

Oracle® Revenue Management and Billing

Version 2.9.0.0.0

Upgrade Guide

Revision 17.9

F23710-01

March, 2020

ORACLE®

Oracle Revenue Management and Billing Upgrade Guide

F23710-01

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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 2.8.0.0.0 to 2.9.0.0.0	Explains how to upgrade from Oracle Revenue Management and Billing Version 2.8.0.0.0 to 2.9.0.0.0.
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 2.9.0.0.0	Lists and describes the tables that are newly added in the Oracle Revenue Management and Billing Version 2.9.0.0.0 database.
Appendix D	Existing Tables Modified in 2.9.0.0.0	Lists the existing tables and their columns that are modified in the Oracle Revenue Management and Billing Version 2.9.0.0.0 database.

Section No.	Section Name	Description
Appendix E	Algorithms and Algorithm Types Dropped in 2.9.0.0.0	Lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 2.9.0.0.0.
Appendix F	Parameters Added or Removed from Algorithm Types in 2.9.0.0.0	Lists the parameters which are added or removed from the algorithm types in Oracle Revenue Management and Billing Version 2.9.0.0.0.
Appendix G	Option Types Added or Removed from Feature Configurations in 2.9.0.0.0	Lists the option types which are added or removed from the feature configurations in Oracle Revenue Management and Billing Version 2.9.0.0.0.
Appendix H	Characteristic Types Dropped in 2.9.0.0.0	Lists the characteristic types which are dropped in Oracle Revenue Management and Billing Version 2.9.0.0.0.
Appendix I	Changing the DB User Password	Explains how to change the database user password.
Appendix J	ORMB V2.9.0.0.0 Rollup Packs	Lists the rollup packs available for Oracle Revenue Management and Billing Version 2.9.0.0.0. It also explains how to apply a rollup pack on the application environment and database server.

Related Documents

You can refer to the following documents for more information:

Document	Description
<i>Oracle Revenue Management and Billing Version 2.9.0.0.0 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.

Conventions

The following conventions are used across the document:

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

Change Log

Revision	Last Update	Updated Section	Comments
17.1	11-April-2020	Appendix C: New Tables Added in 2.9.0.0.0	Updated Information
		Appendix D: Existing Tables Modified in 2.9.0.0.0	Updated Information
		Appendix F: Parameters Added or Removed from Algorithm Types in 2.9.0.0.0	Updated Information
		Appendix G: Option Types Added or Removed from Feature Configurations in 2.9.0.0.0	Updated Information
17.2	18-May-2020	Organization of the Document (Preface)	Updated Information
		Conventions (Preface)	Added Section
		Section 2.1: Prerequisites	Added Information
		Section 2.2: Downloading the ORMB Packages and Patches	Added Information
		Section 2.3.1: Installing OUAF Version 4.4.0.0.0	Updated Information
		Section 2.3.2: Installing Rollup Pack for OUAF Version 4.4.0.0.0	Added Information
		Section 2.4.1: Installing OUAF Version 4.4.0.0.0	Added Information
		Section 2.4.2: Installing Rollup Pack for OUAF Version 4.4.0.0.0	Added Information
		Section 2.5.2: Post Installation Tasks	Added Information
		Section 2.5.2.4: Applying the 31122862 Patch	Added Section
		Section 2.5.2.5: Applying the 31130102 Patch	Added Section
Section 2.5.2.6: Applying the 31190091 Patch	Added Section		

Revision	Last Update	Updated Section	Comments
		Section 2.5.2.7: Applying the 31172781 Patch	Added Section
		Section 2.5.2.8: Applying the 31222633 Patch	Added Section
		Section 2.5.2.9: Applying the 31248602 Patch	Added Section
		Section 2.6: Upgrading the ORMB Database	Added Information
		Section 2.6.4: Applying the 31122862 Patch	Added Section
		Section 2.6.5: Applying the 31130102 Patch	Added Section
		Section 2.6.6: Applying the 31190091 Patch	Added Section
		Section 2.6.7: Applying the 31172781 Patch	Added Section
		Section 2.6.8: Applying the 31222633 Patch	Added Section
		Section 2.6.9: Applying the 31248602 Patch	Added Section
		Appendix J : ORMB V2.9.0.0.0 Rollup Packs	Added Appendix
17.3	29-May-2020	Section 2.5.2: Post Installation Tasks	Added Information
		Section 2.5.2.10: Applying the 31313821 Patch	Added Section
		Section 2.5.2.11: Applying the 31314417 Patch	Added Section
		Section 2.6: Upgrading the ORMB Database	Added Information
		Section 2.6.10: Applying the 31313821 Patch	Added Section
		Section 2.6.11: Applying the 31314417 Patch	Added Section
		Appendix J: ORMB V2.9.0.0.0 Rollup Packs	Added Information
17.4	25-Aug-2020	Section 2: Upgrading from ORMB Version 2.8.0.0.0 to 2.9.0.0.0	Updated Information
		Section 2.8: Migrating Data from ORMB Version Below 2.6.0.1.0 to 2.9.0.0.0	Added Section
17.5	31-Aug-2020	Section 2.5.2: Post Installation Tasks	Added Information
		Section 2.6: Upgrading the ORMB Database	Added Information
		Section 2.6.1: Installing ORMB Version 2.9.0.0.0	Updated Information
		Section 2.6.2: Applying the 31066976 Patch	Updated Information
		Section 2.6.3: Applying the 31074070 Patch	Updated Information
		Section 2.6.4: Applying the 31122862 Patch	Updated Information
		Section 2.6.5: Applying the 31130102 Patch	Updated Information
		Section 2.6.6: Applying the 31190091 Patch	Updated Information

Revision	Last Update	Updated Section	Comments
		Section 2.6.7: Applying the 31172781 Patch	Updated Information
		Section 2.6.8: Applying the 31222633 Patch	Updated Information
		Section 2.6.9: Applying the 31248602 Patch	Updated Information
		Section 2.6.10: Applying the 31313821 Patch	Updated Information
		Section 2.6.11: Applying the 31314417 Patch	Updated Information
		Appendix J: ORMB V2.9.0.0.0 Rollup Packs	Added Information
17.6	08-Feb-2021	Section 2.4.1: Installing OUAF Version 4.4.0.0.0	Updated Information
17.7	23-Apr-2021	Section 2: Upgrading from ORMB Version 2.8.0.0.0 to 2.9.0.0.0	Removed Information
17.8	03-June-2021	Appendix C: New Tables Added in 2.9.0.0.0	Updated Information
17.9	19-Jan-2022	-	Added Bookmarks in PDF

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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.

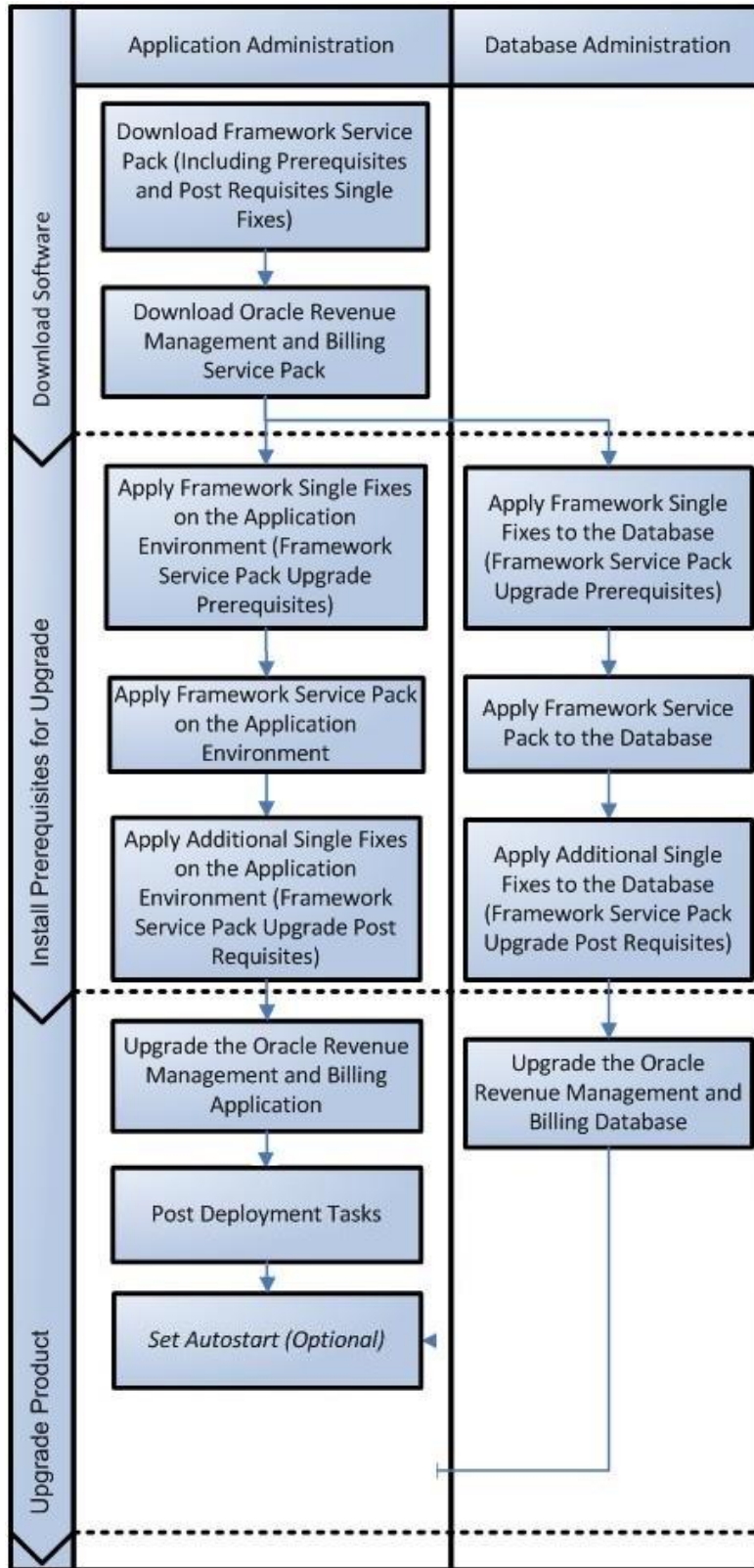


Figure 1: Upgrade Process

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 2.8.0.0.0 to 2.9.0.0.0

2. Upgrading from ORMB Version 2.8.0.0.0 to 2.9.0.0.0

This section explains how to upgrade from Oracle Revenue Management and Billing Version 2.8.0.0.0 to 2.9.0.0.0. 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.

2.1 Prerequisites

If you are already using the Transaction Feed Management feature and want to upgrade to Oracle Revenue Management and Billing Version 2.9.0.0.0, 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 2.8.0.0.0 will not happen successfully.
- Transactions which are uploaded using 2.8.0.0.0 must not be in the **Initial Product Determined (INPD)** status. They can be in the **Uploaded (UPLD)**, **Invalid (INVL)**, **Error (EROR)**, **Completed (COMP)**, or **Cancelled (CNCL)** status.
- Equal to (=) or tilde (~) symbol is not used in any existing price item parameter code or value. Otherwise, erroneous results might occur.

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

2.2 Downloading the ORMB Packages and Patches

For upgrading from Oracle Revenue Management and Billing Version 2.8.0.0.0 to 2.9.0.0.0, you must download the following packages from the Oracle Revenue Management and Billing 2.9.0.0.0 media pack which is available on [Oracle Software Delivery Cloud](#):

- Oracle Utilities Application Framework V4.4.0.0.0 Single Fix Prerequisite Rollup for RMB V2.9.0.0.0
- Oracle Revenue Management and Billing V2.9.0.0.0 Multiplatform

- Oracle Revenue Management and Billing V2.9.0.0.0 Oracle Database

You must also download the following package from the Oracle Utilities Customer Care and Billing 2.7.0.1.0 media pack which is available on [Oracle Software Delivery Cloud](#):

- Oracle Utilities Customer Care and Billing 2.7.0.1.0 - Oracle Utilities Application Framework (4.4.0.0.0) Installation Package

In addition, you must download the following patches from [My Oracle Support](#):

- MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31066976)
- MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31074070)
- UPDATE ONLINE HELP FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31008818)
- MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31122862)
- MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31130102)
- MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31190091)
- MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31172781)
- MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31222633)
- MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31248602)
- MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31313821)
- MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0 (Patch Number: 31314417)

Note: If you are using IBM WebSphere, you need to download the WAS CHANGES FOR FW 4.4.0.0.0 WITH FW PRE-REQUIRES patch (Patch Number: 30779997) from [My Oracle Support](#). The WAS CHANGES FOR FW 4.4.0.0.0 WITH FW PRE-REQUIRES patch is a password protected patch. You need to contact Oracle Support to provide the password for downloading the patch.

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 2.8.0.0.0 to 2.9.0.0.0, you need to install the following on the database:

1. [Oracle Utilities Application Framework \(OUAF\) Version 4.4.0.0.0](#)
2. [Rollup Pack for Oracle Utilities Application Framework \(OUAF\) Version 4.4.0.0.0](#)

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

2.3.1 Installing OUAF Version 4.4.0.0.0

To install Oracle Utilities Application Framework (OUAF) Version 4.4.0.0.0:

1. Login to the database server using the administrator's credentials.

2. Create a temporary folder (for example, `TEMPDIR`) on the database server using the following command:

```
mkdir TEMPDIR
```

3. Copy the **Oracle Revenue Management and Billing V2.9.0.0.0 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.

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

AIX, Linux:

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

Windows:

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

5. Unzip the **Oracle Revenue Management and Billing V2.9.0.0.0 Oracle Database** package using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_1>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_1>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_1>` folder. The contents include the following sub-folders:

- FW
- RMB

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

AIX, Linux:

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

Windows:

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

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

7. Set the `JAR_PATH` environment variable using the following command:

AIX, Linux:

```
export JAR_PATH=<DESTINATION_FOLDER_1>/FW/FW44000/jarfiles
```

Note:

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

The <DESTINATION_FOLDER_1> folder is the location where you have extracted the contents of the **Oracle Revenue Management and Billing V2.9.0.0.0 Oracle Database** package.

8. Set the `CLASS_PATH` environment variable using the following command:

AIX, Linux:

```
export CLASS_PATH=${JAR_PATH}/commons-cli-1.3.1.jar:${JAR_PATH}/commons-codec-1.9.jar:${JAR_PATH}/commons-collections-3.2.2.jar:${JAR_PATH}/log4j-api-2.11.0.jar:${JAR_PATH}/log4j-core-2.11.0.jar:${JAR_PATH}/ojdbc8-12.2.0.1.jar:${JAR_PATH}/oradbi.jar:${JAR_PATH}/spl-shared-4.4.0.0.0.jar
```

Windows:

```
SET CLASS_PATH=<DESTINATION_FOLDER_1>\FW\FW44000\jarfiles\*
```

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

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/FW/FW44000/Install-Upgrade
```

Windows:

```
cd <DESTINATION_FOLDER_1>\FW\FW44000\Install-Upgrade
```

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

AIX, Linux:

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

Windows:

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

The following message appears in the command line:

```
Ready to upgrade the target database from V4.3.0.6.0 to V4.4.0.0.0, do you want to continue (Y/N)?
```

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

2.3.2 Installing Rollup Pack for OUAF Version 4.4.0.0.0

You can install the rollup pack for Oracle Utilities Application Framework Version 4.4.0.0.0 from a Windows machine or UNIX Standalone server. To install the rollup pack for Oracle Utilities Application Framework (OUAF) Version 4.4.0.0.0 on the database:

1. Login to the database server using the administrator's credentials.
2. Do the following:

If you are using the following application server...	Then...
IBM WebSphere	<p>a. Copy the WAS CHANGES FOR FW 4.4.0.0.0 WITH FW PRE-REQUIRES patch to the <code>TEMPDIR</code> folder using the following command:</p> <p>AIX, Linux:</p> <pre>cp <PATH>/<filename>.zip <PATH>/TEMPDIR</pre> <p>Windows:</p> <pre>copy <PATH>\<filename>.zip <PATH>\TEMPDIR</pre> <p>b. Unzip the WAS CHANGES FOR FW 4.4.0.0.0 WITH FW PRE-REQUIRES patch using the following command:</p> <p>AIX, Linux:</p> <pre>unzip <filename>.zip -d <PATH>/TEMPDIR</pre> <p>Windows:</p> <pre>unzip <filename>.zip -d <PATH>\TEMPDIR</pre> <p>The contents of the zip file are extracted in the <code>TEMPDIR</code> folder. The contents include one folder named <code>WAS_FW44000</code>.</p> <p>c. Change to the <code>WAS_FW44000</code> folder using the following command:</p> <p>AIX, Linux:</p> <pre>cd TEMPDIR/WAS_FW44000</pre> <p>Windows:</p> <pre>cd TEMPDIR\WAS_FW44000</pre> <p>The contents include the following files - <code>Files.zip</code>, <code>ORMB-V29000-FW-PREREQ-MultiPlatform.jar</code>, and <code>README.txt</code>.</p>
Oracle WebLogic	<p>a. Copy the Oracle Utilities Application Framework V4.4.0.0.0 Single Fix Prerequisite Rollup for RMB V2.9.0.0.0 package to the <code>TEMPDIR</code> folder using the following command:</p> <p>AIX, Linux:</p> <pre>cp <PATH>/<filename>.zip <PATH>/TEMPDIR</pre>

If you are using the following application server...	Then...
	<p><u>Windows:</u></p> <pre>copy <PATH>\<filename>.zip <PATH>\TEMPDIR</pre> <p>b. Unzip the Oracle Utilities Application Framework V4.4.0.0.0 Single Fix Prerequisite Rollup for RMB V2.9.0.0.0 package using the following command:</p> <p><u>AIX, Linux:</u></p> <pre>unzip <filename>.zip -d <PATH>/TEMPDIR</pre> <p><u>Windows:</u></p> <pre>unzip <filename>.zip -d <PATH>\TEMPDIR</pre> <p>The contents of the zip file are extracted in the <code>TEMPDIR</code> folder. The contents include the <code>ORMB-V29000-FW-PREREQ-MultiPlatform.jar</code> file.</p> <p>c. Change to the <code>TEMPDIR</code> folder using the following command:</p> <p><u>AIX, Linux:</u></p> <pre>cd <PATH>/TEMPDIR</pre> <p><u>Windows:</u></p> <pre>cd <PATH>\TEMPDIR</pre>

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.

- Decompress the JAR file using the following command:

```
jar -xvf ORMB-V29000-FW-PREREQ-MultiPlatform.jar
```

A sub-folder named `FW-V4.4.0.0.0-Rollup` is extracted. It contains the following two sub-folders:

- Application
- Database

- Change to the `TEMPDIR` folder using the following command:

AIX, Linux:

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

Windows:

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

- Create a folder named `dbpatch_tools` using the following command:

```
mkdir dbpatch_tools
```

- Copy the `db_patch_standalone.jar` file to the `dbpatch_tools` folder.

7. Change to the `dbpatch_tools` folder using the following command:

AIX, Linux:

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

Windows:

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

8. 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`

9. Set the `TOOLSBIN` environment variable using the following command:

AIX, Linux:

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

Windows:

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

10. Change to the `Database` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_2>/FW-V4.4.0.0.0-Rollup/Database
```

Windows:

```
cd <DESTINATION_FOLDER_2>\FW-V4.4.0.0.0-Rollup\Database
```

Note: The `<DESTINATION_FOLDER_2>` folder is the location where you have extracted the contents of the `ORMB-V29000-FW-PREREQ-MultiPlatform.jar` file.

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

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)

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

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

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

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

2.4 Installing Framework on the Application Environment

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

1. [Oracle Utilities Application Framework \(OUAF\) Version 4.4.0.0.0](#)
2. [Rollup Pack for Oracle Utilities Application Framework \(OUAF\) Version 4.4.0.0.0](#)

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

2.4.1 Installing OUAF Version 4.4.0.0.0

To install Oracle Utilities Application Framework (OUAF) Version 4.4.0.0.0 on the application environment:

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

```
mkdir TEMPDIR
```

3. Copy the **Oracle Utilities Customer Care and Billing 2.7.0.1.0 - Oracle Utilities Application Framework (4.4.0.0.0) Installation** 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 Customer Care and Billing 2.7.0.1.0 - Oracle Utilities Application Framework (4.4.0.0.0) Installation** 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-V4.4.0.0.0-MultiPlatform.jar` file.

6. Decompress the `FW-V4.4.0.0.0-MultiPlatform.jar` file using the following command:

```
jar -xvf FW-V4.4.0.0.0-MultiPlatform.jar
```

The contents of the JAR file include a folder named `FW-V4.4.0.0.0-SP0`.

7. If you are using IBM WebSphere, you need to do the following:

- a. Copy the **WAS CHANGES FOR FW 4.4.0.0.0 WITH FW PRE-REQUIRES** patch to the `TEMPDIR` folder using the following command:

AIX, Linux:

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

Windows:

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

- b. Unzip the **WAS CHANGES FOR FW 4.4.0.0.0 WITH FW PRE-REQUIRES** patch using the following command:

AIX, Linux:

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

Windows:

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

The contents of the zip file are extracted in the `TEMPDIR` folder. The contents include one folder named `WAS_FW44000`.

- c. Change to the `WAS_FW44000` folder using the following command:

AIX, Linux:

```
cd TEMPDIR/WAS_FW44000
```

Windows:

```
cd TEMPDIR\WAS_FW44000
```

The contents include the following files - `Files.zip`, `ORMB-V29000-FW-PREREQ-MultiPlatform.jar`, and `README.txt`.

- d. Follow the instructions given in the `README.txt` file and then install Oracle Utilities Application Framework (OUAF) Version 4.4.0.0.0. Otherwise, erroneous results might occur.

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

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

9. 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.

10. Change to the `FW-V4.4.0.0.0-SP0` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/FW-V4.4.0.0.0-SP0
```

Windows:

```
cd <DESTINATION_FOLDER_1>\FW-V4.4.0.0.0-SP0
```

Note: The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the `FW-V4.4.0.0.0-MultiPlatform.jar` file.

11. 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 Folder (<Enter> quit):
```

12. 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.

13. 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.

14. 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*.

15. 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.

16. 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*.

17. 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.

18. 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 folder named Log File Mount Point. If this output folder does not exist, the installation will not be successfully executed.

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

19. Type **P** to proceed with the installation. The following environment configuration menus appear in the command line:

- 1. Environment Description
- 2. Business Application Server Configuration
- 3. Web Application Server Configuration
- 4. Database Configuration
- 5. General Configuration Options

- 6. OUAF TrustStore Options

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

21. 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*.

22. 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.

23. 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*.

24. 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.

25. 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*.

26. 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.

27. 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*.

28. 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.

29. 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*.

30. Type **6** to define values for the OUAF TrustStore Options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.

31. 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*.

