply waits for the user to input the passwords.

1.   It is a limitation of RCU wherein it does not display or prompt any message on command window, but simply waits for the user to input the passwords. Following are the passwords to be provided,

Installer: RCU Inputs for OBDX Schema Creation

List of Passwords	Description
SYSDBA Password	Password of the DB user to be used to create OBDX DB Schema and objects. The DB user should have SYSDBA role.
Schema Password	Password of the Schema which will be created for OBDX.

2. Input the SYS passwords, press **<Enter>** and again the content on the screen vanishes. Now, input the Schema Password and press **<Enter>**.

3. Once the installation is completed "Repository Creation Utility - Create: Operation Completed" message will be displayed.

4. At first instance enter the sys password.

5. The entered password will be verified internally. If found ok then once again the screen will disappear and above screen will be displayed.

6. Enter the password of schema to be created.

7. Database setup will be done.

    OBDX LOANS MODULE WEBLOGIC CONFIGURATION

    On Pressing option 2 in screen displayed in figure 5.3.1following screen will appear.
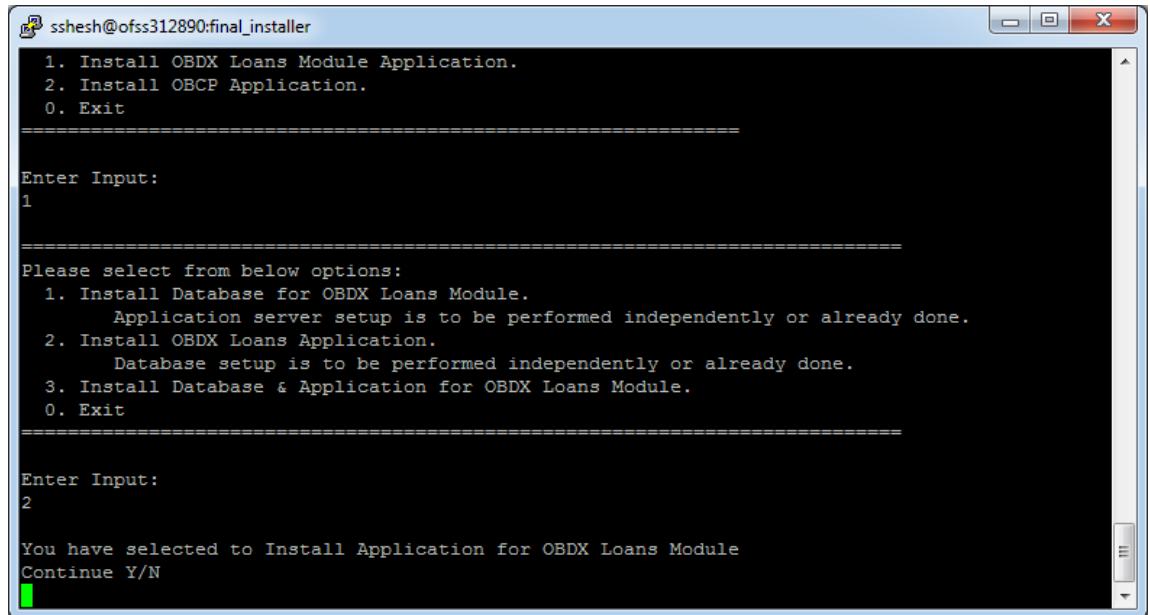
8. Enter Y, if you want to proceed further.

    Following set of password will be asked by the user:

On completion following screen will appear.

9.   To proceed press **<Y>** and **<Enter>**.
        In this case, Installer will ask for passwords which will be used at runtime for installing
        the Application Server on Weblogic. Following are the passwords prompted on
        command line before starting the installation,

        Installer: Inputs for OBDX Weblogic Configuration

List of Passwords	Description
Weblogic Password	Weblogic Console Password
DIGX Schema	Password of OBDX Schema created using RCU. This will be used for DIGX DataSource configuration.
OPSS Schema	OPSS Schema Password. This will be used for OPSS DataSource configuration.
MDS Schema	MDS Schema Password. This will be used for MDS DataSource configuration.

