

Oracle® Banking Platform Collections and Recovery

DBA Guide

Release 2.9.0.0.0

F23392-01

November 2019

Oracle Banking Platform Collections and Recovery DBA Guide, Release 2.9.0.0.0

F23392-01

Copyright © 2011, 2019, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

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

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Contents

Preface	5
Audience	5
Documentation Accessibility	5
Conventions	5
1 Oracle Database Application	7
1.1 Installing Application Database Blueprint	7
1.1.1 Prerequisite	7
1.2 Multi-platform based Installation	8
1.2.1 Framework Installation	8
1.2.2 Collection and Recovery Application Blueprint Installation or Upgrade.	12
1.3 Windows Based Installation	14
1.3.1 Framework Installation	15
1.3.2 Collection and Recovery Application Blueprint Installation or Upgrade	19
1.4 Tasks Performed by CDXDBI	22
2 Day Zero Script Execution	25
3 Day Zero Script Execution for US Localization	27
4 Database Initialization Parameters	31

List of Figures

Figure 1–1 Extracted Multiplatform-Oracle-Database.zip	8
Figure 1–2 Input file example for Linux	10
Figure 1–3 Input file example for Windows	10
Figure 1–4 Command line input	10
Figure 1–5 Framework hotfix db_patch_standalone.jar	11
Figure 1–6 Framework hotfix db_patch_standalone.jar for Linux	12
Figure 1–7 Framework hotfix db_patch_standalone.jar for Windows	12
Figure 1–8 Input file example for Linux	14
Figure 1–9 Input file example for Windows	14
Figure 1–10 Command line input	14
Figure 1–11 Extracted Windows-Oracle-Database.zip	15
Figure 1–12 Framework Blueprint Installation	17
Figure 1–13 Framework hotfix db_patch_standalone.jar	17
Figure 1–14 Executing Framework Hotfix	18
Figure 1–15 Executing Framework Hotfix after confirmation	19
Figure 1–16 Executing Collection and Recovery Blueprint	21
Figure 1–17 Processing Collections_Interaction.sql	22
Figure 2–1 Executing Masterfile.sql	25
Figure 2–2 Execution Result	26
Figure 3–1 Day Zero folder for US Localization	27
Figure 3–2 Day Zero folder for US Localization execution	28
Figure 3–3 Day Zero folder for US Localization execution	29

Preface

This document describes the initial installation of the Oracle Banking Collections and Oracle Banking Recovery Application Database blueprints on an existing Oracle Banking Platform core 2.9.0.0.0 database.

This preface contains the following topics:

- Audience
- Documentation Accessibility
- Conventions

Audience

This document is intended for the following:

- Consulting Staff
- Administrators

Documentation Accessibility

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

Access to Oracle Support

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

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 Oracle Database Application

This chapter explains the Oracle Database Application Installation process.

The artifacts required for the initial installation of the Oracle Banking Collections and Oracle Banking Recovery 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.

1.1 Installing Application Database Blueprint

1.1.1 Prerequisite

- Oracle Database server and Oracle Client software are installed (if the following steps are performed from a remote machine).
- OBP 2.9.0.0.0 schema is available in the same instance of Oracle database.
- Blueprint Application can be executed from any platform that supports java.
- JAVA should be above or same as jdk1.8.0_172 version.
- Oracle Client should be installed.

Database Role and User Creation

- 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;
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;
```

Installing Application Database Blueprint can be performed in two ways:

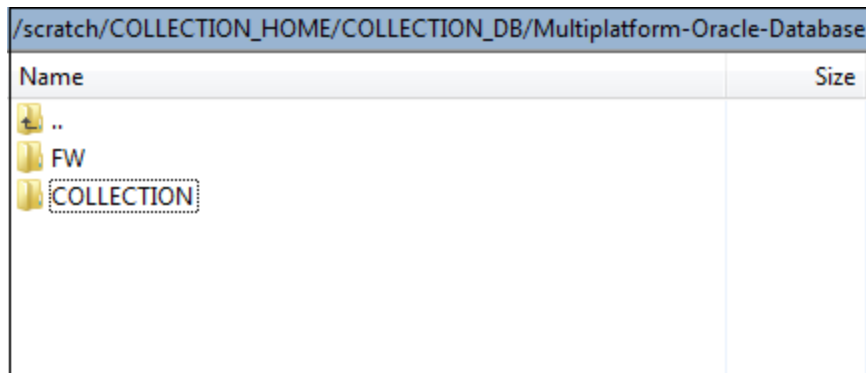
- Multi-platform based installation
- Windows based installation

Choose one of the installation options depending on the available platform.

1.2 Multi-platform based Installation

1. Create a folder with the name `COLLECTION_HOME` and a subfolder `COLLECTION_DB` inside the `COLLECTION_HOME` folder.
2. Copy **Multiplatform-Oracle-Database.zip** in the folder `COLLECTION_DB`.
3. Unzip **Multiplatform-Oracle-Database.zip**.
`<COLLECTION_HOME>\COLLECTION_DB\Multiplatform-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 and Recovery application blueprint installation, and Collection and Recovery application upgrade.

Figure 1–1 Extracted Multiplatform-Oracle-Database.zip



- Need DBA grants to the `<DB_USER>`
Execute the below sql with sysuser for accessing grants to `<DB_USER>`
`<COLLECTION_HOME>\COLLECTION_DB\ Multiplatform-Oracle-Database\COLLECTION\Database_Creation\Grants\Grants.sql`

Blueprint Installation is divided into two steps:

- a. Framework Installation
- b. Collection and Recovery Application Blueprint Installation or Upgrade

1.2.1 Framework Installation

This installation is carried out only once when the environment is being created.

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

Table 1–1 Parameters

Parameters	Values
Target database	<database name>
Database username	<DB_USER>
Database Password	<database user password>
Location for Java Home (For example, C:\Java\jdk1.8.0_172) must be higher than jdk1.8.0_172	<Java installation path>
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
Database Schema name	<Schema name>
Tablespace name	<Tablespace name>

2. Editing the **Storage.xml** file is required if blueprint is going to be executed from windows machine. If blueprint is going to be executed from Linux machine there is no need to update **Storage.xml** file. This file contains tablespace information for all the tables and indexes that the utility will create. It must 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