32. Type **P** to proceed with the installation. The Oracle Utilities Application Framework Version 4.4.0.0.0 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 `$(SPLEBASE)/bin` folder. And, on the Windows machine, this utility is available in the `%SPLEBASE%\bin` folder.
2. `splenviron` - The `splenviron` utility sets the environment variables using the `ENVIRON.INI` file. On the UNIX machine, this utility is available in the `$(SPLEBASE)/bin` folder. And, on the Windows machine, this utility is available in the `%SPLEBASE%\bin` folder. The following are some of the key environment variables that are set using the `splenviron` utility:

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

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

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 4.4.0.0.0

To install the rollup pack for Oracle Utilities Application Framework Version 4.4.0.0.0 on the application environment:

1. Do the following:

If you are using the following application server...	Then...
IBM WebSphere	<p>a. Copy the WAS CHANGES FOR FW 4.4.0.0.0 WITH FW PRE-REQUIRES patch to the <code>TEMPDIR</code> folder using the following command:</p> <p>AIX, Linux:</p> <pre>cp <PATH>/<filename>.zip <PATH>/TEMPDIR</pre> <p>Windows:</p> <pre>copy <PATH>\<filename>.zip <PATH>\TEMPDIR</pre> <p>b. Unzip the WAS CHANGES FOR FW 4.4.0.0.0 WITH FW PRE-REQUIRES patch using the following command:</p> <p>AIX, Linux:</p> <pre>unzip <filename>.zip -d <PATH>/TEMPDIR</pre> <p>Windows:</p> <pre>unzip <filename>.zip -d <PATH>\TEMPDIR</pre> <p>The contents of the zip file are extracted in the <code>TEMPDIR</code> folder. The contents include one folder named <code>WAS_FW44000</code>.</p> <p>c. Change to the <code>WAS_FW44000</code> folder using the following command:</p> <p>AIX, Linux:</p> <pre>cd TEMPDIR/WAS_FW44000</pre> <p>Windows:</p> <pre>cd TEMPDIR\WAS_FW44000</pre> <p>The contents include the following files - <code>Files.zip</code>, <code>ORMB-V29000-FW-PREREQ-MultiPlatform.jar</code>, and <code>README.txt</code>.</p>
Oracle WebLogic	<p>a. Copy the Oracle Utilities Application Framework V4.4.0.0.0 Single Fix Prerequisite Rollup for RMB V2.9.0.0.0 package to the <code>TEMPDIR</code> folder using the following command:</p> <p>AIX, Linux:</p> <pre>cp <PATH>/<filename>.zip <PATH>/TEMPDIR</pre> <p>Windows:</p> <pre>copy <PATH>\<filename>.zip <PATH>\TEMPDIR</pre>

If you are using the following application server...	Then...
	<p>b. Unzip the Oracle Utilities Application Framework V4.4.0.0.0 Single Fix Prerequisite Rollup for RMB V2.9.0.0.0 package using the following command:</p> <p>AIX, Linux:</p> <pre>unzip <filename>.zip -d <PATH>/TEMPDIR</pre> <p>Windows:</p> <pre>unzip <filename>.zip -d <PATH>\TEMPDIR</pre> <p>The contents of the zip file are extracted in the <code>TEMPDIR</code> folder. The contents include the <code>ORMB-V29000-FW-PREREQ-MultiPlatform.jar</code> file.</p> <p>c. Change to the <code>TEMPDIR</code> folder using the following command:</p> <p>AIX, Linux:</p> <pre>cd <PATH>/TEMPDIR</pre> <p>Windows:</p> <pre>cd <PATH>\TEMPDIR</pre>

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.

- Decompress the JAR file using the following command:

```
jar -xvf ORMB-V29000-FW-PREREQ-MultiPlatform.jar
```

A sub-folder named `FW-V4.4.0.0.0-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:

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

Windows:

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

- Change to the `Application` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_2>/FW-V4.4.0.0.0-Rollup/Application
```


Windows:

```
cd <DESTINATION_FOLDER_2>\FW-V4.4.0.0.0-Rollup\Application
```

Note: The <DESTINATION_FOLDER_2> folder is the location where you have extracted the contents of the ORMB-V29000-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)
```

- 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:

- [Oracle Revenue Management and Billing \(ORMB\) Version 2.9.0.0.0](#)

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 2.9.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 2.9.0.0.0 on the application environment:

- Login to the application server using the administrator's credentials.
- Copy the **Oracle Revenue Management and Billing V2.9.0.0.0 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.

- 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 V2.9.0.0.0 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.V2.9.0.0.0` folder.

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

AIX, Linux:

```
$(SPL)Ebase/bin/splenvron.sh -e $(SPL)ENVIRON
```

Windows:

```
%$(SPL)Ebase%\bin\splenvron.cmd -e %$(SPL)ENVIRON%
```

6. Stop the managed server where the application is hosted using the WebLogic Console.
7. Change to the `ORMB.V2.9.0.0.0` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_3>/ORMB.V2.9.0.0.0
```

Windows:

```
cd <DESTINATION_FOLDER_3>\ORMB.V2.9.0.0.0
```

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*.

2.5.2 Post Installation Tasks

Once you install Oracle Revenue Management and Billing (ORMB) Version 2.9.0.0.0, you need to apply the following patches on the application environment:

1. [MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31066976\)](#)
2. [MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31074070\)](#)
3. [UPDATE ONLINE HELP FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31008818\)](#)
4. [MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31122862\)](#)
5. [MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31130102\)](#)
6. [MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31190091\)](#)
7. [MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31172781\)](#)
8. [MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31222633\)](#)
9. [MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31248602\)](#)
10. [MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31313821\)](#)
11. [MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31314417\)](#)

The above patch list is not comprehensive. For the complete list of patches that you need to apply on the application environment, see the *ORMB V29000 Patch Guide (Doc ID: 2704165.1)* which is available on [My Oracle Support](#).

Alternatively, instead of individually applying the above listed patches, you can download and install the rollup packs, if available, to apply a set of patches at once. For more information about the rollup packs, see [Appendix J: ORMB V2.9.0.0.0 Rollup Packs](#).

2.5.2.1 Applying the 31066976 Patch

Once you install ORMB, you need to apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31066976). To apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0** 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 2.9.0.0.0** 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_31066976_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 `v2.9.0.0.0-31066976_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31066976_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V2.9.0.0.0-31066976_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_5>\V2.9.0.0.0-31066976_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.V2.9.0.0.0-31066976.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31066976.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31066976.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31066976`.

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

AIX, Linux:

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

Windows:

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

8. Change to the `CCB.V2.9.0.0.0-31066976` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V2.9.0.0.0-31066976_MultiPlatform/CCB.V2.9.0.0.0-31066976
```

Windows:

```
cd <DESTINATION_FOLDER_5>\V2.9.0.0.0-31066976_MultiPlatform\CCB.V2.9.0.0.0-31066976
```

Note: The `V2.9.0.0.0-31066976_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31066976.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.2 Applying the 31074070 Patch

Once you apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31074070). To apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0** 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 2.9.0.0.0** 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_31074070_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 `V2.9.0.0.0-31074070_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31074070_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_7>/V2.9.0.0.0-31074070_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_7>\V2.9.0.0.0-31074070_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.V2.9.0.0.0-31074070.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31074070.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31074070.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31074070`.

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.V2.9.0.0.0-31074070` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_7>/V2.9.0.0.0-31074070_MultiPlatform/CCB.V2.9.0.0.0-31074070
```

Windows:

```
cd <DESTINATION_FOLDER_7>\V2.9.0.0.0-31074070_MultiPlatform\CCB.V2.9.0.0.0-31074070
```

Note: The `V2.9.0.0.0-31074070_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31074070.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.3 Applying the 31008818 Patch

Once you apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the UPDATE ONLINE HELP FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31008818). To apply the UPDATE ONLINE HELP FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **UPDATE ONLINE HELP FOR ORMB VERSION 2.9.0.0.0** 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 **UPDATE ONLINE HELP FOR ORMB VERSION 2.9.0.0.0** 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_31008818_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 `V2.9.0.0.0-31008818_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31008818_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_9>/V2.9.0.0.0-31008818_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_9>\V2.9.0.0.0-31008818_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.V2.9.0.0.0-31008818.jar`.

6. Decompress the `CCB.V2.9.0.0.0-31008818.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31008818.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31008818`.

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

AIX, Linux:

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

Windows:

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

8. Change to the `CCB.V2.9.0.0.0-31008818` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_9>/V2.9.0.0.0-31008818_MultiPlatform/CCB.V2.9.0.0.0-31008818
```

Windows:

```
cd <DESTINATION_FOLDER_9>\V2.9.0.0.0-31008818_MultiPlatform\CCB.V2.9.0.0.0-31008818
```

Note: The `V2.9.0.0.0-31008818_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31008818.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.4 Applying the 31122862 Patch

Once you apply the UPDATE ONLINE HELP FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31122862). To apply the MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0** 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 3 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_10>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_10>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_10>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31122862_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_10>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_11>
```

Windows:

```
unzip <DESTINATION_FOLDER_10>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_11>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_11>` folder. The contents include the `V2.9.0.0.0-31122862_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31122862_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_11>/V2.9.0.0.0-31122862_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_11>\V2.9.0.0.0-31122862_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_11>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31122862.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31122862.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31122862.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31122862`.

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.V2.9.0.0.0-31122862` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_11>/V2.9.0.0.0-31122862_MultiPlatform/CCB.V2.9.0.0.0-31122862
```

Windows:

```
cd <DESTINATION_FOLDER_11>\V2.9.0.0.0-31122862_MultiPlatform\CCB.V2.9.0.0.0-31122862
```

Note: The `V2.9.0.0.0-31122862_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31122862.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.5 Applying the 31130102 Patch

Once you apply the MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31130102). To apply the MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0** 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 4 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_12>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_12>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_12>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31130102_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_12>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_13>
```

Windows:

```
unzip <DESTINATION_FOLDER_12>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_13>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_13>` folder. The contents include the `V2.9.0.0.0-31130102_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31130102_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_13>/V2.9.0.0.0-31130102_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_13>\V2.9.0.0.0-31130102_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_13>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31130102.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31130102.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31130102.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31130102`.

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

AIX, Linux:

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

Windows:

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

8. Change to the `CCB.V2.9.0.0.0-31130102` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_13>/V2.9.0.0.0-31130102_MultiPlatform/CCB.V2.9.0.0.0-31130102
```

Windows:

```
cd <DESTINATION_FOLDER_13>\V2.9.0.0.0-31130102_MultiPlatform\CCB.V2.9.0.0.0-31130102
```

Note: The `V2.9.0.0.0-31130102_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31130102.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.6 Applying the 31190091 Patch

Once you apply the MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31190091). To apply the MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0** 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 5 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_14>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_14>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_14>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31190091_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_14>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_15>
```

Windows:

```
unzip <DESTINATION_FOLDER_14>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_15>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_15>` folder. The contents include the `V2.9.0.0.0-31190091_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31190091_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_15>/V2.9.0.0.0-31190091_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_15>\V2.9.0.0.0-31190091_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_15>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31190091.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31190091.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31190091.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31190091`.

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

AIX, Linux:

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

Windows:

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

8. Change to the `CCB.V2.9.0.0.0-31190091` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_15>/V2.9.0.0.0-31190091_MultiPlatform/CCB.V2.9.0.0.0-31190091
```

Windows:

```
cd <DESTINATION_FOLDER_15>\V2.9.0.0.0-31190091_MultiPlatform\CCB.V2.9.0.0.0-31190091
```

Note: The `V2.9.0.0.0-31190091_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31190091.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.7 Applying the 31172781 Patch

Once you apply the MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31172781). To apply the MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0** 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 6 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_16>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_16>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_16>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31172781_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_16>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_17>
```

Windows:

```
unzip <DESTINATION_FOLDER_16>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_17>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_17>` folder. The contents include the `V2.9.0.0.0-31172781_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31172781_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_17>/V2.9.0.0.0-31172781_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_17>\V2.9.0.0.0-31172781_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_17>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31172781.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31172781.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31172781.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31172781`.

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.V2.9.0.0.0-31172781` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_17>/V2.9.0.0.0-31172781_MultiPlatform/CCB.V2.9.0.0.0-31172781
```

Windows:

```
cd <DESTINATION_FOLDER_17>\V2.9.0.0.0-31172781_MultiPlatform\CCB.V2.9.0.0.0-31172781
```

Note: The `V2.9.0.0.0-31172781_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31172781.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.8 Applying the 31222633 Patch

Once you apply the MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31222633). To apply the MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0** 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 7 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_18>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_18>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_18>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31222633_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_18>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_19>
```

Windows:

```
unzip <DESTINATION_FOLDER_18>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_19>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_19>` folder. The contents include the `V2.9.0.0.0-31222633_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31222633_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_19>/V2.9.0.0.0-31222633_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_19>\V2.9.0.0.0-31222633_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_19>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31222633.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31222633.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31222633.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31222633`.

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

AIX, Linux:

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

Windows:

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

8. Change to the `CCB.V2.9.0.0.0-31222633` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_19>/V2.9.0.0.0-31222633_MultiPlatform/CCB.V2.9.0.0.0-31222633
```

Windows:

```
cd <DESTINATION_FOLDER_19>\V2.9.0.0.0-31222633_MultiPlatform\CCB.V2.9.0.0.0-31222633
```

Note: The `V2.9.0.0.0-31222633_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31222633.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.9 Applying the 31248602 Patch

Once you apply the MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31248602). To apply the MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0** 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 8 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_20>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_20>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_20>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31248602_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_20>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_21>
```

Windows:

```
unzip <DESTINATION_FOLDER_20>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_21>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_21>` folder. The contents include the `V2.9.0.0.0-31248602_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31248602_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_21>/V2.9.0.0.0-31248602_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_21>\V2.9.0.0.0-31248602_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_21>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31248602.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31248602.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31248602.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31248602`.

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

AIX, Linux:

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

Windows:

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

8. Change to the `CCB.V2.9.0.0.0-31248602` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_21>/V2.9.0.0.0-31248602_MultiPlatform/CCB.V2.9.0.0.0-31248602
```

Windows:

```
cd <DESTINATION_FOLDER_21>\V2.9.0.0.0-31248602_MultiPlatform\CCB.V2.9.0.0.0-31248602
```

Note: The `V2.9.0.0.0-31248602_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31248602.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.10 Applying the 31313821 Patch

Once you apply the MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31313821). To apply the MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0** 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 9 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_22>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_22>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_22>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31313821_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_22>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_23>
```

Windows:

```
unzip <DESTINATION_FOLDER_22>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_23>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_23>` folder. The contents include the `V2.9.0.0.0-31313821_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31313821_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_23>/V2.9.0.0.0-31313821_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_23>\V2.9.0.0.0-31313821_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_23>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31313821.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31313821.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31313821.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31313821`.

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

AIX, Linux:

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

Windows:

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

8. Change to the `CCB.V2.9.0.0.0-31313821` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_23>/V2.9.0.0.0-31313821_MultiPlatform/CCB.V2.9.0.0.0-31313821
```

Windows:

```
cd <DESTINATION_FOLDER_23>\V2.9.0.0.0-31313821_MultiPlatform\CCB.V2.9.0.0.0-31313821
```

Note: The `V2.9.0.0.0-31313821_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31313821.jar` file.

9. Install the patch using the following command:

AIX, Linux:

```
./installSF.sh
```

Windows:

```
installSF.cmd
```

2.5.2.11 Applying the 31314417 Patch

Once you apply the MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31314417). To apply the MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0** 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 10 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_24>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_24>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_24>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31314417_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_24>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_25>
```

Windows:

```
unzip <DESTINATION_FOLDER_24>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_25>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_25>` folder. The contents include the `V2.9.0.0.0-31314417_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31314417_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_25>/V2.9.0.0.0-31314417_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_25>\V2.9.0.0.0-31314417_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_25>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31314417.jar` and a folder named `database`.

6. Decompress the `CCB.V2.9.0.0.0-31314417.jar` file using the following command:

```
jar -xvf CCB.V2.9.0.0.0-31314417.jar
```

The contents include two folders - `META-INF` and `CCB.V2.9.0.0.0-31314417`.

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

AIX, Linux:

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

Windows:

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

8. Change to the `CCB.V2.9.0.0.0-31314417` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_25>/V2.9.0.0.0-31314417_MultiPlatform/CCB.V2.9.0.0.0-31314417
```

Windows:

```
cd <DESTINATION_FOLDER_25>\V2.9.0.0.0-31314417_MultiPlatform\CCB.V2.9.0.0.0-31314417
```

Note: The `V2.9.0.0.0-31314417_MultiPlatform` folder is the location where you have extracted the contents of the `CCB.V2.9.0.0.0-31314417.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 2.8.0.0.0 to 2.9.0.0.0, you need to install the following on the database:

1. [Oracle Revenue Management and Billing \(ORMB\) Version 2.9.0.0.0](#)
2. [MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31066976\)](#)
3. [MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31074070\)](#)
4. [MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31122862\)](#)
5. [MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31130102\)](#)
6. [MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31190091\)](#)
7. [MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31172781\)](#)
8. [MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31222633\)](#)
9. [MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31248602\)](#)
10. [MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31313821\)](#)
11. [MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0 \(Patch Number: 31314417\)](#)

The above patch list is not comprehensive. For the complete list of patches that you need to apply on the database, see the *ORMB V29000 Patch Guide (Doc ID: 2704165.1)* which is available on [My Oracle Support](#).

Alternatively, instead of individually applying the above listed patches, you can download and install the rollup packs, if available, to apply a set of patches at once. For more information about the rollup packs, see [Appendix J: ORMB V2.9.0.0.0 Rollup Packs](#).

Note: There might be situations when you do not want to recreate one or more table indexes. You can skip the recreation process of one or more table indexes by adding the following line in the <DESTINATION_FOLDER_1>/RMB/Upgrade/Oracle/Install-Upgrade/CDXSchUpg.inp file:

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

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

The <DESTINATION_FOLDER_1> folder is the location where you have extracted the contents of the **Oracle Revenue Management and Billing V2.9.0.0.0 Oracle Database** package.

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 2.9.0.0.0 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
```

- 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
```

- 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 2.9.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 2.9.0.0.0:

- Set the `JAVA_HOME` environment variable using the following command:

AIX, Linux:

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

Windows:

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

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

- Set the `JAR_PATH` environment variable using the following command:

AIX, Linux:

```
export JAR_PATH=<DESTINATION_FOLDER_1>/RMB/jarfiles
```

Note:

The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the **Oracle Revenue Management and Billing V2.9.0.0.0 Oracle Database** package.

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

- Set the `CLASS_PATH` environment variable using the following command:

AIX, Linux:

```
export CLASS_PATH=${JAR_PATH}/commons-cli-
1.3.1.jar:${JAR_PATH}/commons-codec-1.9.jar:${JAR_PATH}/commons-
collections-3.2.2.jar:${JAR_PATH}/log4j-api-
2.11.0.jar:${JAR_PATH}/log4j-core-2.11.0.jar:${JAR_PATH}/ojdbc8-
12.2.0.1.jar:${JAR_PATH}/oradbi.jar:${JAR_PATH}/spl-shared-
4.4.0.0.jar
```

Windows:

```
SET CLASS_PATH=<DESTINATION_FOLDER_1>\RMB\jarfiles\*
```

- Change to the `Install-Upgrade` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/RMB/Upgrade/Oracle/Install-Upgrade
```

Windows:

```
cd <DESTINATION_FOLDER_1>\RMB\Upgrade\Oracle\Install-Upgrade
```

- Execute the `OraDBI (Java)` utility using the following command:

AIX, Linux:

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

Windows:

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

The following message appears in the command line:

```
Ready to upgrade the target database from V2.8.0.0.0 to
V2.9.0.0.0, do you want to continue (Y/N)?
```

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

2.6.2 Applying the 31066976 Patch

Once you install ORMB, you need to apply the **MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0** patch (Patch Number: 31066976). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the **MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0** patch:

- Copy the **MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0** 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 2.9.0.0.0** 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_31066976_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 `V2.9.0.0.0-31066976_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31066976_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_4>/V2.9.0.0.0-31066976_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_4>\V2.9.0.0.0-31066976_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.V2.9.0.0.0-31066976.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 `31066976`.

8. Ensure that the `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 the `<DESTINATION_FOLDER_5>` folder 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 31074070 Patch

Once you apply the MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31074070). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0** 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 2.9.0.0.0** 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_31074070_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 `V2.9.0.0.0-31074070_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31074070_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_7>/V2.9.0.0.0-31074070_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_7>\V2.9.0.0.0-31074070_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.V2.9.0.0.0-31074070.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 `31074070`.

8. Ensure that the `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 the `<DESTINATION_FOLDER_8>` folder 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
```

2.6.4 Applying the 31122862 Patch

Once you apply the MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31122862). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0** 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 3 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_9>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_9>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_9>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31122862_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_9>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_10>
```

Windows:

```
unzip <DESTINATION_FOLDER_9>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_10>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_10>` folder. The contents include the `V2.9.0.0.0-31122862_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31122862_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_10>/V2.9.0.0.0-31122862_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_10>\V2.9.0.0.0-31122862_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_10>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31122862.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_11>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_11>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_11>` folder. The contents include utility files and a folder named `31122862`.

8. Ensure that the `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 the `<DESTINATION_FOLDER_11>` folder using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_11>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_11>
```

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.6.5 Applying the 31130102 Patch

Once you apply the MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31130102). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0** 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
```

- Unzip the **MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_12>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_12>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_12> folder. The contents include three files - README.txt, MultiPlatform.zip, and Bug_31130102_Product_Fix_Design.pdf.

- Unzip the MultiPlatform file using the following command:

AIX, Linux:

```
unzip <DESTINATION_FOLDER_12>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_13>
```

Windows:

```
unzip <DESTINATION_FOLDER_12>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_13>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_13> folder. The contents include the V2.9.0.0.0-31130102_MultiPlatform folder.

- Change to the V2.9.0.0.0-31130102_MultiPlatform folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_13>/V2.9.0.0.0-31130102_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_13>\V2.9.0.0.0-31130102_MultiPlatform
```

Note: The <DESTINATION_FOLDER_13> folder is the location where you have extracted the contents of the MultiPlatform.zip file.

The contents include a file named CCB.V2.9.0.0.0-31130102.jar and a folder named database.

- 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_14>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_14>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_14>` folder. The contents include utility files and a folder named `31130102`.

8. Ensure that the `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 the `<DESTINATION_FOLDER_14>` folder using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_14>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_14>
```

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.6.6 Applying the 31190091 Patch

Once you apply the MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31190091). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0** 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 5 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_15>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_15>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_15>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31190091_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_15>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_16>
```

Windows:

```
unzip <DESTINATION_FOLDER_15>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_16>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_16>` folder. The contents include the `V2.9.0.0.0-31190091_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31190091_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_16>/V2.9.0.0.0-31190091_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_16>\V2.9.0.0.0-31190091_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_16>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31190091.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_17>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_17>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_17>` folder. The contents include utility files and a folder named `31190091`.

8. Ensure that the `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 the `<DESTINATION_FOLDER_17>` folder using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_17>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_17>
```

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```


2.6.7 Applying the 31172781 Patch

Once you apply the MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31172781). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0** 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 6 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_18>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_18>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_18>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31172781_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_18>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_19>
```

Windows:

```
unzip <DESTINATION_FOLDER_18>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_19>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_19>` folder. The contents include the `V2.9.0.0.0-31172781_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31172781_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_19>/V2.9.0.0.0-31172781_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_19>\V2.9.0.0.0-31172781_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_19>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31172781.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_20>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_20>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_20>` folder. The contents include utility files and a folder named `31172781`.

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

AIX, Linux:

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

Windows:

```
SET TOOLS_BIN=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 the `<DESTINATION_FOLDER_20>` folder using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_20>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_20>
```

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.6.8 Applying the 31222633 Patch

Once you apply the MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31222633). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0** 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 7 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_21>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_21>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_21>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31222633_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_21>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_22>
```

Windows:

```
unzip <DESTINATION_FOLDER_21>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_22>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_22>` folder. The contents include the `V2.9.0.0.0-31222633_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31222633_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_22>/V2.9.0.0.0-31222633_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_22>\V2.9.0.0.0-31222633_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_22>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31222633.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_23>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_23>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_23>` folder. The contents include utility files and a folder named `31222633`.

8. Ensure that the `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 the `<DESTINATION_FOLDER_23>` folder using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_23>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_23>
```

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.6.9 Applying the 31248602 Patch

Once you apply the MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31248602). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0** 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
```

- Unzip the **MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_24>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_24>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_24> folder. The contents include three files - README.txt, MultiPlatform.zip, and Bug_31248602_Product_Fix_Design.pdf.

- Unzip the MultiPlatform file using the following command:

AIX, Linux:

```
unzip <DESTINATION_FOLDER_24>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_25>
```

Windows:

```
unzip <DESTINATION_FOLDER_24>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_25>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_25> folder. The contents include the V2.9.0.0.0-31248602_MultiPlatform folder.

- Change to the V2.9.0.0.0-31248602_MultiPlatform folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_25>/V2.9.0.0.0-31248602_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_25>\V2.9.0.0.0-31248602_MultiPlatform
```

Note: The <DESTINATION_FOLDER_25> folder is the location where you have extracted the contents of the MultiPlatform.zip file.

The contents include a file named CCB.V2.9.0.0.0-31248602.jar and a folder named database.

- 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_26>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_26>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_26>` folder. The contents include utility files and a folder named `31248602`.

