

Oracle® Revenue Management and Billing

Version 2.7.0.0.0

Upgrade Guide

Revision 14.5

E95804-01

May, 2018

Oracle Revenue Management and Billing Upgrade Guide

E95804-01

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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 2.6.0.1.0 to 2.7.0.0.0	Explains how to upgrade from Oracle Revenue Management and Billing Version 2.6.0.1.0 to 2.7.0.0.0.
Section 3	Additional Tasks	Lists and describes the additional tasks that you need to perform after upgrading the application.
Appendix A	Known Issues	Lists the known issues in the current release of the Oracle Revenue Management and Billing application.
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 2.7.0.0.0	Lists and describes the tables that are newly added in the Oracle Revenue Management and Billing Version 2.7.0.0.0 database.
Appendix D	Existing Tables Modified in 2.7.0.0.0	Lists the existing tables and their columns that are modified in the Oracle Revenue Management and Billing Version 2.7.0.0.0 database.

Section No.	Section Name	Description
Appendix E	Algorithms and Algorithm Types Dropped in 2.7.0.0.0	Lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 2.7.0.0.0.
Appendix F	Parameters Added or Removed from Algorithm Types in 2.7.0.0.0	Lists the parameters which are added or removed from the algorithm types in Oracle Revenue Management and Billing Version 2.7.0.0.0.
Appendix G	Option Types Added or Removed from Feature Configurations in 2.7.0.0.0	Lists the option types which are added or removed from the feature configurations in Oracle Revenue Management and Billing Version 2.7.0.0.0.
Appendix H	Characteristic Types Dropped in 2.7.0.0.0	Lists the characteristic types which are dropped in Oracle Revenue Management and Billing Version 2.7.0.0.0.
Appendix I	SQL Statements for 2.6.0.1.0 to 2.7.0.0.0 Data Migration	Lists and describes the SQL queries which are used for migrating data from Oracle Revenue Management and Billing Version 2.6.0.1.0 to 2.7.0.0.0.
Appendix J	Revenue Recognition Division Upgrade Batch (C1-RRDIV)	Describes the batch which is used for migrating data from Oracle Revenue Management and Billing Version 2.6.0.1.0 to 2.7.0.0.0.
Appendix K	Changing the DB User Password	Explains how to change the database user password.

Related Documents

You can refer to the following documents for more information:

Document	Description
<i>Oracle Revenue Management and Billing Version 2.7.0.0.0 Release Notes</i>	Provides a brief description about the new features, enhancements, UI and database level changes, supported platforms, framework upgrade, supported upgrades, and technology upgrade made in this release. It also highlights the discontinued features, bug fixes, and known issues in this release.
<i>Oracle Revenue Management and Billing Upgrade Path Guide</i>	Explains the path and pre-requisites for upgrading Oracle Revenue Management and Billing from one version to another.

Change Log

Revision	Last Update	Updated Section	Comments
14.1	11-Jun-2018	Appendix D.1: C1_FT_EXT	Updated Information
		Appendix D.2: CI_FILE_REQUEST	Updated Information
		Appendix D.4: CI_CONSTRUCT_LOG_PARM	Updated Information
		Appendix D.5: CI_SQ_RULE	Updated Information
		Appendix D.20: CI_FILE_REQUEST_TYPE	Updated Information
14.2	28-Jun-2018	Section 2.5.2: Post Installation Tasks	Updated Information
		Section 2.5.2.2: Applying the 28105411 Patch	Added Section
		Section 2.5.2.3: Applying the 28068211 Patch	Updated Information
		Section 2.6.3: Applying the 28105411 Patch	Added Section
		Section 2.7: Migrating Data	Updated Information
14.3	02-Jul-2018	Section 2.2: Downloading the ORMB Packages and Patches	Updated Information
		Section 2.6: Upgrading the ORMB Database	Updated Information
		Section 2.6.1: Installing ORMB Version 2.7.0.0.0	Updated Information
14.4	20-Aug-2019	Section 2: Upgrading from ORMB Version 2.6.0.1.0 to 2.7.0.0.0	Added Information about the Single-Step Utility
14.5	24-Aug-2020	Section 2.3: Upgrading Framework on the Database	Added Information

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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.

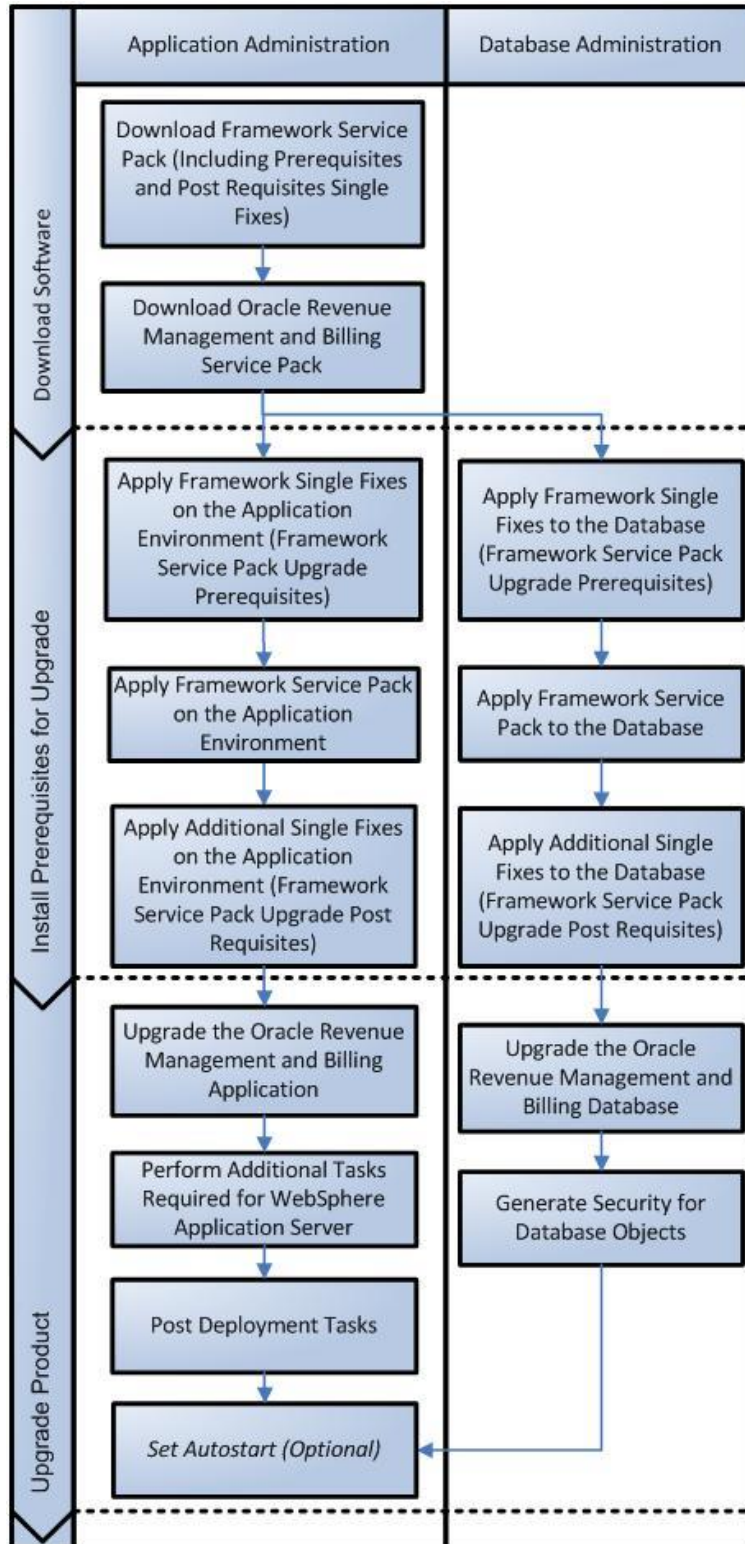


Figure 1 : Upgrade Process

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 2.6.0.1.0 to 2.7.0.0.0

Note: For upgrading from any other version of Oracle Revenue Management and Billing other than 2.6.0.1.0, consult with Oracle Support, Oracle Partner, or Oracle Consulting that may be supporting your implementation and upgrade process.

2. Upgrading from ORMB Version 2.6.0.1.0 to 2.7.0.0.0

This section explains how to upgrade from Oracle Revenue Management and Billing Version 2.6.0.1.0 to 2.7.0.0.0. The high-level steps include:

1. Downloading the ORMB Packages and Patches
2. Upgrading Framework on the Database
3. Installing Framework on the Application Environment
4. Installing the Oracle Revenue Management and Billing Application
5. Upgrading the Oracle Revenue Management and Billing Database
6. Migrating Data

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

You can upgrade the database either manually by following the steps listed in this document or automatically using the single-step utility. Oracle Revenue Management and Billing provides the single-step utility which helps to upgrade the database from any previous version (not older than V2.3.0.2.0) to the current version. You can download the single-step utility from the UTILITIES PROVIDING A SINGLE STEP PROCESS FOR DATABASE UPGRADE patch (Patch Number: 25895460) which is available on [My Oracle Support](#). To understand how to execute the single-step utility, refer to the documentation available in the patch. At present, the single-step utility is only supported on the Windows environment.

To improve the performance of the SQL queries executed for data migration, you can execute a Java utility for setting degree of parallelism. This Java utility must be used in conjunction with the single-step utility. It must be executed before executing the single-step utility. You can download this utility from the JAVA UTILITY FOR SETTING DEGREE OF PARALLELISM IN DATA MIGRATIONS SQLS patch (Patch Number: 28226772) which is available on [My Oracle Support](#). To understand how to execute this Java utility, refer to the documentation available in the patch. At present, this utility is only supported on the Windows environment.

2.1 Prerequisites

If you are already using the Transaction Feed Management feature and want to upgrade to Oracle Revenue Management and Billing Version 2.7.0.0.0, 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 2.6.0.1.0 will not happen successfully.
- Transactions which are uploaded using 2.6.0.1.0 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.

2.2 Downloading the ORMB Packages and Patches

For upgrading from Oracle Revenue Management and Billing Version 2.6.0.1.0 to 2.7.0.0.0, you must download the following packages from the Oracle Revenue Management and Billing V2.7.0.0.0 media pack which is available on [Oracle Software Delivery Cloud](#):

- Oracle Utilities Application Framework V4.3.0.4.0 Multiplatform
- Oracle Utilities Application Framework V4.3.0.4.0 Single Fix Prerequisite Rollup for RMB V2.7.0.0.0
- Oracle Revenue Management and Billing V2.7.0.0.0 Multiplatform
- Oracle Revenue Management and Billing V2.7.0.0.0 Oracle Database
- In addition, you must download the following patches from [My Oracle Support](#):
- MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 (Patch Number: 28053738)
- MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 (Patch Number: 28105411)
- UPDATE ORMB VERSION 2.7.0.0.0 ONLINE HELP (Patch Number: 28068211)
- UPGRADE FROM 2.6.0.1.0 TO 2.7.0.0.0 (Patch Number: 28118364)

The downloaded files will be in the ZIP format.

2.3 Upgrading Framework on the Database

While upgrading from Oracle Revenue Management and Billing Version 2.6.0.1.0 to 2.7.0.0.0, you need to install the following on the database:

1. Rollup Pack for Oracle Utilities Application Framework (OUAF) Version 4.3.0.4.0

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

Note: If you have applied the F1-MGDPR ISSUE WHILE EXPORTING DIVISION USING CMA patch (Patch Number: 29307690) in ORMB Version 2.6.0.1.0 database, you need to apply the ERROR EXECUTING BLUEPRINT WHILE UPGRADING FROM 2.6.0.1.0 TO 2.7.0.0.0 patch (Patch Number: 30404849) on the database before you start upgrading the database from 2.6.0.1.0 TO 2.7.0.0.0.

2.3.1 Installing Rollup Pack for OUAF Version 4.3.0.4.0

You can install the rollup pack for Oracle Utilities Application Framework Version 4.3.0.4.0 from a Windows machine and UNIX Standalone server. To install the rollup pack for Oracle Utilities Application Framework (OUAF) Version 4.3.0.4.0 on the database:

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

```
mkdir TEMPDIR
```

3. Copy the Oracle Utilities Application Framework V4.3.0.4.0 Single Fix Prerequisite Rollup for RMB V2.7.0.0.0 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 V4.3.0.4.0 Single Fix Prerequisite Rollup for RMB V2.7.0.0.0 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 ORMB-V27000-FW-PREREQ-MultiPlatform.jar file.

6. Change to <DESTINATION_FOLDER_1> using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_1>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_1>
```

7. Decompress the JAR file using the following command:

```
jar -xvf ORMB-V27000-FW-PREREQ-MultiPlatform.jar
```

A sub-directory named FW-V4.3.0.4.0-Rollup is extracted. It contains the following two sub-folders:

- Application
- Database

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

AIX, Linux:

```
cd <PATH>/TEMPDIR
```

Windows:

```
cd <PATH>\TEMPDIR
```


9. Create a directory named `dbpatch_tools` using the following command:

```
mkdir dbpatch_tools
```

10. Create the `db_patch_standalone.jar` file on the application server. For more information, refer to the Database Patching section in *Oracle Revenue Management and Billing Installation Guide*.
11. Copy the `db_patch_standalone.jar` file to the `dbpatch_tools` folder.
12. Change to the `dbpatch_tools` folder using the following command:

AIX, Linux:

```
cd <PATH>/TEMPDIR/dbpatch_tools
```

Windows:

```
cd <PATH>\TEMPDIR\dbpatch_tools
```

13. 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

14. Set the `TOOLS_BIN` environment variable using the following command:

AIX, Linux:

```
export TOOLS_BIN=/TEMPDIR/dbpatch_tools/bin
```

Windows:

```
SET TOOLS_BIN=TEMPDIR\dbpatch_tools\bin
```

15. Change to the Database directory using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/FW-V4.3.0.4.0-Rollup/Database
```

Windows:

```
cd <DESTINATION_FOLDER_1>\FW-V4.3.0.4.0-Rollup\Database
```

Note: The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the `ORMB-V27000-FW-PREREQ-MultiPlatform.jar` file.

