

FCIS Database Setup
Oracle FLEXCUBE Investor Servicing
Release 14.0.0.3.7
[May] [2019]



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1. Installing Oracle FLEXCUBE Database

1.1 Introduction

Oracle FLEXCUBE database can be installed in one of the following methods.

- From Shipment Media – Load the Shipment Media objects into an empty schema using Installer.
- Import full dump – Import the Oracle FLEXCUBE objects into an empty schema using full dump. This is a manual activity.

These methods are discussed in detail under the following heads.

1.2 Creating Schema from Shipment Media

Under this method, you need to create the schema from the Shipment Media.

1.2.1 Loading from Shipment Media

Database installation includes the provision of details of the schema to connect and the location of the source objects. The objects of the selected modules are compiled as explained below.

Source input for installer for DB setup

Copy the shipment media to a folder in the local system.

Eg: C:\Installer\12.3.0.0.0_Exec\

Note: After copying all the sources from shipment media to a folder in the local system, ensure that the folder containing those has full rights for that user.

It is not mandatory to copy the sources to local system. You may also directly refer the Installer to the shipment media.

Based on the installation type, the below details will identify the list of schemas that needs to be deployed:

1. Installation without PENSION module

The below list of schema types needs to be executed:

- a. SMS
- b. SP
- c. LOB
- d. REPORTS

2. Installation including PENSION module

The below list of schema types needs to be executed:

- a. SMS
- b. SP
- c. LOB
- d. PENSION
- e. REPORTS

3. Pension Standalone module setup

The below list of schema types needs to be executed:

- a. SMS
- b. SP
- c. PENSION

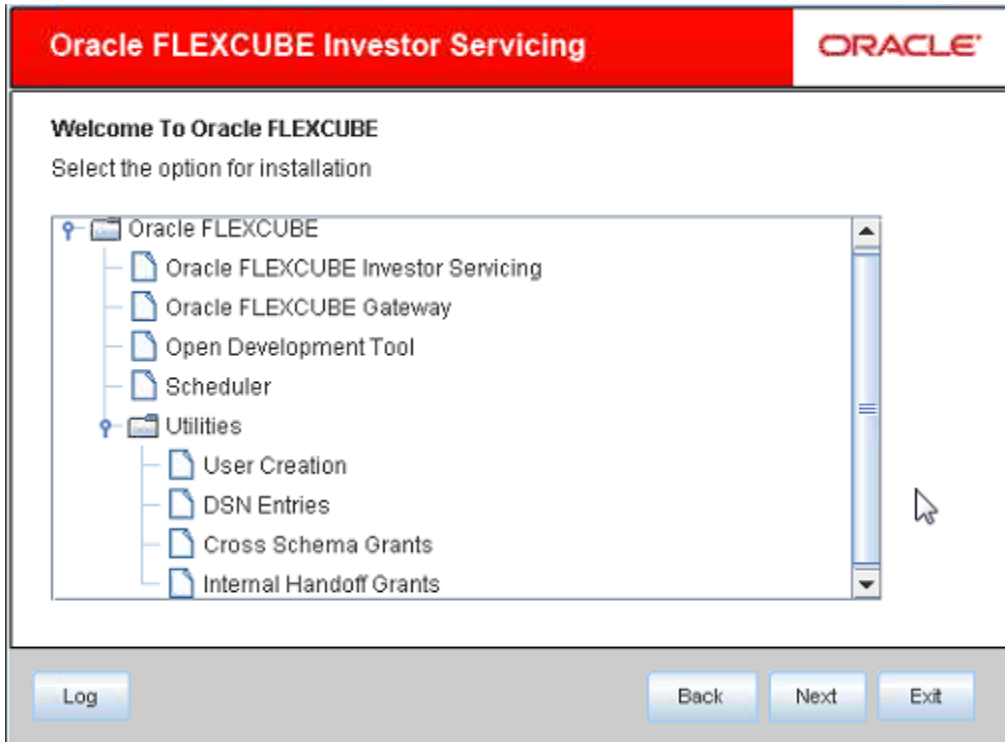
Post the DB setup, it's mandatory to run the Cross Schema Scripts Utility. Refer to [Cross Schema Scripts](#) document under the Utilities folder.

1.2.1.1 Loading Objects from Shipment Media

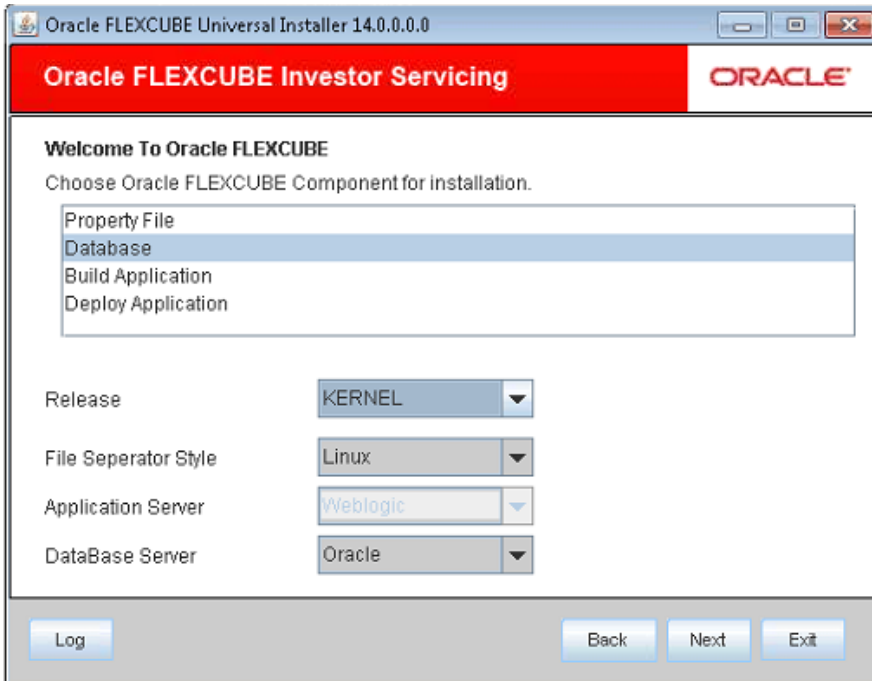
The steps to load objects from the Shipment Media are given below:

1. Launch Oracle FLEXCUBE Investor Servicing Installer.

Click 'Next'. The following screen is displayed.



2. Choose 'Oracle FLEXCUBE Investor Servicing'. Click 'Next'. The following screen is displayed:



3. Choose 'Database'.
4. Specify the following details:

Release

Select the release status from the drop-down list. The values are as follows:

- KERNEL
- VN

File Seperator Style

Select appropriate file separator style. Ex. Linux or Windows.

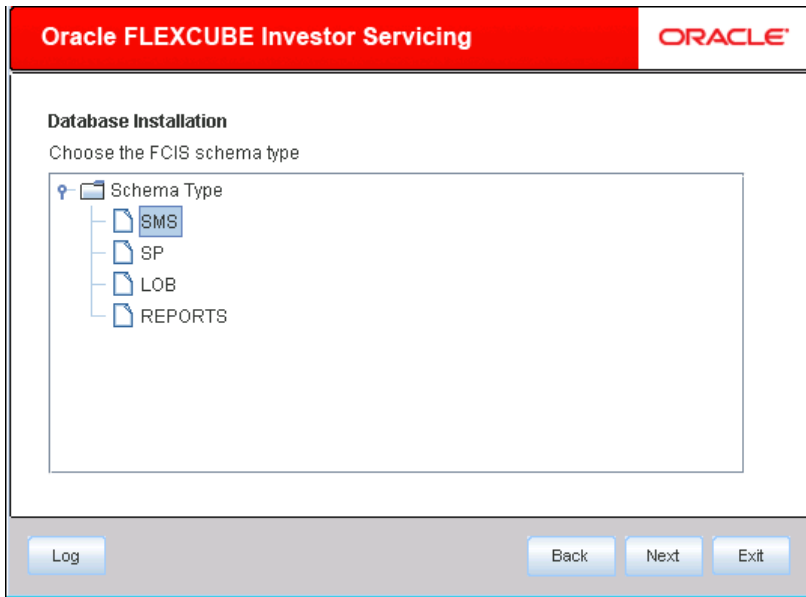
Application Server

Specify the application server on which you are installing Oracle FLEXCUBE.

