# Oracle Financial Services Revenue Management and Billing

Version 6.0.0.0.0

## **Upgrade Guide**

Revision 25.4

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Oracle Financial Services Revenue Management and Billing Upgrade Guide

**Note:** To improve the content readability, the Oracle Financial Services Revenue Management and Billing product is referred to as Oracle Revenue Management and Billing throughout this document.

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# Preface

## **About This Document**

This document will help you to understand how to upgrade the Oracle Revenue Management and Billing application and its database. It also explains how to upgrade the application framework.

## **Intended Audience**

This document is intended for the following audience:

- End-Users
- System Administrators
- Consulting Team
- Implementation Team

# **Organization of the Document**

The information in this document is organized into the following sections:

| Section No.  | Section Name   | Description   |
|--|--|---|
| Section 1  | Preparing for Upgrade  | Provides an overview of the upgrade process. It also lists the prerequisites for upgrading the application.                     |
| Section 2  | Upgrading from ORMB Version 5.1.0.0.0 to 6.0.0.0                             | Explains how to upgrade from Oracle<br>Revenue Management and Billing Version<br>5.1.0.0.0 to 6.0.0.0.0.                        |
| Section 3 Additional Tasks                             |  | Lists and describes the additional tasks that you need to perform after upgrading the application.                              |
| Appendix A   | Known IssuesLists the known issues in OracleManagement and Billing Version 6 |   |
| Appendix B   | Third-Party Software Upgrade   | Provides a list of third-party software that you need to upgrade before upgrading the application.                              |
| Appendix C New Tables Added in ORMB<br>Version 6.0.0.0 |  | Lists and describes the tables that are newly<br>added in Oracle Revenue Management and<br>Billing Version 6.0.0.0.0.           |
| Appendix D   | Existing Tables Modified in ORMB<br>Version 6.0.0.0                          | Lists the existing tables and their columns<br>that are modified in Oracle Revenue<br>Management and Billing Version 6.0.0.0.0. |

| Section No.  | Section Name   | Description  |
|--|--|--|
| Appendix E   | Algorithms and Algorithm Types<br>Dropped in ORMB Version<br>6.0.0.0.0 | Lists the algorithms and algorithm types<br>which are dropped in Oracle Revenue<br>Management and Billing Version 6.0.0.0.0.   |
| Appendix F Parameters Added or Removed<br>from Algorithm Types in ORMB<br>Version 6.0.0.0          |  | Lists the parameters which are added or<br>removed from the algorithm types in Oracle<br>Revenue Management and Billing Version<br>6.0.0.0.0.  |
| Appendix G Option Types Added or Removed<br>from Feature Configurations in<br>ORMB Version 6.0.0.0 |  | Lists the option types which are added or<br>removed from the feature configurations in<br>Oracle Revenue Management and Billing<br>Version 6.0.0.0.0.   |
| Appendix H   | Characteristic Types Dropped in ORMB Version 6.0.0.0.0                 | Lists the characteristic types which are dropped in Oracle Revenue Management and Billing Version 6.0.0.0.0.   |
| Appendix I Batch Controls Dropped in ORMB<br>Version 6.0.0.0                                       |  | Lists the batch controls which are dropped in<br>Oracle Revenue Management and Billing<br>Version 6.0.0.0.0.   |
| Appendix J Parameters Added or Removed<br>from Batch Controls in ORMB<br>Version 6.0.0.0           |  | Lists the parameters which are added or<br>removed from the batch controls in Oracle<br>Revenue Management and Billing Version<br>6.0.0.0.0.   |
| Appendix K Changing the DB User Password   |  | Explains how to change the database user password.   |
| Appendix L ORMB V6.0.0.0 Rollup Packs  |  | Lists the rollup packs available for Oracle<br>Revenue Management and Billing Version<br>6.0.0.0.0. It also explains how to apply a<br>rollup pack on the application environment<br>and database. |
| Appendix M New Tables Added in OUAF<br>Version 4.5.0.1.1   |  | Lists and describes the tables that are newly<br>added in Oracle Utilities Application<br>Framework Version 4.5.0.1.1.   |
| Appendix N Existing Tables Modified in OUAF Version 4.5.0.1.1                                      |  | Lists the existing tables and their columns<br>that are modified in Oracle Utilities<br>Application Framework Version 4.5.0.1.1.   |
| Appendix O   | SQL Statements for 5.1.0.0.0 to 6.0.0.0.0 Data Migration               | Lists and describes the query which is used<br>for migrating data from Oracle Revenue<br>Management and Billing Version 5.1.0.0.0 to<br>6.0.0.0.   |

| Section No. | Section Name  | Description  |  |
|-------------|---|--|--|
| Appendix P  | Parameters Added or Removed<br>from Batch Controls in OUAF<br>Version 4.5.0.1.1 | Lists the parameters which are added or<br>removed from the batch controls in Oracle<br>Utilities Application Framework Version<br>4.5.0.1.1.      |  |
| Appendix Q  | SQL Statements for 5.1.0.0.0 to 6.0.0.0.0 Data Migration                        | Lists and describes the query which is used<br>for migrating data from Oracle Revenue<br>Management and Billing Version 5.1.0.0.0 to<br>6.0.0.0.0. |  |

## **Conventions**

The following conventions are used across the document:

| Convention | Meaning  |
|------------|--|
| boldface   | Boldface indicates graphical user interface elements associated with an action, or terms defined in the text.  |
| italic     | Italic indicates a document or book title.   |
| monospace  | Monospace indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or information that an end-user needs to enter in the application. |

# Acronyms

| Acronym | Meaning                                |
|---------|--|
| ORMB    | Oracle Revenue Management and Billing  |
| OUAF    | Oracle Utilities Application Framework |
| FW      | Framework                              |
| INPD    | Initial Product Determined             |
| UPLD    | Uploaded                               |
| INVL    | Invalid                                |
| EROR    | Error                                  |
| СОМР    | Completed                              |
| CNCL    | Cancelled                              |
| FTP     | File Transfer Protocol                 |

The following acronyms are used in this document:

# **Related Documents**

You can refer to the following documents for more information:

| Document Name  | Description   |
|--|---|
| Oracle Revenue Management and Billing<br>Version 6.0.0.0.0 Release Notes | Provides a brief description about the new features,<br>enhancements, and UI level changes introduced in the<br>current release. The new features and enhancements<br>are classified under three distinct heads – Generic<br>(which is intended for both domains), Financial<br>Services, and Health Insurance. It also contains high-<br>level information about the supported platforms,<br>framework upgrade, supported upgrades, and<br>documentation updates. In addition, it contains a list of<br>discontinued features, planned deprecation notices,<br>customer bugs fixed or forward ported and known<br>issues in the current release. |
| Oracle Revenue Management and Billing<br>Upgrade Path Guide              | Explains the path and pre-requisites for upgrading Oracle Revenue Management and Billing from one version to another.   |
| Oracle Revenue Management and Billing<br>Direct Database Upgrade Guide   | Explains how to directly upgrade the ORMB database<br>from 2.5.0.1.0 or any later version to the current<br>release. It also highlights any known issues during<br>direct database upgrade and how to handle these<br>issues in the database.   |

# **Change Log**

| Revision | Last Update | Updated Section  | Comments            |
|----------|-------------|--|---------------------|
| 25.1     | 18-Oct-2023 | Section 2.5.2: Applying the Release-<br>Specific Patches   | Updated Information |
|          |             | Section 2.6: Upgrading the ORMB Database                   | Updated Information |
|          |             | Section 2.6.2: Applying the Release-<br>Specific Patches   | Updated Information |
|          |             | Appendix L: ORMB V6.0.0.0.0 Rollup<br>Packs                | Updated Information |
| 25.2     | 14-Dec-2023 | Section 3.3: Table Partitioning                            | Added Section       |
| 25.3     | 02-Jan-2024 | Section 2.5.4: Setting the C1-CFS<br>Feature Configuration | Updated Information |

| Revision | Last Update | Updated Section  | Comments            |
|----------|-------------|--|---------------------|
|          |             | Section 2.5.5: Setting the C1-<br>REPORTVW Feature Configuration | Updated Information |
|          |             | Section 2.5.6 Setting the C1-FLUPLD<br>Feature Configuration     | Updated Information |
| 25.4     | 29-Apr-2024 | Organization of the Document                                     | Updated Information |

# **Access to Oracle Support**

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# **1. Preparing for Upgrade**

This section provides an overview of the upgrade process. It also lists the pre-requisites for upgrading Oracle Revenue Management and Billing from one version to another.

# 1.1 Upgrade Overview

The following figure provides an overview of the steps that need to be taken for upgrading Oracle Revenue Management and Billing.

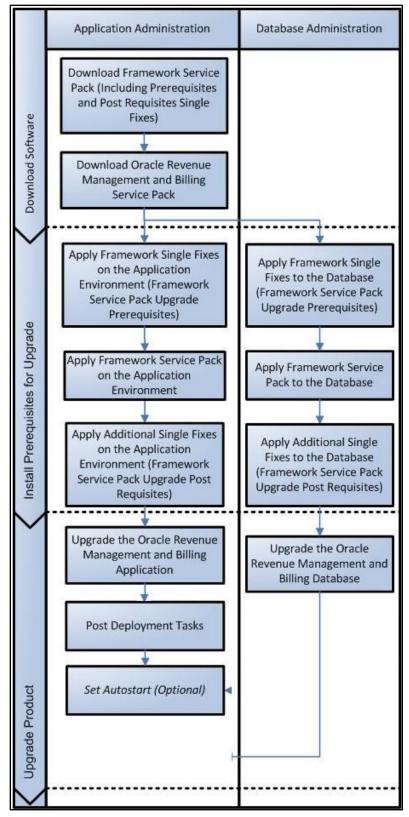


Figure 1: Upgrade Process

## **1.2 Upgrade Pre-requisites**

Before you upgrade Oracle Revenue Management and Billing, you need to upgrade the application framework as mentioned in the *Oracle Revenue Management and Billing Upgrade Path Guide*. While upgrading the application framework, you might have to apply some patches (additional single fixes) as pre-requisites or post-requisites.

Also, before you upgrade the application framework, you might have to upgrade some of the third-party software. For more information, refer to the **Upgrade Prerequisites** section in the *Oracle Revenue Management and Billing Upgrade Path Guide.* 

# **1.3 Supported Upgrades**

In this release, we support the following upgrades:

• Upgrade from Oracle Revenue Management and Billing Version 5.1.0.0.0 to 6.0.0.0.0

# 2. Upgrading from ORMB Version 5.1.0.0.0 to 6.0.0.0.0

This section explains how to upgrade from Oracle Revenue Management and Billing Version 5.1.0.0.0 to 6.0.0.0.0. The high-level steps include:

- 1. Downloading the OUAF and ORMB Packages
- 2. Upgrading Framework on the Database
- 3. Installing Framework on the Application Environment
- 4. Installing the ORMB Application
- 5. Upgrading the ORMB Database
- 6. Migrating Data

**Note:** Before you upgrade the application, you must take a backup of the application and the database.

# 2.1 **Prerequisites**

If you are already using the Transaction Feed Management feature and want to upgrade to Oracle Revenue Management and Billing Version 6.0.0.0, then you need to ensure the following (before upgrading):

- All bills generated in the system are in the **Complete** status. In other words, there should not be any bills in the **Pending** status. If there are any bills in the **Pending** status or if any billable charge (generated through TFM) is not yet billed, disaggregation and cancellation of transactions which are uploaded using 5.1.0.0.0 will not happen successfully.
- Transactions which are uploaded using 5.1.0.0.0 must not be in the Initial Product Determined (INPD) status. They can be in the Uploaded (UPLD), Invalid (INVL), Error (EROR), Completed (COMP), or Cancelled (CNCL) status.
- Equal to (=) or tilde (~) symbol is not used in any existing price item parameter code or value. Otherwise, erroneous results might occur.

Also, ensure that no data exists in the **CI\_BCHG\_TEMP** table before you start the upgrade process. If there is data in the **CI\_BCHG\_TEMP** table, it means all billing batches are not yet executed for a set of bills. We recommend you to either complete the billing process for such bills by executing all the billing batches or delete the data from the **CI\_BCHG\_TEMP** table. Otherwise, erroneous results might occur when you execute the billing batches after the upgrade.

# 2.2 Downloading the OUAF and ORMB Packages

For upgrading from Oracle Revenue Management and Billing Version 5.1.0.0.0 to 6.0.0.0.0, you must download the following packages from the **Oracle Financial Services Revenue Management and Billing 6.0.0.0.0** media pack which is available on <u>Oracle Software Delivery Cloud</u>:

• Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup

- Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 Multiplatform
- Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 Oracle Database

You must also download the following packages from the **Oracle Utilities Application Framework 4.5.0.1.1** media pack which is available on <u>Oracle Software Delivery Cloud</u>:

- Oracle Utilities Application Framework 4.5.0.1.1 Application Installation Media
- Oracle Utilities Application Framework 4.5.0.1.1 Database Installation Media

In addition, you must download the following patch from <u>My Oracle Support</u>:

• UPGRADE FROM 5.1.0.0.0 TO 6.0.0.0.0 (Patch Number: 35789534)

The downloaded files will be in the ZIP format.

## 2.2.1 Downloading the OUAF Packages

Oracle Utilities Application Framework 4.5.0.1.1 media pack can be installed on the following supported platforms:

- AIX (64-bit)
- Microsoft Windows (64-bit)
- Linux (64-bit)

The media pack includes the following packages - Oracle Utilities Application Framework 4.5.0.1.1 - Database Installation Media and Oracle Utilities Application Framework 4.5.0.1.1 - Application Installation Media.

To download the OUAF packages:

- 1. Login to <u>Oracle Software Delivery Cloud</u>.
- 2. Select the **Release** option from the **All Categories** list.
- 3. Type **Oracle Utilities Application Framework** in the corresponding text box.
- 4. Click Search. A list of media packs appears in the search results.
- 5. Click the **Select** (<sup>sec</sup>) icon corresponding to the **Oracle Utilities Application Framework 4.5.0.1.1** media pack.
- 6. If required, you can verify the media pack which is selected by clicking the **View Items** link.
- 7. Click the **Continue** link. A page appears.
- 8. Select the required platform from the **Platforms/Languages** list.
- 9. Click **Continue**. A page appears with the license agreement.
- 10. Scroll and read the entire license agreement and then click the I reviewed and accept the Oracle License Agreement option.
- 11. Click **Continue**. The **File Download** page appears.
- 12. Select the following packages from the media pack:
  - Oracle Utilities Application Framework 4.5.0.1.1 Application Installation Media
  - Oracle Utilities Application Framework 4.5.0.1.1 Database Installation Media
- 13. Click **Download**. An executable file is downloaded on your local machine.
- 14. Run the executable file. The Oracle Download Manager window appears.

15. Browse to the location where you want to download the packages and then click **Next**. The packages are downloaded on your local machine.