16. Execute the `ouafDatabasePatch` utility using the following command:

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

Note: In the previous versions of Oracle Revenue Management and Billing, you used to execute the `cdxpatch` utility while installing the rollup pack for Oracle Utilities Application Framework. Henceforth, the `cdxpatch` utility is no longer supported and you need to use the `ouafDatabasePatch` utility.

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

Parameter	Value
Enter the target database type (O/M/D) [O]	O (if you have Oracle database) OR M (if you have MySQL database)
Enter the username that owns the schema	<DB_USER> Example: CISADM
Enter the password for the <DB_USER> user	<DB_USER_PASSWORD>
Enter the name of the Oracle Database Connection String	<DB_Server:DBPORT:ORACLE_SID>

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 4.3.0.4.0. You will have to first change the database user password. For more information on how to change the database user password, refer to [Appendix K: Changing the DB User Password](#).

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

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

18. 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 service pack on the database and define security for all database objects, you must install the framework and its service packs on the application environment. You need to install the following on the application environment:

1. Oracle Utilities Application Framework (OUAF) Version 4.3.0.4.0
2. Rollup Pack for Oracle Utilities Application Framework (OUAF) Version 4.3.0.4.0

You cannot perform these steps on the existing environments. You need to 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 4.3.0.4.0

To install Oracle Utilities Application Framework (OUAF) Version 4.3.0.4.0 on the application environment:

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

```
mkdir TEMPDIR
```

3. Copy the Oracle Utilities Application Framework V4.3.0.4.0 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.

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 V4.3.0.4.0 Multiplatform 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 `FW-V4.3.0.4.0-MultiPlatform.jar` file.

6. Decompress the `FW-V4.3.0.4.0-MultiPlatform.jar` file using the following command:

```
jar -xvf FW-V4.3.0.4.0-MultiPlatform.jar
```

The contents of the JAR file include a folder named `FW.V4.3.0.4.0`.

7. 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 *Oracle Revenue Management and Billing Installation Guide*.

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

```
export PATH=/<Java_Home>/bin:$PATH
```

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.

9. Change to the FW.V4.3.0.4.0 folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/FW.V4.3.0.4.0
```

Windows:

```
cd <DESTINATION_FOLDER_1>\FW.V4.3.0.4.0
```

Note: The <DESTINATION_FOLDER_1> folder is the location where you have extracted the contents of the FW-V4.3.0.4.0-MultiPlatform.jar file.

10. Execute the `install` utility using the following command:

AIX, Linux:

```
ksh ./install.sh
```

Windows:

```
install.cmd
```

The following message appears in the command line:

```
Enter Oracle Client Home Directory (<Enter> quit):
```

11. 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

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.

12. 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.

13. Specify the required value for menu options, and then press **Enter**.

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

14. 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.
15. Specify the required value for menu options, and then press **Enter**.

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

16. 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.
17. Specify the required value for menu options, and then press **Enter**. The specified values are stored in the `$SPLEBASE/etc/ENVIRON.INI` file.

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 directory named Log File Mount Point. If this output directory 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 *Oracle Revenue Management and Billing Installation Guide*.

18. 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. SSL Certificate Keystore
 - 7. OUAF TrustStore Options
19. Type **1**, and then press **Enter**. The utility prompts you to enter the environment description.
20. Specify the environment description, and then press **Enter**.

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

21. 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.
22. Specify the required value for menu options, and then press **Enter**.

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

23. 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.

24. Specify the required value for menu options, and then press **Enter**.

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

25. 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.

26. Specify the required value for menu options, and then press **Enter**.

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

27. 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.

28. Specify the required value for menu options, and then press **Enter**.

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

29. Type **6** to define values for the SSL certificate keystore options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.

30. Specify the required value for menu options, and then press **Enter**.

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

31. Type **7** 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.

32. Specify the required value for menu options, and then press **Enter**.

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

33. Type **P** to proceed with the installation. The Oracle Utilities Application Framework Version 4.3.0.4.0 is installed on the application server.

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 all menu options. Otherwise, the installation process will not be completed successfully.

The values that you specify for the menu options are stored in the `$SPLEBASE/etc/ENVIRON.INI` file.

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` directory. And, on the Windows machine, this utility is available in the `%SPLEBASE%\bin` directory.

2. `splenvron` - The `splenvron` utility sets the environment variables using the `ENVIRON.INI` file. On the UNIX machine, this utility is available in the `$SPLEBASE/bin` directory. And, on the

Windows machine, this utility is available in the %SPLEBASE%\bin directory. The following are some of the key environment variables that are set using the splenviron utility:

- \$PATH
- \$SPLEBASE (%SPLEBASE%) – Indicates the <SPLDIR>/<SPLENVIRON> directory
- \$SPLOUTPUT (%SPLOUTPUT%) - Indicates the <SPLDIROUT>/<SPLENVIRON> directory
- \$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:

AIX, Linux:

```
$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, startup 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 4.3.0.4.0

To install the rollup pack for Oracle Utilities Application Framework Version 4.3.0.4.0 on the application environment:

1. Copy the Oracle Utilities Application Framework V4.3.0.4.0 Single Fix Prerequisite Rollup for RMB V2.7.0.0.0 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 Utilities Application Framework V4.3.0.4.0 Single Fix Prerequisite Rollup for RMB V2.7.0.0.0 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-V27000-FW-PREREQ-MultiPlatform.jar file.

- Decompress the JAR file using the following command:

```
jar -xvf ORMB-V27000-FW-PREREQ-MultiPlatform.jar
```

A sub-directory named FW-V4.3.0.4.0-Rollup is extracted. It contains the following two sub-folders:

- Application
- Database

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

AIX, Linux:

```
$SPLEBASE/bin/splenvron.sh -e $SPLENVIRON
```

Windows:

```
%SPLEBASE%\bin\splenvron.cmd -e %SPLENVIRON%
```

- Change to the Application directory using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_2>/FW-V4.3.0.4.0-Rollup/Application
```

Windows:

```
cd <DESTINATION_FOLDER_2>\FW-V4.3.0.4.0-Rollup\Application
```

Note: The <DESTINATION_FOLDER_2> folder is the location where you have extracted the contents of the ORMB-V27000-FW-PREREQ-MultiPlatform.jar file.

- Execute the installSFgroup utility using the following command:

AIX, Linux:

```
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 2.7.0.0.0

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.

2.5.1 Installing ORMB Version 2.7.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 2.7.0.0.0 on the application environment:

1. Login to the application server using the administrator's credentials.
2. Copy the Oracle Revenue Management and Billing V2.7.0.0.0 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 Revenue Management and Billing V2.7.0.0.0 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.V2.7.0.0.0` folder.

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

AIX, Linux:

```
$SPLEBASE/bin/splenvron.sh -e $SPLENVIRON
```

Windows:

```
%SPLEBASE%\bin\splenvron.cmd -e %SPLENVIRON%
```

6. Stop the managed server where the application is hosted using the WebLogic Console.
7. Change to the ORMB.V2.7.0.0.0 folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_3>/ORMB.V2.7.0.0.0
```

Windows:

```
cd <DESTINATION_FOLDER_3>\ORMB.V2.7.0.0.0
```

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**.

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.

11. If you are using demo certificates, execute the following commands before starting the environment:

AIX, Linux:

```
cd $SPLEBASE/bin
perl demo_gen_cert.plx
```

Windows:

```
cd %SPLEBASE%\bin
perl demo_gen_cert.plx
```

2.5.2 Post Installation Tasks

Once you install Oracle Revenue Management and Billing (ORMB) Version 2.7.0.0.0, you need to apply the following patches on the application environment:

- MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 (Patch Number: 28053738)
- MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 (Patch Number: 28105411)
- UPDATE ORMB VERSION 2.7.0.0.0 ONLINE HELP (Patch Number: 28068211)

2.5.2.1 Applying the 28053738 Patch

Once you install ORMB, you need to apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 patch (Patch Number: 28053738). To apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 patch:

1. Copy the MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 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 MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 patch 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_28053738_Product_Fix_Design.pdf.

4. Unzip the MultiPlatform 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 V2.7.0.0.0-28053738_MultiPlatform folder.

5. Change to the V2.7.0.0.0-28053738_MultiPlatform folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V2.7.0.0.0-28053738_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_5>\V2.7.0.0.0-28053738_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.V2.7.0.0.0-28053738.jar and a folder named database.

6. Decompress the CCB.V2.7.0.0.0-28053738.jar file using the following command:

```
jar -xvf CCB.V2.7.0.0.0-28053738.jar
```

The contents include two folders - META-INF and CCB.V2.7.0.0.0-28053738.

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

AIX, Linux:

```
$SPLEBASE/bin/splenvron.sh -e $SPLENVIRON
```

Windows:

```
%SPLEBASE%\bin\splenvron.cmd -e %SPLENVIRON%
```

8. Change to the CCB.V2.7.0.0.0-28053738 folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V2.7.0.0.0-
28053738_MultiPlatform/CCB.V2.7.0.0.0-28053738
```

Windows:

```
cd <DESTINATION_FOLDER_5>\V2.7.0.0.0-  
28053738_MultiPlatform\CCB.V2.7.0.0.0-28053738
```

Note: The V2.7.0.0.0-28053738_MultiPlatform folder is the location where you have extracted the contents of the CCB.V2.7.0.0.0-28053738.jar file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.2 Applying the 28105411 Patch

Once you apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 patch, you need to apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 patch (Patch Number: 28105411). To apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 patch:

1. Copy the MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 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 MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_6>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_6>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_6> folder. The contents include three files - README.txt, MultiPlatform.zip, and Bug_28105411_Product_Fix_Design.pdf.

4. Unzip the MultiPlatform file using the following command:

AIX, Linux:

```
unzip <DESTINATION_FOLDER_6>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_7>
```

Windows:

```
unzip <DESTINATION_FOLDER_6>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_7>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_7> folder. The contents include the V2.7.0.0.0-28105411_MultiPlatform folder.

5. Change to the V2.7.0.0.0-28105411_MultiPlatform folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_7>/V2.7.0.0.0-28105411_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_7>\V2.7.0.0.0-28105411_MultiPlatform
```

Note: The <DESTINATION_FOLDER_7> folder is the location where you have extracted the contents of the MultiPlatform.zip file.

The contents include a file named CCB.V2.7.0.0.0-28105411.jar and a folder named database.

6. Decompress the CCB.V2.7.0.0.0-28105411.jar file using the following command:

```
jar -xvf CCB.V2.7.0.0.0-28105411.jar
```

The contents include two folders -META-INF and CCB.V2.7.0.0.0-28105411.

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

AIX, Linux:

```
$SPLBASE/bin/splenvron.sh -e $SPLENVIRON
```

Windows:

```
%SPLBASE%\bin\splenvron.cmd -e %SPLENVIRON%
```

8. Change to the CCB.V2.7.0.0.0-28105411 folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_7>/V2.7.0.0.0-  
28105411_MultiPlatform/CCB.V2.7.0.0.0-28105411
```

Windows:

```
cd <DESTINATION_FOLDER_7>\V2.7.0.0.0-  
28105411_MultiPlatform\CCB.V2.7.0.0.0-28105411
```

Note: The V2.7.0.0.0-28105411_MultiPlatform folder is the location where you have extracted the contents of the CCB.V2.7.0.0.0-28105411.jar file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.3 Applying the 28068211 Patch

Once you apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 patch, you need to apply the UPDATE ORMB VERSION 2.7.0.0.0 ONLINE HELP patch (Patch Number: 28068211). To apply the UPDATE ORMB VERSION 2.7.0.0.0 ONLINE HELP patch:

1. Copy the UPDATE ORMB VERSION 2.7.0.0.0 ONLINE HELP 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 UPDATE ORMB VERSION 2.7.0.0.0 ONLINE HELP patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_8>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_8>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_8> folder. The contents include three files - README.txt, MultiPlatform.zip, and Bug_28068211_Product_Fix_Design.pdf.

4. Unzip the MultiPlatform file using the following command:

AIX, Linux:

```
unzip <DESTINATION_FOLDER_8>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_9>
```

Windows:

```
unzip <DESTINATION_FOLDER_8>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_9>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_9> folder. The contents include the V2.7.0.0.0-28068211_MultiPlatform folder.