10.   Input all the passwords and press **<Enter>**.

11.   The Weblogic installation starts and once the installation is completed "Installation Completed Successfully" message will be displayed.

12.   The installer will then prompt for following JPS configuration passwords,

Installer: Inputs for Updating Policies

List of Passwords	Description
OPSS Schema	OPSS Schema Password. This will be used for OPSS DataSource configuration.
ldapCredentials	Password of connecting to LDAP server.

13.   The security policies will get updated.

14.   The installer then creates LDAP users and groups and configures httpd.conf (OHS configuration for GUI).

15.   Once the installation is completed "Installation Complete" message will be displayed.
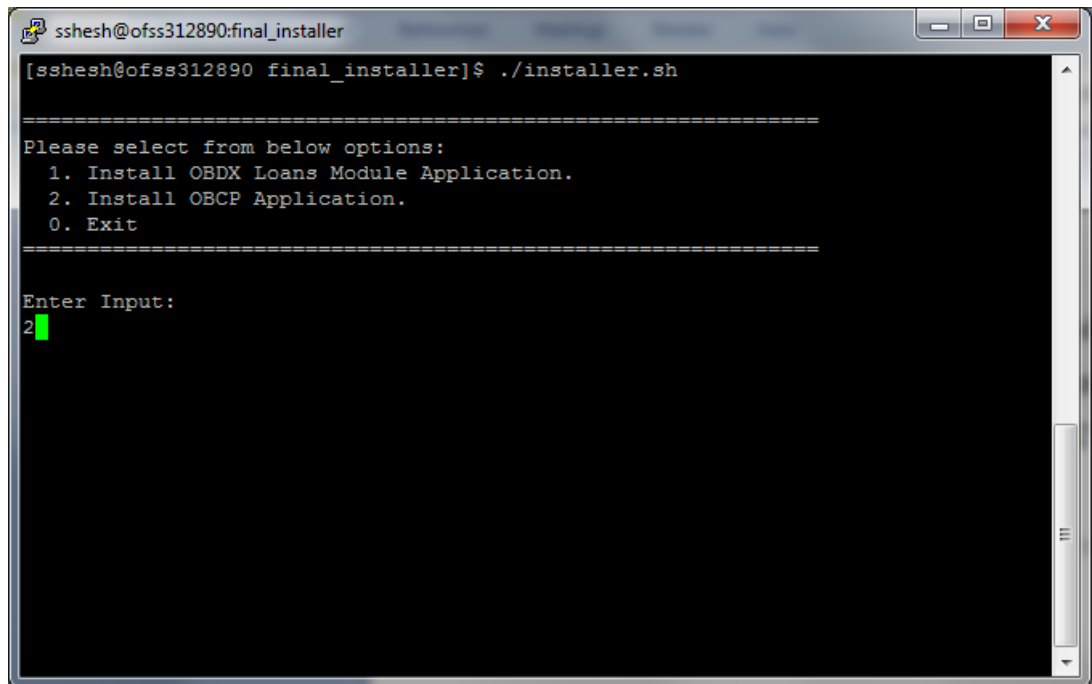
Note:

1) Selection of option '3' will install the complete setup for OBDX Loans Module wherein the steps mentioned above for Install DB Schema and Configure Application Server will be combined i.e. the creation of application DB user and entities is followed by Application Server Setup.

2) In case where DB Installation step is skipped it is assumed that the DB installation is done completely along with OBDX Database users created. Although DB installation can be performed at a later stage, the DB login details (Database Administrator User Credentials etc.) should be present at the time of OBDX Application Server Setup.

