

**Oracle Financial Services Revenue  
Management and Billing**

**OR**

**Oracle Insurance Revenue  
Management and Billing**

Version 7.0.0.0.0

**Upgrade Guide**

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Oracle Financial Services Revenue Management and Billing/Oracle Insurance Revenue Management and Billing Version 7.0.0.0.0 Upgrade Guide

**Note:** To improve the content readability, the above two products are collectively referred to as Oracle Revenue Management and Billing throughout this document.

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# Preface

## About This Document

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

## Intended Audience

This document is intended for the following audience:

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

## Organization of the Document

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

Section No.	Section Name	Description
Section 1	Preparing for Upgrade	Provides an overview of the upgrade process. It also lists the prerequisites for upgrading the application.
Section 2	Upgrading from ORMB Version 6.1.0.0.0 to 7.0.0.0.0	Explains how to upgrade from Oracle Revenue Management and Billing Version 6.1.0.0.0 to 7.0.0.0.0
Section 3	Additional Tasks	Lists and describes the additional tasks that you need to perform after upgrading the application.
Appendix A	Known Issues	Lists the known issues in Oracle Revenue Management and Billing Version 7.0.0.0.0
Appendix B	Third-Party Software Upgrade	Provides a list of third-party software that you need to upgrade before upgrading the application.
Appendix C	New Tables Added in ORMB Version 7.0.0.0.0	Lists and describes the tables that are newly added in Oracle Revenue Management and Billing Version 7.0.0.0.0
Appendix D	Existing Tables Modified in ORMB Version 7.0.0.0.0	Lists the existing tables and their columns that are modified in Oracle Revenue Management and Billing Version 7.0.0.0.0

Section No.	Section Name	Description
Appendix E	Algorithms and Algorithm Types Dropped in ORMB Version 7.0.0.0.0	Lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 7.0.0.0.0
Appendix F	Parameters Added or Removed from Algorithm Types in ORMB Version 7.0.0.0.0	Lists the parameters which are added or removed from the algorithm types in Oracle Revenue Management and Billing Version 7.0.0.0.0
Appendix G	Option Types Added or Removed from Feature Configurations in ORMB Version 7.0.0.0.0	Lists the option types which are added or removed from the feature configurations in Oracle Revenue Management and Billing Version 7.0.0.0.0
Appendix H	Characteristic Types Dropped in ORMB Version 7.0.0.0.0	Lists the characteristic types which are dropped in Oracle Revenue Management and Billing Version 7.0.0.0.0
Appendix I	Batch Controls Dropped in ORMB Version 7.0.0.0.0	Lists the batch controls which are dropped in Oracle Revenue Management and Billing Version 7.0.0.0.0
Appendix J	Parameters Added or Removed from Batch Controls in ORMB Version 7.0.0.0.0	Lists the parameters which are added or removed from the batch controls in Oracle Revenue Management and Billing Version 7.0.0.0.0
Appendix K	Changing the DB User Password	Explains how to change the database user password.
Appendix L	ORMB V7.0.0.0.0 Rollup Packs	Lists the rollup packs available for Oracle Revenue Management and Billing Version 7.0.0.0.0. It also explains how to apply a rollup pack on the application environment and database.
Appendix M	New Tables Added in OUAF Version 4.5.0.1.3	Lists and describes the tables that are newly added in Oracle Utilities Application Framework Version 4.5.0.1.3.
Appendix N	Existing Tables Modified in OUAF Version 4.5.0.1.3	Lists the existing tables and their columns that are modified in Oracle Utilities Application Framework Version 4.5.0.1.3.
Appendix O	Algorithms and Algorithm Types Dropped in OUAF Version 4.5.0.1.3	Lists the algorithms and algorithm types which are dropped in Oracle Utilities Application Framework Version 4.5.0.1.3.
Appendix P	Parameters Added or Removed from Batch Controls in OUAF Version 4.5.0.1.3	Lists the parameters which are added or removed from the batch controls in Oracle Utilities Application Framework Version 4.5.0.1.3.

Section No.	Section Name	Description
Appendix Q	SQL Statements for 6.1.0.0.0 to 7.0.0.0.0 Data Migration	Lists and describes the query which is used for migrating data from Oracle Revenue Management and Billing Version 6.1.0.0.0 to 7.0.0.0.0.

## Conventions

The following conventions are used across the document:

Convention	Meaning
<b>boldface</b>	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.

## Acronyms

The following acronyms are used in this document:

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

## Related Documents

You can see the following documents for more information:

Document Name	Description
<i>Oracle Revenue Management and Billing Version 7.0.0.0.0 Release Notes</i>	Provides a brief description about the new features, enhancements, and UI level changes introduced in the current release. The new features and enhancements are classified under three distinct heads – Generic (which is intended for both domains), Financial Services, and Health Insurance. It also contains high-level information about the supported platforms, framework upgrade, supported upgrades, and documentation updates. In addition, it contains a list of discontinued features, planned deprecation notices, customer bugs fixed or forward ported and known issues in the current 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.
<i>Oracle Revenue Management and Billing Direct Database Upgrade Guide</i>	Explains how to directly upgrade the ORMB database from 2.5.0.1.0 or any later version to the current release. It also highlights any known issues during direct database upgrade and how to handle these issues in the database.

## Change Log

Revision	Last Update	Updated Section	Comments
27.1	19-Aug-2024	Section 2.3.3: Installing Rollup Pack for OUAF Version 4.5.0.1.3	Updated Information
		Section 2.6.2: Applying the Release-Specific Patches	Updated Information
		Appendix L : ORMB V7.0.0.0.0 Rollup Packs	Updated Information
27.2	05-Oct-2024	Preface	Updated Information
		Section 2.5.2: Applying the Release-Specific Patches	Updated Information
		Section 2.6: Upgrading the ORMB Database	Updated Information
		Section 2.6.2: Applying the Release-Specific Patches	Updated Information

Revision	Last Update	Updated Section	Comments
		Appendix L: ORMB V7.0.0.0.0 Rollup Packs	Updated Information
27.3	12-Mar-2025	Appendix C: New Tables Added in ORMB Version 7.0.0.0.0	Added Information
27.4	21-July-2025	Section 2.3.1: Pre-requisites	Updated Information
		Section 2.3.2: Installing OUAF Version 4.5.0.1.3	Updated Information
		Section 2.3.3: Installing Rollup Pack for OUAF Version 4.5.0.1.3	Updated Information
		Section 2.6.1: Installing ORMB Version 7.0.0.0.0	Updated Information
		Section 2.6.2: Applying the Release-Specific Patches	Updated Information
		Appendix L.2: Applying a Rollup Pack on the Database	Updated Information

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# 1. Preparing for Upgrade

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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.

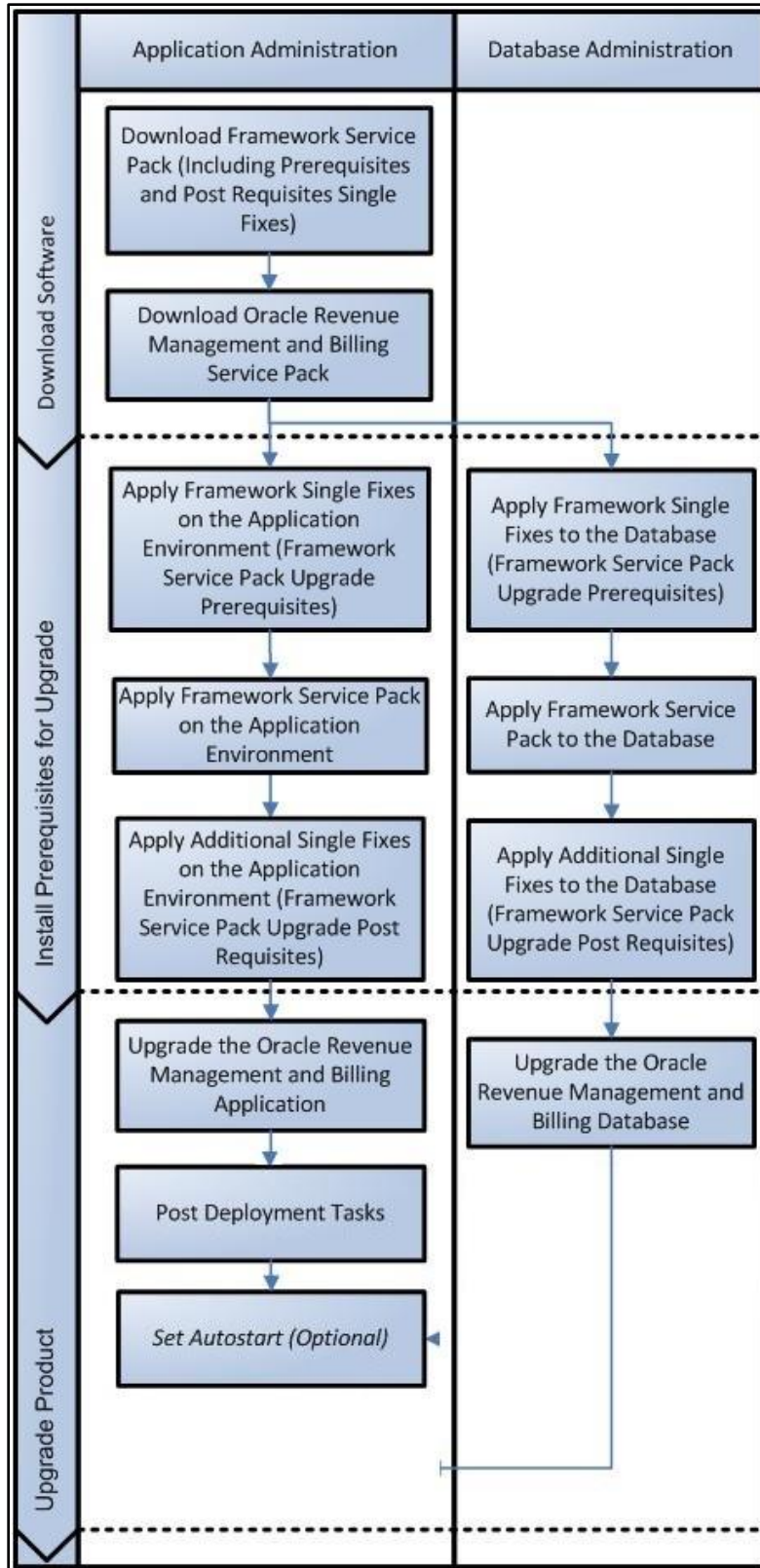


Figure 1: Upgrade Process

## 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, see 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 6.1.0.0.0 to 7.0.0.0.0

## 2. Upgrading from ORMB Version 6.1.0.0.0 to 7.0.0.0.0

This section explains how to upgrade from Oracle Revenue Management and Billing Version 6.1.0.0.0 to 7.0.0.0.0. The high-level steps include:

1. [Downloading the OUAF and ORMB Packages](#)
2. [Upgrading Framework on the Database](#)
3. [Installing Framework on the Application Environment](#)
4. [Installing the ORMB Application](#)
5. [Upgrading the ORMB Database](#)
6. [Migrating Data](#)

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

### 2.1 Prerequisites

If you are already using the Transaction Feed Management feature and want to upgrade to Oracle Revenue Management and Billing Version 7.0.0.0.0, 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 any previous version will not happen successfully.
- Transactions which are uploaded using any previous version must not be in the **Initial Product Determined (INPD)** status. They can be in the **Uploaded (UPLD)**, **Invalid (INVL)**, **Error (EROR)**, **Completed (COMP)**, or **Cancelled (CNCL)** status.
- Equal to (=) or tilde (~) symbol is not used in any existing price item parameter code or value. Otherwise, erroneous results might occur.

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

### 2.2 Downloading the OUAF and ORMB Packages

For upgrading from Oracle Revenue Management and Billing Version 6.1.0.0.0 to 7.0.0.0.0, you must download the following packages from the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0** or **Oracle Insurance Revenue Management and Billing 7.0.0.0.0** media pack which is available on [Oracle Software Delivery Cloud](#):

- Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.3) Single Fix Prerequisite Rollup



- Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Multiplatform
- Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Database

You must also download the following packages from the **Oracle Utilities Application Framework 4.5.0.1.3** media pack which is available on [Oracle Software Delivery Cloud](#):

- Oracle Utilities Application Framework 4.5.0.1.3 - Application Installation Media
- Oracle Utilities Application Framework 4.5.0.1.3 - Database Installation Media

The downloaded files will be in the ZIP format.

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

- UPGRADE FROM 6.1.0.0.0 TO 7.0.0.0.0 (Patch Number: 36890020)

The downloaded files will be in the ZIP format.


## 2.2.1 Downloading the OUAF Packages

Oracle Utilities Application Framework 4.5.0.1.3 media pack can be installed on the following supported platforms:

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

The media pack includes the following packages - **Oracle Utilities Application Framework 4.5.0.1.3 - Database Installation Media** and **Oracle Utilities Application Framework 4.5.0.1.3 - Application Installation Media**.

To download the OUAF packages:

1. Login to [Oracle Software Delivery Cloud](#).
2. Select the **Release** option from the **All Categories** list.
3. Type **Oracle Utilities Application Framework** in the corresponding text box.
4. Click **Search**. A list of media packs appears in the search results.
5. Click the **Select** () icon corresponding to the **Oracle Utilities Application Framework 4.5.0.1.3** media pack.
6. If required, you can verify the media pack which is selected by clicking the **View Items** link.
7. Click the **Continue** link. A page appears.
8. Select the required platform from the **Platforms/Languages** list.
9. Click **Continue**. A page appears with the license agreement.
10. Scroll and read the entire license agreement and then click the **I reviewed and accept the Oracle License Agreement** option.
11. Click **Continue**. The **File Download** page appears.
12. Select the following packages from the media pack:
  - Oracle Utilities Application Framework 4.5.0.1.3 - Application Installation Media
  - Oracle Utilities Application Framework 4.5.0.1.3 - Database Installation Media
13. Click **Download**. An executable file is downloaded on your local machine.

14. Run the executable file. The **Oracle Download Manager** window appears.
15. Browse to the location where you want to download the packages and then click **Next**. The packages are downloaded on your local machine.


## 2.2.2 Downloading the ORMB Packages

Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 and Oracle Insurance Revenue Management and Billing 7.0.0.0.0 media packs can be installed on the following supported platforms:

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

The media pack includes multiple packages. For more information, see the **Media Pack Contents** section in the *Oracle Revenue Management and Billing Version 7.0.0.0.0 Quick Installation Guide*.

To download the ORMB packages:

1. Login to [Oracle Software Delivery Cloud](#).
2. Select the **Release** option from the **All Categories** list.
3. Type **Oracle Financial Services Revenue Management and Billing** or **Oracle Insurance Revenue Management and Billing** in the corresponding text box.
4. Click **Search**. A list of media packs appears in the search results.
5. Click the **Select** (  ) icon corresponding to the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0** or **Oracle Insurance Revenue Management and Billing 7.0.0.0.0** media pack.
6. If required, you can verify the media pack which is selected by clicking the **View Items** link.
7. Click the **Continue** link. A page appears.
8. Select the required platform from the **Platforms/Languages** list.
9. Click **Continue**. A page appears with the license agreement.
10. Scroll and read the entire license agreement and then click the **I reviewed and accept the Oracle License Agreement** option.
11. Click **Continue**. The **File Download** page appears.
12. Select the following packages from the media pack:
  - Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.3) Single Fix Prerequisite Rollup
  - Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Multiplatform
  - Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Database
13. Click **Download**. An executable file is downloaded on your local machine.
14. Run the executable file. The **Oracle Download Manager** window appears.
15. Browse to the location where you want to download the packages and then click **Next**. The packages are downloaded on your local machine.