```
<TABLESPACE>SAMPLE_NAME</TABLESPACE>
```

3. Navigate to the installation path as specified below:

```
cd <COLLECTION_HOME>\COLLECTION_DB\Multiplatform-Oracle-Database\FW\FW43010\Install-Upgrade
```

4. Input to blueprint utility can be provided in two ways:

- File based input

- a. Create file in current directory or update **input_sample.txt** file as shown below:

Input file format :

```
-d jdbc:oracle:thin:@<DBserverIP>:<DBServer
Port>/<SID>,<DbUser>,<password>,<Oracle user with read-write privileges to
Database Schema>,<Oracle user with read-only privileges to Database
```

Schema>, <database role with read-write privileges to Database Schema>, <database role with read-only privileges to Database Schema>, <name of the target Schema where you want to install or upgrade>

-l <LoadParFile1,LoadParFile2>

-j <JDKpath>

-q <for silent execution of blueprint >

Figure 1–2 Input file example for Linux

```
1 -d jdbc:oracle:thin:@[redacted]:1521/P26195A,COLL_UPG_TEST,welcome1,CISUSER,CISREAD,CIS_USER,CIS_READ,COLL_UPG_TEST
2 -l 1,2
3 -j /scratch/app/product/jdk1.8.0_172
4 -q true
```

Figure 1–3 Input file example for Windows

```
1 -d jdbc:oracle:thin:@[redacted]:1521/P26195A,COLL_UPG_TEST,welcome1,CISUSER,CISREAD,CIS_USER,CIS_READ,COLL_UPG_TEST
2 -l 1,2
3 -j D:\Softwares\Java\jdk1.8.0_172
4 -q true
```

- b. Open prompt and execute command as shown below:

For Windows : > run_blueprint.cmd -i <filename> -t <Table Space name>

For Linux : \$ run_blueprint.sh -i <filename> -t <Table Space name>

- **Command line input**

- a. Open prompt and execute run_blueprint.cmd or run_blueprint.sh

Figure 1–4 Command line input

```
-bash-4.1$ sh run_blueprint.sh
/scratch/Blueprint/Multiplatform-Oracle-Database/FW/FW43010/Install-Upgrade
Enter the database server hostname (10.180.70.70/machinename.com) : 10.180.26.195
Enter the database port number(e.g. 1521): 1521
Enter the database name/SID: P26195A
Enter your database username: COLL_UPG_TEST
Enter your password for username
Enter the Oracle user with read-write privileges to Database Schema(e.g. CISUSER): CISUSER
Enter the Oracle user with read-only privileges to Database Schema(e.g. CISREAD): CISREAD
Enter the database role with read-write privileges to Database Schema(e.g. CIS_USER): CIS_USER
Enter the database role with read-only privileges to Database Schema(e.g. CIS_READ): CIS_READ
Enter the name of the target Schema where you want to install or upgrade: COLL_UPG_TEST
Enter the name of the target Table Space for schema COLL_UPG_TEST : COLL_UPG_TEST
Java home directory (/scratch/app/product/jdk1.8.0_172): /scratch/app/product/jdk1.8.0_172
Execute silently: (y/n)y
```

Utility will perform the necessary steps to install OUA framework blueprint

5. Check the installation logs for any error in log directory in current path.
6. After Framework Installation, run **Hotfixes for Framework**.
Perform the following steps to apply or install hotfixes:
7. Navigate to Hotfix path:

<COLLECTION_HOME>\COLLECTION_DB\Multiplatform-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 from Hotfix path 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 1–5 Framework hotfix db_patch_standalone.jar

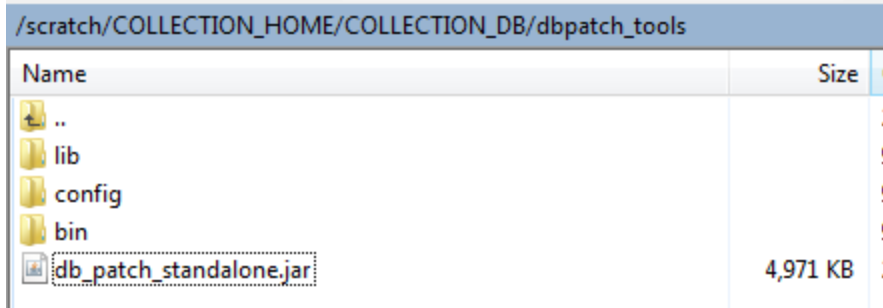


Table 1–2 Hot-fix input Details

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>

- d. Set the TOOLSBIN environment variable using the following command in command prompt:

Go to <COLLECTION_HOME>\COLLECTION_DB\Multiplatform-Oracle-Database\FW\FW43010\FW43010-HFix

- e. Execute the ouafDatabasePatch.cmd utility.