3.4   Installing OBDX Schema using RCU

Follow the below mentioned steps to install the OBCP Database Schema:

- On invoking the installer.sh, the following screen is displayed to the user.
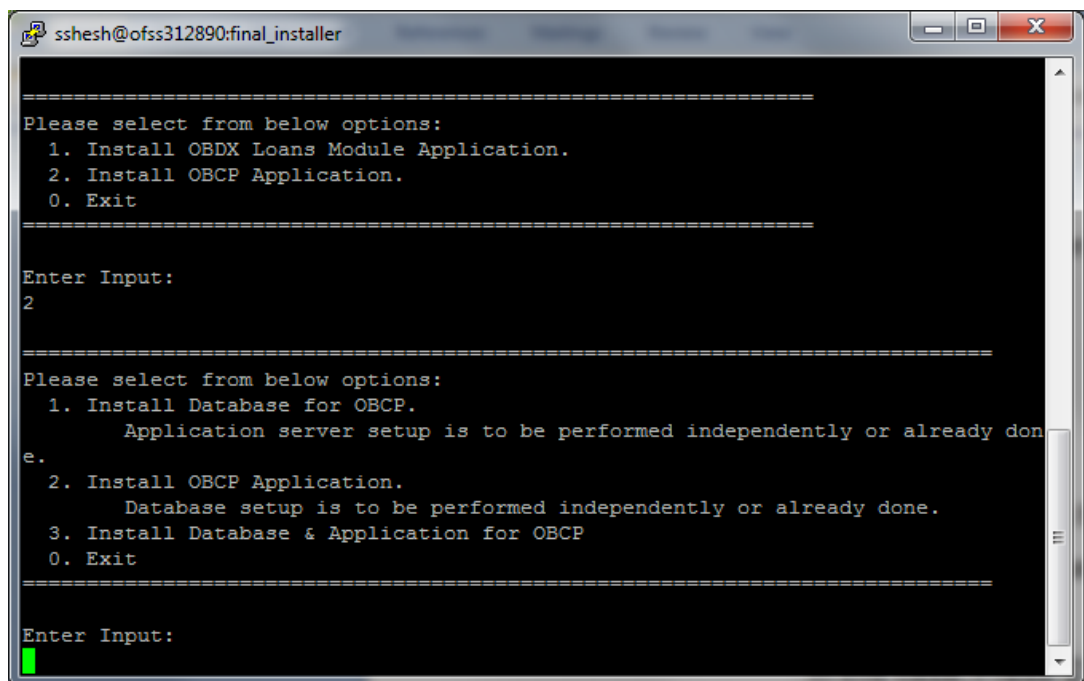
User will have to choose the option as follows,

1.   Install OBDX Loans Module Application.

2.   Install OBCP Application.

3.   Exit.

   In this case, Press '2' → <Enter>

The installer will then prompt the user with following options as shown in the screenshot below,
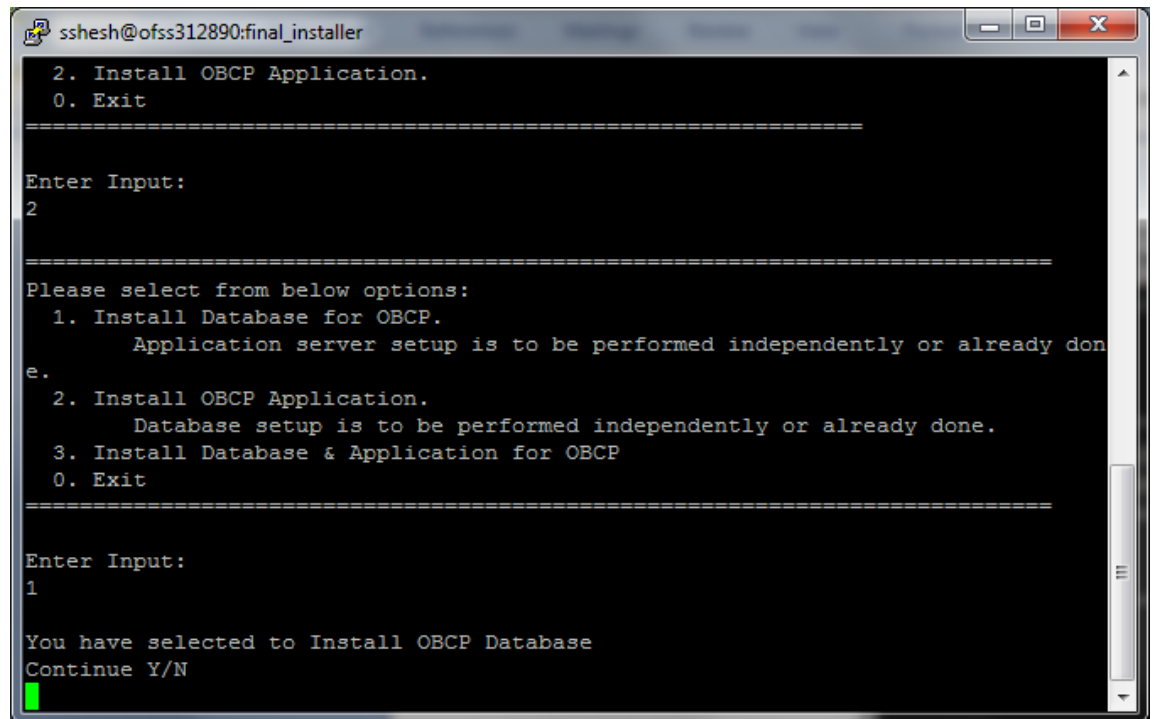
4.   Install Database for OBCP.