## 2.3 Upgrading Framework on the Database

While upgrading from Oracle Revenue Management and Billing Version 6.1.0.0.0 to 7.0.0.0.0, you need to install the following on the database:

1. [Oracle Utilities Application Framework \(OUAF\) Version 4.5.0.1.3](#)
2. [Rollup Pack for Oracle Utilities Application Framework \(OUAF\) Version 4.5.0.1.3](#)

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

### 2.3.1 Pre-requisites

Before installing Oracle Utilities Application Framework Version 4.5.0.1.3, you need to do the following:

- Set the **MAX\_STRING\_SIZE** parameter to **EXTENDED** – For more information, see the **Setting the MAX\_STRING\_SIZE Parameter to EXTENDED** topic of the **Initial Install or Installing Version 7.0.0.0.0 for the First Time** section in the *Oracle Revenue Management and Billing Database Administrator's Guide*.
- Assign the **Execute** privilege for the **DBMS\_CRYPTO** package to the **CISADM** user - For more information, see the **Enabling the DBMS\_CRYPTO Package** topic of the **Initial Install or Installing Version 7.0.0.0.0 for the First Time** section in the *Oracle Revenue Management and Billing Database Administrator's Guide*.
- Set the interval partitioning for the **F1\_MO\_UPD** and **F1\_MO\_UPD\_BACKLOG** tables – For more information, see the **Partitioning F1\_MO\_UPD and F1\_MO\_UPD\_BACKLOG Tables** section of the *Oracle Revenue Management and Billing Database Administrator's Guide*.

### 2.3.2 Installing OUAF Version 4.5.0.1.3

To install Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.3:

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

```
mkdir TEMPDIR
```

3. Copy the **Oracle Utilities Application Framework 4.5.0.1.3 - Database Installation Media** package to the `TEMPDIR` folder using the following command:

**AIX, Linux:**

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

**Windows:**

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

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

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

**AIX, Linux:**

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

**Windows:**

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

5. Unzip the **Oracle Utilities Application Framework 4.5.0.1.3 - Database Installation Media** package using the following command:

**AIX, Linux:**

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

**Windows:**

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

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

- `Install-Upgrade`
- `jarfiles`

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

**AIX, Linux:**

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

**Windows:**

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

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

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

**AIX, Linux:**

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

**Note:**

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

The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the **Oracle Utilities Application Framework 4.5.0.1.3 - Database Installation Media** package.

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

**AIX, Linux:**

```
export CLASS_PATH=$JAR_PATH/commons-cli-1.5.0.jar:$JAR_PATH/commons-codec-1.17-744c1c9.jar:$JAR_PATH/jackson-annotations-2.14.0-rc2.jar:$JAR_PATH/jackson-core-2.14.0-rc2.jar:$JAR_PATH/jackson-databind-2.14.0-rc2.jar:$JAR_PATH/log4j-api-2.17.1.jar:$JAR_PATH/log4j-core-2.17.1.jar:$JAR_PATH/ojdbc8-19.18.0.0.0.jar:$JAR_PATH/spl-oradbi-4.5.0.1.3.jar:$JAR_PATH/spl-shared-4.5.0.1.3.jar
```

**Windows:**

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

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

**AIX, Linux:**

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

**Windows:**

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

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

**Windows:**

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

**AIX, Linux:**

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

The following message appears in the command line:

```
Ready to upgrade the target database from V4.5.0.1.1 to V4.5.0.1.3, do you want to continue (Y/N)?
```

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

### 2.3.3 Installing Rollup Pack for OUAF Version 4.5.0.1.3

You can install the rollup pack for Oracle Utilities Application Framework Version 4.5.0.1.3 from a Windows machine or UNIX Standalone server. To install the rollup pack for Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.3 on the database:

1. Log in to the database server using the administrator's credentials.
2. Copy the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.3) Single Fix Prerequisite Rollup** package to the `TEMPDIR` folder using the following command:

**AIX, Linux:**

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

**Windows:**

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

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

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

**AIX, Linux:**

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

**Windows:**

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

4. Unzip the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.3) Single Fix Prerequisite Rollup** package using the following command:

**AIX, Linux:**

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_2>
```

**Windows:**

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_2>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_2>` folder. The contents include the `ORMB-V70000-FW-PREREQ-MultiPlatform.jar` file.

5. Change to the `<DESTINATION_FOLDER_2>` folder using the following command:

**AIX, Linux:**

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

**Windows:**

```
cd <PATH>\<DESTINATION_FOLDER_2>
```

- Decompress the JAR file using the following command:

```
jar -xvf ORMB-V70000-FW-PREREQ-MultiPlatform.jar
```

A sub-folder named `FW-V4.5.0.1.3-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
```

- Create the `db_patch_standalone.jar` file on the application server. For more information, see the **Database Patching Process** section in the *Oracle Revenue Management and Billing Installation Guide*.

- Copy the `db_patch_standalone.jar` file from the `$SPLEBASE/tools/dbstandalone` or `%SPLEBASE%\tools\dbstandalone` folder to the `dbpatch_tools` folder.

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

**AIX, Linux:**

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

**Windows:**

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

- 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`

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

**AIX, Linux:**

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

**Windows:**

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

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

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_2>/FW-V4.5.0.1.3-Rollup/Database
```

**Windows:**

```
cd <DESTINATION_FOLDER_2>\FW-V4.5.0.1.3-Rollup\Database
```

**Note:** The `<DESTINATION_FOLDER_2>` folder is the location where you have extracted the contents of the `ORMB-V70000-FW-PREREQ-MultiPlatform.jar` file.

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

**Windows:**

```
TEMPDIR\dbpatch_tools\bin\ouafDatabasePatch.cmd
```

OR

```
%SPLEBASE%\tools\bin\db\bin\ouafDatabasePatch.cmd
```

**AIX, Linux:**

```
TEMPDIR/dbpatch_tools/bin/ouafDatabasePatch.sh
```

OR

```
$SPLEBASE/tools/bin/db/bin/ouafDatabasePatch.sh
```

**Note:** On the AIX and Linux platforms, ensure that you grant the execute permission for the `ouafDatabasePatch.sh` utility using the following command:

```
chmod 755 ouafDatabasePatch.sh
```

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

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

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

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

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



## 2.4 Installing Framework on the Application Environment

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

1. [Oracle Utilities Application Framework \(OUAF\) Version 4.5.0.1.3](#)
2. [Rollup Pack for Oracle Utilities Application Framework \(OUAF\) Version 4.5.0.1.3](#)

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

### 2.4.1 Installing OUAF Version 4.5.0.1.3

To install Oracle Utilities Application Framework (OUAF) Version 4.5.0.1.3 on the application environment:

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

```
mkdir TEMPDIR
```

3. Copy the **Oracle Utilities Application Framework 4.5.0.1.3 - Application Installation Media** package to the `TEMPDIR` folder using the following command:

**AIX, Linux:**

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

**Windows:**

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

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

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

**AIX, Linux:**

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

**Windows:**

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

5. Unzip the **Oracle Utilities Application Framework 4.5.0.1.3 - Application Installation Media** package using the following command:

**AIX, Linux:**

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

**Windows:**

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

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_1> folder. The contents include a directory named FW-V4.5.0.1.3. The contents of the installation package are identical for all supported platforms. The FW-V4.5.0.1.3 folder contains the OUAF installation software.

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

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

7. Set the `Java_Home` path using the following command:

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

**Points to Note:**

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

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

8. Change to the FW-V4.5.0.1.3 folder using the following command:

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_1>/FW-V4.5.0.1.3
```

**Windows:**

```
cd <DESTINATION_FOLDER_1>\FW-V4.5.0.1.3
```

**Note:** The <DESTINATION\_FOLDER\_1> folder is the location where you have extracted the contents of the **Oracle Utilities Application Framework 4.5.0.1.3 - Application Installation Media** package.

9. 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):
```

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

10. Type <ORACLE\_CLIENT\_HOME>, and then press **Enter**. The following environment installation menus appear in the command line:

- 1. Environment ID, Roles, Third Party Software Configuration
- 2. Keystore Options
- 50. Environment Installation Options

**Points to Note:**

The `<ORACLE_CLIENT_HOME>` is the location where Oracle Database Client is installed. This is required to execute the Perl installation utilities.

If the `ORACLE_CLIENT_HOME` environment variable is set, the installation utility will not request you to provide this information.

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

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

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

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

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

**Points to Note:**

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

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

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

17. Type **P** to proceed with the installation. The following environment configuration menus appear in the command line:
  - 1. Environment Description
  - 2. Business Application Server Configuration
  - 3. Web Application Server Configuration
  - 4. Database Configuration
  - 5. General Configuration Options
  - 6. OUAF TrustStore Options
18. Type **1**, and then press **Enter**. The utility prompts you to enter the environment description.

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

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

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

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

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

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

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

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

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

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

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

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

30. Type **P** to proceed with the installation. The Oracle Utilities Application Framework Version 4.5.0.1.3 is installed on the application server.

**Points to Note:**

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

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

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

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

2. `splenviron` – The `splenviron` utility sets the environment variables using the `ENVIRON.INI` file. On the UNIX machine, this utility is available in the `$$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` - Updated to include all the required environment scripts and objects.
- `$$SPLEBASE (%SPLEBASE%)` – Indicates the `<SPLDIR>/<SPLENVIRON>` folder
- `$$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, start-up or performing an additional application product installation.

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

## 2.4.2 Installing Rollup Pack for OUAF Version 4.5.0.1.3

To install the rollup pack for Oracle Utilities Application Framework Version 4.5.0.1.3 on the application environment:

1. Copy the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.3) Single Fix Prerequisite Rollup** package to the `TEMPDIR` folder using the following command:

**AIX, Linux:**

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

**Windows:**

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

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

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

**AIX, Linux:**

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

**Windows:**

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

3. Unzip the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.3) Single Fix Prerequisite Rollup** package using the following command:

**AIX, Linux:**

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_2>
```

**Windows:**

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_2>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_2>` folder. The contents include the `ORMB-V70000-FW-PREREQ-MultiPlatform.jar` file.

4. Decompress the JAR file using the following command:

```
jar -xvf ORMB-V70000-FW-PREREQ-MultiPlatform.jar
```

A sub-folder named `FW-V4.5.0.1.3-Rollup` is extracted. It contains the following two sub-folders:

- `Application`
- `Database`

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

**AIX, Linux:**

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

**Windows:**

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

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

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_2>/FW-V4.5.0.1.3-Rollup/Application
```

**Windows:**

```
cd <DESTINATION_FOLDER_2>\FW-V4.5.0.1.3-Rollup\Application
```

**Note:** The `<DESTINATION_FOLDER_2>` folder is the location where you have extracted the contents of the `ORMB-V70000-FW-PREREQ-MultiPlatform.jar` file.

7. Execute the `installSFgroup` utility using the following command:

**AIX, Linux:**

```
chmod a+x installSFgroup.sh
```

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

```
./installSFgroup.sh
```

**Windows:**

```
installSFgroup.cmd
```

The following message appears in the command line:

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

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

## 2.5 Installing the ORMB Application

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

1. [Oracle Revenue Management and Billing \(ORMB\) Version 7.0.0.0.0](#)
2. [Oracle Revenue Management and Billing \(ORMB\) Version 7.0.0.0.0 Post Requisite Patches](#)

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

Once you install the application, you can access the application. For more information on how to access the application, see the [Accessing the ORMB Application](#) section.

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

- [C1-CFS](#)
- [C1-REPORTVW](#)
- [C1-FLUPLD](#)

## 2.5.1 Installing ORMB Version 7.0.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 7.0.0.0.0 on the application environment:

1. Login to the application server using the administrator's credentials.
2. Copy the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Multiplatform** package to the `TEMPDIR` folder using the following command:

**AIX, Linux:**

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

**Windows:**

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

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

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

**AIX, Linux:**

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

**Windows:**

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

4. Unzip the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Multiplatform** package using the following command:

**AIX, Linux:**

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_3>
```

**Windows:**

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_3>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_3>` folder. The contents include `ORMB.V7.0.0.0.0` folder.

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

**AIX, Linux:**

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

**Windows:**

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



6. Stop the managed server where the application is hosted using the Oracle WebLogic Console.
7. Change to the `ORMB.V7.0.0.0.0` folder using the following command:

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_3>/ORMB.V7.0.0.0.0
```

**Windows:**

```
cd <DESTINATION_FOLDER_3>\ORMB.V7.0.0.0.0
```

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

**AIX, Linux:**

```
./install.sh
```

**Windows:**

```
install.cmd
```

The following message appears in the command line:

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

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

**Points to Note:**

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

**AIX, Linux:**

```
$SPLEBASE/bin/configureEnv.sh -a
```

**Windows:**

```
%SPLEBASE%\bin\configureEnv.cmd -a
```

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

## 2.5.2 Applying the Release-Specific Patches

Once you install Oracle Revenue Management and Billing (ORMB) Version 7.0.0.0, you need to apply the release-specific patches on the application environment. To view the list of patches that you need to apply on the application environment, see the [ORMB V7.0.0.0 Patch Guide \(Document ID: 3050173.1\)](#) on [My Oracle Support](#).

Alternatively, instead of individually applying the patches, you can download and install the rollup packs, if available, to apply a set of patches at once. For more information about the rollup packs, see [Appendix L: ORMB V7.0.0.0 Rollup Packs](#).

To apply a patch:

1. Download the patch from [My Oracle Support](#). A zip file is downloaded.

2. Unzip the downloaded file using the following command:

**AIX, Linux:**

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_4>
```

**Windows:**

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_4>
```

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

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

**AIX, Linux:**

```
unzip <DESTINATION_FOLDER_4>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_5>
```

**Windows:**

```
unzip <DESTINATION_FOLDER_4>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_5>
```

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_5> folder. The contents include the V7.0.0.0.0-<PATCH\_NUMBER>\_MultiPlatform folder.

4. Change to the V7.0.0.0.0-<PATCH\_NUMBER>\_MultiPlatform folder using the following command:

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_5>/V7.0.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

**Windows:**

```
cd <DESTINATION_FOLDER_5>\V7.0.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

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

The contents include a file named CCB.V7.0.0.0.0-<PATCH\_NUMBER>.jar and a directory named database.

5. Decompress the CCB.V7.0.0.0.0-<PATCH\_NUMBER>.jar file using the following command:

```
jar -xvf CCB.V7.0.0.0.0-<PATCH_NUMBER>.jar
```

The contents include two sub-folders - META-INF and CCB.V7.0.0.0.0-<PATCH\_NUMBER>.

6. 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:**

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

Where,

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

- Change to the `CCB.V7.0.0.0.0-<PATCH_NUMBER>` folder using the following command:

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_5>/V7.0.0.0.0-  
<PATCH_NUMBER>_MultiPlatform/CCB.V7.0.0.0.0-<PATCH_NUMBER>
```

**Windows:**

```
cd <DESTINATION_FOLDER_5>\V7.0.0.0.0-  
<PATCH_NUMBER>_MultiPlatform\CCB.V7.0.0.0.0-<PATCH_NUMBER>
```

- Install the patch using the following command:

**AIX, Linux:**