Database Server

Specify the database server on which you are installing Oracle FLEXCUBE. Once you have specified the above details, click 'Next'.

Following screen is shown.



The schema types for Oracle FLEXCUBE Investor Servicing are given below:

- SMS
- SP
- LOB
- PENSION
- REPORTS

For all the above schema types, you need to get the execute permissions for the procedures given below:

- DBMS_CRYPTO
- UTL_MAIL
- CTX_DDL
- UTL_RAW
- CTXSYS
- DBMS_RLS
- UTL_RECOMP
- DBMS_MONITOR
- DBMS_LOCK
- DBMS_AQ
- DBMS_REDACT

For all the above schema types, you need to get the SELECT permissions for the Tables given below:

- GV_\$INSTANCE
 - REDACTION_POLICIES
 - REDACTION_COLUMNS
5. Select schema type which needs to be deployed and click 'Next'. The following screen is displayed:

The screenshot shows the Oracle FLEXCUBE Investor Servicing installation wizard. The title bar includes "Oracle FLEXCUBE Investor Servicing" and the Oracle logo. The main window is titled "Installation Type". Under "FC Home", the path "D:\Projects\FCIS\AppSetup\FCIS_14.0.0.0.0\Soft" is entered. Three radio buttons are present: "New Installation" (selected), "Patch", and "Rolled-up Patch". Below this, the text "Provide schema details for patch installation." is displayed. A table with two columns, "Name" and "Value", contains the following data:

Name	Value
Username	FCUBS121
Password	••••••••
Service Name	FC1202WI
IP Address	10.110.110.110
Port	1101
TNS Connect Descriptor	FC1102WI

Below the table is a "Test Connection" button. At the bottom of the window, there are three buttons: "Log", "Back", and "Next", and an "Exit" button.

FC Home is the location where FCIS sources copied from shipment media.

Select the appropriate installation option. Provide schema details for validation in case of patch and rolled up patch installation. For New Installation, schema details are not enabled. Click 'Next'.

Based on the FCHOME chosen, the valid list of deployable units are listed as shown in the next screen:

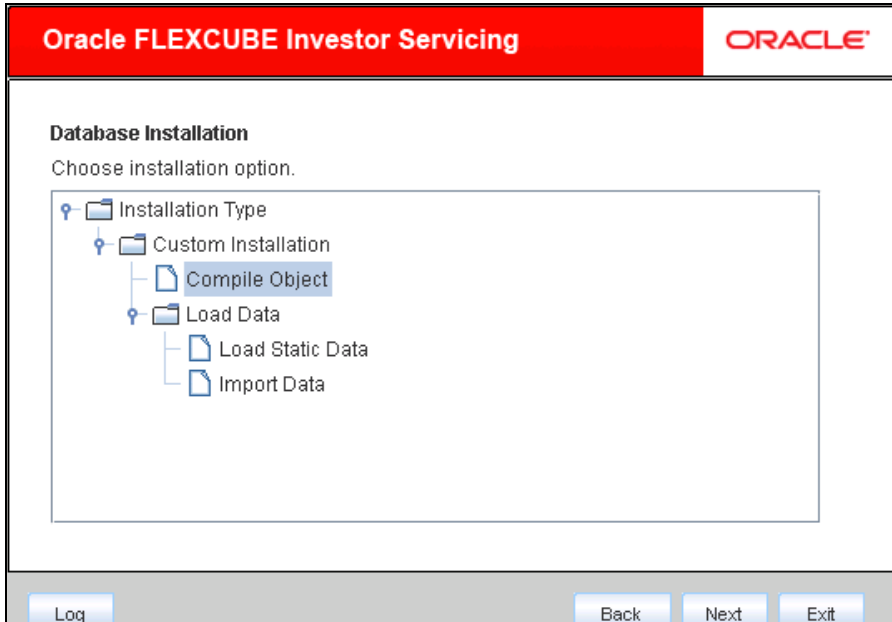
No	Version	Type	Select
1	14.0.0.0	CONSOLE	<input checked="" type="checkbox"/>

Choose the required set of Main and Patch releases. Click Next.

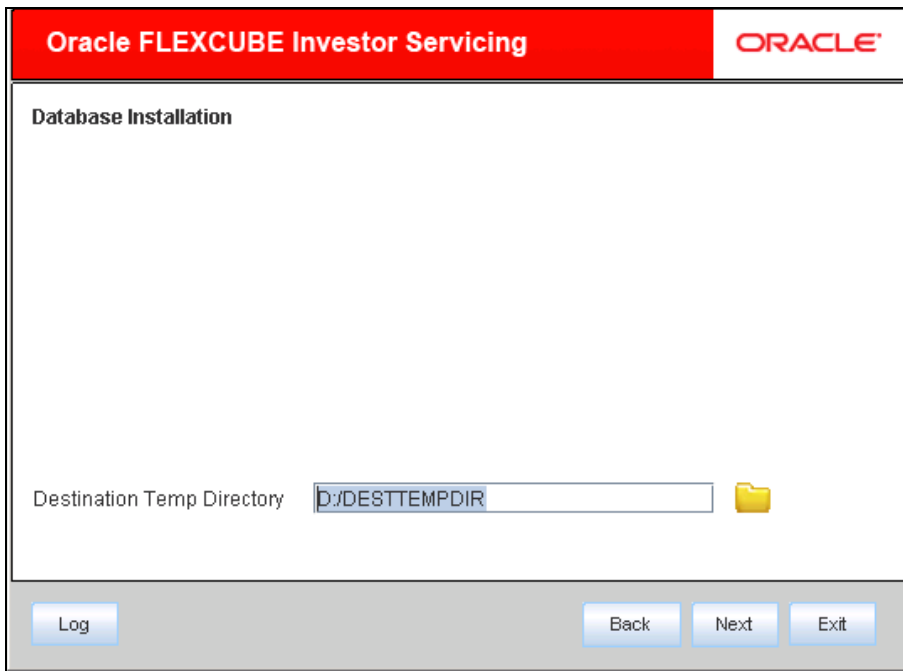
The Oracle FLEXCUBE Universal installer supports custom installation of Oracle FLEXCUBE in two methods:

- Compile objects and load static data into the database
- Load objects and data by importing data and objects from the import file

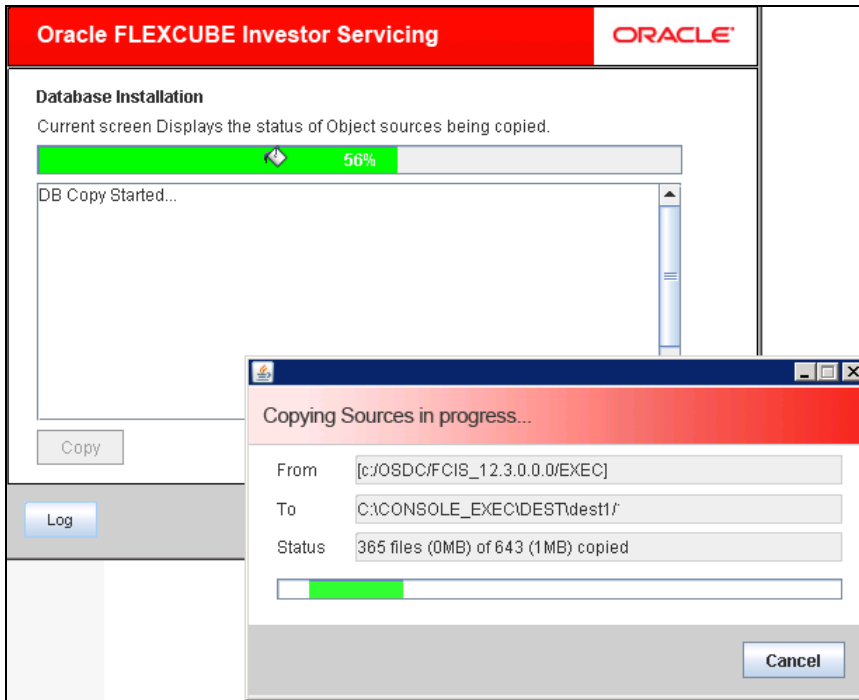
Click Next, the below screen will be displayed