## 2.2.2 Downloading the ORMB Packages

Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 media pack can be installed on the following supported platforms:

- AIX (64-bit)
- Microsoft Windows (64-bit)
- Linux (64-bit)

The media pack includes multiple packages. For more information, refer to the **Media Pack Contents** section in the *Oracle Revenue Management and Billing Version 6.0.0.0 Quick Installation Guide*.

To download the ORMB packages:

- 1. Login to Oracle Software Delivery Cloud.
- 2. Select the **Release** option from the **All Categories** list.
- 3. Type **Oracle Financial Services Revenue Management and Billing** in the corresponding text box.
- 4. Click Search. A list of media packs appears in the search results.
- 5. Click the Select (<sup>(C)</sup>) icon corresponding to the Oracle Financial Services Revenue Management and Billing 6.0.0.0 media pack.
- 6. If required, you can verify the media pack which is selected by clicking the **View Items** link.
- 7. Click the **Continue** link. A page appears.
- 8. Select the required platform from the **Platforms/Languages** list.
- 9. Click **Continue**. A page appears with the license agreement.
- 10. Scroll and read the entire license agreement and then click the I reviewed and accept the Oracle License Agreement option.
- 11. Click Continue. The File Download page appears.
- 12. Select the following packages from the media pack:
  - Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup
  - Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 Multiplatform
  - Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 Oracle Database
- 13. Click **Download**. An executable file is downloaded on your local machine.
- 14. Run the executable file. The **Oracle Download Manager** window appears.
- 15. Browse to the location where you want to download the packages and then click **Next**. The packages are downloaded on your local machine.

# 2.3 Upgrading Framework on the Database

While upgrading from Oracle Revenue Management and Billing Version 5.1.0.0.0 to 6.0.0.0.0, you need to install the following on the database:

1. Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.1

2. <u>Rollup Pack for Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.1</u>

To install the framework and its service packs on the database, you must have ability to connect to the database.

### 2.3.1 Pre-requisites

Before installing Oracle Utilities Application Framework Version 4.5.0.1.1, you need to do the following:

- Set the MAX\_STRING\_SIZE parameter to EXTENDED For more information, refer to the Setting the MAX\_STRING\_SIZE Parameter to EXTENDED topic of the Initial Install or Installing Version 6.0.0.0 for the First Time section in the Oracle Revenue Management and Billing Database Administrator's Guide.
- Assign the Execute privilege for the DBMS\_CRYPTO package to the CISADM user For more information, refer to the Enabling the DBMS\_CRYPTO Package topic of the Initial Install or Installing Version 6.0.0.0 for the First Time section in the Oracle Revenue Management and Billing Database Administrator's Guide.
- Set the interval partitioning for the F1\_MO\_UPD and F1\_MO\_UPD\_BACKLOG tables For more information, refer to the Partitioning F1\_MO\_UPD and F1\_MO\_UPD\_BACKLOG Tables section of the Oracle Revenue Management and Billing Database Administrator's Guide.

## 2.3.2 Installing OUAF Version 4.5.0.1.1

To install Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.1:

- 1. Login to the database server using the administrator's credentials.
- 2. Create a temporary folder (for example, TEMPDIR) on the database server using the following command:

mkdir TEMPDIR

3. Copy the **Oracle Utilities Application Framework 4.5.0.1.1 - Database Installation Media** package to the TEMPDIR folder using the following command:

AIX, Linux:

cp <PATH>/<filename>.zip <PATH>/TEMPDIR

Windows:

copy <PATH>\<filename>.zip <PATH>\TEMPDIR

**Note:** You can also use File Transfer Protocol (FTP) to transfer the downloaded file from one host to another. You must use the binary mode while copying files through FTP.

4. Change to the TEMPDIR folder using the following command:

AIX, Linux:

cd <PATH>/TEMPDIR

Windows:

cd <PATH>\TEMPDIR

5. Unzip the Oracle Utilities Application Framework 4.5.0.1.1 - Database Installation Media package using the following command:

#### AIX, Linux:

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 1>

#### Windows:

unzip <filename>.zip -d <PATH>\<DESTINATION\_FOLDER\_1>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_1> folder. The contents include the following sub-folders:

- Install-Upgrade
- jarfiles
- 6. Set the JAVA HOME environment variable using the following command:

#### AIX, Linux:

export JAVA HOME=<JAVA HOME PATH>

#### Windows:

SET JAVA HOME=<JAVA HOME PATH>

**Note:** The <JAVA HOME PATH> is the location where Java Development Kit Version 8.0 is installed.

7. Set the JAR\_PATH environment variable using the following command:

#### AIX, Linux:

export JAR PATH=<DESTINATION FOLDER 1>/jarfiles

#### Note:

The above command is applicable only for AIX and Linux platforms.

The <DESTINATION\_FOLDER\_1> folder is the location where you have extracted the contents of the Oracle Utilities Application Framework 4.5.0.1.1 - Database Installation Media package.

8. Set the CLASS PATH environment variable using the following command:

#### AIX, Linux:

```
export CLASS_PATH=$JAR_PATH/commons-cli-
1.5.0.jar:$JAR_PATH/commons-codec-1.17-744clc9.jar:$JAR_PATH/
jackson-annotations-2.14.0-rc2.jar:$JAR_PATH/jackson-core-2.14.0-
rc2.jar:$JAR_PATH/jackson-databind-2.14.0-
rc2.jar:$JAR_PATH/log4j-api-2.17.1.jar:$JAR_PATH/log4j-core-
2.17.1.jar:$JAR_PATH/ojdbc8-19.12.0.0.0.jar:$JAR_PATH/spl-oradbi-
4.5.0.1.1.jar:$JAR_PATH/spl-shared-4.5.0.1.1.jar
```

#### Windows:

```
SET CLASS PATH=<DESTINATION FOLDER 1>\jarfiles\*
```

9. Change to the Install-Upgrade folder using the following command:

#### AIX, Linux:

cd <DESTINATION FOLDER 1>/Install-Upgrade

#### Windows:

cd <DESTINATION FOLDER 1>\Install-Upgrade

10. Execute the OraDBI (Java) utility using the following command:

#### AIX, Linux:

```
$JAVA_HOME/bin/java -Xmx1500M -cp $CLASS_PATH
com.oracle.ouaf.oem.install.OraDBI -d jdbc:oracle:thin:
@<DB_SERVER_NAME>:<DB_PORT>:<DB_NAME>, <SCHEMA_NAME>,
<SCHEMA_PASSWORD>, <READWRITE_USER>, <READONLY_USER>,
<READWRITE_ROLE>, <READONLY_ROLE>, <SCHEMA NAME> -p
<READWRITE_USER_PASSWORD>, <READONLY_USER_PASSWORD> -1 1,2 -q
true
```

#### Windows:

%JAVA\_HOME%\bin\java -Xmx1500M -cp %CLASS\_PATH% com.oracle.ouaf.oem.install.OraDBI -d jdbc:oracle:thin: @<DB\_SERVER\_NAME>:<DB\_PORT>:<DB\_NAME>, <SCHEMA\_NAME>, <SCHEMA\_PASSWORD>, <READWRITE\_USER>, <READONLY\_USER>, <READWRITE\_ROLE>, <READONLY\_ROLE>, <SCHEMA NAME> -p <READWRITE\_USER\_PASSWORD>, <READONLY\_USER\_PASSWORD> -1 1,2 -q true

The following message appears in the command line:

```
Ready to upgrade the target database from V4.5.0.0.0 to V4.5.0.1.1, do you want to continue (Y/N)?
```

11. Type **Y** and then press **Enter**. A message appears indicating that the process is completed successfully.

## 2.3.3 Installing Rollup Pack for OUAF Version 4.5.0.1.1

You can install the rollup pack for Oracle Utilities Application Framework Version 4.5.0.1.1 from a Windows machine or UNIX Standalone server. To install the rollup pack for Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.1 on the database:

- 1. Login to the database server using the administrator's credentials.
- Copy the Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup package to the TEMPDIR folder using the following command:

<u>AIX, Linux:</u>

cp <PATH>/<filename>.zip <PATH>/TEMPDIR

Windows:

copy <PATH>\<filename>.zip <PATH>\TEMPDIR

**Note:** You can also use File Transfer Protocol (FTP) to transfer the downloaded file from one host to another. You must use the binary mode while copying files through FTP.

3. Change to the **TEMPDIR** folder using the following command:

#### AIX, Linux:

cd <PATH>/TEMPDIR

#### Windows:

cd <PATH>\TEMPDIR

4. Unzip the Oracle Financial Services Revenue Management and Billing 6.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup package using the following command:

AIX, Linux:

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 2>

#### Windows:

unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 2>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_2> folder. The contents include the ORMB-V60000-FW-PREREQ-MultiPlatform.jar file.

5. Change to the <DESTINATION FOLDER 2> folder using the following command:

#### AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_2>
```

#### Windows:

```
cd <PATH>\<DESTINATION FOLDER 2>
```

6. Decompress the JAR file using the following command:

```
jar -xvf ORMB-V60000-FW-PREREQ-MultiPlatform.jar
```

A sub-folder named FW-V4.5.0.1.1-Rollup is extracted. It contains the following two sub-folders:

- Application
- Database
- 7. Change to the **TEMPDIR** folder using the following command:

#### AIX, Linux:

cd <PATH>/TEMPDIR

#### Windows:

cd <PATH>\TEMPDIR

8. Create a folder named dbpatch tools using the following command:

mkdir dbpatch tools

- 9. Create the db\_patch\_standalone.jar file on the application server. For more information, refer to the **Database Patching Process** section in the *Oracle Revenue Management and Billing Installation Guide*.
- 10. Copy the db\_patch\_standalone.jar file from the SPLEBASE/tools/dbstandalone folder to the dbpatch tools folder.
- 11. Change to the dbpatch tools folder using the following command:

#### AIX, Linux:

```
cd <PATH>/TEMPDIR/dbpatch tools
```

#### Windows:

```
cd <PATH>\TEMPDIR\dbpatch tools
```

12. Decompress the JAR file using the following command:

jar -xvf db patch standalone.jar

The contents are extracted in the dbpatch\_tools folder. The contents include the following three sub-folders:

- bin
- config
- lib
- 13. Set the **TOOLSBIN** environment variable using the following command:

#### AIX, Linux:

export TOOLSBIN=/TEMPDIR/dbpatch\_tools/bin

#### Windows:

SET TOOLSBIN=TEMPDIR\dbpatch\_tools\bin

14. Change to the Database folder using the following command:

#### AIX, Linux:

cd <DESTINATION FOLDER 2>/FW-V4.5.0.1.1-Rollup/Database

#### Windows:

cd <DESTINATION\_FOLDER\_2>\FW-V4.5.0.1.1-Rollup\Database

Note: The <DESTINATION\_FOLDER\_2> folder is the location where you have extracted the contents of the ORMB-V60000-FW-PREREQ-MultiPlatform.jar file.

15. Execute the ouafDatabasePatch utility using the following command:

#### <u>AIX, Linux:</u>

ouafDatabasePatch.sh

#### Windows:

ouafDatabasePatch.cmd

This utility prompts you to enter values for the following parameters:

| Parameter                      | Value   |
|--------------------------------|---|
| Enter the target database type | <ul> <li>(if you have Oracle database)</li> </ul>     |
| (O/M/D) [O]                    | OR  |
|                                | M (if you have MySQL database)                        |
| Enter the username that owns   | <db_user></db_user>                                   |
| the schema                     | Example: CISADM                                       |
| Enter the password for the     | <db_user_password></db_user_password>                 |
| <db_user> user</db_user>       |   |
| Enter the name of the Oracle   | <db_server:db_port:db_sid></db_server:db_port:db_sid> |
| Database Connection String     | OR  |
|                                | <db_server:db_port db_name=""></db_server:db_port>    |

**Note:** If you have changed the database user password, you will not be able to install the rollup pack for Oracle Utilities Application Framework Version 4.5.0.1.1. You will have to first change the database user password. For more information on how to change the database user password, refer to <u>Appendix K:</u> <u>Changing the DB User Password</u>.

16. Enter the required parameter values. The following message appears in the command line:

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

17. Type **Y** and then press **Enter**. A message appears indicating that the patches are applied successfully.

## 2.4 Installing Framework on the Application Environment

Once you install the framework and its rollup pack on the database, you need to install the following on the application environment:

- 1. Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.1
- 2. Rollup Pack for Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.1

You must not perform these steps on the existing environments. Instead, you must create new development and production/UAT environments on the application server and then perform the steps listed in this section.

### 2.4.1 Installing OUAF Version 4.5.0.1.1

To install Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.1 on the application environment:

- 1. Login to the application server using the administrator's credentials.
- 2. Create a temporary folder (for example, TEMPDIR) on the application server using the following command:

mkdir TEMPDIR

3. Copy the **Oracle Utilities Application Framework 4.5.0.1.1** - **Application Installation Media** package to the TEMPDIR folder using the following command:

AIX, Linux:

cp <PATH>/<filename>.zip <PATH>/TEMPDIR

#### Windows:

copy <PATH>\<filename>.zip <PATH>\TEMPDIR

**Note:** You can also use File Transfer Protocol (FTP) to transfer the downloaded file from one host to another. You must use the binary mode while copying files through FTP.

4. Change to the TEMPDIR folder using the following command:

#### <u>AIX, Linux:</u>

cd <PATH>/TEMPDIR

#### Windows:

cd <PATH>\TEMPDIR

5. Unzip the **Oracle Utilities Application Framework 4.5.0.1.1** - **Application Installation Media** package using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 1>
```

#### Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 1>
```

The contents of the zip file are extracted in the  $<DESTINATION\_FOLDER\_1>$  folder. The contents include a directory named FW-V4.5.0.1.1. The contents of the installation package are identical for all supported platforms. The FW-V4.5.0.1.1 folder contains the OUAF installation software.

6. Install and configure the required third-party software for the application server.

**Note**: You must install the prerequisite third-party software depending on the platform on which you want to install Oracle Utilities Application Framework. For more details, refer to the **Installing Application Server Prerequisite Software** section in the *Oracle Revenue Management and Billing Installation Guide*.

7. Set the Java Home path using the following command:

export PATH=/<Java Home>/bin:\$PATH

#### Points to Note:

The <Java\_Home> is the location where you have installed Java 1.8.

The above command is applicable only for AIX and Linux platforms.

8. Change to the FW-V4.5.0.1.1 folder using the following command:

#### AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/FW-V4.5.0.1.1
```

#### Windows:

```
cd <DESTINATION FOLDER 1>\FW-V4.5.0.1.1
```

**Note**: The <DESTINATION\_FOLDER\_1> folder is the location where you have extracted the contents of the **Oracle Utilities Application Framework 4.5.0.1.1 - Application Installation Media** package.

9. Execute the install utility using the following command:

#### <u>AIX, Linux:</u>

ksh ./install.sh

#### Windows:

install.cmd

The following message appears in the command line:

Enter Oracle Client Home Folder (<Enter> quit):

**Note:** In Microsoft Windows platform, the installation must be on a New Technology File System (NTFS). The script will error out if the filesystem is not NTFS.

