

Oracle® Banking Platform Collections

DBA Guide

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Preface

This document describes the initial installation of the Oracle Banking Platform Collection Application Database blueprints on an existing Oracle Banking Platform core 2.6.2.0.0 database.

This preface contains the following topics:

- [Audience](#)
- [Documentation Accessibility](#)
- [Conventions](#)

Audience

This document is intended for the following:

- Consulting Staff
- Administrators

Documentation Accessibility

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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.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1 About this Guide

This guide is applicable for the following products:

- Oracle Banking Platform
- Oracle Banking Enterprise Collections

References to Oracle Banking Platform or OBP in this guide apply to all the above mentioned products.

2 Oracle Database Application

This chapter explains the Oracle Database Application Installation process.

The artifacts required for the initial installation of the OBP Collection application are available in Windows-Oracle-Database.zip. This zip file contains the scripts and utilities that you will run in order to complete the installation process.

2.1 Installing Application Database Blueprint

Prerequisite

- Oracle Database server and Oracle Client software are installed (if the following steps are performed from a remote machine).
- OBP 2.6.2.0.0 schema is available in the same instance of Oracle database.
- Blueprint Application can be executed from Windows machine only.
- JAVA should be above or same as jdk1.7 version.
- Oracle Client should be installed.
- Need DBA access to create below roles and users.
- Create the CIS_USER and CIS_READ roles on target DB using the following commands:

- CREATE ROLE CIS_USER;
- CREATE ROLE CIS_READ;

- Create the CISADM, CISUSER, and CISREAD users on target DB using the following commands:

```
CREATE USER CISUSER PROFILE DEFAULT IDENTIFIED BY CISUSER DEFAULT
TABLESPACE <TABLESPACE_NAME> TEMPORARY TABLESPACE TEMP;
```

```
CREATE USER CISUSER PROFILE DEFAULT IDENTIFIED BY CISUSER DEFAULT
TABLESPACE <TABLESPACE_NAME> TEMPORARY TABLESPACE TEMP;
```

```
GRANT SELECT ANY TABLE TO CISUSER; GRANT CIS_USER TO CISUSER;
```

```
GRANT CIS_READ TO CISUSER; GRANT CONNECT TO CISUSER;
```

```
CREATE USER CISREAD IDENTIFIED BY CISREAD DEFAULT TABLESPACE
<TABLESPACE_NAME> TEMPORARY TABLESPACE TEMP; GRANT SELECT ANY TABLE TO
CISREAD; GRANT CIS_READ TO CISREAD; GRANT CONNECT TO CISREAD;
```

- Need DBA grants to the <DB_USER>

Execute the below sql with sysuser for accessing grants to <DB_USER>

```
<COLLECTION_HOME>\COLLECTION_DB\Windows-Oracle-Database\COLLECTION\Database_
Creation\Windows\Grants.sql
```

Installation Steps

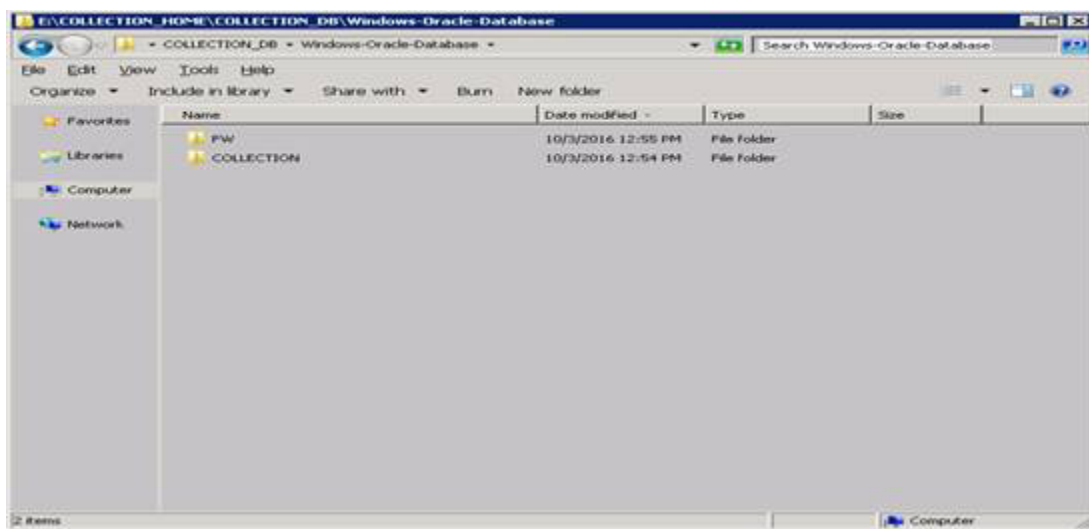
Follow the steps below to install application database blueprint:

1. Create a folder COLLECTION_HOME and a subfolder COLLECTION_DB inside the COLLECTION_HOME folder.
2. Copy Windows-Oracle-Database.zip in the folder COLLECTION_DB.
3. Unzip Windows-Oracle-Database.zip at the location where you want to unzip the installer on the Windows machine.