5.   Install OBCP Application.

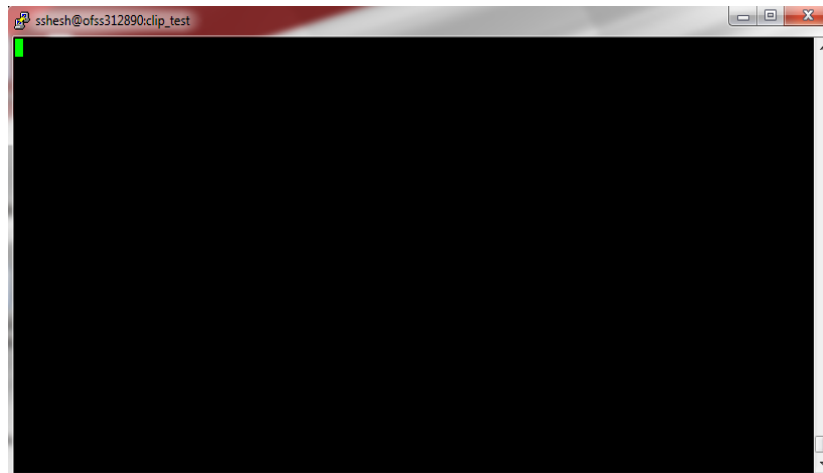6.   Install Database & Application for OBCP.

7.   Exit.

        In this case, Press '1' → <Enter>.

        On selection of above option, following options will be prompted to the user,

8.   To proceed press **<Y>** and **<Enter>**.

9.   The installation begins and it is noticed that the complete console screen goes blank as shown below.
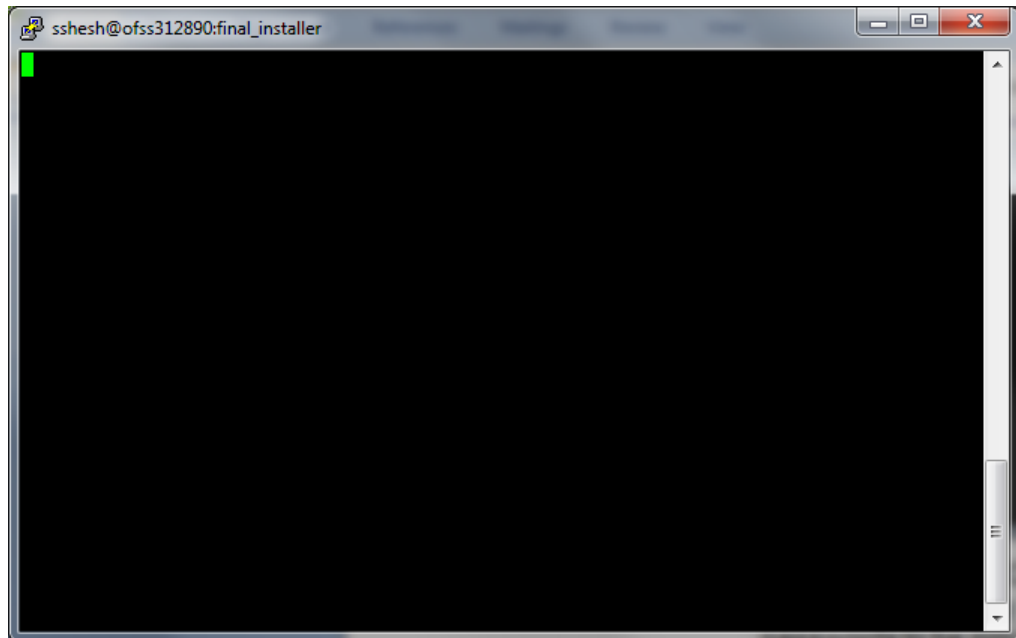
10.   Enter sys password.