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

AIX, Linux:

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

Windows:

```
SET TOOLS_BIN=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 the `<DESTINATION_FOLDER_26>` folder using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_26>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_26>
```

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.6.10 Applying the 31313821 Patch

Once you apply the MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31313821). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0** 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 9 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_27>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_27>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_27>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31313821_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_27>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_28>
```

Windows:

```
unzip <DESTINATION_FOLDER_27>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_28>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_28>` folder. The contents include the `V2.9.0.0.0-31313821_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31313821_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_28>/V2.9.0.0.0-31313821_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_28>\V2.9.0.0.0-31313821_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_28>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31313821.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_29>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_29>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_29>` folder. The contents include utility files and a folder named `31313821`.

8. Ensure that the `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 the `<DESTINATION_FOLDER_29>` folder using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_29>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_29>
```

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.6.11 Applying the 31314417 Patch

Once you apply the MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0 patch, you need to apply the MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0 patch (Patch Number: 31314417). You can apply this patch from a Windows machine or UNIX Standalone server.

To apply the MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0 patch:

1. Copy the **MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0** 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 10 FOR ORMB VERSION 2.9.0.0.0** patch using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_30>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_30>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_30>` folder. The contents include three files - `README.txt`, `MultiPlatform.zip`, and `Bug_31314417_Product_Fix_Design.pdf`.

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

AIX, Linux:

```
unzip <DESTINATION_FOLDER_30>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_31>
```

Windows:

```
unzip <DESTINATION_FOLDER_30>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_31>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_31>` folder. The contents include the `V2.9.0.0.0-31314417_MultiPlatform` folder.

5. Change to the `V2.9.0.0.0-31314417_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_31>/V2.9.0.0.0-31314417_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_31>\V2.9.0.0.0-31314417_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_31>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V2.9.0.0.0-31314417.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_32>
```

Windows:

```
unzip CDXPatch.zip -d <PATH>\<DESTINATION_FOLDER_32>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_32>` folder. The contents include utility files and a folder named `31314417`.

8. Ensure that the `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 the `<DESTINATION_FOLDER_32>` folder using the following command:

AIX, Linux:

```
cd <PATH>/<DESTINATION_FOLDER_32>
```

Windows:

```
cd <PATH>\<DESTINATION_FOLDER_32>
```

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

AIX, Linux:

```
ouafDatabasePatch.sh
```

Windows:

```
ouafDatabasePatch.cmd
```

2.7 Migrating Data

No data migration is required while upgrading from Oracle Revenue Management and Billing Version 2.8.0.0.0 to 2.9.0.0.0.

2.8 Migrating Data from ORMB Version Below 2.6.0.1.0 to 2.9.0.0.0

You need to perform this step only when you are upgrading ORMB database from any version below 2.6.0.1.0 to 2.9.0.0.0 using the single-step utility. Before you migrate the data from any version below 2.6.0.1.0 to 2.9.0.0.0, you need to:

1. Create a deferred revenue recognition template for each distribution code and contract type combination for which deferred revenue recognitions exist in the system.
2. Create a table named `CI_REV_REC_SCH_BK241` and move the data from the `CI_REV_REC_SCH` to `CI_REV_REC_SCH_BK241` table.

To migrate the data from any version below 2.6.0.1.0 to 2.9.0.0.0:

1. Download the **V2.9 UPGRADE - DEFERRED REVENUE RECOGNITION FUNCTIONALITY ISSUES** patch (Patch Number: 31437274) from [My Oracle Support](#).
2. Copy the **V2.9 UPGRADE - DEFERRED REVENUE RECOGNITION FUNCTIONALITY ISSUES** 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.

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

AIX, Linux:

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

Windows:

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

4. Unzip the **V2.9 UPGRADE - DEFERRED REVENUE RECOGNITION FUNCTIONALITY ISSUES** patch 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 - README.txt, deploy.zip, and Bug_31437274_Product_Fix_Design.pdf.

5. Unzip the `deploy.zip` file using the following command:

AIX, Linux:

```
unzip <DESTINATION_FOLDER_1>/deploy.zip -d  
<PATH>/<DESTINATION_FOLDER_2>
```

Windows:

```
unzip <DESTINATION_FOLDER_1>\deploy.zip -d  
<PATH>\<DESTINATION_FOLDER_2>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_2> folder. The contents include a folder named `Migration_From_V2.4.0.1.0_To_V2.9.0.0.0`. This folder contains one file named `UpgradeDRRBatchProcess_29000-v2.sql`.

6. Change to the `Migration_From_V2.4.0.1.0_To_V2.9.0.0.0` folder using the following command:

```
cd <DESTINATION_FOLDER_2>\Migration_From_V2.4.0.1.0_To_V2.9.0.0.0
```

7. Connect to the ORMB database using a utility named SQL*Plus and the administrator's (for example, `CISADM`) credentials.
8. Execute the following query from the `Migration_From_V2.4.0.1.0_To_V2.9.0.0.0` folder:

```
UpgradeDRRBatchProcess_29000-v2.sql
```

The above SQL creates a stored procedure named `UPGRADEDRRBATCHPROCESSFROMBK`.

9. Execute the `UPGRADEDRRBATCHPROCESSFROMBK` stored procedure using the following command:

```
DECLARE P_REVENUE_CONSTANTS CHAR(200);  
BEGIN P_REVENUE_CONSTANTS:='Y';  
      UPGRADEDRRBATCHPROCESSFROMBK(P_REVENUE_CONSTANTS=>P_REVENUE  
_CONSTANTS);  
END;
```

The value passed through the `P_REVENUE_CONSTANTS` variable is stored against the **Use Contract Expiration Date (Y or N)** parameter in the **C1-REVRECSCH** algorithm (which is attached on the **FT Freeze** system event of the respective contract type).

Once the above stored procedure is executed, the data is copied from the `CI_REV_REC_SCH_BK241` to `CI_REV_REC_SCH` table. The data is derived for the `DRR_TEMPLATE_CD`, `VALID_UNTIL_DT` and `BO_STATUS_CD` columns corresponding to each record in the `CI_REV_REC_SCH` table. If the deferred revenue recognition template could not be derived, the data is not added in the `DRR_TEMPLATE_CD` and `BO_STATUS_CD` columns. If the financial transaction against which the deferred revenue recognition is created is missing in the record, the data is not added in the `VALID_UNTIL_DT` column. Also, if the type of the corresponding financial transaction is **BS** or **BX** and the bill segment is missing in the record, the data is not added in the `VALID_UNTIL_DT` column.

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/splenvirion.sh -e $SPLENVIRON
```

