

**Oracle Financial Services Revenue
Management and Billing**

OR

**Oracle Insurance Revenue
Management and Billing**

Version 6.1.0.0.0

Upgrade Guide

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Oracle Financial Services Revenue Management and Billing/Oracle Insurance Revenue Management and Billing 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 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0	Explains how to upgrade from Oracle Revenue Management and Billing Version 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0.
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 6.1.0.0.0.
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 6.1.0.0.0	Lists and describes the tables that are newly added in Oracle Revenue Management and Billing Version 6.1.0.0.0.
Appendix D	Existing Tables Modified in ORMB Version 6.1.0.0.0	Lists the existing tables and their columns that are modified in Oracle Revenue Management and Billing Version 6.1.0.0.0.

Section No.	Section Name	Description
Appendix E	Algorithms and Algorithm Types Dropped in ORMB Version 6.1.0.0.0	Lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 6.1.0.0.0.
Appendix F	Parameters Added or Removed from Algorithm Types in ORMB Version 6.1.0.0.0	Lists the parameters which are added or removed from the algorithm types in Oracle Revenue Management and Billing Version 6.1.0.0.0.
Appendix G	Option Types Added or Removed from Feature Configurations in ORMB Version 6.1.0.0.0	Lists the option types which are added or removed from the feature configurations in Oracle Revenue Management and Billing Version 6.1.0.0.0.
Appendix H	Characteristic Types Dropped in ORMB Version 6.1.0.0.0	Lists the characteristic types which are dropped in Oracle Revenue Management and Billing Version 6.1.0.0.0.
Appendix I	Batch Controls Dropped in ORMB Version 6.1.0.0.0	Lists the batch controls which are dropped in Oracle Revenue Management and Billing Version 6.1.0.0.0.
Appendix J	Parameters Added or Removed from Batch Controls in ORMB Version 6.1.0.0.0	Lists the parameters which are added or removed from the batch controls in Oracle Revenue Management and Billing Version 6.1.0.0.0.
Appendix K	Changing the DB User Password	Explains how to change the database user password.
Appendix L	ORMB V6.1.0.0.0 Rollup Packs	Lists the rollup packs available for Oracle Revenue Management and Billing Version 6.1.0.0.0. It also explains how to apply a rollup pack on the application environment and database.
Appendix M	New Tables Added in OUAF Version 4.5.0.1.1	Lists and describes the tables that are newly added in Oracle Utilities Application Framework Version 4.5.0.1.1.
Appendix N	Existing Tables Modified in OUAF Version 4.5.0.1.1	Lists the existing tables and their columns that are modified in Oracle Utilities Application Framework Version 4.5.0.1.1.

Conventions

The following conventions are used across the document:

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

Acronyms

The following acronyms are used in this document:

Acronym	Meaning
ORMB	Oracle Revenue Management and Billing
OUIAF	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 refer to the following documents for more information:

Document Name	Description
<i>Oracle Revenue Management and Billing Version 6.1.0.0.0 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
26.1	16-Feb-2024	Section 2.3.3: Installing Rollup Pack for OUAF Version 4.5.0.1.1	Updated Information
		Section 2.5.5: Setting the C1-REPORTVW Feature Configuration	Updated Information
		Section 2.5.6: Setting the C1-FLUPLD Feature Configuration	Updated Information

Access to Oracle Support

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1. Preparing for Upgrade

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

1.1 Upgrade Overview

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

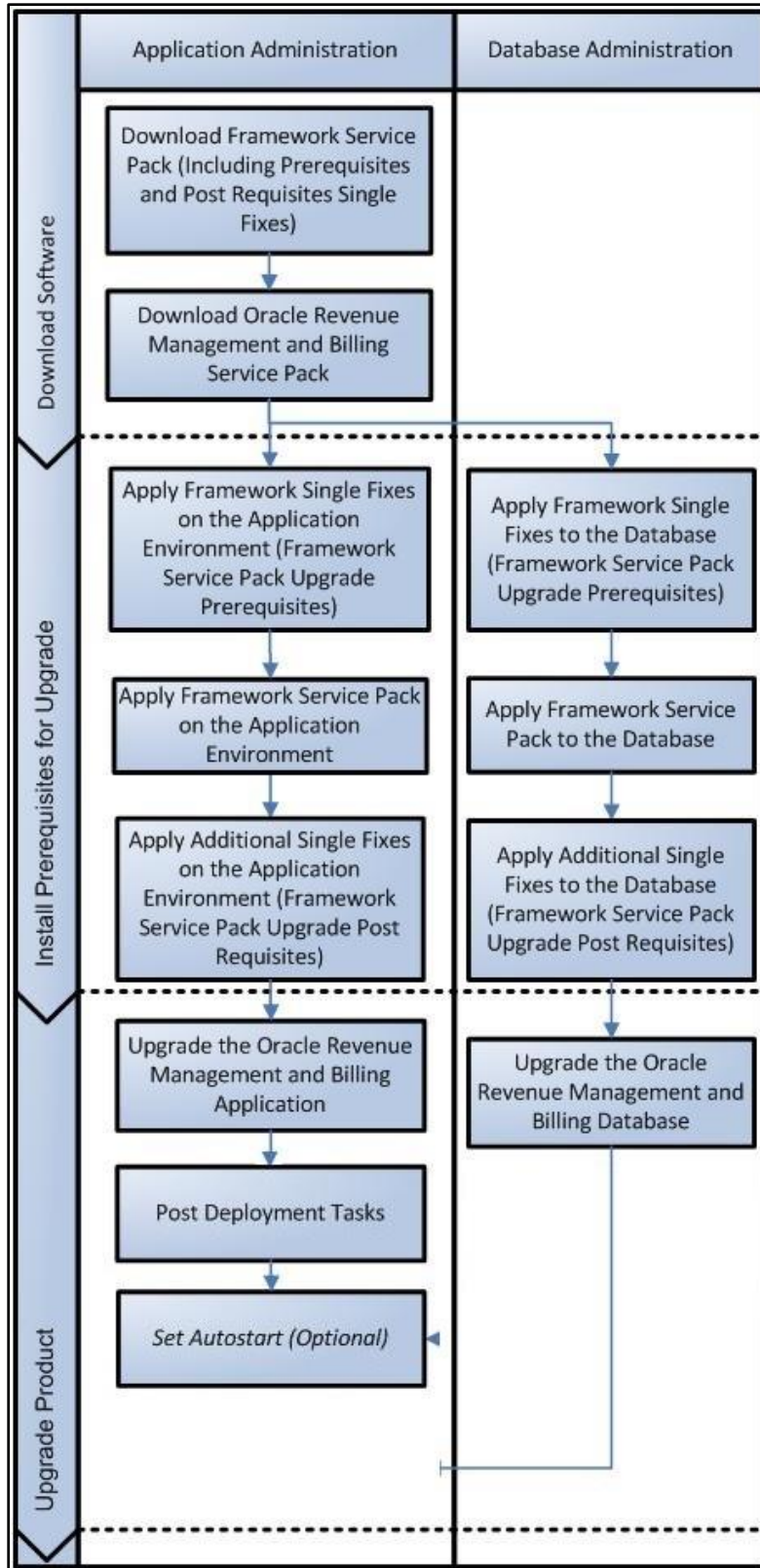


Figure 1: Upgrade Process

1.2 Upgrade Pre-requisites

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

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

1.3 Supported Upgrades

In this release, we support the following upgrades:

- Upgrade from Oracle Revenue Management and Billing Version 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0

Note: We support the ORMB upgrade from 5.1.0.0.0 to 6.1.0.0.0 for the health insurance domain and the ORMB upgrade from 6.0.0.0.0 to 6.1.0.0.0 for the financial services domain.