5. Change to the V2.7.0.0.0-28068211_MultiPlatform folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_9>/V2.7.0.0.0-28068211_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_9>\V2.7.0.0.0-28068211_MultiPlatform
```

Note: The <DESTINATION_FOLDER_9> folder is the location where you have extracted the contents of the MultiPlatform.zip file.

The contents include a file named CCB.V2.7.0.0.0-28068211.jar.

6. Decompress the CCB.V2.7.0.0.0-28068211.jar file using the following command:

```
jar -xvf CCB.V2.7.0.0.0-28068211.jar
```

The contents include two folders -META-INF and CCB.V2.7.0.0.0-28068211.

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

AIX, Linux:

```
$$SPLEBASE/bin/splenvron.sh -e $$SPLENVIRON
```

Windows:

```
%SPLEBASE%\bin\splenvron.cmd -e %SPLENVIRON%
```

8. Change to the CCB.V2.7.0.0.0-28068211 folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_9>/V2.7.0.0.0-  
28068211_MultiPlatform/CCB.V2.7.0.0.0-28068211
```

Windows:

```
cd <DESTINATION_FOLDER_9>\V2.7.0.0.0-  
28068211_MultiPlatform\CCB.V2.7.0.0.0-28068211
```

Note: The V2.7.0.0.0-28068211_MultiPlatform folder is the location where you have extracted the contents of the CCB.V2.7.0.0.0-28068211.jar file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

10. Start the managed server using the 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
WebLogic	https://<hostname>:<WebLogic_Port_Number>/ouaf/loginPage.jsp

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 2.6.0.1.0 to 2.7.0.0.0, you need to install the following on the database:

1. Oracle Revenue Management and Billing (ORMB) Version 2.7.0.0.0
2. MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 (Patch Number: 28053738)
3. MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 (Patch Number: 28105411)

Note:

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.

Pre-requisites:

Before installing Oracle Revenue Management and Billing Version 2.7.0.0.0 on the database, you need to set the MAX_STRING_SIZE parameter to EXTENDED. If you have a non-container database, you need to perform the following steps to set the MAX_STRING_SIZE parameter to EXTENDED:

1. Set the ORACLE_HOME and ORACLE_SID environment variables.

Note: You need to connect as system administrator while executing the below steps.

2. Shutdown the target database using the following command:

```
shutdown immediate
```

3. Start the database in the Upgrade mode using the following command:

```
startup upgrade
```

4. Set the MAX_STRING_SIZE parameter to EXTENDED using the following command:

```
alter system set max_string_size=extended scope=both;
```

5. Execute the utl32k.sql file using the following command:

```
@?/rdbms/admin/utl32k.sql;
```

6. Restart the database in the Normal mode using the following commands:

```
shutdown immediate  
startup
```

However, if you have a container database, you need to perform the following steps to set the MAX_STRING_SIZE parameter to EXTENDED:

1. Set the ORACLE_HOME and ORACLE_SID environment variables.

Note: You need to connect as system administrator while executing the below steps.

2. Set the MAX_STRING_SIZE parameter to EXTENDED using the following command:

```
alter system set max_string_size=extended scope=spfile;
```

3. Start all pluggable databases in the Upgrade mode using the following command:

```
shutdown immediate  
startup upgrade  
alter pluggable database all open upgrade;  
exit
```

4. Create the utl32k_cdb_pdb_output folder to store the log files using the following command:

```
mkdir /scratch/mydir/utl32k_cdb_pdb_output
```

5. Execute the utl32k.sql from the catcon.pl file for all pluggable databases using the following command:

```
cd $ORACLE_HOME/rdbms/admin  
$ORACLE_HOME/perl/bin/perl $ORACLE_HOME/rdbms/admin/catcon.pl -u  
SYS -d $ORACLE_HOME/rdbms/admin -l  
'/scratch/mydir/utl32k_cdb_pdb_output' -b  
utl32k_cdb_pdb_output utl32k.sql
```

6. Restart the database in the Normal mode using the following commands:

```
shutdown immediate  
startup  
alter pluggable database all open read write;
```

2.6.1 Installing ORMB Version 2.7.0.0.0

You can install Oracle Revenue Management and Billing (ORMB) Version 2.7.0.0.0 either using the Interactive or Command Line mode of the OraDBI (Java) utility. To install Oracle Revenue Management and Billing (ORMB) Version 2.7.0.0.0 using the Interactive mode of the utility:

1. Copy the Oracle Revenue Management and Billing V2.7.0.0.0 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.

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

AIX, Linux:

```
cd <PATH>/TEMPDIR
```

Windows:

```
cd <PATH>\TEMPDIR
```

3. Unzip the Oracle Revenue Management and Billing V2.7.0.0.0 Oracle Database 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 following sub-folders:

- FW
- RMB

4. Set the `JAVA_HOME` environment variable using the following command:

Windows:

```
SET JAVA_HOME=<JAVA_HOME_PATH>
```

AIX, Linux:

```
export JAVA_HOME=<JAVA_HOME_PATH>
```

Note: The `<JAVA_HOME_PATH>` is the location where Java Development Kit Version 8.0 is installed.

5. Set the JAR_PATH environment variable using the following command:

AIX, Linux:

```
export JAR_PATH=<DESTINATION_FOLDER_2>/RMB/jarfiles
```

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

6. Set the CLASS_PATH environment variable using the following command:

Windows:

```
SET CLASS_PATH=<DESTINATION_FOLDER_2>\RMB\jarfiles\*
```

AIX, Linux:

```
export CLASS_PATH=${JAR_PATH}/ojdbc7-12.1.0.2.jar:${JAR_PATH}/log4j-api-2.6.2.jar:${JAR_PATH}/log4j-core-2.6.2.jar:${JAR_PATH}/commons-cli-1.3.1.jar:${JAR_PATH}/commons-codec-1.9.jar:${JAR_PATH}/oradbi.jar:${JAR_PATH}/commons-collections-3.2.2.jar:${JAR_PATH}/spl-shared-4.3.0.4.0.jar
```

OR

```
export CLASS_PATH=${JAR_PATH}/ojdbc7-12.2.0.1.jar:${JAR_PATH}/log4j-api-2.6.2.jar:${JAR_PATH}/log4j-core-2.6.2.jar:${JAR_PATH}/commons-cli-1.3.1.jar:${JAR_PATH}/commons-codec-1.9.jar:${JAR_PATH}/oradbi.jar:${JAR_PATH}/commons-collections-3.2.2.jar:${JAR_PATH}/spl-shared-4.3.0.4.0.jar
```

7. Change to the Install-Upgrade directory using the following command:

Windows:

```
cd <DESTINATION_FOLDER_2>\RMB\Upgrade\Oracle\Install-Upgrade
```

AIX, Linux:

```
cd <DESTINATION_FOLDER_2>/RMB/Upgrade/Oracle/Install-Upgrade
```

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

Windows:

```
<Java_Home>\bin\java -Xmx1500M -cp com.oracle.ouaf.oem.install.OraDBI
```

AIX, Linux:

```
${JAVA_HOME}/bin/java -Xmx1500M -cp ${CLASS_PATH} com.oracle.ouaf.oem.install.OraDBI
```

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

Parameter	Value
Enter the database server hostname	<DB_SERVER>
Enter the database port number(e.g. 1521)	<DB_PORT>

Parameter	Value
Enter the database name/SID	<DB_NAME>
Enter your database username	<DB_USER> Example: CISADM
Enter your password for username <DB_USER>	<DB_USER_PASSWORD>
Enter the location for Java Home (e.g. C:\Java\jdk1.6.0_18)	..\jdk1.8.0_121
Enter the Oracle user with read-write privileges to Database Schema(e.g. CISUSER)	<DB_USER> Example: CISUSER
Enter the Oracle user with read-only privileges to Database Schema(e.g. CISREAD)	<DB_USER> Example: CISREAD
Enter the database role with read-write privileges to Database Schema(e.g. CIS_USER)	<DB_USER_ROLE> Example: CIS_USER
Enter the database role with read-only privileges to Database Schema(e.g. CIS_READ)	<DB_USER_ROLE> Example: CIS_READ
Enter the name of the target Schema where you want to install or upgrade	<Schema_Name>

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

```
Ready to upgrade the target database from V2.6.0.1.0 to
V2.7.0.0.0, do you want to continue (Y/N)?
```

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

To install Oracle Revenue Management and Billing (ORMB) Version 2.7.0.0.0 using the Command Line mode of the utility:

- Copy the Oracle Revenue Management and Billing V2.7.0.0.0 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.

- Change to the TEMPDIR folder using the following command:

AIX, Linux:

```
cd <PATH>/TEMPDIR
```

Windows:

```
cd <PATH>\TEMPDIR
```

- Unzip the Oracle Revenue Management and Billing V2.7.0.0 Oracle Database 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 following sub-folders:

- FW
- RMB

- Set the JAVA_HOME environment variable using the following command:

Windows:

```
SET JAVA_HOME=<JAVA_HOME_PATH>
```

AIX, Linux:

```
export JAVA_HOME=<JAVA_HOME_PATH>
```

Note: The <JAVA_HOME_PATH> is the location where Java Development Kit Version 8.0 is installed.

- Set the JAR_PATH environment variable using the following command:

AIX, Linux:

```
export JAR_PATH=<DESTINATION_FOLDER_2>/RMB/jarfiles
```

Note: The above command is applicable only for Linux platform.

- Set the CLASS_PATH environment variable using the following command:

Windows:

```
SET CLASS_PATH=<DESTINATION_FOLDER_2>\RMB\jarfiles\*
```

AIX, Linux:

```
export CLASS_PATH=${JAR_PATH}/ojdbc7-12.1.0.2.jar:${JAR_PATH}/log4j-api-2.6.2.jar:${JAR_PATH}/log4j-core-2.6.2.jar:${JAR_PATH}/commons-cli-1.3.1.jar:${JAR_PATH}/commons-codec-1.9.jar:${JAR_PATH}/oradbi.jar:${JAR_PATH}/commons-collections-3.2.2.jar:${JAR_PATH}/spl-shared-4.3.0.4.0.jar
```

OR

```
export CLASS_PATH=${JAR_PATH}/ojdbc7-12.2.0.1.jar:${JAR_PATH}/log4j-api-2.6.2.jar:${JAR_PATH}/log4j-core-2.6.2.jar:${JAR_PATH}/commons-cli-1.3.1.jar:${JAR_PATH}/commons-codec-1.9.jar:${JAR_PATH}/oradbi.jar:${JAR_PATH}/commons-collections-3.2.2.jar:${JAR_PATH}/spl-shared-4.3.0.4.0.jar
```

7. Create the `detail.txt` file with the following details:

```
-d jdbc:oracle:thin:@<Database-host>:<port>/<DB-SID>,<schema-
user>,<schema-password>,<read-write-user>,<read-user>,<read-
write-role>,<read-role>,<schema-user> -l 1,2 -j <JAVA_HOME> -q
true
```

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

Windows:

```
cd <DESTINATION_FOLDER_2>\RMB\Upgrade\Oracle\Install-Upgrade
```

AIX, Linux:

```
cd <DESTINATION_FOLDER_2>/RMB/Upgrade/Oracle/Install-Upgrade
```

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

Windows:

```
<Java_Home>\bin\java -Xmx1500M -cp
<DESTINATION_FOLDER_1>\RMB\jarfiles\*
com.oracle.ouaf.oem.install.OraDBI -f detail.txt
```

AIX, Linux:

```
${JAVA_HOME}/bin/java -Xmx1500M -cp ${CLASS_PATH}
com.oracle.ouaf.oem.install.OraDBI -f detail.txt
```

A message appears indicating that the process is completed successfully.

2.6.2 Applying the 28053738 Patch

Once you install ORMB, you need to apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 patch (Patch Number: 28053738). You can apply this patch from a Windows machine and UNIX Standalone server.

To apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 patch:

1. Copy the MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 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 MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 patch 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 three files - `README.txt`, `MultiPlatform.zip`, and `Bug_28053738_Product_Fix_Design.pdf`.

4. Unzip the `MultiPlatform` file using the following command:

AIX, Linux:

```
unzip <DESTINATION_FOLDER_3>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_4>
```

Windows:

```
unzip <DESTINATION_FOLDER_3>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_4>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_4>` folder. The contents include the `V2.7.0.0.0-28053738_MultiPlatform` folder.

5. Change to the `V2.7.0.0.0-28053738_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_4>/V2.7.0.0.0-28053738_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_4>\V2.7.0.0.0-28053738_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_4>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.7.0.0.0-28053738.jar` and a folder named `database`.

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

AIX, Linux:

```
cd database/ORACLE
```

Windows:

```
cd database\ORACLE
```

The contents include a zip file named CDXPatch.

7. Unzip the CDXPatch file using the following command:

AIX, Linux:

```
unzip CDXPatch.zip -d <PATH>/<DESTINATION_FOLDER_5>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_5>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_5> folder. The contents include utility files and a folder named 28053738.

8. Ensure that TOOLSBIN environment variable is set using the following command:

AIX, Linux:

```
export TOOLSBIN=/TEMPDIR/dbpatch_tools/bin
```

Windows:

```
SET TOOLSBIN=TEMPDIR\dbpatch_tools\bin
```

Note: The dbpatch_tools folder is the location where you have extracted the contents of db_patch_standalone.jar file.
--

9. Change to <DESTINATION_FOLDER_5> using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_5>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_5>
```

10. Execute the ouafDatabasePatch utility using the following command:

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.6.3 Applying the 28105411 Patch

Once you apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.7.0.0.0 patch, you need to apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 patch (Patch Number: 28105411). You can apply this patch from a Windows machine and UNIX Standalone server.

To apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 patch:

1. Copy the MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 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 MANDATORY PATCH 2 FOR ORMB VERSION 2.7.0.0.0 patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_6>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_6>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_6>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_28105411_Product_Fix_Design.pdf`.

4. Unzip the `MultiPlatform` file using the following command:

AIX, Linux:

```
unzip <DESTINATION_FOLDER_6>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_7>
```

Windows:

```
unzip <DESTINATION_FOLDER_6>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_7>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_7>` folder. The contents include the `V2.7.0.0.0-28105411_MultiPlatform` folder.