<COLLECTION_HOME>\COLLECTION_DB\ Windows-Oracle-Database\ contains following sub folders which are referred to in the installation process mentioned below.

- **FW:** Used for Framework installation and Framework hot fixes
- **COLLECTION:** Used for Collection application blueprint installation and Collection application upgrade

Figure 2–1 Extracted Windows-Oracle-Database.zip



Blueprint Installation is divided in two steps:

1. Framework Installation
2. Collection Application Blueprint Installation or Upgrade

2.2 Framework Installation

This installation will be carried out for the first time only once when the environment is being created.

1. Before starting Blueprint installation, keep the below parameters ready.

Table 2–1 Parameters

Parameters	Values
Target database	<database name>
Database username	<DB_USER>
Password username	<database user password>
Location for Java Home (For example, C:\Java\jdk1.6.0_18) must be higher than jdk1.7	<Java installation path>
Enter the TUGBU jar files location	<COLLECTION_HOME>\COLLECTION_DB\Windows-Oracle-Database\FW\FW43010\jarfiles
Oracle user with read-write privileges to Database Schema	CISUSER
Oracle user with read-only privileges to Database Schema	CISREAD
Database role with read-write privileges to Database Schema	CIS_USER
Database role with read-only privileges to Database Schema	CIS_READ

2. Edit the **Storage.xml** file. This file contains the tablespace information for all the tables and indexes that the utility will create. This file should be created by the release team and edited by the customers to match their own requirements. This file has the following format:

```
<TABLESPACE>CISTS_01</TABLESPACE>
```

 Change the Tablespace name which is in this format <CISTS01>
3. Open Windows command prompt.
4. Execute below command to go to the installation path:

```
cd <COLLECTION_HOME>\COLLECTION_DB\Windows-Oracle-Database\FW\FW43010\Install-Upgrade
```
5. For Framework installation, use **OraDBI.exe** command.

```
<COLLECTION_HOME>\COLLECTION_DB\Windows-Oracle-Database\FW\FW43010\Install-Upgrade>OraDBI.exe
```

Figure 2–2 Framework Blueprint Installation

```

Administrator: Windows\system32\cmd.exe - Oracle
E:\COLLECTION_HOME\COLLECTION_DB\Windows-Oracle-Database\FW\FW43010\Install-Upgrade>OraDBI.exe

Enter the name of the target database: POB237A
Enter your database username: COLLAU
Enter your password username:
Enter the location for Java Home(e.g. C:\Java\jdk1.6.0_18): D:\Java\jdk1.7.0_80
Enter the TUGBU jarfiles location (e.g.C:\Database-Install\Jarfiles): E:\COLLECTION_HOME\COLLECTION_DB\Windows-Oracle-Database\FW\FW43010\TUGBU
Enter the Oracle user with read-write privileges to Database Schema: cisuser
Enter the Oracle user with read-only privileges to Database Schema: cisread
Enter the database role with read-write privileges to Database Schema: cis_user
Enter the database role with read-only privileges to Database Schema: cis_read
Enter the name of the target Schema where you want to install or upgrade: COLLAU

Connecting to the Target Database as user COLLAU
User Name      : COLLAU
Database Name  : POB237A

```

- a. After using OraDBI.exe command, utility will prompt for parameters mentioned in first step.
 - b. Utility will ask for confirmation at various stages during installation. Type **Y** and continue installation.
 - c. Utility will perform the necessary steps to install OUAF framework blueprint.
 - d. Check the installation logs for any error.
6. After Framework Installation, run **Hotfixes for Framework**. Perform the following steps to apply install hotfixes.