11.   Enter Admin schema password.
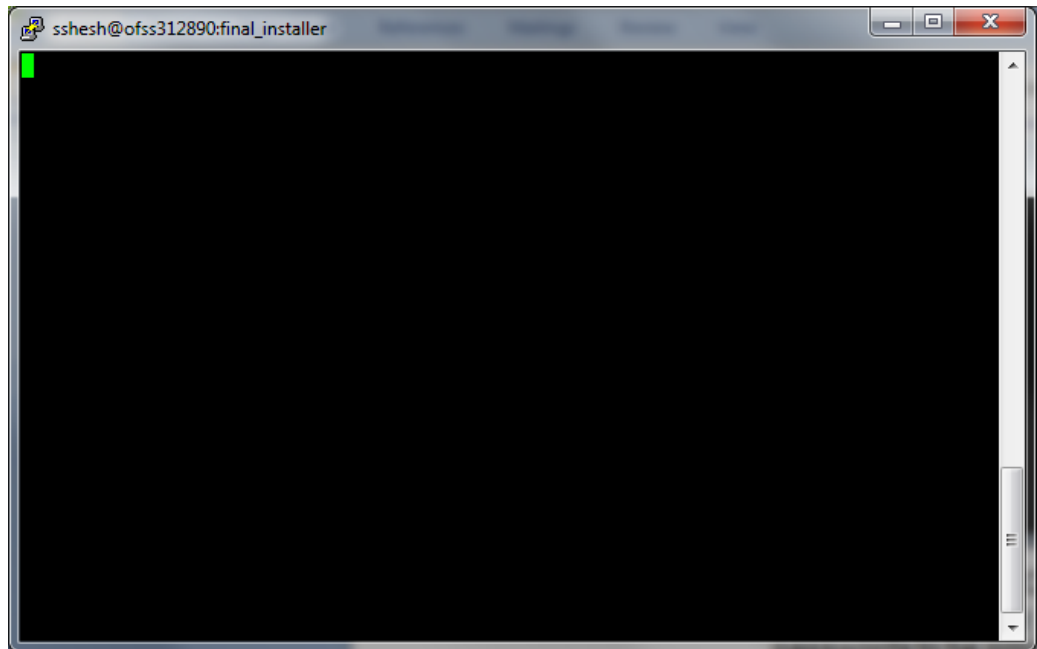
Admin schema creation starts.