5. Change to the `V2.7.0.0.0-28105411_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_7>/V2.7.0.0.0-28105411_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_7>\V2.7.0.0.0-28105411_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_7>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.7.0.0.0-28105411.jar` and a folder named `database`.

6. Change to the `ORACLE` folder using the following command:

AIX, Linux:

```
cd database/ORACLE
```

Windows:

```
cd database\ORACLE
```

The contents include a zip file named `CDXPatch`.

7. Unzip the `CDXPatch` file using the following command:

AIX, Linux:

```
unzip CDXPatch.zip -d <PATH>/<DESTINATION_FOLDER_8>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_8>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_8>` folder. The contents include utility files and a folder named `28105411`.

8. Ensure that `TOOLSBIN` environment variable is set using the following command:

AIX, Linux:

```
export TOOLSBIN=/TEMPDIR/dbpatch_tools/bin
```

Windows:

```
SET TOOLSBIN=TEMPDIR\dbpatch_tools\bin
```

Note: The `dbpatch_tools` folder is the location where you have extracted the contents of `db_patch_standalone.jar` file.

9. Change to `<DESTINATION_FOLDER_8>` using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_8>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_8>
```

10. Execute the `ouafDatabasePatch` utility using the following command:

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.7 Migrating Data

Once you upgrade the database, you can migrate the data from Oracle Revenue Management and Billing Version 2.6.0.1.0 to 2.7.0.0.0 using the `PostProcessingScript` query which is available in the `UPGRADE FROM 2.6.0.1.0 TO 2.7.0.0.0` patch.

To migrate the data from ORMB Version 2.6.0.1.0 to 2.7.0.0.0:

1. Copy the `UPGRADE FROM 2.6.0.1.0 TO 2.7.0.0.0` 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 2.6.0.1.0 TO 2.7.0.0.0` patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_6>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_6>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_6>` 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_6>/deploy.zip -d  
<PATH>/<DESTINATION_FOLDER_7>
```

Windows:

```
unzip <DESTINATION_FOLDER_6>\deploy.zip -d  
<PATH>\<DESTINATION_FOLDER_7>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_7>` folder. The contents include a folder named `Migration_From_V2.6.0.1.0_To_V2.7.0.0.0`. This folder contains one file named `PostProcessingScript.sql`.

5. Change to the `Migration_From_V2.6.0.1.0_To_V2.7.0.0.0` folder using the following command:

```
cd <DESTINATION_FOLDER_7>\Migration_From_V2.6.0.1.0_To_V2.7.0.0.0
```

6. Connect to the ORMB database using a utility named SQL*Plus and the administrator's (for example, CISADM) credentials.
7. Execute the following query from the `Migration_From_V2.6.0.1.0_To_V2.7.0.0.0` folder:

```
PostProcessingScript.sql
```

Note: For more information about the query, refer to the **PostProcessingScript.sql** section in [Appendix I: SQL Statements for 2.6.0.1.0 to 2.7.0.0.0 Data Migration](#).

In addition, if you are already using the Deferred Revenue Recognition feature and want to upgrade to the ORMB V2.7.0.0.0, you need to execute the **Revenue Recognition Division Upgrade Batch (C1-RRDIV)** batch to migrate the data from the previous release to the new release. It considers all existing deferred revenue recognitions which are in the **Active** status. It then checks whether the corresponding deferred revenue recognition template is associated to any division. If the deferred revenue recognition template is not associated to any division, it derives the division from the contract for which the deferred revenue recognition is created and then associates the division with the respective deferred revenue recognition template. In this process, the deferred revenue recognition template might be associated with one or more divisions.

Note:

For more information about the batch, refer to [Appendix J: Revenue Recognition Division Upgrade Batch \(C1-RRDIV\)](#).

If you are upgrading from any previous version of ORMB other than 2.6.0.1.0, you need to first execute the **Upgrade Batch for Deferred Revenue Recognition (C1-RRUPG)** batch before executing the **Revenue Recognition Division Upgrade Batch (C1-RRDIV)** batch. For more information about the **Upgrade Batch for Deferred Revenue Recognition (C1-RRUPG)** batch, refer to the **Migrating Data** section in *Oracle Revenue Management and Billing 2.6.0.1.0 Upgrade Guide*.

3. Additional Tasks

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

- Generating the Application Viewer
- Starting the Thread Pool Worker
- Building Javadoc Index

3.1 Generating the Application Viewer

Once you upgrade the application, you need to regenerate the application viewer. To regenerate the application viewer:

1. Login to the application server using the administrator's credentials.
2. Initialize the application environment (on which you want to regenerate the application viewer) 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 %SPLEBASE% is the name of the application environment for which you want to set the environment variables.

3. Set the ANT_OPTS environment variable using the following command:

Windows:

```
Set ANT_OPTS= -Xms512m -Xmx1024m -XX:PermSize=256M
```

Note: This command helps to process some tasks which require more memory. This command is only applicable for Windows and not for Linux machine.

4. Execute the genappvieweritems utility using the following command:

AIX, Linux:

```
$SPLEBASE/bin/genappvieweritems.sh
```

Windows:

```
%SPLEBASE%\bin\genappvieweritems.cmd
```

If the application viewer is generated successfully, the response code is set to 0. However, if you get any other response code other than 0, it means an error has occurred while generating the application viewer. A log file is created in the \$SPLEBASE/logs folder.

5. Execute the `initialSetup` utility using the following command:

AIX, Linux:

```
$SPLEBASE/bin/initialSetup.sh
```

Windows:

```
%SPLEBASE%\bin\initialSetup.cmd
```

Where, `$SPLEBASE` or `%SPLEBASE%` is the path where the application environment is installed.

The `initialSetup` utility updates the configuration files including the WAR files on the system.

3.2 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.

3.3 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.

Appendix A : Known Issues

To view a list of known issues in the current release, refer to *Oracle Revenue Management and Billing Version 2.7.0.0.0 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 2.7.0.0.0

This section lists and describes the tables that are newly added in the Oracle Revenue Management and Billing Version 2.7.0.0.0 database.

C.1 C1_ACCT_SUBSCR

Purpose:	Used to store the details of an account subscription.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_ID	CHAR(12)	No	-
ACCT_ID	CHAR(10)	Yes	-
SA_ID	CHAR(10)	Yes	-
SUBSCR_TYPE_CD	CHAR(30)	Yes	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
CRE_DTTM	DATE	Yes	-
STATUS_UPD_DTTM	DATE	Yes	-
INITIAL_END_DT	DATE	Yes	-
AUTO_RENEW_SW	CHAR(1)	Yes	'N'
PERCENT_ESC	NUMBER(5,2)	Yes	-
BO_STATUS_CD	CHAR(12)	No	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
BO_DATA_AREA	CLOB	Yes	-
BUS_OBJ_CD	CHAR(30)	No	''
VERSION	NUMBER(5)	No	1
INITIAL_START_DT	DATE	No	-
TRMN_REASON_FLG	VARCHAR2(50)	Yes	-
SUBSCR_COMMENTS	VARCHAR2(4000)	Yes	-
TRMN_DATE	DATE	Yes	-

Primary Key:

Key Type	Column Name
Simple	SUBSCR_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT917P0	Unique	SUBSCR_ID

C.2 C1_ACCT_SUBSCR_ACTION

Purpose:	Used to store the suspension and termination details of an account subscription.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_ID	CHAR(12)	No	-
ACTION_TYPE_FLG	CHAR(4)	No	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
SUSP_COND_FLG	CHAR(4)	Yes	-
TRMN_REASON_FLG	CHAR(4)	Yes	-
SUSP_REASON_FLG	CHAR(4)	Yes	-
VERSION	NUMBER(5)	No	1
SUBSCR_ACTION_ID	CHAR(12)	No	-
RENEWAL_TYPE_FLG	CHAR(4)	Yes	-
RESUME_DT	DATE	Yes	-

Primary Key:

Key Type	Column Name
Composite	SUBSCR_ID
	CHAR_TYPE_CD
	EFFT_DT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT920P0	Unique	SUBSCR_ID
			CHAR_TYPE_CD
			EFFT_DT

C.3 C1_ACCT_SUBSCR_CHAR

Purpose:	Used to store characteristics defined for an account subscription.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_ID	CHAR(12)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFT_DT	DATE	No	-
CHAR_VAL	CHAR(16)	Yes	-
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	-
CHAR_VAL_FK1	VARCHAR2(50)	Yes	-
CHAR_VAL_FK2	VARCHAR2(50)	Yes	-
CHAR_VAL_FK3	VARCHAR2(50)	Yes	-
CHAR_VAL_FK4	VARCHAR2(50)	Yes	-
CHAR_VAL_FK5	VARCHAR2(50)	Yes	-
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	SUBSCR_ID
	CHAR_TYPE_CD
	EFFT_DT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT920P0	Unique	SUBSCR_ID
			CHAR_TYPE_CD
			EFFT_DT

C.4 C1_ACCT_SUBSCR_K

Purpose:	Used to store account subscription ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_ID	CHAR(12)	No	-
ENV_ID	NUMBER(6)	No	-

Primary Key:

Key Type	Column Name
Composite	SUBSCR_ID
	EFFT_DT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT925P0	Unique	SUBSCR_ID
			ENV_ID

C.5 C1_ACCT_SUBSCR_LOG

Purpose:	Used to store logs of an account subscription.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_ID	CHAR(12)	No	-
SEQNO	NUMBER(5)	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_STATUS_CD	CHAR(12)	Yes	-
DESCRLONG	VARCHAR2(4000)	Yes	-
MESSAGE_CAT_NBR	NUMBER(5)	Yes	-
MESSAGE_NBR	NUMBER(5)	Yes	-
CHAR_TYPE_CD	CHAR(8)	Yes	-
CHAR_VAL	CHAR(16)	Yes	-
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	-
CHAR_VAL_FK1	VARCHAR2(50)	Yes	-
CHAR_VAL_FK2	VARCHAR2(50)	Yes	-
CHAR_VAL_FK3	VARCHAR2(50)	Yes	-
CHAR_VAL_FK4	VARCHAR2(50)	Yes	-
CHAR_VAL_FK5	VARCHAR2(50)	Yes	-
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-
USER_ID	CHAR(8)	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
LOG_DTTM	DATE	Yes	-
VERSION	NUMBER(5)	Yes	1

Primary Key:

Key Type	Column Name
Composite	SUBSCR_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT924P0	Unique	SUBSCR_ID
			SEQNO

C.6 C1_ACCT_SUBSCR_LOG_PARM

Purpose:	Used to store account subscription's log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_ID	CHAR(12)	No	-
SEQNO	NUMBER(5)	No	-
PARM_SEQ	NUMBER(3)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	Yes	-
MESSAGE_PARM	VARCHAR2(30)	Yes	-
VERSION	NUMBER(5)	Yes	1

Primary Key:

Key Type	Column Name
Composite	SUBSCR_ID
	SEQNO
	PARM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT926P0	Unique	SUBSCR_ID
			SEQNO
			PARM_SEQ

C.7 C1_ACCT_SUBSCR_MRR

Purpose:	Used to store monthly recurring revenue calculated for an account subscription.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_ID	CHAR(12)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
EFFT_DT	DATE	No	-
MRR_VAL	NUMBER(15,2)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	SUBSCR_ID
	EFFT_DT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT923P0	Unique	SUBSCR_ID
			EFFT_DT

C.8 C1_ACCT_SUBSCR_SRVC

Purpose:	Used to store the details of the services added in an account subscription.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_SRVC_ID	CHAR(12)	No	-
SUBSCR_ID	CHAR(12)	No	-
SUBSCR_TYPE_SRVC_FLG	CHAR(4)	Yes	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
VERSION	NUMBER(5)	No	1
TRMN_DATE	DATE	Yes	-
SEQNO	NUMBER(5)	Yes	-
TRMN_REASON_FLG	CHAR(4)	Yes	-
SUBSCR_ACTION_ID	CHAR(12)	Yes	-

Primary Key:

Key Type	Column Name
Simple	SUBSCR_SRVC_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT918P0	Unique	SUBSCR_SRVC_ID

C.9 C1_ACCT_SUBSCR_SRVC_CHRG

Purpose:	Used to store the details of the charges associated with a subscription service.
Total Number of Columns:	13

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_SRVC_ID	CHAR(12)	No	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
SUBSCR_TYPE_CHRG_FLG	CHAR(4)	Yes	-
CHARGE_AMT	NUMBER(15,2)	Yes	-
ONE_TIME_SW	CHAR(1)	Yes	'N'
POLICY_INVOICE_FREQ_CD	CHAR(4)	Yes	-
AUTO_RENEW_SW	CHAR(1)	Yes	'N'
PERCENT_ESC	NUMBER(5,2)	Yes	-
VERSION	NUMBER(5)	No	1
DESCR_ON_BILL	VARCHAR2(80)	Yes	-
SUBSCR_CHRG_ID	CHAR(12)	No	-
CURRENCY_CD	CHAR(3)	No	' '

Primary Key:

Key Type	Column Name
Simple	SUBSCR_CHRG_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT919P0	Unique	SUBSCR_CHRG_ID