Path of the Hotfix folder:

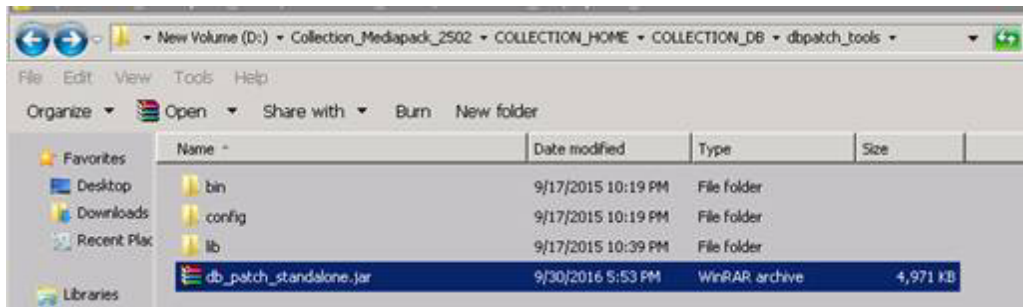
<COLLECTION_HOME>\COLLECTION_DB\Windows-Oracle-Database\FW\FW43010\FW43010-HFix

Follow the below steps to apply framework hotfix patches on DB:

- a. Create a directory named dbpatch_tools in the TEMPDIR directory.
- b. Copy the db_patch_standalone.jar file to the dbpatch_tools directory.
- c. Decompress the JAR file using the following command:

```
cd TEMPDIR\dbpatch_tools
jar -xvf db_patch_standalone.jar
```

Artifacts can be seen in below screenshot.

Figure 2–3 Framework hotfix *db_patch_standalone.jar*

- d. Set the TOOLSBIN environment variable using the following command in command prompt.
- e. Go to <COLLECTION_HOME>\<COLLECTION_DB>\Windows-Oracle-Database\FW\FW43010\FW43010-HFix
- f. Execute the ouafDatabasePatch.cmd utility

At starting point, it will ask the Database string type as below:

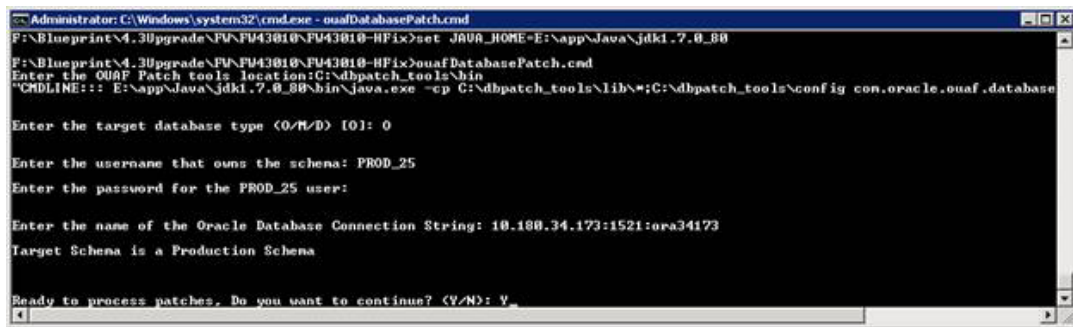
Table 2–2 Database String Type Details

Details	Values
Enter the target database type	Enter as O for oracle database
Enter the username that owns the schema	<DB_USER >
Enter the password for the <username> user	<database user password>
Enter the name of the Oracle Database Connection String	<DB_Server:DBPORT:ORACLE_SID>

Note

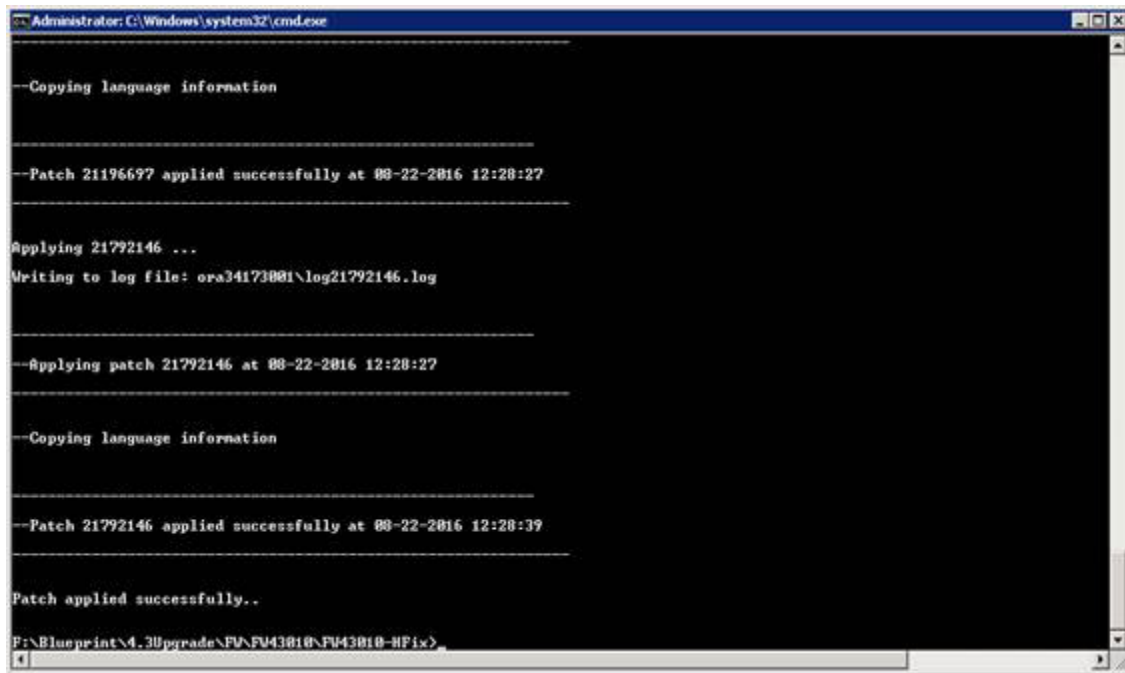
Ensure that you execute the **ouafDatabasePatch** utility from the Window 32-bit or 64-bit desktop that has Oracle Database Client 12.1.0.2 (32-bit) and Java Development Kit Version 7.0 installed. The database must be listed in the tnsnames.ora file on your local machine.