- 10. Type <ORACLE\_CLIENT\_HOME>, and then press Enter. The following environment installation menus appear in the command line:
  - 1. Environment ID, Roles, Third Party Software Configuration
  - 2. Keystore Options
  - 50. Environment Installation Options

#### Points to Note:

The <ORACLE\_CLIENT\_HOME> is the location where Oracle Database Client is installed. This is required to execute the Perl installation utilities.

If the ORACLE\_CLIENT\_HOME environment variable is set, the installation utility will not request you to provide this information.

- 11. Type **1** to define values for the third-party software configuration, and then press **Enter**. The utility prompts you to enter values for a list of menu options.
- 12. Specify the required value for menu options, and then press Enter. The specified values are stored in the \$SPLEBASE/etc/ENVIRON.INI file.

**Note**: For more details about these menu options, refer to the **Environment ID**, **Roles**, **Third Party Software Configuration** section in the *Oracle Revenue Management and Billing Installation Guide*.

- 13. Type **2** to define values for the keystore options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.
- 14. Specify the required value for menu options, and then press Enter. The specified values are stored in the SPLEBASE/etc/ENVIRON.INI file.

**Note**: For more details about these menu options, refer to the **Keystore Options** section in the *Oracle Revenue Management and Billing Installation Guide*.

- 15. Type **50** to define values for the environment installation options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.
- 16. Specify the required value for menu options, and then press Enter. The specified values are stored in the \$SPLEBASE/etc/ENVIRON.INI file.

#### Points to Note:

**\$SPLEBASE** or **\$SPLEBASE**% is the path where the application environment is installed.

Before you specify the environment installation options, ensure that you have created an output folder named Log File Mount Point. If this output folder does not exist, the installation will not be successfully executed.

For more details about these menu options, refer to the **Environment Installation Options** section in the *Oracle Revenue Management and Billing Installation Guide*.

- 17. Type **P** to proceed with the installation. The following environment configuration menus appear in the command line:
  - 1. Environment Description
  - 2. Business Application Server Configuration
  - 3. Web Application Server Configuration
  - 4. Database Configuration
  - 5. General Configuration Options
  - 6. OUAF TrustStore Options

18. Type **1**, and then press **Enter**. The utility prompts you to enter the environment description.

19. Specify the environment description, and then press Enter. The specified values are stored in the \$SPLEBASE/etc/ENVIRON.INI file.

**Note**: For more details, refer to the **Environment Description** section in the Oracle Revenue Management and Billing Installation Guide.

- 20. Type **2** to define values for the business application server configuration, and then press **Enter**. The utility prompts you to enter values for a list of menu options.
- 21. Specify the required value for menu options, and then press Enter. The specified values are stored in the \$SPLEBASE/etc/ENVIRON.INI file.

**Note:** For more details, refer to the **Business Application Server Configuration** section in the Oracle Revenue Management and Billing Installation Guide.

- 22. Type **3** to define values for the web application server configuration, and then press **Enter**. The utility prompts you to enter values for a list of menu options.
- 23. Specify the required value for menu options, and then press Enter. The specified values are stored in the \$SPLEBASE/etc/ENVIRON.INI file.

**Note:** For more details, refer to the **Web Application Server Configuration** section in the *Oracle Revenue Management and Billing Installation Guide*.

- 24. Type **4** to define values for the database configuration, and then press **Enter**. The utility prompts you to enter values for a list of menu options.
- 25. Specify the required value for menu options, and then press Enter. The specified values are stored in the \$SPLEBASE/etc/ENVIRON.INI file.

**Note**: For more details about these menu options, refer to the **Database Configuration** section in the *Oracle Revenue Management and Billing Installation Guide*.

- 26. Type **5** to define values for the general configuration options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.
- 27. Specify the required value for menu options, and then press Enter. The specified values are stored in the \$SPLEBASE/etc/ENVIRON.INI file.

**Note**: For more details about these menu options, refer to the **General Configuration Options** section in the *Oracle Revenue Management and Billing Installation Guide*.

- 28. Type **6** to define values for the OUAF TrustStore Options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.
- 29. Specify the required value for menu options, and then press Enter. The specified values are stored in the \$SPLEBASE/etc/ENVIRON.INI file.

**Note:** For more details about these menu options, refer to the **OUAF TrustStore Options** section in the *Oracle Revenue Management and Billing Installation Guide*.

30. Type **P** to proceed with the installation. The Oracle Utilities Application Framework Version 4.5.0.1.1 is installed on the application server.

#### Points to Note:

The utility contains default values for some of the menu options. If required, you can change their values. While executing the install utility, you must set the value for the required menu options. Otherwise, the installation process will not be completed successfully.

You will be warned if you did not edit a section. You may proceed if you want to keep the default settings.

Once the installation process is completed, the following utilities are automatically executed in the specified order:

1. initialSetup - The initialSetup utility updates the configuration files including the WAR files on the system. On the UNIX machine, this utility is available in the \$SPLEBASE/bin folder. And, on the Windows machine, this utility is available in the \$SPLEBASE\$\bin folder.

2. splenviron – The splenviron utility sets the environment variables using the ENVIRON.INI file. On the UNIX machine, this utility is available in the <code>\$SPLEBASE/bin</code> folder. And, on the Windows machine, this utility is available in the <code>%SPLEBASE%/bin</code> folder. The following are some of the key environment variables that are set using the <code>splenviron</code> utility:

- → \$PATH
- → \$SPLEBASE (%SPLEBASE%) Indicates the <SPLDIR>/<SPLENVIRON> folder
- → \$SPLOUTPUT (%SPLOUTPUT%) Indicates the <SPLDIROUT>/<SPLENVIRON> folder
- → \$SPLENVIRON (%SPLENVIRON%) Indicates the environment name

For future operations or any post installation steps, you need to first execute the following command to connect your session to the new environment:

#### <u>AIX, Linux:</u>

#### \$SPLEBASE/bin/splenviron.sh -e \$SPLENVIRON

#### Windows:

#### %SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%

You need to execute this script each time you want to be connected to the specific environment before performing manual operations such as shutdown, start-up or performing an additional application product installation.

When you have finished the install process, your current online session will be connected to the new environment.

## 2.4.2 Installing Rollup Pack for OUAF Version 4.5.0.1.1

To install the rollup pack for Oracle Utilities Application Framework Version 4.5.0.1.1 on the application environment:

1. Copy the Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup package to the TEMPDIR folder using the following command:

#### AIX, Linux:

cp <PATH>/<filename>.zip <PATH>/TEMPDIR

#### Windows:

copy <PATH>\<filename>.zip <PATH>\TEMPDIR

**Note:** You can also use File Transfer Protocol (FTP) to transfer the downloaded file from one host to another. You must use the binary mode while copying files through FTP.

2. Change to the **TEMPDIR** folder using the following command:

#### AIX, Linux:

cd <PATH>/TEMPDIR

#### Windows:

cd <PATH>\TEMPDIR

3. Unzip the Oracle Financial Services Revenue Management and Billing 6.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup package using the following command:

#### AIX, Linux:

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 2>

#### Windows:

unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 2>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_2> folder. The contents include the ORMB-V60000-FW-PREREQ-MultiPlatform.jar file.

4. Decompress the JAR file using the following command:

jar -xvf ORMB-V60000-FW-PREREQ-MultiPlatform.jar

A sub-folder named FW-V4.5.0.1.1-Rollup is extracted. It contains the following two sub-folders:

- Application
- Database
- 5. Initialize the application environment where you want to install the rollup pack using the following command:

#### AIX, Linux:

\$SPLEBASE/bin/splenviron.sh -e \$SPLENVIRON

#### Windows:

%SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%

6. Change to the Application folder using the following command:

#### AIX, Linux:

cd <DESTINATION\_FOLDER\_2>/FW-V4.5.0.1.1-Rollup/Application

#### Windows:

cd <DESTINATION FOLDER 2>\FW-V4.5.0.1.1-Rollup\Application

Note: The <DESTINATION\_FOLDER\_2> folder is the location where you have extracted the contents of the ORMB-V60000-FW-PREREQ-MultiPlatform.jar file.

7. Execute the installSFgroup utility using the following command:

#### <u>AIX, Linux:</u>

```
chmod a+x installSFgroup.sh
chmod a+x FW*/*.sh
./installSFgroup.sh
```

#### Windows:

installSFgroup.cmd

The following message appears in the command line:

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

8. Type **Y** in the command line, and then press **Enter**. A message appears indicating that the process has been completed successfully.

## 2.5 Installing the ORMB Application

This section explains how to install the application. You need to install the following on the application environment:

- 1. Oracle Revenue Management and Billing (ORMB) Version 6.0.0.0.0
- 2. Oracle Revenue Management and Billing (ORMB) Version 6.0.0.0.0 Post Requisite Patches

**Note:** If you have updated the template files in the *\$SPLEBASE/etc* folder, you must also take a backup of these files. Once the application is installed on the new application environment, you need to copy the latest template files in the *\$SPLEBASE/etc* folder.

Once you install the application, you can access the application. For more information on how to access the application, refer to the <u>Accessing the ORMB Application</u> section.

After accessing the application, you need to set the following feature configurations:

- <u>C1-CFS</u>
- <u>C1-REPORTVW</u>
- <u>C1-FLUPLD</u>

### 2.5.1 Installing ORMB Version 6.0.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 6.0.0.0.0 on the application environment:

- 1. Login to the application server using the administrator's credentials.
- 2. Copy the **Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 Multiplatform** package to the TEMPDIR folder using the following command:

#### AIX, Linux:

cp <PATH>/<filename>.zip <PATH>/TEMPDIR

#### Windows:

copy <PATH>\<filename>.zip <PATH>\TEMPDIR

**Note:** You can also use File Transfer Protocol (FTP) to transfer the downloaded file from one host to another. You must use the binary mode while copying files through FTP.

3. Change to the **TEMPDIR** folder using the following command:

#### AIX, Linux:

cd <PATH>/TEMPDIR

#### Windows:

cd <PATH>\TEMPDIR

4. Unzip the Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 - Multiplatform package using the following command:

#### AIX, Linux:

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 3>

#### Windows:

unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 3>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_3> folder. The contents include ORMB.V6.0.0.0.0 folder.

5. Initialize the application environment (on which you want to install the application) using the following command:

#### AIX, Linux:

\$SPLEBASE/bin/splenviron.sh -e \$SPLENVIRON

#### Windows:

%SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%

- 6. Stop the managed server where the application is hosted using the Oracle WebLogic Console.
- 7. Change to the ORMB.V6.0.0.0 folder using the following command:

#### AIX, Linux:

cd <DESTINATION FOLDER 3>/ORMB.V6.0.0.0

#### Windows:

cd <DESTINATION FOLDER 3>\ORMB.V6.0.0.0

8. Execute the install utility using the following command:

#### AIX, Linux:

./install.sh

#### Windows:

install.cmd

The following message appears in the command line:

Do you wish to proceed with the installation? Y/N:

- 9. Type **Y** and then press **Enter**. A message appears informing you to type P if you want to proceed with the installation.
- 10. Type **P**, and then press **Enter**.

#### **Points to Note:**

If you want to set the advanced menu options, execute the configureEnv utility using the following command:

#### AIX, Linux:

\$SPLEBASE/bin/configureEnv.sh -a

Windows:

%SPLEBASE%\bin\configureEnv.cmd -a

You cannot set the advanced menu options during the installation process. These options can be set only after the application is installed. For more information, refer to the **Advanced Menu Options** section in the *Oracle Revenue Management and Billing Installation Guide*.

## 2.5.2 Applying the Release-Specific Patches

Once you install Oracle Revenue Management and Billing (ORMB) Version 6.0.0.0.0, you need to apply the release-specific patches on the application environment. To view the list of patches that you need to apply on the application environment, refer to the <u>ORMB V6.0.0.0 Patch Guide</u> (Document ID: 2978216.1) on <u>My Oracle Support</u>.

Alternatively, instead of individually applying the patches, you can download and install the rollup packs, if available, to apply a set of patches at once. For more information about the rollup packs, refer to <u>Appendix L: ORMB V6.0.0.0 Rollup Packs</u>.

To apply a patch:

- 1. Download the patch from <u>My Oracle Support</u>. A zip file is downloaded.
- 2. Unzip the downloaded file using the following command:

#### <u>AIX, Linux:</u>

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 4>

Windows:

unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 4>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_4> folder. The contents include three files - README.txt, MultiPlatform.zip, and Bug <PATCH NUMBER> Product Fix Design.pdf.

3. Unzip the MultiPlatform.zip file using the following command:

#### AIX, Linux:

```
unzip <DESTINATION_FOLDER_4>/MultiPlatform.zip -d
<PATH>/<DESTINATION FOLDER 5>
```

#### Windows:

```
unzip <DESTINATION_FOLDER_4>\MultiPlatform.zip -d
<PATH>\<DESTINATION FOLDER 5>
```

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_5> folder. The contents include the V6.0.0.0-<PATCH NUMBER> MultiPlatform folder.

4. Change to the V6.0.0.0-<PATCH\_NUMBER>\_MultiPlatform folder using the following command:

#### AIX, Linux:

```
cd <DESTINATION FOLDER 5>/V6.0.0.0-<PATCH NUMBER> MultiPlatform
```

#### <u>Windows:</u>

```
cd <DESTINATION FOLDER 5>\V6.0.0.0-<PATCH NUMBER> MultiPlatform
```

**Note:** The <DESTINATION\_FOLDER\_5> folder is the location where you have extracted the contents of the MultiPlatform.zip file.

The contents include a file named CCB.V6.0.0.0.0-<PATCH\_NUMBER>.jar and a directory named database.

5. Decompress the CCB.V6.0.0.0.0-<PATCH\_NUMBER>.jar file using the following command:

jar -xvf CCB.V6.0.0.0.-<PATCH NUMBER>.jar

The contents include two sub-folders - META-INF and CCB.V6.0.0.0-<PATCH NUMBER>.

6. Initialize the application environment (on which you want to install the patch) using the following command:

#### AIX, Linux:

\$SPLEBASE/bin/splenviron.sh -e \$SPLENVIRON

#### Windows:

%SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%

#### Where,

\$SPLEBASE or %SPLEBASE% is the path where the application environment is installed and \$SPLENVIRON or %SPLENVIRON% is the name of the application environment.