2. Upgrading from ORMB Version 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0

This section explains how to upgrade from Oracle Revenue Management and Billing Version 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0. The high-level steps include:

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

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

2.1 Prerequisites

If you are already using the Transaction Feed Management feature and want to upgrade to Oracle Revenue Management and Billing Version 6.1.0.0.0, 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 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0, you must download the following packages from the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0** or **Oracle Insurance Revenue Management and Billing 6.1.0.0.0** media pack which is available on [Oracle Software Delivery Cloud](#):

- Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup

- Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Multiplatform
- Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Database

You must also download the following packages from the **Oracle Utilities Application Framework 4.5.0.1.1** media pack which is available on [Oracle Software Delivery Cloud](#):

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

The downloaded files will be in the ZIP format.


2.2.1 Downloading the OUAF Packages

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

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

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

To download the OUAF packages:

1. Login to [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 4.5.0.1.1** media pack.
6. If required, you can verify the media pack which is selected by clicking the **View Items** link.
7. Click the **Continue** link. A page appears.
8. Select the required platform from the **Platforms/Languages** list.
9. Click **Continue**. A page appears with the license agreement.
10. Scroll and read the entire license agreement and then click the **I reviewed and accept the Oracle License Agreement** option.
11. Click **Continue**. The **File Download** page appears.
12. Select the following packages from the media pack:
 - Oracle Utilities Application Framework 4.5.0.1.1 - Application Installation Media
 - Oracle Utilities Application Framework 4.5.0.1.1 - Database Installation Media
13. Click **Download**. An executable file is downloaded on your local machine.
14. Run the executable file. The **Oracle Download Manager** window appears.
15. Browse to the location where you want to download the packages and then click **Next**. The packages are downloaded on your local machine.


2.2.2 Downloading the ORMB Packages

Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 and Oracle Insurance Revenue Management and Billing 6.1.0.0.0 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, refer to the **Media Pack Contents** section in the *Oracle Revenue Management and Billing Version 6.1.0.0.0 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 6.1.0.0.0** or **Oracle Insurance Revenue Management and Billing 6.1.0.0.0** media pack.
6. If required, you can verify the media pack which is selected by clicking the **View Items** link.
7. Click the **Continue** link. A page appears.
8. Select the required platform from the **Platforms/Languages** list.
9. Click **Continue**. A page appears with the license agreement.
10. Scroll and read the entire license agreement and then click the **I reviewed and accept the Oracle License Agreement** option.
11. Click **Continue**. The **File Download** page appears.
12. Select the following packages from the media pack:
 - Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup
 - Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Multiplatform
 - Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Database
13. Click **Download**. An executable file is downloaded on your local machine.
14. Run the executable file. The **Oracle Download Manager** window appears.
15. Browse to the location where you want to download the packages and then click **Next**. The packages are downloaded on your local machine.

2.3 Upgrading Framework on the Database

While upgrading from Oracle Revenue Management and Billing Version 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0, you need to install the following on the database:

1. [Oracle Utilities Application Framework \(OUAF\) Version 4.5.0.1.1](#)
2. [Rollup Pack for Oracle Utilities Application Framework \(OUAF\) Version 4.5.0.1.1](#)

Note: If you are upgrading from ORMB Version 5.1.0.0.0 to 6.1.0.0.0 on the database, you need to install both OUAF and Rollup Pack for OUAF. However, if you are upgrading from ORMB Version 6.0.0.0.0 to 6.1.0.0.0 on the database, you need to just install the Rollup Pack for OUAF.

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

2.3.1 Pre-requisites

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

- Set the **MAX_STRING_SIZE** parameter to **EXTENDED** – For more information, refer to the **Setting the MAX_STRING_SIZE Parameter to EXTENDED** topic of the **Initial Install or Installing Version 6.1.0.0.0 for the First Time** section in the *Oracle Revenue Management and Billing Database Administrator's Guide*.
- Assign the **Execute** privilege for the **DBMS_CRYPTO** package to the **CISADM** user - For more information, refer to the **Enabling the DBMS_CRYPTO Package** topic of the **Initial Install or Installing Version 6.1.0.0.0 for the First Time** section in the *Oracle Revenue Management and Billing Database Administrator's Guide*.
- Set the interval partitioning for the **F1_MO_UPD** and **F1_MO_UPD_BACKLOG** tables – For more information, refer to the **Partitioning F1_MO_UPD and F1_MO_UPD_BACKLOG Tables** section of the *Oracle Revenue Management and Billing Database Administrator's Guide*.

2.3.2 Installing OUAF Version 4.5.0.1.1

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

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

```
mkdir TEMPDIR
```

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

AIX, Linux:

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

Windows:

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

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

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

AIX, Linux:

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

Windows:

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

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

AIX, Linux:

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

Windows:

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

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

- `Install-Upgrade`
- `jarfiles`

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

AIX, Linux:

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

Windows:

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

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

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

AIX, Linux:

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

Note:

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

The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the **Oracle Utilities Application Framework 4.5.0.1.1 - Database Installation Media** package.

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

AIX, Linux:

```
export CLASS_PATH=$JAR_PATH/commons-cli-1.5.0.jar:$JAR_PATH/commons-codec-1.17-744c1c9.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/ojdbc8-19.12.0.0.0.jar:$JAR_PATH/spl-oradbi-4.5.0.1.1.jar:$JAR_PATH/spl-shared-4.5.0.1.1.jar
```

Windows:

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

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

AIX, Linux:

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

Windows:

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

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

AIX, Linux:

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

Windows:

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

The following message appears in the command line:

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

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

2.3.3 Installing Rollup Pack for OUAF Version 4.5.0.1.1

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

1. Log in to the database server using the administrator's credentials.
2. Copy the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup** package to the `TEMPDIR` folder using the following command:

AIX, Linux:

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

Windows:

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

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

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

AIX, Linux:

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

Windows:

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

4. Unzip the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup** package using the following command:

AIX, Linux:

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

Windows:

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

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_2>` folder. The contents include the `ORMB-V61000-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-V61000-FW-PREREQ-MultiPlatform.jar
```

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

- `Application`
- `Database`

- 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, refer to 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 `TOOLS_BIN` environment variable using the following command:

AIX, Linux:

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

Windows:

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

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

AIX, Linux:

```
cd <DESTINATION_FOLDER_2>/FW-V4.5.0.1.1-Rollup/Database
```

Windows:

```
cd <DESTINATION_FOLDER_2>\FW-V4.5.0.1.1-Rollup\Database
```

Note: The `<DESTINATION_FOLDER_2>` folder is the location where you have extracted the contents of the `ORMB-V61000-FW-PREREQ-MultiPlatform.jar` file.

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

AIX, Linux:

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

OR

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

Windows:

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

OR

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

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

Parameter	Value
Enter the target database type (O/M/D) [O]	O (if you have Oracle database) OR M (if you have MySQL database)
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/DB_NAME>

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

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

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

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

2.4 Installing Framework on the Application Environment

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

1. [Oracle Utilities Application Framework \(OUAF\) Version 4.5.0.1.1](#)
2. [Rollup Pack for Oracle Utilities Application Framework \(OUAF\) Version 4.5.0.1.1](#)

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

2.4.1 Installing OUAF Version 4.5.0.1.1

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

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