```
./installSF.sh
```

**Windows:**

```
installSF.cmd
```

- Start the managed server using the Oracle WebLogic Console.

## 2.5.3 Accessing the ORMB Application

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

Application Server	URL
Oracle WebLogic	https://<hostname>:<WebLogic_Port_Number>/ouaf/loginPage.jsp

## 2.5.4 Setting the C1-CFS Feature Configuration

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

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

1. Login to Oracle Revenue Management and Billing Version 7.0.0.0.0.
2. Click the **Admin** link in the **Application** toolbar. A list appears.
3. From the **Admin** menu, select **F** and then click **Feature Configuration**. A sub-menu appears.
4. Click the **Search** option from the **Feature Configuration** sub-menu. The **Feature Configuration Query** screen appears.
5. In the **Feature Configuration Search** zone, enter **C1-CFS** in the **Feature Name** field.
6. Click **Search**. A list of feature configurations that meet the search criteria appears in the search results.
7. In the **Search Results** section, click the link in the **Description** column corresponding to the feature configuration whose details you want to edit. The **Feature Configuration** screen appears. It contains the following option types:

Option Type	Description	Mandatory (Yes or No)
File Object Storage Usage	<p>Used to indicate whether the application environment should use the file object storage service of Oracle Cloud Infrastructure (OCI). The valid values are:</p> <ul style="list-style-type: none"> <li>• Y</li> <li>• N</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to <b>N</b>.</p> <p>You must ensure that the value of this option type is set to <b>N</b> in the On Premise and Cloud Service environments.</p> <p>If the value of this option type is set to <b>Y</b>, you need to accordingly specify the directory paths while executing the <b>DWLDBILC</b>, <b>C1-PUPSG</b>, <b>C1-APACK</b>, and <b>C1-RECUP</b> batches. For more information, see the <i>Oracle Revenue Management and Billing Batch Guide</i>.</p> </div>	Yes
ODB Extendable Lookup and Bucket	<p>Used to specify the following information in the &lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>• The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while uploading the files through the On Demand Billing feature.</li> </ul>	Yes (Conditional)

Option Type	Description	Mandatory (Yes or No)
	<ul style="list-style-type: none"> <li>The bucket or container from where you want to upload the file using the On Demand Billing feature.</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Note:</b> This option type is required only when the <b>File Object Storage Usage</b> option type is set to <b>Y</b> and you want to use the On Demand Billing feature.</p> </div>	
Payment Upld Extendable Lookup and Bucket	<p>Used to specify the following information in the &lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while uploading the files through the Payment Upload feature.</li> <li>The bucket or container from where you want to upload the file using the Payment Upload feature.</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Note:</b> This option type is required only when the <b>File Object Storage Usage</b> option type is set to <b>Y</b> and you want to use the Payment Upload feature.</p> </div>	Yes (Conditional)

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

## 2.5.5 Setting the C1-REPORTVW Feature Configuration

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

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

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

1. Login to Oracle Revenue Management and Billing Version 7.0.0.0.0.
2. Click the **Admin** link in the **Application** toolbar. A list appears.
3. From the **Admin** menu, select **F** and then click **Feature Configuration**. A sub-menu appears.

4. Click the **Search** option from the **Feature Configuration** sub-menu. The **Feature Configuration Query** screen appears.
5. In the **Feature Configuration Search** zone, enter **C1-REPORTVW** in the **Feature Name** field.
6. Click **Search**. A list of feature configurations that meet the search criteria appears in the search results.
7. In the **Search Results** section, click the link in the **Description** column corresponding to the feature configuration whose details you want to edit. The **Feature Configuration** screen appears. It contains the following option types:

Option Type	Description	Mandatory (Yes or No)
Report Download HTTP URL	<p>Used to specify the HTTP servlet using which you want to download and view the FOP reports that are generated in the online mode. You must specify the URL in the following format:</p> <p><a href="https://ipaddress:port/ouaf/reportView">https://ipaddress:port/ouaf/reportView</a></p> <p><b>Note:</b> You must override the default value as per the requirement.</p>	Yes
Report Generation (FOP) File Path	<p>Used to specify the directory or bucket where you want to store the FOP reports which are generated either from the user interface or through a batch process.</p> <p>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:</p> <ul style="list-style-type: none"> <li>• <b>@SHARED_DIR</b> – Used when you want to store the FOP reports in the shared directory on the server.</li> </ul> <p>For example, you can set the value to @SHARED_DIR/output.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://&lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>• The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while storing the FOP reports on OCI</li> </ul>	Yes

Option Type	Description	Mandatory (Yes or No)
	<ul style="list-style-type: none"> <li>The bucket or container where you want the system to store the FOP reports which are generated in the different formats.</li> </ul> <div data-bbox="513 415 1084 701" style="border: 1px solid black; padding: 5px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to <b>@SHARED_DIR/splapp/reporting/output</b>. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. <b>SHARED_DIR</b>) is case-sensitive.</p> </div>	
Report Generation XSL Template File Path	<p>Used to specify the directory or bucket from where the respective XSL file should be fetched while generating the FOP report.</p> <p>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:</p> <ul style="list-style-type: none"> <li><b>@SHARED_DIR</b> – Used when you want to fetch the XSL file from the shared directory on the server.</li> </ul> <p>For example, you can set the value to <b>@SHARED_DIR/xsl</b>.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://&lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while fetching the XSL file for an FOP report.</li> <li>The bucket or container from where you want the system to fetch the XSL file while generating the FOP report.</li> </ul> <div data-bbox="513 1724 1084 1858" style="border: 1px solid black; padding: 5px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to <b>@SHARED_DIR/splapp/reporting/xsl</b>.</p> </div>	Yes

Option Type	Description	Mandatory (Yes or No)
	<p>You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. <b>SHARED_DIR</b>) is case-sensitive.</p> <p>Before generating an FOP report, you need to ensure that the XSL files are copied from the <b>@INSTALL_DIR/splapp/reporting/xsl</b> directory to the specified shared directory.</p>	
Report Generation XML Data File Path	<p>Used to specify the directory or bucket where you want to extract the data from the system in the XML format for an FOP report.</p> <p>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:</p> <ul style="list-style-type: none"> <li>• <b>@SHARED_DIR</b> – Used when you want to store the XML file in the shared directory on the server.</li> </ul> <p>For example, you can set the value to <b>@SHARED_DIR/extractxml</b>.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://&lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>• The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while storing the XML file on OCI.</li> <li>• The bucket or container where you want the system to store the XML file for an FOP report.</li> </ul> <div data-bbox="516 1583 1081 1875" style="border: 1px solid black; padding: 5px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to <b>@SHARED_DIR/splapp/reporting/extractxml</b>. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. <b>SHARED_DIR</b>) is case-sensitive.</p> </div>	Yes



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

## 2.5.6 Setting the C1-FLUPLD Feature Configuration

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

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

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

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

1. Login to Oracle Revenue Management and Billing Version 7.0.0.0.0.
2. Click the **Admin** link in the **Application** toolbar. A list appears.
3. From the **Admin** menu, select **F** and then click **Feature Configuration**. A sub-menu appears.
4. Click the **Search** option from the **Feature Configuration** sub-menu. The **Feature Configuration Query** screen appears.
5. In the **Feature Configuration Search** zone, enter **C1-FLUPLD** in the **Feature Name** field.
6. Click **Search**. A list of feature configurations that meet the search criteria appears in the search results.
7. In the **Search Results** section, click the link in the **Description** column corresponding to the feature configuration whose details you want to edit. The **Feature Configuration** screen appears. It contains the following option types:

Option Type	Description	Mandatory (Yes or No)
File Decryption Key Alias	Used to specify the alias (i.e. key defined in the keystore) using which you want to encrypt or decrypt the files.  <b>Note:</b> By default, the value is set to <b>ouaf.system</b> . You can change the value as per the requirement.	Yes
Key Store File Path	Used to specify the directory or bucket from where you want to fetch the keystore file.	Yes

Option Type	Description	Mandatory (Yes or No)
	<p>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:</p> <ul style="list-style-type: none"> <li>• <b>@SHARED_DIR</b> – Used when you want to fetch the keystore file from the shared directory on the server.</li> </ul> <p>For example, you can set the value to <b>@SHARED_DIR/.ouaf_keystore</b>.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the <b>file-storage://&lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt;</b> format:</p> <ul style="list-style-type: none"> <li>• The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while fetching the keystore file on OCI.</li> <li>• The bucket or container from where you want the system to fetch the keystore file.</li> </ul> <div data-bbox="537 1089 1122 1341" style="border: 1px solid black; padding: 5px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to <b>@SHARED_DIR/ks/.ouaf_keystore</b>. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. <b>SHARED_DIR</b>) is case-sensitive.</p> </div>	
Key Store Mode	<p>Used to specify the mode using which you want to encrypt or decrypt the files.</p> <div data-bbox="545 1455 1114 1530" style="border: 1px solid black; padding: 5px;"> <p><b>Note:</b> By default, the value is set to <b>CBC</b> (i.e. Cipher-block Chaining).</p> </div>	Yes
Key Store Padding	<p>Used to specify the padding using which you want to encrypt or decrypt the files.</p> <div data-bbox="545 1646 1114 1722" style="border: 1px solid black; padding: 5px;"> <p><b>Note:</b> By default, the value is set to <b>PKCS5Padding</b>.</p> </div>	Yes
Key Store Password File Path	<p>Used to specify the directory or bucket from where you want to fetch the keystore password file.</p>	Yes

Option Type	Description	Mandatory (Yes or No)
	<p>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:</p> <ul style="list-style-type: none"> <li>• <b>@SHARED_DIR</b> – Used when you want to fetch the keystore password file from the shared directory on the server.</li> </ul> <p>For example, you can set the value to <b>@SHARED_DIR/.ouaf_storepass</b>.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://&lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>• The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while fetching the keystore password file on OCI.</li> <li>• The bucket or container from where you want the system to fetch the keystore password file.</li> </ul> <div data-bbox="537 1087 1122 1339" style="border: 1px solid black; padding: 5px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to <b>@SHARED_DIR/ks/.ouaf_storepass</b>. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. <b>SHARED_DIR</b>) is case-sensitive.</p> </div>	
Key Store Type	<p>Used to indicate the type of keystore file.</p> <div data-bbox="545 1419 1114 1461" style="border: 1px solid black; padding: 2px;"> <p><b>Note:</b> By default, the value is set to <b>JCEKS</b>.</p> </div>	Yes
Private Key File Path	<p>Used to specify the directory or bucket from where you want to fetch the private key file.</p> <p>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:</p> <ul style="list-style-type: none"> <li>• <b>@SHARED_DIR</b> – Used when you want to fetch the private key file from the shared directory on the server.</li> </ul>	Yes

Option Type	Description	Mandatory (Yes or No)
	<p>For example, you can set the value to @SHARED_DIR/.ouaf_storepass.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://&lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>• The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while fetching the private key file on OCI.</li> <li>• The bucket or container from where you want the system to fetch the private key file.</li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to @SHARED_DIR/ks/.ouaf_storepass. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. SHARED_DIR) is case-sensitive.</p> </div>	
File Decryption PGP Private Key File Path	<p>Used to specify the directory or bucket from where you want to fetch the private key file for decrypting Pretty Good Privacy (PGP) files.</p> <p>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:</p> <ul style="list-style-type: none"> <li>• @SHARED_DIR – Used when you want to fetch the private key file (for decrypting PGP files) from the shared directory on the server.</li> </ul> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://&lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>• The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while fetching the private key file (for decrypting PGP files) on OCI.</li> </ul>	Yes

Option Type	Description	Mandatory (Yes or No)
	<ul style="list-style-type: none"> <li>The bucket or container from where you want the system to fetch the private key file for decrypting PGP files.</li> </ul> <div style="border: 1px solid black; padding: 5px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to <b>@SHARED_DIR/PGP_KEYS/PGP_PRIVATE_KEY.asc</b>. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. <b>SHARED_DIR</b>) is case-sensitive.</p> </div>	
File Decryption PGP Public Key File Path	<p>Used to specify the directory or bucket from where you want to fetch the public key file for decrypting Pretty Good Privacy (PGP) files.</p> <p>If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:</p> <ul style="list-style-type: none"> <li><b>@SHARED_DIR</b> – Used when you want to fetch the public key file (for decrypting PGP files) from the shared directory on the server.</li> </ul> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://&lt;File Storage Extendable Lookup Value&gt;/&lt;Object Storage Bucket&gt; format:</p> <ul style="list-style-type: none"> <li>The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while fetching the public key file (for decrypting PGP files) on OCI.</li> <li>The bucket or container from where you want the system to fetch the public key file for decrypting PGP files.</li> </ul> <div style="border: 1px solid black; padding: 5px;"> <p><b>Points to Note:</b></p> <p>By default, the value is set to <b>@SHARED_DIR/PGP_KEYS/PGP_PUBLIC_KEY.asc</b>. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. <b>SHARED_DIR</b>) is case-sensitive.</p> </div>	Yes

Option Type	Description	Mandatory (Yes or No)
File Decryption PGP Public Key Alias	Used to specify the alias (i.e. key in the public key file) using which you want to encrypt or decrypt the PGP files.  <b>Note:</b> By default, the value is set to <b>ouaf.system.fileupload.publickey</b> . You can change the value as per the requirement.	Yes

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

## 2.6 Upgrading the ORMB Database

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

While upgrading from Oracle Revenue Management and Billing Version 6.1.0.0.0 to 7.0.0.0.0, you need to install the following on the database:

- [Oracle Revenue Management and Billing \(ORMB\) Version 7.0.0.0.0](#)
- [Oracle Revenue Management and Billing \(ORMB\) Version 7.0.0.0.0 Post Requisite Patches](#)

### Points to Note:

To view the list of patches that you need to apply on the database, see the [ORMB V7.0.0.0.0 Patch Guide \(Document ID: 3050173.1\)](#) on [My Oracle Support](#).

Alternatively, instead of individually applying the patches, you can download and install the rollup packs, if available, to apply a set of patches at once. For more information about the rollup packs, see [Appendix L: ORMB V7.0.0.0.0 Rollup Packs](#).

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

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

### 2.6.1 Installing ORMB Version 7.0.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 7.0.0.0.0:

- Login to the database server using the administrator's credentials.
- Copy the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Database** package to the `TEMPDIR` folder using the following command:

#### **AIX, Linux:**

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

#### **Windows:**

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

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

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

**AIX, Linux:**

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

**Windows:**

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

4. Unzip the **Oracle Financial Services Revenue Management and Billing 7.0.0.0.0 - Oracle Database** package using the following command:

**AIX, Linux:**

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_3>
```

**Windows:**

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_3>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_3>` folder. The contents include the following sub-folder:

- RMB

**Note:**

There might be situations when you do not want to recreate one or more table indexes. You can skip the recreation process of one or more table indexes by adding the following line in the `<DESTINATION_FOLDER_3>/RMB/Upgrade/Oracle/Install-Upgrade/OraSchUpg.inp` file:

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

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

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

**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.

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

**AIX, Linux:**

```
export JAR_PATH=<DESTINATION_FOLDER_3>/RMB/jarfiles
```

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

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

**AIX, Linux:**

```
export CLASS_PATH=$JAR_PATH/commons-cli-1.5.0.jar:$JAR_PATH/commons-codec-1.17-744c1c9.jar:$JAR_PATH/jackson-annotations-2.14.0-rc2.jar:$JAR_PATH/jackson-core-2.14.0-rc2.jar:$JAR_PATH/jackson-databind-2.14.0-rc2.jar:$JAR_PATH/log4j-api-2.17.1.jar:$JAR_PATH/log4j-core-2.17.1.jar:$JAR_PATH/ojdbc8-19.18.0.0.0.jar:$JAR_PATH/spl-oradbi-4.5.0.1.3.jar:$JAR_PATH/spl-shared-4.5.0.1.3.jar
```

**Windows:**

```
SET CLASS_PATH=<DESTINATION_FOLDER_3>\RMB\jarfiles\*
```

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

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_3>/RMB/Upgrade/Oracle/Install-Upgrade
```

**Windows:**

```
cd <DESTINATION_FOLDER_3>\RMB\Upgrade\Oracle\Install-Upgrade
```

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

**Windows:**

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

**AIX, Linux:**

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

If you are upgrading from ORMB Version 6.1.0.0.0 to 7.0.0.0.0, the following message appears in the command line:

```
Ready to upgrade the target database from V6.1.0.0.0 to V7.0.0.0.0, do you want to continue (Y/N)?
```

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



## 2.6.2 Applying the Release-Specific Patches

Once you install Oracle Revenue Management and Billing Version 7.0.0.0.0, you need to apply all patches listed in the [ORMB V7.0.0.0.0 Patch Guide](#) (Document ID: 3050173.1). You can apply a patch from a Windows machine or UNIX Standalone server.

To apply a patch:

1. Download the patch from [My Oracle Support](#). A zip file is downloaded.
2. Unzip the downloaded file using the following command:

**AIX, Linux:**

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_4>
```

**Windows:**

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_4>
```

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

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

**AIX, Linux:**

```
unzip <DESTINATION_FOLDER_4>/MultiPlatform.zip -d  
<PATH>/<DESTINATION_FOLDER_5>
```

**Windows:**

```
unzip <DESTINATION_FOLDER_4>\MultiPlatform.zip -d  
<PATH>\<DESTINATION_FOLDER_5>
```

The contents of the zip file are extracted in the <DESTINATION\_FOLDER\_5> folder. The contents include the v7.0.0.0.0-<PATCH\_NUMBER>\_MultiPlatform folder.

4. Change to the v7.0.0.0.0-<PATCH\_NUMBER>\_MultiPlatform folder using the following command:

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_5>/v7.0.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

**Windows:**

```
cd <DESTINATION_FOLDER_5>\v7.0.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

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

The contents include a file named CCB.v7.0.0.0.0-<PATCH\_NUMBER>.jar and a folder named database.

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

**AIX, Linux:**

```
cd database/ORACLE
```

**Windows:**

```
cd database\ORACLE
```

The contents include a zip file named `CDXPatch`.

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

**AIX, Linux:**

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

**Windows:**

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

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_6>` folder. The contents include utility files and a folder named `<PATCH_NUMBER>`.