Windows:

```
%SPLEBASE%\bin\splenvirion.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 2.9.0.0.0 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 2.9.0.0.0

This section lists and describes the tables that are newly added in the Oracle Revenue Management and Billing Version 2.9.0.0.0 database.

C.1 C1_ACCUM_GRP_MPP

Purpose:	Used to store the accumulation group details for minimum premium program.
Total Number of Columns:	27

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCUM_GRP_ID	CHAR(12)	No	-
PER_ID	CHAR(10)	Yes	-
INCURRED_START_DT	DATE	Yes	-
INCURRED_END_DT	DATE	Yes	-
PAID_START_DT	DATE	Yes	-
PAID_END_DT	DATE	Yes	-
SETTLEMENT_DATE	DATE	Yes	-
SETTLEMENT_FREQUENCY_FLG	CHAR(4)	Yes	-
ACCT_ID	CHAR(10)	Yes	-
MIN_ATTACHMNT_PT_ARRNG_FLG	CHAR(4)	Yes	-
MIN_ATTACHMT_PT_VALUE	NUMBER(36,18)	Yes	-
MAX_ATTACHMNT_PT_ARRNG_FLG	CHAR(4)	Yes	-
MAX_ATTACHMNT_PT_VALUE	NUMBER(36,18)	Yes	-
RUN_IN_SW	CHAR(1)	No	'N'
RUN_IN_INCURRED_START_DT	DATE	Yes	-
RUN_IN_INCURRED_END_DT	DATE	Yes	-
RUN_IN_PAID_START_DT	DATE	Yes	-
RUN_IN_PAID_END_DT	DATE	Yes	-
MAX_RUN_IN_AMT	NUMBER(36,18)	Yes	-
THIRD_PTY_SW	CHAR(1)	No	'N'
THIRD_PTY_INCURRED_START_DT	DATE	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
THIRD_PTY_INCURRED_END_DT	DATE	Yes	-
THIRD_PTY_PAID_START_DT	DATE	Yes	-
THIRD_PTY_PAID_END_DT	DATE	Yes	-
THD_PTY_MAX_AMT	NUMBER(36,18)	Yes	-
VERSION	NUMBER(5,0)	No	1
MIN_ATTACHMNT_PT_VALUE	NUMBER(36,18)	Yes	-

Primary Key:

Key Type	Column Name
Simple	ACCUM_GRP_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM636P0	Unique	ACCUM_GRP_ID

C.2 C1_BSEG_DEAL_EXT

Purpose:	Used to store the billing details of a deal simulation.
Total Number of Columns:	16

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BSEG_ID	CHAR(12)	No	-
CONSTRUCT_ID	CHAR(14)	No	-
PRIORITY_NUM	NUMBER(5,0)	No	-
TEMPLATE_PURPOSE_FLG	CHAR(4)	No	-
VERSION_NUM	NUMBER(5,0)	No	-
USAGE_ACCT_ID	CHAR(10)	No	-
PRICEITEM_CD	CHAR(30)	Yes	-
TOU_CD	CHAR(8)	Yes	-
PRICE_ASGN_ID	CHAR(10)	Yes	-
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	No	0

Column Name	Data Type	Nullable (Yes or No)	Default Value
VERSION	NUMBER(5,0)	No	1
BSEG_TYPE_FLG	CHAR(4)	No	' '
SETTLEMENT_ACCT_ID	CHAR(10)	Yes	-
SET_CONSTRUCT_ID	CHAR(14)	Yes	-
SET_VERSION_NUM	NUMBER(5,0)	Yes	-
SETTLEMENT_ID_NBR	VARCHAR2(20)	Yes	-

Primary Key:

Key Type	Column Name
Simple	BSEG_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM571P0	Unique	BSEG_ID

C.3 C1_BSEG_DEAL_K

Purpose:	Used to store the deal simulation bill segment ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BSEG_ID	CHAR(12)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	BSEG_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	SYS_C0026230	Unique	BSEG_ID
			ENV_ID

C.4 C1_DEAL

Purpose:	Used to store the details of a deal.
Total Number of Columns:	37

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_ID	CHAR(10)	No	-
CIS_DIVISION	CHAR(5)	No	''
DEAL_CREATION_DATE	DATE	Yes	-
CUST_TIER_FLG	CHAR(4)	No	''
DEAL_EXPIRING_DATE	DATE	Yes	-
CUST_SEG_FLG	CHAR(4)	No	''
DEAL_TYPE	VARCHAR2(20)	No	''
CURRENCY	CHAR(3)	No	''
DEAL_COMMENTS	VARCHAR2(254)	No	''
BO_STATUS_CD	CHAR(12)	No	''
VERSION	NUMBER(5,0)	No	1
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
ACCESS_GRP_CD	CHAR(12)	Yes	-
USER_ID	CHAR(8)	Yes	-
CREATE_DT	DATE	No	-
EXPIRE_DT	DATE	Yes	-
DEAL_TYPE_CD	VARCHAR2(20)	No	''
CURRENCY_CD	CHAR(3)	No	''
SIMULATION_TYPE_FLG	CHAR(4)	Yes	-
TEMPLATE_SW	CHAR(1)	Yes	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
REVIEW_DT	DATE	Yes	-
REVIEW_FREQUENCY_FLG	CHAR(4)	Yes	-
FREQUENCY_FLG	CHAR(4)	Yes	-
ACCEPTANCE_DT	DATE	Yes	-
FINALIZED_DT	DATE	Yes	-
DEAL_IDENTIFIER	CHAR(64)	Yes	-
DEAL_ACTV_DT	DATE	Yes	-
SKIP_REFERENCE_SW	CHAR(1)	Yes	-
DEAL_ENTITY_TYPE_FLG	CHAR(4)	Yes	-
DEAL_ENTITY_ID	CHAR(10)	Yes	-
USAGE_PERIOD_FLG	CHAR(4)	Yes	-
EFFT_START_DT	DATE	Yes	-
EFFT_END_DT	DATE	Yes	-
PRICE_SEL_DT	DATE	Yes	-

Primary Key:

Key Type	Column Name
Simple	DEAL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM561P0	Unique	DEAL_ID
2.	XM561S0	Non Unique	USER_ID

C.5 C1_DEAL_ADHOC_REV

Purpose:	Used to store the adhoc revenue and cost of a deal.
Total Number of Columns:	9

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQNO	NUMBER(5,0)	No	1
CIS_DIVISION	CHAR(5)	Yes	-
REV_TYPE_FLG	CHAR(4)	No	-
REVENU_COST_GRP_FLG	CHAR(4)	No	''
PRICEITEM_CD	CHAR(30)	No	''
AMOUNT	NUMBER(36,18)	Yes	-
CURRENCY_CD	CHAR(3)	No	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	DEAL_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM607P0	Unique	DEAL_ID
			SEQNO

C.6 C1_DEAL_APPROVAL

Purpose:	Used to store the approval history of a deal.
Total Number of Columns:	17

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
MODEL_ID	CHAR(10)	No	-
CIS_DIVISION	CHAR(5)	No	-
DEAL_APPR_PROF_CD	CHAR(8)	No	-
TD_TYPE_CD	CHAR(8)	No	-
ROLE_ID	CHAR(10)	No	-
APPR_STATUS	VARCHAR2(4)	No	-
APPR_USER_ID	CHAR(8)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CRE_DTTM	DATE	Yes	-
UPDT_DTTM	DATE	Yes	-
CREATED_BY	VARCHAR2(254)	Yes	-
VERSION	NUMBER(5,0)	No	1
DEAL_RSN_CD	CHAR(10)	Yes	-
APP_TXN_ID	CHAR(15)	No	-
DEAL_LEVEL	NUMBER(3,0)	No	-
ACTION_SEQ_NUM	NUMBER(5,0)	No	-
DIV_ACT_SEQ_NUM	NUMBER(5,0)	Yes	-
PROFILE_TYPE	CHAR(4)	Yes	-

Primary Key:

Key Type	Column Name
Simple	APP_TXN_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM583P0	Unique	APP_TXN_ID

C.7 C1_DEAL_APROF

Purpose:	Used to store the details of a deal approval profile.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_APPR_PROF_CD	CHAR(8)	No	-
CURRENCY_CD	CHAR(3)	No	-
VERSION	NUMBER(5,0)	No	-
BUS_OBJ_CD	CHAR(30)	No	' '
BO_DATA_AREA	CLOB	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_APROF_STATUS	CHAR(4)	No	-

Primary Key:

Key Type	Column Name
Simple	DEAL_APPR_PROF_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM580P0	Unique	DEAL_APPR_PROF_CD

C.8 C1_DEAL_APROF_HCY

Purpose:	Used to store the approval hierarchy of a deal.
Total Number of Columns:	21

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_APPR_PROF_CD	CHAR(8)	No	-
SEQ_NUM	NUMBER(3,0)	Yes	-
TD_TYPE_CD	CHAR(8)	No	-
ROLE_ID	CHAR(10)	No	-
ALLOW_PRICE_PROP_SW	CHAR(1)	No	-
ALLOW_SUBMIT_PI_APPR_SW	CHAR(1)	No	-
DEAL_APPR_ALLOWED_SW	CHAR(1)	No	-
DISP_ELG_PI_ONLY_SW	CHAR(1)	No	-
MIN_PROFIT_PERCENT	NUMBER(15,2)	Yes	-
MAX_PROFIT_PERCENT	NUMBER(15,2)	Yes	-
MIN_PROFIT_AMOUNT	NUMBER(15,2)	Yes	-
MAX_PROFIT_AMOUNT	NUMBER(15,2)	Yes	-
MIN_DEVIATION_PERCENT	NUMBER(15,2)	Yes	-
MAX_DEVIATION_PERCENT	NUMBER(15,2)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
MIN_DEVIATION_AMOUNT	NUMBER(15,2)	Yes	-
MAX_DEVIATION_AMOUNT	NUMBER(15,2)	Yes	-
MIN_REVENUE_AMOUNT	NUMBER(15,2)	Yes	-
MAX_REVENUE_AMOUNT	NUMBER(15,2)	Yes	-
VERSION	NUMBER(5,0)	No	1
SEQNO	NUMBER(5,0)	No	1
DEAL_LEVEL	NUMBER(3,0)	No	(null)

Primary Key:

Key Type	Column Name
Composite	DEAL_APPR_PROF_CD
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM582P0	Unique	DEAL_APPR_PROF_CD
			SEQNO

C.9 C1_DEAL_APROF_L

Purpose:	Used to store the description of a deal approval profile.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_APPR_PROF_CD	CHAR(8)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	-
DESCRLONG	VARCHAR2(4000)	No	' '
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	DEAL_APPR_PROF_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM581P0	Unique	DEAL_APPR_PROF_CD
			LANGUAGE_CD

C.10 C1_DEAL_CHAR

Purpose:	Used to store the characteristics of a deal.
Total Number of Columns:	13

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_ID	CHAR(10)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	No	-
CHAR_VAL	CHAR(16)	Yes	-
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	''
VERSION	NUMBER(5,0)	No	0
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	-
SEQNO	NUMBER(5,0)	No	0
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DEAL_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM611P0	Unique	DEAL_ID
			CHAR_TYPE_CD
			EFFDT

C.11 C1_DEAL_COMMENTS

Purpose:	Used to store the comments specified for a deal.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_COMMENTS	VARCHAR2(2000)	No	-
LANGUAGE_CD	CHAR(3)	No	-
LOG_DTTM	DATE	Yes	-
USER_ID	CHAR(8)	Yes	-
BO_STATUS_CD	CHAR(12)	Yes	-
VERSION	NUMBER(5,0)	No	0
SEQNO	NUMBER(5,0)	No	1
DEAL_ID	CHAR(10)	No	-
CREATE_DT	DATE	Yes	-
COMMENT_DTTM	DATE	Yes	-

Primary Key:

Key Type	Column Name
Composite	DEAL_ID
	SEQNO
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM565P0	Unique	DEAL_ID
			SEQNO
			LANGUAGE_CD

C.12 C1_DEAL_DEFER_REQ

Purpose:	Used to store the deals for which either hierarchy should be created or simulation should be done in the deferred mode.
Total Number of Columns:	9

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REQ_ID	CHAR(12)	No	-
DEAL_ID	CHAR(10)	No	''
MODEL_ID	CHAR(10)	No	-
REF_MODEL_ID	CHAR(10)	Yes	-
DEAL_REQ_FLG	CHAR(4)	No	''
RECORD_STATUS_FLG	CHAR(4)	No	''
CREATE_DT	DATE	Yes	-
VERSION	NUMBER(5,0)	No	1
ROLE_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Simple	REQ_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM639P0	Unique	REQ_ID

C.13 C1_DEAL_K

Purpose:	Used to store the deal ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	DEAL_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM566P0	Unique	DEAL_ID
			ENV_ID

C.14 C1_DEAL_L

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_ID	CHAR(10)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
DESCRLONG	VARCHAR2(4000)	Yes	-
VERSION	NUMBER(5,0)	No	0

Primary Key:

Key Type	Column Name
Composite	DEAL_ID
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM610P0	Unique	DEAL_ID
			LANGUAGE_CD

C.15 C1_DEAL_LOG

Purpose:	Used to store the logs of a deal.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQNO	NUMBER(5,0)	No	-
LOG_DTTM	DATE	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	Yes	-
DESCRLONG	VARCHAR2(4000)	Yes	-
MESSAGE_CAT_NBR	NUMBER(5,0)	Yes	-
MESSAGE_NBR	NUMBER(5,0)	Yes	-
USER_ID	CHAR(8)	Yes	-
VERSION	NUMBER(5,0)	No	1
BO_STATUS_CD	CHAR(12)	Yes	-
CHAR_TYPE_CD	CHAR(8)	Yes	-
CHAR_VAL	CHAR(16)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
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	-
DEAL_ID	CHAR(10)	No	-
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-

Primary Key:

Key Type	Column Name
Composite	SEQNO
	DEAL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM563P0	Unique	SEQNO
			DEAL_ID

C.16 C1_DEAL_LOG_PARM

Purpose:	Used to store the deal log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQNO	NUMBER(5,0)	No	-
PARM_SEQ	NUMBER(3,0)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	Yes	-
VERSION	NUMBER(5,0)	No	0

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_ID	CHAR(10)	No	-
MESSAGE_PARM	VARCHAR2(2000)	Yes	-

Primary Key:

Key Type	Column Name
Composite	SEQNO
	DEAL_ID
	PARM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM564P0	Unique	SEQNO
			DEAL_ID
			PARM_SEQ

C.17 C1_DEAL_PRICE_ASGN_TC

Purpose:	Used to store the terms and conditions for a deal price assignment.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_PRI_TC_ID	CHAR(10)	No	-
MODEL_ID	CHAR(10)	Yes	-
PRICEITEM_CD	CHAR(30)	Yes	-
PRICE_ASGN_ID	CHAR(10)	Yes	-
PRICE_ITEM_GRP_CD	CHAR(30)	Yes	-
TC_TYPE_CD	CHAR(12)	Yes	-
VERSION	NUMBER(5,0)	Yes	1
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-
DEAL_ENTITY_TYPE_FLG	CHAR(4)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEFAULT_SW	CHAR(1)	Yes	-
DEAL_ENTITY_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Simple	DEAL_PRI_TC_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM596P1	Unique	DEAL_PRI_TC_ID

C.18 C1_DEAL_PRICEITEM_APPR

Purpose:	Used to store the price item approval details of a deal.
Total Number of Columns:	16

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
APP_TXN_ID	CHAR(15)	No	-
SEQNO	NUMBER(5,0)	No	1
PRICE_ASGN_ID	CHAR(10)	Yes	-
TD_TYPE_CD	CHAR(8)	No	-
ROLE_ID	CHAR(10)	No	-
APPR_STATUS	VARCHAR2(4)	No	-
APPR_USER_ID	CHAR(8)	Yes	-
CRE_DTTM	DATE	Yes	-
UPDT_DTTM	DATE	Yes	-
CREATED_BY	VARCHAR2(254)	Yes	-
VERSION	NUMBER(5,0)	No	1
PRICEITEM_CD	CHAR(30)	Yes	-
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-
DEAL_ENTITY_TYPE_FLG	CHAR(4)	Yes	-
DEAL_ENTITY_ID	CHAR(10)	Yes	-

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

Primary Key:

Key Type	Column Name
Composite	APP_TXN_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM626P0	Unique	APP_TXN_ID
			SEQNO

C.19 C1_DEAL_PRICEITEM_COMMENTS

Purpose:	Used to store the comments for a deal price assignment.
Total Number of Columns:	15

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_PRI_COMNT_ID	CHAR(10)	No	-
SEQNO	NUMBER(5,0)	No	-
PRICE_ASGN_ID	CHAR(10)	Yes	-
PRICE_ITEM_GRP_CD	CHAR(30)	Yes	-
MODEL_ID	CHAR(10)	Yes	-
DEAL_COMMENTS	VARCHAR2(4000)	Yes	-
LANGUAGE_CD	CHAR(3)	Yes	-
LOG_DTTM	DATE	Yes	-
USER_ID	CHAR(8)	Yes	-
BO_STATUS_CD	CHAR(12)	Yes	-
VERSION	NUMBER(5,0)	Yes	-
PRICE_ITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_ENTITY_TYPE_FLG	CHAR(4)	Yes	-
DEAL_ENTITY_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DEAL_PRI_COMNT_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM595P0	Unique	DEAL_PRI_COMNT_ID
			SEQNO

C.20 C1_DEAL_PRICELIST

Purpose:	Used to store the details of a deal price list.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICELIST_MAP_ID	CHAR(10)	No	-
CIS_DIVISION	CHAR(5)	No	-
PRICELIST_ID	CHAR(10)	No	-
CUST_SEG_FLG	CHAR(4)	Yes	-
CUST_TIER_FLG	CHAR(4)	Yes	-
VERSION	NUMBER(5,0)	No	0

Primary Key:

Key Type	Column Name
Simple	PRICELIST_MAP_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM617P0	Unique	PRICELIST_MAP_ID

C.21 C1_DEAL_PRICELIST_K

Purpose:	Used to store the deal price list ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICELIST_MAP_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	PRICELIST_MAP_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM619P0	Unique	PRICELIST_MAP_ID
			ENV_ID

C.22 C1_DEAL_PRICELIST_L

Purpose:	Used to store the description of a deal price list.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICELIST_MAP_ID	CHAR(10)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	Yes	-
DESCRLONG	VARCHAR2(4000)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
VERSION	NUMBER(5,0)	No	0

Primary Key:

Key Type	Column Name
Composite	PRICELIST_MAP_ID
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM618P0	Unique	PRICELIST_MAP_ID
			LANGUAGE_CD

C.23 C1_DEAL_REFERENCES

Purpose:	Used to store the reference details of a deal.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQ_NO	NUMBER(5,0)	No	-
REFERENCE_TYPE_FLG	CHAR(4)	No	-
REF_MODEL_ID	CHAR(10)	No	-
REFER_USAGE_SW	CHAR(1)	Yes	-
REFER_PRICE_SW	CHAR(1)	Yes	-
INCLUDE_CHILD_HIREARCHY_SW	CHAR(1)	Yes	-
DEAL_ID	CHAR(10)	No	-
PER_ID	CHAR(10)	Yes	-
ACCT_ID	CHAR(10)	Yes	-
REF_DEAL_ID	CHAR(10)	Yes	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	SEQ_NO
	DEAL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM622P0	Unique	SEQ_NO
			DEAL_ID

C.24 C1_DEAL_SIMULATION_DTL

Purpose:	Used to store the simulation details of a deal.
Total Number of Columns:	38

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SIMULATION_ID	CHAR(10)	No	-
DEAL_ID	CHAR(10)	Yes	-
MODEL_ID	CHAR(10)	Yes	-
PRICE_ASGN_ID	CHAR(10)	Yes	-
PRICE_ITEM_GRP_CD	CHAR(30)	Yes	-
PRICEITEM_CD	CHAR(30)	Yes	-
PER_ID	CHAR(10)	Yes	-
ACCT_ID	CHAR(10)	Yes	-
COST	NUMBER(15,2)	Yes	-
PROFITABILITY_VAL	NUMBER(8,2)	Yes	-
SQI_TYPE_FLG	CHAR(4)	Yes	-
STATUS_CD	CHAR(12)	Yes	-
REVENUE_IMPACT	NUMBER(15,2)	Yes	-
REVENUE	NUMBER(15,2)	Yes	-
AVERAGE_PRICE	NUMBER(15,2)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CURRENCY_CD	CHAR(3)	Yes	-
PRICE_ASSIGNMENT_LEVEL	VARCHAR2(50)	Yes	-
PRICE_ASSIGNMENT_TYPE	VARCHAR2(40)	Yes	-
CURRENT_APPROVER	CHAR(10)	Yes	-
PRICELIST_ID	CHAR(10)	Yes	-
PRODUCT_CD	CHAR(30)	Yes	-
TC_TYPE_CD	CHAR(12)	Yes	-
PM_ROLE_ID	CHAR(10)	Yes	-
ILM_DT	DATE	Yes	trunc(current_date)
ILM_ARCH_SW	CHAR(1)	Yes	'N'
MODEL_SQI_ID	CHAR(12)	Yes	-
VERSION	NUMBER(5,0)	Yes	-
PRICE_ITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-
DEAL_ENTITY_TYPE_FLG	CHAR(4)	Yes	-
PRIC_CCY_CD	CHAR(3)	Yes	-
PRIC_AMT	NUMBER(15,2)	Yes	-
EXCHRATE_ID	CHAR(10)	Yes	-
EXCHRATE	NUMBER(36,18)	Yes	-
TOT_AGG_SQ	NUMBER(36,18)	Yes	-
VALUE_AMT	NUMBER(36,18)	Yes	-
IS_PASS_SW	CHAR(1)	Yes	-
DEAL_ENTITY_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Simple	SIMULATION_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM591P0	Unique	SIMULATION_ID
2.	XM591S0	Non Unique	MODEL_ID
			DEAL_ENTITY_ID
			PRICEITEM_CD
			PRICEITEM_PARM_GRP_ID

C.25 C1_DEAL_SIMULATION_SMRY

Purpose:	Used to store the simulation summary of a deal.
Total Number of Columns:	14

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_ID	CHAR(10)	Yes	-
MODEL_ID	CHAR(10)	No	-
DEAL_ENTITY_TYPE_FLG	CHAR(4)	No	-
COST	NUMBER(15,2)	Yes	-
PROFITABILITY_VAL	NUMBER(8,2)	Yes	-
SQI_TYPE_FLG	CHAR(4)	No	-
STATUS_CD	CHAR(12)	Yes	-
REVENUE_IMPACT	NUMBER(8,2)	Yes	-
REVENUE	NUMBER(15,2)	Yes	-
CURRENCY_CD	CHAR(3)	Yes	-
ILM_DT	DATE	Yes	trunc(current_date)
ILM_ARCH_SW	CHAR(1)	Yes	'N'
VERSION	NUMBER(5,0)	No	1
DEAL_ENTITY_ID	CHAR(10)	No	-

Primary Key:

Key Type	Column Name
Composite	MODEL_ID
	DEAL_ENTITY_TYPE_FLG
	DEAL_ENTITY_ID
	SQI_TYPE_FLG

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM625P0	Unique	MODEL_ID
			DEAL_ENTITY_TYPE_FLG
			DEAL_ENTITY_ID
			SQI_TYPE_FLG
2.	XM625S0	Non Unique	MODEL_ID
			DEAL_ENTITY_ID

C.26 C1_DEAL_TC

Purpose:	Used to store the terms and conditions of a deal.
Total Number of Columns:	3

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_ID	CHAR(10)	No	-
TC_TYPE_CD	CHAR(12)	No	-
VERSION	NUMBER(5,0)	No	-

Primary Key:

Key Type	Column Name
Composite	DEAL_ID
	TC_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM621P0	Unique	DEAL_ID
			TC_TYPE_CD

C.27 C1_DEAL_TYPE

Purpose:	Used to store the details of a deal type.
Total Number of Columns:	14

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_TYPE_CD	VARCHAR2(20)	No	-
DEAL_COMMIT_FREQ	CHAR(4)	No	-
PRICEITEM_APPR_REQ_SW	CHAR(1)	No	-
ASGN_IF_IN_RANGE_SW	CHAR(1)	No	-
DIV_LVL_APPR_REQ_SW	CHAR(1)	No	-
HIGH_LVL_APPR_REQ_SW	CHAR(1)	No	-
PRE_APPR_EXST_PRICING_SW	CHAR(1)	No	-
VERSION	NUMBER(5,0)	No	1
BUS_OBJ_CD	CHAR(30)	Yes	-
CRE_DTTM	DATE	Yes	-
UPDT_DTTM	DATE	Yes	-
CREATED_BY	VARCHAR2(254)	Yes	-
DEAL_TYPE_STATUS	CHAR(4)	No	-
BO_DATA_AREA	CLOB	Yes	-

Primary Key:

Key Type	Column Name
Simple	DEAL_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM575P0	Unique	DEAL_TYPE_CD

C.28 C1_DEAL_TYPE_ALG

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_TYPE_CD	VARCHAR2(20)	No	-
DEAL_ALG_ENTITY	CHAR(4)	No	-
SEQ_NUM	NUMBER(3,0)	No	-
ALG_CD	CHAR(12)	No	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	DEAL_TYPE_CD
	DEAL_ALG_ENTITY
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM578P0	Unique	DEAL_TYPE_CD
			DEAL_ALG_ENTITY
			SEQ_NUM

C.29 C1_DEAL_TYPE_CHAR

Purpose:	Used to store the characteristics of a deal type.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_TYPE_CD	VARCHAR2(20)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
CHAR_VAL	CHAR(16)	No	-
EFFDT	DATE	No	-
ADHOC_CHAR_VAL	VARCHAR2(254)	No	-
VERSION	NUMBER(5,0)	No	1
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	-

Primary Key:

Key Type	Column Name
Composite	DEAL_TYPE_CD
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM579P0	Unique	DEAL_TYPE_CD
			CHAR_TYPE_CD
			EFFDT

C.30 C1_DEAL_TYPE_CST_AHCY

Purpose:	Used to store the approval profile information of a deal type.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_TYPE_CD	VARCHAR2(20)	No	-
EFF_START_DT	DATE	No	-
PROFILE_TYPE	CHAR(4)	No	-
CIS_DIVISION	CHAR(5)	No	-
CUST_SEG	CHAR(4)	Yes	-
CUST_TIER	CHAR(4)	Yes	-
DEAL_APPR_PROF_CD	CHAR(8)	No	-
VERSION	NUMBER(5,0)	No	1
BUS_OBJ_CD	CHAR(30)	Yes	-
EFF_END_DATE	DATE	Yes	-
SEQNO	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	DEAL_TYPE_CD
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM577P0	Unique	DEAL_TYPE_CD
			SEQNO

C.31 C1_DEAL_TYPE_L

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEAL_TYPE_CD	VARCHAR2(20)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	-
DESCRLONG	VARCHAR2(4000)	No	' '
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	DEAL_TYPE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM576P0	Unique	DEAL_TYPE_CD
			LANGUAGE_CD

C.32 C1_DIV_PI_COST

Purpose:	Used to store the division-specific cost for a price item.
Total Number of Columns:	7

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
COST	NUMBER(36,18)	Yes	-
VERSION	NUMBER(5,0)	Yes	-
CURRENCY_CD	CHAR(3)	Yes	-
EFF_DT	DATE	No	-

Primary Key:

Key Type	Column Name
Composite	CIS_DIVISION
	PRICEITEM_CD
	COST_TYPE
	EFF_DT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM603P0	Unique	CIS_DIVISION
			PRICEITEM_CD
			COST_TYPE
			EFF_DT

C.33 C1_DIV_PI_FLRCEIL_TYPE

Purpose:	Used to store the division-specific floor and ceil limits for a price item.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIS_DIVISION	CHAR(5)	No	-
PRICEITEM_CD	CHAR(30)	No	-
FLOOR_CEIL_TYPE	CHAR(4)	Yes	-
ROLE_ID	CHAR(10)	No	-
CEIL	NUMBER(36,18)	Yes	-
FLOOR	NUMBER(36,18)	Yes	-
SPREAD_PERCENT	NUMBER(36,18)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
SPRED_AMOUNT	NUMBER(36,18)	Yes	-
VERSION	NUMBER(5,0)	Yes	-
CURRENCY_CD	CHAR(3)	Yes	-

Primary Key:

Key Type	Column Name
Composite	CIS_DIVISION
	PRICEITEM_CD
	ROLE_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM602P0	Unique	CIS_DIVISION
			PRICEITEM_CD
			ROLE_ID

C.34 C1_DIV_PRICEITEM_HIERARCHY

Purpose:	Used to store the division-specific hierarchy details of a price item.
Total Number of Columns:	7

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIS_DIVISION	CHAR(5)	No	-
PRICEITEM_CD	CHAR(30)	No	-
VERSION	NUMBER(5,0)	No	1
HIERARCHY_CD	CHAR(30)	No	-
HRCHY_PAR_CD	CHAR(30)	No	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-

Primary Key:

Key Type	Column Name
Composite	CIS_DIVISION
	PRICEITEM_CD
	HIERARCHY_CD
	HRCHY_PAR_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XXT553P0	Unique	CIS_DIVISION
			PRICEITEM_CD
			HIERARCHY_CD
			HRCHY_PAR_CD

C.35 C1_FILE_REQUEST_IDENTIFIER

Purpose:	Used to store the identifier for a file upload record.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
REQUEST_ID	CHAR(20)	No	-
FILE_ID	CHAR(10)	No	-
STATUS_CD	CHAR(12)	No	-
RECORD_IDENTIFIER1	VARCHAR2(254)	No	-
RECORD_IDENTIFIER2	VARCHAR2(254)	No	''
RECORD_IDENTIFIER3	VARCHAR2(254)	No	''
RECORD_IDENTIFIER4	VARCHAR2(254)	No	''
RECORD_IDENTIFIER5	VARCHAR2(254)	No	''
ILM_ARCH_SW	CHAR(1)	No	'N'
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Simple	REQUEST_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XC471P0	Unique	REQUEST_ID
2.	XC471S1	Non Unique	FILE_ID
3.	XC471S2	Non Unique	RECORD_IDENTIFIER1
4.	XC471S3	Non Unique	RECORD_IDENTIFIER1
			STATUS_CD
5.	XC471S4	Non Unique	RECORD_IDENTIFIER2

C.36 C1_HIERARCHY

Purpose:	Used to store the details of an entity hierarchy relationship.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
HIERARCHY_CD	CHAR(30)	No	-
HRCHY_ENTITY_CD	CHAR(30)	No	-
CIS_DIVISION	CHAR(5)	No	-
START_DT	DATE	No	-
END_DT	DATE	Yes	-
BO_STATUS_CD	CHAR(12)	No	''
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	No	''
MAXIMUM_HIERARCHY_VAL	CHAR(2)	No	''
VERSION	NUMBER(5,0)	No	-

Primary Key:

Key Type	Column Name
Simple	HIERARCHY_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF442P1	Unique	HIERARCHY_CD
2.	XF442S1	Unique	HRCHY_ENTITY_CD
			CIS_DIVISION
			START_DT

C.37 C1_HIERARCHY_CHAR

Purpose:	Used to store the characteristics of an entity hierarchy relationship.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
HIERARCHY_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	No	-
ADHOC_CHAR_VAL	VARCHAR2(254)	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	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5,0)	No	-

Primary Key:

Key Type	Column Name
Composite	HIERARCHY_CD
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF442P4	Unique	HIERARCHY_CD
			CHAR_TYPE_CD
			EFFDT

C.38 C1_HIERARCHY_DTL

Purpose:	Used to store the hierarchy information of an entity hierarchy relationship.
Total Number of Columns:	8

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
HIERARCHY_CD	CHAR(30)	No	-
HRCHY_PAR_CD	CHAR(30)	No	-
HRCHY_CHLD_CD	CHAR(30)	No	-
LEVEL_CD	CHAR(4)	No	-
VERSION	NUMBER(5,0)	No	-
CHLD_FLG	CHAR(1)	No	' '
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-

Primary Key:

Key Type	Column Name
Composite	HIERARCHY_CD
	HRCHY_PAR_CD
	HRCHY_CHLD_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF442P3	Unique	HIERARCHY_CD
			HRCHY_PAR_CD
			HRCHY_CHLD_CD

C.39 C1_HIERARCHY_L

Purpose:	Used to store the description of an entity hierarchy relationship.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
HIERARCHY_CD	CHAR(30)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	-
VERSION	NUMBER(5,0)	No	-

Primary Key:

Key Type	Column Name
Composite	HIERARCHY_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF442P2	Unique	HIERARCHY_CD
			LANGUAGE_CD

C.40 C1_HRCHY_ENTITY

Purpose:	Used to store the details of a hierarchy entity.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
HRCHY_ENTITY_CD	CHAR(30)	No	-
LEVEL_CD	CHAR(4)	No	-
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
VERSION	NUMBER(5,0)	No	-
HRCHY_ENTITY_STATUS_FLG	CHAR(4)	No	' '

Primary Key:

Key Type	Column Name
Simple	HRCHY_ENTITY_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF441P1	Unique	HRCHY_ENTITY_CD

C.41 C1_HRCHY_ENTITY_CHAR

Purpose:	Used to store the characteristics of a hierarchy entity.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
HRCHY_ENTITY_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	No	-
ADHOC_CHAR_VAL	VARCHAR2(254)	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	' '

Primary Key:

Key Type	Column Name
Composite	HRCHY_ENTITY_CD
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF441P3	Unique	HRCHY_ENTITY_CD
			CHAR_TYPE_CD
			EFFDT

C.42 C1_HRCHY_ENTITY_DIV

Purpose:	Used to store the divisions associated with a hierarchy entity.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
HRCHY_ENTITY_CD	CHAR(30)	No	-
EFFDT	DATE	No	-
CIS_DIVISION	CHAR(5)	No	-
VERSION	NUMBER(5,0)	No	-

Primary Key:

Key Type	Column Name
Composite	HRCHY_ENTITY_CD
	CIS_DIVISION

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF445P0	Unique	HRCHY_ENTITY_CD
			CIS_DIVISION

C.43 C1_HRCHY_ENTITY_L

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
HRCHY_ENTITY_CD	CHAR(30)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	-
VERSION	NUMBER(5,0)	No	-

Primary Key:

Key Type	Column Name