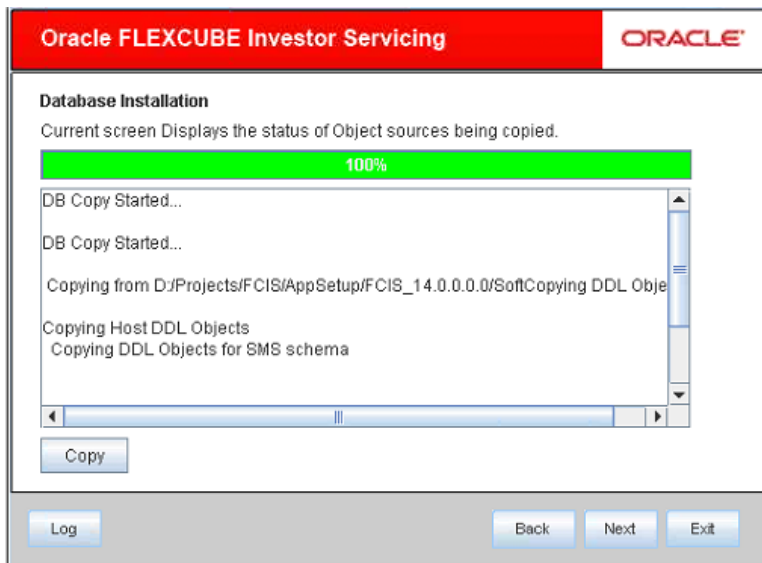
6. Select 'Compile Object' under 'Custom Installation' and click 'Next'. The following screen is displayed.



7. Provide Destination directory path as required and click on Next. This directory will be used as a staging directory to copy required files for compilation.



8. Click 'Copy' to start database objects source copy.
9. The Installer will copy the source files from the source directory to the destination directory. The files are taken from this location for compilation.
10. Wait until all the files are copied. Once the copy process is completed, the following screen is displayed:



11. Click Next button, for New Installation following screen is shown:

Name	Value
Username	installer
Password	••••••••
Service Name	testdb
IP Address	10.10.10.10
Port	1000
TNS Connect Descriptor	testdb.world

No. of threads for recompilation

12. Specify the following schema details:

User Name

Specify the user name to access the schema.

Password

Enter the schema password.

Service Name

Provide service name of Database.

TNS Connect Descriptor

Specify a valid connect string that contains the details for database connectivity.

IP Address

Specify the IP address of the system where the database schema is installed.

Port

Specify the port number.

No. of threads for recompilation

Specify the number of threads that would be used to compile the objects. Defaulted to 4, if no value is given.

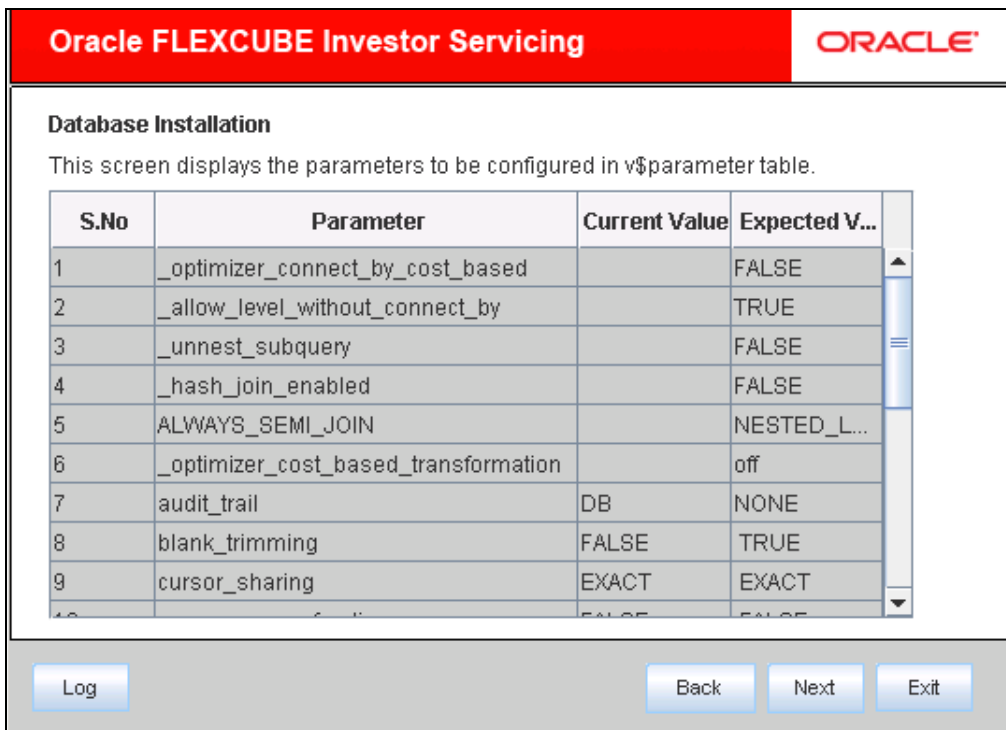
Once you have entered the details, you can test the database schema connection using 'Test Connection' button.

Note

- If the connection is established, the installer displays a message 'Connection Successful'.
- If there is an error in establishing the connection, the system displays the message 'Invalid DB Credentials'.
- If the TNS entry is not proper, the installer displays the message 'TNS entries are not proper'.

13. After testing the connection successfully, click 'Next'. The following screen is displayed.

On click of 'Next' following screen is shown:



14. This screen displays the parameter details of the database. This is for information purpose. You cannot modify the parameters from this screen.

15. Click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing **ORACLE**

Database Installation
This screen displays the Grants provided to the schema.

S.No	Grant Privilege Required	Grant provided
1	CREATE SESSION	Y
2	CREATE TYPE	Y
3	CREATE TRIGGER	Y
4	CREATE TABLE	Y
5	CREATE DATABASE LINK	Y
6	CREATE LIBRARY	Y
7	CREATE SYNONYM	Y
8	CREATE SEQUENCE	Y

16. This screen displays the grants provided to the schema. This is for information purpose only. If grant privilege needs to be provided to an item then 'Generate Report' button needs to be clicked.

17. If you click 'Generate Report' button, in the 'Logs' folder, the installer creates an SQL file 'grantScript.sql' containing the script for granting the privileges. You can use this file to get the access.

Note: Only system user can execute the file 'grantScripts.sql' for granting privileges.

18. Click Next, The following screen is displayed.

Oracle FLEXCUBE Investor Servicing **ORACLE**

Database Installation
The screen displays the count of the objects already present in the Database.

S.No.	Object Type	Count	Drop
1	MATERIALIZED VIEW	0	<input type="checkbox"/>
2	TABLE	0	<input type="checkbox"/>
3	PACKAGE	0	<input type="checkbox"/>
4	PROCEDURE	0	<input type="checkbox"/>
5	FUNCTION	0	<input type="checkbox"/>
6	TRIGGER	0	<input type="checkbox"/>
7	VIEW	0	<input type="checkbox"/>

Drop Log Drop Drop All

Log Back Next Exit

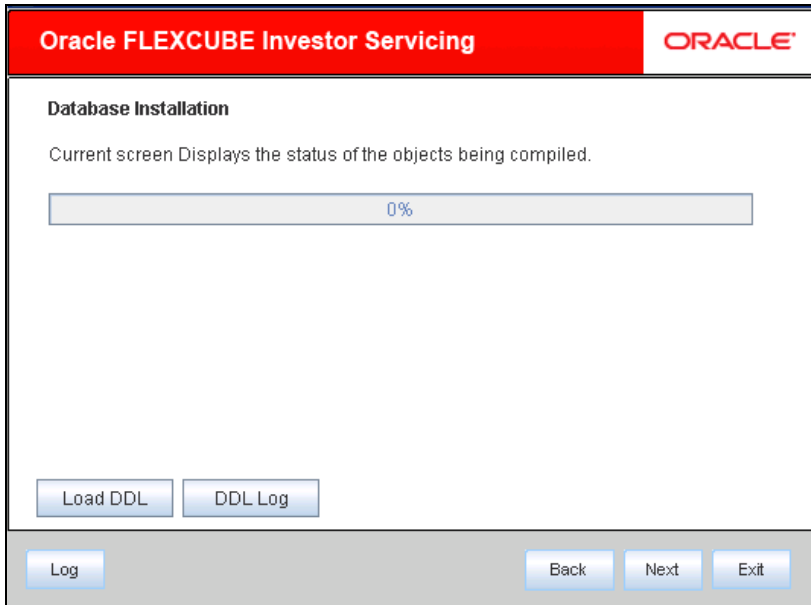
19. You can select the objects to be dropped and click 'Drop' button to drop the selected objects. As you drop the objects, the count in this screen is updated. You can drop all the objects at once using 'Drop All' button.