7. Change to the CCB.V6.0.0.0.0-<PATCH NUMBER> folder using the following command:

#### AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V6.0.0.0.0-
<PATCH_NUMBER>_MultiPlatform/CCB.V6.0.0.0.0-<PATCH_NUMBER>
```

#### Windows:

```
cd <DESTINATION_FOLDER_5>\V6.0.0.0-
<PATCH NUMBER> MultiPlatform\CCB.V6.0.0.0.0-<PATCH NUMBER>
```

8. Install the patch using the following command:

#### AIX, Linux:

./installSF.sh

#### Windows:

installSF.cmd

9. Start the managed server using the Oracle WebLogic Console.

## 2.5.3 Accessing the ORMB Application

The following table lists the URLs that you can use to access the application on various application servers:

| Application Server | URL   |
|--------------------|---|
| Oracle WebLogic    | https:// <hostname>:<weblogic_port_number>/ouaf/loginPage.jsp</weblogic_port_number></hostname> |

### 2.5.4 Setting the C1-CFS Feature Configuration

The **C1-CFS** feature configuration enables you to indicate whether the application environment should use the file object storage service of Oracle Cloud Infrastructure (OCI). If the file object storage service of OCI is used, you need to specify the buckets or containers within the Object Storage namespace from where you need to read files for the On Demand Billing and Payment Upload features. Before specifying the buckets to read files from the external location for the On Demand Billing and Payment Upload features, you need to define a file storage extendable lookup value using the **File Storage Configuration** (F1-FileStorage) extendable lookup where the file adapter is set to **Oracle Cloud Object Storage**. For more information on how to define a file storage extendable lookup value, refer to the **Oracle Utilities** Application Framework Administrative Processes  $\rightarrow$  Configuration Tools  $\rightarrow$  Miscellaneous Topics  $\rightarrow$  Referencing URIs  $\rightarrow$  External File Storage in Oracle Revenue Management and Billing Online Help.

To set the **C1-CFS** feature configuration:

- 1. Login to Oracle Revenue Management and Billing Version 6.0.0.0.0.
- 2. Click the Admin link in the Application toolbar. A list appears.
- 3. From the Admin menu, select F and then click Feature Configuration. A sub-menu appears.
- 4. Click the **Search** option from the **Feature Configuration** sub-menu. The **Feature Configuration Query** screen appears.
- 5. In the Feature Configuration Search zone, enter C1-CFS in the Feature Name field.
- 6. Click **Search**. A list of feature configurations that meet the search criteria appears in the search results.
- In the Search Results section, click the link in the Description column corresponding to the feature configuration whose details you want to edit. The Feature Configuration screen appears. It contains the following option types:

| Option Type               | Description  | Mandatory (Yes or No) |
|---------------------------|--|-----------------------|
| File Object Storage Usage | Used to indicate whether the application<br>environment should use the file object storage<br>service of Oracle Cloud Infrastructure (OCI).<br>The valid values are: | Yes                   |

| Option Type                                  | Description   | Mandatory (Yes or No) |
|--|---|-----------------------|
|  | <ul> <li>Y</li> <li>N</li> <li>Points to Note:</li> <li>By default, the value is set to N.</li> <li>You must ensure that the value of this option type is set to N in the On Premise and Cloud Service environments.</li> <li>If the value of this option type is set to Y, you need to accordingly specify the directory paths while executing the DWLDBILC, C1-PUPSG, C1-APACK, and C1-RECUP batches.</li> <li>For more information, refer to the Oracle Revenue Management and Billing Batch Guide.</li> </ul> |                       |
| ODB Extendable Lookup<br>and Bucket          | <ul> <li>Used to specify the following information in the <file extendable="" lookup="" storage="" value="">/<object bucket="" storage=""> format:</object></file></li> <li>The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while uploading the files through the On Demand Billing feature.</li> <li>The bucket or container from where you want to upload the file using the On Demand Billing feature.</li> </ul>                       | Yes (Conditional)     |
|  | <b>Note:</b> This option type is required only when<br>the <b>File Object Storage Usage</b> option type is<br>set to <b>Y</b> and you want to use the On Demand<br>Billing feature.   |                       |
| Payment Upld Extendable<br>Lookup and Bucket | <ul> <li>Used to specify the following information in the <file extendable="" lookup="" storage="" value="">/<object bucket="" storage=""> format:</object></file></li> <li>The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while uploading the files through the Payment Upload feature.</li> <li>The bucket or container from where you want to upload the file using the Payment Upload feature.</li> </ul>                             | Yes (Conditional)     |

| Option Type | Description  | Mandatory (Yes or No) |
|-------------|--|-----------------------|
|             | <b>Note:</b> This option type is required only when<br>the <b>File Object Storage Usage</b> option type is<br>set to <b>Y</b> and you want to use the Payment<br>Upload feature. |                       |

- 8. Set the File Object Storage Usage option type to N.
- 9. Click the **Save** button in the **Page Title** area. The changes made to the feature configuration are saved.

### 2.5.5 Setting the C1-REPORTVW Feature Configuration

You need to set the **C1-REPORTVW** feature configuration only when you are using the Apache FOP Reporting framework in ORMB. It enables you to define the following properties which were earlier derived from the spl.properties file:

- ouaf.runtime.billView.directoryPath
- ouaf.runtime.reportView.directoryPath
- ouaf.application.reportingDir

To set the **C1-REPORTVW** feature configuration:

- 1. Login to Oracle Revenue Management and Billing Version 6.0.0.0.0.
- 2. Click the **Admin** link in the **Application** toolbar. A list appears.
- 3. From the Admin menu, select F and then click Feature Configuration. A sub-menu appears.
- 4. Click the **Search** option from the **Feature Configuration** sub-menu. The **Feature Configuration Query** screen appears.
- 5. In the Feature Configuration Search zone, enter C1-REPORTVW in the Feature Name field.
- 6. Click **Search**. A list of feature configurations that meet the search criteria appears in the search results.
- 7. In the **Search Results** section, click the link in the **Description** column corresponding to the feature configuration whose details you want to edit. The **Feature Configuration** screen appears. It contains the following option types:

| Option Type                          | Description   | Mandatory (Yes or No) |
|--------------------------------------|---|-----------------------|
| Report Download HTTP<br>URL          | Used to specify the HTTP servlet using which<br>you want to download and view the FOP<br>reports that are generated in the online mode.<br>You must specify the URL in the following<br>format:<br><u>https://ipaddress:port/ouaf/reportView</u><br><b>Note:</b> You must override the default value as<br>per the requirement. | Yes                   |
| Report Generation<br>(FOP) File Path | Used to specify the directory or bucket where you want to store the FOP reports which are   | Yes                   |

| Option Type                                 | Description  | Mandatory (Yes or No) |
|---|--|-----------------------|
|   | generated either from the user interface or through a batch process.   |                       |
|   | If the application environment is an On<br>Premise or Cloud Service environment, you can<br>specify the directory name along with the<br>following relative path:  |                       |
|   | • <b>@SHARED_DIR</b> – Used when you want to store the FOP reports in the shared directory on the server.  |                       |
|   | For example, you can set the value to @SHARED_DIR/output.  |                       |
|   | However, if the application environment is a<br>Cloud Service Premium Edition environment,<br>you must specify the following information in<br>the file-storage:// <file extendable<br="" storage="">Lookup Value&gt;/<object bucket="" storage=""><br/>format:</object></file>                          |                       |
|   | • The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while storing the FOP reports on OCI  |                       |
|   | • The bucket or container where you want the system to store the FOP reports which are generated in the different formats.   |                       |
|   | Points to Note:<br>By default, the value is set to<br>@SHARED_DIR/splapp/reporting/output.<br>You must change the value as per the<br>requirement.   |                       |
|   | The shared directory variable (i.e. <b>SHARED_DIR</b> ) is case-sensitive.   |                       |
| Report Generation XSL<br>Template File Path | Used to specify the directory or bucket from<br>where the respective XSL file should be fetched<br>while generating the FOP report.<br>If the application environment is an On<br>Premise or Cloud Service environment, you can<br>specify the directory name along with the<br>following relative path: | Yes                   |

| Option Type                             | Description   | Mandatory (Yes or No) |
|---|---|-----------------------|
|   | <ul> <li>@SHARED_DIR – Used when you want<br/>to fetch the XSL file from the shared<br/>directory on the server.</li> </ul>   |                       |
|   | For example, you can set the value to @SHARED_DIR/xsl.  |                       |
|   | However, if the application environment is a<br>Cloud Service Premium Edition environment,<br>you must specify the following information in<br>the file-storage:// <file extendable<br="" storage="">Lookup Value&gt;/<object bucket="" storage=""><br/>format:</object></file> |                       |
|   | <ul> <li>The file storage extendable lookup<br/>value from where the cloud storage<br/>compartment and connection details<br/>are retrieved while fetching the XSL file<br/>for an FOP report.</li> </ul>   |                       |
|   | • The bucket or container from where you want the system to fetch the XSL file while generating the FOP report.   |                       |
|   | Points to Note:   |                       |
|   | By default, the value is set to<br><b>@SHARED_DIR/splapp/reporting/xsl</b> . You<br>must change the value as per the requirement.   |                       |
|   | The shared directory variable (i.e.<br>SHARED_DIR) is case-sensitive.   |                       |
|   | Before generating an FOP report, you need to<br>ensure that the XSL files are copied from the<br><b>@INSTALL_DIR/splapp/reporting/xsl</b><br>directory to the specified shared directory.   |                       |
| Report Generation<br>XML Data File Path | Used to specify the directory or bucket where you want to extract the data from the system in the XML format for an FOP report.   | Yes                   |
|   | If the application environment is an On<br>Premise or Cloud Service environment, you can<br>specify the directory name along with the<br>following relative path:   |                       |
|   | <ul> <li>@SHARED_DIR – Used when you want<br/>to store the XML file in the shared<br/>directory on the server.</li> </ul>   |                       |
|   | For example, you can set the value to @SHARED_DIR/extractxml.   |                       |

| Option Type | Description   | Mandatory (Yes or No) |
|-------------|---|-----------------------|
|             | However, if the application environment is a<br>Cloud Service Premium Edition environment,<br>you must specify the following information in<br>the file-storage:// <file extendable<br="" storage="">Lookup Value&gt;/<object bucket="" storage=""><br/>format:</object></file> |                       |
|             | <ul> <li>The file storage extendable lookup<br/>value from where the cloud storage<br/>compartment and connection details<br/>are retrieved while storing the XML file<br/>on OCI.</li> </ul>   |                       |
|             | • The bucket or container where you want the system to store the XML file for an FOP report.  |                       |
|             | Points to Note:   |                       |
|             | By default, the value is set to<br><b>@SHARED_DIR/splapp/reporting/extractxml</b> .<br>You must change the value as per the<br>requirement.   |                       |
|             | The shared directory variable (i.e. SHARED_DIR) is case-sensitive.  |                       |

- 8. Enter the values for the required option types in the Feature Configuration screen.
- 9. Click the **Save** button in the **Page Title** area. The changes made to the feature configuration are saved.

### 2.5.6 Setting the C1-FLUPLD Feature Configuration

You need to set the **C1-FLUPLD** feature configuration only when you want to decrypt the encrypted files on the SFTP server while uploading and transforming the files through the **C1-FTRAN** batch. The **C1-FRDALG** algorithm is used to decrypt the file using the keystore. Earlier, the following properties were derived from the FW\_spl.properties.keystore.truststore.include file to encrypt or decrypt the files using the keystore:

- com.oracle.ouaf.system.keystore.file
- com.oracle.ouaf.system.keystore.passwordFileName
- com.oracle.ouaf.system.keystore.type
- com.oracle.ouaf.system.keystore.padding
- com.oracle.ouaf.system.keystore.mode
- com.oracle.ouaf.system.keystore.alias
- ouaf.system.fileupload.pgp.pvt.key.filepath

Now, the **C1-FLUPLD** feature configuration enables you to specify the required details to encrypt or decrypt the files using the keystore.

To set the **C1-FLUPLD** feature configuration:

- 1. Login to Oracle Revenue Management and Billing Version 6.0.0.0.0.
- 2. Click the **Admin** link in the **Application** toolbar. A list appears.
- 3. From the Admin menu, select F and then click Feature Configuration. A sub-menu appears.
- 4. Click the **Search** option from the **Feature Configuration** sub-menu. The **Feature Configuration Query** screen appears.
- 5. In the Feature Configuration Search zone, enter C1-FLUPLD in the Feature Name field.
- 6. Click **Search**. A list of feature configurations that meet the search criteria appears in the search results.
- In the Search Results section, click the link in the Description column corresponding to the feature configuration whose details you want to edit. The Feature Configuration screen appears. It contains the following option types:

| Option Type               | Description  | Mandatory (Yes or No) |
|---------------------------|--|-----------------------|
| File Decryption Key Alias | Used to specify the alias (i.e. key defined in the keystore) using which you want to encrypt or decrypt the files.   | Yes                   |
|                           | <b>Note:</b> By default, the value is set to <b>ouaf.system</b> . You can change the value as per the requirement.   |                       |
| Key Store File Path       | <ul> <li>Used to specify the directory or bucket from where you want to fetch the keystore file.</li> <li>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path: <ul> <li>@SHARED_DIR – Used when you want to fetch the keystore file from the shared directory on the server.</li> </ul> </li> <li>For example, you can set the value to @SHARED_DIR/.ouaf_keystore.</li> <li>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://<file extendable="" lookup="" storage="" value="">/<object bucket="" storage=""> format:</object></file></li> <li>The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while fetching the keystore file on OCI.</li> </ul> | Yes                   |

| Option Type                     | Description  | Mandatory (Yes or No) |
|---------------------------------|--|-----------------------|
|                                 | • The bucket or container from where you want the system to fetch the keystore file.   |                       |
|                                 | Points to Note:  |                       |
|                                 | By default, the value is set to<br>@SHARED_DIR/ks/.ouaf_keystore. You must<br>change the value as per the requirement.   |                       |
|                                 | The shared directory variable (i.e. SHARED_DIR) is case-sensitive.   |                       |
| Key Store Mode                  | Used to specify the mode using which you want to encrypt or decrypt the files.   | Yes                   |
|                                 | <b>Note:</b> By default, the value is set to <b>CBC</b> (i.e. Cipher-block Chaining).  |                       |
| Key Store Padding               | Used to specify the padding using which you want to encrypt or decrypt the files.  | Yes                   |
|                                 | Note: By default, the value is set to PKCS5Padding.  |                       |
| Key Store Password File<br>Path | Used to specify the directory or bucket from where you want to fetch the keystore password file.   | Yes                   |
|                                 | If the application environment is an On Premise<br>or Cloud Service environment, you can specify<br>the directory name along with the following<br>relative path:  |                       |
|                                 | <ul> <li>@SHARED_DIR – Used when you want<br/>to fetch the keystore password file from<br/>the shared directory on the server.</li> </ul>  |                       |
|                                 | For example, you can set the value to @SHARED_DIR/.ouaf_storepass.   |                       |
|                                 | However, if the application environment is a<br>Cloud Service Premium Edition environment,<br>you must specify the following information in the<br>file-storage:// <file extendable="" lookup<br="" storage="">Value&gt;/<object bucket="" storage=""> format:</object></file> |                       |
|                                 | <ul> <li>The file storage extendable lookup value<br/>from where the cloud storage<br/>compartment and connection details are<br/>retrieved while fetching the keystore<br/>password file on OCI.</li> </ul>   |                       |

| Option Type           | Description  | Mandatory (Yes or No) |
|-----------------------|--|-----------------------|
|                       | • The bucket or container from where you want the system to fetch the keystore password file.  |                       |
|                       | Points to Note:  |                       |
|                       | By default, the value is set to<br>@SHARED_DIR/ks/.ouaf_storepass. You must<br>change the value as per the requirement.  |                       |
|                       | The shared directory variable (i.e. <b>SHARED_DIR</b> ) is case-sensitive.   |                       |
| Key Store Type        | Used to indicate the type of keystore file.  | Yes                   |
|                       | Note: By default, the value is set to JCEKS.   |                       |
| Private Key File Path | Used to specify the directory or bucket from where you want to fetch the private key file.   | Yes                   |
|                       | If the application environment is an On Premise<br>or Cloud Service environment, you can specify<br>the directory name along with the following<br>relative path:  |                       |
|                       | <ul> <li>@SHARED_DIR – Used when you want<br/>to fetch the private key file from the<br/>shared directory on the server.</li> </ul>  |                       |
|                       | For example, you can set the value to @SHARED_DIR/.ouaf_storepass.   |                       |
|                       | However, if the application environment is a<br>Cloud Service Premium Edition environment,<br>you must specify the following information in the<br>file-storage:// <file extendable="" lookup<br="" storage="">Value&gt;/<object bucket="" storage=""> format:</object></file> |                       |
|                       | <ul> <li>The file storage extendable lookup value<br/>from where the cloud storage<br/>compartment and connection details are<br/>retrieved while fetching the private key<br/>file on OCI.</li> </ul>   |                       |
|                       | • The bucket or container from where you want the system to fetch the private key file.  |                       |
|                       | Points to Note:  |                       |
|                       | By default, the value is set to <b>@SHARED_DIR/ks/.ouaf_storepass</b> . You must change the value as per the requirement.  |                       |

| Option Type | Description                                     | Mandatory (Yes or No) |
|-------------|---|-----------------------|
|             | The shared directory variable (i.e. SHARED_DIR) |                       |
|             | is case-sensitive.                              |                       |
|             |   |                       |

- 8. Enter the values for the required option types in the Feature Configuration screen.
- 9. Click the **Save** button in the **Page Title** area. The changes made to the feature configuration are saved.

### 2.6 Upgrading the ORMB Database

This section explains how to upgrade the database. When you upgrade the database, the system overwrites the database schema and the metadata present in the database. However, the transactional data is not affected.

While upgrading from Oracle Revenue Management and Billing Version 5.1.0.0.0 to 6.0.0.0.0, you need to install the following on the database:

- 1. Oracle Revenue Management and Billing (ORMB) Version 6.0.0.0.0
- 2. Oracle Revenue Management and Billing (ORMB) Version 6.0.0.0.0 Post Requisite Patches

### Points to Note:

To view the list of patches that you need to apply on the database, refer to the <u>ORMB V6.0.0.0 Patch</u> <u>Guide</u> (Document ID: 2978216.1) on <u>My Oracle Support</u>.

Alternatively, instead of individually applying the patches, you can download and install the rollup packs, if available, to apply a set of patches at once. For more information about the rollup packs, refer to Appendix L: ORMB V6.0.0.0.0 Rollup Packs.

Before you upgrade the database, you must take a backup of the existing database.

When you upgrade the database, any metadata with the Owner flag set to CM is not overridden during the upgrade process.

### 2.6.1 Installing ORMB Version 6.0.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 6.0.0.0.0:

- 1. Login to the database server using the administrator's credentials.
- 2. Copy the Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 Oracle Database package to the TEMPDIR folder using the following command:

AIX, Linux:

cp <PATH>/<filename>.zip <PATH>/TEMPDIR

Windows:

copy <PATH>\<filename>.zip <PATH>\TEMPDIR

**Note:** You can also use File Transfer Protocol (FTP) to transfer the downloaded file from one host to another. You must use the binary mode while copying files through FTP.

3. Change to the **TEMPDIR** folder using the following command:

#### AIX, Linux:

cd <PATH>/TEMPDIR

#### Windows:

cd <PATH>\TEMPDIR

4. Unzip the Oracle Financial Services Revenue Management and Billing 6.0.0.0.0 - Oracle Database package using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 3>
```

#### Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 3>
```

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_3> folder. The contents include the following sub-folder:

• RMB

### Note:

There might be situations when you do not want to recreate one or more table indexes. You can skip the recreation process of one or more table indexes by adding the following line in the <DESTINATION\_FOLDER\_3>/RMB/Upgrade/Oracle/Install-

Upgrade/OraSchUpg.inp file:

```
-INDEX: 'INDEX1', 'INDEX2', 'INDEX3'
```

For example, -INDEX: 'XXT033P0', 'XXT034P0', 'XXT035P0'

5. Set the JAVA HOME environment variable using the following command:

### <u>AIX, Linux:</u>

```
export JAVA HOME=<JAVA HOME PATH>
```

#### Windows:

```
SET JAVA HOME=<JAVA HOME PATH>
```

**Note:** The <JAVA\_HOME\_PATH> is the location where Java Development Kit Version 8.0 is installed.

6. Set the JAR PATH environment variable using the following command:

### AIX, Linux:

export JAR PATH=<DESTINATION FOLDER 3>/RMB/jarfiles

Note: The above command is applicable only for AIX and Linux platforms.

7. Set the CLASS\_PATH environment variable using the following command:

### AIX, Linux:

```
export CLASS_PATH=$JAR_PATH/commons-cli-
1.5.0.jar:$JAR_PATH/commons-codec-1.17-744clc9.jar:$JAR_PATH/
jackson-annotations-2.14.0-rc2.jar:$JAR_PATH/jackson-core-2.14.0-
rc2.jar:$JAR_PATH/jackson-databind-2.14.0-
rc2.jar:$JAR_PATH/log4j-api-2.17.1.jar:$JAR_PATH/log4j-core-
2.17.1.jar:$JAR_PATH/ojdbc8-19.12.0.0.0.jar:$JAR_PATH/spl-oradbi-
4.5.0.1.1.jar:$JAR_PATH/spl-shared-4.5.0.1.1.jar
```

### Windows:

SET CLASS PATH=<DESTINATION FOLDER 3>\RMB\jarfiles\\*

8. Change to the Install-Upgrade folder using the following command:

### AIX, Linux:

cd <DESTINATION FOLDER 3>/RMB/Upgrade/Oracle/Install-Upgrade

### Windows:

cd <DESTINATION FOLDER 3>\RMB\Upgrade\Oracle\Install-Upgrade

9. Execute the OraDBI (Java) utility using the following command:

### AIX, Linux:

```
$JAVA_HOME/bin/java -Xmx1500M -cp $CLASS_PATH
com.oracle.ouaf.oem.install.OraDBI -d jdbc:oracle:thin:
@<DB_SERVER_NAME>:<DB_PORT>:<DB_NAME>, <SCHEMA_NAME>,
<SCHEMA_PASSWORD>, <READWRITE_USER>, <READONLY_USER>,
<READWRITE_ROLE>, <READONLY_ROLE>, <SCHEMA NAME> -p
<READWRITE_USER_PASSWORD>, <READONLY_USER_PASSWORD> -1 1,2 -q
true
```

### Windows:

```
%JAVA_HOME%\bin\java -Xmx1500M -cp %CLASS_PATH%
com.oracle.ouaf.oem.install.OraDBI -d jdbc:oracle:thin:
@<DB_SERVER_NAME>:<DB_PORT>:<DB_NAME>, <SCHEMA_NAME>,
<SCHEMA_PASSWORD>, <READWRITE_USER>, <READONLY_USER>,
<READWRITE_ROLE>, <READONLY_ROLE>, <SCHEMA NAME> -p
<READWRITE_USER_PASSWORD>, <READONLY_USER_PASSWORD> -1 1,2 -q
true
```

The following message appears in the command line:

```
Ready to upgrade the target database from V5.1.0.0.0 to V6.0.0.0, do you want to continue (Y/N)?
```

10. Type **Y** and then press **Enter**. A message appears indicating that the process is completed successfully.

### 2.6.2 Applying the Release-Specific Patches

Once you install Oracle Revenue Management and Billing Version 6.0.0.0.0, you need to apply all patches listed in the <u>ORMB V6.0.0.0 Patch Guide</u> (Document ID: 2978216.1). You can apply a patch from a Windows machine or UNIX Standalone server.

To apply a patch:

- 1. Download the patch from <u>My Oracle Support</u>. A zip file is downloaded.
- 2. Unzip the downloaded file using the following command:

### AIX, Linux:

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 4>

#### Windows:

unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 4>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_4> folder. The contents include three files - README.txt, MultiPlatform.zip, and Bug <PATCH\_NUMBER> Product Fix\_Design.pdf.

3. Unzip the MultiPlatform.zip file using the following command:

#### AIX, Linux:

```
unzip <DESTINATION_FOLDER_4>/MultiPlatform.zip -d
<PATH>/<DESTINATION FOLDER 5>
```

### Windows:

```
unzip <DESTINATION_FOLDER_4>\MultiPlatform.zip -d
<PATH>\<DESTINATION FOLDER 5>
```

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_5> folder. The contents include the V6.0.0.0-<PATCH\_NUMBER>\_MultiPlatform folder.

4. Change to the V6.0.0.0-<PATCH\_NUMBER>\_MultiPlatform folder using the following command:

#### AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V6.0.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

#### Windows:

cd <DESTINATION FOLDER 5>\V6.0.0.0-<PATCH NUMBER> MultiPlatform

Note: The <DESTINATION\_FOLDER\_5> folder is the location where you have extracted the contents of the MultiPlatform.zip file.

The contents include a file named CCB.V6.0.0.0.0-<PATCH\_NUMBER>.jar and a folder named database.

5. Change to the ORACLE folder using the following command:

### AIX, Linux:

cd database/ORACLE

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### Windows:

cd database\ORACLE

The contents include a zip file named CDXPatch.

6. Unzip the CDXPatch.zip file using the following command:

AIX, Linux:

unzip CDXPatch.zip -d <PATH>/<DESTINATION FOLDER 6>

### Windows:

unzip CDXPatch.zip -d <PATH>\<DESTINATION FOLDER 6>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_6> folder. The contents include utility files and a folder named <PATCH NUMBER>.

7. Execute the ouafDatabasePatch utility using the following command:

### Windows:

ouafDatabasePatch.cmd

### AIX, Linux:

ouafDatabasePatch.sh

## 2.7 Migrating Data

Once you upgrade the database, you can migrate the data from Oracle Revenue Management and Billing Version 5.1.0.0.0 to 6.0.0.0.0 using the PostProcessingScript query which is available in the **UPGRADE FROM 5.1.0.0.0 TO 6.0.0.0.0** patch.

To migrate the data from ORMB Version 5.1.0.0.0 to 6.0.0.0.0:

1. Copy the **UPGRADE FROM 5.1.0.0.0 TO 6.0.0.0** patch to the **TEMPDIR** folder using the following command:

### AIX, Linux:

cp <PATH>/<filename>.zip <PATH>/TEMPDIR

### Windows:

copy <PATH>\<filename>.zip <PATH>\TEMPDIR

**Note:** You can also use File Transfer Protocol (FTP) to transfer the downloaded file from one host to another. You must use the binary mode while copying files through FTP.

2. Change to the TEMPDIR folder using the following command:

### AIX, Linux:

cd <PATH>/TEMPDIR

### Windows:

cd <PATH>\TEMPDIR

3. Unzip the UPGRADE FROM 5.1.0.0.0 TO 6.0.0.0.0 patch using the following command:

### AIX, Linux:

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 7>

#### Windows:

unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 7>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_7> folder. The contents include two files - README.txt and deploy.zip.

4. Unzip the deploy.zip file using the following command:

#### AIX, Linux:

```
unzip <DESTINATION_FOLDER_7>/deploy.zip -d
<PATH>/<DESTINATION FOLDER 8>
```

#### Windows:

```
unzip <DESTINATION_FOLDER_7>\deploy.zip -d
<PATH>\<DESTINATION FOLDER 8>
```

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_8> folder. The contents include a folder named deploy.

5. Change to the deploy folder using the following command:

```
cd <DESTINATION FOLDER 8>\deploy
```

The contents include a folder named Migration\_From\_V5.1.0.0.0\_To\_6.0.0.0. This folder contains one file named PostProcessingScript.sql.

6. Change to the Migration\_From\_V5.1.0.0.0\_To\_6.0.0.0.0 folder using the following command:

```
cd
<DESTINATION_FOLDER_8>\deploy\Migration_From_V5.1.0.0.0_To_6.0.0.
0.0
```

- 7. Connect to the ORMB database using a utility named SQL\*Plus and the administrator's (for example, CISADM) credentials.
- 8. Execute the following query from the Migration\_From\_V5.1.0.0.0\_To\_6.0.0.0.0 folder:

PostProcessingScript.sql

**Note:** For more information about the query, refer to the **<u>PostProcessingScript.sql</u>** section in <u>Appendix Q:</u> <u>SQL Statements for 5.1.0.0.0 to 6.0.0.0 Data Migration</u>.

# 3. Additional Tasks

This section describes the following tasks that you need to perform after upgrading the application:

- 1. Starting the Thread Pool Worker
- 2. Building Javadoc Index
- 3. <u>Table Partitioning</u>

### 3.1 Starting the Thread Pool Worker

Once you upgrade the application, you need to start the thread pool worker. The thread pool worker is required when you execute batches either online or through batch scheduler.

You can use the **Distributed Thread Pool** property of the thread pool worker to set the number of threads that can run concurrently. By default, 5 threads run concurrently. You can change the default value by editing the following line in the threadpoolworker.properties file:

com.splwg.grid.distThreadPool.threads.DEFAULT=5

To start the thread pool worker, use the following command once you initialize the application environment:

### AIX, Linux:

\$SPLEBASE/bin/threadpoolworker.sh

### Windows:

%SPLEBASE%\bin\threadpoolworker.cmd

Where, **\$SPLEBASE** or **\$SPLEBASE** is the path where the application environment is installed.

### 3.2 Building Javadoc Index

Once you upgrade the application, you may want to regenerate the index file of Javadoc documentation. You must regenerate the Javadoc index file only when some modifications are made to the Java code.

To regenerate the Javadoc index file, use the following command:

### AIX, Linux:

\$SPLEBASE/bin/buildJavadocsIndex.sh

### Windows:

%SPLEBASE%\bin\buildJavadocsIndex.cmd

Where, **\$SPLEBASE** or **\$SPLEBASE** is the path where the application environment is installed.

### 3.3 Table Partitioning

Once the database is upgraded, we recommend you partition the tables which has considerable amount of data. This will help you to manage data and ensure consistent system performance with the increasing data. For more information about the table partitioning, refer to the **Table Partitioning Strategy** section in the *Oracle Revenue Management and Billing Database Administrator's Guide*.

**Note:** An out of box sample release-specific table partitioning scripts are provided by Oracle Revenue Management and Billing on <u>My Oracle Support</u>. You can partition the tables using these sample scripts. For more information, refer to *Oracle Revenue Management and Billing ILM Implementation Guide*.

## **Appendix A : Known Issues**

To view a list of known issues in the current release, refer to the Oracle Revenue Management and Billing Version 6.0.0.0.0 Release Notes.

## **Appendix B : Third-Party Software Upgrade**

To view a list of third-party software that you need to upgrade before upgrading the application, refer to the **Upgrade Prerequisites** section in the *Oracle Revenue Management and Billing Upgrade Path Guide*.

## Appendix C: New Tables Added in ORMB Version 6.0.0.0.0

This section lists and describes the tables that are newly added in Oracle Revenue Management and Billing Version 6.0.0.0.

## C.1 C1\_HIERARCHY\_DIV

| Purpose:                 | Used to store the divisions to which an entity hierarchy relationship is associated. |
|--------------------------|--|
| Total Number of Columns: | 2  |

### **Column Details:**

| Column Name  | Data Type | Nullable (Yes or No) | Default Value |
|--------------|-----------|----------------------|---------------|
| CIS_DIVISION | CHAR(5)   | No                   | -             |
| HIERARCHY_CD | CHAR(30)  | No                   | -             |

### **Primary Key:**

| Кеу Туре  | Column Name  |
|-----------|--------------|
| Composite | CIS_DIVISION |
|           | HIERARCHY_CD |

#### Indexes:

| Sr. No. | Index Name | Index Type | Column Name  |
|---------|------------|------------|--------------|
| 1.      | XM785P0    | Unique     | CIS_DIVISION |
|         |            |            | HIERARCHY_CD |

## **Appendix D : Existing Tables Modified in ORMB Version 6.0.0.0**

This section lists the existing tables which are modified in Oracle Revenue Management and Billing Version 6.0.0.0.0. It indicates the columns that are newly added, dropped, or modified in these tables.

### D.1 C1\_DEAL\_APROF\_CRT\_HCY

The following table lists the columns that are newly added, modified, or dropped from the C1\_DEAL\_APROF\_CRT\_HCY table:

| Sr.<br>No. | Column Name      | Modification Type | 2       | Data Type in<br>V5.1.0.0.0 | Data Type in ' | V6.0.0.0.0 | Data<br>Migration<br>Required<br>(Yes or No) | Column<br>Value After<br>Data<br>Migration |
|------------|------------------|-------------------|---------|----------------------------|----------------|------------|--|--|
| 1.         | MAX_REV_VAR_PERC | Newly Added       |         | -                          | NUMBEF         | R(22,15)   | No   | -  |
| 2.         | MIN_REV_VAR_PERC | Newly Added       |         | -                          | NUMBEF         | 8(22,15)   | No   | -  |
| 3.         | VARIATION_TYPE   | Dropped           | CHAR(8) | -                          | No             | -          |  |  |

### D.2 C1\_HIERARCHY

The following table lists the columns that are newly added, modified, or dropped from the C1\_HIERARCHY table:

| Sr. No. | Column Name | Modification Type | Data Type in<br>V5.1.0.0.0 | Data Type in<br>V6.0.0.0.0 | Data Migration<br>Required (Yes or<br>No) |   |
|---------|-------------|-------------------|----------------------------|----------------------------|---|---|
| 1.      |             | Newly Added       | -                          | CHAR(5)                    | No  | - |

## D.3 C1\_PA\_REQ

The following table lists the columns that are newly added, modified, or dropped from the C1\_PA\_REQ table:

| Sr. No. | Column Name | Modification Type | Data Type<br>V5.1.0.0.0 | in | Data Type<br>V6.0.0.0.0 | in | Data Migration<br>Required (Yes or<br>No) |   | alue<br>Data |
|---------|-------------|-------------------|-------------------------|----|-------------------------|----|---|---|--------------|
| 1.      | ACCT_ID     | Newly Added       | -                       |    | CHAR(10)                |    | No  | - |              |

## D.4 C1\_REPRC\_MEMB\_CHAR

The following table lists the columns that are newly added, modified, or dropped from the C1\_REPRC\_MEMB\_CHAR table:

| Sr. No. | Column Name | Modification Type | Data Type in<br>V5.1.0.0.0 | Data Type in<br>V6.0.0.0.0 | Data Migration<br>Required (Yes or<br>No) | ColumnValueAfterDataMigration |
|---------|-------------|-------------------|----------------------------|----------------------------|---|-------------------------------|
| 1.      | CRE_DTTM    | Newly Added       | -                          | DATE                       | No  | -                             |
| 2.      | UPD_DTTM    | Newly Added       | -                          | DATE                       | No  | -                             |

# Appendix E : Algorithms and Algorithm Types Dropped in ORMB Version 6.0.0.0.0

This section lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 6.0.0.0.0.

## E.1 Algorithm Types

No algorithm types are dropped in Oracle Revenue Management and Billing Version 6.0.0.0.

### E.2 Algorithms

The following table lists the algorithms which are dropped in Oracle Revenue Management and Billing Version 6.0.0.0.0:

| Algorithm    | Description   |
|--------------|---|
| C1-ORMIDPOST | ORMB to IDCS User Sync Master Configuration Post Processing Algorithm         |
| C1-USRBOPOST | User Post Processing Algorithm for IDCS Sync                                  |
| CM-DTCAGEIM  | Member Age Date calculation in Individual Membership with Continuous Coverage |

# Appendix F : Parameters Added or Removed from Algorithm Types in ORMB Version 6.0.0.0

No parameters are newly added or removed from the existing algorithm types in Oracle Revenue Management and Billing Version 6.0.0.0.

# Appendix G : Option Types Added or Removed from Feature Configurations in ORMB Version 6.0.0.0.0

This section lists the option types which are newly added or removed from the existing feature configurations in Oracle Revenue Management and Billing Version 6.0.0.0.0.

| Feature Configuration | Option Type (Removed from<br>6.0.0.0) | Option Type (Added in 6.0.0.0) |
|-----------------------|---------------------------------------|--------------------------------|
| C1_FM                 | -                                     | Enable Account Cache           |

# Appendix H : Characteristic Types Dropped in ORMB Version 6.0.0.0.0

No characteristic types are dropped in Oracle Revenue Management and Billing Version 6.0.0.0.0.

# Appendix I : Batch Controls Dropped in ORMB Version 6.0.0.0

No batch controls are dropped in Oracle Revenue Management and Billing Version 6.0.0.0.

# Appendix J : Parameters Added or Removed from Batch Controls in ORMB Version 6.0.0.0.0

This section lists the parameters which are newly added or removed from the existing batch controls in Oracle Revenue Management and Billing Version 6.0.0.0.

| Batch Control | Parameters (Remo   | oved from 6.0.0.0.0)      | Parameters (Add    | ded in 6.0.0.0.0)                                  |
|---------------|--------------------|---------------------------|--------------------|--|
|               | Sequence<br>Number | Parameter                 | Sequence<br>Number | Parameter  |
| C1-APERP      | -                  | -                         | 895                | Encryption Key Ring                                |
|               | -                  | -                         | 896                | Signature Key Ring                                 |
| C1-DRMT       | 70                 | threadpool                | -                  | -  |
| C1-GLERP      | -                  | -                         | 895                | Encryption Key Ring                                |
|               | -                  | -                         | 896                | Signature Key Ring                                 |
| C1-MLMCR      | 30                 | Thread Pool Name          | 20                 | Thread Pool Name                                   |
|               | 20                 | Model Build Type          | -                  | -  |
| C1-RPTGN      | 30                 | Thread pool Name          | 30                 | Binding Parameter<br>Names used in the<br>Zone     |
|               | 20                 | Report Code               | 40                 | Binding Parameter<br>Values for the above<br>Names |
|               | 10                 | Report Query<br>Parameter | 50                 | Thread pool Name                                   |
|               | -                  | -                         | 10                 | Report Code  |
|               | -                  | -                         | 20                 | Batch Report Zone                                  |
| CISTMEXT      | -                  | -                         | 30                 | Statement Extraction<br>Algorithm                  |

## **Appendix K : Changing the DB User Password**

If you have changed the database user password, you need to execute the following steps before installing the rollup pack for Oracle Utilities Application Framework Version 4.5.0.1.1:

- 1. Perform the following steps on the application environment:
  - a. Change the DB Name using the configureEnv command.
  - b. Execute the initialSetup utility using the following command:

### AIX, Linux:

\$SPLEBASE/bin/initialSetup.sh

### Windows:

%SPLEBASE%\bin\initialSetup.cmd

c. Execute the invokeDBUpdatePatch utility to change the database user name and password using the following command:

### AIX, Linux:

\$SPLEBASE/bin/invokeDBUpdatePatch.sh -b

### Windows:

%SPLEBASE%\bin\invokeDBUpdatePatch.cmd -b

## Appendix L: ORMB V6.0.0.0 Rollup Packs

Instead of individually applying the patches, you can download and apply the release-specific rollup packs. To view the list of rollup packs that you need to apply on the application environment and database, refer to the <u>ORMB V6.0.0.0 Patch Guide</u> (Document ID: 2978216.1) on <u>My Oracle Support</u>.

## L.1 Applying a Rollup Pack on the Application Environment

Once you install Oracle Revenue Management and Billing Version 6.0.0.0.0, you need to apply the rollup packs listed in the <u>ORMB V6.0.0.0 Patch Guide</u> (Document ID: 2978216.1). To apply a rollup pack on the application environment:

- 1. Download the rollup pack from <u>My Oracle Support</u>. A zip file is downloaded.
- 2. Unzip the rollup pack using the following command:

### AIX, Linux:

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 1>

### Windows:

unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 1>

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_1> folder. The contents include the README.txt file and three folders named RMB\_V6.0.0.0.0\_App\_Rollup, RMB\_V6.0.0.0\_DB\_Rollup, and RMB\_V6.0.0.0.0\_PFDs.

3. Initialize the application environment (on which you want to install the rollup pack) using the following command:

### AIX, Linux:

\$SPLEBASE/bin/splenviron.sh -e \$SPLENVIRON

### Windows:

%SPLEBASE%\bin\splenviron.cmd -e %SPLENVIRON%

Where,

\$SPLEBASE or %SPLEBASE% is the path where the application environment is installed and \$SPLENVIRON or %SPLENVIRON% is the name of the application environment.

4. Change to the RMB\_V6.0.0.0\_App\_Rollup folder using the following command:

### AIX, Linux:

cd <DESTINATION FOLDER 1>/RMB V6.0.0.0.0 App Rollup

### Windows:

cd <DESTINATION\_FOLDER\_1>\RMB\_V6.0.0.0.0\_App\_Rollup

**Note:** The <DESTINATION\_FOLDER\_1> folder is the location where you have extracted the contents of the rollup pack.

5. Install the patch using the following command:

### AIX, Linux:

./installSFgroup.sh

### Windows:

installSFgroup.cmd

### L.2 Applying a Rollup Pack on the Database

Once you install Oracle Revenue Management and Billing Version 6.0.0.0., you need to apply the rollup packs listed in the <u>ORMB V6.0.0.0 Patch Guide</u> (Document ID: 2978216.1). You can apply a rollup pack from a Windows machine or UNIX Standalone server. To apply a rollup pack on the database:

- 1. Download the rollup pack from <u>My Oracle Support</u>. A zip file is downloaded.
- 2. Unzip the rollup pack using the following command:

### <u>AIX, Linux:</u>

unzip <filename>.zip -d <PATH>/<DESTINATION FOLDER 1>

### Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION FOLDER 1>
```

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_1> folder. The contents include the README.txt file and three folders named RMB\_V6.0.0.0.0\_App\_Rollup, RMB\_V6.0.0.0\_DB\_Rollup, and RMB\_V6.0.0.0.0\_PFDs.

3. Change to the RMB V6.0.0.0 DB Rollup folder using the following command:

### <u>AIX, Linux:</u>

```
cd <DESTINATION FOLDER 1>/RMB V6.0.0.0 DB Rollup
```

### Windows:

```
cd <DESTINATION FOLDER 1>\RMB V6.0.0.0 DB Rollup
```

Note: The <DESTINATION\_FOLDER\_1> folder is the location where you have extracted the contents of the rollup pack.

4. Execute the ouafDatabasePatch utility using the following command:

Windows: ouafDatabasePatch.cmd AIX,Linux: ouafDatabasePatch.sh

## Appendix M : New Tables Added in OUAF Version 4.5.0.1.1

This section lists and describes the tables that are newly added in Oracle Utilities Application Framework Version 4.5.0.1.1.

## M.1 CI\_MD\_FLD\_ADDTL

| Purpose:                 | Used to store the additional attributes of a field. |
|--------------------------|---|
| Total Number of Columns: | 4   |

### **Column Details:**

| Column Name   | Data Type    | Nullable (Yes or No) | Default Value |
|---------------|--------------|----------------------|---------------|
| FLD_NAME      | CHAR(30)     | No                   | -             |
| OWNER_FLG     | CHAR(4)      | No                   | -             |
| PII_CLASS_FLG | CHAR(4)      | No                   | -             |
| VERSION       | NUMBER(22,5) | No                   | 1             |

### **Primary Key:**

| Кеу Туре | Column Name |
|----------|-------------|
| Simple   | FLD_NAME    |

### Indexes:

| Sr. No. | Index Name | Index Type | Column Name |
|---------|------------|------------|-------------|
| 1.      | F1C907P0   | Unique     | FLD_NAME    |

## M.2 F1\_BATCH\_RUN\_ANALYTICS\_SNAP

| Purpose:                 | Used to store the batch run analytics data. |
|--------------------------|---|
| Total Number of Columns: | 20  |

| Column Name  | Data Type | Nullable (Yes or No) | Default Value |
|--------------|-----------|----------------------|---------------|
| BATCH_BUS_DT | DATE      | Yes                  | -             |
| BATCH_CD     | CHAR(8)   | No                   | -             |

| Column Name        | Data Type     | Nullable (Yes or No) | Default Value |
|--------------------|---------------|----------------------|---------------|
| BATCH_JOB_ID       | CHAR(14)      | No                   | -             |
| BATCH_JOB_STAT_FLG | CHAR(2)       | No                   | -             |
| BATCH_NBR          | NUMBER(22,10) | No                   | -             |
| BATCH_RERUN_NBR    | NUMBER(22,10) | No                   | -             |
| CRE_DTTM           | DATE          | Yes                  | -             |
| DO_NOT_RESTART_SW  | CHAR(1)       | No                   | -             |
| ELAPSED_SECS       | NUMBER(22,22) | No                   | -             |
| END_DTTM           | DATE          | Yes                  | -             |
| PROCESS_DT         | DATE          | Yes                  | -             |
| REC_ERR_CNT        | NUMBER(22,10) | No                   | -             |
| REC_PROC_CNT       | NUMBER(22,10) | No                   | -             |
| RUN_STATUS         | CHAR(2)       | No                   | -             |
| START_DTTM         | DATE          | Yes                  | -             |
| SUBMIT_METH_FLG    | CHAR(4)       | No                   | -             |
| SUBMIT_USER_ID     | CHAR(8)       | No                   | -             |
| THREADPOOL         | VARCHAR2(254) | No                   | -             |
| USER_ID            | CHAR(8)       | No                   | -             |
| VERSION            | NUMBER(22,5)  | No                   | 1             |

| Кеу Туре  | Column Name     |
|-----------|-----------------|
| Composite | BATCH_CD        |
|           | BATCH_NBR       |
|           | BATCH_RERUN_NBR |