C.10 C1_ACCT_SUBSCR_TRMN_CHRG

Purpose:	Used to store termination charges of an account subscription.
Total Number of Columns:	8

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQNO	CHAR(12)	No	-
TRMN_CHRG_TYPE_FLG	CHAR(4)	No	-
CHARGE_AMT	NUMBER(15,2)	Yes	-
VERSION	NUMBER(5)	No	1
SUBSCR_ACTION_ID	CHAR(12)	No	-
CURRENCY_CD	CHAR(3)	No	' '
CHARGE_ID	CHAR(12)	Yes	-
TRMN_ADJ_TYPE_CD	CHAR(8)	Yes	-

Primary Key:

Key Type	Column Name
Composite	SUBSCR_ACTION_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT929P0	Unique	SUBSCR_ACTION_ID
			SEQNO

C.11 C1_ACCUM_DISC_ARG_AMT

Purpose:	Used to store the details of accumulation discount arrangement amount.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCUM_GRP_ID	CHAR(12)	No	-
WIN_START_DT	DATE	No	-
DISC_CUL_AGG_AMT	NUMBER(36,18)	No	-
BILLABLE_CHG_ID	CHAR(12)	No	-
ACCT_ID	CHAR(10)	No	''
CUL_MIN_ENR_LIMIT	NUMBER(36,18)	No	0
CUL_MAX_ENR_LIMIT	NUMBER(36,18)	No	0
CUL_MIN_FLAT_LIMIT	NUMBER(36,18)	No	0
CUL_MAX_FLAT_LIMIT	NUMBER(36,18)	No	0
CREDIT_BILLABLE_CHG_ID	CHAR(12)	No	''

Primary Key:

Key Type	Column Name
Composite	ACCUM_GRP_ID
	WIN_START_DT
	ACCT_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT993P0	Unique	ACCUM_GRP_ID
			WIN_START_DT
			ACCT_ID
2.	XT993S0	Normal	ACCT_ID
3.	XT993S1	Normal	BILLABLE_CHG_ID

C.12 C1_ACCUM_LF_AMT

Purpose:	Used to store the details of the level-funded accumulation amount.
Total Number of Columns:	13

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCUM_GRP_ID	CHAR(12)	No	-
ACCT_ID	CHAR(10)	No	-
WIN_START_DT	DATE	No	-
CUL_LF_FUND	NUMBER(36,18)	No	0
CUL_LF_RO_FUND	NUMBER(36,18)	No	0
ASL_CUL_CREDITS	NUMBER(36,18)	No	0
AGG_AMT	NUMBER(36,18)	No	0
SSL_CUL_CREDITS	NUMBER(36,18)	No	0
NET_AGG_AMT	NUMBER(36,18)	No	0
PREV_CUL_MAX_LIABILITY	NUMBER(36,18)	No	0
MAX_LIABILITY	NUMBER(36,18)	No	0
CUL_MAX_LIABILITY	NUMBER(36,18)	No	0
BILLABLE_CHG_ID	CHAR(12)	Yes	-

Primary Key:

Key Type	Column Name
Composite	ACCUM_GRP_ID
	ACCT_ID
	WIN_START_DT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF935P0	Unique	ACCUM_GRP_ID
			ACCT_ID
			WIN_START_DT
2.	XF935S0	Normal	ACCT_ID
3.	XF935S1	Normal	BILLABLE_CHG_ID

C.13 C1_ACCUM_MIN_PREM_AMT

Purpose:	Used to store the details of the minimum premium accumulation amount.
Total Number of Columns:	13

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCUM_GRP_ID	CHAR(12)	No	-
ACCT_ID	CHAR(10)	No	-
WIN_START_DT	DATE	No	-
CUL_ENR_LIMIT	NUMBER(36,18)	No	0
ENR_LIMIT_ATTACH_PT_VALUE	NUMBER(36,18)	No	0
CUL_MONTHLY_MAX	NUMBER(36,18)	No	0
AGG_AMT	NUMBER(36,18)	No	0
SSL_CUL_CREDITS	NUMBER(36,18)	No	0
NET_AGG_AMT	NUMBER(36,18)	No	0
PREV_CUL_MAX_LIABILITY	NUMBER(36,18)	No	0
MAX_LIABILITY	NUMBER(36,18)	No	0
CUL_MAX_LIABILITY	NUMBER(36,18)	No	0
BILLABLE_CHG_ID	CHAR(12)	Yes	-

Primary Key:

Key Type	Column Name
Composite	ACCUM_GRP_ID
	ACCT_ID
	WIN_START_DT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF936P0	Unique	ACCUM_GRP_ID
			ACCT_ID
			WIN_START_DT
2.	XF936S0	Normal	ACCT_ID
3.	XF936S1	Normal	BILLABLE_CHG_ID

C.14 C1_BILL_LVL

Purpose:	Used to store the derivation and pricing parameters details of a bill group.
Total Number of Columns:	23

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_LVL_ID	CHAR(10)	No	-
SRC_SYSTEM_CD	CHAR(10)	No	''
PARENT_PER_ID	CHAR(10)	No	-
BILLING_GROUP_ID	CHAR(10)	Yes	-
SORT_ID	CHAR(10)	Yes	-
EFFDT	DATE	No	-
BILL_LVL_1	CHAR(30)	No	-
BILL_LVL_2	CHAR(30)	Yes	-
BILL_LVL_3	CHAR(30)	Yes	-
BILL_LVL_4	CHAR(30)	Yes	-
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
BO_STATUS_CD	CHAR(12)	No	''
CRE_DTTM	DATE	Yes	-
STATUS_UPD_DTTM	DATE	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
ILM_ARCH_SW	CHAR(1)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5)	Yes	1
BILL_LVL_5	CHAR(30)	Yes	-
BILL_LVL_6	CHAR(30)	Yes	-
BILL_LVL_7	CHAR(30)	Yes	-
BILL_LVL_8	CHAR(30)	Yes	-

Primary Key:

Key Type	Column Name
Simple	BILL_LVL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF906P0	Unique	BILL_LVL_ID

C.15 C1_BILL_LVL_CHAR

Purpose:	Used to store characteristics defined for the derivation and pricing parameters of a bill group.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_LVL_ID	CHAR(10)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
SEQ_NUM	NUMBER(5)	No	-
CHAR_VAL	CHAR(16)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	BILL_LVL_ID
	CHAR_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF908P0	Unique	BILL_LVL_ID
			SEQ_NUM
			CHAR_TYPE_CD
2.	XF908S0	Normal	SRCH_CHAR_VAL

C.16 C1_BILL_LVL_K

Purpose:	Used to store derivation and pricing parameters ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_LVL_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6)	No	-

Primary Key:

Key Type	Column Name
Composite	BILL_LVL_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF907P0	Unique	BILL_LVL_ID
			ENV_ID

C.17 C1_BILL_LVL_LOG

Purpose:	Used to store logs of the derivation and pricing parameters of a bill group.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_LVL_ID	CHAR(10)	No	-
SEQNO	NUMBER(5)	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	No	-
LOG_DTTM	DATE	Yes	-
BO_STATUS_CD	CHAR(12)	No	''
DESCRLONG	VARCHAR2(4000)	Yes	-
MESSAGE_CAT_NBR	NUMBER(5)	No	-
MESSAGE_NBR	NUMBER(5)	No	-
CHAR_TYPE_CD	CHAR(8)	No	''
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
USER_ID	CHAR(8)	No	''
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	BILL_LVL_ID
	SEQNO
	CHAR_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF909P0	Unique	BILL_LVL_ID
			SEQNO
2.	XF909S0	Normal	CHAR_TYPE_CD
			CHAR_VAL_FK1
3.	XF909S1	Normal	CHAR_TYPE_CD
			CHAR_VAL
4.	XF909S2	Normal	SRCH_CHAR_VAL

C.18 C1_BILL_LVL_LOG_PARM

Purpose:	Used to store derivation and pricing parameters' log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_LVL_ID	CHAR(10)	No	-
SEQNO	NUMBER(5)	No	-
PARM_SEQ	NUMBER(3)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	No	''
MESSAGE_PARM	VARCHAR2(30)	No	''
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	BILL_LVL_ID
	SEQNO
	PARM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF910P0	Unique	BILL_LVL_ID
			SEQNO
			PARM_SEQ

C.19 C1_BILLING_GROUP_SORT

Purpose:	Used to store the details of the sort records created for a bill group.
Total Number of Columns:	15

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILLING_GROUP_ID	CHAR(10)	No	-
SORT_ID	CHAR(10)	No	-
DESCR	VARCHAR2(60)	No	''
START_DT	DATE	No	-
END_DT	DATE	Yes	-
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
BO_STATUS_CD	CHAR(12)	No	''
CRE_DTTM	DATE	Yes	-
STATUS_UPD_DTTM	DATE	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5)	Yes	-
PARENT_PER_ID	CHAR(10)	No	-

Primary Key:

Key Type	Column Name
Primary	BILLING_GROUP_ID
	SORT_ID
	DRR_ALG_ENTITY_FLG

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF905P0	Unique	BILLING_GROUP_ID
			SORT_ID
2.	XF905S0	Normal	PARENT_PER_ID

Sr. No.	Index Name	Index Type	Column Name
			BILLING_GROUP_ID
3.	XF905S1	Normal	BUS_OBJ_CD
			BO_STATUS_CD
			BILLING_GROUP_ID

C.20 C1_BILLING_GROUP_SORT_L

Purpose:	Used to store the description of a sort record which is created for a bill group.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILLING_GROUP_ID	CHAR(10)	No	-
SORT_ID	CHAR(10)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	''
DESCRLONG	VARCHAR2(4000)	No	''
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	BILLING_GROUP_ID
	SORT_ID
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF911P0	Unique	BILLING_GROUP_ID
			SORT_ID
			LANGUAGE_CD

C.21 C1_DRR_TMPLT_CHAR

Purpose:	Used to store characteristics defined for a deferred revenue recognition template.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DRR_TEMPLATE_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
SEQ_NUM	NUMBER(5)	No	-
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	DRR_TEMPLATE_CD
	CHAR_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF800P0	Unique	DRR_TEMPLATE_CD
			CHAR_TYPE_CD
			SEQ_NUM

C.22 C1_DRR_TMPLT_DIV

Purpose:	Used to store divisions associated with a deferred revenue recognition template.
Total Number of Columns:	3

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DRR_TEMPLATE_CD	CHAR(30)	No	-
VERSION	NUMBER(5)	No	1
CIS_DIVISION	CHAR(5)	No	-

Primary Key:

Key Type	Column Name
Composite	DRR_TEMPLATE_CD
	CIS_DIVISION

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF802P0	Unique	DRR_TEMPLATE_CD
			CIS_DIVISION

C.23 C1_ENTITY_REPORT

Purpose:	Used to store the details of an entity report.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENTITY_REP_ID	CHAR(12)	No	-
REPORT_TMPLATE_CD	CHAR(30)	No	-
REPORT_ENTITY_TYPE_FLG	CHAR(4)	No	-
ENTITY_ID	CHAR(14)	No	-
OUTPUT_FORMAT_FLG	CHAR(4)	No	-
REPORT_FREQUENCY_FLG	CHAR(4)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
VERSION	NUMBER(5)	No	-
BUS_OBJ_CD	CHAR(30)	No	-
BO_STATUS_CD	CHAR(12)	No	-
BO_DATA_AREA	CLOB	Yes	-
CRE_DTTM	DATE	Yes	-
STATUS_UPD_DTTM	DATE	Yes	-

Primary Key:

Key Type	Column Name
Simple	ENTITY_REP_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT931P0	Unique	ENTITY_REP_ID
2.	XT931S0	Unique	ENTITY_ID
			REPORT_TMPLATE_CD

C.24 C1_ENTITY_REPORT_CHAR

Purpose:	Used to store characteristics defined for an entity report.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENTITY_REP_ID	CHAR(12)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	No	-
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	-
CHAR_VAL	CHAR(16)	Yes	-
CHAR_VAL_FK1	VARCHAR2(50)	Yes	-
CHAR_VAL_FK2	VARCHAR2(50)	Yes	-
CHAR_VAL_FK3	VARCHAR2(50)	Yes	-
CHAR_VAL_FK4	VARCHAR2(50)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CHAR_VAL_FK5	VARCHAR2(50)	Yes	-
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	ENTITY_REP_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT933P0	Unique	ENTITY_REP_ID
			CHAR_TYPE_CD
			EFFDT

C.25 C1_ENTITY_REPORT_FIELDS

Purpose:	Used to store the fields included in an entity report.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENTITY_REP_ID	CHAR(12)	No	-
FIELD_NAME	CHAR(30)	No	-
DISPLAY_SW	CHAR(1)	No	-
MANDATORY_SW	CHAR(1)	No	-
SORT_SEQ	NUMBER(2)	No	0
SORT_DIR_FLG	CHAR(4)	No	' '
INCLUDE_SORT_SW	CHAR(1)	No	-
INCLUDE_SUBTOTAL_SW	CHAR(1)	No	-
SUM_OR_COUNT_FLG	CHAR(4)	No	-
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	DSC_RPT_TYPE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT935P0	Unique	ENTITY_REP_ID
			FIELD_NAME

C.26 C1_ENTITY_REPORT_K

Purpose:	Used to store entity report ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENTITY_REP_ID	CHAR(12)	No	-
ENV_ID	NUMBER(6)	No	-

Primary Key:

Key Type	Column Name
Composite	ENTITY_REP_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT932P0	Unique	ENTITY_REP_ID
			ENV_ID