20. Click 'Drop Log' button to view the drop log.

Note: The details of the drop process are logged in a file 'Drop_All.log' in the folder <Destination Folder>/DBLogs.

21. If all the objects do not get dropped at the first time, you can drop them again.

22. Click 'Next' button, the following screen is displayed.

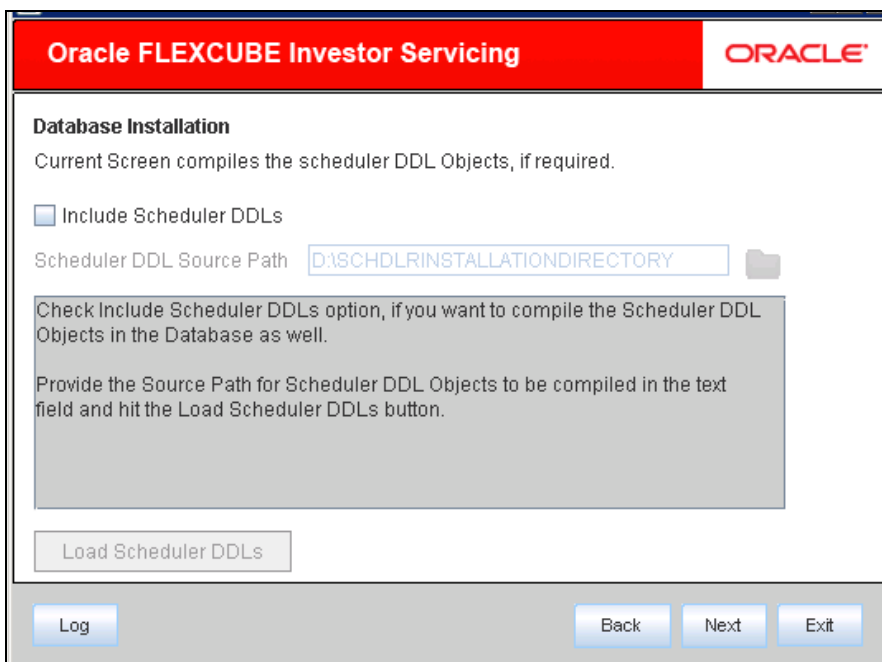


23. On click of Load DDL button, the table, sequences and type objects are getting compiled.

24. Click 'DDL Log' button to view the DDL logs. The log file 'LoadDDL.log' will be available in the destination directory under the folder 'DBLogs'.

Note:

- You can rectify the missing DDL objects and recompile them either manually or by redoing the DDL compilation using Installer.
- Only for SMS setup, on click 'Next' the following screen is displayed. For other schema setup, this screen will be skipped.



25. Specify the following details:

Include Scheduler DDLs

Check this box to include scheduler DDLs. If you do not need to include the scheduler DDLs, leave this field unchecked.

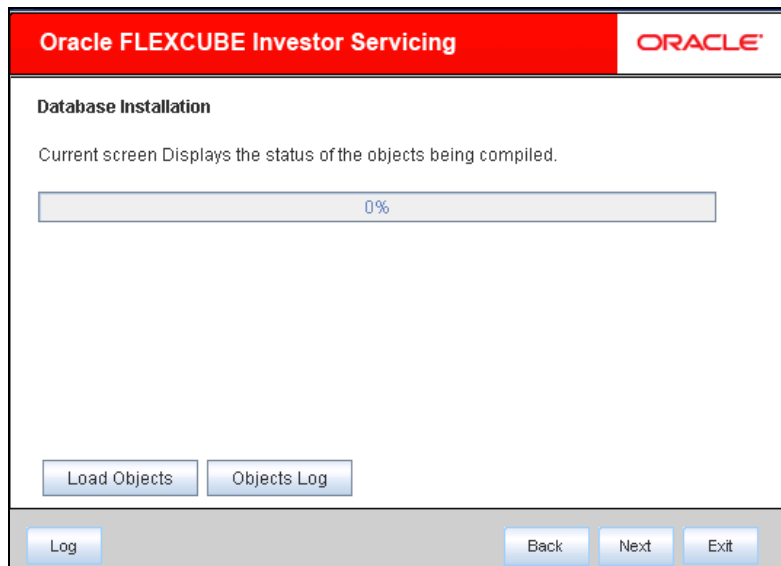
Scheduler DDL Source Path

Specify the location of the 'tables_oracle.sql' folder, which is available in the extracted 'quartz.jar'.

Note: Quartz is an open source job scheduling service. You can use Quartz to create schedules for executing jobs whose tasks are defined as standard Java components. You first need to download the file 'quartz.tar' and extract it to the local machine. In the extracted folder, find the location of the folder 'dbTables' and enter that path in the field 'Scheduler DDL Source Path'. Please refer the release document for version and download url for quartz

26. Click 'Load Scheduler DDLs' to compile the files.

27. Click 'Next'. The following screen is displayed.



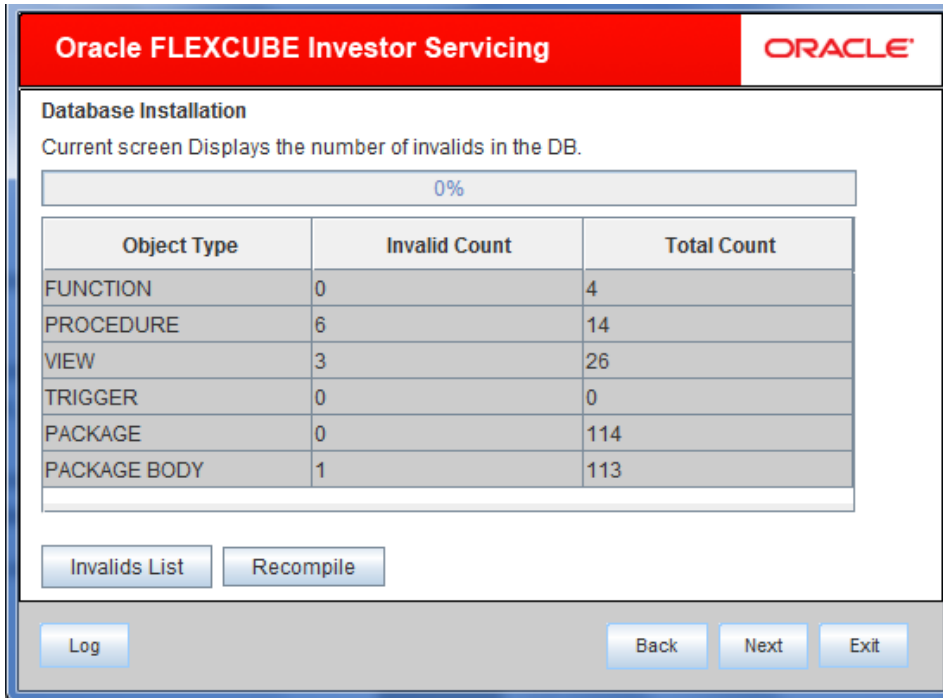
28. Click 'Load Objects' button. The installer loads the functions, procedures, views, triggers and packages as per your selection and compiles them.

29. Click 'Objects Log' button to view the log. The log file 'LoadAppObj.log' will be available in the destination directory under the folder 'DBLogs'.

Note: You can rectify the missing objects and recompile them either manually or by redoing the Application object compilation using Installer.