Figure 2–4 Executing Framework Hotfix



After confirming to continue, hotfix installation will continue as depicted in below screenshot.

Figure 2–5 Executing Framework Hotfix after confirmation



2.3 Collection Application Blueprint Installation or Upgrade

For complete Collection application blueprint installation or upgrade, follow the below steps.

Collection Blueprint path:

<COLLECTION_HOME>\<COLLECTION_DB>\Windows-Oracle-Database\COLLECTION\Upgrade\Oracle\Install-Upgrade

1. Edit the **Storage.xml** file. This file contains the tablespace information for all the tables and indexes that the utility will create. This file should be created by the release team and edited by the customers

to match their own requirements. This file has the following format:

```
<TABLESPACE>CISTS_01</TABLESPACE>
```

Change the Tablespace name which is in this format <CISTS01>

Note

It is important to know that the tablespace information is used only when the new objects are created.

2. Before running **CDXDBI.exe** command make sure you have the below parameter values ready with you. The utility will prompt you to enter values for the following parameters to start the installation.

Table 2–3 Parameters

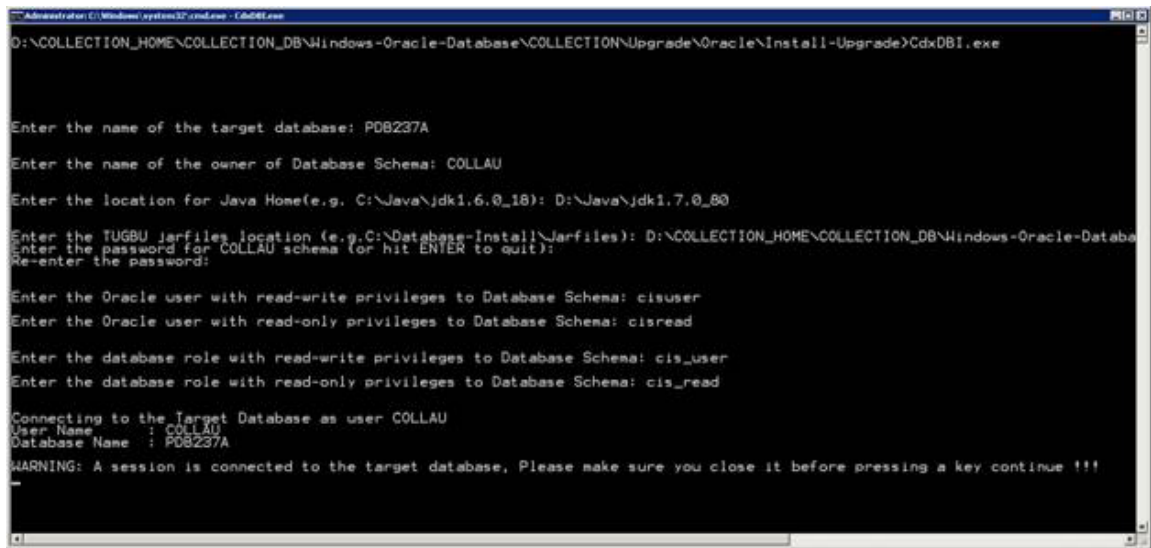
Parameters	Values
Target database	<database name>
Database username	<DB_USER>
Password username	<database user password>
Location for Java Home (For example, C:\Java\jdk1.6.0_18) must be higher than jdk1.7	<Java installation path>
Enter the TUGBU jar files location	<COLLECTION_HOME>\COLLECTION_DB\Windows-Oracle-Database\COLLECTION\jarfiles
Oracle user with read-write privileges to Database Schema	CISUSER
Oracle user with read-only privileges to Database Schema	CISREAD
Database role with read-write privileges to Database Schema	CIS_USER
Database role with read-only privileges to Database Schema	CIS_READ

Note

You can execute the CDXDBI.exe only on Windows machine.