### Indexes:

| Sr. No. | Index Name | Index Type | Column Name     |  |
|---------|------------|------------|-----------------|--|
| 1.      | F1T301P0   | Unique     | BATCH_CD        |  |
|         |            |            | BATCH_NBR       |  |
|         |            |            | BATCH_RERUN_NBR |  |
| 2.      | F1T301S01  | Non-Unique | CRE_DTTM        |  |
|         |            |            | BATCH_CD        |  |

| Sr. No. | Index Name | Index Type | Column Name     |  |
|---------|------------|------------|-----------------|--|
|         |            |            | BATCH_NBR       |  |
|         |            |            | BATCH_RERUN_NBR |  |

## M.3 F1\_BATCH\_THD\_ANALYTICS\_SNAP

| Purpose:                 | Used to store the batch thread analytics data. |
|--------------------------|--|
| Total Number of Columns: | 21   |

| Column Name      | Data Type     | Nullable (Yes or No) | Default Value |
|------------------|---------------|----------------------|---------------|
| BATCH_BUS_DT     | DATE          | Yes                  | -             |
| BATCH_CD         | CHAR(8)       | No                   | -             |
| BATCH_JOB_ID     | CHAR(14)      | Yes                  | -             |
| BATCH_NBR        | NUMBER(22,10) | No                   | -             |
| BATCH_RERUN_NBR  | NUMBER(22,10) | No                   | -             |
| BATCH_THREAD_NBR | NUMBER(22,10) | No                   | -             |
| CRE_DTTM         | DATE          | No                   | -             |
| END_DT           | DATE          | No                   | -             |
| END_DTTM         | DATE          | No                   | -             |
| REC_ERR_CNT      | NUMBER(22,10) | Yes                  | -             |
| REC_PROC_CNT     | NUMBER(22,10) | Yes                  | -             |
| RUN_STATUS       | CHAR(2)       | Yes                  | -             |
| SCHEDULER_ID     | NUMBER(22,10) | No                   | -             |
| START_DT         | DATE          | No                   | -             |
| START_DTTM       | DATE          | No                   | -             |
| SUBMIT_METH_FLG  | CHAR(4)       | Yes                  | -             |
| SUBMIT_USER_ID   | CHAR(8)       | Yes                  | -             |
| THD_RETRY_CNT    | NUMBER(22,2)  | Yes                  | -             |
| THREAD_STATUS    | CHAR(2)       | Yes                  | -             |
| THREADPOOL       | VARCHAR2(254) | Yes                  | -             |
| VERSION          | NUMBER(22,5)  | No                   | 1             |

| Кеу Туре  | Column Name      |
|-----------|------------------|
| Composite | BATCH_CD         |
|           | BATCH_NBR        |
|           | BATCH_RERUN_NBR  |
|           | BATCH_THREAD_NBR |
|           | SCHEDULER_ID     |

### Indexes:

| Sr. No. | Index Name | Index Type | Column Name      |
|---------|------------|------------|------------------|
| 1.      | F1T401P0   | Unique     | BATCH_CD         |
|         |            |            | BATCH_NBR        |
|         |            |            | BATCH_RERUN_NBR  |
|         |            |            | BATCH_THREAD_NBR |
|         |            |            | SCHEDULER_ID     |
| 2.      | F1T401S01  | Non-Unique | CRE_DTTM         |
|         |            |            | BATCH_CD         |
|         |            |            | BATCH_NBR        |
|         |            |            | BATCH_RERUN_NBR  |
|         |            |            | BATCH_THREAD_NBR |

## M.4 F1\_MIGR\_OBJ\_DATA

| Purpose:                 | Used to store the details of a migration object. |
|--------------------------|--|
| Total Number of Columns: | 4  |

| Column Name | Data Type    | Nullable (Yes or No) | Default Value |
|-------------|--------------|----------------------|---------------|
| MIGR_OBJ_ID | CHAR(14)     | No                   | -             |
| SEQ_NUM     | NUMBER(22,3) | No                   | -             |
| TBL_DATA    | CLOB(4000)   | No                   | -             |
| VERSION     | NUMBER(22,5) | No                   | 1             |

| Кеу Туре  | Column Name |
|-----------|-------------|
| Composite | MIGR_OBJ_ID |
|           | SEQ_NUM     |

### Indexes:

| Sr. No. | Index Name | Index Type | Column Name |
|---------|------------|------------|-------------|
| 1.      | F1T926P0   | Unique     | MIGR_OBJ_ID |
|         |            |            | SEQ_NUM     |

## M.5 F1\_MO\_UPD\_BACKUP

| Purpose:                 | Used to store the backup of all exported keys. |
|--------------------------|--|
| Total Number of Columns: | 5  |

### **Column Details:**

| Column Name      | Data Type     | Nullable (Yes or No) | Default Value |
|------------------|---------------|----------------------|---------------|
| BATCH_CD         | CHAR(8)       | No                   | -             |
| BATCH_NBR        | NUMBER(22,10) | No                   | -             |
| BATCH_THREAD_NBR | NUMBER(22,10) | No                   | -             |
| CRE_DTTM         | DATE          | No                   | -             |
| EXPORTED_KEYS    | CLOB(4000)    | No                   | -             |

### **Primary Key:**

None

#### Indexes:

None

### M.6 F1\_REDACTION\_RULE

| Purpose:                 | Used to store the details of a redaction rule. |
|--------------------------|--|
| Total Number of Columns: | 10   |

| Column Name | Data Type | Nullable (Yes or No) | Default Value |
|-------------|-----------|----------------------|---------------|
| BUS_OBJ_CD  | CHAR(30)  | No                   | -             |

| Column Name         | Data Type      | Nullable (Yes or No) | Default Value |
|---------------------|----------------|----------------------|---------------|
| FLD_NAME            | CHAR(30)       | Yes                  | -             |
| REDACT_FILTER_EXP   | VARCHAR2(2000) | Yes                  | -             |
| REDACT_FUNC_XFLG    | VARCHAR2(30)   | No                   | -             |
| REDACT_REF_FLD      | CHAR(30)       | Yes                  | -             |
| REDACT_RULE_CD      | VARCHAR2(30)   | No                   | -             |
| REDACT_SRC_TYPE_FLG | CHAR(4)        | No                   | -             |
| REDACT_XPATH_EXP    | VARCHAR2(2000) | Yes                  | -             |
| TBL_NAME            | CHAR(30)       | Yes                  | -             |
| VERSION             | NUMBER(22,5)   | No                   | 1             |

| Кеу Туре | Column Name    |
|----------|----------------|
| Simple   | REDACT_RULE_CD |

### Indexes:

| Sr. No. | Index Name | Index Type | Column Name    |
|---------|------------|------------|----------------|
| 1.      | F1C910P0   | Unique     | REDACT_RULE_CD |

## M.7 F1\_REDACTION\_RULE\_L

| Purpose:                 | Used to store the description of a redaction rule. |
|--------------------------|--|
| Total Number of Columns: | 4  |

#### **Column Details:**

| Column Name    | Data Type     | Nullable (Yes or No) | Default Value |
|----------------|---------------|----------------------|---------------|
| DESCR100       | VARCHAR2(100) | No                   | -             |
| LANGUAGE_CD    | CHAR(3)       | No                   | -             |
| REDACT_RULE_CD | VARCHAR2(30)  | No                   | -             |
| VERSION        | NUMBER(22,5)  | No                   | 1             |

### **Primary Key:**

| Кеу Туре  | Column Name |
|-----------|-------------|
| Composite | LANGUAGE_CD |

| Кеу Туре | Column Name    |
|----------|----------------|
|          | REDACT_RULE_CD |

### Indexes:

| Sr. No. | Index Name | Index Type | Column Name    |
|---------|------------|------------|----------------|
| 1.      | F1C911P0   | Unique     | REDACT_RULE_CD |
|         |            |            | LANGUAGE_CD    |

## M.8 SEC\_INVENTORY

| Purpose:                 | Used to store the encryption details for each secret. |  |
|--------------------------|---|--|
| Total Number of Columns: | 7   |  |

### **Column Details:**

| Column Name           | Data Type     | Nullable (Yes or No) | Default Value |
|-----------------------|---------------|----------------------|---------------|
| ENC_KEY_NAME          | VARCHAR2(200) | No                   | -             |
| ENCRYPTED_BYTES       | RAW(2000)     | No                   | -             |
| ENCRYPTION_ALG        | VARCHAR2(30)  | No                   | -             |
| SALT                  | RAW(2000)     | No                   | -             |
| SECRET_NAME           | VARCHAR2(200) | No                   | -             |
| VERIFICATION_HASH     | RAW(2000)     | No                   | -             |
| VERIFICATION_HASH_ALG | VARCHAR2(30)  | No                   | -             |

### **Primary Key:**

| Кеу Туре | Column Name |
|----------|-------------|
| Simple   | SECRET_NAME |

### Indexes:

| Sr. No. | Index Name | Index Type | Column Name |
|---------|------------|------------|-------------|
| 1.      | F1C920P0   | Unique     | SECRET_NAME |

## **Appendix N : Existing Tables Modified in OUAF Version 4.5.0.1.1**

This section lists the existing tables which are modified in Oracle Utilities Application Framework Version 4.5.0.1.1. It indicates the columns that are newly added, dropped, or modified in these tables.

#### N.1 CI\_BATCH\_RUN

The following table lists the columns that are newly added, modified, or dropped from the Cl\_BATCH\_RUN table:

| Sr. No. | Column Name   | Modification Type | Data Type in<br>V4.5.0.0.0 | ı | Data<br>V4.5.0.1 | Туре<br>1 | in | Data<br>Require<br>No) | Migration<br>ed (Yes or | Column<br>After<br>Migration | Value<br>Data |
|---------|---------------|-------------------|----------------------------|---|------------------|-----------|----|------------------------|-------------------------|------------------------------|---------------|
| 1.      | LOG_FILE_NAME | Newly Added       | -                          |   | VARCH            | HAR2(254  | L) |                        | No                      | -                            |               |

#### N.2 CI\_CURRENCY\_CD

The following table lists the columns that are newly added, modified, or dropped from the CI\_CURRENCY\_CD table:

| Sr. No. | Column Name     | Modification Type | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes or<br>No) |   |
|---------|-----------------|-------------------|----------------------------|----------------------------|---|---|
| 1.      | EXT_CURRENCY_CD | Newly Added       | -                          | CHAR(36)                   | No  | - |

## N.3 F1\_CRYPTO\_KEY

The following table lists the columns that are newly added, modified, or dropped from the F1\_CRYPTO\_KEY table:

| Sr.<br>No. | Column Name | Modification Type | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes or<br>No) | Column Value After<br>Data Migration |
|------------|-------------|-------------------|----------------------------|----------------------------|---|--------------------------------------|
| 1.         | PUBLIC_KEY  | Format Change     | VARCHAR2(2000)             | VARCHAR2(32767)            | No  | -                                    |

# N.4 F1\_CRYPTO\_KEY\_RING

The following table lists the columns that are newly added, modified, or dropped from the F1\_CRYPTO\_KEY\_RING table:

| Sr.<br>No. | Column Name          | Modification Type |   | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes or<br>No) | Column Value After Data<br>Migration |
|------------|----------------------|-------------------|---|----------------------------|----------------------------|---|--------------------------------------|
| 1.         | KEY_RING_CAT_F<br>LG | Newly Added       | - | CHAR(4)                    | No                         | -   |                                      |
| 2.         | OWNER_FLG            | Newly Added       |   | -                          | CHAR(4)                    | No  | -                                    |

## N.5 F1\_CRYPTO\_KEY\_RING\_L

The following table lists the columns that are newly added, modified, or dropped from the F1\_CRYPTO\_KEY\_RING\_L table:

| Sr. No. | Column Name | Modification Type | Data<br>V4.5.0. | Туре<br>0.0 | in | Data<br>V4.5.0.1 |        | in | Migration<br>ed (Yes or |   | Value<br>Data |
|---------|-------------|-------------------|-----------------|-------------|----|------------------|--------|----|-------------------------|---|---------------|
| 1.      | OWNER_FLG   | Newly Added       |                 | -           |    | CI               | HAR(4) |    | No                      | - |               |

#### N.6 F1\_ETL\_MP\_CTRL

The following table lists the columns that are newly added, modified, or dropped from the F1\_ETL\_MP\_CTRL table:

| Sr.<br>No. | Column Name          | Modification Ty | ре | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data<br>Migration<br>Required (Yes<br>or No) | Column Value After Data<br>Migration |
|------------|----------------------|-----------------|----|----------------------------|----------------------------|--|--------------------------------------|
| 1.         | F1_BI_TYPE_FLD       | Newly Added     | -  | CHAR(30)                   | No                         | -  |                                      |
| 2.         | F1_BI_TYPE_VALU<br>E | Newly Added     |    | -                          | CHAR(4)                    | No   | -                                    |

#### N.7 F1\_MENU\_APP\_SVCS\_VW

The following table lists the columns that are newly added, modified, or dropped from the F1\_MENU\_APP\_SVCS\_VW table:

| Sr. No. | Column Name        | Modification Type | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes or<br>No) | Column Value<br>After Data<br>Migration |
|---------|--------------------|-------------------|----------------------------|----------------------------|---|---|
| 1.      | APP_SVC_ID         | Newly Added       | -                          | CHAR(20)                   | No  | -                                       |
| 2.      | LINE_VISIBILITY_SW | Newly Added       | -                          | CHAR(1)                    | No  | -                                       |
| 3.      | MENU_LINE_ID       | Newly Added       | -                          | CHAR(10)                   | No  | -                                       |

### N.8 F1\_MIGR\_DATA\_ST

The following table lists the columns that are newly added, modified, or dropped from the F1\_MIGR\_DATA\_ST table:

| Sr. No. | Column Name     | Modification Type | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes<br>or No) | Column Value<br>After Data<br>Migration |
|---------|-----------------|-------------------|----------------------------|----------------------------|---|---|
| 1.      | BULK_IMPORT_FLG | Newly Added       | -                          | CHAR(4)                    | No  | -                                       |
| 2.      | INSERT_ONLY_FLG | Newly Added       | -                          | CHAR(4)                    | No  | -                                       |
| 3.      | REDACT_OPT_FLG  | Newly Added       | -                          | CHAR(4)                    | No  | -                                       |