```
For Windows : > ouafDatabasePatch.cmd
For Linux : $ ouafDatabasePatch.sh
```

Figure 1–6 Framework hotfix db_patch_standalone.jar for Linux

```

opsobp@mum00cp:/scratch/app/product/Blueprint/Multiplatform-Oracle-Database/FW43010/FW43010-HFix
[opsobp@mum00cp: FW43010-HFix]$ sh ouafDatabasePatch.sh
Enter the OUA Patch tools bin location:
/scratch/app/product/Blueprint/dbpatch_tools/bin

Enter the target database type (O/M/D) [0]: 0

Enter the username that owns the schema: COLL_UPG_TEST
Enter the password for the COLL_UPG_TEST user:

Enter the name of the Oracle Database Connection String: [REDACTED]:1521:P26195A
Target Schema is a Production Schema

Ready to process patches, Do you want to continue? (Y/N): Y

```

Figure 1–7 Framework hotfix db_patch_standalone.jar for Windows

```

C:\Windows\System32\cmd.exe - ouafDatabasePatch.cmd
D:\Blueprint\Multiplatform-Oracle-Database\FW43010\FW43010-HFix>set JAVA_HOME=D:\Software\Java\jdk1.8.0_172
D:\Blueprint\Multiplatform-Oracle-Database\FW43010\FW43010-HFix>set TOOLS_BIN=D:\Blueprint\dbpatch_tools\bin
D:\Blueprint\Multiplatform-Oracle-Database\FW43010\FW43010-HFix>ouafDatabasePatch.cmd
*CMDLINE*: D:\Software\Java\jdk1.8.0_172\bin\java.exe -cp D:\Blueprint\dbpatch_tools\lib\*;D:\Blueprint\dbpatch_tools\config\con.oracle.o

Enter the target database type (O/M/D) [0]: 0

Enter the username that owns the schema: COLL_UPG_TEST
Enter the password for the COLL_UPG_TEST user:

Enter the name of the Oracle Database Connection String: [REDACTED]:1521:P26195A
Target Schema is a Production Schema

Fix for 21196697 already applied. To be skipped...
Fix for 21792146 already applied. To be skipped...
Fix for 21647369 already applied. To be skipped...

Ready to process patches, Do you want to continue? (Y/N):

```

1.2.2 Collection and Recovery Application Blueprint Installation or Upgrade.

For complete Oracle Banking Collections and Oracle Banking Recovery application blueprint installation or upgrade, follow the below steps:

Navigate to path:

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

1. Editing the Storage.xml file is required if blueprint is going to be executed from windows machine. If blueprint is going to be executed from Linux machine there is no need to update 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>CISADM</TABLESPACE>
```

Change the Tablespace name which is in this format

```
<TABLESPACE>SAMPLE_NAME</TABLESPACE>
```

Note

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

2. Before starting installation, keep the below parameters ready:

Table 1–3 Parameters

Parameters	Values
Target database	<database name>
Database username	<DB_USER>
Password username	<database user password>
Location for Java Home (For example, C:\Java\jdk1.8.0_172) must be higher than jdk1.8.0_172	<Java installation path>
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
Database Schema name	<Schema name>
Tablespace name	<Table Space name>

3. Go to the below installation path:

Cd <COLLECTION_HOME>\COLLECTION_DB\Multiplatform-Oracle-Database\COLLECTION\Upgrade\Oracle\Install-Upgrade

4. Input can be provided in two ways:

- File based input

- a. Create file in current directory or update input_sample.txt file as shown below:

Input file format :

```
-d jdbc:oracle:thin:@<DBserverIP>:<DBServer
Port>/<SID>,<DbUser>,<password>,<Oracle user with read-write privileges to
Database Schema>,<Oracle user with read-only privileges to Database
Schema>,<database role with read-write privileges to Database Schema>,<database
role with read-only privileges to Database Schema>,<name of the target Schema where
you want to install or upgrade>
```

```
-l <LoadParFile1,LoadParFile2>
```

```
-j <JDKpath>
```

```
-q <for silent execution of blueprint >
```

Figure 1–8 Input file example for Linux

```

1 -d jdbc:oracle:thin:@[redacted]:1521/P26195A, COLL_UPG_TEST, welcome1, CISUSER, CISREAD, CIS_USER, CIS_READ, COLL_UPG_TEST
2 -l 1,2
3 -j /scratch/app/product/jdk1.8.0_172
4 -q true

```

Figure 1–9 Input file example for Windows

```

1 -d jdbc:oracle:thin:@[redacted]:1521/P26195A, COLL_UPG_TEST, welcome1, CISUSER, CISREAD, CIS_USER, CIS_READ, COLL_UPG_TEST
2 -l 1,2
3 -j D:\Softwares\Java\jdk1.8.0_172
4 -q true

```

- b. Open prompt and execute command as shown below:

For Windows : > run_blueprint.cmd -i <filename> -t <Table Space name>

For Linux : \$ run_blueprint.sh -i <filename> -t <Table Space name>

- Command line input

- a. Open prompt and execute run_blueprint.cmd or run_blueprint.sh

Figure 1–10 Command line input

```

-bash-4.1$ sh run_blueprint.sh
/scratch/Blueprint/Multiplatform-Oracle-Database/FW/FW43010/Install-Upgrade
Enter the database server hostname (10.180.70/machinename.com) : [redacted]
Enter the database port number (e.g. 1521) : 1521
Enter the database name/SID: P26195A
Enter your database username: COLL_UPG_TEST
Enter your password for username
Enter the Oracle user with read-write privileges to Database Schema (e.g. CISUSER) : CISUSER
Enter the Oracle user with read-only privileges to Database Schema (e.g. CISREAD) : CISREAD
Enter the database role with read-write privileges to Database Schema (e.g. CIS_USER) : CIS_USER
Enter the database role with read-only privileges to Database Schema (e.g. CIS_READ) : CIS_READ
Enter the name of the target Schema where you want to install or upgrade: COLL_UPG_TEST
Enter the name of the target Table Space for schema COLL_UPG_TEST : COLL_UPG_TEST
Java home directory (/scratch/app/product/jdk1.8.0_172) : /scratch/app/product/jdk1.8.0_172
Execute silently: (y/n)y

```

Utility will perform the necessary steps to install Collection and Recovery application blueprint.

5. Check the installation logs for any error in log directory in current path.

Installing Application Database Blueprint is completed successfully.

6. Follow Day Zero Script Execution and Day Zero Script Execution for US Localization.

1.3 Windows Based Installation

Follow the steps below to install application database blueprint:

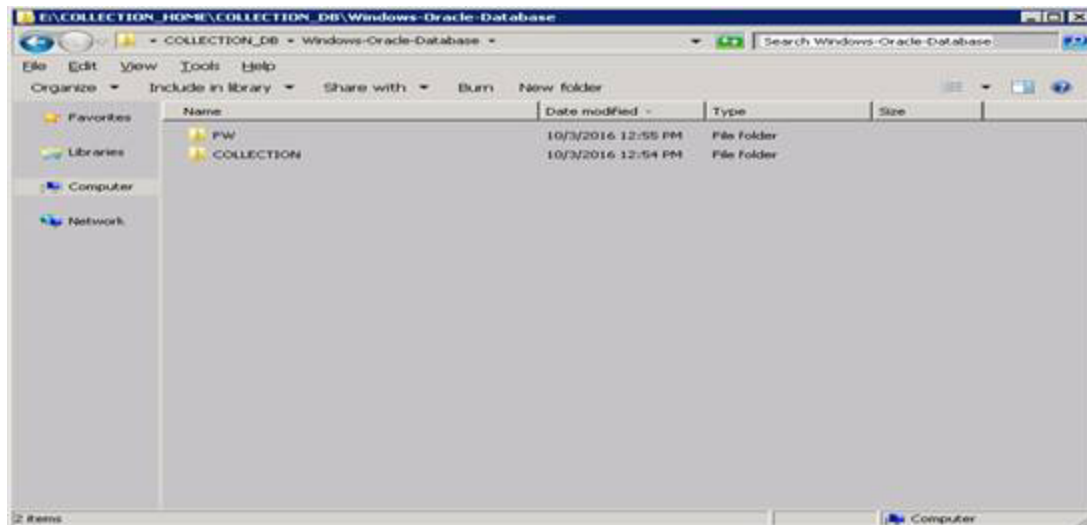
1. Create a folder COLLECTION_HOME and a subfolder COLLECTION_DB inside the COLLECTION_HOME folder.
2. Copy Windows-Oracle-Database.zip in the folder COLLECTION_DB.
3. Unzip Windows-Oracle-Database.zip at the location where you want to unzip the installer on the

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 and Recovery application blueprint installation, and Collection and Recovery application upgrade

Figure 1–11 Extracted Windows-Oracle-Database.zip



- 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\Grants\Grants.sql

Blueprint Installation is divided into two steps:

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

1.3.1 Framework Installation

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

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

Table 1–4 Parameters

Parameters	Values
Target database	<database name>
Database username	<DB_USER>
Password username	<database user password>
Location for Java Home (For example, C:\Java\jdk1.8.0_172) must be higher than jdk1.8.0_172	<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:

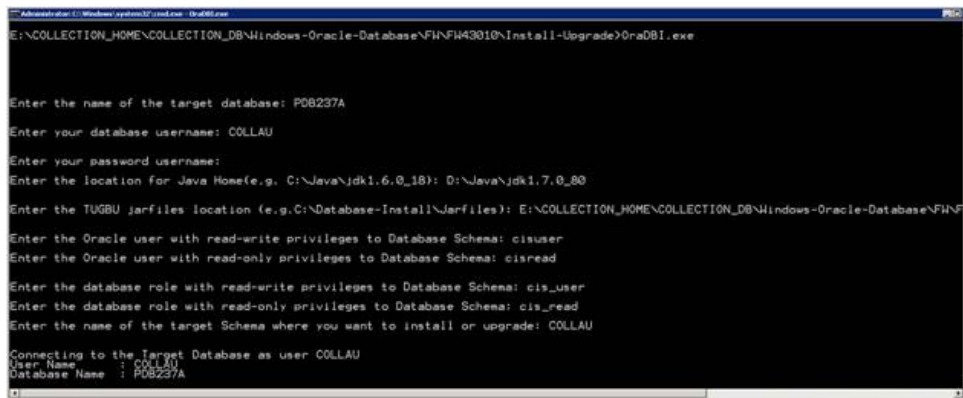
```
<TABLESPACE>CISTS_01</TABLESPACE>
```

 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 1–12 Framework Blueprint Installation



- 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 OUA 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:

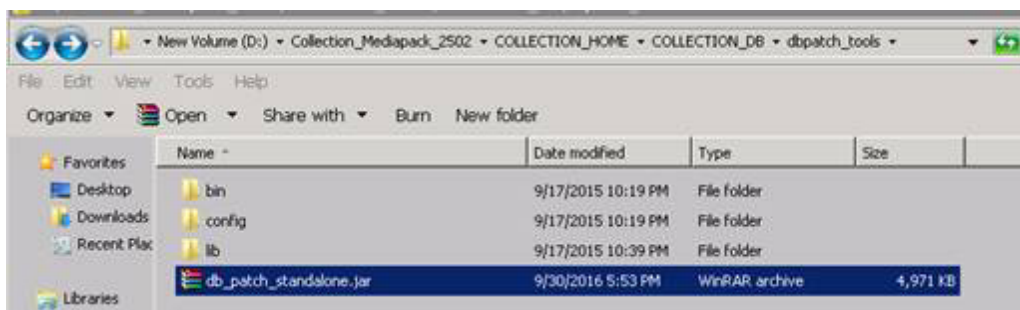
- a. Create a directory named dbpatch_tools in the TEMPDIR directory.
- b. Copy the db_patch_standalone.jar file to the dbpatch_tools directory.
- c. Decompress the JAR file using the following command:

```
cd TEMPDIR\dbpatch_tools
```

```
jar -xvf db_patch_standalone.jar
```

Artifacts can be seen in below screenshot.

Figure 1–13 Framework hotfix db_patch_standalone.jar



- d. Set the TOOLS_BIN 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 1–5 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 1–14 Executing Framework Hotfix

```
Administrator: C:\Windows\system32\cmd.exe - ouafDatabasePatch.cmd
F:\Blueprint\4.3Upgrade\FW\FW43010\FW43010-HFix>set JAVA_HOME=E:\app\java\jdk1.7.0_80
F:\Blueprint\4.3Upgrade\FW\FW43010\FW43010-HFix>ouafDatabasePatch.cmd
Enter the OUIF Patch tools location:C:\dbpatch_tools\bin
"CMDLINE::: E:\app\java\jdk1.7.0_80\bin\java.exe -cp C:\dbpatch_tools\lib\*;C:\dbpatch_tools\config con.oracle.ouaf.database

Enter the target database type (O/M/D) [O]: 0

Enter the username that owns the schema: PROD_25
Enter the password for the PROD_25 user:

Enter the name of the Oracle Database Connection String: 10.100.34.173:1521:ora34173
Target Schema is a Production Schema

Ready to process patches, Do you want to continue? (Y/N): Y_
```

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

Figure 1–15 Executing Framework Hotfix after confirmation

```

Administrator: C:\Windows\system32\cmd.exe

--Copying language information

-----

--Patch 21196697 applied successfully at 08-22-2016 12:28:27

-----

Applying 21792146 ...
Writing to log file: ora34i73001\log21792146.log

-----

--Applying patch 21792146 at 08-22-2016 12:28:27

-----

--Copying language information

-----

--Patch 21792146 applied successfully at 08-22-2016 12:28:39

-----

Patch applied successfully..

F:\Blueprint\4.3\Upgrade\FU\FM43010\FM43010-HFix>

```

1.3.2 Collection and Recovery Application Blueprint Installation or Upgrade

For complete Oracle Banking Collections & Oracle Banking Recovery application blueprint installation or upgrade, follow the below steps.

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>CISADM</TABLESPACE>
```

Change the Tablespace name which is in this format

```
<TABLESPACE>SAMPLE_NAME</TABLESPACE>
```

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 1–6 Parameters

Parameters	Values
Target database	<database name>
Database username	<DB_USER>
Password username	<database user password>
Location for Java Home (For example, C:\Java\jdk1.8.0_172) must be higher than jdk1.8.0_172	<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 1–16 Executing Collection and Recovery Blueprint

```

Administration (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 1–17 Processing Collections_Interaction.sql

```

C:\Windows\system32\cmd.exe

Connecting to the Target Database as user COLLDEU
User Name      : COLLDEU
Database Name  : P26195A

Upgrading the target database from U2.6.2.0.0 to U2.7.0.0.0
Executing Database Setup Scripts...

Processing file cdx_bp_crtlog.sql ...

Connecting to the Target Database as user COLLDEU
User Name      : COLLDEU
Database Name  : P26195A

Executing Initialization Scripts...

Performing Schema Upgrade for RMB...

Running the Schema Upgrade process in the Modification Mode
Connecting to the Target Database
User Name      : COLLDEU
Database Name  : P26195A
Schema Name    : COLLDEU

Setting Current Schema to COLLDEU
Loading Blueprint

```

- a. After using CdxDBI.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 Collection and Recovery application blueprint.
- d. Check the installation logs for any error.
Installing Application Database Blueprint is completed successfully.
- e. Follow Day Zero Script Execution and Day Zero Script Execution for US Localization.

1.4 Tasks Performed by CDXDBI

CDXDBI performs the following tasks:

1. 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).
2. 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.
3. Verifies whether the tablespace names already exist in Storage.xml file (If not, the process aborts).
4. Installs the schema, installs the system data, and configures security.
5. Maintains upgrade log tables in the database.
6. Updates release ID when the upgrade is completed successfully.

7. 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 generated during the upgrade, CDXDBI prompts the user at the end of the process. Users should check the log files to verify the warning messages. Warning messages are only alerts and do not necessarily mean that a problem exists.