3. To run the CdxDbi.exe command, open Windows command prompt.
4. Go to the below installation path:
Cd <COLLECTION_HOME>\COLLECTION_DB\Windows-Oracle-Database\COLLECTION\Upgrade\Oracle\Install-Upgrade
5. Now run CdxDBI.exe command.

Figure 2–6 Executing Collection Blueprint



```
Administration (C:\Windows\system32\cmd.exe) - CdXDBI.exe
D:\COLLECTION_HOME\COLLECTION_DB\Windows-Oracle-Database\COLLECTION\Upgrade\Oracle\Install-Upgrade>CdXDBI.exe

Enter the name of the target database: PDB237A
Enter the name of the owner of Database Schema: COLLAU
Enter the location for Java Home(e.g. C:\Java\jdk1.6.0_18): D:\Java\jdk1.7.0_80
Enter the TUGBU Jarfiles location (e.g. C:\Database-Install\Jarfiles): D:\COLLECTION_HOME\COLLECTION_DB\Windows-Oracle-Database\Jarfiles
Enter the password for COLLAU schema (or hit ENTER to quit):
Re-enter the password:
Enter the Oracle user with read-write privileges to Database Schema: cisuser
Enter the Oracle user with read-only privileges to Database Schema: cisread
Enter the database role with read-write privileges to Database Schema: cis_user
Enter the database role with read-only privileges to Database Schema: cis_read
Connecting to the Target Database as user COLLAU
User Name      : COLLAU
Database Name  : PDB237A
WARNING: A session is connected to the target database, Please make sure you close it before pressing a key continue !!!
```

6. The utility at this point is ready to perform the initial install and prompts you for permission to start the process.
7. If you choose to continue, CDXDBI first checks for the existence of each of the users specified and prompts for their password (if applicable), default tablespace, and temporary tablespace, if they do not exist.
8. After setting up the roles and users, the utility continues upgrading schema and system data definitions. If an error occurs while executing an SQL or another utility, it logs and displays the error message and allows you to re-execute the current step.
9. This utility populates the schema with the initial install data. If an error occurs while executing an SQL or another utility, it logs and displays the error message and allows you to re-execute the current step.

Figure 2–7 Processing Collections_Interaction.sql

```

Administrator: C:\Windows\system32\cmd.exe - CdxDBI.exe
Connecting to the Target Database as user COLL_JAVA_R2501
User Name      : COLL_JAVA_R2501
Database Name  : CONT3378

WARNING: 83 sessions are connected to the target database. Please make sure you close them before pressing a key continue !!!

Ready to upgrade the target database from 02.5.0.1.0 to 02.5.0.1.0, do you want to continue <Y/N>? Y

Executing Database Setup Scripts...

Processing file cdx_bp_crtlog.sql ...

Connecting to the Target Database as user COLL_JAVA_R2501
User Name      : COLL_JAVA_R2501
Database Name  : CONT3378

Executing Initialization Scripts...

Performing Schema Upgrade for RMB...

Running the Schema Upgrade process in the Modification Mode

Connecting to the Target Database
User Name      : COLL_JAVA_R2501
Database Name  : CONT3378
Schema Name    : COLL_JAVA_R2501

Setting Current Schema to COLL_JAVA_R2501
Loading Blueprint