Composite	HRCHY_ENTITY_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF441P2	Unique	HRCHY_ENTITY_CD
			LANGUAGE_CD

C.44 C1_INVOICE_REQ

Purpose:	Used to store the details of an invoice request.
Total Number of Columns:	19

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_ID	CHAR(12)	No	-
INVOICE_REQ_TYPE_CD	CHAR(30)	No	-
INVOICE_ENTITY_TYPE_FLG	CHAR(4)	No	-
INVOICE_ENTITY_ID	CHAR(12)	No	-
CUTOFF_DT	DATE	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCOUNTING_DT	DATE	Yes	-
BILL_DT	DATE	Yes	-
PROCESSING_DT	DATE	Yes	-
BUS_OBJ_CD	CHAR(30)	No	''
BO_STATUS_CD	CHAR(12)	No	''
BO_DATA_AREA	CLOB	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
CRE_DTTM	DATE	No	current_date
STATUS_UPD_DTTM	DATE	Yes	-
COMMENTS	VARCHAR2(254)	No	''
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5,0)	No	1
INCLUDE_PER_HIER_SW	CHAR(1)	No	'N'

Primary Key:

Key Type	Column Name
Simple	INVOICE_REQ_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF981P0	Unique	INVOICE_REQ_ID
2.	XF981S1	Non Unique	INVOICE_REQ_TYPE_CD
3.	XF981S2	Non Unique	INVOICE_ENTITY_TYPE_FLG
4.	XF981S3	Non Unique	INVOICE_ENTITY_ID
5.	XF981S4	Non Unique	BUS_OBJ_CD
			BO_STATUS_CD
			INVOICE_REQ_ID

C.45 C1_INVOICE_REQ_CHAR

Purpose:	Used to store the characteristics of an invoice request.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_ID	CHAR(12)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	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(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	INVOICE_REQ_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF987P0	Unique	INVOICE_REQ_ID
			CHAR_TYPE_CD
			EFFDT

C.46 C1_INVOICE_REQ_DTLS

Purpose:	Used to store the accounts for which the bill should be generated through an invoice request.
Total Number of Columns:	8

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_ID	CHAR(12)	No	-
INVOICE_REQ_DTL_ID	CHAR(12)	No	-
ACCT_ID	CHAR(10)	No	-
BILL_ID	CHAR(12)	Yes	-
EXCLUDE_ACCT_SW	CHAR(1)	No	'N'
INVOICE_REC_STATUS_FLG	CHAR(4)	No	-
ERROR_DESC	VARCHAR2(4000)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Simple	INVOICE_REQ_DTL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF982P0	Unique	INVOICE_REQ_DTL_ID
2.	XF982S1	Non Unique	INVOICE_REQ_ID
3.	XF982S2	Non Unique	ACCT_ID

C.47 C1_INVOICE_REQ_EXT_REF

Purpose:	Used to store the entity details (for example, policy) for which an invoice request is created.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_ID	CHAR(12)	No	-
EXT_REF_ID	VARCHAR2(30)	No	-
EXT_REF_TYPE_FLG	CHAR(4)	No	-
VERSION	NUMBER(5,0)	No	1
EXT_REF_STATUS	VARCHAR2(30)	Yes	' '

Primary Key:

Key Type	Column Name
Composite	INVOICE_REQ_ID
	EXT_REF_ID
	EXT_REF_TYPE_FLG

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF984P0	Unique	INVOICE_REQ_ID
			EXT_REF_ID
			EXT_REF_TYPE_FLG
2.	XF984S1	Non Unique	EXT_REF_ID
3.	XF984S2	Non Unique	EXT_REF_TYPE_FLG

C.48 C1_INVOICE_REQ_K

Purpose:	Used to store the invoice request ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_ID	CHAR(12)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	INVOICE_REQ_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF983P0	Unique	INVOICE_REQ_ID
			ENV_ID

C.49 C1_INVOICE_REQ_LOG

Purpose:	Used to store the logs of an invoice request.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_ID	CHAR(12)	No	-
SEQNO	NUMBER(5,0)	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	No	''
BO_STATUS_CD	CHAR(12)	No	''
LOG_DTTM	DATE	No	-
DESCRLONG	VARCHAR2(4000)	No	''
MESSAGE_CAT_NBR	NUMBER(5,0)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
MESSAGE_NBR	NUMBER(5,0)	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	''
USER_ID	CHAR(8)	No	''
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	INVOICE_REQ_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF985P0	Unique	INVOICE_REQ_ID
			SEQNO

C.50 C1_INVOICE_REQ_LOG_PARM

Purpose:	Used to store the invoice request log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_ID	CHAR(12)	No	-
SEQNO	NUMBER(5,0)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
PARAM_SEQ	NUMBER(3,0)	No	-
MSG_PARAM_TYP_FLG	CHAR(4)	No	''
MSG_PARAM_VAL	VARCHAR2(2000)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	INVOICE_REQ_ID
	SEQNO
	PARAM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF986P0	Unique	INVOICE_REQ_ID
			SEQNO
			PARAM_SEQ

C.51 C1_INVOICE_REQ_TYPE

Purpose:	Used to store the details of an invoice request type.
Total Number of Columns:	17

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_TYPE_CD	CHAR(30)	No	-
BUS_OBJ_CD	CHAR(30)	No	''
TRANS_BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
INVOICE_REQ_TYPE_STAT_FLG	CHAR(4)	No	''
INVOICE_MODE_FLG	CHAR(4)	No	''
BILLING_MODE_FLG	CHAR(4)	No	''
DATE_CALC_ALG_CD	CHAR(12)	No	''
IS_APPR_REQ_SW	CHAR(1)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
APPR_TD_TYPE	CHAR(8)	No	''
APPR_TD_ROLE	CHAR(10)	No	''
SUBMITTER_TD_TYPE	CHAR(8)	No	''
SUBMITTER_TD_ROLE	CHAR(10)	No	''
FREEZE_COMPLETE_SW	CHAR(1)	No	-
DEFER_PROC_COUNT	NUMBER(5,0)	No	0
WAIT_DAYS_COUNT	NUMBER(5,0)	No	0
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Simple	INVOICE_REQ_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF988P0	Unique	INVOICE_REQ_TYPE_CD

C.52 C1_INVOICE_REQ_TYPE_CHAR

Purpose:	Used to store the characteristics of an invoice request type.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_TYPE_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
SEQ_NUM	NUMBER(5,0)	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	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	INVOICE_REQ_TYPE_CD
	CHAR_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF993P0	Unique	INVOICE_REQ_TYPE_CD
			CHAR_TYPE_CD
			SEQ_NUM

C.53 C1_INVOICE_REQ_TYPE_L

Purpose:	Used to store the description of an invoice request type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
INVOICE_REQ_TYPE_CD	CHAR(30)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	''
DESCRLONG	VARCHAR2(4000)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	INVOICE_REQ_TYPE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF989P0	Unique	INVOICE_REQ_TYPE_CD
			LANGUAGE_CD

C.54 C1_MODEL

Purpose:	Used to store the details of a deal version.
Total Number of Columns:	14

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
MODEL_ID	CHAR(10)	No	-
PER_ID	CHAR(10)	Yes	-
ACCT_ID	CHAR(10)	Yes	-
MODEL_TYPE_FLG	CHAR(4)	No	''
BO_STATUS_CD	CHAR(12)	No	''
VERSION	NUMBER(5,0)	No	1
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
DEAL_ID	CHAR(10)	No	''
EFF_START_DT	DATE	Yes	-
EFF_END_DATE	DATE	Yes	-
USER_ID	CHAR(8)	Yes	-
DEAL_LEVEL	NUMBER(3,0)	Yes	-
CRE_DT	DATE	Yes	-

Primary Key:

Key Type	Column Name
Simple	MODEL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM606P0	Unique	MODEL_ID

Sr. No.	Index Name	Index Type	Column Name
2.	XM606S0	Non Unique	DEAL_ID

C.55 C1_MODEL_COMMENTS

Purpose:	Used to store the comments specified for a deal version.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
MODEL_COMMENTS	VARCHAR2(2000)	No	-
LANGUAGE_CD	CHAR(3)	No	-
LOG_DTTM	DATE	Yes	-
USER_ID	CHAR(8)	Yes	-
BO_STATUS_CD	CHAR(12)	Yes	-
VERSION	NUMBER(5,0)	No	0
SEQNO	NUMBER(5,0)	No	1
MODEL_ID	CHAR(10)	No	-
CREATE_DT	DATE	Yes	-
COMMENT_DTTM	DATE	Yes	-

Primary Key:

Key Type	Column Name
Composite	MODEL_ID
	SEQNO
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF899P0	Unique	MODEL_ID
			SEQNO
			LANGUAGE_CD

C.56 C1_MODEL_FIN_SUMMARY

Purpose:	Used to store the financial summary of a deal version.
Total Number of Columns:	16

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
OVERALL_REVENUE	NUMBER(15,2)	Yes	-
OVERALL_PROPOSED_REVENUE	NUMBER(15,2)	Yes	-
OVERALL_COST	NUMBER(15,2)	Yes	-
HURDLE_RATE_ADDITIONAL_FACTOR	NUMBER(15,2)	Yes	-
OVERALL_PROFITABILITY	NUMBER(15,2)	Yes	-
OVERALL_DEAL_PROFITABILITY_DEVI	NUMBER(15,2)	Yes	-
MONTHLY_AVERAGE_REVENUE	NUMBER(15,2)	Yes	-
CIS_DIVISION	CHAR(5)	Yes	-
MODEL_ID	CHAR(10)	No	-
SEQNO	NUMBER(5,0)	No	1
VERSION	NUMBER(5,0)	No	1
FIN_SUMMARY_STATUS_FLG	CHAR(4)	Yes	-
OVERALL_PROPOSED_COST	NUMBER(15,2)	Yes	-
PROPOSED_PROFITABILITY_AMT	NUMBER(15,2)	Yes	-
OVERALL_PROFITABILITY_AMT	NUMBER(15,2)	Yes	-
PROPOSED_PROFITABILITY	NUMBER(15,2)	Yes	-

Primary Key:

Key Type	Column Name
Composite	MODEL_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM608P0	Unique	MODEL_ID
			SEQNO

C.57 C1_MODEL_K

Purpose:	Used to store the deal version ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
MODEL_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	MODEL_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM573P0	Unique	MODEL_ID
			ENV_ID

C.58 C1_MODEL_L

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
LANGUAGE_CD	CHAR(3)	No	-
VERSION	NUMBER(5,0)	No	0
MODEL_ID	CHAR(10)	No	-
DESCR	VARCHAR2(60)	Yes	-

Primary Key:

Key Type	Column Name
Composite	MODEL_ID
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM574P1	Unique	MODEL_ID
			LANGUAGE_CD

C.59 C1_MODEL_LOG

Purpose:	Used to store the logs of a deal version.
Total Number of Columns:	18

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
MODEL_ID	CHAR(10)	No	-
SEQNO	NUMBER(5,0)	No	-
LOG_DTTM	DATE	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	Yes	-
DESCRLONG	VARCHAR2(4000)	Yes	-
MESSAGE_CAT_NBR	NUMBER(5,0)	No	0
MESSAGE_NBR	NUMBER(5,0)	No	0
USER_ID	CHAR(8)	Yes	-
VERSION	NUMBER(5,0)	No	0
BO_STATUS_CD	CHAR(12)	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	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CHAR_VAL_FK5	VARCHAR2(50)	Yes	-

Primary Key:

Key Type	Column Name
Composite	SEQNO
	MODEL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM563P1	Unique	SEQNO
			MODEL_ID

C.60 C1_MODEL_LOG_PARM

Purpose:	Used to store the deal version log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
MODEL_ID	CHAR(10)	No	-
SEQNO	NUMBER(5,0)	No	-
PARAM_SEQ	NUMBER(3,0)	No	-
MSG_PARAM_TYP_FLG	CHAR(4)	Yes	-
VERSION	NUMBER(5,0)	No	0
MESSAGE_PARAM	VARCHAR2(2000)	Yes	-

Primary Key:

Key Type	Column Name
Composite	SEQNO
	MODEL_ID
	PARAM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM564P1	Unique	SEQNO
			MODEL_ID
			PARM_SEQ

C.61 C1_MODEL_SQI

Purpose:	Used to store the original volumes and proposed commitments of a deal version.
Total Number of Columns:	27

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SEQNO	NUMBER(5,0)	Yes	1
SQI_CD	CHAR(8)	No	''
SVC_QTY	NUMBER(36,18)	No	0
VERSION	NUMBER(5,0)	No	1
ACCT_ID	CHAR(10)	Yes	-
STATUS_CD	CHAR(12)	Yes	-
PER_ID	CHAR(10)	Yes	-
SQI_TYPE_FLG	CHAR(4)	Yes	-
VOLUME_AGG_ID	CHAR(10)	Yes	-
DEAL_ID	CHAR(10)	Yes	-
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-
CURRENCY_CD	CHAR(3)	Yes	-
MODEL_SQI_ID	CHAR(12)	No	-
MODEL_ID	CHAR(10)	No	-
ILM_DT	DATE	Yes	trunc(current_date)
ILM_ARCH_SW	CHAR(1)	Yes	'N'
CIS_DIVISION	CHAR(5)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICEITEM_CD	CHAR(30)	Yes	-
PRICE_ITEM_GRP_CD	CHAR(30)	Yes	-
PRICE_ASGN_ID	CHAR(10)	Yes	-
CRE_DT	DATE	Yes	-
VOL_AGGR_ID	CHAR(12)	Yes	-
SQI_COUNT	NUMBER(15,2)	Yes	-
DEAL_ENTITY_TYPE_FLG	CHAR(4)	Yes	-
DEAL_ENTITY_ID	CHAR(10)	Yes	-
EXTERNAL_SYSTEM	VARCHAR2(255)	Yes	-
SIMULATION_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Simple	MODEL_SQI_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM568P0	Unique	MODEL_SQI_ID
2.	XM568S0	Non Unique	MODEL_ID
			DEAL_ENTITY_ID
			PRICEITEM_CD
			PRICEITEM_PARM_GRP_ID

C.62 C1_OFFPROC_ACCUM_AMT_DTLS

Purpose:	Used to store the details of an off-process request which is used in an accumulation cycle of an accumulation group.
Total Number of Columns:	8

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
WIN_START_DT	DATE	No	-
OFFPROC_SUBENTITY_TYPE_FLG	CHAR(4)	Yes	''
OFFPROC_SUBENTITY_ID	VARCHAR2(254)	Yes	''
OFFPROC_REQ_DTL_ID	CHAR(12)	No	-
OFFPROC_AMT	NUMBER(36,18)	Yes	0
VERSION	NUMBER(5,0)	No	1
OFFPROC_CAT_FLG	CHAR(4)	No	-

Primary Key:

Key Type	Column Name
Composite	ACCUM_GRP_ID
	WIN_START_DT
	OFFPROC_REQ_DTL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM638P0	Unique	ACCUM_GRP_ID
			WIN_START_DT
			OFFPROC_REQ_DTL_ID
2.	XM638S0	Unique	OFFPROC_REQ_DTL_ID

C.63 C1_OFFPROC_REQ

Purpose:	Used to store the details of an off-process request.
Total Number of Columns:	15

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
OFFPROC_REQ_ID	CHAR(12)	No	-
OFFPROC_REQ_TYPE_CD	CHAR(30)	No	
OFFPROC_PARENT_ENT_TYP_FLG	CHAR(4)	No	''
OFFPROC_PARENT_ENT_ID	CHAR(12)	No	''
BUS_OBJ_CD	CHAR(30)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_STATUS_CD	CHAR(12)	No	''
BO_DATA_AREA	CLOB	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
CRE_DTTM	DATE	No	current_date
STATUS_UPD_DTTM	DATE	Yes	-
COMMENTS	VARCHAR2(254)	No	''
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5,0)	No	1
OFFPROC_REQ_MODE_FLG	CHAR(4)	No	-

Primary Key:

Key Type	Column Name
Simple	OFFPROC_REQ_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM631P0	Unique	OFFPROC_REQ_ID
2.	XM631S1	Non Unique	OFFPROC_PARENT_ENT_ID
			OFFPROC_REQ_TYPE_CD
3.	XM631S2	Non Unique	BUS_OBJ_CD
			BO_STATUS_CD
			OFFPROC_REQ_ID
4.	XM631S3	Non Unique	OFFPROC_REQ_TYPE_CD
			BO_STATUS_CD

C.64 C1_OFFPROC_REQ_CHAR

Purpose:	Used to store the characteristics of an off-process request.
Total Number of Columns:	12

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	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(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	OFFPROC_REQ_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM632P0	Unique	OFFPROC_REQ_ID
			CHAR_TYPE_CD
			EFFDT

C.65 C1_OFFPROC_REQ_DTLS

Purpose:	Used to store the accumulation amendment details for which a billable charge or adjustment should be created through an off-process request.
Total Number of Columns:	24

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
OFFPROC_REQ_ID	CHAR(12)	No	-
OFFPROC_ENTITY_TYPE_FLG	CHAR(4)	No	''
OFFPROC_ENTITY_ID	CHAR(12)	No	''
OFFPROC_SUBENTITY_TYPE_FLG	CHAR(4)	No	''
OFFPROC_SUBENTITY_ID	VARCHAR2(254)	No	''
OFFPROC_APL_FLD_FLG	CHAR(4)	No	''
OFFPROC_AMT	NUMBER(36,18)	No	0
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
OFFPROC_CHG_ENTITY_ID	CHAR(12)	No	''
OFFPROC_CHG_TYPE	VARCHAR2(30)	No	''
EFFDT	DATE	Yes	-
OFFPROC_CAT_FLG	CHAR(4)	No	-
ACCT_ID	CHAR(10)	No	''
VERSION	NUMBER(5,0)	No	1
OFFPROC_DTL_REC_STATUS_FLG	CHAR(4)	No	''
MESSAGE_NBR	NUMBER(5,0)	Yes	-
MESSAGE_CAT_NBR	NUMBER(5,0)	Yes	-
MESSAGE_PARM1	VARCHAR2(2000)	Yes	-
MESSAGE_PARM2	VARCHAR2(2000)	Yes	(null)
MESSAGE_PARM3	VARCHAR2(2000)	Yes	(null)
MESSAGE_PARM4	VARCHAR2(2000)	Yes	(null)
MESSAGE_PARM5	VARCHAR2(2000)	Yes	(null)

Primary Key:

Key Type	Column Name
Simple	OFFPROC_REQ_DTL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM633P0	Unique	OFFPROC_REQ_DTL_ID
2.	XM633S1	Non Unique	OFFPROC_REQ_ID

Sr. No.	Index Name	Index Type	Column Name
3.	XM633S2	Non Unique	OFFPROC_ENTITY_ID

C.66 C1_OFFPROC_REQ_K

Purpose:	Used to store the off-process request ID.
Total Number of Columns:	C1_OFFPROC_REQ_K

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
OFFPROC_REQ_ID	CHAR(12)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	OFFPROC_REQ_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM630P0	Unique	OFFPROC_REQ_ID
			ENV_ID

C.67 C1_OFFPROC_REQ_LOG

Purpose:	Used to store the logs of an off-process request.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
OFFPROC_REQ_ID	CHAR(12)	No	-
SEQNO	NUMBER(5,0)	No	-
LOG_DTTM	DATE	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	No	''
DESCRLONG	VARCHAR2(4000)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_STATUS_CD	CHAR(12)	No	''
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
MESSAGE_CAT_NBR	NUMBER(5,0)	No	-
MESSAGE_NBR	NUMBER(5,0)	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	''
SRCH_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	OFFPROC_REQ_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM634P0	Unique	OFFPROC_REQ_ID
			SEQNO

C.68 C1_OFFPROC_REQ_LOG_PARM

Purpose:	Used to store the off-process request log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
OFFPROC_REQ_ID	CHAR(12)	No	-
SEQNO	NUMBER(5,0)	No	-
PARAM_SEQ	NUMBER(3,0)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	No	''
MSG_PARM_VAL	VARCHAR2(2000)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	OFFPROC_REQ_ID
	SEQNO
	PARAM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM635P0	Unique	OFFPROC_REQ_ID
			SEQNO
			PARAM_SEQ

C.69 C1_OFFPROC_REQ_TYPE

Purpose:	Used to store the details of an off-process request type.
Total Number of Columns:	14

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
OFFSET_REQ_TYPE_CD	CHAR(30)	No	-
BUS_OBJ_CD	CHAR(30)	No	''
TRANS_BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
C1_ACTIVE_INACTIVE_FLG	CHAR(4)	No	''
VERSION	NUMBER(5,0)	No	1
IS_APPR_REQ	CHAR(1)	No	-
C1_APPR_TD_TYPE	CHAR(8)	No	''
C1_APPR_TD_ROLE	CHAR(10)	No	''
XFER_ADJ_TYPE_CD	CHAR(8)	No	''
OFFSET_AMT_ALG_CD	CHAR(12)	No	''
DEFER_PROC_COUNT	NUMBER(5,0)	Yes	0
C1_SUB_TD_TYPE	CHAR(8)	No	''
C1_SUB_TD_ROLE	CHAR(10)	No	''

Primary Key:

Key Type	Column Name
Simple	OFFSET_REQ_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF610P0	Unique	OFFSET_REQ_TYPE_CD

C.70 C1_OFFPROC_REQ_TYPE_CHAR

Purpose:	Used to store the characteristics of an off-process request type.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
OFFPROC_REQ_TYPE_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
SEQ_NUM	NUMBER(5,0)	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(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	OFFPROC_REQ_TYPE_CD
	CHAR_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM628P0	Unique	OFFPROC_REQ_TYPE_CD
			CHAR_TYPE_CD
			SEQ_NUM

C.71 C1_OFFPROC_REQ_TYPE_L

Purpose:	Used to store the description of an off-process request type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
OFFSET_REQ_TYPE_CD	CHAR(30)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	''
DESCRLONG	VARCHAR2(4000)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	OFFSET_REQ_TYPE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF611P0	UNIQUE	OFFSET_REQ_TYPE_CD
			LANGUAGE_CD

C.72 C1_PRICEASGN_COST

Purpose:	Used to store the cost details of a price assignment.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIS_DIVISION	CHAR(5)	No	-
PRICE_ASGN_ID	CHAR(10)	No	-
COST_TYPE_FLG	CHAR(4)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
COST	NUMBER(36,18)	Yes	-
VERSION	NUMBER(5,0)	Yes	-
CURRENCY_CD	CHAR(3)	Yes	-

Primary Key:

Key Type	Column Name
Composite	CIS_DIVISION
	PRICE_ASGN_ID
	COST_TYPE_FLG

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM615P0	Unique	CIS_DIVISION
			PRICE_ASGN_ID
			COST_TYPE_FLG

C.73 C1_PRICEASGN_FLOOR_CEIL

Purpose:	Used to store the floor and ceil limits for a price assignment.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICE_ASGN_ID	CHAR(10)	No	-
FLOOR_CEIL_TYPE_FLG	CHAR(4)	No	-
CIS_DIVISION	CHAR(5)	No	-
ROLE_ID	CHAR(10)	No	-
CEIL	NUMBER(36,18)	Yes	-
FLOOR	NUMBER(36,18)	Yes	-
SPREAD_PERCENT	NUMBER(36,18)	Yes	-
SPRED_AMOUNT	NUMBER(36,18)	Yes	-
VERSION	NUMBER(5,0)	No	0
CURRENCY_CD	CHAR(3)	Yes	-

Primary Key:

Key Type	Column Name
Composite	PRICE_ASGN_ID
	FLOOR_CEIL_TYPE_FLG
	ROLE_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM616P0	Unique	PRICE_ASGN_ID
			FLOOR_CEIL_TYPE_FLG
			ROLE_ID

C.74 C1_PRICEASGN_SQ

Purpose:	Used to store the proposed commitments for a price assignment.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIS_DIVISION	CHAR(5)	Yes	-
SQI_CD	CHAR(8)	No	-
SVC_QTY	NUMBER(36,18)	No	-
VERSION	NUMBER(5,0)	Yes	1
PRICE_ASGN_ID	CHAR(10)	No	-
USAGE_PERIOD_FLG	CHAR(4)	Yes	-

Primary Key:

Key Type	Column Name
Composite	PRICE_ASGN_ID
	SQI_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM614P0	Unique	PRICE_ASGN_ID
			SQI_CD

C.75 C1_PRS_ACCT

Purpose:	Used to store the details of a prospect account.
Total Number of Columns:	46

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCT_ID	CHAR(10)	No	-
BILL_CYC_CD	CHAR(4)	No	''
SETUP_DT	DATE	Yes	-
CURRENCY_CD	CHAR(3)	No	''
ACCT_MGMT_GRP_CD	CHAR(10)	No	''
ALERT_INFO	VARCHAR2(250)	No	''
BILL_AFTER_DT	DATE	Yes	-
PROTECT_CYC_SW	CHAR(1)	No	''
CIS_DIVISION	CHAR(5)	No	''
MAILING_PREM_ID	CHAR(10)	No	''
PROTECT_PREM_SW	CHAR(1)	No	''
COLL_CL_CD	CHAR(10)	No	''
CR_REVIEW_DT	DATE	Yes	-
POSTPONE_CR_RVW_DT	DATE	Yes	-
INT_CR_REVIEW_SW	CHAR(1)	No	''
CUST_CL_CD	CHAR(8)	No	''
BILL_PRT_INTERCEPT	CHAR(8)	No	''
NO_DEP_RVW_SW	CHAR(1)	No	''
BUD_PLAN_CD	CHAR(8)	No	''
VERSION	NUMBER(5,0)	No	1
PROTECT_DIV_SW	CHAR(1)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCESS_GRP_CD	CHAR(12)	No	' '
ACCT_DATA_AREA	CLOB	Yes	-
EC_EXPIRY_SCHEDULE_CD	CHAR(12)	Yes	-
BILL_LEAD_DAYS	NUMBER(5,0)	Yes	-
ACCT_USAGE_FLG	CHAR(4)	Yes	-
TRIAL_BILL_SW	CHAR(1)	Yes	-
REPRICING_SW	CHAR(1)	Yes	-
CRE_BY	CHAR(8)	Yes	-
LAST_UPD_BY	CHAR(8)	Yes	-
CRE_DTTM	DATE	Yes	-
LAST_UPD_DTTM	DATE	Yes	-
PRODUCT_CD	CHAR(30)	Yes	-
DEFER_AUTO_PAY_DT	DATE	Yes	-
ACCR_CYC_CD	CHAR(4)	Yes	-
EXCL_ACCR_SW	CHAR(1)	No	'N'
RULE_APAY_SW	CHAR(1)	No	'N'
BO_STATUS_CD	CHAR(12)	No	' '
STATUS_UPD_DTTM	DATE	Yes	-
BUS_OBJ_CD	CHAR(30)	No	' '
BO_DATA_AREA	CLOB	Yes	-
CLOSING_DT	DATE	Yes	-
DD_CR_SW	CHAR(1)	No	'N'
SRC_SYSTEM_CD	CHAR(10)	Yes	-
EXIST_ACCT_ID	CHAR(10)	Yes	-
MAIN_ACCT_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Simple	ACCT_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM533P0	Unique	ACCT_ID
2.	XM533S1	Non Unique	BILL_CYC_CD
			ACCT_ID
3.	XM533S2	Non Unique	MAILING_PREM_ID
4.	XM533S3	Non Unique	CIS_DIVISION

C.76 C1_PRS_ACCT_BAL_CNT

Purpose:	Used to store the balance counter of a prospect account.
Total Number of Columns:	15

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BAL_CNT_ID	CHAR(30)	No	-
ACCT_ID	CHAR(10)	No	''
BAL_CNT_FLG	CHAR(4)	No	''
BAL_CNT_TYPE	CHAR(4)	No	''
EFF_DTTM	DATE	No	-
BAL_CNT_VAL	NUMBER(36,18)	No	-
CURRENCY_CD	CHAR(3)	Yes	-
BUS_OBJ_CD	CHAR(30)	Yes	''
BO_STATUS_CD	CHAR(12)	Yes	''
BO_DATA_AREA	CLOB	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	''
STATUS_UPD_DTTM	DATE	Yes	-
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Simple	BAL_CNT_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF994P0	Unique	BAL_CNT_ID
2.	XF994S0	Non Unique	BUS_OBJ_CD
			BO_STATUS_CD
			BAL_CNT_ID
3.	XF994S1	Unique	ACCT_ID
			EFF_DTTM
			BAL_CNT_FLG
			BAL_CNT_TYPE

C.77 C1_PRS_ACCT_CHAR

Purpose:	Used to store the characteristics of a prospect account.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCT_ID	CHAR(10)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	No	-
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5,0)	No	1
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	''

Primary Key:

Key Type	Column Name
Composite	ACCT_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM534P0	Unique	ACCT_ID
			CHAR_TYPE_CD
			EFFDT

C.78 C1_PRS_ACCT_K

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCT_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	ACCT_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM560P0	Unique	ACCT_ID
			ENV_ID

C.79 C1_PRS_ACCT_NBR

Purpose:	Used to store the identifiers of a prospect account.
Total Number of Columns:	46

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCT_ID	CHAR(10)	No	-
BILL_CYC_CD	CHAR(4)	No	''
SETUP_DT	DATE	Yes	-
CURRENCY_CD	CHAR(3)	No	''
ACCT_MGMT_GRP_CD	CHAR(10)	No	''
ALERT_INFO	VARCHAR2(250)	No	''
BILL_AFTER_DT	DATE	Yes	-
PROTECT_CYC_SW	CHAR(1)	No	''
CIS_DIVISION	CHAR(5)	No	''
MAILING_PREM_ID	CHAR(10)	No	''
PROTECT_PREM_SW	CHAR(1)	No	''
COLL_CL_CD	CHAR(10)	No	''
CR_REVIEW_DT	DATE	Yes	-
POSTPONE_CR_RVW_DT	DATE	Yes	-
INT_CR_REVIEW_SW	CHAR(1)	No	''
CUST_CL_CD	CHAR(8)	No	''
BILL_PRT_INTERCEPT	CHAR(8)	No	''
NO_DEP_RVW_SW	CHAR(1)	No	''
BUD_PLAN_CD	CHAR(8)	No	''
VERSION	NUMBER(5,0)	No	1
PROTECT_DIV_SW	CHAR(1)	No	''
ACCESS_GRP_CD	CHAR(12)	No	''
ACCT_DATA_AREA	CLOB	Yes	-
EC_EXPIRY_SCHEDULE_CD	CHAR(12)	Yes	-
BILL_LEAD_DAYS	NUMBER(5,0)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCT_USAGE_FLG	CHAR(4)	Yes	-
TRIAL_BILL_SW	CHAR(1)	Yes	-
REPRICING_SW	CHAR(1)	Yes	-
CRE_BY	CHAR(8)	Yes	-
LAST_UPD_BY	CHAR(8)	Yes	-
CRE_DTTM	DATE	Yes	-
LAST_UPD_DTTM	DATE	Yes	-
PRODUCT_CD	CHAR(30)	Yes	-
DEFER_AUTO_PAY_DT	DATE	Yes	-
ACCR_CYC_CD	CHAR(4)	Yes	-
EXCL_ACCR_SW	CHAR(1)	No	'N'
RULE_APAY_SW	CHAR(1)	No	'N'
BO_STATUS_CD	CHAR(12)	No	''
STATUS_UPD_DTTM	DATE	Yes	-
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
CLOSING_DT	DATE	Yes	-
DD_CR_SW	CHAR(1)	No	'N'
SRC_SYSTEM_CD	CHAR(10)	Yes	-
EXIST_ACCT_ID	CHAR(10)	Yes	-
MAIN_ACCT_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Simple	ACCT_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM533P0	Unique	ACCT_ID
2.	XM533S1	Non Unique	BILL_CYC_CD ACCT_ID
3.	XM533S2	Non Unique	MAILING_PREM_ID

Sr. No.	Index Name	Index Type	Column Name
4.	XM533S3	Non Unique	CIS_DIVISION

C.80 C1_PRS_ACCT_PER

Purpose:	Used to store the person details of a prospect account.
Total Number of Columns:	19

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCT_ID	CHAR(10)	No	(null)
ACCT_REL_TYPE_CD	CHAR(8)	No	''
BILL_ADDR_SRCE_FLG	CHAR(4)	No	''
PER_ID	CHAR(10)	No	
MAIN_CUST_SW	CHAR(1)	No	''
FIN_RESP_SW	CHAR(1)	No	''
THRD_PTY_SW	CHAR(1)	No	''
RECEIVE_COPY_SW	CHAR(1)	No	''
BILL_RTE_TYPE_CD	CHAR(8)	No	''
BILL_FORMAT_FLG	CHAR(2)	No	''
NBR_BILL_COPIES	NUMBER(1,0)	No	0
VERSION	NUMBER(5,0)	No	1
CUST_PO_ID	VARCHAR2(20)	No	''
NOTIFY_SW	CHAR(1)	No	''
NAME_PFX_SFX	VARCHAR2(50)	No	''
PFX_SFX_FLG	CHAR(2)	No	''
QTE_RTE_TYPE_CD	CHAR(12)	No	''
RECV_QTE_SW	CHAR(1)	No	'N'
WEB_ACCESS_FLG	CHAR(4)	No	'ALWD'

Primary Key:

Key Type	Column Name
Composite	ACCT_ID
	PER_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM536P0	Unique	ACCT_ID
			PER_ID
2.	XM536S1	Non Unique	PER_ID
			ACCT_ID
			MAIN_CUST_SW

C.81 C1_PRS_BAL_CNT

Purpose:	Used to store the balance counter of a prospect person.
Total Number of Columns:	15

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BAL_CNT_ID	CHAR(30)	No	-
PER_ID	CHAR(10)	No	''
BAL_CNT_FLG	CHAR(4)	No	''
BAL_CNT_TYPE	CHAR(4)	No	''
EFF_DTTM	DATE	No	-
BAL_CNT_VAL	NUMBER(36,18)	No	-
CURRENCY_CD	CHAR(3)	Yes	-
BUS_OBJ_CD	CHAR(30)	Yes	''
BO_STATUS_CD	CHAR(12)	Yes	''
BO_DATA_AREA	CLOB	Yes	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	''
STATUS_UPD_DTTM	DATE	Yes	-
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Simple	BAL_CNT_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF587P0	Unique	BAL_CNT_ID
2.	XF587S0	Non Unique	BUS_OBJ_CD
			BO_STATUS_CD
			BAL_CNT_ID
3.	XF587S1	Unique	PER_ID
			EFF_DTTM
			BAL_CNT_FLG
			BAL_CNT_TYPE

C.82 C1_PRS_ENRL_PROD

Purpose:	Used to store the details of a product enrollment.
Total Number of Columns:	8