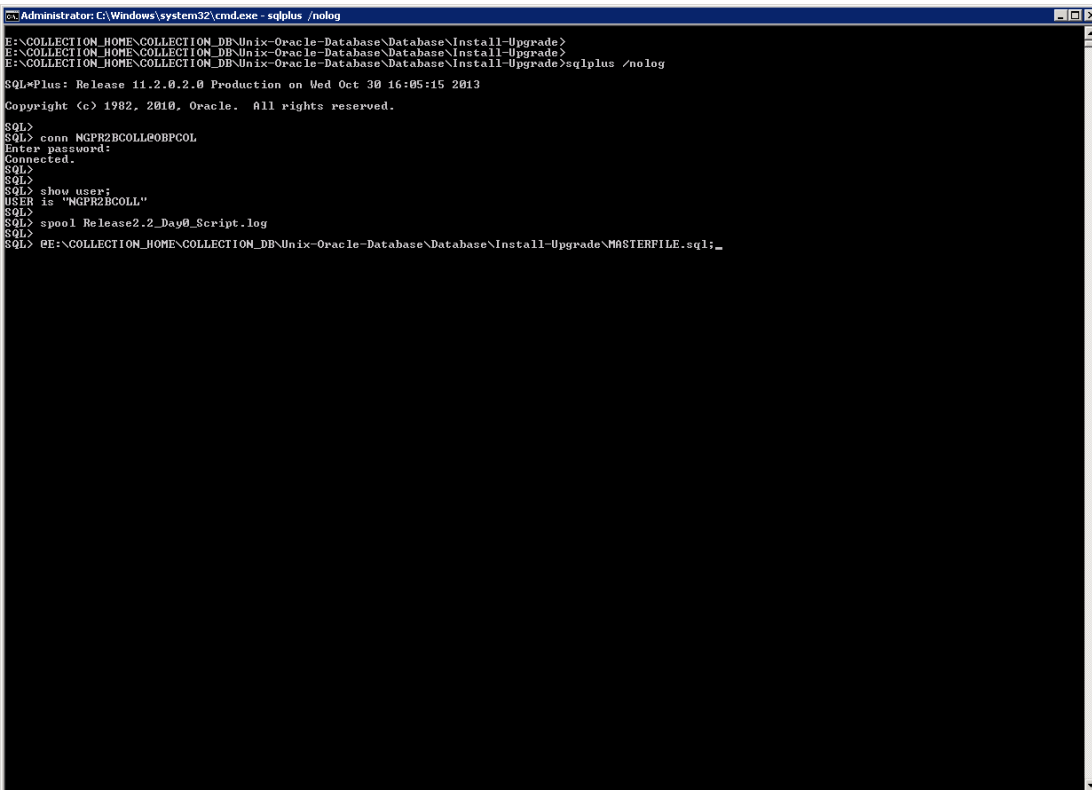
2 Day Zero Script Execution

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

Once CDXDBI.exe utility completes its work, execute the following SQL file on the database.

```
<COLLECTION_HOME>\<COLLECTION_DB>\Windows-Oracle-Database\Upgrade\Oracle\Install-Upgrade\MASTERFILE.sql
```

Figure 2–1 Executing Masterfile.sql



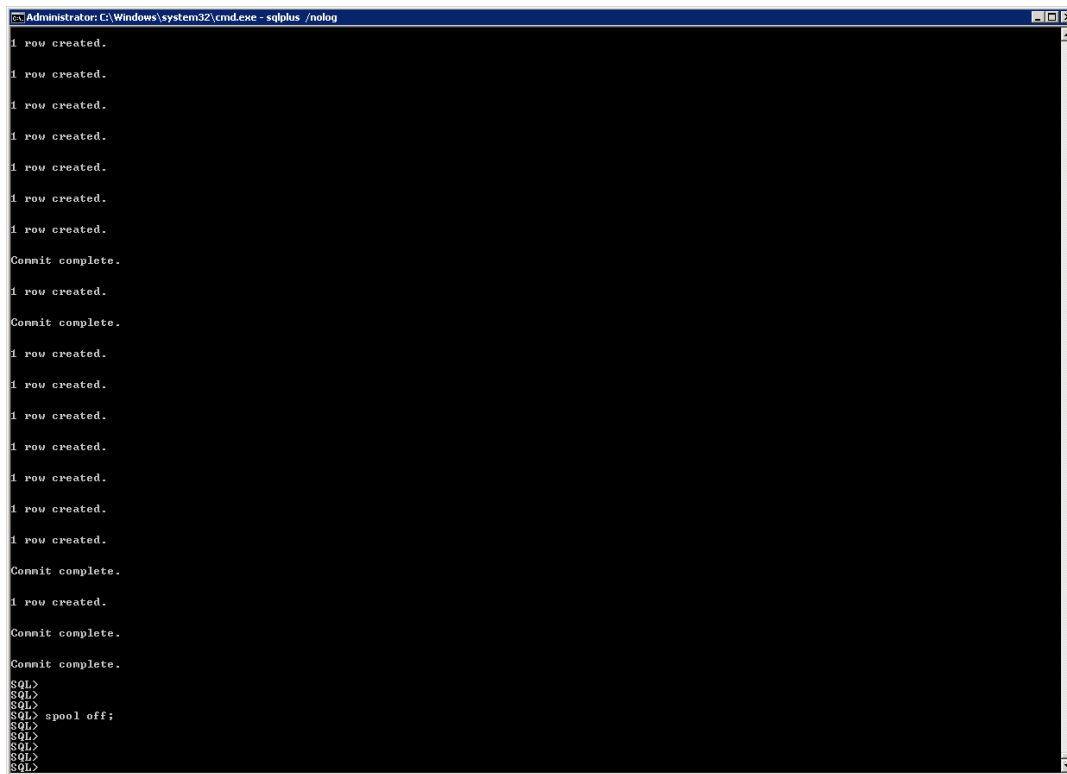
```
Administrator: C:\Windows\system32\cmd.exe - sqlplus /nolog
E:\<COLLECTION_HOME>\<COLLECTION_DB>\Unix-Oracle-Database\Database\Install-Upgrade>
E:\<COLLECTION_HOME>\<COLLECTION_DB>\Unix-Oracle-Database\Database\Install-Upgrade>
E:\<COLLECTION_HOME>\<COLLECTION_DB>\Unix-Oracle-Database\Database\Install-Upgrade>sqlplus /nolog

SQL*Plus: Release 11.2.0.2.0 Production on Wed Oct 30 16:05:15 2013
Copyright (c) 1982, 2010, Oracle. All rights reserved.

SQL>
SQL> conn NGPR2BCOLL@OBPCOL
Enter password:
Connected.
SQL>
SQL>
SQL> show user;
USER is "NGPR2BCOLL"
SQL>
SQL> spool Release2.2_Day0_Script.log
SQL>
SQL> @E:\<COLLECTION_HOME>\<COLLECTION_DB>\Unix-Oracle-Database\Database\Install-Upgrade\MMASTERFILE.sql;_