```

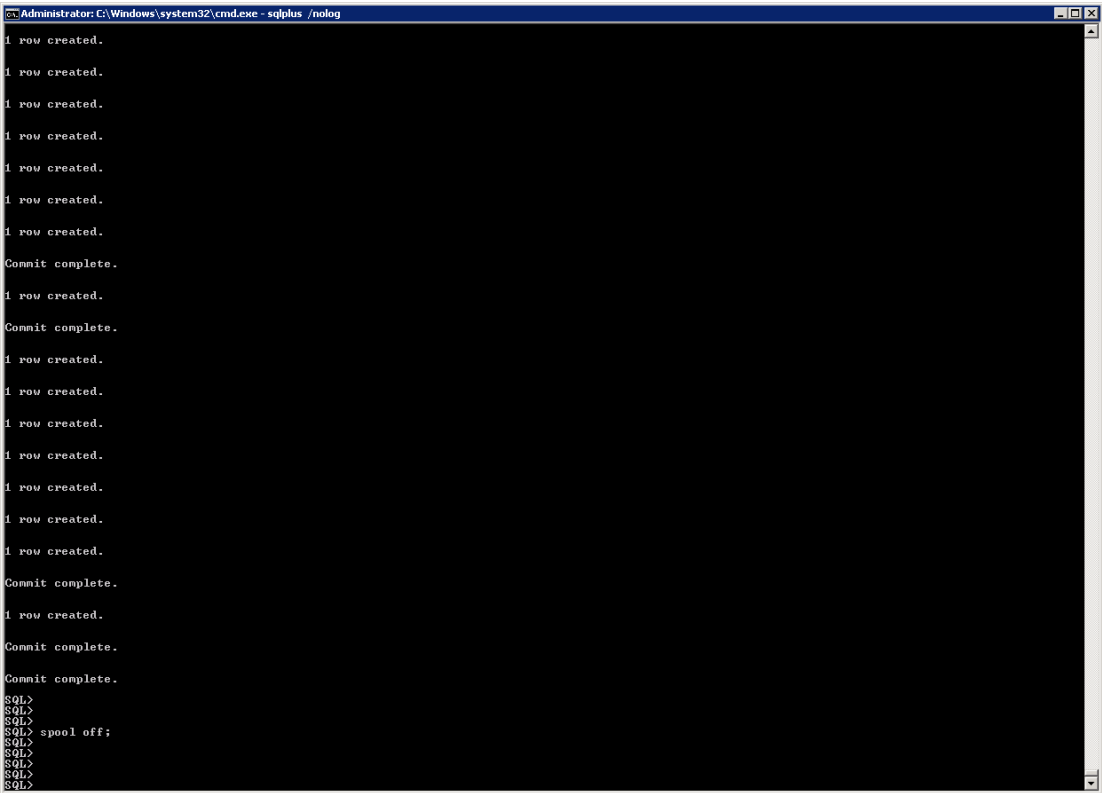
- After using CdxDBI.exe command, utility will prompt for parameters mentioned in first step.
- Utility will ask for confirmation at various stages during installation. Type Y and continue installation.
- Utility will perform the necessary steps to install Collection application blueprint.
- Check the installation logs for any error.

2.4 Tasks Performed by CDXDBI

CDXDBI performs the following tasks:

- Interacts with the user to collect information about the name of Oracle account that will own the application schema (for example, CISADM1), password of this account, password of the SYSTEM account in the database, the name of the Oracle account that the application user will use (for example, CISUSER), the name of the Oracle account that will be assigned read-only privileges to the application schema (for example, CISREAD), the name of read-write role in the Oracle database (for example, CIS_USER), and the name of read-only role in the Oracle database (for example, CIS_READ).
- Connects to the database as SYSTEM account, checks whether the user already has the application schema installed to verify whether this is an initial installation.
- Verifies whether the tablespace names already exist in Storage.xml file (If not, the process aborts).
- Installs the schema, installs the system data, and configures security.
- Maintains upgrade log tables in the database.
- Updates release ID when the upgrade is completed successfully.
- If an error occurs while executing a SQL script or another utility, it logs and displays the error message and allows you to re-execute the current step. Log files CDXDBI###.log are created in the same folder as CDXDBI and contains all the SQL commands executed against the database along with the results. The log files are incremental so that the results are never overwritten. If warning messages are

Figure 2–9 Execution Result



After successful execution, check the log (spool) file.

