

**Oracle® Banking Platform Collections**

DBA Guide

Release 2.3.1.0.0

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# Preface

This document describes the initial installation of the OBP Collection Application Database blueprints on an existing OBP 2.3.0.0.0 database.

This preface contains the following topics:

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

## Audience

This document is intended for the following:

- Consulting Staff
- Administrators

## Documentation Accessibility

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## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	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.





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# Oracle Database Application

This chapter explains the Oracle Database application Installation process.

The files for the initial install of the OBP Collection application are located in the <COLLECTION\_HOME>\<COLLECTION\_DB>\Unix-Oracle-Database\Database\Install-Upgrade folder.

This folder contains the scripts and utilities that you will run in order to complete the installation process.

The process prompts for the names of three database users during this process:

- A user that will own the application schema. For example, CISADM, NGPR2BCOLL.
- A user that has select, update, insert, or delete (read-write) privileges to the objects in the application schema. The application will access the database as this user. For example, CISUSER or <BLANK> (If there is no such user, you do not have to provide any name).
- A user with read-only privileges to the objects in the application schema. For example, CISREAD or <BLANK> (If there is no such user, you do not have to provide any name).

## 1.1 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 2.3 schema is available in the same instance of Oracle database.

### Installation Steps

Follow the steps below to install application database blue print:

1. Create a folder COLLECTION\_HOME and a subfolder COLLECTION\_DB inside the COLLECTION\_HOME folder.
2. Copy Unix-Oracle-Database.zip in the folder COLLECTION\_DB.
3. Unzip Unix-Oracle-Database.zip at the location where you want to install on the UNIX/Linux server.

The contents of the zip include sub folders which are referred to in the installation process mentioned below.

4. After extracting the zip file, browse to the folder <COLLECTION\_HOME>\<COLLECTION\_HOME>\Unix-Oracle-Database\Database\Install-Upgrade if it is an initial install else <COLLECTION\_HOME>\<COLLECTION\_HOME>\Unix-Oracle-Database\Upgrade\Install-Upgrade if it is an upgrade.
5. Edit the **Storage.par** 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:

```
TABLE:SC_USR_GRP_USR:CISTS_01  
INDEX:XC001P0:CISTS_01
```

Note that each record has 3 fields separated by a colon. The first field specifies the utility that the object is a TABLE or an INDEX. The second field stores the name of the object and the third contains the tablespace name (CISTS\_01) where the new objects should be created. It should be replaced if tablespace name is different.

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

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6. Run **CDXDDBI.exe**. The utility prompts you to enter values for the following parameters:
  - The name of the target database.
  - The password for the SYSTEM user account in the database (in silent mode).
  - The name of the owner of the Database Schema.
  - The password for the user (in silent mode).
  - Oracle user with read-write privileges to the Database Schema (If there is no such user, you do not have to enter any name).
  - Oracle user with read-only privileges to the Database Schema (If there is no such user, you do not have to enter any name).

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**Note:** You can execute the CDXDDBI.exe only on Windows machine.

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Figure 1–1 Executing CDXDBI.exe