```
mkdir TEMPDIR
```

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

AIX, Linux:

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

Windows:

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

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

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

AIX, Linux:

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

Windows:

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

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

AIX, Linux:

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

Windows:

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

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_1>` folder. The contents include a directory named `FW-V4.5.0.1.1`. The contents of the installation package are identical for all supported platforms. The `FW-V4.5.0.1.1` folder contains the OUAF installation software.

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

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

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

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

Points to Note:

The `<Java_Home>` is the location where you have installed Java 1.8.

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

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

AIX, Linux:

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

Windows:

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

Note: The `<DESTINATION_FOLDER_1>` folder is the location where you have extracted the contents of the **Oracle Utilities Application Framework 4.5.0.1.1 - Application Installation Media** package.

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

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, refer to the **Environment ID, Roles, Third Party Software Configuration** section in the *Oracle Revenue Management and Billing Installation Guide*.

13. Type **2** to define values for the keystore options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.

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

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

15. Type **50** to define values for the environment installation options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.

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

Points to Note:

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

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

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

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

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

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

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

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

20. Type **2** to define values for the business application server configuration, and then press **Enter**. The utility prompts you to enter values for a list of menu options.

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

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

22. Type **3** to define values for the web application server configuration, and then press **Enter**. The utility prompts you to enter values for a list of menu options.

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

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

24. Type **4** to define values for the database configuration, and then press **Enter**. The utility prompts you to enter values for a list of menu options.

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

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

26. Type **5** to define values for the general configuration options, and then press **Enter**. The utility prompts you to enter values for a list of menu options.

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

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

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

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

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

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

Points to Note:

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

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

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

1. `initialSetup` - The `initialSetup` utility updates the configuration files including the WAR files on the system. On the UNIX machine, this utility is available in the `$SPLEBASE/bin` folder. And, on the Windows machine, this utility is available in the `%SPLEBASE%\bin` folder.
2. `splenvron` - The `splenvron` utility sets the environment variables using the `ENVIRON.INI` file. On the UNIX machine, this utility is available in the `$SPLEBASE/bin` 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 `splenvron` utility:

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

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

AIX, Linux:

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

Windows:

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

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

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

2.4.2 Installing Rollup Pack for OUAF Version 4.5.0.1.1

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

1. Copy the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup** package to the `TEMPDIR` folder using the following command:

AIX, Linux:

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

Windows:

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

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

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

AIX, Linux:

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

Windows:

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

3. Unzip the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Utilities Application Framework (4.5.0.1.1) Single Fix Prerequisite Rollup** package using the following command:

AIX, Linux:

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

Windows:

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

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_2>` folder. The contents include the `ORMB-V61000-FW-PREREQ-MultiPlatform.jar` file.

4. Decompress the JAR file using the following command:

```
jar -xvf ORMB-V61000-FW-PREREQ-MultiPlatform.jar
```

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

- `Application`
- `Database`

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

AIX, Linux:

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

Windows:

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

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

AIX, Linux:

```
cd <DESTINATION_FOLDER_2>/FW-V4.5.0.1.1-Rollup/Application
```

Windows:

```
cd <DESTINATION_FOLDER_2>\FW-V4.5.0.1.1-Rollup\Application
```

Note: The `<DESTINATION_FOLDER_2>` folder is the location where you have extracted the contents of the `ORMB-V61000-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 6.1.0.0.0](#)
2. [Oracle Revenue Management and Billing \(ORMB\) Version 6.1.0.0.0 Post Requisite Patches](#)

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

Once you install the application, you can access the application. For more information on how to access the application, refer to the [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 6.1.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 6.1.0.0.0 on the application environment:

1. Login to the application server using the administrator's credentials.
2. Copy the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Multiplatform** package to the `TEMPDIR` folder using the following command:

AIX, Linux:

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

Windows:

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

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

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

AIX, Linux:

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

Windows:

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

4. Unzip the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Multiplatform** package using the following command:

AIX, Linux:

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

Windows:

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

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_3>` folder. The contents include `ORMB.V6.1.0.0.0` 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:

```
%SPLBASE%\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.V6.1.0.0.0` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_3>/ORMB.V6.1.0.0.0
```

Windows:

```
cd <DESTINATION_FOLDER_3>\ORMB.V6.1.0.0.0
```

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

AIX, Linux:

```
./install.sh
```

Windows:

```
install.cmd
```

The following message appears in the command line:

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

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

Points to Note:

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

AIX, Linux:

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

Windows:

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

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

2.5.2 Applying the Release-Specific Patches

Once you install Oracle Revenue Management and Billing (ORMB) Version 6.1.0.0.0, you need to apply the release-specific patches on the application environment. To view the list of patches that you need to apply on the application environment, refer to the [ORMB V6.1.0.0.0 Patch Guide \(Document ID: 3000929.1\)](#) 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, refer to [Appendix L: ORMB V6.1.0.0.0 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 V6.1.0.0.0-<PATCH_NUMBER>_MultiPlatform folder.

4. Change to the V6.1.0.0.0-<PATCH_NUMBER>_MultiPlatform folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V6.1.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_5>\V6.1.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

Note: The <DESTINATION_FOLDER_5> folder is the location where you have extracted the contents of the MultiPlatform.zip file.

The contents include a file named CCB.V6.1.0.0.0-<PATCH_NUMBER>.jar and a directory named database.

- Decompress the `CCB.V6.1.0.0.0-<PATCH_NUMBER>.jar` file using the following command:

```
jar -xvf CCB.V6.1.0.0.0-<PATCH_NUMBER>.jar
```

The contents include two sub-folders - `META-INF` and `CCB.V6.1.0.0.0-<PATCH_NUMBER>`.

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

AIX, Linux:

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

Windows:

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

Where,

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

- Change to the `CCB.V6.1.0.0.0-<PATCH_NUMBER>` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V6.1.0.0.0-  
<PATCH_NUMBER>_MultiPlatform/CCB.V6.1.0.0.0-<PATCH_NUMBER>
```