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

**AIX, Linux:**

```
ouafDatabasePatch.sh
```

**Windows:**

```
ouafDatabasePatch.cmd
```

**Note:** On the AIX and Linux platforms, ensure that you grant the execute permission for the `ouafDatabasePatch.sh` utility using the following command:

```
chmod 755 ouafDatabasePatch.sh
```

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

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

8. Enter the required parameter value. The following message appears in the command line:

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

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

## 2.7 Migrating Data

Once you upgrade the database, you can migrate the data from Oracle Revenue Management and Billing Version 6.1.0.0.0 to 7.0.0.0.0 using the `PostProcessingScript` query which is available in the **UPGRADE FROM 6.1.0.0.0 to 7.0.0.0.0** patch.

To migrate the data from ORMB Version 6.1.0.0.0 to 7.0.0.0.0:

1. Copy the **UPGRADE FROM 6.1.0.0.0 to 7.0.0.0.0** patch to the `TEMPDIR` folder using the following command:

**AIX, Linux:**

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

**Windows:**

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

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

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

**AIX, Linux:**

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

**Windows:**

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

3. Unzip the **UPGRADE FROM 6.1.0.0.0 to 7.0.0.0.0** patch using the following command:

**AIX, Linux:**

```
unzip <filename>.zip -d <PATH>/<DESTINATION_FOLDER_7>
```

**Windows:**

```
unzip <filename>.zip -d <PATH>\<DESTINATION_FOLDER_7>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_7>` folder. The contents include two files - `README.txt` and `deploy.zip`.

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

**AIX, Linux:**

```
unzip <DESTINATION_FOLDER_7>/deploy.zip -d  
<PATH>/<DESTINATION_FOLDER_8>
```

**Windows:**

```
unzip <DESTINATION_FOLDER_7>\deploy.zip -d  
<PATH>\<DESTINATION_FOLDER_8>
```

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_8>` folder. The contents include a folder named `deploy`.

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

```
cd <DESTINATION_FOLDER_8>\deploy
```

The contents include a folder named `Migration_From_V6.1.0.0.0_To_7.0.0.0.0`. This folder contains one file named `PostProcessingScript.sql`.

6. Change to the `Migration_From_V6.1.0.0.0_To_7.0.0.0.0` folder using the following command:

```
cd  
<DESTINATION_FOLDER_8>\deploy\Migration_From_V6.1.0.0.0_To_7.0.0.0.0
```

7. Connect to the ORMB database using a utility named SQL\*Plus and the administrator's (for example, `CISADM`) credentials.
8. Execute the following query from the `Migration_From_V6.1.0.0.0_To_7.0.0.0.0` folder:

```
PostProcessingScript.sql
```

**Note:** For more information about the query, see the [PostProcessingScript.sql](#) section in [Appendix Q: SQL Statements for 6.1.0.0.0 to 7.0.0.0.0 Data Migration](#).

## 3. Additional Tasks

---

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

1. [Starting the Thread Pool Worker](#)
2. [Building Javadoc Index](#)
3. [Table Partitioning](#)

### 3.1 Starting the Thread Pool Worker

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

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

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

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

**AIX, Linux:**

```
$SPLEBASE/bin/threadpoolworker.sh
```

**Windows:**

```
%SPLEBASE%\bin\threadpoolworker.cmd
```

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

### 3.2 Building Javadoc Index

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

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

**AIX, Linux:**