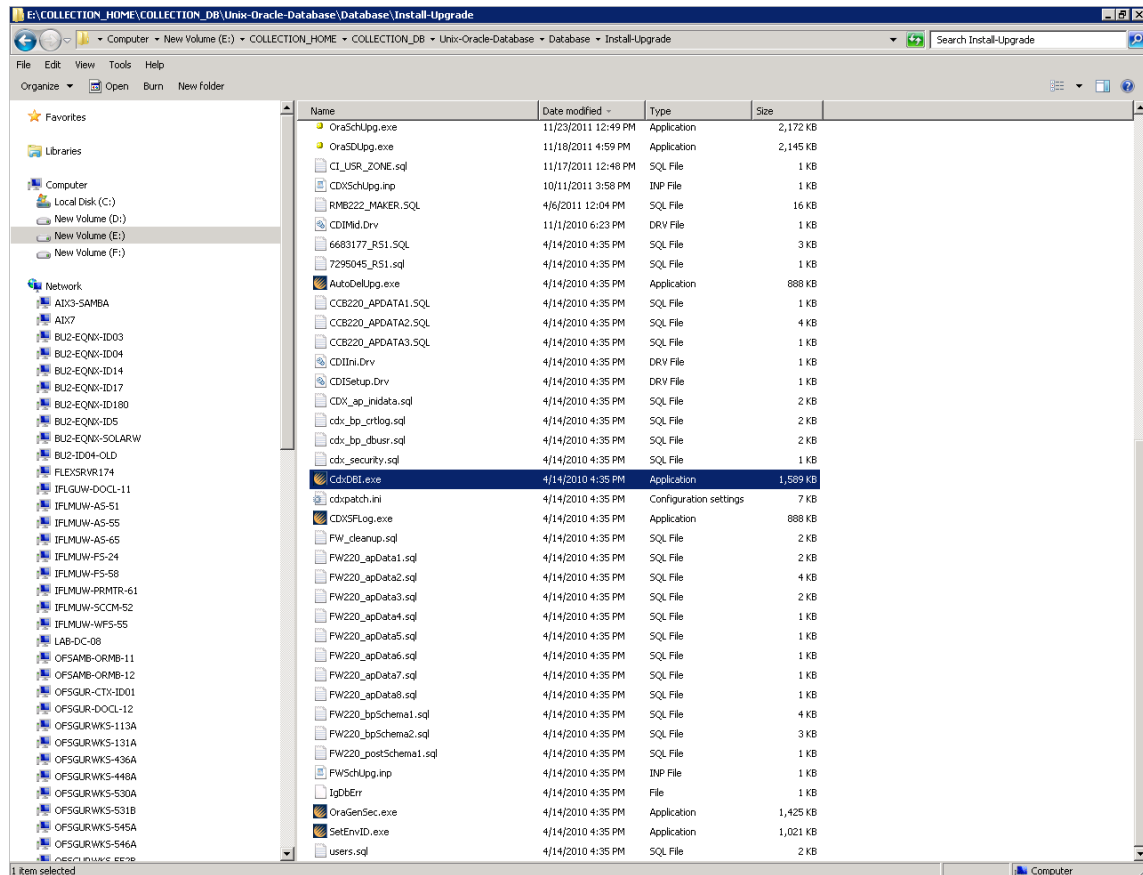
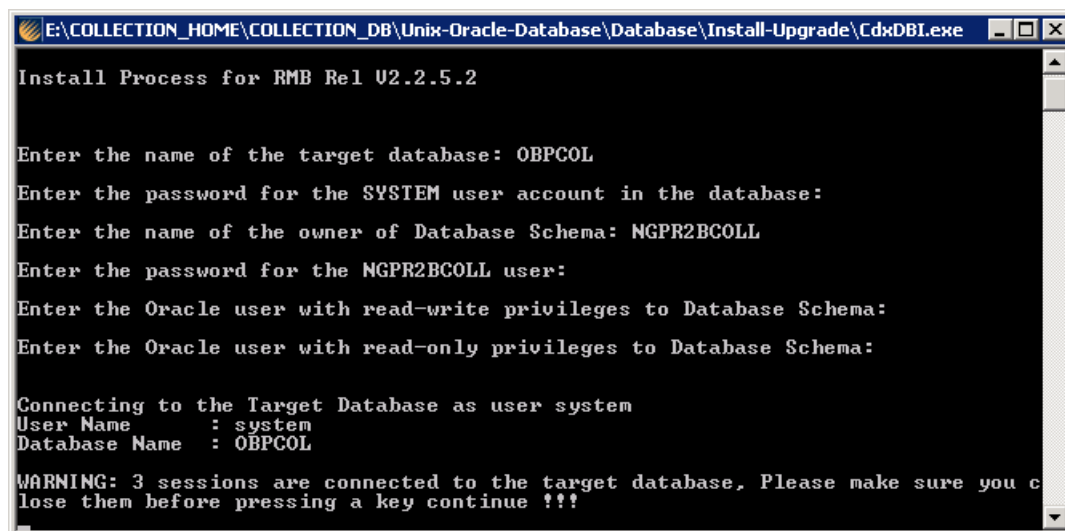


Figure 1–2 Install Process for RMB



**Figure 1–3 Executing Environment ID Setup Process**

```

E:\COLLECTION_HOME\COLLECTION_DB\Unix-Oracle-Database\Database\Install-Upgrade\CdxDBI.exe
Executing the Environment ID Setup Process
*****
Connecting to the OBPCOL as a NGPR2BCOLL user ...
Environment ID set to 442290
Environment ID Setup Process completed successfully, Now Exiting ...

Auto Delete Upgrade for Frameworks...

Running Auto System Data Deletion process in Modification Mode
Connecting to the Target Database
User Name      : NGPR2BCOLL
Database Name  : OBPCOL

Source Database character set: UTF8
Target Database character set: AL32UTF8
Possible character set conversion can cause data corruption, Do you want to continue? <Y/N> y
Ready to upgrade the target database, Do you want to continue? <Y/N> y