C.27 C1_ENTITY_REPORT_OUTPUT_FORMAT

Purpose:	Used to store the output format details of an entity report.
Total Number of Columns:	3

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENTITY_REP_ID	CHAR(12)	No	-
OUTPUT_FORMAT_CD	CHAR(10)	No	-
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
Composite	ENTITY_REP_ID
	OUTPUT_FORMAT_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT934P0	Unique	ENTITY_REP_ID
			OUTPUT_FORMAT_CD

C.28 C1_PRC_RULE

Purpose:	Used to store the details of a pricing rule.
Total Number of Columns:	19

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_ID	CHAR(15)	No	-
PER_ID	CHAR(10)	No	-
POLICY_ID	CHAR(14)	Yes	-
PRICEITEM_CD	CHAR(30)	No	-
PRICING_GRP_ID	CHAR(10)	Yes	-
START_DT	DATE	No	-
END_DT	DATE	Yes	-
PRICELIST_ID	CHAR(10)	Yes	-
PRICING_RULE_TYPE_CD	CHAR(30)	Yes	-
BO_DATA_AREA	CLOB	Yes	-
BUS_OBJ_CD	CHAR(30)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_STATUS_CD	CHAR(12)	No	''
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
CRE_DTTM	DATE	No	-
STATUS_UPD_DTTM	DATE	Yes	-
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5)	No	1
POLICY_STATUS_CD	CHAR(12)	Yes	''

Primary Key:

Key Type	Column Name
Simple	PRICING_RULE_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF900P0	Unique	PRICING_RULE_ID
2.	XF900S0	Normal	BUS_OBJ_CD
			BO_STATUS_CD
			PRICING_RULE_ID
3.	XF900S1	Normal	PER_ID
			POLICY_ID

C.29 C1_PRC_RULE_CHAR

Purpose:	Used to store characteristics defined for a pricing rule.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_ID	CHAR(15)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	No	-
CHAR_VAL	CHAR(16)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	N	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	PRICING_RULE_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF901P0	Unique	PRICING_RULE_ID
			CHAR_TYPE_CD
			EFFDT
2.	XF901S0	Normal	SRCH_CHAR_VAL

C.30 C1_PRC_RULE_K

Purpose:	Used to store pricing rule ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_ID	CHAR(15)	No	-
ENV_ID	NUMBER(6)	No	-

Primary Key:

Key Type	Column Name
Composite	PRICING_RULE_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF902P0	Unique	PRICING_RULE_ID
			ENV_ID

C.31 C1_PRC_RULE_LOG

Purpose:	Used to store logs of a pricing rule.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_ID	CHAR(15)	No	-
SEQNO	NUMBER(5)	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	No	-
LOG_DTTM	DATE	No	-
BO_STATUS_CD	CHAR(12)	No	''
DESCRLONG	VARCHAR2(4000)	No	''
MESSAGE_CAT_NBR	NUMBER(5)	No	-
MESSAGE_NBR	NUMBER(5)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
CHAR_VAL	VARCHAR2(254)	No	''
ADHOC_CHAR_VAL	VARCHAR2(50)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(254)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
USER_ID	CHAR(8)	No	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
SRCH_CHAR_VAL	VARCHAR2(254)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	PRICING_RULE_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF903P0	Unique	PRICING_RULE_ID
			SEQNO
2.	XF903S0	Normal	CHAR_TYPE_CD
			CHAR_VAL_FK1
3.	XF903S1	Normal	CHAR_TYPE_CD
			CHAR_VAL

C.32 C1_PRC_RULE_LOG_PARM

Purpose:	Used to store pricing rule's log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_ID	CHAR(15)	No	-
SEQNO	NUMBER(5)	No	-
PARM_SEQ	NUMBER(4)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	No	''
MESSAGE_PARM	VARCHAR2(30)	No	''
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	PRICING_RULE_ID
	SEQNO
	PARM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF904P0	Unique	PRICING_RULE_ID
			SEQNO
			PARM_SEQ

C.33 C1_PRC_RULE_TYPE

Purpose:	Used to store the details of a pricing rule type.
Total Number of Columns:	7

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
BO_DATA_AREA	CLOB	Yes	-
BUS_OBJ_CD	CHAR(30)	No	-
TRANS_BUS_OBJ_CD	CHAR(30)	No	-
C1_ACTIVE_INACTIVE_FLG	CHAR(4)	No	-
VERSION	NUMBER(5)	No	-
PRC_RULE_TYPE_CAT	CHAR(4)	No	-

Primary Key:

Key Type	Column Name
Simple	PRICING_RULE_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF827P0	Unique	PRICING_RULE_TYPE_CD

C.34 C1_PRC_RULE_TYPE_ALG

Purpose:	Used to store algorithms associated with a pricing rule type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
PRC_RLTY_ALG_ENTITY_FLG	CHAR(4)	No	' '
SEQ_NUM	NUMBER(3)	No	-
ALG_CD	CHAR(12)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
Composite	PRICING_RULE_TYPE_CD
	SEQ_NUM
	PRC_RLTY_ALG_ENTITY_FLG

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF933P0	Unique	PRICING_RULE_TYPE_CD
			SEQ_NUM
			PRC_RLTY_ALG_ENTITY_FLG
2.	XF933S1	Normal	ALG_CD

C.35 C1_PRC_RULE_TYPE_CHAR

Purpose:	Used to store characteristics defined for a pricing rule type.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQ_NUM	NUMBER(3)	No	-
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
Composite	PRICING_RULE_TYPE_CD
	CHAR_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF829P0	Unique	PRICING_RULE_TYPE_CD
			SEQ_NUM
			CHAR_TYPE_CD
2.	XF829S0	Normal	SRCH_CHAR_VAL

C.36 C1_PRC_RULE_TYPE_L

Purpose:	Used to store the description of a pricing rule type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
DESCRLONG	VARCHAR2(4000)	No	''
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
Composite	PRICING_RULE_TYPE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF828P0	Unique	PRICING_RULE_TYPE_CD
			LANGUAGE_CD

C.37 C1_PRC_RULE_TYPE_PRICEITEM

Purpose:	Used to store price items associated with a pricing rule type.
Total Number of Columns:	3

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
PRICEITEM_CD	CHAR(30)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_RULE_TYPE_CD
	PRICEITEM_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF930P0	Unique	PRICING_RULE_TYPE_CD
			PRICEITEM_CD

C.38 C1_PRC_RULE_TYPE_REL

Purpose:	Used to store the details of related pricing rule types.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
SEQ_NUM	NUMBER(3)	No	-
REL_PRICING_RULE_TYPE_CD	CHAR(30)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_RULE_TYPE_CD
	REL_PRICING_RULE_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF340PO	UNIQUE	PRICING_RULE_TYPE_CD
			REL_PRICING_RULE_TYPE_CD

C.39 C1_PRCRLTY_ACCOUNT_PRIORITY

Purpose:	Used to store the bill to information of each price item in a pricing rule type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
PRICEITEM_CD	CHAR(30)	No	-
ACCOUNT_PRIORITY	NUMBER(5)	No	-
INVOICE_TYPE	CHAR(16)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICEITEM_CD
	PRICING_RULE_TYPE_CD
	INVOICE_TYPE

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF932P0	UNIQUE	PRICING_RULE_TYPE_CD
			PRICEITEM_CD
			INVOICE_TYPE

C.40 C1_PRCRLTY_PARAMETER

Purpose:	Used to store price item parameters associated with a pricing rule type.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
PRICE_PARM_CD	VARCHAR2(30)	No	-
TRANSACTION_FIELD	CHAR(30)	Yes	-
IS_SSL_ELIGIBLE_SW	CHAR(1)	Yes	-
IS_LF_ELIGIBLE_SW	CHAR(1)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_RULE_TYPE_CD
	PRICE_PARM_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF934P0	UNIQUE	PRICING_RULE_TYPE_CD
			PRICE_PARM_CD

C.41 C1_PRCRLTY_PRICEITEM_RATE_OPT

Purpose:	Used to store rate options associated with each price item in a pricing rule type.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_RULE_TYPE_CD	CHAR(30)	No	-
PRICEITEM_CD	CHAR(30)	No	-
RATE_OPT	CHAR(30)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_RULE_TYPE_CD
	PRICEITEM_CD
	RATE_OPT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF931P0	UNIQUE	PRICING_RULE_TYPE_CD
			PRICEITEM_CD
			RATE_OPT

C.42 C1_PRICEITEM_PARM_VAL

Purpose:	Used to store the predefined values of a price item parameter.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICEITEM_CD	CHAR(30)	No	-
PRICE_PARM_CD	VARCHAR2(30)	No	-
START_DT	DATE	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICE_PARM_VAL	VARCHAR2(254)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICEITEM_CD
	PRICE_PARM_CD
	START_DT
	PRICE_PARM_VAL

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF533P0	UNIQUE	PRICEITEM_CD
			PRICE_PARM_CD
			START_DT
			PRICE_PARM_VAL

C.43 C1_PRICING_GRP

Purpose:	Used to store the details of a pricing group.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
PER_ID	CHAR(10)	No	-
BUS_OBJ_CD	CHAR(30)	No	-
BO_DATA_AREA	CLOB	Yes	-
BO_STATUS_CD	CHAR(12)	No	''
BO_STATUS_REASON_CD	CHAR(30)	No	''
STATUS_UPD_DTTM	DATE	Yes	-
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CRE_DTTM	DATE	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
SINGLE	PRICING_GRP_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF920P0	UNIQUE	PRICING_GRP_ID
2.	XF920S0	NORMAL	BUS_OBJ_CD
			PRICING_GRP_ID
			BO_STATUS_CD

C.44 C1_PRICING_GRP_CHAR

Purpose:	Used to store characteristics defined for a pricing group.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
EFFDT	DATE	No	-
VERSION	NUMBER(5)	No	1
CHAR_TYPE_CD	CHAR(8)	No	-
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_GRP_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF924P0	UNIQUE	PRICING_GRP_ID
			CHAR_TYPE_CD
			EFFDT
2.	XF924S0	NORMAL	SRCH_CHAR_VAL

C.45 C1_PRICING_GRP_K

Purpose:	Used to store pricing group ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6)	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_GRP_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF923P0	UNIQUE	PRICING_GRP_ID
			ENV_ID

C.46 C1_PRICING_GRP_L

Purpose:	Used to store the description of a pricing group.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
DESCR	VARCHAR2(60)	No	-
LANGUAGE_CD	CHAR(3)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_GRP_ID
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF927P0	UNIQUE	PRICING_GRP_ID
			LANGUAGE_CD

C.47 C1_PRICING_GRP_LOG

Purpose:	Used to store logs of a pricing group.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
LOG_ENTRY_TYPE_FLG	CHAR(4)	No	-
LOG_DTTM	DATE	No	-
BO_STATUS_CD	CHAR(12)	No	''
DESCRLONG	VARCHAR2(4000)	No	''
MESSAGE_CAT_NBR	NUMBER(5)	No	-
MESSAGE_NBR	NUMBER(5)	No	-
USER_ID	CHAR(8)	No	-
BO_STATUS_REASON_CD	CHAR(30)	No	-
SEQNO	NUMBER(5)	No	-
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_GRP_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF925P0	UNIQUE	PRICING_GRP_ID
			SEQNO
2.	XF925S0	NORMAL	CHAR_TYPE_CD
			CHAR_VAL_FK1
3.	XF925S1	NORMAL	CHAR_TYPE_CD
			CHAR_VAL

C.48 C1_PRICING_GRP_LOG_PARM

Purpose:	Used to store pricing group's log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
SEQNO	NUMBER(5)	No	-
PARM_SEQ	NUMBER(3)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	No	' '
MESSAGE_PARM	VARCHAR2(2000)	No	' '
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_GRP_ID
	PARM_SEQ
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF926P0	UNIQUE	PRICING_GRP_ID
			SEQNO
			PARM_SEQ

C.49 C1_PRICING_GRP_RULE

Purpose:	Used to store the details of a pricing group rule.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_RULE_CD	CHAR(20)	No	-
PRIORITY	NUMBER(3)	No	-
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_GRP_ID
	PRICING_GRP_RULE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF921P0	UNIQUE	PRICING_GRP_ID
			PRICING_GRP_RULE_CD

C.50 C1_PRICING_GRP_RULE_BL

Purpose:	Used to store the criteria of a pricing group rule.
Total Number of Columns:	13

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
PRICING_GRP_RULE_CD	CHAR(20)	No	-
SEQ_NUM	NUMBER(3)	No	-
SRC_SYSTEM_CD	CHAR(10)	No	-
BILL_LVL_1	CHAR(30)	No	-
BILL_LVL_2	CHAR(30)	Yes	-
BILL_LVL_3	CHAR(30)	Yes	-
BILL_LVL_4	CHAR(30)	Yes	-
BILL_LVL_5	CHAR(30)	Yes	-
BILL_LVL_6	CHAR(30)	Yes	-
BILL_LVL_7	CHAR(30)	Yes	-
BILL_LVL_8	CHAR(30)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_GRP_ID
	PRICING_GRP_RULE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF922P0	UNIQUE	PRICING_GRP_ID
			PRICING_GRP_RULE_CD
			SEQ_NUM