```
$SPLEBASE/bin/buildJavadocsIndex.sh
```

**Windows:**

```
%SPLEBASE%\bin\buildJavadocsIndex.cmd
```

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

## 3.3 Table Partitioning

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

**Note:** An out of box sample release-specific table partitioning scripts are provided by Oracle Revenue Management and Billing on [My Oracle Support](#). You can partition the tables using these sample scripts. For more information, see *Oracle Revenue Management and Billing ILM Implementation Guide*.

## Appendix A : Known Issues

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To view a list of known issues in the current release, see the *Oracle Revenue Management and Billing Version 7.0.0.0 Release Notes*.

## Appendix B : Third-Party Software Upgrade

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



## Appendix C : New Tables Added in ORMB Version 7.0.0.0.0

This section lists and describes the tables that are newly added in Oracle Revenue Management and Billing Version 7.0.0.0.0.

### C.1 C1\_ASL\_DTLS\_INTG

<b>Purpose:</b>	Used to store the aggregate stop loss data for generic dataset extract.
<b>Total Number of Columns:</b>	37

#### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIS_DIVISION	CHAR(5 BYTE)	No	-
IDENTIFIER_TYPE	VARCHAR2(60 BYTE)	No	-
CUSTOMER_ID	VARCHAR2(90 BYTE)	No	-
DIV_CURRENCY_CD	CHAR(3 BYTE)	No	-
CIS_DIVISION_DESCR	VARCHAR2(60 BYTE)	No	-
DIV_CURRENCY	VARCHAR2(60 BYTE)	No	-
CUSTOMER_NAME	VARCHAR2(254 BYTE)	No	-
POLICY_PERIOD_FROM	DATE	Yes	-
POLICY_PERIOD_TO	DATE	Yes	-
INCURRED_FROM	DATE	Yes	-
INCURRED_THROUGH	DATE	Yes	-
PAID_FROM	DATE	Yes	-
PAID_THROUGH	DATE	Yes	-
SETTLEMENT_FREQUENCY	VARCHAR2(60 BYTE)	Yes	-
SETTLEMENT_DATE	DATE	Yes	-
SETTLEMENT_DAYS	VARCHAR2(32767 BYTE)	Yes	-
MAX_PAYOUT_LIMIT	VARCHAR2(18 BYTE)	Yes	-
MIN_LIMIT	VARCHAR2(18 BYTE)	Yes	-
ACCT_ID	CHAR(10 BYTE)	Yes	-
POLICY_ID	CHAR(14 BYTE)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCUM_GRP_ID	CHAR(12 BYTE)	Yes	-
PERSON_ID	CHAR(10 BYTE)	Yes	-
BILLING_DATE	DATE	Yes	-
CUM_AGG_EXP	VARCHAR2(18 BYTE)	Yes	-
LESS_CUM_SSL_CRED	VARCHAR2(18 BYTE)	Yes	-
CUM_AGG_EXP_ASL	VARCHAR2(18 BYTE)	Yes	-
YTD_ASL_LIMIT	VARCHAR2(18 BYTE)	Yes	-
ASL_CREDITS	VARCHAR2(17 BYTE)	Yes	-
ASL_CREDIT_CAP	VARCHAR2(18 BYTE)	Yes	-
PREV_BILLED_CREDIT	VARCHAR2(18 BYTE)	Yes	-
FINAL_BILLED_CREDIT	VARCHAR2(18 BYTE)	Yes	-
CALC_METHOD	VARCHAR2(32767 BYTE)	Yes	-
MIN_ASL_LIMIT	VARCHAR2(17 BYTE)	Yes	-
ENROL_LIMT_PCT	VARCHAR2(32767 BYTE)	Yes	-
POL_LIMIT	VARCHAR2(17 BYTE)	Yes	-
DATA_LOAD_DTTM	DATE	Yes	-
POLICY_NBR	VARCHAR2(64 BYTE)	Yes	-

**Primary Key:**

None

**Indexes:**

None

## C.2 C1\_BILL\_CORR

<b>Purpose:</b>	Used to store the details of a bill correction request.
<b>Total Number of Columns:</b>	14

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_ID	CHAR(12)	No	-
BILL_CORR_TYPE_CD	CHAR(30)	No	-
BUS_OBJ_CD	CHAR(30)	No	-
BO_STATUS_CD	CHAR(12)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
BO_DATA_AREA	CLOB(4000)	Yes	-
BILL_CORR_REASON_FLG	CHAR(4)	No	-
PRIMARY_BILL_ID	CHAR(12)	Yes	-
CRE_DTTM	DATE(7)	No	-
STATUS_UPD_DTTM	DATE(7)	No	-
COMMENTS	VARCHAR2(254)	Yes	-
ILM_ARCH_SW	CHAR(1)	Yes	-
ILM_DT	DATE(7)	Yes	-
VERSION	NUMBER(22)	No	1

**Primary Key:**

Key Type	Column Name
Simple	BILL_CORR_ID

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM861P0	Unique	BILL_CORR_ID

## C.3 C1\_BILL\_CORR\_BATCH

<b>Purpose:</b>	Used to store the batch details for a bill correction request.
<b>Total Number of Columns:</b>	3

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_ID	CHAR(12)	No	-
BATCH_JOB_ID	CHAR(14)	No	-
VERSION	NUMBER(22)	No	1

**Primary Key:**

Key Type	Column Name
Composite	BATCH_JOB_ID
	BILL_CORR_ID

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM865P0	Unique	BATCH_JOB_ID
			BILL_CORR_ID

## C.4 C1\_BILL\_CORR\_BILL

<b>Purpose:</b>	Used to store the bills impacted due to a bill correction request.
<b>Total Number of Columns:</b>	17

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_ID	CHAR(12)	No	-
BILL_ID	CHAR(12)	No	-
BILL_SEL_TYPE_FLG	CHAR(4)	No	-
BILL_CYC_CD	CHAR(4)	Yes	-
WIN_START_DT	DATE(7)	Yes	-
CUTOFF_DT	DATE(7)	No	-
MSTCFG_DTL_ID	CHAR(12)	No	-
BILL_CORR_ELIG_ST_FLG	CHAR(4)	No	-
BILL_PRSN_OPT_FLG	CHAR(4)	No	-
FREEZE_COMPLETE_SW	CHAR(1)	No	-
DELTA_REFUND_SW	CHAR(1)	No	-
TOLERANCE_CHECK_SW	CHAR(1)	No	-
BILL_CORR_REGEN_ST_FLG	CHAR(4)	No	PEND
NEW_BILL_ID	CHAR(12)	Yes	-
HOLD_APAY_SW	CHAR(1)	No	'N'
HOLD_BILL_EXTRACT_SW	CHAR(1)	No	'N'
VERSION	NUMBER(22	No	1

**Primary Key:**

Key Type	Column Name
Composite	BILL_CORR_ID
	BILL_ID

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM864P0	Unique	BILL_CORR_ID
			BILL_ID

## C.5 C1\_BILL\_CORR\_BSEG

<b>Purpose:</b>	Used to store the bill segments impacted due to a bill correction request.
<b>Total Number of Columns:</b>	7

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_DTL_ID	CHAR(12)	No	-
BSEG_ID	CHAR(12)	No	-
BILL_ID	CHAR(12)	No	-
BILL_CORR_BSEG_IMPACT_ST_FLG	CHAR(4)	No	-
CRE_DTTM	DATE(7)	No	-
UPD_DTTM	DATE(7)	Yes	-
VERSION	NUMBER(22)	No	1

**Primary Key:**

Key Type	Column Name
Composite	BILL_CORR_DTL_ID
	BSEG_ID

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM863P0	Unique	BILL_CORR_DTL_ID
			BSEG_ID

## C.6 C1\_BILL\_CORR\_CHAR

<b>Purpose:</b>	Used to store the characteristics of a bill correction request.
<b>Total Number of Columns:</b>	12

### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_ID	CHAR(12)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
EFFDT	DATE(7)	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(12)	No	1

### Primary Key:

Key Type	Column Name
Composite	BILL_CORR_ID
	CHAR_TYPE_CD
	EFFDT

### Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM867P0	Unique	BILL_CORR_ID
			CHAR_TYPE_CD
			EFFDT

## C.7 C1\_BILL\_CORR\_DTLS

<b>Purpose:</b>	Used to store the entities which are corrected through a bill correction request.
<b>Total Number of Columns:</b>	12

### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_DTL_ID	CHAR(12)	No	-
BILL_CORR_ID	CHAR(12)	No	-
BILL_CORR_ENTITY_TYPE_FLG	CHAR(4)	No	-
ENTITY_ID	CHAR(14)	Yes	-
BILL_CORR_ENTITY_ACTION_FLG	CHAR(4)	No	-
EFFDT	DATE(7)	Yes	-
ACTION_NOTE	VARCHAR2(254)	Yes	-
APP_TXN_ID	CHAR(15)	Yes	-
NEW_ENTITY_ID	CHAR(14)	Yes	-
TXN_DISAGG_REQ_ID	CHAR(14)	Yes	-
CRE_DTTM	DATE(7)	No	-
VERSION	NUMBER(22)	No	1

### Primary Key:

Key Type	Column Name
Simple	BILL_CORR_DTL_ID

### Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM862P0	Unique	BILL_CORR_DTL_ID

## C.8 C1\_BILL\_CORR\_EXCP

<b>Purpose:</b>	Used to store the errors that occurred while processing a bill correction request.
<b>Total Number of Columns:</b>	13

### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
CRE_DTTM	DATE(7)	No	-
MESSAGE_CAT_NBR	NUMBER(22)	No	-
MESSAGE_NBR	NUMBER(22)	No	-
MESSAGE_PARM1	VARCHAR2(2000)	Yes	-
MESSAGE_PARM2	VARCHAR2(2000)	Yes	-
MESSAGE_PARM3	VARCHAR2(2000)	Yes	-
MESSAGE_PARM4	VARCHAR2(2000)	Yes	-
MESSAGE_PARM5	VARCHAR2(2000)	Yes	-
VERSION	NUMBER(22)	No	1
ENTITY_ID	CHAR(14)	No	-
BILL_CORR_EXCP_ENT_TYP_FLG	CHAR(4)	No	-
BILL_CORR_ID	CHAR(12)	No	-
SEQNO	NUMBER(22)	No	-

### Primary Key:

Key Type	Column Name
Composite	BILL_CORR_EXCP_ENT_TYP_FLG
	BILL_CORR_ID
	ENTITY_ID
	SEQNO

### Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM866P0	Unique	BILL_CORR_EXCP_ENT_TYP_FLG
			BILL_CORR_ID
			ENTITY_ID



Sr. No.	Index Name	Index Type	Column Name
			SEQNO

## C.9 C1\_BILL\_CORR\_K

<b>Purpose:</b>	Used to store the bill correction request ID.
<b>Total Number of Columns:</b>	2

### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_ID	CHAR(12)	No	-
ENV_ID	NUMBER(22)	No	-

### Primary Key:

Key Type	Column Name
Composite	BILL_CORR_ID
	ENV_ID

### Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM870P0	Unique	BILL_CORR_ID
			ENV_ID

## C.10 C1\_BILL\_CORR\_LOG

<b>Purpose:</b>	Used to store the logs of a bill correction request.
<b>Total Number of Columns:</b>	20

### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_ID	CHAR(12)	No	-
SEQNO	NUMBER(22)	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	No	-
BO_STATUS_CD	CHAR(12)	No	-
LOG_DTTM	DATE(7)	No	-
DESCRLONG	VARCHAR2(4000)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
MESSAGE_CAT_NBR	NUMBER(22)	No	-
MESSAGE_NBR	NUMBER(22)	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(22)	No	1

**Primary Key:**

Key Type	Column Name
Composite	BILL_CORR_ID
	SEQNO

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM868P0	Unique	BILL_CORR_ID
			SEQNO

## C.11 C1\_BILL\_CORR\_LOG\_PARM

<b>Purpose:</b>	Used to store the log parameters of a bill correction request.
<b>Total Number of Columns:</b>	6

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_ID	CHAR(12)	No	-
SEQNO	NUMBER(22)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
PARM_SEQ	NUMBER(22)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	No	-
MSG_PARM_VAL	VARCHAR2(2000)	No	-
VERSION	NUMBER(22)	Yes	1

**Primary Key:**

Key Type	Column Name
Composite	BILL_CORR_ID
	PARM_SEQ
	SEQNO

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM869P0	Unique	BILL_CORR_ID
			PARM_SEQ
			SEQNO

## C.12 C1\_BILL\_CORR\_TYPE

<b>Purpose:</b>	Used to store the details of a bill correction type.
<b>Total Number of Columns:</b>	17

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_TYPE_CD	CHAR(30)	No	-
BUS_OBJ_CD	CHAR(30)	No	-
TRANS_BUS_OBJ_CD	CHAR(30)	No	-
C1_ACTIVE_INACTIVE_FLG	CHAR(4)	No	-
BO_DATA_AREA	CLOB(4000)	Yes	-
ACCESS_GRP_CD	CHAR(12)	No	-
BILL_CORR_HOLD_STAGE_FLG	CHAR(4)	Yes	-
FINAL_REVIEW_SW	CHAR(1)	No	-
TOLERANCE_CHECK_SW	CHAR(1)	No	-
FREEZE_COMPLETE_SW	CHAR(1)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
BSEG_CANCEL_OPT_FLG	CHAR(4)	No	-
IS_APPR_REQ_SW	CHAR(1)	No	-
C1_APPR_TD_TYPE	CHAR(8)	Yes	-
C1_APPR_TD_ROLE	CHAR(10)	Yes	-
C1_SUB_TD_TYPE	CHAR(8)	No	-
C1_SUB_TD_ROLE	CHAR(10)	No	-
VERSION	NUMBER(22)	No	1

**Primary Key:**

Key Type	Column Name
Simple	BILL_CORR_TYPE_CD

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM851P0	Unique	BILL_CORR_TYPE_CD

## C.13 C1\_BILL\_CORR\_TYPE\_ALG

<b>Purpose:</b>	Used to store the algorithms attached to a bill correction type.
<b>Total Number of Columns:</b>	5

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_TYPE_CD	CHAR(30)	No	-
BILL_CORR_TYPE_SEVT_FLG	CHAR(4)	No	-
SEQ_NUM	NUMBER(22)	No	-
ALG_CD	CHAR(12)	No	-
VERSION	NUMBER(22)	No	1

**Primary Key:**

Key Type	Column Name
Composite	BILL_CORR_TYPE_CD
	BILL_CORR_TYPE_SEVT_FLG
	SEQ_NUM

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM854P0	Unique	BILL_CORR_TYPE_CD
			BILL_CORR_TYPE_SEVT_FLG
			SEQ_NUM

## C.14 C1\_BILL\_CORR\_TYPE\_CHAR

<b>Purpose:</b>	Used to store the characteristics of a bill correction type.
<b>Total Number of Columns:</b>	12

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_TYPE_CD	CHAR(30)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
SEQ_NUM	NUMBER(22)	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(22)	No	1

**Primary Key:**

Key Type	Column Name
Composite	BILL_CORR_TYPE_CD
	CHAR_TYPE_CD
	SEQ_NUM

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM853P0	Unique	BILL_CORR_TYPE_CD

Sr. No.	Index Name	Index Type	Column Name
			CHAR_TYPE_CD
			SEQ_NUM

## C.15 C1\_BILL\_CORR\_TYPE\_L

<b>Purpose:</b>	Used to store the description of a bill correction type.
<b>Total Number of Columns:</b>	5

### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CORR_TYPE_CD	CHAR(30)	No	-
LANGUAGE_CD	CHAR(3)	No	-
DESCR	VARCHAR2(60)	No	''
DESCRLONG	VARCHAR2(4000)	No	''
VERSION	NUMBER(22)	No	1

### Primary Key:

Key Type	Column Name
Composite	BILL_CORR_TYPE_CD
	LANGUAGE_CD

### Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM852P0	Unique	BILL_CORR_TYPE_CD
			LANGUAGE_CD

## C.16 C1\_BILL\_FACT\_INTG

<b>Purpose:</b>	Used to store the bill fact data for generic dataset extract.
<b>Total Number of Columns:</b>	41

### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_ID	CHAR(12 BYTE)	No	-
INVOICE_ACCT	CHAR(10 BYTE)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_CYC_CD	CHAR(4 BYTE)	No	-
ALT_BILL_ID	VARCHAR2(30 BYTE)	No	-
PREV_BILL_ID	CHAR(12 BYTE)	Yes	-
CURR_BILL_BAL	NUMBER(20,2)	Yes	-
PAYMENTS_RECEIVED_LAST_BILL	NUMBER(20,2)	Yes	-
ADJUSTMENTS_IF_ANY	NUMBER(20,2)	Yes	-
PREVIOUS_BALANCE	NUMBER(20,2)	Yes	-
BILL_DT	DATE	Yes	-
DUE_DT	DATE	Yes	-
COMPLETE_DTTM	DATE	Yes	-
REVIEW_YN	CHAR(14 BYTE)	Yes	-
ILM_DT	DATE	Yes	-
ILM_ARCH_SW	CHAR(1 BYTE)	Yes	-
UDF_CHAR1	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR2	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR3	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR4	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR5	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR6	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR7	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR8	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR9	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR10	VARCHAR2(254 BYTE)	Yes	-
UDF_NBR_1	NUMBER(36,18)	Yes	-
UDF_NBR_2	NUMBER(36,18)	Yes	-
UDF_NBR_3	NUMBER(36,18)	Yes	-
UDF_NBR_4	NUMBER(36,18)	Yes	-
UDF_NBR_5	NUMBER(36,18)	Yes	-
UDF_NBR_6	NUMBER(36,18)	Yes	-
UDF_NBR_7	NUMBER(36,18)	Yes	-
UDF_NBR_8	NUMBER(36,18)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
UDF_NBR_9	NUMBER(36,18)	Yes	-
UDF_NBR_10	NUMBER(36,18)	Yes	-
UDF_DTTM_1	DATE	Yes	-
UDF_DTTM_2	DATE	Yes	-
UDF_DTTM_3	DATE	Yes	-
UDF_DTTM_4	DATE	Yes	-
UDF_DTTM_5	DATE	Yes	-
DATA_LOAD_DTTM	DATE	Yes	-

**Primary Key:**

Key Type	Column Name
Simple	BILL_ID

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM937P0	Unique	BILL_ID

## C.17 C1\_DIM\_ACCT\_INTG

<b>Purpose:</b>	Used to store the account details.
<b>Total Number of Columns:</b>	55

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
SRC_ACCT_ID	CHAR(10 BYTE)	No	-
CUST_ID	CHAR(10 BYTE)	No	-
CUST_NAME	VARCHAR2(254 BYTE)	No	-
ACCT_NBR	VARCHAR2(30 BYTE)	Yes	-
ACCT_NBR_TYPE	CHAR(8 BYTE)	Yes	-
ACCT_APAY_ID	CHAR(10 BYTE)	Yes	-
APAY_START_DT	DATE	Yes	-
APAY_END_DT	DATE	Yes	-
BILL_MSG_CD	CHAR(4 BYTE)	Yes	-
BILL_MSG_TYPE_FLG	CHAR(2 BYTE)	Yes	-



Column Name	Data Type	Nullable (Yes or No)	Default Value
BILL_MSG	VARCHAR2(60 BYTE)	Yes	-
APAY_SRC_CD	CHAR(12 BYTE)	Yes	-
EXT_ACCT_ID	VARCHAR2(50 BYTE)	Yes	-
APAY_EXP_DT	DATE	Yes	-
APAY_MAX_WDRWL_AMT	NUMBER(15,2)	Yes	-
APAY_METHOD_FLG	CHAR(4 BYTE)	Yes	-
ENCR_EXT_ACCT_ID	VARCHAR2(108 BYTE)	Yes	-
APAY_METHOD	VARCHAR2(60 BYTE)	Yes	-
APAY_RTE_TYPE_CD	CHAR(10 BYTE)	Yes	-
APAY_PCT	NUMBER(5,2)	Yes	-
APAY_TYPE_FLG	CHAR(4 BYTE)	Yes	-
APAY_USAGE_FLG	CHAR(4 BYTE)	Yes	-
ACCT_NBR_TYPE_DESCR	VARCHAR2(60 BYTE)	Yes	-
ACCT_CL_CD	CHAR(8 BYTE)	No	-
ACCT_CL_DESCR	VARCHAR2(60 BYTE)	Yes	-
ACCT_MGMT_GRP_CD	CHAR(10 BYTE)	No	-
ACCT_MGMT_GRP_DESCR	VARCHAR2(60 BYTE)	Yes	-
CIS_DIVISION	CHAR(5 BYTE)	No	-
BASE_CURRENCY_CD	CHAR(3 BYTE)	Yes	-
CIS_DIVISION_DESCR	VARCHAR2(60 BYTE)	Yes	-
BILL_CYC_CD	CHAR(4 BYTE)	No	-
BILL_CYC_DESCR	VARCHAR2(60 BYTE)	Yes	-
COLL_CL_CD	CHAR(10 BYTE)	No	-
OD_PROC_SW	VARCHAR2(3 BYTE)	Yes	-
COLL_CL_DESCR	VARCHAR2(60 BYTE)	Yes	-
CURRENCY_CD	CHAR(3 BYTE)	No	-
CURRENCY_DESC	VARCHAR2(60 BYTE)	Yes	-
ACCT_USAGE_TYPE	CHAR(4 BYTE)	Yes	-
ACCT_USAGE_TYPE_DESC	VARCHAR2(60 BYTE)	Yes	-
ACCT_TYPE	CHAR(8 BYTE)	No	-