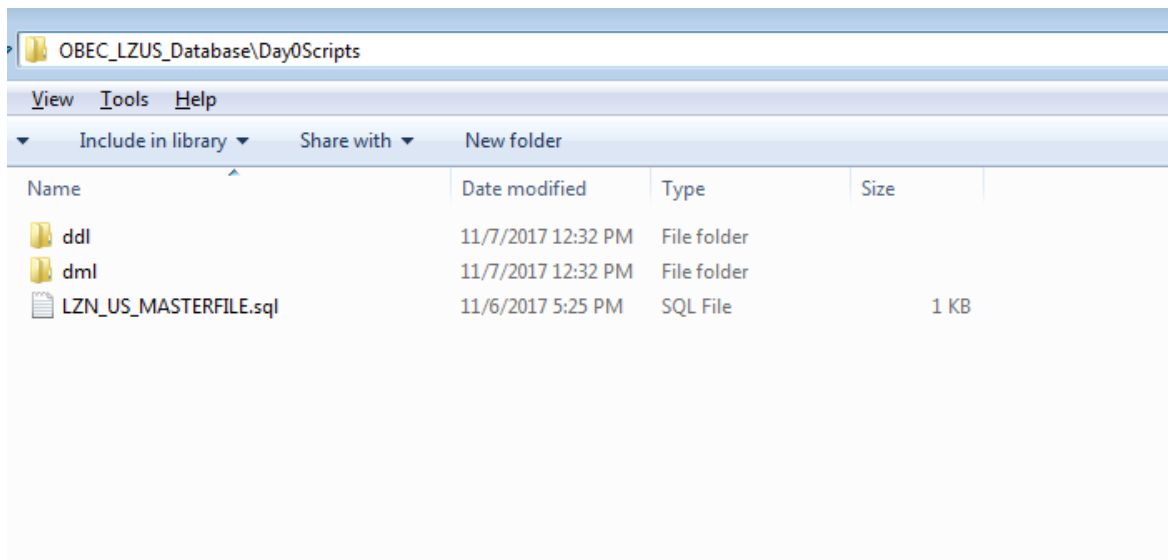
2.6 Day Zero Script Execution for US Localization

This activity is to be performed only for Blueprint installation and not for Incremental upgrade.

Once Masterfile.sql script execution is completed, follow the steps mentioned below if localization installation is to be done.