Windows:

```
cd <DESTINATION_FOLDER_5>\V6.1.0.0.0-  
<PATCH_NUMBER>_MultiPlatform\CCB.V6.1.0.0.0-<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	<code>https://<hostname>:<WebLogic_Port_Number>/ouaf/loginPage.jsp</code>

2.5.4 Setting the C1-CFS Feature Configuration

The **C1-CFS** feature configuration enables you to indicate whether the application environment should use the file object storage service of Oracle Cloud Infrastructure (OCI). If the file object storage service of OCI is used, you need to specify the buckets or containers within the Object Storage namespace from where you need to read files for the On Demand Billing and Payment Upload features. Before specifying the buckets to read files from the external location for the On Demand Billing and Payment Upload features, you need to define a file storage extendable lookup value using the **File Storage Configuration (F1-FileStorage)** extendable lookup where the file adapter is set to **Oracle Cloud Object Storage**. For more information on how to define a file storage extendable lookup value, refer to the **Oracle Utilities Application Framework Administrative Processes → 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 6.1.0.0.0.
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"> • Y • N <p>Points to Note:</p> <p>By default, the value is set to N.</p> <p>You must ensure that the value of this option type is set to N in the On Premise and Cloud Service environments.</p> <p>If the value of this option type is set to Y, you need to accordingly specify the directory paths while executing the DWLDBILC, C1-PUPSG, C1-APACK, and C1-RECUP batches. For more information, refer to the <i>Oracle</i></p>	Yes

Option Type	Description	Mandatory (Yes or No)
	<i>Revenue Management and Billing Batch Guide.</i>	
ODB Extendable Lookup and Bucket	<p>Used to specify the following information in the <File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p> <ul style="list-style-type: none"> • 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. • The bucket or container from where you want to upload the file using the On Demand Billing feature. <p>Note: This option type is required only when the File Object Storage Usage option type is set to Y and you want to use the On Demand Billing feature.</p>	Yes (Conditional)
Payment Upld Extendable Lookup and Bucket	<p>Used to specify the following information in the <File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p> <ul style="list-style-type: none"> • 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. • The bucket or container from where you want to upload the file using the Payment Upload feature. <p>Note: This option type is required only when the File Object Storage Usage option type is set to Y and you want to use the Payment Upload feature.</p>	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 6.1.0.0.0.
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>https://ipaddress:port/ouaf/reportView</p> <p>Note: 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"> • @SHARED_DIR – Used when you want to store the FOP reports in the shared directory on the server. 	Yes

Option Type	Description	Mandatory (Yes or No)
	<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://<File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p> <ul style="list-style-type: none"> • The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while storing the FOP reports on OCI • The bucket or container where you want the system to store the FOP reports which are generated in the different formats. <div data-bbox="505 894 1068 1182" style="border: 1px solid black; padding: 5px;"> <p>Points to Note:</p> <p>By default, the value is set to @SHARED_DIR/splapp/reporting/output. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. SHARED_DIR) 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"> • @SHARED_DIR – Used when you want to fetch the XSL file from the shared directory on the server. <p>For example, you can set the value to @SHARED_DIR/xsl.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://<File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p>	Yes

Option Type	Description	Mandatory (Yes or No)
	<ul style="list-style-type: none"> • 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. • The bucket or container from where you want the system to fetch the XSL file while generating the FOP report. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Points to Note:</p> <p>By default, the value is set to @SHARED_DIR/splapp/reporting/xsl. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. SHARED_DIR) is case-sensitive.</p> <p>Before generating an FOP report, you need to ensure that the XSL files are copied from the @INSTALL_DIR/splapp/reporting/xsl directory to the specified shared directory.</p> </div>	
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"> • @SHARED_DIR – Used when you want to store the XML file in the shared directory on the server. <p>For example, you can set the value to @SHARED_DIR/extractxml.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://<File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p> <ul style="list-style-type: none"> • The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while storing the XML file on OCI. 	Yes

Option Type	Description	Mandatory (Yes or No)
	<ul style="list-style-type: none"> The bucket or container where you want the system to store the XML file for an FOP report. <div style="border: 1px solid black; padding: 5px;"> <p>Points to Note:</p> <p>By default, the value is set to @SHARED_DIR/splapp/reporting/extractxml. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. SHARED_DIR) is case-sensitive.</p> </div>	

- 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.

2.5.6 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:

- Login to Oracle Revenue Management and Billing Version 6.1.0.0.0.
- Click the **Admin** link in the **Application** toolbar. A list appears.
- From the **Admin** menu, select **F** and then click **Feature Configuration**. A sub-menu appears.
- Click the **Search** option from the **Feature Configuration** sub-menu. The **Feature Configuration Query** screen appears.
- In the **Feature Configuration Search** zone, enter **C1-FLUPLD** in the **Feature Name** field.
- 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	<p>Used to specify the alias (i.e. key defined in the keystore) using which you want to encrypt or decrypt the files.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Note: By default, the value is set to ouaf.system. You can change the value as per the requirement.</p> </div>	Yes
Key Store File Path	<p>Used to specify the directory or bucket from where you want to fetch the keystore 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"> • @SHARED_DIR – Used when you want to fetch the keystore file from the shared directory on the server. <p>For example, you can set the value to @SHARED_DIR/.ouaf_keystore.</p> <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://<File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p> <ul style="list-style-type: none"> • The file storage extendable lookup value from where the cloud storage compartment and connection details are retrieved while fetching the keystore file on OCI. • The bucket or container from where you want the system to fetch the keystore file. <div style="border: 1px solid black; padding: 5px;"> <p>Points to Note:</p> <p>By default, the value is set to @SHARED_DIR/ks/.ouaf_keystore. You must change the value as per the requirement.</p> <p>The shared directory variable (i.e. SHARED_DIR) is case-sensitive.</p> </div>	Yes

Option Type	Description	Mandatory (Yes or No)
Key Store Mode	<p>Used to specify the mode using which you want to encrypt or decrypt the files.</p> <div data-bbox="542 338 1114 417" style="border: 1px solid black; padding: 5px;"> <p>Note: By default, the value is set to CBC (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="542 527 1114 606" style="border: 1px solid black; padding: 5px;"> <p>Note: By default, the value is set to PKCS5Padding.</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> <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"> • @SHARED_DIR – Used when you want to fetch the keystore password file from the shared directory on the server. <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://<File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p> <ul style="list-style-type: none"> • 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. • The bucket or container from where you want the system to fetch the keystore password file. <div data-bbox="542 1591 1114 1843" style="border: 1px solid black; padding: 5px;"> <p>Points to Note:</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>	Yes

Option Type	Description	Mandatory (Yes or No)
Key Store Type	Used to indicate the type of keystore file. <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Note: By default, the value is set to JCEKS.</div>	Yes
Private Key File Path	Used to specify the directory or bucket from where you want to fetch the private key file. If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path: <ul style="list-style-type: none"> • @SHARED_DIR – Used when you want to fetch the private key file from the shared directory on the server. For example, you can set the value to @SHARED_DIR/.ouaf_storepass . However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://<File Storage Extendable Lookup Value>/<Object Storage Bucket> format: <ul style="list-style-type: none"> • 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. • The bucket or container from where you want the system to fetch the private key file. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Points to Note:</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>	Yes
File Decryption PGP Private Key File Path	Used to specify the directory or bucket from where you want to fetch the private key file for decrypting Pretty Good Privacy (PGP) files. If the application environment is an On Premise or Cloud Service environment, you can specify the directory name along with the following relative path:	Yes

Option Type	Description	Mandatory (Yes or No)
	<ul style="list-style-type: none"> • @SHARED_DIR – Used when you want to fetch the private key file (for decrypting PGP files) from the shared directory on the server. <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://<File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p> <ul style="list-style-type: none"> • 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. • The bucket or container from where you want the system to fetch the private key file for decrypting PGP files. <div style="border: 1px solid black; padding: 5px;"> <p>Points to Note:</p> <p>By default, the value is set to @SHARED_DIR/PGP_KEYS/PGP_PRIVATE_KEY.asc. 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 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"> • @SHARED_DIR – Used when you want to fetch the public key file (for decrypting PGP files) from the shared directory on the server. <p>However, if the application environment is a Cloud Service Premium Edition environment, you must specify the following information in the file-storage://<File Storage Extendable Lookup Value>/<Object Storage Bucket> format:</p> <ul style="list-style-type: none"> • The file storage extendable lookup value from where the cloud storage 	Yes

Option Type	Description	Mandatory (Yes or No)
	<p>compartment and connection details are retrieved while fetching the public key file (for decrypting PGP files) on OCI.</p> <ul style="list-style-type: none"> The bucket or container from where you want the system to fetch the public key file for decrypting PGP files. <div style="border: 1px solid black; padding: 5px;"> <p>Points to Note:</p> <p>By default, the value is set to @SHARED_DIR/PGP_KEYS/PGP_PUBLIC_KEY.asc. 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 Public Key Alias	<p>Used to specify the alias (i.e. key in the public key file) using which you want to encrypt or decrypt the PGP files.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Note: By default, the value is set to ouaf.system.fileupload.publickey. You can change the value as per the requirement.</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.

2.6 Upgrading the ORMB Database

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

While upgrading from Oracle Revenue Management and Billing Version 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0, you need to install the following on the database:

1. [Oracle Revenue Management and Billing \(ORMB\) Version 6.1.0.0.0](#)
2. [Oracle Revenue Management and Billing \(ORMB\) Version 6.1.0.0.0 Post Requisite Patches](#)

Points to Note:

To view the list of patches that you need to apply on the database, refer to the [ORMB V6.1.0.0.0 Patch Guide](#) (Document ID: 3000929.1) 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, refer to [Appendix L: ORMB V6.1.0.0.0 Rollup Packs](#).

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

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

2.6.1 Installing ORMB Version 6.1.0.0.0

To install Oracle Revenue Management and Billing (ORMB) Version 6.1.0.0.0:

1. Login to the database server using the administrator's credentials.
2. Copy the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - Oracle Database** package to the `TEMPDIR` folder using the following command:

AIX, Linux:

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

Windows:

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

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

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

AIX, Linux:

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

Windows:

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

4. Unzip the **Oracle Financial Services Revenue Management and Billing 6.1.0.0.0 - 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:$JAR_PATH/spl-oradbi-4.5.0.1.1.jar:$JAR_PATH/spl-shared-4.5.0.1.1.jar
```