BILL_LEAD_DAYS	NUMBER(5,0)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
PROD_CL_CD	VARCHAR2(10 BYTE)	Yes	-
PROD_CL_CD_DESCR	VARCHAR2(10 BYTE)	Yes	-
PROD_GRP_CD	VARCHAR2(10 BYTE)	Yes	-
PROD_GRP_CD_DESCR	VARCHAR2(10 BYTE)	Yes	-
PRD_CD	VARCHAR2(10 BYTE)	Yes	-
PRD_CD_DESCR	VARCHAR2(10 BYTE)	Yes	-
ACCT_PURPOSE	VARCHAR2(10 BYTE)	Yes	-
ACCT_PURPOSE_TYPE	VARCHAR2(10 BYTE)	Yes	-
BEHAVIOUR_SCORE	VARCHAR2(10 BYTE)	Yes	-
SETUP_DT	DATE	Yes	-
MATURITY_DT	VARCHAR2(10 BYTE)	Yes	-
JOINT_APPLICANT_SW	VARCHAR2(10 BYTE)	Yes	-
CUST_TYPE	VARCHAR2(60 BYTE)	Yes	-
DATA_LOAD_DTTM	DATE	Yes	-

**Primary Key:**

None

**Indexes:**

None

## C.18 C1\_DIM\_CUST\_INTG

<b>Purpose:</b>	Used to store the customer and its hierarchy information.
<b>Total Number of Columns:</b>	49

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
CUSTOMER_ID	CHAR(10 BYTE)	No	-
CUSTOMER_NAME	VARCHAR2(254 BYTE)	No	-
NAME_TYPE_FLG	CHAR(4 BYTE)	No	-
EMAIL_ID	VARCHAR2(254 BYTE)	No	-
LANGUAGE	CHAR(3 BYTE)	No	-
LANGUAGE_DESCRIPTION	VARCHAR2(60 BYTE)	No	-
PH_COUNTRY_CD	CHAR(3 BYTE)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CONTACT_NUMBER	VARCHAR2(24 BYTE)	Yes	-
CONTACT_TYPE	CHAR(12 BYTE)	Yes	-
PER_ID_NBR	VARCHAR2(90 BYTE)	Yes	-
ID_TYPE_CD	CHAR(8 BYTE)	Yes	-
ID_TYPE	VARCHAR2(60 BYTE)	Yes	-
CIS_DIVISION	CHAR(5 BYTE)	Yes	-
CIS_DIVISION_DESCR	VARCHAR2(60 BYTE)	Yes	-
ADDRESS	VARCHAR2(254 BYTE)	No	-
ADDRESS_2	VARCHAR2(254 BYTE)	No	-
ADDRESS_3	VARCHAR2(254 BYTE)	No	-
ADDRESS_4	VARCHAR2(254 BYTE)	No	-
CITY	VARCHAR2(90 BYTE)	No	-
COUNTY	VARCHAR2(90 BYTE)	No	-
POSTAL_CODE	CHAR(12 BYTE)	No	-
GEOGRAPHICAL_CODE	CHAR(11 BYTE)	No	-
IN_CITYLIMIT	CHAR(1 BYTE)	No	-
STATE_CODE	CHAR(6 BYTE)	No	-
STATE_DESCRIPTION	VARCHAR2(60 BYTE)	No	-
COUNTRY_CODE	CHAR(3 BYTE)	No	-
COUNTRY_DESCRIPTION	VARCHAR2(60 BYTE)	No	-
HOUSE_TYPE	CHAR(2 BYTE)	No	-
EMPLOYEMENT_STATUS	CHAR(3 BYTE)	Yes	-
EMPLOYMENT_TYPE	VARCHAR2(30 BYTE)	Yes	-
EMPLOYER_NAME	VARCHAR2(120 BYTE)	Yes	-
INDUSTRY_TYPE	VARCHAR2(30 BYTE)	Yes	-
COMPANY_TYPE	VARCHAR2(30 BYTE)	Yes	-
OCCUPATION_TYPE	CHAR(120 BYTE)	Yes	-
DESIGNATION	CHAR(120 BYTE)	Yes	-
GROSS_ANNUALSALARY	NUMBER(36,18)	Yes	-
RECEIVE_MARKETINGINFORMATION	VARCHAR2(60 BYTE)	Yes	-
PER_OR_BUS_FLG	CHAR(2 BYTE)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
L1_PARENT_ID	VARCHAR2(10 BYTE)	Yes	-
L1_PARENT_NAME	VARCHAR2(64 BYTE)	Yes	-
L2_PARENT_ID	VARCHAR2(10 BYTE)	Yes	-
L2_PARENT_NAME	VARCHAR2(64 BYTE)	Yes	-
L3_PARENT_ID	VARCHAR2(10 BYTE)	Yes	-
L3_PARENT_NAME	VARCHAR2(64 BYTE)	Yes	-
L4_PARENT_ID	VARCHAR2(10 BYTE)	Yes	-
L4_PARENT_NAME	VARCHAR2(64 BYTE)	Yes	-
L5_PARENT_ID	VARCHAR2(10 BYTE)	Yes	-
L5_PARENT_NAME	VARCHAR2(64 BYTE)	Yes	-
DATA_LOAD_DTTM	DATE	Yes	-

**Primary Key:**

None

**Indexes:**

None

## C.19 C1\_FT\_BSEG\_FACT\_INTG

<b>Purpose:</b>	Used to store the bill segment fact data for generic dataset extract.
<b>Total Number of Columns:</b>	67

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
FT_ID	CHAR(12 BYTE)	No	-
TOTAL_AMT	NUMBER(15,2)	No	-
CURRENCY_CD	CHAR(3 BYTE)	No	-
PRICEITEM_CD	CHAR(30 BYTE)	Yes	-
CUR_AMT	NUMBER(15,2)	No	-
BILL_ID	CHAR(12 BYTE)	No	-
BSEG_ID	CHAR(12 BYTE)	No	-
DESCR_ON_BILL	VARCHAR2(80 BYTE)	Yes	-
SA_ID	CHAR(10 BYTE)	No	-
BSEG_START_DT	DATE	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
BSEG_END_DT	DATE	Yes	-
BILLABLE_CHG_ID	CHAR(12 BYTE)	Yes	-
MEMBERSHIP_ID	CHAR(15 BYTE)	Yes	-
POLICY_ID	CHAR(14 BYTE)	Yes	-
PLAN_ID	CHAR(15 BYTE)	Yes	-
COV_START_DT	DATE	Yes	-
COV_END_DT	DATE	Yes	-
FT_TYPE_FLG	CHAR(2 BYTE)	No	-
CIS_DIVISION	CHAR(5 BYTE)	No	-
FREEZE_SW	CHAR(1 BYTE)	No	-
FREEZE_USER_ID	CHAR(8 BYTE)	No	-
FREEZE_DTTM	DATE	Yes	-
ARS_DT	DATE	Yes	-
ACCOUNTING_DT	DATE	Yes	-
CAN_RSN_CD	CHAR(4 BYTE)	Yes	-
CAN_RSN_DESCR	VARCHAR2(60 BYTE)	Yes	-
BSEG_STAT_FLG	CHAR(2 BYTE)	No	-
PRCE_CALC_ID	CHAR(22 BYTE)	No	-
MEMBER_PER_ID	VARCHAR2(15 BYTE)	No	-
MEM_PREM_AMT	NUMBER(15,2)	Yes	-
PRICE_PARM	VARCHAR2(4000 BYTE)	Yes	-
ILM_DT	DATE	Yes	-
ILM_ARCH_SW	CHAR(1 BYTE)	Yes	-
UDF_CHAR1	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR2	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR3	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR4	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR5	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR6	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR7	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR8	VARCHAR2(254 BYTE)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
UDF_CHAR9	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR10	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR11	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR12	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR13	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR14	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR15	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR16	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR17	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR18	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR19	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR20	VARCHAR2(254 BYTE)	Yes	-
UDF_NBR_1	NUMBER(36,18)	Yes	-
UDF_NBR_2	NUMBER(36,18)	Yes	-
UDF_NBR_3	NUMBER(36,18)	Yes	-
UDF_NBR_4	NUMBER(36,18)	Yes	-
UDF_NBR_5	NUMBER(36,18)	Yes	-
UDF_DTTM_1	DATE	Yes	-
UDF_DTTM_2	DATE	Yes	-
UDF_DTTM_3	DATE	Yes	-
UDF_DTTM_4	DATE	Yes	-
UDF_DTTM_5	DATE	Yes	-
ACCT_ID	CHAR(10 BYTE)	Yes	-
RS_CD	CHAR(8 BYTE)	Yes	-
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	No	-
DATA_LOAD_DTTM	DATE	Yes	-

**Primary Key:**

Key Type	Column Name
Composite	FT_ID
	MEMBER_PER_ID
	PRCE_CALC_ID

Key Type	Column Name
	PRICEITEM_PARM_GRP_ID

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM936P0	Unique	FT_ID
			MEMBER_PER_ID
			PRCE_CALC_ID
			PRICEITEM_PARM_GRP_ID

## C.20 C1\_GRP\_MEM\_INTG

<b>Purpose:</b>	Used to store the group membership, parent customer, and bill group details.
<b>Total Number of Columns:</b>	73

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
POLICY_ID	CHAR(14 BYTE)	No	-
PER_ID	CHAR(10 BYTE)	No	-
POLICY_PER_ROLE_CD	CHAR(12 BYTE)	No	-
MAIN_CUST_SW	CHAR(1 BYTE)	No	-
POLICY_TYPE_CD	CHAR(30 BYTE)	No	-
POLICY_NBR_UPR	VARCHAR2(64 BYTE)	No	-
POLICY_START_DT	DATE	No	-
POLICY_END_DT	DATE	Yes	-
PARENT_PER_ID	CHAR(10 BYTE)	No	-
PARENT_NAME	VARCHAR2(254 BYTE)	No	-
BILLING_GROUP_ID	CHAR(10 BYTE)	Yes	-
BILLING_GROUP_NAME	VARCHAR2(254 BYTE)	No	-
PRICEITEM_CD	CHAR(30 BYTE)	Yes	-
MEMBERSHIP_ID	CHAR(15 BYTE)	No	-
MEM_PER_ID	CHAR(10 BYTE)	Yes	-
MEMBER_NAME	VARCHAR2(254 BYTE)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
SA_REL_TYPE_CD	CHAR(8 BYTE)	No	-
RELATIONSHIP_TYPE	VARCHAR2(60 BYTE)	No	-
MEMBERSHIP_START_DT	DATE	No	-
MEMBERSHIP_END_DT	DATE	Yes	-
PLAN_ID	CHAR(15 BYTE)	Yes	-
PLAN_NBR	VARCHAR2(30 BYTE)	No	-
PLAN_NAME	VARCHAR2(60 BYTE)	No	-
PLAN_START_DT	DATE	No	-
PLAN_END_DT	DATE	Yes	-
MAIN_MEMBER_SW	CHAR(1 BYTE)	No	-
UDF_CHAR1	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR2	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR3	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR4	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR5	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR6	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR7	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR8	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR9	VARCHAR2(254 BYTE)	Yes	-
UDF_CHAR10	VARCHAR2(254 BYTE)	Yes	-
UDF_NBR_1	NUMBER(36,18)	Yes	-
UDF_NBR_2	NUMBER(36,18)	Yes	-
UDF_NBR_3	NUMBER(36,18)	Yes	-
UDF_NBR_4	NUMBER(36,18)	Yes	-
UDF_NBR_5	NUMBER(36,18)	Yes	-
UDF_NBR_6	NUMBER(36,18)	Yes	-
UDF_NBR_7	NUMBER(36,18)	Yes	-
UDF_NBR_8	NUMBER(36,18)	Yes	-
UDF_NBR_9	NUMBER(36,18)	Yes	-
UDF_NBR_10	NUMBER(36,18)	Yes	-
UDF_DTTM_1	DATE	Yes	-



Column Name	Data Type	Nullable (Yes or No)	Default Value
UDF_DTTM_2	DATE	Yes	-
UDF_DTTM_3	DATE	Yes	-
UDF_DTTM_4	DATE	Yes	-
UDF_DTTM_5	DATE	Yes	-
PRICEITEM_DESCR	VARCHAR2(60 BYTE)	Yes	-
CHAR_TYPE_CD_1	CHAR(8 BYTE)	Yes	-
CHAR_VAL_1	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_2	CHAR(8 BYTE)	Yes	-
CHAR_VAL_2	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_3	CHAR(8 BYTE)	Yes	-
CHAR_VAL_3	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_4	CHAR(8 BYTE)	Yes	-
CHAR_VAL_4	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_5	CHAR(8 BYTE)	Yes	-
CHAR_VAL_5	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_6	CHAR(8 BYTE)	Yes	-
CHAR_VAL_6	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_7	CHAR(8 BYTE)	Yes	-
CHAR_VAL_7	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_8	CHAR(8 BYTE)	Yes	-
CHAR_VAL_8	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_9	CHAR(8 BYTE)	Yes	-
CHAR_VAL_9	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_10	CHAR(8 BYTE)	Yes	-
CHAR_VAL_10	VARCHAR2(254 BYTE)	Yes	-
DATA_LOAD_DTTM	DATE	Yes	-

**Primary Key:**

None

**Indexes:**

None

## C.21 C1\_IND\_MEM\_INTG

<b>Purpose:</b>	Used to store the individual membership and health plan details
<b>Total Number of Columns:</b>	69

### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
MEMBERSHIP_ID	CHAR(15 BYTE)	No	-
PER_ID	CHAR(10 BYTE)	No	-
MEMBERSHIP_START_DT	DATE	No	-
MEMBERSHIP_END_DT	DATE	Yes	-
MEMBERSHIP_STATUS	CHAR(12 BYTE)	No	-
SA_ID	CHAR(10 BYTE)	Yes	-
CONTRACT_TYPE_CD	CHAR(8 BYTE)	Yes	-
CONTRACT_TYPE	VARCHAR2(60 BYTE)	Yes	-
SA_RENEWAL_FLG	CHAR(4 BYTE)	Yes	-
MEMBER_AUTO_RENEWAL	CHAR(1 BYTE)	No	-
RENEWAL_DATE	DATE	Yes	-
RATE_GUARANTEE_STATUS	CHAR(4 BYTE)	Yes	-
RATE_GUARANTEE_START_DT	DATE	Yes	-
RATE_GUARANTEE_END_DT	DATE	Yes	-
PRICING_RULE_ID	CHAR(15 BYTE)	Yes	-
PRICING_RULE_TYPE_CD	CHAR(30 BYTE)	Yes	-
PRICING_RULE_TYPE	VARCHAR2(60 BYTE)	Yes	-
PRICING_START_DT	DATE	Yes	-
PRICING_END_DT	DATE	Yes	-
BENEFIT_ID	CHAR(12 BYTE)	Yes	-
BENEFIT_SUB_TYPE_CD	CHAR(30 BYTE)	Yes	-
BENEFIT_SUB_TYPE	VARCHAR2(60 BYTE)	Yes	-
BENEFIT_AMT	NUMBER(15,2)	Yes	-
REPRICE_CHAR_TYPE_CD	CHAR(8 BYTE)	Yes	-
REPRICE_CHAR_VAL	VARCHAR2(50 BYTE)	Yes	-
PRICEITEM_CD	CHAR(30 BYTE)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
PERSON_NAME	VARCHAR2(254 BYTE)	No	-
SA_REL_TYPE_CD	CHAR(8 BYTE)	No	-
RELATIONSHIP_TYPE	VARCHAR2(60 BYTE)	No	-
HEALTH_PLAN_CD	CHAR(30 BYTE)	No	-
PRODUCT_CD	CHAR(30 BYTE)	No	-
PRODUCT	VARCHAR2(60 BYTE)	No	-
PRODUCT_HC_CATEGORY	CHAR(4 BYTE)	No	-
MEMBERSHIP_CAT_FLG	CHAR(4 BYTE)	No	-
PRIMARY_IDENTIFIERVERUE	VARCHAR2(90 BYTE)	No	-
PRIMARY_IDENTIFIERTYPE	CHAR(8 BYTE)	No	-
PRIMARY_IDENTIFIERTYPEDESCR PTION	CHAR(8 BYTE)	No	-
DIVISION_DESCRIPTION	VARCHAR2(60 BYTE)	No	-
REPRC_CHAR_TYPE_CD_1	CHAR(8 BYTE)	Yes	-
REPRC_CHAR_VAL_1	VARCHAR2(50 BYTE)	Yes	-
REPRC_CHAR_TYPE_CD_2	CHAR(8 BYTE)	Yes	-
REPRC_CHAR_VAL_2	VARCHAR2(50 BYTE)	Yes	-
REPRC_CHAR_TYPE_CD_3	CHAR(8 BYTE)	Yes	-
REPRC_CHAR_VAL_3	VARCHAR2(50 BYTE)	Yes	-
REPRC_CHAR_TYPE_CD_4	CHAR(8 BYTE)	Yes	-
REPRC_CHAR_VAL_4	VARCHAR2(50 BYTE)	Yes	-
REPRC_CHAR_TYPE_CD_5	CHAR(8 BYTE)	Yes	-
REPRC_CHAR_VAL_5	VARCHAR2(50 BYTE)	Yes	-
CHAR_TYPE_CD_1	CHAR(8 BYTE)	Yes	-
CHAR_VAL_1	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_2	CHAR(8 BYTE)	Yes	-
CHAR_VAL_2	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_3	CHAR(8 BYTE)	Yes	-
CHAR_VAL_3	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_4	CHAR(8 BYTE)	Yes	-
CHAR_VAL_4	VARCHAR2(254 BYTE)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CHAR_TYPE_CD_5	CHAR(8 BYTE)	Yes	-
CHAR_VAL_5	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_6	CHAR(8 BYTE)	Yes	-
CHAR_VAL_6	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_7	CHAR(8 BYTE)	Yes	-
CHAR_VAL_7	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_8	CHAR(8 BYTE)	Yes	-
CHAR_VAL_8	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_9	CHAR(8 BYTE)	Yes	-
CHAR_VAL_9	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_10	CHAR(8 BYTE)	Yes	-
CHAR_VAL_10	VARCHAR2(254 BYTE)	Yes	-
DATA_LOAD_DTTM	DATE	Yes	-

**Primary Key:**

None

**Indexes:**

None

## C.22 C1\_SSL\_DTLS\_INTG

<b>Purpose:</b>	Used to store the specific stop loss data for generic dataset extract.
<b>Total Number of Columns:</b>	43

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
ACCUM_GRP_ID	CHAR(12 BYTE)	No	-
PARENT_ACCUM_GRP_ID	CHAR(12 BYTE)	No	-
ACCT_ID	CHAR(10 BYTE)	No	-
PER_ID	CHAR(10 BYTE)	No	-
IDENTIFIER_TYPE	CHAR(8 BYTE)	No	-
CUSTOMER_ID	VARCHAR2(90 BYTE)	No	-
CIS_DIVISION	CHAR(5 BYTE)	No	-
DIV_CURRENCY_CD	CHAR(3 BYTE)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIS_DIVISION_DESCR	VARCHAR2(60 BYTE)	No	-
DIV_CURRENCY	VARCHAR2(60 BYTE)	No	-
CUSTOMER_NAME	VARCHAR2(254 BYTE)	No	-
POLICY_ID	CHAR(14 BYTE)	No	-
POLICY_PERIOD_FROM	DATE	Yes	-
POLICY_PERIOD_THROUGH	DATE	Yes	-
BILLING_DATE	DATE	Yes	-
GRACE_DATE	DATE	Yes	-
INCURRED_FROM	DATE	Yes	-
INCURRED_THROUGH	DATE	Yes	-
PAID_FROM	DATE	Yes	-
PAID_THROUGH	DATE	Yes	-
SETTLEMENT_DATE	DATE	Yes	-
SETTLEMENT_FREQUENCY	VARCHAR2(60 BYTE)	Yes	-
SETTLEMENT_DAYS	VARCHAR2(32767 BYTE)	Yes	-
SPECIFIC_STOP_LOSS_MAX	VARCHAR2(18 BYTE)	Yes	-
AGG_SPECIFIC_STOP_LOSS	VARCHAR2(18 BYTE)	Yes	-
SUB_REP_BILL_GRP	VARCHAR2(254 BYTE)	Yes	-
SPECIFIC_STOP_LIMIT	VARCHAR2(18 BYTE)	Yes	-
MAX_RUN_IN_AMT	VARCHAR2(18 BYTE)	Yes	-
ACCUM_OPTION	VARCHAR2(10 BYTE)	Yes	-
MEMBER_SUBSCRIBER_ID	VARCHAR2(254 BYTE)	Yes	-
BILL_LEVEL_1	VARCHAR2(30 BYTE)	Yes	-
BILL_LEVEL_2	VARCHAR2(30 BYTE)	Yes	-
BILL_LEVEL_3	VARCHAR2(30 BYTE)	Yes	-
ACCUM_RUN_DATE	DATE	Yes	-
AGGREGATED_EXPENSE	VARCHAR2(18 BYTE)	Yes	-
SSL_LIMIT	VARCHAR2(18 BYTE)	Yes	-
LASERED	VARCHAR2(3 BYTE)	Yes	-
MOVED_BG	VARCHAR2(3 BYTE)	Yes	-
SSL_CREDIT_WO_CAP	VARCHAR2(18 BYTE)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
SSL_CREDIT_CAP	VARCHAR2(18 BYTE)	Yes	-
TOT_CRED_AMT	VARCHAR2(18 BYTE)	Yes	-
POLICY_NBR	VARCHAR2(64 BYTE)	Yes	-
DATA_LOAD_DTTM	DATE	Yes	-

**Primary Key:**

None

**Indexes:**

None

## C.23 C1\_TXN\_DETAILS\_INTG

<b>Purpose:</b>	Used to store the ORMB transaction feed details.
<b>Total Number of Columns:</b>	120

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
TXN_SOURCE_CD	VARCHAR2(30 BYTE)	Yes	-
TXN_REC_TYPE_CD	VARCHAR2(30 BYTE)	Yes	-
TXN_DETAIL_ID	NUMBER(15,0)	Yes	-
TXN_HEADER_ID	CHAR(14 BYTE)	Yes	-
CIS_DIVISION	CHAR(5 BYTE)	Yes	-
ACCT_ID	CHAR(10 BYTE)	Yes	-
TXN_VOL	NUMBER(36,18)	Yes	-
TXN_AMT	NUMBER(36,18)	Yes	-
CURRENCY_CD	CHAR(3 BYTE)	Yes	-
UDF_CHAR_1	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_2	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_3	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_4	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_5	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_6	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_7	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_8	VARCHAR2(60 BYTE)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
UDF_CHAR_9	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_10	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_11	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_12	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_13	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_14	VARCHAR2(60 BYTE)	Yes	-
UDF_CHAR_15	VARCHAR2(60 BYTE)	Yes	-
UDF_AMT_1	NUMBER(36,18)	Yes	-
UDF_CURRENCY_CD_1	CHAR(3 BYTE)	Yes	-
UDF_AMT_2	NUMBER(36,18)	Yes	-
UDF_CURRENCY_CD_2	CHAR(3 BYTE)	Yes	-
UDF_AMT_3	NUMBER(36,18)	Yes	-
UDF_CURRENCY_CD_3	CHAR(3 BYTE)	Yes	-
UDF_AMT_4	NUMBER(36,18)	Yes	-