### N.9 F1\_MIGR\_OBJ

The following table lists the columns that are newly added, modified, or dropped from the F1\_MIGR\_OBJ table:

| Sr. No. | Column Name  | Modification Type | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes<br>or No) |   |
|---------|--------------|-------------------|----------------------------|----------------------------|---|---|
| 1.      | ENTITIES_CNT | Newly Added       | -                          | NUMBER(22,6)               | No  | - |

## N.10 F1\_MIGR\_OBJ\_SQL

The following table lists the columns that are newly added, modified, or dropped from the F1\_MIGR\_OBJ\_SQL table:

| Sr. No. | Column Name | Modification Type | Data Type<br>V4.5.0.0.0 | in | Data Type<br>V4.5.0.1.1 | e in  | 0  |   | Value<br>Data<br>n |
|---------|-------------|-------------------|-------------------------|----|-------------------------|-------|----|---|--------------------|
| 1.      | PK_VALUE1   | Newly Added       | -                       |    | VARCHAR2                | (254) | No | - |                    |

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| Sr. No. | Column Name | Modification Type | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes or<br>No) | Column Value<br>After Data<br>Migration |
|---------|-------------|-------------------|----------------------------|----------------------------|---|---|
| 2.      | PK_VALUE2   | Newly Added       | -                          | VARCHAR2(254)              | No  | -                                       |
| 3.      | PK_VALUE3   | Newly Added       | -                          | VARCHAR2(254)              | No  | -                                       |
| 4.      | PK_VALUE4   | Newly Added       | -                          | VARCHAR2(254)              | No  | -                                       |
| 5.      | PK_VALUE5   | Newly Added       | -                          | VARCHAR2(254)              | No  | -                                       |

#### N.11 F1\_PROC\_PANEL

The following table lists the columns that are newly added, modified, or dropped from the F1\_PROC\_PANEL table:

| Sr. No. | Column Name | Modification Type | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes or<br>No) |   |
|---------|-------------|-------------------|----------------------------|----------------------------|---|---|
| 1.      | UI_MAP_CD   | Format Change     | VARCHAR2(30)               | CHAR(30)                   | No  | - |

#### N.12 SC\_APP\_SERVICE\_L

The following table lists the columns that are newly added, modified, or dropped from the SC\_APP\_SERVICE\_L table:

| Sr. No. | Column Name | Modification Type | Data<br>V4.5.0 | Туре<br>.0.0 | in | Data<br>V4.5.0. | Туре<br>1.1 | in  | Migration<br>red (Yes or | Column<br>After<br>Migratio | Value<br>Data<br>n |
|---------|-------------|-------------------|----------------|--------------|----|-----------------|-------------|-----|--------------------------|-----------------------------|--------------------|
| 1.      | DESCRLONG   | Newly Added       |                | -            |    | VARCH           | HAR2(400    | )0) | No                       | -                           |                    |

## N.13 F1\_CRYPTO\_KEY\_RING\_LINK

The following table lists the columns that are newly added, modified, or dropped from the F1\_CRYPTO\_KEY\_RING\_LINK table:

| Sr. No. | Column Name     | Modification Type | Data Type in<br>V4.5.0.0.0 | Data Type in<br>V4.5.0.1.1 | Data Migration<br>Required (Yes or<br>No) | Column Value<br>After Data<br>Migration |
|---------|-----------------|-------------------|----------------------------|----------------------------|---|---|
| 1.      | EXT_KEY_RING_CD | Dropped           | CHAR(30)                   | -                          | No  | -                                       |
| 2.      | INT_KEY_RING_CD | Dropped           | CHAR(30)                   | -                          | No  | -                                       |
| 3.      | VERSION         | Dropped           | NUMBER(22,5)               | -                          | No  | -                                       |

# Appendix O: Algorithms and Algorithm Types Dropped in OUAF Version 4.5.0.1.1

This section lists the algorithms and algorithm types which are dropped in Oracle Utilities Application Framework Version 4.5.0.1.1.

# O.1 Algorithm Types

No algorithm types are dropped in Oracle Utilities Application Framework Version 4.5.0.1.1.

#### O.2 Algorithms

The following table lists the algorithms which are dropped in Oracle Utilities Application Framework Version 4.5.0.1.1:

| Algorithm    | Description                                       |  |  |
|--------------|---|--|--|
| F1-CREMDTODO | Create Message From Device Error To Do Entry      |  |  |
| F1-DEPL-INFO | Deployment Information                            |  |  |
| F1-DEPLY-AUD | Create To Do entry when deployment is out of date |  |  |
| F1-DEPRT-AUD | Detect Changes to Deployment Part                 |  |  |
| F1-DEPTY-AUD | Detect Changes to Deployment Type                 |  |  |
| F1-MDTINFO   | Mobile Data Terminal Information                  |  |  |
| F1-MOBCMPINF | Mobile Component Information                      |  |  |
| F1-RMMSGINF  | Remote Message Information (MO)                   |  |  |

# Appendix P: Parameters Added or Removed from Batch Controls in OUAF Version 4.5.0.1.1

This section lists the parameters which are newly added or removed from the existing batch controls in Oracle Utilities Application Framework Version 4.5.0.1.1.

| Batch Control | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|---------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|               | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
| F1ACCTPX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1ACTNDX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1ALGOMX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1ALGTEX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1ANALSX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1APPSEX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |

| Batch Control | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|---------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|               | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
| F1BATCLX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1BKTCGX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1BUSFGX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1BUSFGX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1BUSFPX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1BUSOJX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1BUSSCX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1CALENX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |

| Batch Control   | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|-----------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|                 | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
| <b>F1CHAREX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1COLOTX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1CONTEX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1COUNYX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1CUBEEX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1CUBEWX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1CURREX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1DATAAX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |

| Batch Control   | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|-----------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|                 | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
| F1DATASX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1DISPFX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1DISPNX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1ENTYGX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1ETLMLX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1EXTLPX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1FAACTX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1FIELDX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |

| Batch Control   | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|-----------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|                 | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
| F1FILETX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1FKREFX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1FLINCX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1-GEEXO        | -                  | -                    | 70                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 80                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 90                              | Signature Key Ring              |  |
| F1-GEIXP        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
|                 | -                  | -                    | 70                              | Restrict By Date                |  |
| <b>F1GEOTEX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1-GEXPI        | -                  | -                    | 70                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 80                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 90                              | Signature Key Ring              |  |
| F1INSIPX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |

| Batch Control   | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|-----------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|                 | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1INSTYX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1IWSANX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1IWSAPX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1IWSSCX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1JMSCTX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1LANGEX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1LOOKPX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MAINJX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |

| Batch Control | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|---------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|               | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MANCTX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MEENUX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MESS2X      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MIGRNX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MIGRQX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MKTCGX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MKTMNX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MKTMPX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |

| Batch Control | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|---------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|               | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MKTMTX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MKTPCX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MKTPPX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MKTPTX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1MSTCGX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1NAVKYX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1NAVOTX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |
|               | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1NTDWEX      | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|               | -                  | -                    | 90                              | Encryption Key Ring             |  |

| Batch Control   | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |  |
|-----------------|--------------------|----------------------|---------------------------------|---------------------------------|--|
|                 | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1NTDWFX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1NTUPEX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1NTXIDX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1OUTMPX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| F1-PDBEX        | -                  | -                    | 895                             | Encryption Key Ring             |  |
|                 | -                  | -                    | 896                             | Signature Key Ring              |  |
| F1-PDUPL        | -                  | -                    | 860                             | Encryption Key Ring             |  |
|                 | -                  | -                    | 870                             | Signature Key Ring              |  |
| F1PERFTX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1PERFYX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |
|                 | -                  | -                    | 100                             | Signature Key Ring              |  |
| <b>F1PHONEX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |  |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |  |

| Batch Control   | Parameters (Removed from 4.5.0.1.1) |           | Parameters (Added in 4.5.0.1.1) |                                 |
|-----------------|-------------------------------------|-----------|---------------------------------|---------------------------------|
|                 | Sequence<br>Number                  | Parameter | Sequence<br>Number              | Parameter                       |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1PORTLX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1PROCNX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1REPOTX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1REQTEX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1REREQX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1RPTONX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1SCHEAX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1SCRITX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |

| Batch Control   | Parameters (Remo   | oved from 4.5.0.1.1) | Parameters (Added in 4.5.0.1.1) |                                 |
|-----------------|--------------------|----------------------|---------------------------------|---------------------------------|
|                 | Sequence<br>Number | Parameter            | Sequence<br>Number              | Parameter                       |
|                 | -                  | -                    | 100                             | Signature Key Ring              |
| <b>F1SECTEX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |
|                 | -                  | -                    | 100                             | Signature Key Ring              |
| <b>F1SERVEX</b> | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |
|                 | -                  | -                    | 100                             | Signature Key Ring              |
| F1STASEX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |
|                 | -                  | -                    | 100                             | Signature Key Ring              |
| F1STATSX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |
|                 | -                  | -                    | 100                             | Signature Key Ring              |
| F1STSRNX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |
|                 | -                  | -                    | 100                             | Signature Key Ring              |
| F1STSSTX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |
|                 | -                  | -                    | 100                             | Signature Key Ring              |
| F1SVCTKX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |
|                 | -                  | -                    | 100                             | Signature Key Ring              |
| F1TABLEX        | -                  | -                    | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                  | -                    | 90                              | Encryption Key Ring             |

| Batch Control   | Parameters (Removed from 4.5.0.1.1) |           | Parameters (Added in 4.5.0.1.1) |                                 |
|-----------------|-------------------------------------|-----------|---------------------------------|---------------------------------|
|                 | Sequence<br>Number                  | Parameter | Sequence<br>Number              | Parameter                       |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1TAGEYX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1TIMEEX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1TIMENX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1TODO4X        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1TODOEX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1TODOYX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1TRREEX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1UIMAPX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |

| Batch Control   | Parameters (Removed from 4.5.0.1.1) |           | Parameters (Added in 4.5.0.1.1) |                                 |
|-----------------|-------------------------------------|-----------|---------------------------------|---------------------------------|
|                 | Sequence<br>Number                  | Parameter | Sequence<br>Number              | Parameter                       |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1UIZO2X        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1USERPX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1USSERX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1WEBSTX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1WFEVEX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1WFMSMX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1WFPREX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| F1WFPRLX        | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |

| Batch Control | Parameters (Removed from 4.5.0.1.1) |           | Parameters (Added in 4.5.0.1.1) |                                 |
|---------------|-------------------------------------|-----------|---------------------------------|---------------------------------|
|               | Sequence<br>Number                  | Parameter | Sequence<br>Number              | Parameter                       |
|               | -                                   | -         | 100                             | Signature Key Ring              |
| F1WORKLX      | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|               | -                                   | -         | 90                              | Encryption Key Ring             |
|               | -                                   | -         | 100                             | Signature Key Ring              |
| F1XAICSX      | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|               | -                                   | -         | 90                              | Encryption Key Ring             |
|               | -                                   | -         | 100                             | Signature Key Ring              |
| F1XAIJCX      | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|               | -                                   | -         | 90                              | Encryption Key Ring             |
|               | -                                   | -         | 100                             | Signature Key Ring              |
| F1XAIJQX      | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|               | -                                   | -         | 90                              | Encryption Key Ring             |
|               | -                                   | -         | 100                             | Signature Key Ring              |
| F1XAIJRX      | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|               | -                                   | -         | 90                              | Encryption Key Ring             |
|               | -                                   | -         | 100                             | Signature Key Ring              |
| F1XAIOSX      | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|               | -                                   | -         | 90                              | Encryption Key Ring             |
|               | -                                   | -         | 100                             | Signature Key Ring              |
| F1XAISEX      | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|               | -                                   | -         | 90                              | Encryption Key Ring             |
|               | -                                   | -         | 100                             | Signature Key Ring              |
| F1XAISRX      | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|               | -                                   | -         | 90                              | Encryption Key Ring             |

| Batch Control   | Parameters (Removed from 4.5.0.1.1) |           | Parameters (Added in 4.5.0.1.1) |                                 |
|-----------------|-------------------------------------|-----------|---------------------------------|---------------------------------|
|                 | Sequence<br>Number                  | Parameter | Sequence<br>Number              | Parameter                       |
|                 | -                                   | -         | 100                             | Signature Key Ring              |
| <b>F1ZONELX</b> | -                                   | -         | 80                              | Do Not Apply Redaction<br>Rules |
|                 | -                                   | -         | 90                              | Encryption Key Ring             |
|                 | -                                   | -         | 100                             | Signature Key Ring              |

# Appendix Q : SQL Statements for 5.1.0.0.0 to 6.0.0.0 Data Migration

This section describes the PostProcessingScript query which is used for migrating data from Oracle Revenue Management and Billing Version 5.1.0.0.0 to 6.0.0.0.

## Q.1 PostProcessingScript.sql

The PostProcessingScript.sql query does the following:

- Sets the HIER\_FILTER\_FLG column of the existing deals in the C1\_DEAL table
- Sets the SIML\_REQD\_FLG column of the existing records in the C1\_PRS\_PER and C1\_PRS\_ACCT tables
- Copies the existing records from the C1\_HIERARCHY table to the C1\_HIERARCHY\_DIV table

It updates the following column values of the records in the respective table:

| Table Name       | Column Name     | Column Value After Data Migration  |  |
|------------------|-----------------|--|--|
| C1_DEAL          | HIER_FILTER_FLG | <ul> <li>The column value is set to either of the following:</li> <li>If the deal is created for an existing customer or a prospect customer using the Customer simulation type and the INCLUDE_HIERAR_SW column of the deal in the C1_DEAL table is set to True, the column value is set to HIPR corresponding to the record in the C1_DEAL table.</li> <li>If the deal is created for an existing customer using the Customer simulation type and the INCLUDE_HIERAR_SW column of the deal in the C1_DEAL table.</li> <li>If the deal is created for an existing customer using the Customer simulation type and the INCLUDE_HIERAR_SW column of the deal in the C1_DEAL table is set to False, the column value is set to WHEP corresponding to the record in the C1_DEAL table.</li> </ul> |  |
| C1_PRS_PER       | SIML_REQD_FLG   | The column value is set to <b>Y</b> when the deal version is in the <b>PSML</b> status.  |  |
| C1_PRS_ACCT      | SIML_REQD_FLG   | The column value is set to <b>Y</b> when the deal version is in the <b>PSML</b> status.  |  |
| C1_HIERARCHY_DIV | HIERARCHY_CD    | The column value is set to the value stored in the <b>HIERARCHY_CD</b> column corresponding to the record in the <b>C1_HIERARCHY</b> table.  |  |

| Table Name | Column Name  | Column Value After Data Migration   |
|------------|--------------|---|
|            | CIS_DIVISION | The column value is set to the value stored in the <b>CIS_DIVISION</b> column corresponding to the record in the <b>C1_HIERARCHY</b> table. |