C.51 C1_PRICING_GRP_RULE_L

Purpose:	Used to store the description of a pricing group rule.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICING_GRP_ID	CHAR(10)	No	-
PRICING_GRP_RULE_CD	CHAR(20)	No	-
DESCR	VARCHAR2(60)	No	-
LANGUAGE_CD	CHAR(3)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICING_GRP_ID
	PRICING_GRP_RULE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF928P0	UNIQUE	PRICING_GRP_ID
			PRICING_GRP_RULE_CD
			LANGUAGE_CD

C.52 C1_REPORT_TEMPLATE

Purpose:	Used to store the details of a report template.
Total Number of Columns:	8

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_TMPLATE_CD	CHAR(30)	No	-
C1_ACTIVE_INACTIVE_FLG	CHAR(4)	No	-
BUS_OBJ_CD	CHAR(30)	No	-
BO_STATUS_CD	CHAR(12)	No	-
BO_DATA_AREA	CLOB	Yes	-
CRE_DTTM	DATE	Yes	-
VERSION	NUMBER(5)	No	-
STATUS_UPD_DTTM	DATE	Yes	-

Primary Key:

Key Type	Column Name
SINGLE	REPORT_TMPLATE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT936P0	UNIQUE	REPORT_TMPLATE_CD

C.53 C1_REPORT_TEMPLATE_ALG

Purpose:	Used to store algorithms associated with a report template.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_TMPLATE_CD	CHAR(30)	No	-
ALG_CD	CHAR(12)	No	-
REPORT_TEMPLATE_ALG_ENTITY_FLG	CHAR(4)	No	-
SEQ_NO	NUMBER(5)	No	-
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	REPORT_TMPLATE_CD
	REPORT_TEMPLATE_ALG_ENTITY_FLG
	SEQ_NO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT940P0	UNIQUE	REPORT_TMPLATE_CD
			REPORT_TEMPLATE_ALG_ENTITY_FLG
			SEQ_NO

C.54 C1_REPORT_TEMPLATE_CHAR

Purpose:	Used to store characteristics defined for a report template.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_TMPLATE_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQ_NUM	NUMBER(3)	No	-
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	-
CHAR_VAL	CHAR(16)	Yes	-
CHAR_VAL_FK1	VARCHAR2(50)	Yes	-
CHAR_VAL_FK2	VARCHAR2(50)	Yes	-
CHAR_VAL_FK3	VARCHAR2(50)	Yes	-
CHAR_VAL_FK4	VARCHAR2(50)	Yes	-
CHAR_VAL_FK5	VARCHAR2(50)	Yes	-
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	REPORT_TMPLATE_CD
	CHAR_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT938P0	UNIQUE	REPORT_TMPLATE_CD
			CHAR_TYPE_CD
			SEQ_NUM

C.55 C1_REPORT_TEMPLATE_FIELDS

Purpose:	Used to store fields added in a report template.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_TMPLATE_CD	CHAR(30)	No	-
SEQ_NO	NUMBER(5)	No	-
FIELD_NAME	CHAR(30)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CUSTOMIZABLE_FLG	CHAR(4)	No	-
SORT_SEQ	NUMBER(2)	No	0
SORT_DIR_FLG	CHAR(4)	No	''
INCLUDE_SORT_FLG	CHAR(4)	No	-
INCLUDE_SUBTOTAL_FLG	CHAR(4)	No	-
SUM_OR_COUNT_FLG	CHAR(4)	No	-
MANDATORY_SW	CHAR(1)	No	-
DEFAULT_SW	CHAR(1)	No	-
VERSION	NUMBER(5)	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	REPORT_TMPLATE_CD
	FIELD_NAME
	SEQ_NO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT939P0	UNIQUE	REPORT_TMPLATE_CD
			FIELD_NAME
			SEQ_NO

C.56 C1_REPORT_TEMPLATE_L

Purpose:	Used to store the description of a report template.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_TMPLATE_CD	CHAR(30)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	REPORT_TMPLATE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT937P0	UNIQUE	REPORT_TMPLATE_CD
			LANGUAGE_CD

C.57 C1_SUBSCR_TYPE

Purpose:	Used to store the details of a subscription type.
Total Number of Columns:	16

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_TYPE_CD	CHAR(30)	No	-
SA_TYPE_CD	CHAR(8)	No	-
DURATION	NUMBER(5)	Yes	-
DURATION_FLG	CHAR(4)	Yes	-
BUS_OBJ_CD	CHAR(30)	No	''
BO_STATUS_CD	CHAR(12)	No	''
BO_DATA_AREA	CLOB	Yes	-
PRORATE_SW	CHAR(1)	Yes	-
PRC_REQ_SW	CHAR(1)	Yes	-
VERSION	NUMBER(5)	Yes	-
CIS_DIVISION	CHAR(5)	Yes	-
C1_ACTIVE_INACTIVE_FLG	CHAR(4)	Yes	-
TRANS_BUS_OBJ_CD	CHAR(30)	Yes	-
ADJUST_BILLED_CHARGES_SW	CHAR(1)	Yes	-
ADJ_TYPE_CD	CHAR(8)	Yes	-
TRMN_ADJ_TYPE_CD	CHAR(8)	Yes	-

Primary Key:

Key Type	Column Name
SINGLE	SUBSCR_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT911P0	UNIQUE	SUBSCR_TYPE_CD

C.58 C1_SUBSCR_TYPE_ALG

Purpose:	Used to store algorithms associated with a subscription type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_TYPE_CD	CHAR(30)	No	-
ALG_CD	CHAR(30)	No	-
SEVT_FLG	CHAR(4)	No	-
VERSION	NUMBER(5)	No	1
SEQNO	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	SUBSCR_TYPE_CD
	SEVT_FLG
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT913P0	UNIQUE	SUBSCR_TYPE_CD
			SEQNO
			SEVT_FLG

C.59 C1_SUBSCR_TYPE_CHAR

Purpose:	Used to store characteristics defined for a subscription type.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_TYPE_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	No	-
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	-
CHAR_VAL	CHAR(16)	Yes	-
CHAR_VAL_FK1	VARCHAR2(50)	Yes	-
CHAR_VAL_FK2	VARCHAR2(50)	Yes	-
CHAR_VAL_FK3	VARCHAR2(50)	Yes	-
CHAR_VAL_FK4	VARCHAR2(50)	Yes	-
CHAR_VAL_FK5	VARCHAR2(50)	Yes	-
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	SUBSCR_TYPE_CD
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT914P0	UNIQUE	SUBSCR_TYPE_CD
			CHAR_TYPE_CD
			EFFDT

C.60 C1_SUBSCR_TYPE_L

Purpose:	Used to store the description of a subscription type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_TYPE_CD	CHAR(30)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	-
VERSION	NUMBER(5)	No	1
DESCRLONG	VARCHAR2(4000)	Yes	-

Primary Key:

Key Type	Column Name
COMPOSITE	SUBSCR_TYPE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT912P0	UNIQUE	SUBSCR_TYPE_CD
			LANGUAGE_CD

C.61 C1_SUBSCR_TYPE_SRVC

Purpose:	Used to store the subscription services added in a subscription type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_TYPE_CD	CHAR(30)	No	-
SUBSCR_TYPE_SRVC_FLG	CHAR(4)	No	-
MRR_EXMPTED_SW	CHAR(1)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	SUBSCR_TYPE_CD
	SUBSCR_TYPE_SRVC_FLG

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT915P0	UNIQUE	SUBSCR_TYPE_CD
			SUBSCR_TYPE_SRVC_FLG

C.62 C1_SUBSCR_TYPE_SRVC_CHRG

Purpose:	Used to store the charges associated with a subscription service in a subscription type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SUBSCR_TYPE_CD	CHAR(30)	No	-
SUBSCR_TYPE_SRVC_FLG	CHAR(4)	No	-
SUBSCR_TYPE_CHRG_FLG	CHAR(4)	No	-
DST_ID	CHAR(10)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	SUBSCR_TYPE_CD
	SUBSCR_TYPE_SRVC_FLG
	SUBSCR_TYPE_CHRG_FLG

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT916P0	UNIQUE	SUBSCR_TYPE_CD
			SUBSCR_TYPE_SRVC_FLG
			SUBSCR_TYPE_CHRG_FLG

C.63 C1_TXN_DISAGG_REQ_CHAR

Purpose:	Used to store characteristics defined for a disaggregation request.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
TXN_DISAGG_REQ_ID	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
SEQ_NUM	NUMBER(5)	No	-
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
SRCH_CHAR_VAL	VARCHAR2(50)	No	''
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	TXN_DISAGG_REQ_ID
	CHAR_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF937P0	UNIQUE	TXN_DISAGG_REQ_ID
			CHAR_TYPE_CD
			SEQ_NUM

C.64 C1_TXN_DISAGG_REQ_LOG

Purpose:	Used to store logs of a disaggregation request.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
TXN_DISAGG_REQ_ID	CHAR(12)	No	-
SEQNO	NUMBER(5)	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	Yes	''
BO_STATUS_CD	CHAR(12)	Yes	''
DESCRLONG	VARCHAR2(4000)	Yes	''
MESSAGE_CAT_NBR	NUMBER(5)	Yes	-
MESSAGE_NBR	NUMBER(5)	Yes	-
CHAR_TYPE_CD	CHAR(8)	Yes	''
CHAR_VAL	CHAR(16)	Yes	''
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	-
CHAR_VAL_FK1	VARCHAR2(50)	Yes	-
CHAR_VAL_FK2	VARCHAR2(50)	Yes	-
CHAR_VAL_FK3	VARCHAR2(50)	Yes	-
CHAR_VAL_FK4	VARCHAR2(50)	Yes	-
CHAR_VAL_FK5	VARCHAR2(50)	Yes	-
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-
USER_ID	CHAR(8)	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
LOG_DTTM	DATE	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	TXN_DISAGG_REQ_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF938P0	UNIQUE	TXN_DISAGG_REQ_ID
			SEQNO

C.65 C1_TXN_DISAGG_REQ_LOG_PARM

Purpose:	Used to store disaggregation request's log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
TXN_DISAGG_REQ_ID	CHAR(12)	No	-
SEQNO	NUMBER(5)	No	-
PARAM_SEQ	NUMBER(3)	No	-
MSG_PARAM_TYP_FLG	CHAR(4)	Yes	''
MESSAGE_PARAM	VARCHAR2(30)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	TXN_DISAGG_REQ_ID
	SEQNO
	PARAM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF939P0	UNIQUE	TXN_DISAGG_REQ_ID
			SEQNO
			PARAM_SEQ

C.66 CI_BANK_ACCOUNT_CHAR

Purpose:	Used to store the characteristics defined for a bank account.
Total Number of Columns:	13

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BANK_CD	CHAR(5)	No	-
BANK_ACCT_KEY	CHAR(4)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5)	No	1
EFFDT	DATE	No	-

Primary Key:

Key Type	Column Name
COMPOSITE	BANK_CD
	BANK_ACCT_KEY
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF810P0	UNIQUE	BANK_CD
			BANK_ACCT_KEY
			EFFDT
			CHAR_TYPE_CD

C.67 CI_PRICE_PARM_VAL_L

Purpose:	Used to store the description of a predefined parameter value.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICE_PARM_VAL	VARCHAR2(254)	No	-
PRICE_PARM_CD	VARCHAR2(30)	No	-
DESCR	VARCHAR2(60)	Yes	-
LANGUAGE_CD	CHAR(3)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	PRICE_PARM_VAL
	PRICE_PARM_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	H"Column Name
1.	XF45P0	UNIQUE	PRICE_PARM_VAL
			PRICE_PARM_CD
			LANGUAGE_CD

C.68 CI_RPT_AUDIT

Purpose:	Used to store the details of an audit report.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_CD	CHAR(12)	No	-
RPT_ID	CHAR(10)	No	-
CREATED_BY	CHAR(8)	Yes	-
CRE_DTTM	DATE	Yes	-
IS_SUCCESS	CHAR(3)	Yes	-
MESSAGE_NBR	NUMBER(5)	Yes	-
MESSAGE_CAT_NBR	NUMBER(5)	Yes	-
LAST_UPD_DTTM	DATE	Yes	-
RPT_NAME	VARCHAR2(2000)	Yes	-
VERSION	NUMBER(5)	Yes	1

Primary Key:

Key Type	Column Name
SIMPLE	RPT_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	SYS_C0032093	UNIQUE	RPT_ID

C.69 CI_RPT_AUDIT_PARAM

Purpose:	Used to store parameters added in an audit report.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_CD	CHAR(12)	No	-
RPT_ID	CHAR(10)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQ_NO	NUMBER(5)	No	-
RPT_PARAM	VARCHAR2(50)	Yes	-
RPT_PARAM_VAL	VARCHAR2(50)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	RPT_ID
	SEQ_NO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	SYS_C0032093	UNIQUE	RPT_ID
			SEQ_NO

C.70 CI_RPT_DTL

Purpose:	Used to store the details of a report.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_CD	CHAR(12)	No	-
CREATED_BY	CHAR(8)	Yes	-
CRE_DTTM	DATE	Yes	-
RPT_OUTPUT_FORMAT	CHAR(8)	Yes	-
RPT_TMPLT	VARCHAR2(100)	Yes	-
LAST_UPD_DTTM	DATE	Yes	-
RPT_PROCS_ALG_CD	CHAR(12)	Yes	-
RPT_TYPE	VARCHAR2(20)	Yes	-
RPT_TYPE_TMPLT	VARCHAR2(50)	Yes	-
RPT_MODE	VARCHAR2(50)	Yes	-
SCR_CD	CHAR(12)	Yes	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
SINGLE	REPORT_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	SYS_C0031337	UNIQUE	REPORT_CD

C.71 CI_RPT_DTL_L

Purpose:	Used to store the description of a report.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_CD	CHAR(12)	No	-
RPT_DESC	VARCHAR2(60)	Yes	-
LANGUAGE_CD	CHAR(3)	No	-
VERSION	NUMBER(5)	No	1

Primary Key:

Key Type	Column Name
COMPOSITE	REPORT_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	SYS_C0031347	UNIQUE	REPORT_CD
			LANGUAGE_CD

C.72 CI_RPT_DTL_PARAM

Purpose:	Used to store parameters added in a report.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REPORT_CD	CHAR(12)	No	-
SEQ_NO	NUMBER(5)	No	-
RPT_PARAM	CHAR(30)	Yes	-
RPT_PARAM_NAV	CHAR(32)	Yes	-
VERSION	NUMBER(5)	Yes	1

Primary Key:

Key Type	Column Name
COMPOSITE	REPORT_CD
	SEQ_NO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	SYS_C0031339	UNIQUE	REPORT_CD
			SEQ_NO

Appendix D : Existing Tables Modified in 2.7.0.0.0

This section lists the existing tables which are modified in Oracle Revenue Management and Billing Version 2.7.0.0.0. It also indicates the columns that are newly added, dropped, or modified in these tables.