Windows:

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

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

AIX, Linux:

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

Windows:

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


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

AIX, Linux:

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

Windows:

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

If you are upgrading from ORMB Version 5.1.0.0.0 to 6.1.0.0.0, the following message appears in the command line:

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

However, if you are upgrading from ORMB Version 6.0.0.0.0 to 6.1.0.0.0, the following message appears in the command line:

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

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

2.6.2 Applying the Release-Specific Patches

Once you install Oracle Revenue Management and Billing Version 6.1.0.0.0, you need to apply all patches listed in the [ORMB V6.1.0.0.0 Patch Guide](#) (Document ID: 3000929.1). 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.

- Unzip the `MultiPlatform.zip` file using the following command:

AIX, Linux:

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

Windows:

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

The contents of the zip file are extracted in the `<DESTINATION_FOLDER_5>` folder. The contents include the `V6.1.0.0.0-<PATCH_NUMBER>_MultiPlatform` folder.

- Change to the `V6.1.0.0.0-<PATCH_NUMBER>_MultiPlatform` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_5>/V6.1.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

Windows:

```
cd <DESTINATION_FOLDER_5>\V6.1.0.0.0-<PATCH_NUMBER>_MultiPlatform
```

Note: The `<DESTINATION_FOLDER_5>` folder is the location where you have extracted the contents of the `MultiPlatform.zip` file.

The contents include a file named `CCB.V6.1.0.0.0-<PATCH_NUMBER>.jar` and a folder named `database`.

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

AIX, Linux:

```
cd database/ORACLE
```

Windows:

```
cd database\ORACLE
```

The contents include a zip file named `CDXPatch`.

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

AIX, Linux:

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

Windows:

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

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

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

Windows:

```
ouafDatabasePatch.cmd
```

AIX, Linux:

```
ouafDatabasePatch.sh
```

2.7 Migrating Data

No data migration is required when you are upgrading from ORMB Version 5.1.0.0.0 or 6.0.0.0.0 to 6.1.0.0.0.

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, refer to the **Table Partitioning Strategy** section in the *Oracle Revenue Management and Billing Database Administrator's Guide*.

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

Appendix A : Known Issues

To view a list of known issues in the current release, refer to the *Oracle Revenue Management and Billing Version 6.1.0.0 Release Notes*.

Appendix B : Third-Party Software Upgrade

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

Appendix C : New Tables Added in ORMB Version 6.1.0.0.0

This section lists and describes the tables that are newly added in Oracle Revenue Management and Billing Version 6.1.0.0.0.

C.1 C1_AUDIT_EVENT_REASON

Purpose:	Used to store the reason why the status of the audit event is changed.
Total Number of Columns:	8

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
AUDIT_ELEMENT_VALUE	VARCHAR2(100)	No	-
AUDIT_EVENT_ID	CHAR(12)	No	-
AUDIT_REASON_FLG	CHAR(4)	No	-
ELEMENT_TYPE_FLG	CHAR(4)	No	-
NEW_VALUE	VARCHAR2(254)	No	1
OLD_VALUE	VARCHAR2(254)	No	-
SEQNO	NUMBER(22)	No	-
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Composite	AUDIT_EVENT_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM935P0	Non-Unique	AUDIT_EVENT_ID
			SEQNO

C.2 C1_BUS_RULE_DELIN

Purpose:	Used to store the business rules which are created for the delinquency management.
Total Number of Columns:	33

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ADD_DAYS_TO_COVERAGE_END_DT	NUMBER(22)	No	-
ADD_DAYS_TO_GRACE_END_DT	NUMBER(22)	No	-
ADD_DAYS_TO_PAID_THR_DT	NUMBER(22)	No	-
ADD_DAYS_TO_TERM_REQ	NUMBER(22)	Yes	-
ADD_MONTHS_TO_PAID_THR_DT	NUMBER(22)	No	-
ALLOW_AUTO_REIN_FLG	CHAR(4)	No	-
AUTO_REIN_MAX_COUNT	NUMBER(22)	No	-
BUS_RULE_ID	CHAR(15)	No	-
DAYS_SINCE_TERM	NUMBER(22)	No	-
GRACE_PERIOD	NUMBER(22)	No	-
MEMB_NOTIF_DAYS	NUMBER(22)	No	-
MIN_DAYS_CC	NUMBER(22)	No	-
REC_TRIGDT_HL_FLG	CHAR(4)	No	-
REC_TRIGDT_RS_FLG	CHAR(4)	No	-
REIN_THRESHOLD	NUMBER(22)	No	-
REIN_TRIGGER_OPTION_FLG	CHAR(4)	No	-
REIN_WAIT_DAYS	NUMBER(22)	No	1
SEND_MBR_NOTIF_FLG	CHAR(4)	No	-
TERM_DATE_RULE_FLG	CHAR(4)	No	-
TERM_TRIGGER_OPTION_FLG	CHAR(4)	No	-
TERM_WAIT_DAYS	NUMBER(22)	No	-
UDF_1	VARCHAR2(254)	No	-
UDF_2	VARCHAR2(254)	Yes	-
UDF_3	VARCHAR2(254)	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
UDF_4	VARCHAR2(254)	Yes	-
UDF_5	VARCHAR2(254)	No	-
UDF_6	VARCHAR2(254)	Yes	-
UDF_7	VARCHAR2(254)	Yes	-
UDF_8	VARCHAR2(254)	Yes	-
VERSION	NUMBER(22)	Yes	-
WAIT_DAY_OF_MONTH	NUMBER(22)	Yes	-
WAIT_DAYS	NUMBER(22)	Yes	-
WAIT_MONTH	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Simple	BUS_RULE_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF998P0	Unique	BUS_RULE_ID