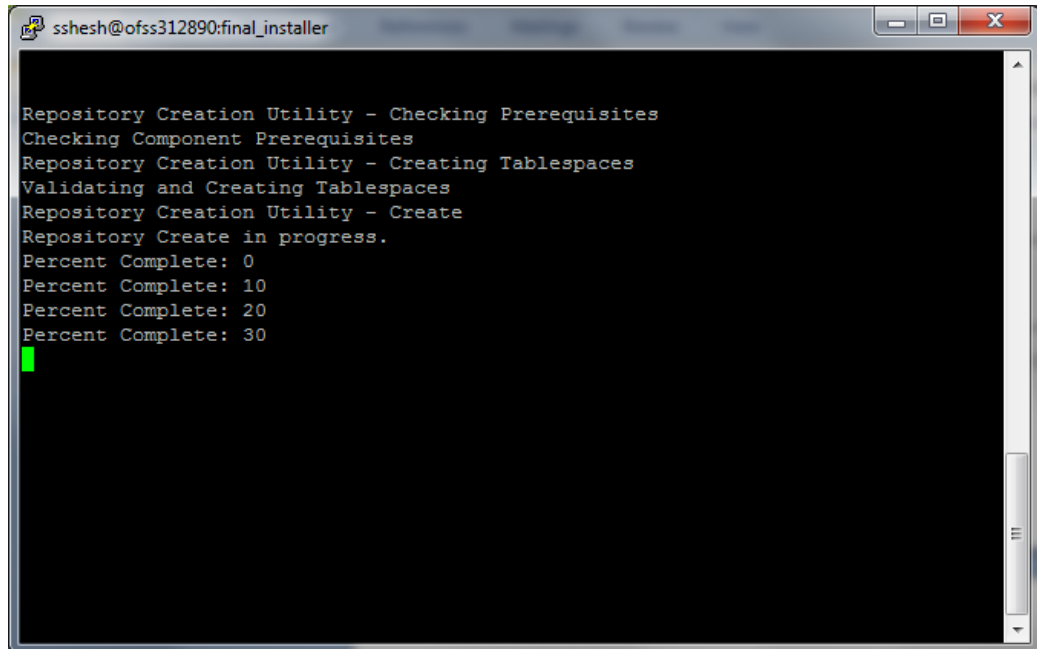
12.   Enter Sys password.
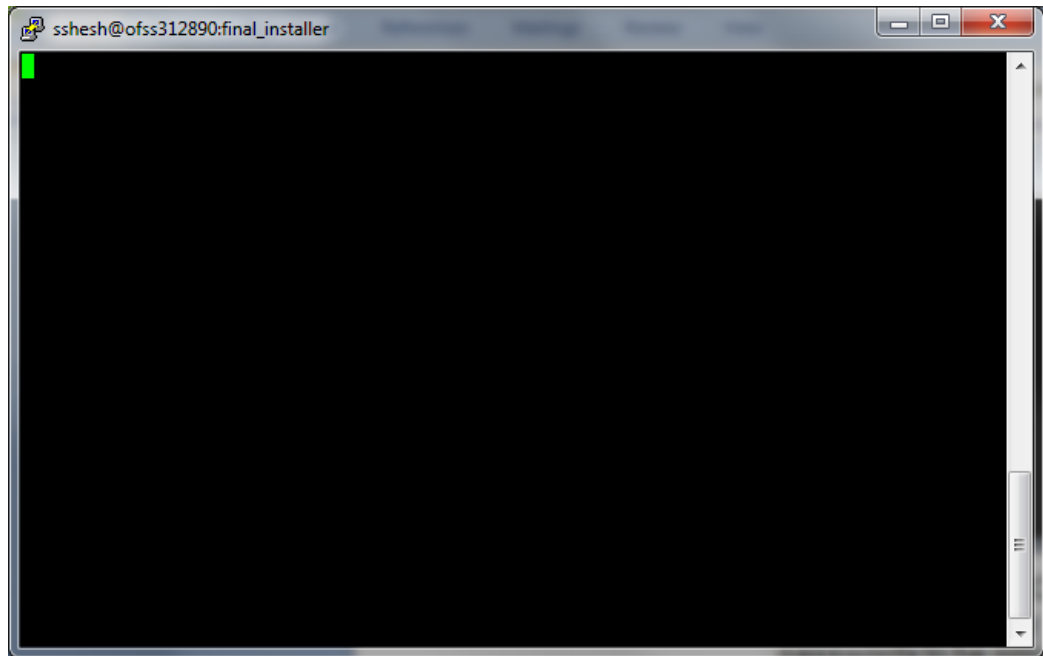
13.   Enter Entity schema password.