D.1 C1_FT_EXT

The following table lists the columns that are either newly added, modified, or deleted in the C1_FT_EXT table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	VERSION_NUM	Newly Added	-	NUMBER(5)	No	-
2.	CONSTRUCT_ID	Newly Added	-	CHAR(4)	No	-

D.2 CI_FILE_REQUEST

The following table lists the columns that are either newly added or modified in the CI_FILE_REQUEST table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	NUM_ERROR_REC	Dropped	NUMBER(10)	-	-	-
2.	NUM_PENDING_REC	Dropped	NUMBER(10)	-	-	-
3.	NUM_PROCESSED_REC	Dropped	NUMBER(10)	-	-	-
4.	NUM_RETRY_REC	Dropped	NUMBER(10)	-	-	-
5.	NUM_SKIPPED_REC	Dropped	NUMBER(10)	-	-	-
6.	NUM_SKIP_DUPLICATE	Dropped	NUMBER(15)	-	-	-

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
7.	FILE_BUSINESS_DT	Newly Added	-	DATE(10)	No	-
8.	FILE_FOOTER	Newly Added	-	VARCHAR2(32000)	No	-
9.	FILE_HEADER	Newly Added	-	VARCHAR2(32000)	No	-

D.3 CI_CONSTRUCT_LOG

The following table lists the columns that are either newly added or modified in the CI_CONSTRUCT_LOG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_VAL	Format Change	CHAR(1)	CHAR(16)	-	-
2.	USER_ID	Format Change	VARCHAR2(8)	CHAR(8)	-	-

D.4 CI_CONSTRUCT_LOG_PARM

The following table lists the columns that are either newly added or modified in the CI_CONSTRUCT_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(2000)	VARCHAR2(30)	-	-

D.5 CI_SQ_RULE

The following table lists the columns that are either newly added or modified in the CI_SQ_RULE table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SQ_PARAM_01	Format Change	CHAR(12)	VARCHAR2(254)	-	-
2.	SQ_PARAM_02	Format Change	CHAR(12)	VARCHAR2(254)	-	-
3.	SQ_PARAM_03	Format Change	CHAR(12)	VARCHAR2(254)	-	-
4.	SQ_PARAM_04	Format Change	CHAR(12)	VARCHAR2(254)	-	-
5.	SQ_PARAM_05	Format Change	CHAR(12)	VARCHAR2(254)	-	-
6.	SQ_PARAM_06	Format Change	CHAR(12)	VARCHAR2(254)	-	-
7.	SQ_PARAM_07	Format Change	CHAR(12)	VARCHAR2(254)	-	-
8.	SQ_PARAM_08	Format Change	CHAR(12)	VARCHAR2(254)	-	-
9.	SQ_PARAM_09	Format Change	CHAR(12)	VARCHAR2(254)	-	-
10.	SQ_PARAM_10	Format Change	CHAR(12)	VARCHAR2(254)	-	-

D.6 CI_ACCUM_GRP_SL_PRICEITEM

The following table lists the columns that are either newly added or modified in the CI_ACCUM_GRP_SL_PRICEITEM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	HCC_CD	Dropped	CHAR(2)	-	-	-
2.	PRICEITEM_PARM_GRP_ID	Newly Added	-	NUMBER(22)	No	-

D.7 CI_TXN_DTL_PRITM

The following table lists the columns that are either newly added or modified in the CI_TXN_DTL_PRITM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SUMM_HASHCODE	Dropped	NUMBER(10)	-	-	-
2.	EXCLUDE_DISAGG	Newly Added	-	CHAR(1)	No	-
3.	PRICING_RULE_ID	Newly Added	-	CHAR(15)	No	-

D.8 C1_ENRL_PROD

The following table lists the columns that are either newly added or modified in the C1_ENRL_PROD table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENROLL_END_BY_SYS_SW	Newly Added	-	CHAR(1)	No	-

D.9 C1_ENRL_PROD_REL

The following table lists the columns that are either newly added or modified in the C1_ENRL_PROD_REL table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENROLL_END_BY_SYS_SW	Newly Added	-	CHAR(1)	No	-

D.10 C1_ENRL_PROD_REL_SVC

The following table lists the columns that are either newly added or modified in the C1_ENRL_PROD_REL_SVC table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENROLL_END_BY_SYS_SW	Newly Added	-	CHAR(1)	No	-

D.11 C1_ENRL_PROD_SVC

The following table lists the columns that are either newly added or modified in the C1_ENRL_PROD_SVC table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENROLL_END_BY_SYS_SW	Newly Added	-	CHAR(1)	No	-

D.12 C1_FEES

The following table lists the columns that are either newly added or modified in the C1_FEES table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SEQ_NO	Newly Added	-	NUMBER(5)	No	-
2.	TXN_DETAIL_ID	Newly Added	-	CHAR(15)	No	-

D.13 CI_ACCUM_GRP

The following table lists the columns that are either newly added or modified in the CI_ACCUM_GRP table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BO_DATA_AREA	Newly Added	-	CLOB(1GB)	No	-
2.	BUS_OBJ_CD	Newly Added	-	CHAR(30)	No	-

D.14 CI_ADJ

The following table lists the columns that are either newly added or modified in the CI_ADJ table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SUBSCR_CHRG_ID	Newly Added	-	CHAR(12)	No	-

D.15 CI_BANK

The following table lists the columns that are either newly added or modified in the CI_BANK table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BUS_OBJ_CD	Newly Added	-	CHAR(30)	No	-

D.16 CI_BILL_CHG

The following table lists the columns that are either newly added or modified in the CI_BILL_CHG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SUBSCR_CHRG_ID	Newly Added	-	CHAR(12)	No	-

D.17 CI_CONSTRUCT_LOG

The following table lists the columns that are either newly added or modified in the CI_CONSTRUCT_LOG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BO_STATUS_REASON_CD	Newly Added	-	VARCHAR2(30)	No	-
2.	LOG_ENTRY_TYPE_FLG	Newly Added	-	CHAR(4)	No	-
3.	SEQNO	Newly Added	-	NUMBER(5)	No	-

D.18 CI_CONSTRUCT_LOG_PARM

The following table lists the columns that are either newly added or modified in the CI_CONSTRUCT_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SEQNO	Newly Added	-	NUMBER(5)	No	-

D.19 CI_FILE_REQUEST_TRANSFORM_DTL

The following table lists the columns that are either newly added or modified in the CI_FILE_REQUEST_TRANSFORM_DTL table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	REQUIRED_SW	Newly Added	-	CHAR(1)	No	-

D.20 CI_FILE_REQUEST_TYPE

The following table lists the columns that are either newly added or modified in the CI_FILE_REQUEST_TYPE table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DISP_PROF_CD	Newly Added	-	CHAR(1)	No	-

D.21 CI_FILE_REQUEST_TYPE_SERVICE

The following table lists the columns that are either newly added or modified in the CI_FILE_REQUEST_TYPE_SERVICE table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	POST_ALG_CD	Newly Added	-	CHAR(1)	No	-

D.22 CI_POLICY

The following table lists the columns that are either newly added or modified in the CI_POLICY table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	RUNOUT_ADM_OPT_FLG	Newly Added	-	CHAR(4)	No	-
2.	RUNOUT_END_DT	Newly Added	-	DATE(10)	No	-

D.23 CI_PRICE_CALC

The following table lists the columns that are either newly added or modified in the CI_PRICE_CALC table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SEQ_NO	Newly Added	-	NUMBER(5)	No	-
2.	TXN_DETAIL_ID	Newly Added	-	CHAR(15)	No	-

D.24 CI_PRICEASGN

The following table lists the columns that are either newly added or modified in the CI_PRICEASGN table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PRICING_RULE_TYPE_CD	Newly Added	-	CHAR(30)	No	-

D.25 CI_TXN_CALC_ACCUM_GRP

The following table lists the columns that are either newly added or modified in the CI_TXN_CALC_ACCUM_GRP table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCUM_AFTER_DT	Newly Added	-	DATE(10)	No	-

D.26 CI_TXN_DISAGG_REQ

The following table lists the columns that are either newly added or modified in the CI_TXN_DISAGG_REQ table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PARENT_ACCUM_GRP_ID	Newly Added	-	CHAR(12)	No	-

D.27 CI_TXN_DTL_PRITM_STG

The following table lists the columns that are either newly added or modified in the CI_TXN_DTL_PRITM_STG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PRICING_RULE_ID	Newly Added	-	CHAR(15)	No	-

D.28 CI_TXN_REC_TYPE

The following table lists the columns that are either newly added or modified in the CI_TXN_REC_TYPE table:

Sr. No.	Column Name	Modification Type	Data Type in V2.6.0.1.0	Data Type in V2.7.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PRICING_RULE_TYPE_CD	Newly Added	-	CHAR(30)	No	-

Appendix E : Algorithms and Algorithm Types Dropped in 2.7.0.0.0

This section lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 2.7.0.0.0.

E.1 Algorithm Type

No algorithm types are dropped in Oracle Revenue Management and Billing Version 2.7.0.0.0.

E.2 Algorithm

No algorithms are dropped in Oracle Revenue Management and Billing Version 2.7.0.0.0.

Appendix F : Parameters Added or Removed from Algorithm Types in 2.7.0.0.0

No parameters are newly added or removed from the existing algorithm types in Oracle Revenue Management and Billing Version 2.7.0.0.0.

Appendix G : Option Types Added or Removed from Feature Configurations in 2.7.0.0.0

No option types are newly added or removed from the existing feature configurations in Oracle Revenue Management and Billing Version 2.7.0.0.0.

Appendix H : Characteristic Types Dropped in 2.7.0.0.0

No characteristic types are dropped in Oracle Revenue Management and Billing Version 2.7.0.0.0.

Appendix I : SQL Statements for 2.6.0.1.0 to 2.7.0.0.0 Data Migration

This section describes the PostProcessingScript query which is used for migrating data from Oracle Revenue Management and Billing Version 2.6.0.1.0 to 2.7.0.0.0.

I.1 PostProcessingScript.sql

The PostProcessingScript.sql query does the following:

- Drops the HCC_CD column from the CI_ACCUM_GRP_SL_PRICEITEM table.

Note: It drops the HCC_CD column only when there is no data present in the CI_ACCUM_GRP_SL_PRICEITEM table. If the data exists in the CI_ACCUM_GRP_SL_PRICEITEM table, consult with Oracle Support, Oracle Partner, or Oracle Consulting that may be supporting your implementation and upgrade process.

- Updates the column values of the records in the respective table:

Table Name	Column Name	Column Value After Data Migration
CI_PRICE_PARM_VAL_L	PRICE_PARM_VAL	The column value is set to the value defined in the PRICE_PARM_VAL column corresponding to the predefined parameter in the CI_PRICE_PARM_VAL table.
	PRICE_PARM_CD	The column value is set to the value defined in the PRICE_PARM_CD column corresponding to the predefined parameter in the CI_PRICE_PARM_VAL table.
	DESCR	The column value is set to the value defined in the PRICE_PARM_VAL column corresponding to the predefined parameter in the CI_PRICE_PARM_VAL table. Note: Only first 60 characters in the PRICE_PARM_VAL column are stored in the DESCR column.
	LANGUAGE_CD	The column value is set to ENG .
	VERSION	The column value is set to 1 .

Appendix J : Revenue Recognition Division Upgrade Batch (C1-RRDIV)

The **Revenue Recognition Division Upgrade Batch (C1-RRDIV)** batch does the following:

- Updates the column values of the records in the respective table:

Table Name	Column Name	Column Value After Data Migration
C1_DRR_TMPLT_DIV	DRR_TEMPLATE_CD	The column value is set to the value defined in the DRR_TEMPLATE_CD column of the CI_REV_REC_SCH table for active deferred revenue recognition which exists in the CI_REV_REC_SCH table.
	CIS_DIVISION	The column value is set to the value defined in the CIS_DIVISION column of the CI_SA table for the contract against which the deferred revenue recognition is created.

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 4.3.0.4.0:

1. Download and apply the single fix available for Bug 22505470 - PATCHES APPEND EXTRA SPACE TO STRINGS AND ADD DB SERVICE CONNECTION SUPPORT on the application and database environments.
2. 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
```