UDF_CURRENCY_CD_4	CHAR(3 BYTE)	Yes	-
UDF_AMT_5	NUMBER(36,18)	Yes	-
UDF_CURRENCY_CD_5	CHAR(3 BYTE)	Yes	-
ACCT_NBR_TYPE_CD	CHAR(8 BYTE)	Yes	-
ACCT_NBR	VARCHAR2(30 BYTE)	Yes	-
UDF_NBR_1	NUMBER(36,18)	Yes	-
UDF_NBR_2	NUMBER(36,18)	Yes	-
UDF_NBR_3	NUMBER(36,18)	Yes	-
UDF_NBR_4	NUMBER(36,18)	Yes	-
UDF_NBR_5	NUMBER(36,18)	Yes	-
UDF_NBR_6	NUMBER(36,18)	Yes	-
UDF_NBR_7	NUMBER(36,18)	Yes	-
UDF_NBR_8	NUMBER(36,18)	Yes	-
UDF_NBR_9	NUMBER(36,18)	Yes	-
UDF_NBR_10	NUMBER(36,18)	Yes	-
UDF_DTTM_1	DATE	Yes	-
UDF_DTTM_2	DATE	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
UDF_DTTM_3	DATE	Yes	-
UDF_DTTM_4	DATE	Yes	-
UDF_DTTM_5	DATE	Yes	-
TXN_CALC_ID	NUMBER(22,0)	Yes	-
SEQ_NO	NUMBER(5,0)	Yes	-
START_DT	DATE	Yes	-
END_DT	DATE	Yes	-
RS_CD	CHAR(8 BYTE)	Yes	-
CALC_AMT	NUMBER(15,2)	Yes	-
DESCR_ON_BILL	VARCHAR2(80 BYTE)	Yes	-
ACCUMULATION_SW	CHAR(1 BYTE)	Yes	-
ORG_TXN_DATE	DATE	Yes	-
DER_DIVISION	CHAR(5 BYTE)	Yes	-
TXN_RATING_CRITERIA	CHAR(4 BYTE)	Yes	-
DST_ID	CHAR(10 BYTE)	Yes	-
RC_SEQ	NUMBER(3,0)	Yes	-
EXEMPT_AMT	NUMBER(36,18)	Yes	-
BASE_AMT	NUMBER(36,18)	Yes	-
BILL_SQ	NUMBER(36,18)	Yes	-
MSR_PEAK_QTY_SW	CHAR(1 BYTE)	Yes	-
PRIC_CCY_CD	CHAR(3 BYTE)	Yes	-
PRIC_AMT	NUMBER(36,18)	Yes	-
EXCHRATE_ID	CHAR(10 BYTE)	Yes	-
EXCHRATE	NUMBER(36,18)	Yes	-
TOT_AGG_SQ	NUMBER(36,18)	Yes	-
PRICECOMP_ID	CHAR(10 BYTE)	Yes	-
VALUE_AMT	NUMBER(36,18)	Yes	-
AGG_PARM_GRP_ID	NUMBER(22,0)	Yes	-
SUMMARY_ID	VARCHAR2(80 BYTE)	Yes	-
CALC_ONLY_SW	CHAR(1 BYTE)	Yes	-
PRECS_CALC_AMT	NUMBER(36,18)	Yes	-



Column Name	Data Type	Nullable (Yes or No)	Default Value
CHAR_TYPE_CD_1	CHAR(8 BYTE)	Yes	-
CHAR_VAL_1	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_1	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_2	CHAR(8 BYTE)	Yes	-
CHAR_VAL_2	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_2	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_3	CHAR(8 BYTE)	Yes	-
CHAR_VAL_3	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_3	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_4	CHAR(8 BYTE)	Yes	-
CHAR_VAL_4	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_4	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_5	CHAR(8 BYTE)	Yes	-
CHAR_VAL_5	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_5	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_6	CHAR(8 BYTE)	Yes	-
CHAR_VAL_6	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_6	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_7	CHAR(8 BYTE)	Yes	-
CHAR_VAL_7	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_7	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_8	CHAR(8 BYTE)	Yes	-
CHAR_VAL_8	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_8	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_9	CHAR(8 BYTE)	Yes	-
CHAR_VAL_9	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_9	VARCHAR2(254 BYTE)	Yes	-
CHAR_TYPE_CD_10	CHAR(8 BYTE)	Yes	-
CHAR_VAL_10	CHAR(16 BYTE)	Yes	-
ADHOC_CHAR_VAL_10	VARCHAR2(254 BYTE)	Yes	-
ACCUM_GRP_ID	CHAR(12 BYTE)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
MEMBER_SUBSCRIBER_ID	VARCHAR2(254 BYTE)	Yes	-
ACCUM_AFTER_DT	DATE	Yes	-
INITIAL_PRICE_ITEM_CD	CHAR(30 BYTE)	Yes	-
PRICEITEM_PARM_GRP_ID	NUMBER(22,0)	Yes	-
PRICING_RULE_ID	CHAR(15 BYTE)	Yes	-
PRICE_ASGN_ID	CHAR(10 BYTE)	Yes	-
BILL_LVL_ID	CHAR(10 BYTE)	Yes	-
SQI_CD	CHAR(8 BYTE)	Yes	-
SVC_QTY	NUMBER(36,18)	Yes	-
DATA_LOAD_DTTM	DATE	Yes	-

**Primary Key:**

None

**Indexes:**

None

## C.24 CI\_DIV\_PRICEITEM\_L

<b>Purpose:</b>	Used to store the division-specific description for a price item.
<b>Total Number of Columns:</b>	5

**Column Details:**

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIS_DIVISION	CHAR(5)	No	-
PRICEITEM_CD	CHAR(30)	No	-
VERSION	NUMBER(22)	Yes	1
LANGUAGE_CD	CHAR(3)	No	-
DIV_PITEM_DESCR	VARCHAR2(100)	Yes	-

**Primary Key:**

Key Type	Column Name
Composite	CIS_DIVISION
	LANGUAGE_CD
	PRICEITEM_CD

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	XM456P0	Unique	CIS_DIVISION
			LANGUAGE_CD
			PRICEITEM_CD

## Appendix D : Existing Tables Modified in ORMB Version 7.0.0.0.0

This section lists the existing tables which are modified in Oracle Revenue Management and Billing Version 7.0.0.0.0. It indicates the columns that are newly added, dropped, or modified in these tables.

### D.1 C1\_BENEFIT\_SUB\_TYPE

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	COMPARE_PREMIUM_SW	Newly Added	-	CHAR(1)	No	-

### D.2 C1\_BENEFITS

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SP_MEMO_SW	Newly Added	-	CHAR(1)	No	-

## D.3 C1\_DEAL\_SIMULATION\_DTL

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	LVLO_FLR_CEIL_STATUS	Newly Added	-	VARCHAR2(4)	No	-

## D.4 C1\_MODEL\_PRICEITEM

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CBPR_GRP_ID	Newly Added	-	CHAR(10)	No	-

## D.5 C1\_PAY\_INS

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PAYABLE_SW	Newly Added	-	CHAR(1)	No	-

## D.6 CI\_PRICEITEM

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BILL_PERIOD_CD	Newly Added	-	CHAR(8)	No	-
2.	PI_CHARGE_TYPE_FLG	Newly Added	-	CHAR(4)	No	-
3.	POLICY_INVOICE_FREQ_CD	Newly Added	-	CHAR(4)	No	-
4.	RECURRING_FLG	Newly Added	-	CHAR(4)	No	-

## D.7 CI\_STM\_SERVICE\_VW

The following table lists the columns that are newly added, modified, or dropped from the CI\_STM\_SERVICE\_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PRICEITEM_DESCR	Format Change	VARCHAR2(60)	VARCHAR2(100)	No	-

## D.8 C1\_DEAL\_DEFER\_REQ

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	USER_ID	Newly Added	-	CHAR(8)	No	-

## D.9 C1\_BILL\_FACT\_INTG

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADJUSTMENTS_IF_ANY	Format Change	NUMBER(22,15)	NUMBER(22,20)	No	-
2.	CURR_BILL_BAL	Format Change	NUMBER(22,15)	NUMBER(22,20)	No	-
3.	PAYMENTS_RECEIVED_LAST_BILL	Format Change	NUMBER(22,15)	NUMBER(22,20)	No	-
4.	PREVIOUS_BALANCE	Format Change	NUMBER(22,15)	NUMBER(22,20)	No	-

## D.10 C1\_BLINE\_INTG

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_ID	Dropped	CHAR(12)	-	No	-
2.	PRICEITEM_CD	Dropped	CHAR(30)	-	No	-
3.	PRICE_ASGN_ID	Dropped	CHAR(10)	-	No	-
4.	PRICE_CURRENCY_CD	Dropped	CHAR(3)	-	No	-

## D.11 C1\_BS\_ACT\_INTG

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_ID	Dropped	CHAR(12)	-	No	-
2.	CUR_AMT	Dropped	NUMBER(22)	-	No	-
3.	FT_TYPE_FLG	Dropped	CHAR(2)	-	No	-
4.	PRICEITEM_CD	Dropped	CHAR(30)	-	No	-
5.	END_DT	Dropped	DATE	-	No	-
6.	START_DT	Dropped	DATE	-	No	-



## D.12 C1\_FACT\_BILL\_INTG

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCOUNTING_DT	Dropped	DATE	-	No	-
2.	ADJUSTMENTS_IF_ANY	Dropped	NUMBER(22)	-	No	-
3.	AGG_SQ	Dropped	VARCHAR2(254)	-	No	-
4.	ALT_BILL_ID	Dropped	VARCHAR2(30)	-	No	-
5.	ARS_DT	Dropped	DATE	-	No	-
6.	AUDIT_REASON_FLG	Dropped	CHAR(4)	-	No	-
7.	BILL_CYC_CD	Dropped	VARCHAR2(4)	-	No	-
8.	BILL_DESCRIPTION	Dropped	VARCHAR2(80)	-	No	-
9.	BILL_DT	Dropped	DATE	-	No	-
10.	BILL_DUE_DT	Dropped	DATE	-	No	-
11.	BILL_ID	Dropped	CHAR(12)	-	No	-
12.	BILL_STAT_FLG	Dropped	CHAR(2)	-	No	-
13.	BSEG_END_DT	Dropped	DATE	-	No	-
14.	BSEG_ID	Dropped	CHAR(12)	-	No	-
15.	BSEG_START_DT	Dropped	DATE	-	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
16.	BSEG_STAT_FLG	Dropped	CHAR(12)	-	No	-
17.	BS_ACTIVITY_AMT	Dropped	NUMBER(22)	-	No	-
18.	CALC_AMT	Dropped	NUMBER(22,5)	-	No	-
19.	CALENDAR_ID	Dropped	CHAR(2)	-	No	-
20.	CANCEL_BSEG_ID	Dropped	CHAR(12)	-	No	-
21.	CAN_RSN_CD	Dropped	CHAR(4)	-	No	-
22.	CAN_RSN_DESCR	Dropped	VARCHAR2(60)	-	No	-
23.	CIS_DIVISION	Dropped	CHAR(5)	-	No	-
24.	CURR_BILL_BAL	Dropped	NUMBER(22)	-	No	-
25.	CUR_AMT	Dropped	NUMBER(22,5)	-	No	-
26.	DST_ID	Dropped	CHAR(10)	-	No	-
27.	FREEZE_DT	Dropped	DATE	-	No	-
28.	FREEZE_SW	Dropped	CHAR(1)	-	No	-
29.	FREEZE_USER_ID	Dropped	CHAR(8)	-	No	-
30.	FT_ID	Dropped	CHAR(12)	-	No	-
31.	FT_TOT_AMT	Dropped	NUMBER(22,15)	-	No	-
32.	FT_TYPE_FLG	Dropped	CHAR(2)	-	No	-
33.	GL_ACCOUNT	Dropped	VARCHAR2(254)	-	No	-
34.	GL_AMOUNT	Dropped	NUMBER(22)	-	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
35.	GL_CHAR_TYPE_CD	Dropped	CHAR(8)	-	No	-
36.	GL_CHAR_VAL	Dropped	CHAR(16)	-	No	-
37.	GL_DIVISION	Dropped	CHAR(5)	-	No	-
38.	GL_SEQ_NBR	Dropped	NUMBER(22,3)	-	No	-
39.	INVOICE_ACCT	Dropped	CHAR(10)	-	No	-
40.	OTHER_ACTIVITY_AMT	Dropped	NUMBER(22,15)	-	No	-
41.	OTHER_ACTIVITY_BS	Dropped	VARCHAR2(60)	-	No	-
42.	PAYMENTS_RECEIVED_LAST_BILL	Dropped	NUMBER(22)	-	No	-
43.	POLICY_FK	Dropped	CHAR(14)	-	No	-
44.	PREVIOUS_BALANCE	Dropped	NUMBER(22)	-	No	-
45.	PREV_BILL_ID	Dropped	VARCHAR2(12)	-	No	-
46.	PRODUCT	Dropped	CHAR(30)	-	No	-
47.	REBILL_SEG_ID	Dropped	CHAR(12)	-	No	-
48.	REVIEW_YN	Dropped	VARCHAR2(1)	-	No	-
49.	SA_ID	Dropped	CHAR(10)	-	No	-
50.	SA_TYPE_CD	Dropped	CHAR(8)	-	No	-
51.	SRC_MEMBERSHIP_ID	Dropped	CHAR(15)	-	No	-
52.	TOT_AMT	Dropped	NUMBER(22,15)	-	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
53.	USAGE_ACCT	Dropped	CHAR(10)	-	No	-
54.	WIN_START_DT	Dropped	DATE	-	No	-
55.	COMPLETE_DTTM	Dropped	DATE	-	No	-
56.	CRE_DTTM	Dropped	DATE	-	No	-
57.	CURRENCY_CD	Dropped	CHAR(3)	-	No	-

## D.13 C1\_HIERARCHY

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CIS_DIVISION	Dropped	CHAR(5)	-	No	-

## D.14 C1\_OTHER\_BS\_PREM\_INTG

The following table lists the columns that are newly added, modified, or dropped from the C1\_OTHER\_BS\_PREM\_INTG table:

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	AUDIT_REASON_FLG	Dropped	CHAR(4)	-	No	-
2.	BSEG_ID	Dropped	CHAR(12)	-	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
3.	CUR_AMT	Dropped	NUMBER(22,15)	-	No	-
4.	FT_TYPE_FLG	Dropped	CHAR(2)	-	No	-
5.	PRICEITEM_CD	Dropped	CHAR(30)	-	No	-
6.	DESCR	Dropped	VARCHAR2(60)	-	No	-
7.	END_DT	Dropped	DATE	-	No	-
8.	START_DT	Dropped	DATE	-	No	-

## D.15 C1\_PREV\_BILL\_INTG

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

Sr. No.	Column Name	Modification Type	Data Type in V6.1.0.0.0	Data Type in V7.0.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BILL_ID	Dropped	CHAR(12)	-	No	-
2.	PREV_BILL_ID	Dropped	VARCHAR2(12)	-	No	-

## Appendix E : Algorithms and Algorithm Types Dropped in ORMB Version 7.0.0.0.0

This section lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 7.0.0.0.0.

### E.1 Algorithm Types

No algorithm types are dropped in Oracle Revenue Management and Billing Version 7.0.0.0.0.

### E.2 Algorithms

The following table lists the algorithms which are dropped in Oracle Revenue Management and Billing Version 7.0.0.0.0:

Algorithm	Description
C1-ADJTGDT	Adjust Trigger Dates for Paid Through Date based calculations ***DEPRECATED***
C1-DLNQMNRDR	Delinquency Monitor Rule Algorithm Account level - Direct billed
C1-INVRQPRCS	Invoice request - Enter status algorithm for Processed

## **Appendix F : Parameters Added or Removed from Algorithm Types in ORMB Version 7.0.0.0.0**

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No parameters are newly added or removed from the existing algorithm types in Oracle Revenue Management and Billing Version 7.0.0.0.0.

## Appendix G : Option Types Added or Removed from Feature Configurations in ORMB Version 7.0.0.0.0

This section lists the option types which are newly added or removed from the existing feature configurations in Oracle Revenue Management and Billing Version 7.0.0.0.0.

Feature Configuration	Option Type (Removed from 7.0.0.0.0)	Option Type (Added in 7.0.0.0.0)
C1-ASOBLLNG	Feed Management - Transaction Derivation Post Processing	Audit Reason Field Mapping
	Individual	Inbound Message Full Snapshot Upload
	Individual Membership	Number of months in advance for Open-Ended Renewal
	Individual Membership Configurations	Plan Active Status
	Membership Terminated Status	Plan Cancel Status
	Policy Pending Reinstatement Status	Policy Characteristic For Inbound Log
	Policy Pending Termination Status	Policy Cancel Status
	Pricing Rule Post-Processing	Round Member Premium
	-	Renewal period for Open-Ended Membership
	-	Show only Billable BCLT
-	Status Reason Mapping Group	



## **Appendix H : Characteristic Types Dropped in ORMB Version 7.0.0.0.0**

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No characteristic types are dropped in Oracle Revenue Management and Billing Version 7.0.0.0.0.

## **Appendix I : Batch Controls Dropped in ORMB Version 7.0.0.0.0**

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No batch controls are dropped in Oracle Revenue Management and Billing Version 7.0.0.0.0.

## Appendix J : Parameters Added or Removed from Batch Controls in ORMB Version 7.0.0.0.0

This section lists the parameters which are newly added or removed from the existing batch controls in Oracle Revenue Management and Billing Version 7.0.0.0.0:

Batch Control	Parameters (Removed from 7.0.0.0.0)		Parameters (Added in 7.0.0.0.0)	
	Sequence Number	Parameter	Sequence Number	Parameter
BILLOPEN	100	Billing for CMS Account	110	Billing for CMS Account
	-	-	100	Off Cycle Mode
BSGENREG	-	-	110	Off Cycle Mode
C1-BILCN	20	Bill Cycle	10	Batch Mode
	10	Bill ID	30	Bill Correction ID
	40	Bill Cancel Reason	40	Bill Cycle
	50	Thread Pool Name	60	Bill Date
	30	Window Start Date	20	Bill ID
	-	-	70	Bill Cancel Reason
	-	-	80	Clear Bill Cycle Switch
	-	-	90	Thread Pool Name
	-	-	50	Window Start Date
C1-DRMT	70	Threadpool	-	-
C1-DTEX	40	Chunk Size	40	Batch Execution Strategy
C1-GENEX	30	Binding Parameter Names	60	Binding Parameter Names
	40	Binding Parameter Values	70	Binding Parameter Values
	50	Thread Pool Name	90	Thread Pool Name
	20	Zone Code	40	File Format
	-	-	30	File Name
	-	-	20	File Path
	-	-	80	Multiple Extract Data Files

Batch Control	Parameters (Removed from 7.0.0.0.0)		Parameters (Added in 7.0.0.0.0)	
	Sequence Number	Parameter	Sequence Number	Parameter
	-	-	50	Zone Code
C1-HLMON	-	-	60	Status
	-	-	50	Hold Request ID
C1-SQUPD	30	Account Id for which all the billable charges to be considered	40	Account Id for which all the billable charges to be considered
	60	Characteristic type on billable chg to backup the old SQ values	70	Characteristic type on billable chg to backup the old SQ values
	10	Bill Cycle for which billable charges to be considered	20	Bill Cycle for which billable charges to be considered
	20	Division for which billable charges to be considered	10	Thread Pool Name
	50	Price Assign id for which all the billable charges to be considered	30	Division for which billable charges to be considered
	40	Price item for which all the billable charges to be considered	80	Operation to decide whether to cancel the billable charge or not
	-	-	60	Price Assign id for which all the billable charges to be considered
	-	-	50	Price item for which all the billable charges to be considered
POSTPROC	110	Billing for CMS Account	120	Billing for CMS Account
			110	Off Cycle Mode

## Appendix K : Changing the DB User Password

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If you have changed the database user password, you need to execute the following steps before installing the rollup pack for Oracle Utilities Application Framework Version 4.5.0.1.3:

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

**AIX, Linux:**

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

**Windows:**

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

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

**AIX, Linux:**