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
PRODUCT_CD	CHAR(30)	No	-
PRODUCT_EFFDT	DATE	No	-
START_DT	DATE	No	-
END_DT	DATE	Yes	-
PRIORITY	NUMBER(3,0)	No	0
VERSION	NUMBER(5,0)	No	1
ENROLL_END_BY_SYS_SW	CHAR(1)	No	'Y'

Primary Key:

Key Type	Column Name
Composite	ENROLLMENT_ID
	PRODUCT_CD
	PRODUCT_EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM585P0	Unique	ENROLLMENT_ID
			PRODUCT_CD
			PRODUCT_EFFDT

C.83 C1_PRS_ENRL_PROD_REL

Purpose:	Used to store the products included in an enrolled packaged product.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
PRODUCT_PAR_CD	CHAR(30)	No	-
PRODUCT_PAR_EFFDT	DATE	No	-
PRODUCT_CHLD_CD	CHAR(30)	No	-
PRODUCT_CHLD_EFFDT	DATE	No	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
INCLUSION_SW	CHAR(1)	No	'N'
VERSION	NUMBER(5,0)	No	1
ENROLL_END_BY_SYS_SW	CHAR(1)	No	'Y'

Primary Key:

Key Type	Column Name
Composite	ENROLLMENT_ID
	PRODUCT_PAR_CD
	PRODUCT_PAR_EFFDT
	PRODUCT_CHLD_CD
	PRODUCT_CHLD_EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM586P0	Unique	ENROLLMENT_ID
			PRODUCT_PAR_CD
			PRODUCT_PAR_EFFDT
			PRODUCT_CHLD_CD
			PRODUCT_CHLD_EFFDT
			ENROLLMENT_ID

C.84 C1_PRS_ENRL_PROD_REL_SVC

Purpose:	Used to store the product services associated with the products in an enrolled packaged product.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
PRODUCT_PAR_CD	CHAR(30)	No	-
PRODUCT_PAR_EFFDT	DATE	No	-
PRODUCT_CHLD_CD	CHAR(30)	No	-
PRODUCT_CHLD_EFFDT	DATE	No	-
SERVICE_CD	CHAR(30)	No	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
INCLUSION_SW	CHAR(1)	No	'N'

Column Name	Data Type	Nullable (Yes or No)	Default Value
ADD_ON_SVC_SW	CHAR(1)	No	'N'
VERSION	NUMBER(5,0)	No	1
ENROLL_END_BY_SYS_SW	CHAR(1)	No	'Y'

Primary Key:

Key Type	Column Name
Composite	ENROLLMENT_ID
	PRODUCT_PAR_CD
	PRODUCT_PAR_EFFDT
	PRODUCT_CHLD_CD
	PRODUCT_CHLD_EFFDT
	SERVICE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM587P0	Unique	ENROLLMENT_ID
			PRODUCT_PAR_CD
			PRODUCT_PAR_EFFDT
			PRODUCT_CHLD_CD
			PRODUCT_CHLD_EFFDT
			SERVICE_CD

C.85 C1_PRS_ENRL_PROD_SVC

Purpose:	Used to store the product services associated with an enrolled product.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
PRODUCT_CD	CHAR(30)	No	-
PRODUCT_EFFDT	DATE	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
SERVICE_CD	CHAR(30)	No	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
ADD_ON_SVC_SW	CHAR(1)	No	'N'
INCLUSION_SW	CHAR(1)	No	'N'
VERSION	NUMBER(5,0)	No	1
ENROLL_END_BY_SYS_SW	CHAR(1)	No	'Y'

Primary Key:

Key Type	Column Name
Composite	ENROLLMENT_ID
	PRODUCT_CD
	PRODUCT_EFFDT
	SERVICE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM588P0	Unique	ENROLLMENT_ID
			PRODUCT_CD
			PRODUCT_EFFDT
			SERVICE_CD

C.86 C1_PRS_PER

Purpose:	Used to store the details of a prospect person.
Total Number of Columns:	47

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PER_ID	CHAR(10)	No	-
LANGUAGE_CD	CHAR(3)	No	''
PER_OR_BUS_FLG	CHAR(2)	No	''
LS_SL_FLG	CHAR(2)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
LS_SL_DESCR	VARCHAR2(254)	No	''
EMAILID	VARCHAR2(254)	No	''
OVRD_MAIL_NAME1	VARCHAR2(254)	No	''
OVRD_MAIL_NAME2	VARCHAR2(254)	No	''
OVRD_MAIL_NAME3	VARCHAR2(254)	No	''
ADDRESS1	VARCHAR2(254)	No	''
ADDRESS2	VARCHAR2(254)	No	''
ADDRESS3	VARCHAR2(254)	No	''
ADDRESS4	VARCHAR2(254)	No	''
CITY	VARCHAR2(90)	No	''
NUM1	CHAR(6)	No	''
NUM2	CHAR(4)	No	''
COUNTY	VARCHAR2(90)	No	''
POSTAL	CHAR(12)	No	''
HOUSE_TYPE	CHAR(2)	No	''
GEO_CODE	CHAR(11)	No	''
IN_CITY_LIMIT	CHAR(1)	No	''
STATE	CHAR(6)	No	''
COUNTRY	CHAR(3)	No	''
VERSION	NUMBER(5,0)	No	1
RECV_MKTG_INFO_FLG	CHAR(4)	No	'NRCV'
WEB_PASSWD	VARCHAR2(30)	No	''
WEB_PWD_HINT_FLG	CHAR(4)	No	''
WEB_PASSWD_ANS	VARCHAR2(60)	No	''
PER_DATA_AREA	CLOB	Yes	-
CIS_DIVISION	CHAR(5)	Yes	-
ACCESS_GRP_CD	CHAR(12)	No	''
BIRTH_DT	DATE	Yes	-
SINCE_DT	DATE	Yes	-
CRE_BY	CHAR(8)	Yes	-
LAST_UPD_BY	CHAR(8)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CRE_DTTM	DATE	Yes	-
LAST_UPD_DTTM	DATE	Yes	-
BO_STATUS_CD	CHAR(12)	No	''
STATUS_UPD_DTTM	DATE	Yes	-
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
CUST_SEG_FLG	CHAR(4)	Yes	-
CUST_TIER_FLG	CHAR(4)	Yes	-
SRC_SYSTEM_CD	CHAR(10)	Yes	-
EXIST_PER_ID	CHAR(10)	Yes	-
MAIN_PER_ID	CHAR(10)	Yes	-
IS_PRS_SW	CHAR(1)	Yes	-

Primary Key:

Key Type	Column Name
Simple	PER_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM537P0	Unique	PER_ID

C.87 C1_PRS_PER_CHAR

Purpose:	Used to store the characteristics of a prospect person.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PER_ID	CHAR(10)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
CHAR_VAL	CHAR(16)	No	''
EFFDT	DATE	No	-
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5,0)	No	1

Column Name	Data Type	Nullable (Yes or No)	Default Value
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	''

Primary Key:

Key Type	Column Name
Composite	PER_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM538P0	Unique	PER_ID
			CHAR_TYPE_CD
			EFFDT

C.88 C1_PRS_PER_ID

Purpose:	Used to store the identifiers of a prospect person.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PER_ID	CHAR(10)	No	-
ID_TYPE_CD	CHAR(8)	No	-
PER_ID_NBR	VARCHAR2(90)	No	''
PRIM_SW	CHAR(1)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	PER_ID
	ID_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM539P0	Unique	PER_ID
			ID_TYPE_CD
2.	XM539S1	Non Unique	PER_ID_NBR
			ID_TYPE_CD

C.89 C1_PRS_PER_K

Purpose:	Used to store the prospect person ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PER_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	PER_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM558P0	Unique	PER_ID
			ENV_ID

C.90 C1_PRS_PER_NAME

Purpose:	Used to store the primary and secondary names of a prospect person.
Total Number of Columns:	7

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PER_ID	CHAR(10)	No	(null)
SEQ_NUM	NUMBER(3,0)	No	(null)
ENTITY_NAME	VARCHAR2(254)	No	''
NAME_TYPE_FLG	CHAR(4)	No	''
VERSION	NUMBER(5,0)	No	1
PRIM_NAME_SW	CHAR(1)	No	''
ENTITY_NAME_UPR	VARCHAR2(254)	No	''

Primary Key:

Key Type	Column Name
Composite	PER_ID
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM540P0	Unique	PER_ID
			SEQ_NUM

C.91 C1_PRS_PER_PER

Purpose:	Used to store the child person information of a prospect person.
Total Number of Columns:	7

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PER_ID1	CHAR(10)	No	(null)
PER_ID2	CHAR(10)	No	(null)
PER_REL_TYPE_CD	CHAR(8)	No	(null)

Column Name	Data Type	Nullable (Yes or No)	Default Value
START_DT	DATE	No	(null)
END_DT	DATE	Yes	(null)
VERSION	NUMBER(5,0)	No	1
FINAN_REL_SW	CHAR(1)	No	'N'

Primary Key:

Key Type	Column Name
Composite	PER_ID1
	PER_ID2
	PER_REL_TYPE_CD
	START_DT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM541P0	Unique	PER_ID1
			PER_ID2
			PER_REL_TYPE_CD
			START_DT
2.	XM541S1	Non Unique	PER_ID2

C.92 C1_PRS_PER_PER_CHAR

Purpose:	Used to store the person to person characteristics of a prospect person.
Total Number of Columns:	15

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PER_ID1	CHAR(10)	No	(null)
PER_ID2	CHAR(10)	No	(null)
PER_REL_TYPE_CD	CHAR(8)	No	(null)
START_DT	DATE	No	(null)
CHAR_TYPE_CD	CHAR(8)	No	(null)
EFFDT	DATE	No	(null)

Column Name	Data Type	Nullable (Yes or No)	Default Value
SRCH_CHAR_VAL	VARCHAR2(50)	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	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	PER_ID1
	PER_ID2
	PER_REL_TYPE_CD
	START_DT
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM542P0	Unique	PER_ID1
			PER_ID2
			PER_REL_TYPE_CD
			START_DT
			CHAR_TYPE_CD
			EFFDT

C.93 C1_PRS_PER_PHONE

Purpose:	Used to store the phone details of a prospect person.
Total Number of Columns:	7

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PER_ID	CHAR(10)	No	-
SEQ_NUM	NUMBER(3,0)	No	-
PHONE_TYPE_CD	CHAR(12)	No	''
COUNTRY_CODE	CHAR(3)	No	''
PHONE	VARCHAR2(24)	No	''
EXTENSION	CHAR(6)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	PER_ID
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM543P0	Unique	PER_ID
			SEQ_NUM
2.	XM543S1	Non Unique	PHONE
3.	XM543S2	Non Unique	SYS_NC00008\$

C.94 C1_PRS_PRICELIST_ASGN

Purpose:	Used to store the price list assignment details of a prospect person or account.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICELIST_ASGN_ID	CHAR(10)	No	-
PARTY_UID	CHAR(10)	Yes	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
PRICELIST_ID	CHAR(10)	Yes	-
BUS_OBJ_CD	CHAR(30)	Yes	-
VERSION	NUMBER(5,0)	No	1
BO_DATA_AREA	CLOB	Yes	-
PL_ASGN_STATUS_FLG	CHAR(4)	Yes	-
SEQNO	NUMBER(5,0)	Yes	1
PL_FRAGMENT_SW	CHAR(1)	No	'N'
PL_ASSGN_TYPE	VARCHAR2(20)	Yes	-

Primary Key:

Key Type	Column Name
Simple	PRICELIST_ASGN_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM544P0	Unique	PRICELIST_ASGN_ID
2.	XM544S1	Non Unique	PARTY_UID, START_DT PL_ASGN_STATUS_FLG SEQNO
3.	XM544S2	Non Unique	PARTY_UID
4.	XM544S3	Non Unique	PRICELIST_ID

C.95 C1_PRS_PRICELIST_ASGN_K

Purpose:	Used to store the prospect person's or account's price list assignment ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRICELIST_ASGN_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	PRICELIST_ASGN_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM562P0	Unique	PRICELIST_ASGN_ID
			ENV_ID

C.96 C1_PRS_PRICELST_ASGN_CHAR

Purpose:	Used to store the characteristics of a prospect person's or account's price list assignment.
Total Number of Columns:	12

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
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(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	PRICELIST_ASGN_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM545P0	Unique	PRICELIST_ASGN_ID
			CHAR_TYPE_CD
			EFFDT

C.97 C1_PRS_PROD_ENRL

Purpose:	Used to store the product enrollment details of a prospect account.
Total Number of Columns:	14

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
ACCT_ID	CHAR(10)	No	-
ENROLL_CHANNEL_FLG	CHAR(4)	No	-
START_DT	DATE	No	-
END_DT	DATE	Yes	-
COMMENTS	VARCHAR2(254)	Yes	''
BUS_OBJ_CD	CHAR(30)	No	''
BO_DATA_AREA	CLOB	Yes	-
BO_STATUS_CD	CHAR(12)	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE	Yes	-
VERSION	NUMBER(5,0)	No	1
ENROLL_END_BY_SYS_SW	CHAR(1)	No	'Y'
PER_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Simple	ENROLLMENT_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM584P0	Unique	ENROLLMENT_ID

C.98 C1_PRS_PROD_ENRL_CHAR

Purpose:	Used to store the characteristics of a product enrollment.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	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(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	ENROLLMENT_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM589P0	Unique	ENROLLMENT_ID
			CHAR_TYPE_CD
			EFFDT

C.99 C1_PRS_PROD_ENRL_K

Purpose:	Used to store the prospect account's product enrollment ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	ENROLLMENT_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM612P0	Unique	ENROLLMENT_ID
			ENV_ID

C.100 C1_PRS_PROD_ENRL_LOG

Purpose:	Used to store the logs of a product enrollment.
Total Number of Columns:	20

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
SEQNO	NUMBER(5,0)	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(5,0)	No	-
MESSAGE_NBR	NUMBER(5,0)	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	''
USER_ID	CHAR(8)	No	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	ENROLLMENT_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM590P0	Unique	ENROLLMENT_ID
			SEQNO

C.101 C1_PRS_PROD_ENRL_LOG_PARM

Purpose:	Used to store the product enrollment log parameters.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ENROLLMENT_ID	CHAR(10)	No	-
SEQNO	NUMBER(5,0)	No	-
PARAM_SEQ	NUMBER(3,0)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	No	-
MESSAGE_PARM	VARCHAR2(2000)	No	''
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	ENROLLMENT_ID
	SEQNO
	PARAM_SEQ

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM592P0	Unique	ENROLLMENT_ID
			SEQNO
			PARAM_SEQ

C.102 C1_PRS_SA

Purpose:	Used to store the contract details of a prospect account.
Total Number of Columns:	39

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SA_ID	CHAR(10)	No	-
PROP_DCL_RSN_CD	CHAR(12)	No	''
PROP_SA_ID	CHAR(10)	No	''
CIS_DIVISION	CHAR(5)	No	''
SA_TYPE_CD	CHAR(8)	No	''
START_OPT_CD	CHAR(12)	No	''
START_DT	DATE	No	-
SA_STATUS_FLG	CHAR(2)	No	''
ACCT_ID	CHAR(10)	No	''
END_DT	DATE	Yes	-
OLD_ACCT_ID	VARCHAR2(15)	No	''
CUST_READ_FLG	CHAR(2)	No	''
ALLOW_EST_SW	CHAR(1)	No	''
SIC_CD	CHAR(8)	No	''
CHAR_PREM_ID	CHAR(10)	No	''
TOT_TO_BILL_AMT	NUMBER(15,2)	No	0
CURRENCY_CD	CHAR(3)	No	''
VERSION	NUMBER(5,0)	No	1
SA_REL_ID	CHAR(10)	No	''
STRT_RSN_FLG	CHAR(4)	No	''
STOP_RSN_FLG	CHAR(4)	No	''
STRT_REQED_BY	VARCHAR2(50)	No	''
STOP_REQED_BY	VARCHAR2(50)	No	''
HIGH_BILL_AMT	NUMBER(15,2)	No	0
INT_CALC_DT	DATE	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIAC_REVIEW_DT	DATE	Yes	-
BUS_ACTIVITY_DESC	VARCHAR2(250)	No	''
IB_SA_CUTOFF_TM	DATE	Yes	-
IB_BASE_TM_DAY_FLG	CHAR(2)	No	''
ENRL_ID	CHAR(12)	No	''
SPECIAL_USAGE_FLG	CHAR(4)	No	''
PROP_SA_STAT_FLG	CHAR(2)	No	''
NBR_PYMNT_PERIODS	NUMBER(3,0)	No	0
NB_RULE_CD	CHAR(8)	No	''
EXPIRE_DT	DATE	Yes	-
RENEWAL_DT	DATE	Yes	-
NB_APAY_FLG	CHAR(4)	No	''
SA_DATA_AREA	CLOB	Yes	-
POLICY_ID	CHAR(14)	Yes	-

Primary Key:

Key Type	Column Name
Simple	SA_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM546P0	Unique	SA_ID
2.	XM546S1	Non Unique	ACCT_ID
3.	XM546S2	Non Unique	CHAR_PREM_ID
4.	XM546S3	Non Unique	OLD_ACCT_ID
			ACCT_ID
5.	XM546S4	Non Unique	SA_REL_ID
			SA_ID
6.	XM546S5	Non Unique	POLICY_ID

C.103 C1_PRS_SA_CHAR

Purpose:	Used to store the characteristics of prospect account's contract.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SA_ID	CHAR(10)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE	No	-
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
VERSION	NUMBER(5,0)	No	1
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	''

Primary Key:

Key Type	Column Name
Composite	SA_ID
	CHAR_TYPE_CD
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM547P0	Unique	SA_ID
			CHAR_TYPE_CD
			EFFDT
2.	XM547S1	Non Unique	SRCH_CHAR_VAL

C.104 C1_PRS_SA_K

Purpose:	Used to store the prospect account's contract ID.
Total Number of Columns:	2

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
SA_ID	CHAR(10)	No	-
ENV_ID	NUMBER(6,0)	No	-

Primary Key:

Key Type	Column Name
Composite	SA_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM559P0	Unique	SA_ID
			ENV_ID

C.105 C1_QEST

Purpose:	Used to store the details of a questionnaire.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
QSTN_CD	CHAR(30)	No	''
SEQ_NO	NUMBER(5,0)	No	1
APPBIY_FLD	VARCHAR2(20)	Yes	-
REF_SLE_FLG	VARCHAR2(20)	Yes	-
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Composite	QSTN_CD
	SEQ_NO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT951P0	Unique	QSTN_CD
			SEQ_NO

C.106 C1_QSTN_DTL

Purpose:	Used to store the details of a questionnaire.
Total Number of Columns:	9

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
QSTN_CD	CHAR(30)	No	-
QSTN_STATUS	CHAR(4)	Yes	-
START_DATE	DATE	Yes	-
END_DATE	DATE	Yes	-
VERSION	NUMBER(5,0)	No	1
BUS_OBJ_CD	CHAR(30)	Yes	-
BO_STATUS_CD	CHAR(12)	Yes	-
BO_DATA_AREA	CLOB	Yes	-
LANGUAGE_CD	CHAR(3)	Yes	-

Primary Key:

Key Type	Column Name
Simple	QSTN_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT996P0	Unique	QSTN_CD

C.107 C1_QSTN_DTL_ALG

Purpose:	Used to store the algorithms associated with a questionnaire.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
QSTN_CD	CHAR(30)	No	''
ALG_ENTITY_CD	CHAR(4)	No	''
ALG_CD	CHAR(12)	No	''
SEQ_NO	NUMBER(5,0)	No	1
VERSION	NUMBER(5,0)	No	1
ATY_ALG_ENTITY_FLG1	CHAR(12)	Yes	-

Primary Key:

Key Type	Column Name
Composite	ALG_CD
	QSTN_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT998P0	Unique	ALG_CD
			QSTN_CD

C.108 C1_QSTN_L

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

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
DESCLNG	VARCHAR2(4000)	No	' '
VERSION	NUMBER(5,0)	No	1

Primary Key:

Key Type	Column Name
Simple	QSTN_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XT997P0	Unique	QSTN_CD

C.109 C1_VOLUME_AGGR

Purpose:	Used to store the pre-aggregated billable charges.
Total Number of Columns:	19

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
VOL_AGGR_ID	CHAR(12)	No	-
CIS_DIVISION	CHAR(5)	Yes	-
PRICEITEM_CD	CHAR(30)	Yes	-
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-
PRICE_ITEM_GRP_CD	CHAR(30)	Yes	-
AGGR_DATE	DATE	Yes	-
SQI_CD	CHAR(8)	Yes	-
REC_TYPE	CHAR(5)	Yes	-
MONTH_VOL	NUMBER(36,18)	Yes	-
QUARTER_VOL	NUMBER(36,18)	Yes	-
HALF_ANNUAL_VOL	NUMBER(36,18)	Yes	-
ANNUAL_VOL	NUMBER(36,18)	Yes	-
MONTH_COUNT	NUMBER(15,2)	Yes	-
QUARTER_COUNT	NUMBER(15,2)	Yes	-
HALF_ANNUAL_COUNT	NUMBER(15,2)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
ANNUAL_COUNT	NUMBER(15,2)	Yes	-
VERSION	NUMBER(5,0)	Yes	1
DEAL_ENTITY_TYPE_FLG	CHAR(4)	Yes	-
DEAL_ENTITY_ID	CHAR(10)	Yes	-

Primary Key:

Key Type	Column Name
Simple	VOL_AGGR_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM613P0	UNIQUE	VOL_AGGR_ID
2.	XM613S0	NONUNIQUE	DEAL_ENTITY_ID

Appendix D : Existing Tables Modified in 2.9.0.0.0

This section lists the existing tables which are modified in Oracle Revenue Management and Billing Version 2.9.0.0.0. It also indicates the columns that are newly added, dropped, or modified in these tables.

D.1 C1_ACCRUAL_CALC_LINE

The following table lists the columns that are either newly added or modified in the C1_ACCRUAL_CALC_LINE table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENTITY_TYPE_FLG	Format Change	CHAR(2)	VARCHAR2(4)	No	-

D.2 C1_ACCRUAL_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_ACCRUAL_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.3 C1_ACCT_SUBSCR_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_ACCT_SUBSCR_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.4 C1_ACCUM_MIN_PREM_AMT

The following table lists the columns that are either newly added or modified in the C1_ACCUM_MIN_PREM_AMT table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MAX_LIMIT_ATTACH_PT_VALUE	Newly Added	-	NUMBER(36,18)	No	-
2.	MIN_LIMIT_ATTACH_PT_VALUE	Newly Added	-	NUMBER(36,18)	No	-
3.	CUL_LIMIT	Newly Added	-	NUMBER(36,18)	No	-
4.	CUL_LIMIT_DELTA	Newly Added	-	NUMBER(36,18)	No	-
5.	CUL_LIMIT_ORG	Newly Added	-	NUMBER(36,18)	No	-
6.	LIMIT_TYPE	Newly Added	-	CHAR(4)	No	-
7.	VERSION	Newly Added	-	NUMBER(5)	No	-
8.	CUL_ENR_LIMIT	Dropped	NUMBER(36,18)	-	-	-
9.	ENR_LIMIT_ATTACH_PT_VALUE	Dropped	NUMBER(36,18)	-	-	-

D.5 C1_ADDRESS

The following table lists the columns that are either newly added or modified in the C1_ADDRESS table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADDRESS7	Newly Added	-	VARCHAR2(254)	No	-

D.6 C1_AUDIT_EVENT_LOG

The following table lists the columns that are either newly added or modified in the C1_AUDIT_EVENT_LOG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_VAL_FK1	Format Change	CHAR(50)	VARCHAR2(50)	No	-
2.	CHAR_VAL_FK2	Format Change	CHAR(50)	VARCHAR2(50)	No	-
3.	CHAR_VAL_FK3	Format Change	CHAR(50)	VARCHAR2(50)	No	-
4.	CHAR_VAL_FK4	Format Change	CHAR(50)	VARCHAR2(50)	No	-
5.	CHAR_VAL_FK5	Format Change	CHAR(50)	VARCHAR2(50)	No	-

D.7 C1_BILL_LVL_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_BILL_LVL_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.8 C1_BSEG_DEAL

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BILL_CYC_CD	Newly Added	-	CHAR(4)	No	-
2.	BILL_SCNR_ID	Newly Added	-	CHAR(12)	No	-
3.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
4.	BSEG_STAT_FLG	Newly Added	-	CHAR(2)	No	-
5.	CAN_BSEG_ID	Newly Added	-	CHAR(12)	No	-
6.	CAN_RSN_CD	Newly Added	-	CHAR(4)	No	-
7.	CLOSING_BSEG_SW	Newly Added	-	CHAR(1)	No	-
8.	SA_ID	Newly Added	-	CHAR(10)	No	-
9.	CRE_DTTM	Newly Added	-	DATE	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
10.	DEAL_ID	Newly Added	-	CHAR(12)	No	-
11.	END_DT	Newly Added	-	DATE	No	-
12.	EST_SW	Newly Added	-	CHAR(1)	No	-
13.	ILM_ARCH_SW	Newly Added	-	CHAR(1)	No	-
14.	ILM_DT	Newly Added	-	DATE	No	-
15.	ITEM_OVERRIDE_SW	Newly Added	-	CHAR(1)	No	-
16.	MASTER_BSEG_ID	Newly Added	-	CHAR(12)	No	-
17.	MODEL_CD	Newly Added	-	VARCHAR2(8)	No	-
18.	MODEL_ID	Newly Added	-	CHAR(10)	No	-
19.	PREM_ID	Newly Added	-	CHAR(10)	No	-
20.	QUOTE_DTL_ID	Newly Added	-	CHAR(12)	No	-
21.	REBILL_SEG_ID	Newly Added	-	CHAR(12)	No	-
22.	SQ_OVERRIDE_SW	Newly Added	-	CHAR(1)	No	-
23.	START_DT	Newly Added	-	DATE	No	-
24.	STAT_CHG_DTTM	Newly Added	-	DATE	No	-
25.	VERSION	Newly Added	-	NUMBER(5)	No	-
26.	WIN_START_DT	Newly Added	-	DATE	No	-

D.9 C1_BSEG_DEAL_CALC

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL_CALC table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
2.	BILLABLE_CHG_ID	Newly Added	-	CHAR(12)	No	-
3.	CALC_AMT	Newly Added	-	NUMBER(15,2)	No	-
4.	CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
5.	DESCR_ON_BILL	Newly Added	-	VARCHAR2(80)	No	-
6.	EFFDT	Newly Added	-	DATE	No	-
7.	END_DT	Newly Added	-	DATE	No	-
8.	HEADER_SEQ	Newly Added	-	NUMBER(3)	No	-
9.	RS_CD	Newly Added	-	CHAR(8)	No	-
10.	START_DT	Newly Added	-	DATE	No	-
11.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.10 C1_BSEG_DEAL_CALC_LN

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL_CALC_LN table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	TOT_AGG_SQ	Newly Added	-	NUMBER(36,18)	No	-
2.	APP_IN_SUMM_SW	Newly Added	-	CHAR(1)	No	-
3.	BASE_AMT	Newly Added	-	NUMBER(36,18)	No	-
4.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
5.	BILL_SQ	Newly Added	-	NUMBER(36,18)	No	-
6.	CALC_AMT	Newly Added	-	NUMBER(36,18)	No	-
7.	CHAR_TYPE_CD	Newly Added	-	CHAR(8)	No	-
8.	CHAR_VAL	Newly Added	-	CHAR(16)	No	-
9.	CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
10.	DESCR_ON_BILL	Newly Added	-	VARCHAR2(80)	No	-
11.	DST_ID	Newly Added	-	CHAR(10)	No	-
12.	EXCHRATE	Newly Added	-	NUMBER(36,18)	No	-
13.	EXCHRATE_ID	Newly Added	-	CHAR(10)	No	-
14.	EXEMPT_AMT	Newly Added	-	NUMBER(36,18)	No	-
15.	HEADER_SEQ	Newly Added	-	NUMBER(3)	No	-
16.	MSR_PEAK_QTY_SW	Newly Added	-	CHAR(1)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
17.	PRICECOMP_ID	Newly Added	-	CHAR(10)	No	-
18.	PRIC_AMT	Newly Added	-	NUMBER(36,18)	No	-
19.	PRIC_CCY_CD	Newly Added	-	CHAR(3)	No	-
20.	PRT_SW	Newly Added	-	CHAR(1)	No	-
21.	VALUE_AMT	Newly Added	-	NUMBER(36,18)	No	-
22.	SQI_CD	Newly Added	-	CHAR(8)	No	-
23.	RC_SEQ	Newly Added	-	NUMBER(3)	No	-
24.	SEQNO	Newly Added	-	NUMBER(5)	No	-
25.	UOM_CD	Newly Added	-	CHAR(4)	No	-
26.	TOU_CD	Newly Added	-	CHAR(8)	No	-
27.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.11 C1_BSEG_DEAL_CL_CHAR

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL_CL_CHAR table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADHOC_CHAR_VAL	Newly Added	-	VARCHAR2(254)	No	-
2.	BSEG_ID	Newly Added	-	CHAR(12)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
3.	CHAR_TYPE_CD	Newly Added	-	CHAR(8)	No	-
4.	CHAR_VAL	Newly Added	-	CHAR(16)	No	-
5.	CHAR_VAL_FK1	Newly Added	-	VARCHAR2(50)	No	-
6.	CHAR_VAL_FK2	Newly Added	-	VARCHAR2(50)	No	-
7.	CHAR_VAL_FK3	Newly Added	-	VARCHAR2(50)	No	-
8.	CHAR_VAL_FK4	Newly Added	-	VARCHAR2(50)	No	-
9.	CHAR_VAL_FK5	Newly Added	-	VARCHAR2(50)	No	-
10.	HEADER_SEQ	Newly Added	-	NUMBER(3)	No	-
11.	SEQNO	Newly Added	-	NUMBER(5)	No	-
12.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.12 C1_BSEG_DEAL_EXCP

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL_EXCP table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_EXCP_FLG	Newly Added	-	CHAR(2)	No	-
2.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
3.	CALL_SEQ	Newly Added	-	VARCHAR2(254)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
4.	COMMENTS	Newly Added	-	VARCHAR2(254)	No	-
5.	CRE_DTTM	Newly Added	-	DATE	No	-
6.	EXP_MSG	Newly Added	-	VARCHAR2(254)	No	-
7.	MESSAGE_CAT_NBR	Newly Added	-	NUMBER(5)	No	-
8.	MESSAGE_NBR	Newly Added	-	NUMBER(5)	No	-
9.	MESSAGE_PARM1	Newly Added	-	VARCHAR2(2000)	No	-
10.	MESSAGE_PARM2	Newly Added	-	VARCHAR2(2000)	No	-
11.	MESSAGE_PARM3	Newly Added	-	VARCHAR2(2000)	No	-
12.	MESSAGE_PARM4	Newly Added	-	VARCHAR2(2000)	No	-
13.	MESSAGE_PARM5	Newly Added	-	VARCHAR2(2000)	No	-
14.	MESSAGE_PARM6	Newly Added	-	VARCHAR2(2000)	No	-
15.	MESSAGE_PARM7	Newly Added	-	VARCHAR2(2000)	No	-
16.	MESSAGE_PARM8	Newly Added	-	VARCHAR2(2000)	No	-
17.	MESSAGE_PARM9	Newly Added	-	VARCHAR2(2000)	No	-
18.	REVIEW_DT	Newly Added	-	DATE	No	-
19.	REVIEW_USER_ID	Newly Added	-	CHAR(8)	No	-
20.	REVIEW_COMP	Newly Added	-	CHAR(1)	No	-
21.	USER_ID	Newly Added	-	CHAR(8)	No	-
22.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.13 C1_BSEG_DEAL_ITEM

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL_ITEM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
2.	SVC_QTY	Newly Added	-	NUMBER(18,6)	No	-
3.	END_DT	Newly Added	-	DATE	No	-
4.	ITEM_CNT	Newly Added	-	NUMBER(11,2)	No	-
5.	ITEM_ID	Newly Added	-	CHAR(10)	No	-
6.	ITEM_TYPE_CD	Newly Added	-	CHAR(8)	No	-
7.	SEQNO	Newly Added	-	NUMBER(5)	No	-
8.	START_DT	Newly Added	-	DATE	No	-
9.	UOM_CD	Newly Added	-	CHAR(4)	No	-
10.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.14 C1_BSEG_DEAL_MSG

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL_MSG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BILL_MSG_CD	Newly Added	-	CHAR(4)	No	-
2.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
3.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.15 C1_BSEG_DEAL_READ

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL_READ table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
2.	END_READ_DTTM	Newly Added	-	DATE	No	-
3.	END_REG_READ_ID	Newly Added	-	CHAR(12)	No	-
4.	END_REG_READING	Newly Added	-	NUMBER(15,6)	No	-
5.	FINAL_SQI_CD	Newly Added	-	CHAR(8)	No	-
6.	FINAL_TOU_CD	Newly Added	-	CHAR(8)	No	-
7.	FINAL_UOM_CD	Newly Added	-	CHAR(4)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
8.	HOW_TO_USE_FLG	Newly Added	-	CHAR(2)	No	-
9.	USAGE_FLG	Newly Added	-	CHAR(2)	No	-
10.	MSR_QTY	Newly Added	-	NUMBER(18,6)	No	-
11.	MSR_PEAK_QTY_SW	Newly Added	-	CHAR(1)	No	-
12.	FINAL_REG_QTY	Newly Added	-	NUMBER(18,6)	No	-
13.	REG_CONST	Newly Added	-	NUMBER(12,6)	No	-
14.	SQI_CD	Newly Added	-	CHAR(8)	No	-
15.	SEQNO	Newly Added	-	NUMBER(5)	No	-
16.	SP_ID	Newly Added	-	CHAR(10)	No	-
17.	START_READ_DTTM	Newly Added	-	DATE	No	-
18.	START_REG_READ_ID	Newly Added	-	CHAR(12)	No	-
19.	START_REG_READING	Newly Added	-	NUMBER(15,6)	No	-
20.	UOM_CD	Newly Added	-	CHAR(4)	No	-
21.	USE_PCT	Newly Added	-	NUMBER(3)	No	-