1. Unzip OBEC_LZUS_Database.zip which is available in OBP 2.6.2.0.0 LZ US mediapack.
2. Navigate to unzipped folder.

Figure 2–10 Day Zero folder for US Localization



3. Execute the following SQL file on the database.

LZN_US_MASTERFILE.sql

Figure 2–11 Day Zero folder for US Localization execution

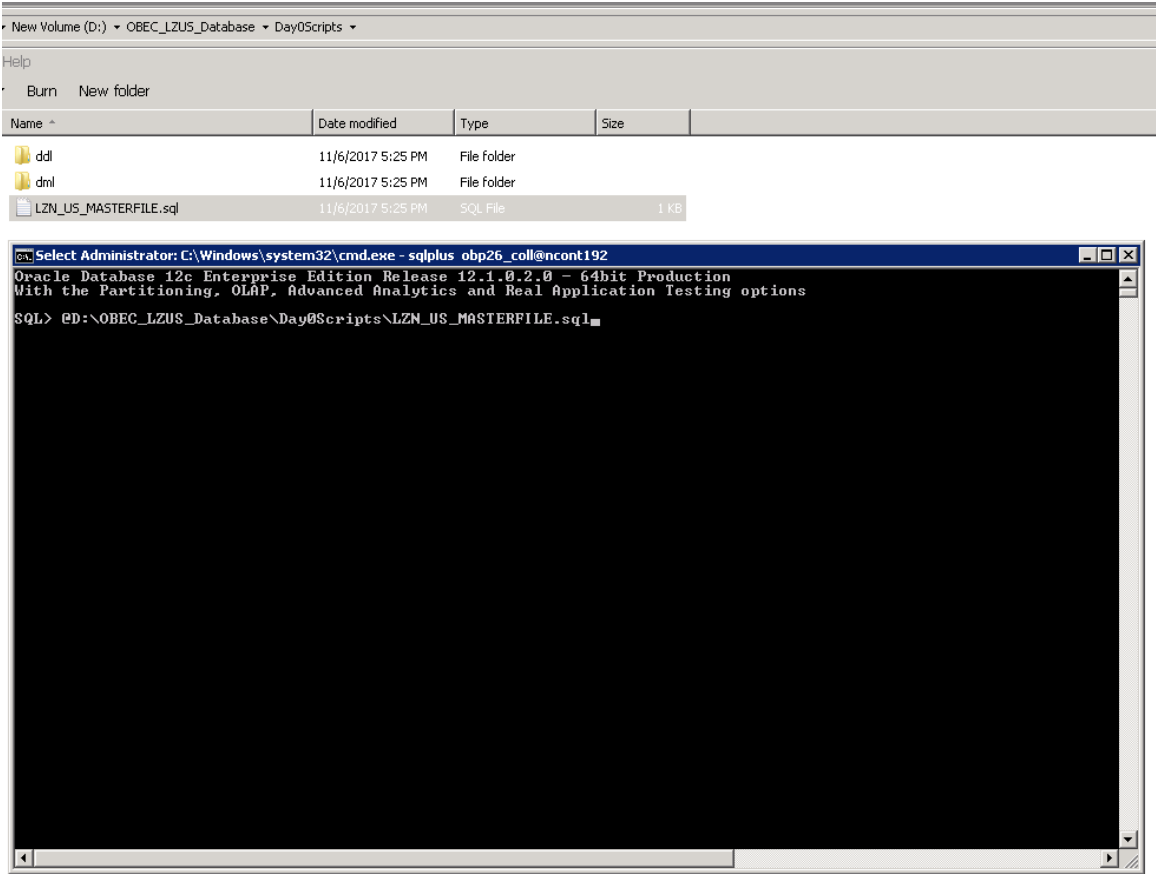
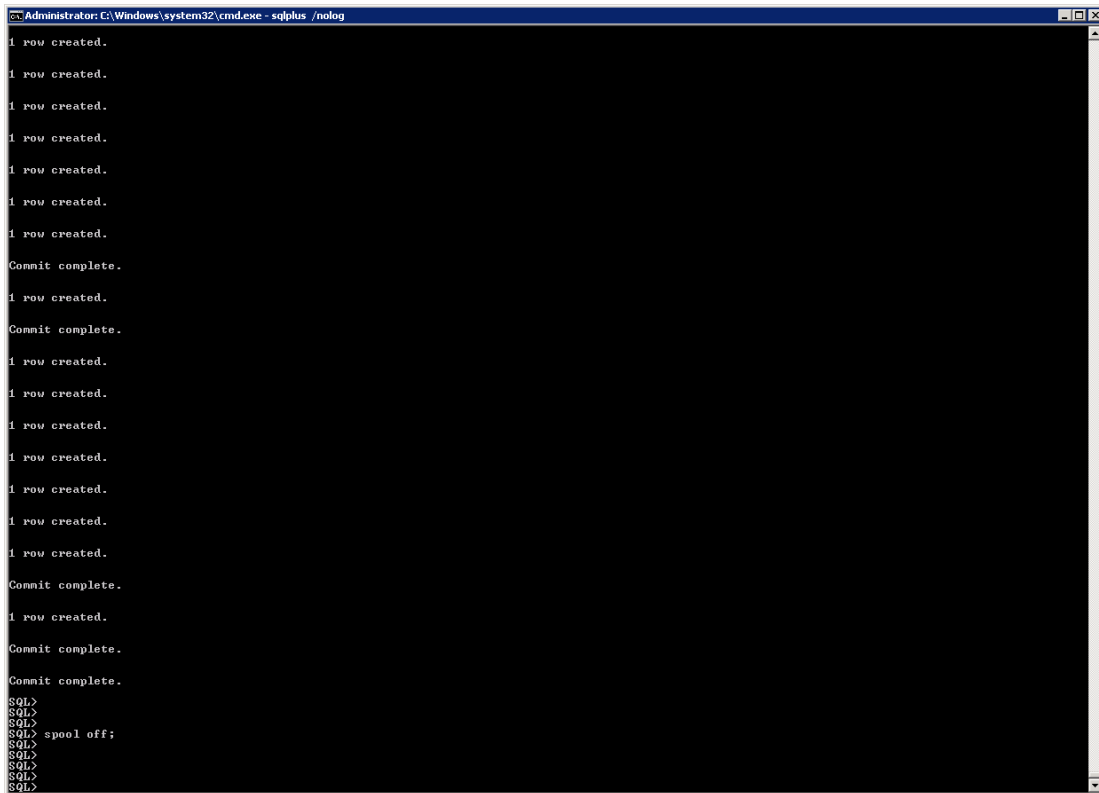


Figure 2–12 Day Zero folder for US Localization execution

```
Administrator: C:\Windows\system32\cmd.exe - sqlplus /nolog
1 row created.
1 row created.
1 row created.
1 row created.
1 row created.
1 row created.
1 row created.
1 row created.
Commit complete.
1 row created.
Commit complete.
1 row created.
1 row created.
1 row created.
1 row created.
1 row created.
1 row created.
1 row created.
Commit complete.
1 row created.
Commit complete.
Commit complete.
SQL>
SQL>
SQL>
SQL> spool off;
SQL>
SQL>
SQL>
SQL>
SQL>
```

2.7 Database Initialization Parameters

The recommended Initialization Parameters are mentioned below. These parameters are a starting point for database tuning. An optimal value for a production environment may differ from one customer deployment to another.

db_block_size=8192

log_checkpoint_interval=10000

db_file_multiblock_read_count=8

transactions=3000

open_cursors=1200

optimizer_index_cost_adj=1

optimizer_index_caching=100

session_cached_cursors=50

trace_enabled=FALSE

db_files=1024

dbwr_io_slaves=10 (Only if Asynchronous IO is not Supported)

sessions=1528