30. The installer loads the DDL and application objects based on the schema type selected.

31. Click 'Next' button, the following screen is displayed. You can view the list of invalid objects in this screen.



32. Click 'Invalid List' button to view the count of invalid objects. The installer creates the file 'InvalidList.txt' in the destination directory under the folder 'DBLogs'.
33. You can use the 'Recompile' button to do a cyclic recompilation. This will reduce the invalid objects count. The Installer allows you to use 'Recompile' button multiple times, in order to reduce the invalid objects count.
34. In case if the invalids still exists, use the recompile option after running the Cross Schema Scripts Utility. Refer to [Cross Schema Scripts](#) document under the Utilities folder.
35. You can view the recompile logs by clicking 'Log' button. The installer creates a file 'recompile.log' in the destination directory under the folder 'DBLogs'.

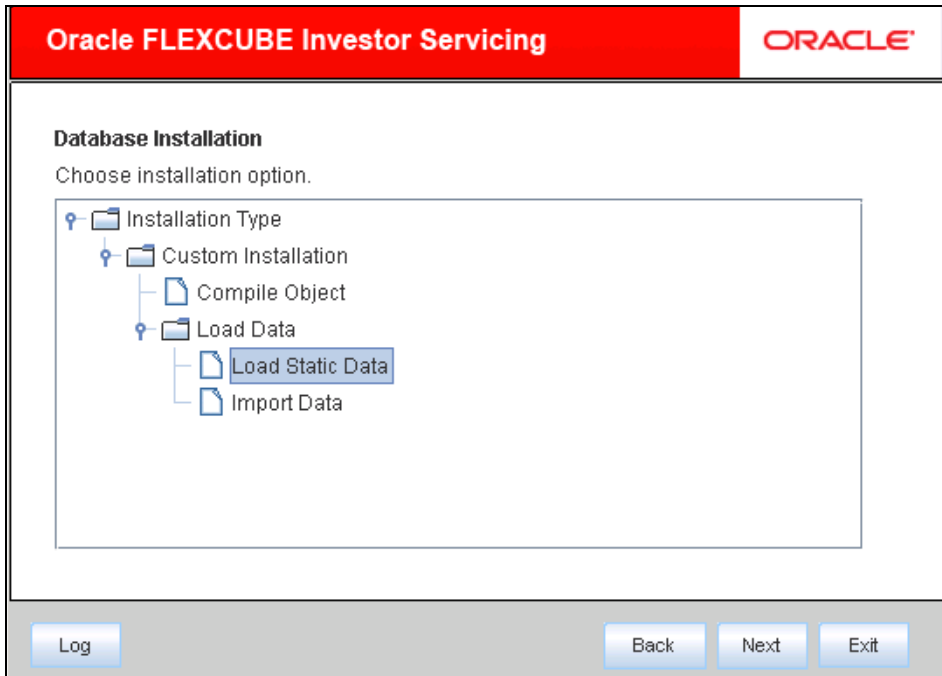
1.3 **Loading Static Data**

Once the objects are loaded, you need to insert data into the tables.

This section explains the steps to load static data into the database and the basic setup to be done.

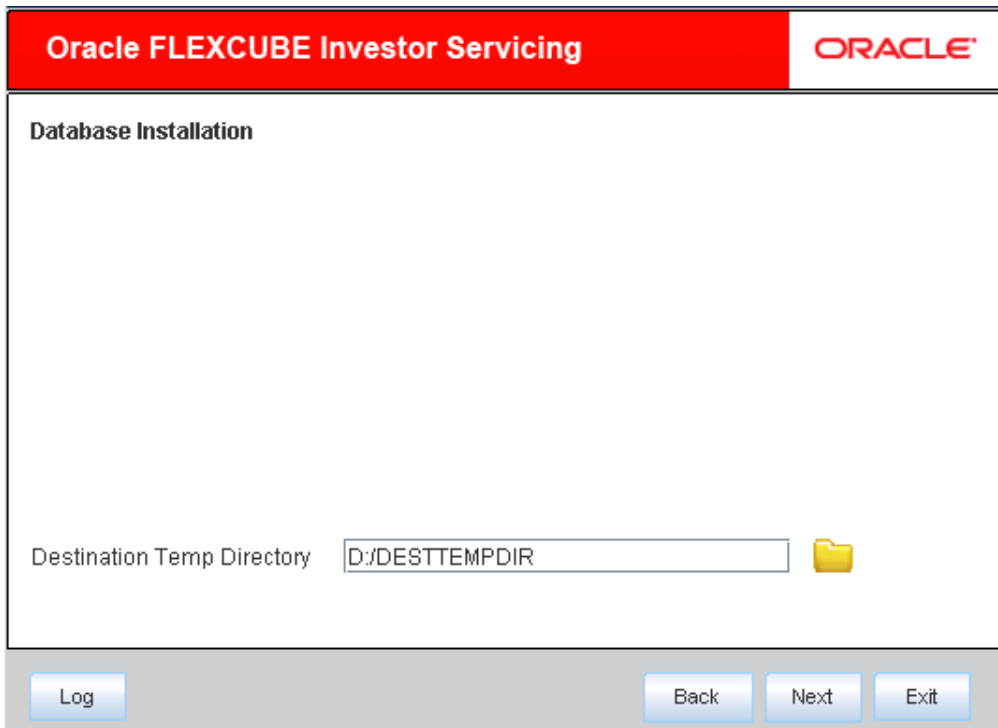
Follow the steps given below:

1. Launch Oracle FLEXCUBE Investor Servicing Installer. The FCHOME related details mentioned in Section 1.2.1.1 (Steps 5 and 6) apply here as well if Installer is launched again.

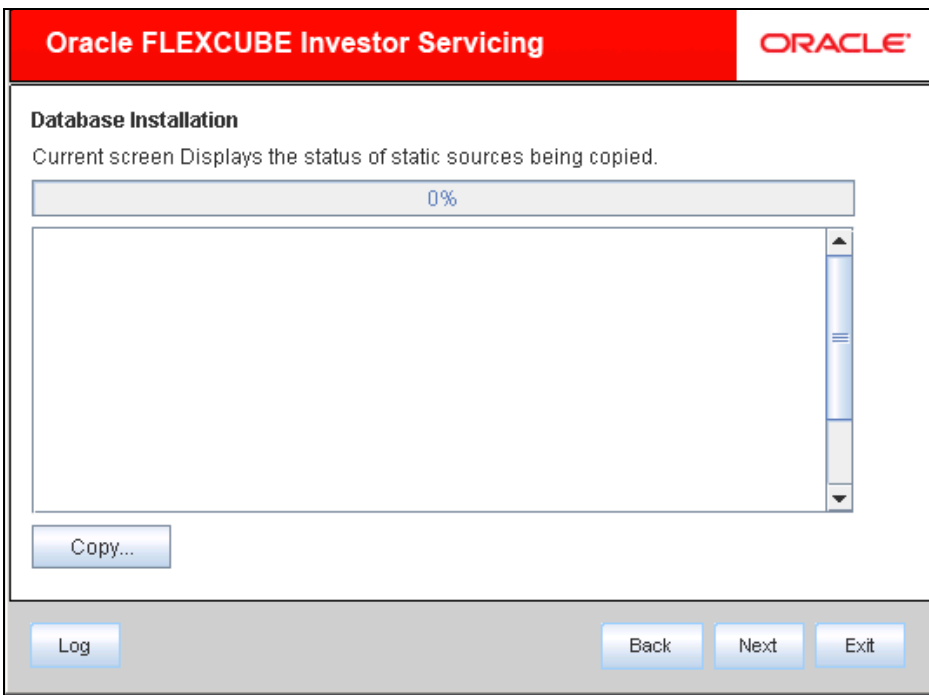


2. Select 'Load Static Data' and click 'Next'. The following screen is displayed.

3. Click 'Next'. The following screen is displayed.



Provide required destination path and click on Next.



4. Click 'Copy' button. The Installer will copy the source files from the source directory to the destination directory. The files are taken from this location for compilation.

5. Wait until all the files are copied. Once the copy process is completed, click 'Next'.

New Installation

Oracle FLEXCUBE Investor Servicing **ORACLE**

Database Installation
Provide schema details.