```

7. The utility at this point is ready to perform the initial install and prompts you for permission to start the process.
8. If you chose 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.
9. 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.
10. 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 1–4 Processing Collections\_Interaction.sql**

```

E:\COLLECTION_HOME\COLLECTION_DB\Unix-Oracle-Database\Database\Install-Upgrade\CdxDBI.exe
Processing file Collections_Interaction.sql ...
Processing file Synonyms.sql ...
Processing file delete_queries_for_main_menu.sql ...
Processing file delete_queries_for_admin_menu.sql ...

Populating Log for Single-fixes...

*****
Executing the Single-Fix logging process
*****
Connecting to the OBPCOL as a NGPR2BCOLL user ...
Single-fix logging process completed successfully, Now Exiting ...
Install/Upgrade of Database Rel.02.2.5.2 Completed Successfully, Now Exiting ...
Press Enter to Continue ...

```

## 1.2 Tasks Performed by CDXDBI

CDXDI performs the following tasks:

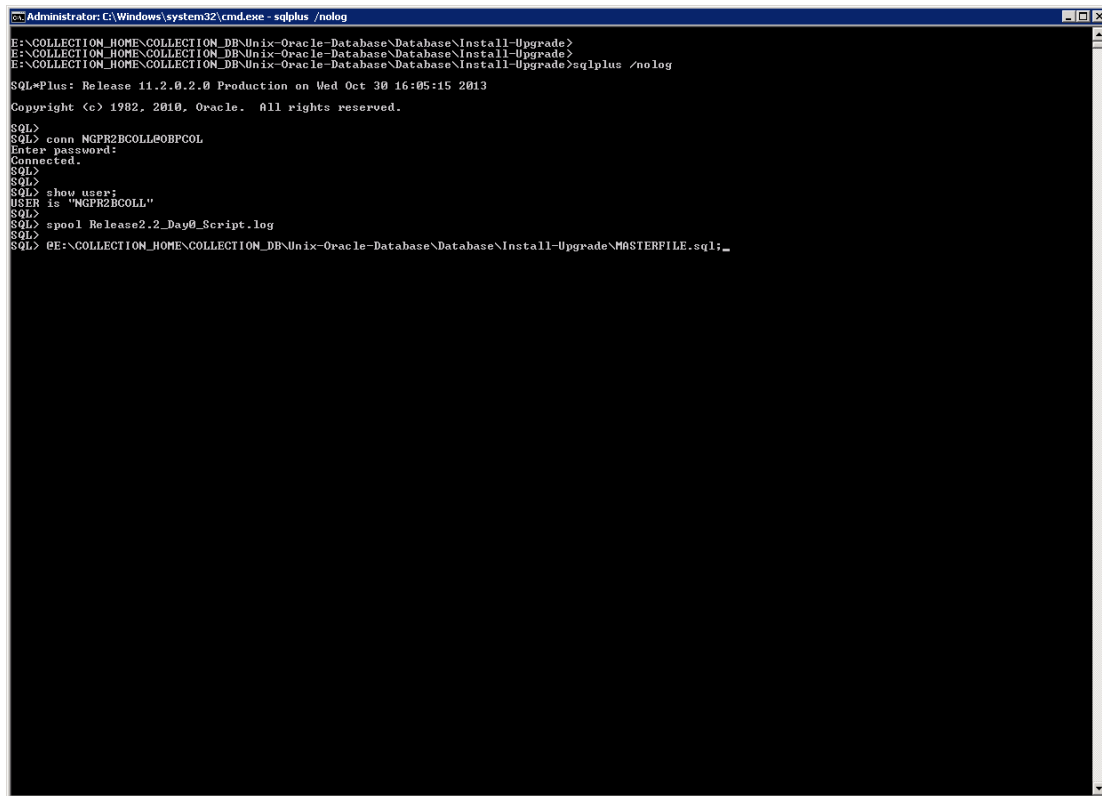
1. Interacts with the user to collect information about the name of Oracle account that will own the application schema (for example, CISADM1), password of this account, password of the SYSTEM account in the database, and the name of the Oracle account that the application user will use (for example, CISUSER), and the name of the Oracle account that will be assigned read-only privileges to the application schema (for example, CISREAD).
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.par 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.