Schema creation starts.

It is a limitation of RCU wherein it does not display or prompt any message on command window, but simply waits for the user to input the passwords. Following are the passwords to be provided,

Installer: RCU Inputs for OBDX Schema Creation.

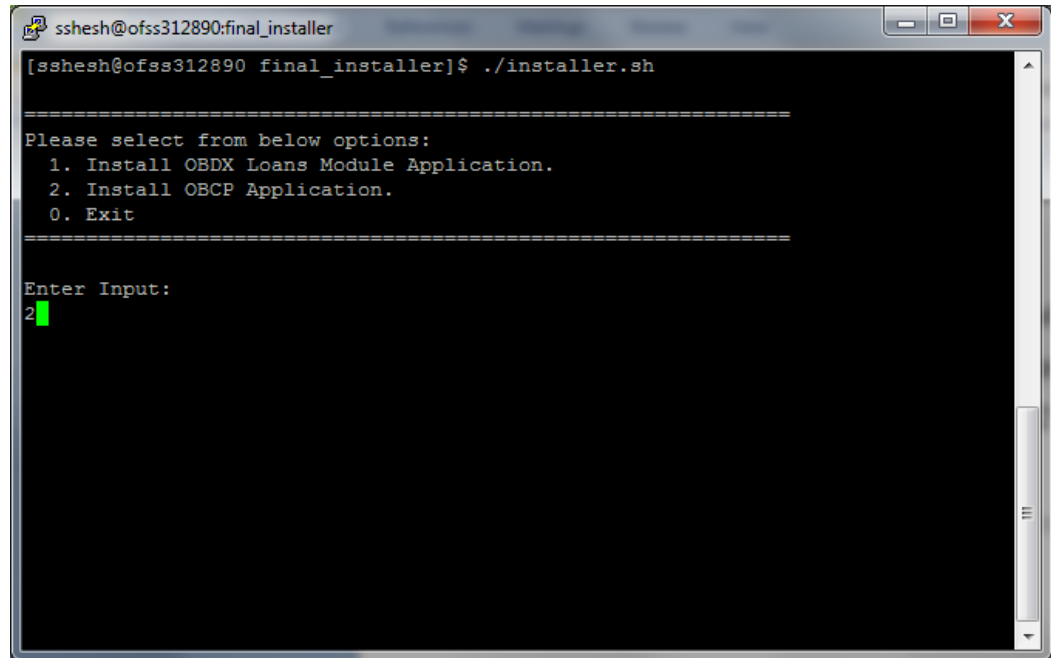| List of Passwords	Description
SYSDBA Password	Password of the DB user to be used to create OBDX DB Schema and objects. The DB user should have SYSDBA role.
Schema Password	Password of the Schema which will be created for OBDX APP and ENTITY(B001).

- For OBDX, two Schemas will be created i.e. App and Entity.

- First, input the SYS password, press **<Enter>** and again the content on the screen vanishes. Now, input the App Schema Password and press **<Enter>**.

- On completion it shows the message as "Repository Creation Utility - Create: Operation Completed" and again the command window screen becomes blank.

- Now, input the SYS password again, press **<Enter>** and Entity Schema Password and press **<Enter>**.

- Once the installation is completed "Repository Creation Utility - Create: Operation Completed" message will be displayed.

3.5   Configure Weblogic Domain for OBDX Application Server

Follow the below mentioned steps to create and configure Weblogic Domain for OBDX Application Server:

On invoking the installer.sh, the following screen is displayed to the user.

User will have to choose the option as follows,

1.   Install OBDX Loans Module Application.

2.   Install OBCP Application.

3.   Exit.

In this case, Press '2' → <Enter>.

The installer will then prompt the user with following options as shown in the screenshot below:

4.   Install Database for OBDX.

5.   Install OBCP Application.

6.   Install Database & Application for OBDX.

7.   Exit.

           In this case, Press '2' → <Enter>.