Name	Value
Username	
Password	••••••••
Service Name	FCISTEST
IP Address	10.110.100.110.
Port	110.1
TNS Connect Descriptor	FCISTEST

Patch Installation

Oracle FLEXCUBE Investor Servicing **ORACLE**

Database Installation
Provide schema details.

Name	Value
Username	
Password	••••••••
Service Name	FCISTEST
IP Address	10.110.100.110.
Port	110
TNS Connect Descriptor	FCISTEST

6. Specify the following schema details:

User Name

Specify the user name to access the schema.

Password

Enter the schema password.

Service Name

Provide service name of Database.

TNS Connect Descriptor

Specify a valid connect string that contains the details for database connectivity.

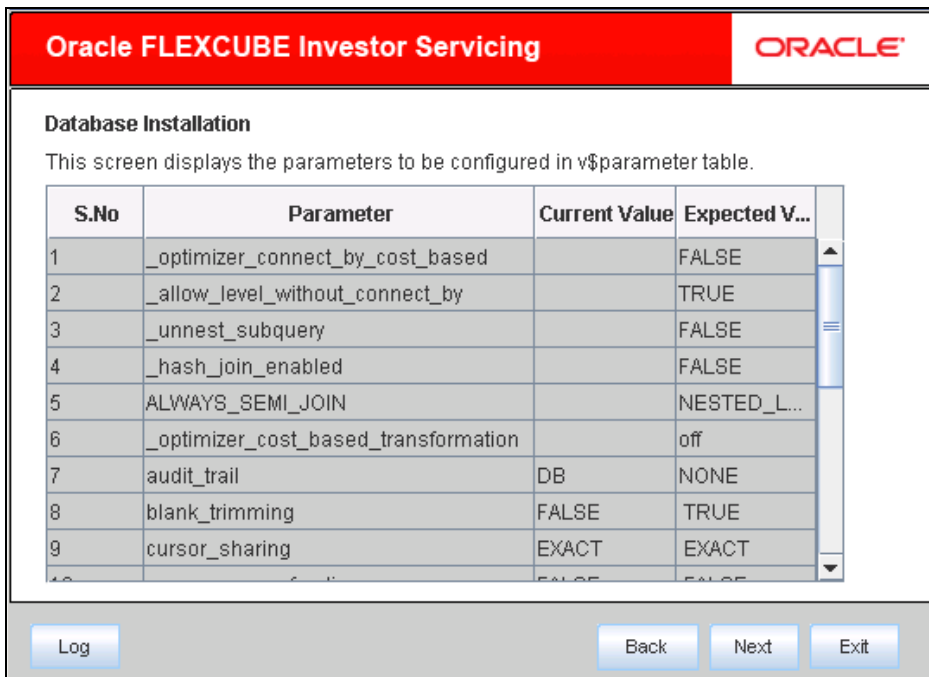
IP Address

Specify the IP address of the system where the database schema is installed.

Port

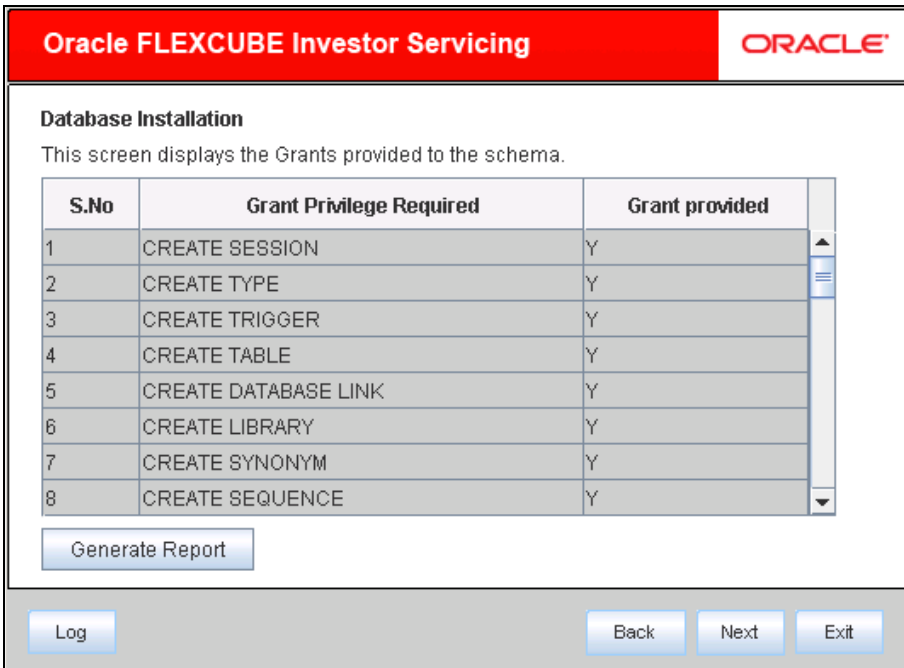
Specify the port number.

1. Once you have entered the details, you can test the database schema connection using 'Test Connection' button.
2. After testing the connection, click 'Next'. The following screen is displayed.



7. This screen displays the parameter details of the database. This is for information purpose. You cannot modify the parameters displayed here.

8. Click 'Next'. The following screen is displayed.



Oracle FLEXCUBE Investor Servicing **ORACLE**

Database Installation
This screen displays the Grants provided to the schema.

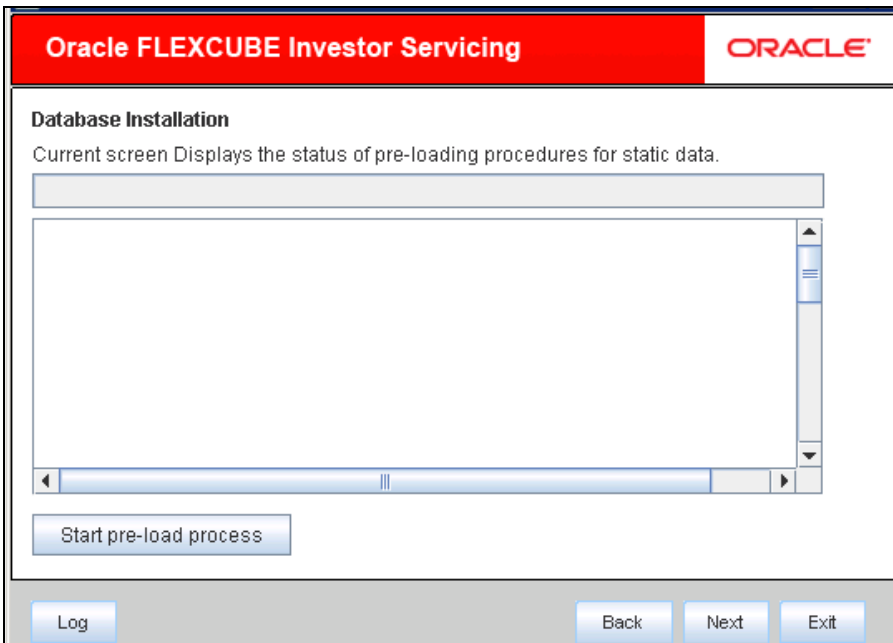
S.No	Grant Privilege Required	Grant provided
1	CREATE SESSION	Y
2	CREATE TYPE	Y
3	CREATE TRIGGER	Y
4	CREATE TABLE	Y
5	CREATE DATABASE LINK	Y
6	CREATE LIBRARY	Y
7	CREATE SYNONYM	Y
8	CREATE SEQUENCE	Y

Generate Report

Log Back Next Exit

9. This screen displays the grants provided to the schema. If object compilation is required and the privilege is not given, then you can find that out from this screen. This is for information purpose.

Click 'Next', the following screen will be displayed..