```

Figure 2–2 Execution Result



```
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.
1 row created.
Commit complete.
1 row created.
Commit complete.
Commit complete.
SQL>
SQL>
SQL>
SQL> spool off;
SQL>
SQL>
SQL>
SQL>
```

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

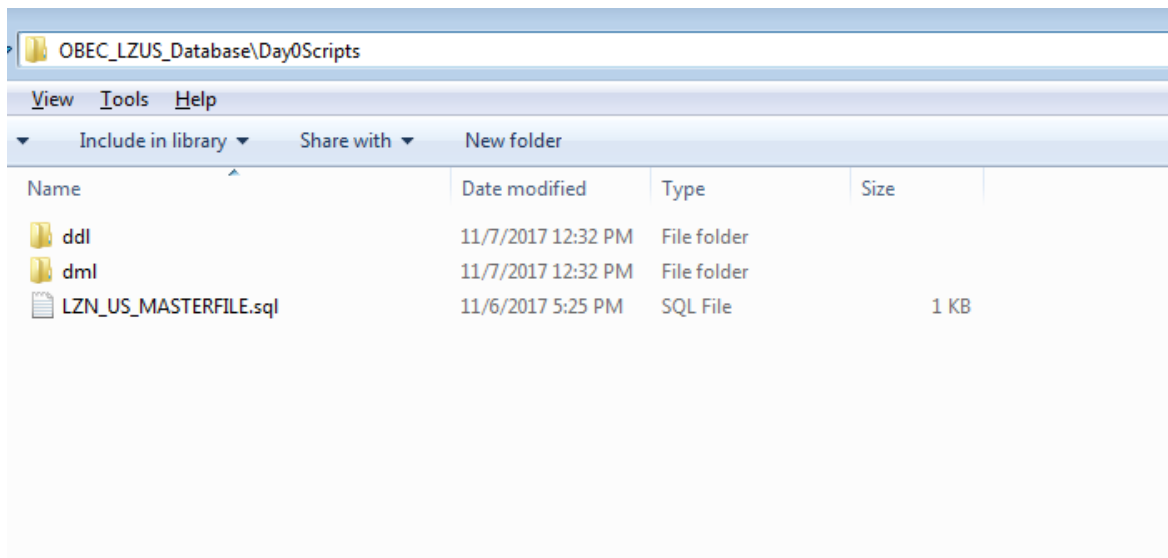
3 Day Zero Script Execution for US Localization

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 2.9.0.0.0 LZ US media pack.
2. Navigate to unzipped folder.