```
$SPLEBASE/bin/invokeDBUpdatePatch.sh -b
```

**Windows:**

```
%SPLEBASE%\bin\invokeDBUpdatePatch.cmd -b
```

## Appendix L : ORMB V7.0.0.0.0 Rollup Packs

Instead of individually applying the patches, you can download and apply the release-specific rollup packs. To view the list of rollup packs that you need to apply on the application environment and database, see the [ORMB V7.0.0.0.0 Patch Guide](#) (Document ID: 3050173.1) on [My Oracle Support](#).

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

Once you install Oracle Revenue Management and Billing Version 7.0.0.0.0, you need to apply the rollup packs listed in the [ORMB V7.0.0.0.0 Patch Guide](#) (Document ID: 3050173.1). 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_V7.0.0.0.0_App_Rollup`, `RMB_V7.0.0.0.0_DB_Rollup`, and `RMB_V7.0.0.0.0_PFDs`.

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

**AIX, Linux:**

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

**Windows:**

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

Where,

`$(SPLBASE)` or `%SPLBASE%` is the path where the application environment is installed and `$(SPLENVIRON)` or `%SPLENVIRON%` is the name of the application environment.

4. Change to the `RMB_V7.0.0.0.0_App_Rollup` folder using the following command:

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_1>/RMB_V7.0.0.0.0_App_Rollup
```

**Windows:**

```
cd <DESTINATION_FOLDER_1>\RMB_V7.0.0.0.0_App_Rollup
```

**Note:** The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the rollup pack.

5. Install the patch using the following command:

**AIX, Linux:**

```
./installSFgroup.sh
```

**Windows:**

```
installSFgroup.cmd
```

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

Once you install Oracle Revenue Management and Billing Version 7.0.0.0.0, you need to apply the rollup packs listed in the [ORMB V7.0.0.0.0 Patch Guide](#) (Document ID: 3050173.1). You can apply a rollup pack from a Windows machine or UNIX Standalone server. To apply a rollup pack on the database:

1. Download the rollup pack from [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_V7.0.0.0.0_App_Rollup`, `RMB_V7.0.0.0.0_DB_Rollup`, and `RMB_V7.0.0.0.0_PFDs`.

3. Change to the `RMB_V7.0.0.0.0_DB_Rollup` folder using the following command:

**AIX, Linux:**

```
cd <DESTINATION_FOLDER_1>/RMB_V7.0.0.0.0_DB_Rollup
```

**Windows:**

```
cd <DESTINATION_FOLDER_1>\RMB_V7.0.0.0.0_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:

**AIX, Linux:**

```
ouafDatabasePatch.sh
```

**Windows:**

```
ouafDatabasePatch.cmd
```

**Note:** On the AIX and Linux platforms, ensure that you grant the execute permission for the `ouafDatabasePatch.sh` utility using the following command:

```
chmod 755 ouafDatabasePatch.sh
```

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

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

- Enter the required parameter value. The following message appears in the command line:  
Ready to process patches, Do you want to continue? (Y/N)
- Type **Y** and then press **Enter**. A message appears indicating that the patches are applied successfully.



## Appendix M : New Tables Added in OUAF Version 4.5.0.1.3

This section lists and describes the tables that are newly added in Oracle Utilities Application Framework Version 4.5.0.1.3.

### M.1 F1\_MST\_CONFIG\_CHAR

<b>Purpose:</b>	Used to store the characteristics of a master configuration.
<b>Total Number of Columns:</b>	13

#### Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BUS_OBJ_CD	CHAR(30)	No	-
CONFIG_PART_NAME	VARCHAR2(254)	No	-
CHAR_TYPE_CD	CHAR(8)	No	-
SEQ_NUM	NUMBER(22)	No	-
VERSION	NUMBER(22)	No	1
CHAR_VAL	CHAR(16)	No	''
ADHOC_CHAR_VAL	VARCHAR2(254)	No	''
CHAR_VAL_FK1	VARCHAR2(50)	No	''
CHAR_VAL_FK2	VARCHAR2(50)	No	''
CHAR_VAL_FK3	VARCHAR2(50)	No	''
CHAR_VAL_FK4	VARCHAR2(50)	No	''
CHAR_VAL_FK5	VARCHAR2(50)	No	''
SRCH_CHAR_VAL	VARCHAR2(50)	No	''

#### Primary Key:

Key Type	Column Name
Composite	BUS_OBJ_CD
	CHAR_TYPE_CD
	CONFIG_PART_NAME
	SEQ_NUM

**Indexes:**

Sr. No.	Index Name	Index Type	Column Name
1.	F1C122P0	Unique	BUS_OBJ_CD
			CHAR_TYPE_CD
			CONFIG_PART_NAME
			SEQ_NUM
2.	F1C122S1	Non-Unique	SRCH_CHAR_VAL

## Appendix N : Existing Tables Modified in OUAF Version 4.5.0.1.3

This section lists the existing tables which are modified in Oracle Utilities Application Framework Version 4.5.0.1.3. It indicates the columns that are newly added, dropped, or modified in these tables.

### N.1 CI\_MD\_IDX

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	IDX_CD	Format Change	CHAR(12)	VARCHAR2(128)	No	-

### N.2 CI\_MD\_IDX\_FLD

The following table lists the columns that are newly added, modified, or dropped from the CI\_MD\_IDX\_FLD table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	IDX_CD	Format Change	CHAR(12)	VARCHAR2(128)	No	-

## N.3 CI\_TD\_ENTRY

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	RTE_BATCH_CD	Newly Added	-	CHAR(8)	No	-
2.	RTE_BATCH_NBR	Newly Added	-	NUMBER(10)	No	-
3.	TD_SUB_STATUS_FLG	Newly Added	-	CHAR(4)	No	-

## N.4 CI\_TD\_ENTRY\_OPEN\_VW

The following table lists the columns that are newly added, modified, or dropped from the CI\_TD\_ENTRY\_OPEN\_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	TD_SUB_STATUS_FLG	Newly Added	-	CHAR(4)	No	-

## N.5 CI\_TD\_LOG

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	TD_LOG_STATUS_FLG	Newly Added	-	CHAR(4)	No	-

## N.6 F1\_BATCH\_RUN\_HIST\_VW

The following table lists the columns that are newly added, modified, or dropped from the F1\_BATCH\_RUN\_HIST\_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	TOTAL_ERROR	Format Change	NUMBER(22)	NUMBER(22,10)	No	-
2.	TOTAL_PROCESSED	Format Change	NUMBER(22)	NUMBER(22,10)	No	-
3.	DO_NOT_RESTART_SW	Newly Added	-	CHAR(1)	No	-
4.	SUBMIT_METH_FLG	Newly Added	-	CHAR(4)	No	-
5.	SUBMIT_USER_ID	Newly Added	-	CHAR(8)	No	-
6.	THREADPOOL	Newly Added	-	VARCHAR2(254)	No	-
7.	USER_ID	Newly Added	-	CHAR(8)	No	-

## N.7 F1\_BATCH\_THD\_CAP\_VW

The following table lists the columns that are newly added, modified, or dropped from the F1\_BATCH\_THD\_CAP\_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	END_MINUTES	Dropped	NUMBER(22)	-	No	-
2.	START_MINUTES	Dropped	NUMBER(22)	-	No	-
3.	BATCH_JOB_ID	Newly Added	-	CHAR(14)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
4.	END_DT	Newly Added	-	DATE	No	-
5.	F1_MINUTE_IN_DAY	Newly Added	-	NUMBER(4)	No	-
6.	F1_TIME_KEY	Newly Added	-	CHAR(4)	No	-
7.	RUN_PROCESSING_DT	Newly Added	-	DATE	No	-
8.	START_DT	Newly Added	-	DATE	No	-
9.	SUBMIT_METH_FLG	Newly Added	-	CHAR(4)	No	-
10.	SUBMIT_USER_ID	Newly Added	-	CHAR(8)	No	-
11.	THREAD_END_DTTM	Newly Added	-	DATE	No	-
12.	THREAD_START_DTTM	Newly Added	-	DATE	No	-

## N.8 F1\_BATCH\_THD\_HIST\_VW

The following table lists the columns that are newly added, modified, or dropped from the F1\_BATCH\_THD\_HIST\_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BATCH_JOB_ID	Newly Added	-	CHAR(14)	No	-
2.	RUN_STATUS	Newly Added	-	CHAR(2)	No	-
3.	THREAD_STATUS	Newly Added	-	CHAR(2)	No	-

## N.9 F1\_BUS\_OBJ\_STATUS\_L

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DESCR_OVRD	Newly Added	-	VARCHAR2(60)	No	-

## N.10 F1\_BUS\_OBJ\_STATUS\_RSN\_L

The following table lists the columns that are newly added, modified, or dropped from the F1\_BUS\_OBJ\_STATUS\_RSN\_L table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DESCR_OVRD	Newly Added	-	VARCHAR2(60)	No	-

## N.11 F1\_BUS\_OBJ\_STATUS\_RSN\_VW

The following table lists the columns that are newly added, modified, or dropped from the F1\_BUS\_OBJ\_STATUS\_RSN\_VW table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BO_STATUS_REASON_CD	Newly Added	-	VARCHAR2(30)	No	-
2.	DESCR	Newly Added	-	VARCHAR2(60)	No	-
3.	DESCRLONG	Newly Added	-	VARCHAR2(4000)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
4.	LANGUAGE_CD	Newly Added	-	CHAR(3)	No	-
5.	OWNER_FLG	Newly Added	-	CHAR(4)	No	-
6.	VERSION	Newly Added	-	NUMBER(5)	No	-

## N.12 F1\_BUS\_OBJ\_STATUS\_VW

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BO_STATUS_CD	Newly Added	-	CHAR(12)	No	-
2.	BUS_OBJ_CD	Newly Added	-	CHAR(30)	No	-
3.	DESCR	Newly Added	-	VARCHAR2(60)	No	-
4.	DESCRLONG	Newly Added	-	VARCHAR2(4000)	No	-
5.	LANGUAGE_CD	Newly Added	-	CHAR(3)	No	-
6.	OWNER_FLG	Newly Added	-	CHAR(4)	No	-
7.	VERSION	Newly Added	-	NUMBER(5)	No	-



## N.13 F1\_BUS\_OBJ\_TR\_RULE\_L

The following table lists the columns that are newly added, modified, or dropped from the F1\_BUS\_OBJ\_TR\_RULE\_L table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BO_NEXT_STATUS_OVRD_LBL	Newly Added	-	VARCHAR2(60)	No	-

## N.14 F1\_MIGR\_REQ\_INSTR

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENTITY_TAG	Newly Added	-	VARCHAR2(30)	No	-

## N.15 F1\_MST\_CONFIG

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.1.1	Data Type in V4.5.0.1.3	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CONFIG_CLS_FLG	Newly Added	-	CHAR(4)	No	-
2.	CONFIG_PART_NAME	Newly Added	-	VARCHAR2(254)	No	-
3.	MST_CONFIG_DATA	Newly Added	-	CLOB	No	-

## Appendix O : Algorithms and Algorithm Types Dropped in OUAF Version 4.5.0.1.3

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This section lists the algorithms and algorithm types which are dropped in Oracle Utilities Application Framework Version 4.5.0.1.3.

### O.1 Algorithm Types

No algorithm types are dropped in Oracle Utilities Application Framework Version 4.5.0.1.3.

### O.2 Algorithms

No algorithms are dropped in Oracle Utilities Application Framework Version 4.5.0.1.3.

## Appendix P : Parameters Added or Removed from Batch Controls in OUAF Version 4.5.0.1.3

This section lists the parameters which are newly added or removed from the existing batch controls in Oracle Utilities Application Framework Version 4.5.0.1.3.

Batch Control	Parameters (Removed from 4.5.0.1.3)		Parameters (Added in 4.5.0.1.3)	
	Sequence Number	Parameter	Sequence Number	Parameter
F1BRANSN	10	Months Old Lower Limit	10	From Days Old
	20	Months Old Upper Limit	20	To Days Old
F1BTANSN	10	Months Old Lower Limit	10	From Days Old
	20	Months Old Upper Limit	20	To Days Old

## Appendix Q : SQL Statements for 6.1.0.0.0 to 7.0.0.0.0 Data Migration

This section describes the `PostProcessingScript` query which is used for migrating data from Oracle Revenue Management and Billing Version 6.1.0.0.0 to 7.0.0.0.0.

### Q.1 PostProcessingScript.sql

The `PostProcessingScript.sql` query does the following:

- Inserts a record in the newly created table named `CI_DIV_PRICEITEM_L` for all the corresponding records present in the `CI_DIV_PRICEITEM` table
- Existing data in the `BO_DATA_AREA` column of the `CI_TXN_DISAGG_REQ` table is converted into the XML format and wrapped with the XML tags

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

Table Name	Column Name	Column Value After Data Migration
CI_DIV_PRICEITEM_L	CIS_DIVISION	The column value is set to the value stored in the <b>CIS_DIVISION</b> column corresponding to the record in the <code>CI_DIV_PRICEITEM</code> table.
	PRICEITEM_CD	The column value is set to the value stored in the <b>PRICEITEM_CD</b> column corresponding to the record in the <code>CI_DIV_PRICEITEM</code> table.
	VERSION	The column value is set to <b>1</b> .
	LANGUAGE_CD	The column value is set to <b>ENG</b> .
	DIV_PITEM_DESCR	The column value is set to <code>'</code> .
CI_TXN_DISAGG_REQ	BO_DATA_AREA	The column is converted into the XML format and the string inside the <b>BO_DATA_AREA</b> column is wrapped with XML tags.