C.3 C1_DELIN_CNTL

Purpose:	Used to store the details of a delinquency control.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_DATA_AREA	CLOB(4000)	Yes	'N'
BUS_OBJ_CD	CHAR(30)	No	"1
C1_ACTIVE_INACTIVE_FLG	CHAR(4)	No	-
COLL_CL_CD	CHAR(10)	No	-
MIN_CR_RVW_FREQ	NUMBER(22,3)	No	-
VERSION	NUMBER(22)	No	''

Primary Key:

Key Type	Column Name
Simple	COLL_CL_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF1000P0	Unique	COLL_CL_CD

C.4 C1_DELIN_CNTL_ALG

Purpose:	Used to store the algorithms attached to a delinquency control.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ALG_CD	CHAR(12)	No	' '
COLL_CL_CD	CHAR(10)	No	1
DELIN_CTRL_SEVT_FLG	CHAR(4)	No	-
SEQ_NUM	NUMBER(22)	No	-
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Composite	COLL_CL_CD
	DELIN_CTRL_SEVT_FLG
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XF1001P0	Unique	COLL_CL_CD
			DELIN_CTRL_SEVT_FLG
			SEQ_NUM

C.5 C1_DELIN_EVT_TYPE

Purpose:	Used to store the details of a delinquency event type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_DATA_AREA	CLOB(4000)	Yes	-
BUS_OBJ_CD	CHAR(30)	No	' '
CC_EVT_SW	CHAR(1)	No	' '
DELIN_EVT_TYPE_CD	CHAR(12)	Yes	-
VERSION	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Simple	DELIN_EVT_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM770PO	Unique	DELIN_EVT_TYPE_CD

C.6 C1_DELIN_EVT_TYPE_ALG

Purpose:	Used to store the algorithms attached to a delinquency event type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ALG_CD	CHAR(12)	No	-
DELIN_EVT_TYPE_CD	CHAR(12)	Yes	-
DELIN_EVT_TYPE_SEVT_FLG	CHAR(4)	Yes	-
SEQ_NUM	NUMBER(22)	Yes	-
VERSION	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DELIN_EVT_TYPE_CD
	DELIN_EVT_TYPE_SEVT_FLG
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM771P0	Unique	DELIN_EVT_TYPE_CD
			DELIN_EVT_TYPE_SEVT_FLG
			SEQ_NUM
2.	XM771S0	Non-Unique	ALG_CD
			DELIN_EVT_TYPE_CD
			DELIN_EVT_TYPE_SEVT_FLG

C.7 C1_DELIN_EVT_TYPE_L

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DELIN_EVT_TYPE_CD	CHAR(12)	Yes	-
DESCR	VARCHAR2(60)	Yes	-
DESCRLONG	VARCHAR2(4000)	Yes	-
LANGUAGE_CD	CHAR(3)	Yes	-
VERSION	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DELIN_EVT_TYPE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM772P0	Unique	DELIN_EVT_TYPE_CD
			LANGUAGE_CD

C.8 C1_DELIN_PROC

Purpose:	Used to store the details of a delinquency process.
Total Number of Columns:	27

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
AUTO_REIN_STOP_SW	CHAR(1)	Yes	-
BO_DATA_AREA	CLOB(4000)	Yes	-
BO_STATUS_CD	CHAR(12)	No	'N'
BO_STATUS_REASON_CD	VARCHAR2(30)	No	-
BUS_OBJ_CD	CHAR(30)	No	-
COLL_CL_CD	CHAR(10)	Yes	-
COMMENTS	VARCHAR2(254)	Yes	-
CRE_DTTM	DATE	Yes	-
DELIN_CAT_FLG	CHAR(4)	No	1
DELIN_DUE_DT	DATE	No	-
DELIN_ENTITY_ID	CHAR(30)	No	-
DELIN_PROC_ID	CHAR(12)	No	-
DELIN_PROC_TYPE_CD	CHAR(30)	No	-
EOG_DT	DATE	No	1
GRACE_PERIOD	NUMBER(22)	No	-
ILM_ARCH_SW	CHAR(1)	No	-
ILM_DT	DATE	No	''
REINST_CNT	NUMBER(22)	No	''
REINST_TRIGGER_DT	DATE	No	1
REL_DELIN_PROC_ID	CHAR(12)	No	-
SOG_DT	DATE	No	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
STATUS_UPD_DTTM	DATE	No	-
TERM_DATE	DATE	No	-
TERM_DATE_RULE_FLG	CHAR(4)	Yes	-
TERM_RSN	VARCHAR2(30)	No	-
TERM_TRIGGER_DT	DATE	No	-
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Simple	DELIN_PROC_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM773P0	Unique	DELIN_PROC_ID
2.	XM773S0	Non-Unique	DELIN_PROC_TYPE_CD
3.	XM773S1	Non-Unique	DELIN_ENTITY_ID
4.	XM773S2	Non-Unique	COLL_CL_CD

C.9 C1_DELIN_PROC_ADV_DEP

Purpose:	Used to store the advance deposit details of a delinquency process.
Total Number of Columns:	4

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DELIN_PROC_ID	CHAR(12)	No	-
PAY_AMT	NUMBER(22)	No	-
PAY_ID	CHAR(12)	Yes	-
VERSION	NUMBER(22,3)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_ID
	PAY_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM816P0	Unique	DELIN_PROC_ID
			PAY_ID

C.10 C1_DELIN_PROC_APPR_DTL

Purpose:	Used to store the approval records of a delinquency process.
Total Number of Columns:	15

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
APPR_USER	CHAR(8)	Yes	-
COMMENTS	VARCHAR2(254)	Yes	-
CRE_DTTM	DATE	No	-
DELIN_PROC_APPR_ACTION_FLG	CHAR(4)	No	' '
DELIN_PROC_APPR_DTL_ID	CHAR(12)	No	' '
DELIN_PROC_APPR_STATUS_FLG	CHAR(4)	Yes	-
DELIN_PROC_EVT_ID	CHAR(12)	Yes	-
DELIN_PROC_ID	CHAR(12)	Yes	-
HOLD_END_DT	DATE	Yes	-
HOLD_REASON	CHAR(30)	Yes	-
STATUS_UPD_DTTM	DATE	Yes	-
SUB_USER	CHAR(8)	Yes	-
TD_ENTRY_ID	CHAR(14)	Yes	-
TRIGGER_DT	DATE	Yes	-
VERSION	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Simple	DELIN_PROC_APPR_DTL_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM783P0	Unique	DELIN_PROC_APPR_DTL_ID

C.11 C1_DELIN_PROC_CHAR

Purpose:	Used to store the characteristics of a delinquency process.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	-
CHAR_TYPE_CD	CHAR(8)	Yes	-
CHAR_VAL	CHAR(16)	Yes	-
CHAR_VAL_FK1	VARCHAR2(50)	Yes	-
CHAR_VAL_FK2	VARCHAR2(50)	Yes	-
CHAR_VAL_FK3	VARCHAR2(50)	No	-
CHAR_VAL_FK4	VARCHAR2(50)	Yes	-
CHAR_VAL_FK5	VARCHAR2(50)	No	1
DELIN_PROC_ID	CHAR(12)	No	-
EFFDT	DATE	No	-
SRCH_CHAR_VAL	VARCHAR2(254)	Yes	-
VERSION	NUMBER(22)	No	'N'