## 1.3 Day Zero Script Execution

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

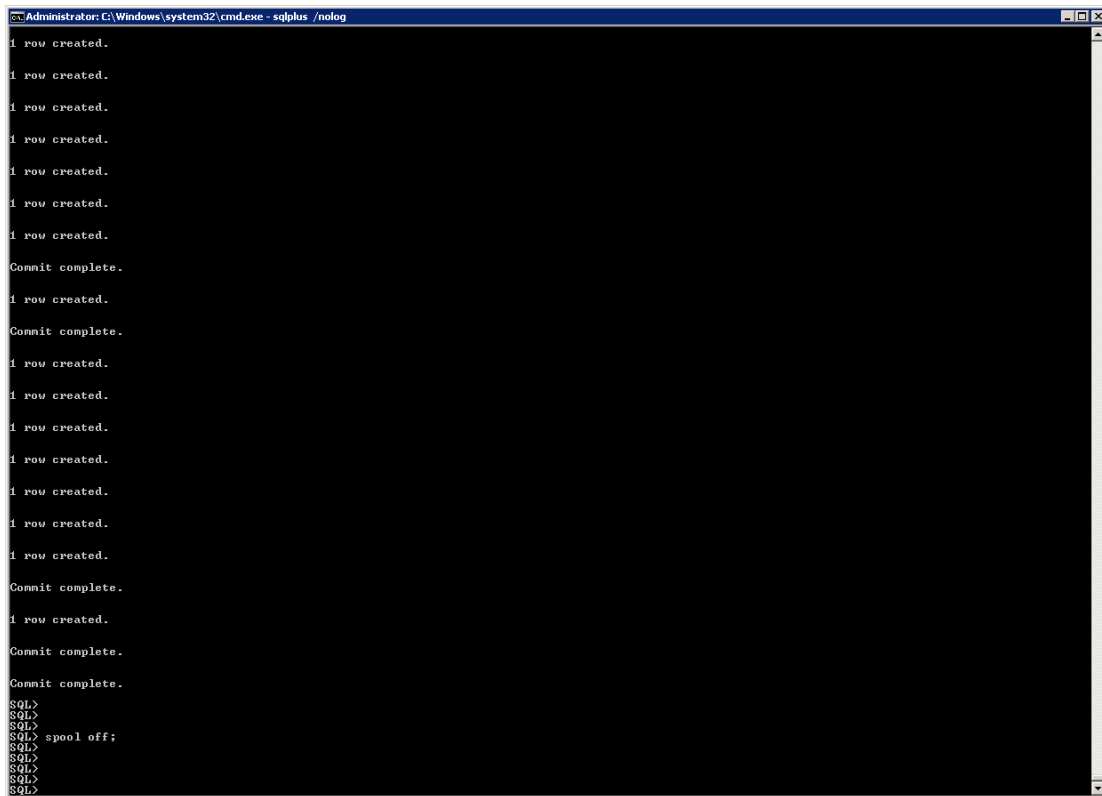
```
<COLLECTION_HOME>\<COLLECTION_  
DB>\Unix-Oracle-Database\Database\Install-Upgrade\MASTERFILE.sql
```

Figure 1-5 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 NGPR2BCOLLE0BPCOL
Enter password:
Connected.
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 1–6 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.
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.

## 1.4 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

Specify the following value with assumption that 100GB of RAM is available on the node.

MEMORY\_MAX\_TARGET = 50G

MEMORY\_TARGET = 40G

SGA\_TARGET = 30G

SGA\_MAX\_SIZE = 40G

DB\_CACHE\_SIZE = 4G

PGA\_AGGREGATE\_TARGET = 2G

STATISTICS\_LEVEL=TYPICAL

## 1.5 Large Redo Log File Sizes

The Redo Log files are written by the Log Writer Background process. These log files are written in a serial manner. Once a log file is full, a log switch occurs and the next log file starts getting populated. It is recommended that the size of the Redo Log files should be sufficiently high so that you do not see frequent log switches in the Alert logs of the database. Frequent log switches impact the IO performance and can be avoided by having a larger Redo Log File size.

We recommend you to set the Redo Log file size to at least 4GB or more, depending on the volume of transactions. This will help you to ensure that there are not more than 5 to 6 log switches per hour.