22.	TOU_CD	Newly Added	-	CHAR(8)	No	-
23.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.16 C1_BSEG_DEAL_SQ

The following table lists the columns that are either newly added or modified in the C1_BSEG_DEAL_SQ table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
2.	BILL_SQ	Newly Added	-	NUMBER(36,18)	No	-
3.	INIT_SQ	Newly Added	-	NUMBER(36,18)	No	-
4.	SQI_CD	Newly Added	-	CHAR(8)	No	-
5.	UOM_CD	Newly Added	-	CHAR(4)	No	-
6.	TOU_CD	Newly Added	-	CHAR(8)	No	-
7.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.17 C1_DISCREPANCY_RPT_CHAR

The following table lists the columns that are either newly added or modified in the C1_DISCREPANCY_RPT_CHAR table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_VAL_FK1	Format Change	VARCHAR2(50)	CHAR(50)	No	-
2.	CHAR_VAL_FK2	Format Change	VARCHAR2(50)	CHAR(50)	No	-
3.	CHAR_VAL_FK3	Format Change	VARCHAR2(50)	CHAR(50)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
4.	CHAR_VAL_FK4	Format Change	VARCHAR2(50)	CHAR(50)	No	-
5.	CHAR_VAL_FK5	Format Change	VARCHAR2(50)	CHAR(50)	No	-

D.18 C1_DISCREPANCY_RPT_LN

The following table lists the columns that are either newly added or modified in the C1_DISCREPANCY_RPT_LN table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DSC_AMT	Newly Added	-	NUMBER(15)	No	-

D.19 C1_DISCREPANCY_RPT_LN_CHAR

The following table lists the columns that are either newly added or modified in the C1_DISCREPANCY_RPT_LN_CHAR table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADHOC_CHAR_VAL	Format Change	VARCHAR2(12)	VARCHAR2(254)	No	-

D.20 C1_DISCREPANCY_RPT_LOG

The following table lists the columns that are either newly added or modified in the C1_DISCREPANCY_RPT_LOG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_VAL_FK1	Format Change	CHAR(50)	VARCHAR2(50)	No	-
2.	CHAR_VAL_FK2	Format Change	CHAR(50)	VARCHAR2(50)	No	-
3.	CHAR_VAL_FK3	Format Change	CHAR(50)	VARCHAR2(50)	No	-
4.	CHAR_VAL_FK4	Format Change	CHAR(50)	VARCHAR2(50)	No	-
5.	CHAR_VAL_FK5	Format Change	CHAR(50)	VARCHAR2(50)	No	-

D.21 C1_DISCREPANCY_RPT_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_DISCREPANCY_RPT_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.22 C1_DRR_TMPLT

The following table lists the columns that are either newly added or modified in the C1_DRR_TMPLT table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CIS_DIVISION	Dropped	CHAR(5)	-	-	-

D.23 C1_FT_DISTRIBUTION_ACCT

The following table lists the columns that are either newly added or modified in the C1_FT_DISTRIBUTION_ACCT table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	STATUS_CD	Format Change	CHAR(2)	VARCHAR2(12)	No	-

D.24 C1_FT_EXT_CHAR

The following table lists the columns that are either newly added or modified in the C1_FT_EXT_CHAR table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SEQNO	Dropped	NUMBER(5,0)	-	-	-

D.25 C1_MO_DEPLOY

The following table lists the columns that are either newly added or modified in the C1_MO_DEPLOY table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CREATED_BY	Format Change	CHAR(8)	VARCHAR2(254)	No	-

D.26 C1_PAY_INS_CHAR

The following table lists the columns that are either newly added or modified in the C1_PAY_INS_CHAR table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_VAL_FK1	Format Change	CHAR(50)	VARCHAR2(50)	No	-
2.	CHAR_VAL_FK2	Format Change	CHAR(50)	VARCHAR2(50)	No	-
3.	CHAR_VAL_FK3	Format Change	CHAR(50)	VARCHAR2(50)	No	-
4.	CHAR_VAL_FK4	Format Change	CHAR(50)	VARCHAR2(50)	No	-
5.	CHAR_VAL_FK5	Format Change	CHAR(50)	VARCHAR2(50)	No	-

D.27 C1_PRC_RULE_LOG

The following table lists the columns that are either newly added or modified in the C1_PRC_RULE_LOG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADHOC_CHAR_VAL	Format Change	VARCHAR2(50)	VARCHAR2(254)	No	-

D.28 C1_PRC_RULE_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_PRC_RULE_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.29 C1_PRCRLTY_PARAMETER

The following table lists the columns that are either newly added or modified in the C1_PRCRLTY_PARAMETER table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	IS_MPP_ELIGIBLE_SW	Newly Added	-	CHAR(1)	No	-

D.30 C1_PRICEITEM_TC

The following table lists the columns that are either newly added or modified in the C1_PRICEITEM_TC table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DEFAULT_SW	Newly Added	-	CHAR(1)	No	-
2.	END_DT	Newly Added	-	DATE	No	-
3.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-
4.	FOOTNOTE_REF	Newly Added	-	VARCHAR2(10)	No	-
5.	SEQNO	Newly Added	-	NUMBER(5)	No	-
6.	START_DT	Newly Added	-	DATE	No	-
7.	TC_TYPE_CD	Newly Added	-	CHAR(12)	No	-
8.	TC_TXT	Newly Added	-	VARCHAR2(4000)	No	-
9.	USAGE_FLAG	Newly Added	-	VARCHAR2(10)	No	-
10.	VARIABLE_SW	Newly Added	-	CHAR(1)	No	-
11.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.31 C1_PRICING_GRP_LOG

The following table lists the columns that are either newly added or modified in the C1_PRICING_GRP_LOG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADHOC_CHAR_VAL	Format Change	VARCHAR2(50)	VARCHAR2(254)	No	-
2.	CHAR_VAL	Format Change	VARCHAR2(254)	CHAR(16)	No	-

D.32 C1_PRODUCT_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_PRODUCT_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.33 C1_PRODUCT_VER_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_PRODUCT_VER_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.34 C1_REF_WO_REQ_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_REF_WO_REQ_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.35 C1_TXN_DISAGG_REQ_LOG

The following table lists the columns that are either newly added or modified in the C1_TXN_DISAGG_REQ_LOG table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	TXN_DISAGG_REQ_ID	Format Change	CHAR(12)	VARCHAR2(14)	No	-

D.36 C1_TXN_DISAGG_REQ_LOG_PARM

The following table lists the columns that are either newly added or modified in the C1_TXN_DISAGG_REQ_LOG_PARM table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-
2.	TXN_DISAGG_REQ_ID	Format Change	CHAR(12)	VARCHAR2(14)	No	-

D.37 C1_UPL_REQUEST

The following table lists the columns that are either newly added or modified in the C1_UPL_REQUEST table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	FILE_NAME	Format Change	VARCHAR2(60)	CHAR(60)	No	-

D.38 CI_ACCT_APAY

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENCR_EXT_ACCT_ID	Newly Added	-	VARCHAR2(108)	No	-

D.39 CI_ACCT_PER_ROUTING

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BO_DATA_AREA	Newly Added	-	CLOB	No	-

D.40 CI_ACCUM_GRP_SL_LASER_EXC

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	FIRST_NAME	Format Change	VARCHAR2(30)	VARCHAR2(50)	No	-
2.	LAST_NAME	Format Change	VARCHAR2(30)	CHAR(50)	No	-

D.41 CI_APAY_CLR_STG

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENCR_EXT_ACCT_ID	Newly Added	-	VARCHAR2(108)	No	-

D.42 CI_APPTXN_REASON_L

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DESCR	Format Change	CHAR(60)	VARCHAR2(60)	No	-

D.43 CI_BILL_LOG

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_VAL	Format Change	CHAR(1)	VARCHAR2(16)	No	-

D.44 CI_CHG_TYPE

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHG_TYPE_SUB_CAT_FLG	Newly Added	-	CHAR(4)	No	-

D.45 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 V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM	Format Change	VARCHAR2(30)	VARCHAR2(2000)	No	-

D.46 CI_CUST_BILLED_PRICE_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCOUNTNUMBER	Newly Added	-	VARCHAR2(30)	No	-
2.	BASE_AMT	Newly Added	-	NUMBER(36,18)	No	-
3.	BILL_DT	Newly Added	-	DATE	No	-
4.	BILL_ID	Newly Added	-	CHAR(12)	No	-
5.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
6.	BILL_SQ	Newly Added	-	NUMBER(36,18)	No	-
7.	BILLEDAMT	Newly Added	-	VARCHAR2(23)	No	-
8.	CURRENCYCODE	Newly Added	-	CHAR(3)	No	-
9.	CUSTOMERNAME	Newly Added	-	VARCHAR2(254)	No	-
10.	DIRECTDEBITACCOUNT	Newly Added	-	VARCHAR2(50)	No	-
11.	ITEMTYPECODE	Newly Added	-	CHAR(30)	No	-
12.	PC_VALUE_AMT	Newly Added	-	NUMBER(36,18)	No	-
13.	PER_ID	Newly Added	-	CHAR(10)	No	-
14.	PER_ID_NBR	Newly Added	-	VARCHAR2(90)	No	-
15.	ID_TYPE_CD	Newly Added	-	CHAR(8)	No	-
16.	PRICECOMP_ID	Newly Added	-	CHAR(10)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
17.	PRODUCTCODE	Newly Added	-	CHAR(30)	No	-
18.	RS_CD	Newly Added	-	CHAR(8)	No	-
19.	VALUE_AMT	Newly Added	-	NUMBER(36,18)	No	-
20.	RC_SEQ	Newly Added	-	NUMBER(3)	No	-
21.	TAX_CHAR_CD	Newly Added	-	VARCHAR2(8)	No	-
22.	TIERFROM	Newly Added	-	NUMBER(36,18)	No	-
23.	TIERTO	Newly Added	-	VARCHAR2(40)	No	-
24.	TIERED_FLAG	Newly Added	-	CHAR(4)	No	-
25.	VAL_TYPE_FLG	Newly Added	-	CHAR(2)	No	-

D.47 CI_DEG_MONTH_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	START_DT	Format Change	DATE(8)	DATE(7)	No	-
2.	START_NEXT_DT	Format Change	DATE(8)	DATE(7)	No	-

D.48 CI_DELETE_BILL_DETAIL

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BO_STATUS_CD	Format Change	CHAR(1)	VARCHAR2(12)	No	-

D.49 CI_ENRL_FLD

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENCR_COL_REF_VAL	Newly Added	-	VARCHAR2(108)	No	-

D.50 CI_ENTITY_DETAIL

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BUS_OBJ_CD	Format Change	CHAR(12)	VARCHAR2(30)	No	-

D.51 CI_FILE_GROUP

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CREATED_BY	Format Change	CHAR(8)	VARCHAR2(254)	No	-

D.52 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 V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BATCH_CD	Newly Added	-	CHAR(8)	No	-

D.53 CI_FILE_REQUEST_DETAIL

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BATCH_CD	Newly Added	-	CHAR(8)	No	-
2.	BATCH_NBR	Newly Added	-	NUMBER(10)	No	-
3.	PRIMARY_REQUEST_ID	Newly Added	-	CHAR(20)	No	-

D.54 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 V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	GROUP_REC_ORDER_BY	Newly Added	-	VARCHAR2(150)	No	-
2.	GROUP_IDENTICAL_REC_SW	Newly Added	-	CHAR(1)	No	-
3.	DELIMITER	Dropped	CHAR(4)	-	-	-
4.	FILE_DECRYPT_ALG_CD	Dropped	CHAR(12)	-	-	-

D.55 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 V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CLOB_TYPE_SW	Dropped	CHAR(1)	-	-	-
2.	TRANSFORM_ALG_CD	Dropped	CHAR(12)	-	-	-

D.56 CI_GET_SA_ID_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SA_ID	Newly Added	-	CHAR(10)	No	-

D.57 CI_MR_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	READ_DT	Format Change	DATE(8)	DATE(7)	No	-

D.58 CI_NOTE_TYPE_L

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DESCR	Format Change	CHAR(8)	VARCHAR2(60)	No	-

D.59 CI_OVRD_ACCOUNT_LEVEL_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_ID	Newly Added	-	CHAR(10)	No	-
2.	END_DT	Newly Added	-	DATE	No	-
3.	INHERITEDFROM	Newly Added	-	CHAR(1)	No	-
4.	LOWER_LIMIT	Newly Added	-	NUMBER(36,18)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
5.	OVERRIDESTANDARD	Newly Added	-	CHAR(25)	No	-
6.	PER_ID1	Newly Added	-	CHAR(10)	No	-
7.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-
8.	PRICE_CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
9.	VALUE_AMT	Newly Added	-	NUMBER(36,18)	No	-
10.	START_DT	Newly Added	-	DATE	No	-
11.	UPPER_LIMIT	Newly Added	-	NUMBER(36,18)	No	-
12.	VAL_TYPE_FLG	Newly Added	-	CHAR(2)	No	-

D.60 CI_OVRD_PARENT_PERSON_LEVEL_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_ID	Newly Added	-	VARCHAR2	No	-
2.	END_DT	Newly Added	-	DATE	No	-
3.	INHERITEDFROM	Newly Added	-	VARCHAR2(90)	No	-
4.	LOWER_LIMIT	Newly Added	-	NUMBER(36,18)	No	-
5.	OVERRIDESTANDARD	Newly Added	-	CHAR(31)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
6.	PARTY_ID	Newly Added	-	CHAR(10)	No	-
7.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-
8.	PRICE_CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
9.	VALUE_AMT	Newly Added	-	NUMBER(36,18)	No	-
10.	START_DT	Newly Added	-	DATE	No	-
11.	UPPER_LIMIT	Newly Added	-	NUMBER(36,18)	No	-
12.	VAL_TYPE_FLG	Newly Added	-	CHAR(2)	No	-

D.61 CI_OVRD_PERSON_LEVEL_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_ID	Newly Added	-	VARCHAR2	No	-
2.	END_DT	Newly Added	-	DATE	No	-
3.	INHERITEDFROM	Newly Added	-	CHAR(1)	No	-
4.	LOWER_LIMIT	Newly Added	-	NUMBER(36,18)	No	-
5.	OVERRIDESTANDARD	Newly Added	-	CHAR(24)	No	-
6.	PARTY_ID	Newly Added	-	CHAR(10)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
7.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-
8.	PRICE_CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
9.	VALUE_AMT	Newly Added	-	NUMBER(36,18)	No	-
10.	START_DT	Newly Added	-	DATE	No	-
11.	UPPER_LIMIT	Newly Added	-	NUMBER(36,18)	No	-
12.	VAL_TYPE_FLG	Newly Added	-	CHAR(2)	No	-

D.62 CI_PER

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	REL_MGR	Newly Added	-	CHAR(8)	No	-

D.63 CI_PER_ADDR

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	POSTAL	Format Change	VARCHAR2(12)	CHAR(12)	No	-

D.64 CI_PEVT_DTL_ST

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENCR_EXT_ACCT_ID	Newly Added	-	VARCHAR2(108)	No	-
2.	ENTITY_NAME	Format Change	CHAR(254)	VARCHAR2(254)	No	-

D.65 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 V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM1	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
2.	MESSAGE_PARM2	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
3.	MESSAGE_PARM3	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
4.	MESSAGE_PARM4	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
5.	MESSAGE_PARM5	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-

D.66 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 V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	FLOOR_CEIL_TYPE	Newly Added	-	CHAR(4)	No	-

D.67 CI_PRICEITEM

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	FLOOR_CEIL_TYPE	Newly Added	-	CHAR(4)	No	-
2.	ROLE_ID	Newly Added	-	CHAR(10)	No	-
3.	TD_TYPE_CD	Newly Added	-	CHAR(8)	No	-

D.68 CI_PRICELIST

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	AVAIL_DEAL_SW	Newly Added	-	CHAR(1)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
2.	STANDARD_DEAL_SW	Newly Added	-	CHAR(1)	No	-

D.69 CI_PROFILE

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	UI_MAP_CD	Format Change	CHAR(30)	VARCHAR2(30)	No	-

D.70 CI_REPRC_ENTITY_DTL

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM1	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
2.	MESSAGE_PARM2	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
3.	MESSAGE_PARM3	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
4.	MESSAGE_PARM4	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
5.	MESSAGE_PARM5	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-

D.71 CI_REPRC_REQ_DTL

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM1	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
2.	MESSAGE_PARM2	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
3.	MESSAGE_PARM3	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
4.	MESSAGE_PARM4	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
5.	MESSAGE_PARM5	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-

D.72 CI_RPT_AUDIT

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BATCH_RUN_NBR	Newly Added	-	NUMBER(10)	No	-
2.	REQUEST_HASH	Newly Added	-	VARCHAR2(50)	No	-
3.	CREATED_BY	Format Change	CHAR(8)	VARCHAR2(254)	No	-

D.73 CI_RPT_DTL

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	EMAIL_BODY_CONTENT	Newly Added	-	VARCHAR2(4000)	No	-
2.	EMAIL_ID	Newly Added	-	VARCHAR2(120)	No	-
3.	EMAIL_SUBJECT	Newly Added	-	VARCHAR2(4000)	No	-
4.	CREATED_BY	Format Change	CHAR(8)	VARCHAR2(254)	No	-

D.74 CI_SETT_ACC_NOT_MAPPED1_VW

The following table lists the columns that are either newly added or modified in the CI_SETT_ACC_NOT_MAPPED1_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_NBR	Newly Added	-	VARCHAR2(30)	No	-
2.	TEMPLATE_CD	Newly Added	-	CHAR(14)	No	-
3.	CRITT_VARIABLE_VALUE	Newly Added	-	VARCHAR2(254)	No	-
4.	CRIT_VARIABLE_VALUE	Newly Added	-	VARCHAR2(254)	No	-

D.75 CI_SETT_ACC_NOT_MAPPED2_VW

The following table lists the columns that are either newly added or modified in the CI_SETT_ACC_NOT_MAPPED2_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_NBR	Newly Added	-	VARCHAR2(30)	No	-
2.	TEMPLATE_CD	Newly Added	-	CHAR(14)	No	-
3.	CRIT_VARIABLE_VALUE	Newly Added	-	VARCHAR2(254)	No	-
4.	CRIT_VARIABLE_VALUE	Newly Added	-	VARCHAR2(254)	No	-

D.76 CI_SETT_ACC_NOT_MAPPED3_VW

The following table lists the columns that are either newly added or modified in the CI_SETT_ACC_NOT_MAPPED3_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_NBR	Newly Added	-	VARCHAR2(30)	No	-
2.	TEMPLATE_CD	Newly Added	-	CHAR(14)	No	-
3.	VARIABLE_VALUE	Newly Added	-	VARCHAR2(254)	No	-

D.77 CI_SETT_ACC_NOT_MAPPED4_VW

The following table lists the columns that are either newly added or modified in the CI_SETT_ACC_NOT_MAPPED4_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_ID	Newly Added	-	CHAR(10)	No	-
2.	ACCT_NBR	Newly Added	-	VARCHAR2(30)	No	-
3.	CHAR_TYPE_CD	Newly Added	-	CHAR(8)	No	-
4.	TEMPLATE_CD	Newly Added	-	CHAR(14)	No	-

D.78 CI_SETL_SOLDPROD_EXTRACT_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ITEM_TYPE_CD	Newly Added	-	VARCHAR2(254)	No	-
2.	SETL_ACCT_ID	Newly Added	-	CHAR(10)	No	-
3.	SOLD_PROD_ID	Newly Added	-	VARCHAR2(30)	No	-

D.79 CI_STD_PRICE_LIST_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_ID	Newly Added	-	VARCHAR2	No	-
2.	END_DT	Newly Added	-	DATE	No	-
3.	INHERITEDFROM	Newly Added	-	CHAR(18)	No	-
4.	LOWER_LIMIT	Newly Added	-	NUMBER(36,18)	No	-
5.	OVERRIDESTANDARD	Newly Added	-	CHAR(8)	No	-
6.	PARTY_ID	Newly Added	-	CHAR(10)	No	-
7.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-
8.	PRICE_CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
9.	VALUE_AMT	Newly Added	-	NUMBER(36,18)	No	-
10.	START_DT	Newly Added	-	DATE	No	-
11.	UPPER_LIMIT	Newly Added	-	NUMBER(36,18)	No	-
12.	VAL_TYPE_FLG	Newly Added	-	CHAR(2)	No	-

D.80 CI_STM_ACCT_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENCR_EXT_ACCT_ID	Newly Added	-	VARCHAR2(108)	No	-

D.81 CI_TC

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	TC_PURPOSE	Newly Added	-	VARCHAR2(10)	No	-

D.82 CI_TD_ENTRY_OPEN_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ASSIGNED_TO	Newly Added	-	CHAR(8)	No	-
2.	ASSIGNED_USER_ID	Newly Added	-	CHAR(8)	No	-
3.	ASSIGNED_DTTM	Newly Added	-	DATE	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
4.	BATCH_CD	Newly Added	-	CHAR(8)	No	-
5.	BATCH_NBR	Newly Added	-	NUMBER(10)	No	-
6.	COMMENTS	Newly Added	-	VARCHAR2(254)	No	-
7.	COMPLETE_USER_ID	Newly Added	-	CHAR(8)	No	-
8.	COMPLETE_DTTM	Newly Added	-	DATE	No	-
9.	CRE_DTTM	Newly Added	-	DATE	No	-
10.	DAYS_OLD	Newly Added	-	NUMBER	No	-
11.	DKEY1	Newly Added	-	VARCHAR2(50)	No	-
12.	DKEY2	Newly Added	-	VARCHAR2(50)	No	-
13.	DKEY3	Newly Added	-	VARCHAR2(50)	No	-
14.	DKEY4	Newly Added	-	VARCHAR2(50)	No	-
15.	DKEY5	Newly Added	-	VARCHAR2(50)	No	-
16.	ILM_ARCH_SW	Newly Added	-	CHAR(1)	No	-
17.	ILM_DT	Newly Added	-	DATE	No	-
18.	MESSAGE_CAT_NBR	Newly Added	-	NUMBER(5)	No	-
19.	MESSAGE_NBR	Newly Added	-	NUMBER(5)	No	-
20.	COMMENTS_LOGS	Newly Added	-	VARCHAR2(6)	No	-
21.	PARMS_TLBL	Newly Added	-	VARCHAR2(32767)	No	-
22.	TD_PRIORITY_FLG	Newly Added	-	CHAR(4)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
23.	RELATED_TODO_CNT	Newly Added	-	VARCHAR2(40)	No	-
24.	SKEY1	Newly Added	-	VARCHAR2(50)	No	-
25.	SKEY2	Newly Added	-	VARCHAR2(50)	No	-
26.	SKEY3	Newly Added	-	VARCHAR2(50)	No	-
27.	SKEY4	Newly Added	-	VARCHAR2(50)	No	-
28.	SKEY5	Newly Added	-	VARCHAR2(50)	No	-
29.	ENTRY_STATUS_FLG	Newly Added	-	CHAR(2)	No	-
30.	TD_ENTRY_ID	Newly Added	-	CHAR(14)	No	-
31.	ROLE_ID	Newly Added	-	CHAR(10)	No	-
32.	TD_TYPE_CD	Newly Added	-	CHAR(8)	No	-
33.	VERSION	Newly Added	-	NUMBER(5)	No	-

D.83 CI_TEMPLATE_LOG

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_VAL	Format Change	CHAR(1)	VARCHAR2(16)	No	-

D.84 CI_TRL_BILL_LOG

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_VAL	Format Change	CHAR(1)	VARCHAR2(16)	No	-

D.85 CI_TRL_BSEXT

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	EFF_START_DATE	Newly Added	-	DATE	No	-
2.	TEMPLATE_CD	Newly Added	-	CHAR(14)	No	-

D.86 CI_TXN_DETAIL_EXCP

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM1	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
2.	MESSAGE_PARM2	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
3.	MESSAGE_PARM3	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
4.	MESSAGE_PARM4	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
5.	MESSAGE_PARM5	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-

D.87 CI_TXN_DTL_PRITM_SUMMARY

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MESSAGE_PARM1	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
2.	MESSAGE_PARM2	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
3.	MESSAGE_PARM3	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
4.	MESSAGE_PARM4	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-
5.	MESSAGE_PARM5	Format Change	VARCHAR2(60)	VARCHAR2(2000)	No	-

D.88 CI_TXN_HEADER

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	FILENAME	Format Change	CHAR(60)	CHAR(100)	No	-

D.89 CI_TXN_REC_TYPE_L_UNPIVOT_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	LANGUAGE_CD	Format Change	CHAR(3)	VARCHAR2(3)	No	-

D.90 CI_UPLPAY_HSTG

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	FILE_NAME	Format Change	VARCHAR2(60)	CHAR(60)	No	-

D.91 CI_USAGE_SETTLEMENT_RPT_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHAR_TYPE_CD	Newly Added	-	CHAR(8)	No	-
2.	CHAR_VAL	Newly Added	-	CHAR(16)	No	-
3.	CONSTRUCT_ID	Newly Added	-	CHAR(14)	No	-
4.	EXCLUDE_ACCT_SW	Newly Added	-	CHAR(1)	No	-
5.	INV_ACT	Newly Added	-	VARCHAR2(254)	No	-
6.	PER_ID_NBR	Newly Added	-	VARCHAR2(90)	No	-
7.	ID_TYPE_CD	Newly Added	-	CHAR(8)	No	-
8.	CUSTOMER_NAME	Newly Added	-	VARCHAR2(254)	No	-
9.	PRIORITY_NUM	Newly Added	-	NUMBER(5)	No	-
10.	SETTLEMENT_NBR	Newly Added	-	VARCHAR2(30)	No	-
11.	SOLD_PRODUCT	Newly Added	-	VARCHAR2(30)	No	-
12.	TEMPLATE_CD	Newly Added	-	CHAR(14)	No	-
13.	USER_ID	Newly Added	-	CHAR(8)	No	-
14.	USER_NAME	Newly Added	-	VARCHAR2(101)	No	-
15.	VARIABLE_NAME	Newly Added	-	VARCHAR2(30)	No	-

D.92 CI_USAGE_SETTLEMENT_RPT2_VW

The following table lists the columns that are either newly added or modified in the CI_USAGE_SETTLEMENT_RPT2_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_NBR_TYPE_CD	Newly Added	-	CHAR(10)	No	-
2.	ACT_NBR2_ACCT_ID	Newly Added	-	CHAR(8)	No	-
3.	CONSTRUCT_ID	Newly Added	-	CHAR(14)	No	-
4.	PER_ID_NBR	Newly Added	-	VARCHAR2(90)	No	-
5.	ID_TYPE_CD	Newly Added	-	CHAR(8)	No	-
6.	CUSTOMER_NAME	Newly Added	-	VARCHAR2(254)	No	-
7.	PRIORITY_NUM	Newly Added	-	NUMBER(5)	No	-
8.	SETTLEMENT_NBR	Newly Added	-	VARCHAR2(30)	No	-
9.	SOLD_PRODUCT	Newly Added	-	VARCHAR2(254)	No	-
10.	TEMPLATE_CD	Newly Added	-	CHAR(14)	No	-
11.	USER_ID	Newly Added	-	CHAR(8)	No	-
12.	USER_NAME	Newly Added	-	VARCHAR2(101)	No	-
13.	VARIABLE_NAME	Newly Added	-	VARCHAR2(30)	No	-

D.93 CI_USAGE_SETTLEMENT_RPT3_VW

The following table lists the columns that are either newly added or modified in the CI_USAGE_SETTLEMENT_RPT3_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V2.8.0.0.0	Data Type in V2.9.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACT_NBR1_2_ACCT_NBR	Newly Added	-	VARCHAR2(30)	No	-
2.	CONSTRUCT_ID	Newly Added	-	CHAR(14)	No	-
3.	ID_TYPE_CD	Newly Added	-	CHAR(8)	No	-
4.	SOLD_PRODUCT	Newly Added	-	VARCHAR2(254)	No	-
5.	TEMPLATE_CD	Newly Added	-	CHAR(14)	No	-
6.	VARIABLE_NAME	Newly Added	-	VARCHAR2(30)	No	-
7.	VARIABLE_VALUE	Newly Added	-	VARCHAR2(254)	No	-

Appendix E : Algorithms and Algorithm Types Dropped in 2.9.0.0.0

This section lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 2.9.0.0.0.

E.1 Algorithm Type

No algorithm types are dropped in Oracle Revenue Management and Billing Version 2.9.0.0.0.

E.2 Algorithm

The following table lists the algorithms which are dropped in Oracle Revenue Management and Billing Version 2.9.0.0.0:

Algorithm	Description
C1-MEMPOSTPR	Membership Post Processing
C1-POLPLPOST	Policy Plan Post Processing
C1-PRCPOSTPR	Pricing Rule Post Processing
C1-APHRCYEN	Approval Transaction Creation for Price Item
TEST-GL-AL	Payoff Amt = Bill Amt / Current Amt = Amt Due

Appendix F : Parameters Added or Removed from Algorithm Types in 2.9.0.0.0

This section lists the parameters which are newly added or removed from the existing algorithm types in Oracle Revenue Management and Billing Version 2.9.0.0.0.

Algorithm Type	Parameter (Removed from 2.9.0.0.0)	Parameter (Added in 2.9.0.0.0)
C1-BILLSEG	-	Catch Up Flag For Cancelled Bill Segments Of Recurring Billable Charges
C1-BILLTOLR	-	Skip Bill To Do Creation For First Bill With No Financial Transaction

Appendix G : Option Types Added or Removed from Feature Configurations in 2.9.0.0.0

This section lists the option types which are newly added or removed from the existing feature configurations in Oracle Revenue Management and Billing Version 2.9.0.0.0.

Feature Name	Option Type (Removed from 2.9.0.0.0)	Option Type (Added in 2.9.0.0.0)
C1-ASOBLLNG	-	Membership Inactive Status
		Membership Person Inactive Status
		Plan Based Contract Creation Eligibility
		Plan Based Contract Characteristic Type
		Plan Based Contract Characteristic Value
		Plan ID Characteristic Type
		Account Identifier Type Char Type
		Account Identifier Value Char Type
		Person Identifier Type Char Type
		Person Identifier Value Char Type
		Off-Process Request Detail Maximum Count
		Policy Renewal Status
		Paid Through Date Eligibility Characteristic Type
		Paid Through Date Eligibility Characteristic Value
Approval Workflow Group for MPP		
Tier Level Characteristic Type		
C1-INCT	-	Settlement Currency Validation Required
C1_FINTRANOP	-	Skip Priceitem Contract Type Validation
		Rate Component Step Optimization

Feature Name	Option Type (Removed from 2.9.0.0.0)	Option Type (Added in 2.9.0.0.0)
		Trial bill characteristic conversion
		Allow Caching Of Rule Based Autopay List
C1_PER_REL	-	Person to Person Relationship Type
DISTBRULE	-	Default Auto Pay Method
		Payment Advice Functionality Supported (Y/N)
C1_AXENTITY	-	Display only Differences of fields on UI
		Approval Transaction screen timeout

Appendix H : Characteristic Types Dropped in 2.9.0.0.0

No characteristic types are dropped in Oracle Revenue Management and Billing Version 2.9.0.0.0.

Appendix I : 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 4.4.0.0.0:

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
```