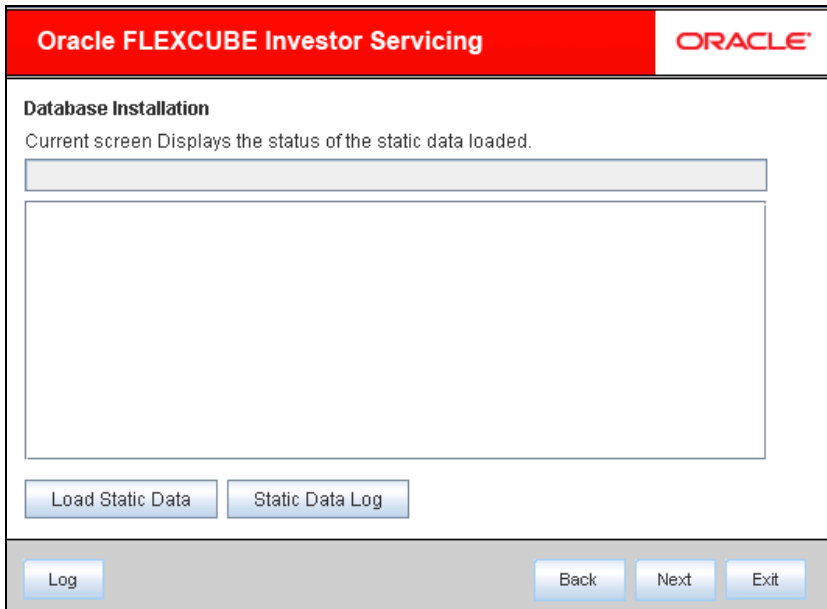
Oracle FLEXCUBE Investor Servicing **ORACLE**

Database Installation
Current screen Displays the status of pre-loading procedures for static data.

Start pre-load process

Log Back Next Exit

10. Click 'Start Pre-Load Process' button. The installer executes the procedures required before beginning static data compilation. All the triggers will be disabled during this process.
11. Click 'Log' button. The installer executes the process log.
12. Once the process is completed, click 'Next'.



13. Click "Load Static Data" to load the static data to schema. You can view the static data log by clicking 'Static Data Log' button.
14. For SMS setup only the below further process of Load Static Data process will be available.
For other schema setup, the Next operation will end the Load Static Data process.
15. Click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing **ORACLE**

Basic Setup Details
Parameters of CSTB_PARAM table in the Database.

S.No.	Param Name	Param value
1	FCUBS_INDIR	/scratch/work_area/DEV/FC1203/O
2	REPROT_TIMESTAMP_FORMAT	HH24:MI:SS
3	EXCEL_IMPORT_XML_SPOOL_A...	/tmp/FCIS121DEVDebug
4	WORK_AREA	FCISITR2DUMP
5	BPEL_INSTALLED	N
6	FCUBS_INTEGRATION_MODULE	FMGIDNDISTEN
7	REPROT_DATE_FORMAT	DD-Mon-YYYY
8	REAL_DEBUG	Y

Log Back Next Exit

16. Here, you can do the basic maintenances for the table 'CSTB_PARAM'.

Note: the above screen only comes when doing the db setup for a consol source but not for a patch source(s).

17. Click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing **ORACLE**

Basic Setup Details
Basic Details for bank and branch

Bank Code

Bank Name

Branch Code

Log Back Next Exit

18. Here you can do the basic maintenances for the tables 'STTM_BANK' and 'STTM_BRANCH'.

19. Click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing		ORACLE
Basic Setup Details		
Basic details about dates. The Date Format must be yyyy/mm/dd.		
Input Date	<input type="text" value="2016/09/26"/>	
Current Business Date	<input type="text" value="2016/09/26"/>	
Previous Business Date	<input type="text" value="2016/09/25"/>	
Next Business Date	<input type="text" value="2016/09/27"/>	
<input type="button" value="Log"/>		<input type="button" value="Back"/> <input type="button" value="Next"/> <input type="button" value="Exit"/>

20. Here, you can do the basic maintenances for the table 'STTM_DATES'.

21. Click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing		ORACLE
Basic Setup Details		
Currency Details.		
Local Currency Code	<input type="text" value="USD"/>	
Local Currency Name	<input type="text" value="US Dollar"/>	
Current Fin Cycle	<input type="text" value="2011"/> ▼	
Current Fin Period	<input type="text" value="QT1"/> ▼	
ISO Currency Code	<input type="text" value="294"/>	
<input type="button" value="Log"/>		<input type="button" value="Back"/> <input type="button" value="Next"/> <input type="button" value="Exit"/>

22. Here, you can do the basic maintenances for the table 'CYTM_CCY_DEFN'.

23. Click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing
ORACLE

Basic Setup Details

User Creation with SMS role for login into the Oracle FLEXCUBE.

External Password

No	User Name	Password or LDAP User name
1	ADMINUSER1	••••••••
2	ADMINUSER2	••••••••

Log
Back
Next
Exit

24. Here you can do the basic maintenances for the table 'SMTB_USER' and 'SMTB_USER_ROLE'.

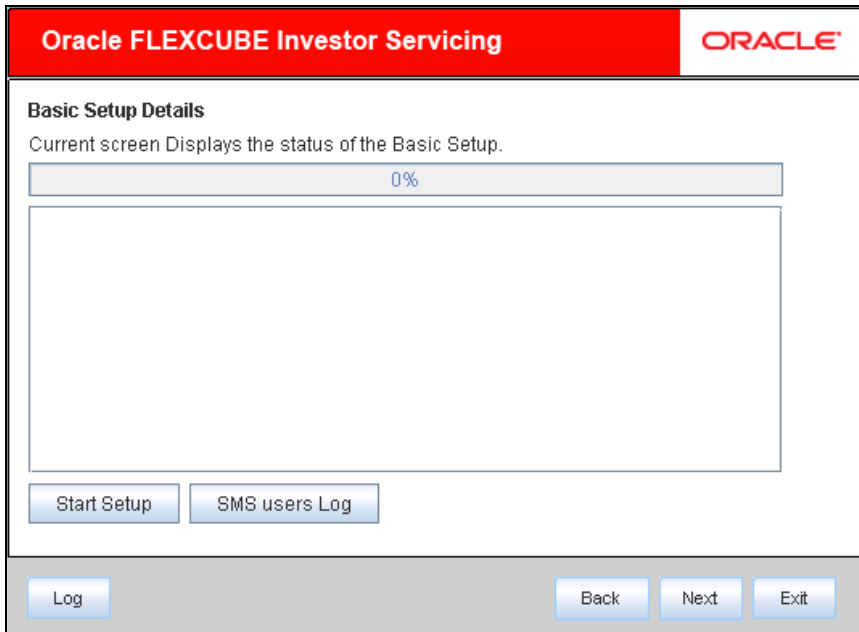
Password

Specify the password. You can use the following characters in the password:

- Alphabets in uppercase
- Alphabets in lowercase
- Numerals

Note: You cannot use '_' (underscore) in the password.

25. Click 'Next'. The following screen is displayed.

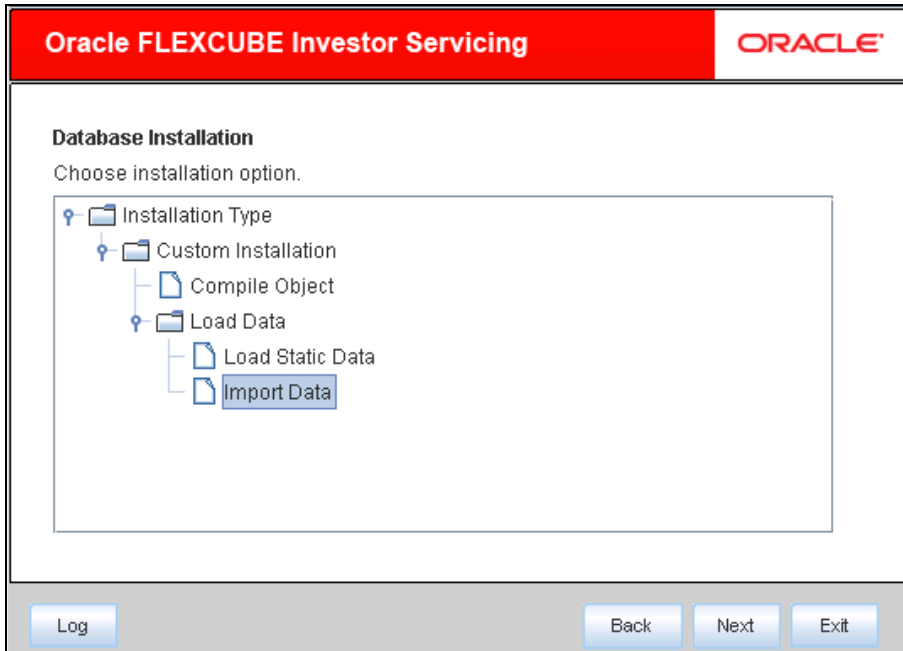


26. Click 'Start Setup' button to compile the entries.
27. This completes the static maintenance and basic setup process.