Primary Key:

Key Type	Column Name
Composite	CHAR_TYPE_CD
	DELIN_PROC_ID
	EFFDT

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM777P0	Unique	CHAR_TYPE_CD
			DELIN_PROC_ID
			EFFDT

Sr. No.	Index Name	Index Type	Column Name
2.	XM777S0	Non-Unique	SRCH_CHAR_VAL

C.12 C1_DELIN_PROC_EVT

Purpose:	Used to store the delinquency events created for a delinquency process.
Total Number of Columns:	11

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_DATA_AREA	CLOB(4000)	No	1
DELIN_EVT_PRV_STAT_FLG	CHAR(4)	No	-
DELIN_EVT_STAT_FLG	CHAR(4)	No	-
DELIN_EVT_TYPE_CD	CHAR(12)	No	-
DELIN_PROC_EVT_ID	CHAR(12)	No	''
DELIN_PROC_ID	CHAR(12)	No	''
PREVIEW_DT	DATE	No	''
STATUS_UPD_DTTM	DATE	No	''
STATUS_UPD_USER	CHAR(8)	Yes	-
TRIGGER_DT	DATE	No	-
VERSION	NUMBER(22,5)	No	1

Primary Key:

Key Type	Column Name
Simple	DELIN_PROC_EVT_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM778P0	Unique	DELIN_PROC_EVT_ID
2.	XM778S0	Non-Unique	DELIN_PROC_ID
3.	XM778S1	Non-Unique	DELIN_EVT_TYPE_CD
4.	XM778S2	Non-Unique	DELIN_EVT_STAT_FLG
5.	XM778S3	Non-Unique	TRIGGER_DT
6.	XM778S4	Non-Unique	PREVIEW_DT

C.13 C1_DELIN_PROC_EVT_NOTIF

Purpose:	Used to store the details of a notification created through a delinquency event.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DELIN_PROC_EVT_ID	CHAR(12)	No	-
DP_EVT_NOTIF_ID	CHAR(30)	No	-
DP_EVT_NOTIF_TYPE_FLG	CHAR(4)	No	-
MEMBERSHIP_ID	CHAR(15)	No	-
SEQ_NUM	NUMBER(22)	Yes	-
VERSION	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_EVT_ID
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM782P0	Unique	DELIN_PROC_EVT_ID
			SEQ_NUM

C.14 C1_DELIN_PROC_HOLD

Purpose:	Used to store the hold records created for a delinquency process.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEL_PROC_HOLD_STATUS_FLG	CHAR(4)	No	-
DELIN_PROC_ID	CHAR(12)	Yes	-
HOLD_END_DT	DATE	No	''

Column Name	Data Type	Nullable (Yes or No)	Default Value
HOLD_END_DT_BY_USER	DATE	Yes	-
HOLD_MODE_FLG	CHAR(4)	No	1
HOLD_REASON	CHAR(30)	No	-
HOLD_REASON_BY_USER	CHAR(30)	No	-
HOLD_ST_DT	DATE	No	''
SEQ_NUM	NUMBER(22)	No	''
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_ID
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM787P0	Unique	DELIN_PROC_ID
			SEQ_NUM

C.15 C1_DELIN_PROC_K

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

Column Details:

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

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_ID
	ENV_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM934P0	Unique	DELIN_PROC_ID
			ENV_ID

C.16 C1_DELIN_PROC_LOG

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ADHOC_CHAR_VAL	VARCHAR2(254)	No	-
BO_STATUS_CD	CHAR(12)	No	-
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	1
CHAR_TYPE_CD	CHAR(8)	No	-
CHAR_VAL	CHAR(16)	No	-
CHAR_VAL_FK1	VARCHAR2(50)	No	-
CHAR_VAL_FK2	VARCHAR2(50)	No	-
CHAR_VAL_FK3	VARCHAR2(50)	No	-
CHAR_VAL_FK4	VARCHAR2(50)	No	-
CHAR_VAL_FK5	VARCHAR2(50)	No	1
DELIN_PROC_ID	CHAR(12)	No	-
DESCRLONG	VARCHAR2(4000)	No	-
LOG_DTTM	DATE	No	-
LOG_ENTRY_TYPE_FLG	CHAR(4)	No	-
MESSAGE_CAT_NBR	NUMBER(22)	No	1
MESSAGE_NBR	NUMBER(22)	No	-
SEQNO	NUMBER(22)	No	-
SRCH_CHAR_VAL	VARCHAR2(254)	No	-
USER_ID	CHAR(8)	No	-
VERSION	NUMBER(22)	No	1

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_ID
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM775P0	Unique	DELIN_PROC_ID
			SEQNO
2.	XM775S0	Non-Unique	CHAR_TYPE_CD
			CHAR_VAL_FK1
3.	XM775S1	Non-Unique	CHAR_TYPE_CD
			CHAR_VAL
4.	XM775S2	Non-Unique	SRCH_CHAR_VAL

C.17 C1_DELIN_PROC_LOG_PARM

Purpose:	Used to store the log parameters of a delinquency process.
Total Number of Columns:	6

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DELIN_PROC_ID	CHAR(12)	No	-
MSG_PARM_TYP_FLG	CHAR(4)	No	-
MSG_PARM_VAL	VARCHAR2(2000)	No	1
PARM_SEQ	NUMBER(22)	No	-
SEQNO	NUMBER(22)	No	-
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_ID
	PARM_SEQ
	SEQNO

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM776P0	Unique	DELIN_PROC_ID
			PARM_SEQ
			SEQNO

C.18 C1_DELIN_PROC_REL_OBJ

Purpose:	Used to store the details of the related objects created through a delinquency process.
Total Number of Columns:	10

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
CRE_DTTM	DATE	Yes	-
DELIN_PROC_ID	CHAR(12)	No	1
ORIG_UNPAID_AMT	NUMBER(22)	No	-
PK_VALUE1	VARCHAR2(50)	No	-
PK_VALUE2	VARCHAR2(50)	No	''
PK_VALUE3	VARCHAR2(50)	No	1
PK_VALUE4	VARCHAR2(50)	No	-
PK_VALUES5	VARCHAR2(50)	No	-
SEQ_NUM	NUMBER(22)	No	-
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_ID
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM786P0	Unique	DELIN_PROC_ID
			SEQ_NUM
2.	XM786S0	Non-Unique	PK_VALUE1

C.19 C1_DELIN_PROC_TYPE

Purpose:	Used to store the details of a delinquency process type.
Total Number of Columns:	36