- On selection of above option, following options will be prompted to the user,
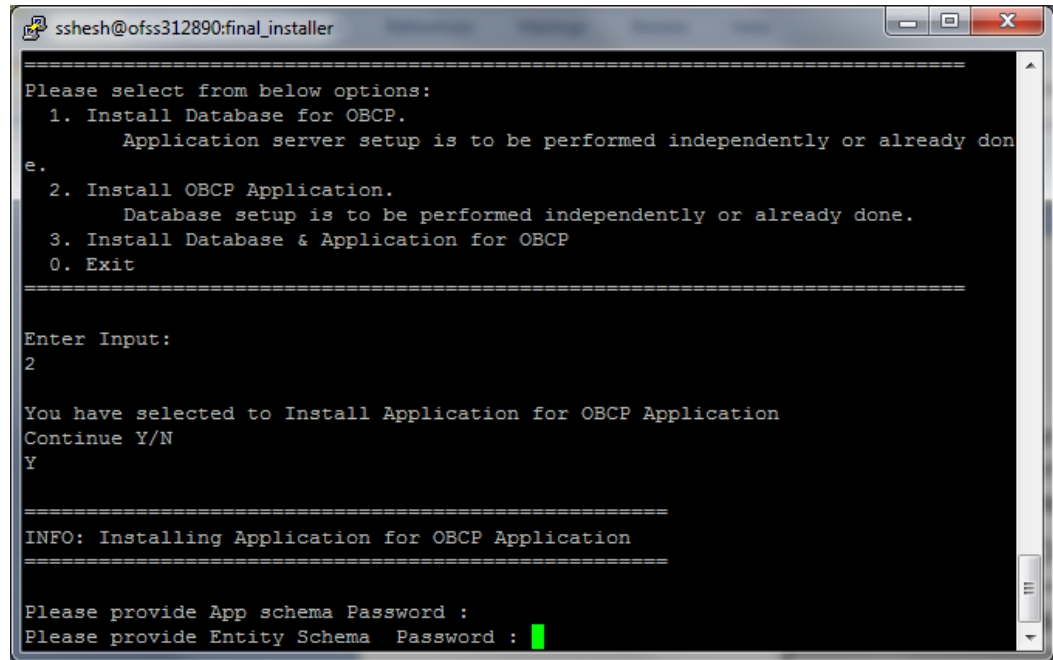

8.   To proceed press **<Y>** and **<Enter>**.

In this case, Installer will ask for passwords which will be used at runtime for configuring deployable. Following are the passwords prompted on command line before starting the installation,

Installer: Inputs for OBDX Weblogic Configuration.

List of Passwords	Description
OBDX App Schema	Password of OBDX Schema created using RCU. This will be used for A1 DataSource configuration.
OBDX Entity Schema	Password of OBDX Entity Schema created using RCU. This will be used for A1B1 DataSource configuration.

In this case, Installer will ask for passwords which will be used at runtime for installing the Application Server on Weblogic. Following are the passwords prompted on command line before starting the installation.

Installer: Inputs for OBDX Weblogic Configuration.

List of Passwords	Description
Weblogic Password	Weblogic Console Password
OBDX App Schema	Password of OBDX Schema created using RCU. This will be used for A1 DataSource configuration.
OBDX Entity Schema	Password of OBDX Entity Schema created using RCU. This will be used for A1B1 DataSource configuration.

9. Input all the passwords and press **<Enter>**.

10. The Weblogic installation starts and once the installation is completed "Installation Complete" message will be displayed.

11. For log refer <%Installation_home%>/logs/ obdx151000.log.

Note:

1) Selection of option '3**'** will install the complete setup for OBDX wherein the steps mentioned above for the creation of DB user and entities, is followed by Application Server Setup.

2) In case where DB Installation step is skipped it is assumed that the DB installation is done completely. Although DB installation can be performed at a later stage, the DB login details (Database Administrator User Credentials etc.) should be present at the time of OBDX Application Server Setup.

3.6 Steps Post Installer Execution

This chapter lists the steps to be performed manually by the user after a particular installation is complete by the installer.

Once the above mentioned steps are complete, administrator needs to run the sql script using the sql client.

Follow the below steps to proceed:

1. Go to location <%Installer_Home%>/obcp/rcu-obcp/rcu/integration/obcp/dbsetup/seed Start sql*plus

2. Run seed.sql in sql*plus.

3. Connect OBDXADMIN_<%post_fix%>/<%password%>@<%database_ip%>:<%database_port%>/<%database_service_id%>.

4.	spool <%Log path%>@<%Installer_Home%>/obcp/rcu-obcp/rcu/integration/obcp/dbsetup/seed/see.sql.

5.	Spool off.