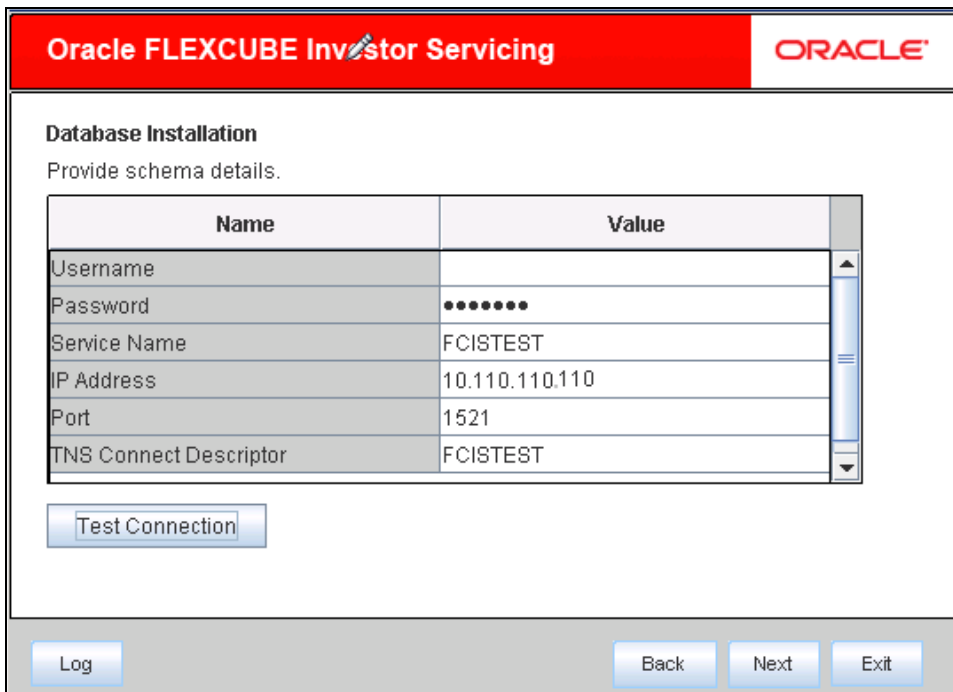
1.3.1 Import Database Installation

Data import is an alternative method to load the static data into the database. This section describes the process of importing data for installation.

1. Launch Oracle FLEXCUBE Investor Servicing Installer.



2. Select 'Import Data' and click 'Next'. The following screen is displayed.



3. Specify the following schema details:

User Name

Specify the user name to access the schema.

Password

Enter the schema password.

Service Name

Provide service name of Database.

TNS Connect Descriptor

Specify a valid connect string that contains the details for database connectivity.

IP Address

Specify the IP address of the system where the database schema is installed.

Port

Specify the port number.

4. Once you have entered the details, you can test the database schema connection using 'Test Connection' button.

5. After testing the connection, click 'Next'. The following screen is displayed.

The screenshot shows the Oracle FLEXCUBE Investor Servicing interface. At the top, there is a red header with the text "Oracle FLEXCUBE Investor Servicing" and the ORACLE logo. Below the header, the title "Database Installation" is displayed, followed by the instruction: "This screen displays the parameters to be configured in v\$parameter table." A table with 4 columns (S.No, Parameter, Current Value, Expected V...) and 10 rows is shown. The table contains the following data:

S.No	Parameter	Current Value	Expected V...
1	_optimizer_connect_by_cost_based		FALSE
2	_allow_level_without_connect_by		TRUE
3	_unnest_subquery		FALSE
4	_hash_join_enabled		FALSE
5	ALWAYS_SEMI_JOIN		NESTED_L...
6	_optimizer_cost_based_transformation		off
7	audit_trail	DB	NONE
8	blank_trimming	FALSE	TRUE
9	cursor_sharing	EXACT	EXACT
10		FALSE	FALSE

At the bottom of the screen, there are four buttons: "Log", "Back", "Next", and "Exit".

6. This screen displays the parameter details of the database. This is for information purpose.

- Click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing **ORACLE**

Database Installation
This screen displays the Grants provided to the schema.

S.No	Grant Privilege Required	Grant provided
1	CREATE SESSION	Y
2	CREATE TYPE	Y
3	CREATE TRIGGER	Y
4	CREATE TABLE	Y
5	CREATE DATABASE LINK	Y
6	CREATE LIBRARY	Y
7	CREATE SYNONYM	Y
8	CREATE SEQUENCE	Y

- This screen displays the grants provided to the schema. If object compilation is required and the privilege is not given, then you can find that out from this screen. This is for information purpose.
- Click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing **ORACLE**

Database Installation
Data Dump Parameters

Include PAR File

PAR File Name

On including PAR File option, you are required to update the PAR File and place it in the physical directory, to the same machine where the Installer is running.

Also mention the PAR File name.

10. Specify the following details:

Include PAR File

Check this box to include the PAR file. If you check this box, you need to specify the PAR file name.

PAR file stands for Parameter File. A PAR file is a text file that contains all valid parameters and their respective values. Maintaining the parameters in text format enables you to modify or reuse them easily.

PAR File Name

If you have checked the box 'Include PAR File', you need to specify the PAR file name here.

11. Once you have specified the above details, click 'Next' button.

12. Specify the Oracle directory name. This is the directory in the server machine where the import file is located.

Click 'Next'. The following screen is displayed

The screenshot shows a software window titled "Oracle FLEXCUBE Investor Servicing" with the Oracle logo in the top right corner. The main content area is titled "Database Installation" and "Data Dump Parameters". It features a label "Oracle Directory Name" next to a text input field containing "OracleDir". Below this is a grey instruction box: "Please ensure that the Oracle Directory name mentioned above is created in the server. Also, ensure that the physical directory, the Oracle directory is pointing to is also present." At the bottom, there are four buttons: "Log", "Back", "Next", and "Exit".

13. Specify the following details:

Dump File Name

Specify the import file name.

Export Schema Name

Specify the export schema name from which the import file is imported.

Export Schema Tablespace

Specify the export schema tablespace from which the import file is imported.

14. Once you have specified the above details, click 'Next'. The following screen is displayed.

Oracle FLEXCUBE Investor Servicing ORACLE

Database Installation
Data Dump Parameters

Dump File Name

Export Schema Name

Export Schema Tablespace

Please ensure that the Dump file name mentioned is present in the Oracle Directory in the server.
For more details refer the log file associated with the dump file present in the baseline area.

Log Back Next Exit

15. Specify the following details:

Import Schema Name

Specify the import schema name to which the import file is loaded.

Import Schema Tablespace

Specify the import schema tablespace to which the import file is loaded.

16. Once you have specified the above details, click 'Next' button. The following screen is displayed.

The screenshot shows the 'Database Installation' screen with the following elements:

- Header:** Oracle FLEXCUBE Investor Servicing (left) and ORACLE (right).
- Section:** Database Installation
- Text:** Data Dump Parameters
- Form Fields:**
 - Import Schema Name: FCTEST
 - Import Schema Tablespace: FCTEST
- Text Box:** Provide the schema name and schema tablespace which has been created to import through Datapump.
- Buttons:** Log, Back, Next, Exit.

The screenshot shows the 'Database Installation' screen with the following elements:

- Header:** Oracle FLEXCUBE Investor Servicing (left) and ORACLE (right).
- Section:** Database Installation
- Text:** Current screen Displays the status of Data Imported.
- Form Fields:** A large empty rectangular area for displaying data.
- Buttons:** Import Objects, Import Data, Full Import.
- Footer Buttons:** Log, Back, Next, Exit.

17. This triggers the import operation. You can optionally import the objects, data or full set by using 'Import Objects', 'Import Data' or 'Full Import' buttons respectively.
18. Click 'Import' button to import the database with the PAR file parameter



Setting up Database
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