Figure 3–1 Day Zero folder for US Localization



3. Execute the following SQL file on the database.

LZN_US_MASTERFILE.sql

Figure 3–2 Day Zero folder for US Localization execution

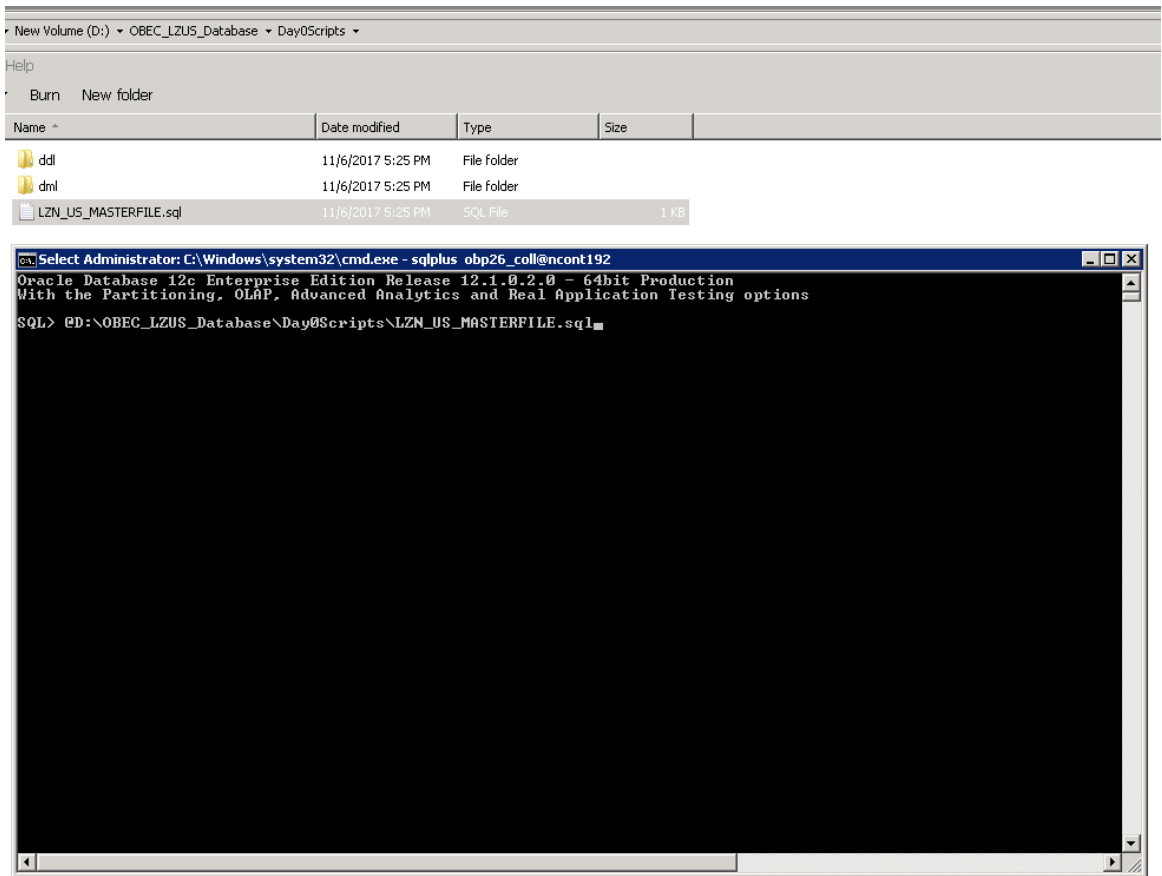
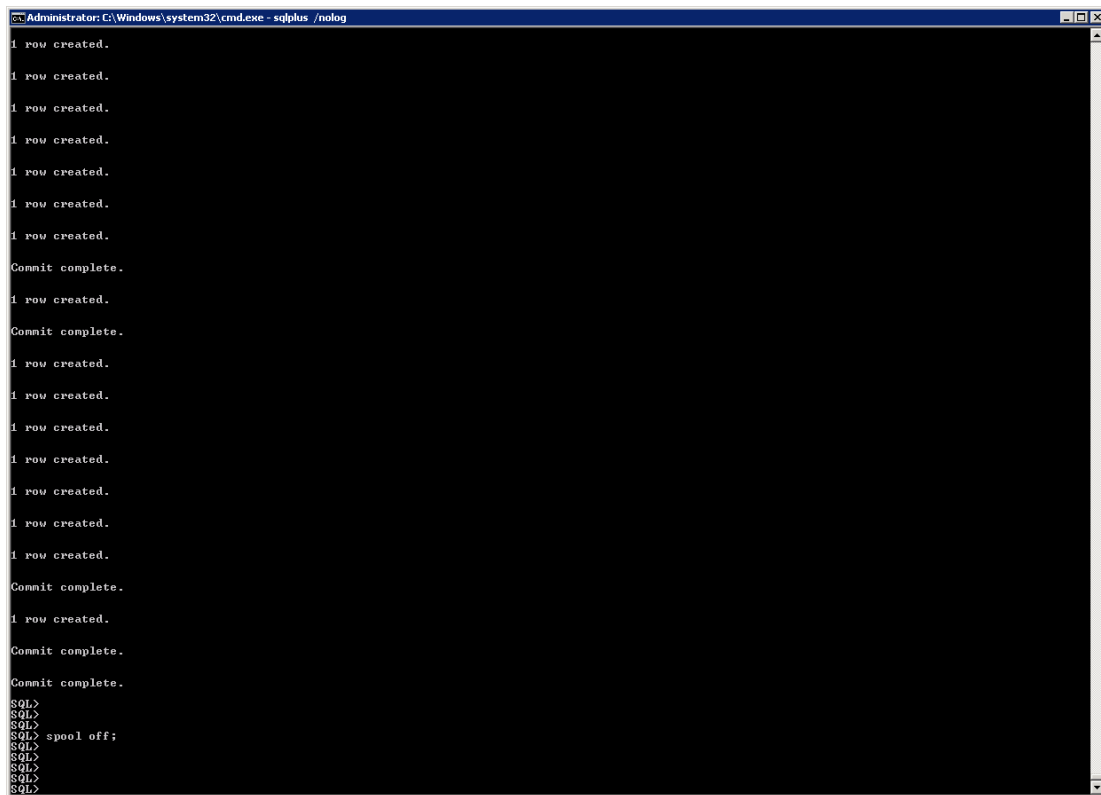


Figure 3–3 Day Zero folder for US Localization execution



```
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.
1 row created.
Commit complete.
1 row created.
Commit complete.
Commit complete.
SQL>
SQL>
SQL>
SQL> spool off;
SQL>
SQL>
SQL>
SQL>
SQL>
```


4 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