Appendix J : ORMB V2.9.0.0.0 Rollup Packs

Instead of individually applying the patches, you can download and apply the release-specific rollup packs. The following table indicates whether a patch is included in any rollup pack:

Patch Number	Patch Description	Rollup Pack
31066976	MANDATORY PATCH 1 FOR ORMB VERSION 2.9.0.0.0	31319753 - ROLLUP PACK ORMB V2.9.0.0.0
31074070	MANDATORY PATCH 2 FOR ORMB VERSION 2.9.0.0.0	
31008818	UPDATE ONLINE HELP FOR ORMB VERSION 2.9.0.0.0	
31122862	MANDATORY PATCH 3 FOR ORMB VERSION 2.9.0.0.0	
31130102	MANDATORY PATCH 4 FOR ORMB VERSION 2.9.0.0.0	
31190091	MANDATORY PATCH 5 FOR ORMB VERSION 2.9.0.0.0	
31172781	MANDATORY PATCH 6 FOR ORMB VERSION 2.9.0.0.0	
31222633	MANDATORY PATCH 7 FOR ORMB VERSION 2.9.0.0.0	
31248602	MANDATORY PATCH 8 FOR ORMB VERSION 2.9.0.0.0	
31313821	MANDATORY PATCH 9 FOR ORMB VERSION 2.9.0.0.0	
31314417	MANDATORY PATCH 10 FOR ORMB VERSION 2.9.0.0.0	

Note: The above patch list is not comprehensive. For the complete list of patches that you need to apply on the application environment and database, see the *ORMB V29000 Patch Guide (Doc ID: 2704165.1)* which is available on [My Oracle Support](#).

J.1 Applying a Rollup Pack on the Application Environment

Once you install ORMB, you need to apply the above listed rollup packs. To apply a rollup pack on the application environment:

1. Download the rollup pack from [My Oracle Support](#). A zip file is downloaded.
2. Unzip the rollup pack using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_1>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_1>
```

The contents of the zip file are extracted in the <DESTINATION_FOLDER_1> folder. The contents include the `README.txt` file and three folders named `RMB_V2.9.0.0.0_App_Rollup`, `RMB_V2.9.0.0.0_DB_Rollup`, and `RMB_V2.9.0.0.0_PFDs`.

- 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%
```

Where,

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

- Change to the `RMB_V2.9.0.0.0_App_Rollup` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/RMB_V2.9.0.0.0_App_Rollup
```

Windows:

```
cd <DESTINATION_FOLDER_1>\RMB_V2.9.0.0.0_App_Rollup
```

Note: The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the rollup pack.

- Install the patch using the following command:

AIX, Linux:

```
./installSFgroup.sh
```

Windows:

```
installSFgroup.cmd
```

J.2 Applying a Rollup Pack on the Database

Once you install ORMB, you need to apply the above listed rollup packs. To apply a rollup pack on the database:

- Download the rollup pack from [My Oracle Support](#). A zip file is downloaded.
- Unzip the rollup pack using the following command:

AIX, Linux:

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_1>
```

Windows:

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_1>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_1>` folder. The contents include the `README.txt` file and three folders named `RMB_V2.9.0.0.0_App_Rollup`, `RMB_V2.9.0.0.0_DB_Rollup`, and `RMB_V2.9.0.0.0_PFDs`.

3. Change to the `RMB_V2.9.0.0.0_DB_Rollup` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/RMB_V2.9.0.0.0_DB_Rollup
```

Windows:

```
cd <DESTINATION_FOLDER_1>\RMB_V2.9.0.0.0_DB_Rollup
```

Note: The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the rollup pack.

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

Windows:

```
ouafDatabasePatch.cmd
```

AIX, Linux:

```
ouafDatabasePatch.sh
```