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ADD_DAYS_TO_DUE_DT	NUMBER(22,5)	No	-
ALLOW_AUTO_REIN_FLG	CHAR(4)	No	-
AUTO_REIN_MAX_COUNT	NUMBER(22,3)	Yes	-
BO_DATA_AREA	CLOB(4000)	Yes	1
BUS_OBJ_CD	CHAR(30)	Yes	-
C1_ACTIVE_INACTIVE_FLG	CHAR(4)	No	-
C1_APPR_TD_ROLE	CHAR(8)	No	-
C1_APPR_TD_TYPE	CHAR(10)	No	-
COLL_OBJ	CHAR(12)	No	-
DAYS_SINCE_TERM	NUMBER(22)	No	''
DELIN_ENTITY_TYPE_FLG	CHAR(4)	No	-
DELIN_PROC_TYPE_CD	CHAR(30)	No	1
GRACE_PERIOD	NUMBER(22)	Yes	-
GRACE_PERIOD_SRC_FLG	CHAR(4)	No	-
GRACE_STDT_BASIS_FLG	CHAR(4)	No	1
IS_APPR_REQ_SW	CHAR(4)	No	-
IS_AUTO_TERM_REQ_SW	CHAR(4)	Yes	-
MEMB_NOTIF_DAYS	NUMBER(22)	Yes	-
MEMB_NOTIF_DAYS_SRC_FLG	CHAR(4)	Yes	-
REC_TRIGDT_HL_FLG	CHAR(4)	Yes	-
REC_TRIGDT_HL_SRC_FLG	CHAR(4)	No	-
REC_TRIGDT_RS_FLG	CHAR(4)	No	-
REC_TRIGDT_RS_SRC_FLG	CHAR(4)	No	-
REIN_THRESHOLD	NUMBER(22)	No	-
REIN_TRIGGER_OPTION_FLG	CHAR(4)	Yes	-

Column Name	Data Type	Nullable (Yes or No)	Default Value
REIN_WAIT_DAYS	NUMBER(22)	No	-
TERM_REINST_OPT_SRC_FLG	CHAR(30)	No	-
TERM_TRIGGER_OPTION_FLG	CHAR(4)	No	1
TERM_WAIT_DAYS	NUMBER(22,2)	Yes	-
TRANS_BUS_OBJ_CD	CHAR(30)	No	''
TRIGGER_DT_CALC_MODE_FLG	CHAR(4)	Yes	-
TRIGGER_MODE_FLG	CHAR(4)	Yes	-
USAGE_BASIS_FLG	CHAR(4)	No	-
VERSION	NUMBER(22,5)	No	1
WAIT_PERIOD_FLG	CHAR(4)	Yes	-
WORK_DAYS_SW	CHAR(1)	Yes	-

Primary Key:

Key Type	Column Name
Simple	DELIN_PROC_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM762P0	Unique	DELIN_PROC_TYPE_CD

C.20 C1_DELIN_PROC_TYPE_ALG

Purpose:	Used to store the algorithms attached to a delinquency process type.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ALG_CD	CHAR(12)	No	''
DELIN_PROC_TYPE_CD	CHAR(30)	No	1
DELIN_PROC_TYPE_SEVT_FLG	CHAR(4)	No	''
SEQ_NUM	NUMBER(22)	No	''
VERSION	NUMBER(22,3)	No	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_TYPE_CD
	DELIN_PROC_TYPE_SEVT_FLG
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM763P0	Unique	DELIN_PROC_TYPE_CD
			DELIN_PROC_TYPE_SEVT_FLG
			SEQ_NUM

C.21 C1_DELIN_PROC_TYPE_APPR

Purpose:	Used to store the approval configuration of a delinquency process type.
Total Number of Columns:	3

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DELIN_PROC_APPR_ACTION_FLG	CHAR(4)	No	' '
DELIN_PROC_TYPE_CD	CHAR(30)	Yes	-
VERSION	NUMBER(22,3)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_APPR_ACTION_FLG
	DELIN_PROC_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM769P0	Unique	DELIN_PROC_APPR_ACTION_FLG
			DELIN_PROC_TYPE_CD

C.22 C1_DELIN_PROC_TYPE_CHAR

Purpose:	Used to store the characteristics of a delinquency process type.
Total Number of Columns:	12

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
ADHOC_CHAR_VAL	VARCHAR2(254)	Yes	-
CHAR_TYPE_CD	CHAR(8)	No	-
CHAR_VAL	CHAR(16)	Yes	-
CHAR_VAL_FK1	VARCHAR2(50)	No	-
CHAR_VAL_FK2	VARCHAR2(50)	No	-
CHAR_VAL_FK3	VARCHAR2(50)	Yes	-
CHAR_VAL_FK4	VARCHAR2(50)	No	-
CHAR_VAL_FK5	VARCHAR2(50)	Yes	-
DELIN_PROC_TYPE_CD	CHAR(30)	Yes	-
SEQ_NUM	NUMBER(22)	No	-
SRCH_CHAR_VAL	VARCHAR2(254)	No	' '
VERSION	NUMBER(22,2)	Yes	-

Primary Key:

Key Type	Column Name
Composite	CHAR_TYPE_CD
	DELIN_PROC_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM764P0	Unique	CHAR_TYPE_CD
			DELIN_PROC_TYPE_CD
			SEQ_NUM

C.23 C1_DELIN_PROC_TYPE_EVENT

Purpose:	Used to store the details of the delinquency event types added in a delinquency process type.
Total Number of Columns:	18

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_DATA_AREA	CLOB(4000)	Yes	-
DAY_OF_MONTH	NUMBER(22)	No	''
DEFER_NEXT_CYC_SW	CHAR(1)	No	-
DELIN_EVT_TYPE_CD	CHAR(12)	Yes	-
DELIN_PROC_TYPE_CD	CHAR(30)	Yes	-
MOVE_PAST_EVT_SW	CHAR(1)	No	-
PREVIEW_DAYS	NUMBER(22,5)	No	-
PREVIEW_REQ_SW	CHAR(1)	No	-
RULE_TYPE_CD	CHAR(12)	No	-
SEND_MBR_NOTIF_FLG	CHAR(4)	Yes	-
SEND_MBR_NOTIF_SRC_FLG	CHAR(4)	Yes	-
SEQ_NUM	NUMBER(22)	Yes	-
SKIP_PAST_EVT_SW	CHAR(1)	Yes	-
TRIGGER_PERIOD_FLG	CHAR(4)	Yes	-
VERSION	NUMBER(22)	No	''
WAIT_DAYS	NUMBER(22)	Yes	-
WAIT_DAYS_SRC_FLG	CHAR(4)	Yes	-
WAIT_MONTHS	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_TYPE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM767P0	Unique	DELIN_PROC_TYPE_CD
			SEQ_NUM

C.24 C1_DELIN_PROC_TYPE_L

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

Column Details:

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

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_TYPE_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM766P0	Unique	DELIN_PROC_TYPE_CD
			LANGUAGE_CD

C.25 C1_DELIN_PROC_TYPE_TERM_RL_PR

Purpose:	Used to store the termination date rule priority defined in a delinquency process type.
Total Number of Columns:	4

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
PRIORITY_NUM	NUMBER(22)	Yes	-
TERM_DATE_RULE_FLG	CHAR(4)	No	' '
VERSION	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Composite	DELIN_PROC_TYPE_CD
	PRIORITY_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM765P0	Unique	DELIN_PROC_TYPE_CD
			PRIORITY_NUM

C.26 C1_DELIN_PROC_TYPE_TERM_RSN

Purpose:	Used to store the termination reasons defined for automatic reinstatement in a delinquency process type.
Total Number of Columns:	3

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_STATUS_REASON_CD	VARCHAR2(30)	Yes	-
DELIN_PROC_TYPE_CD	CHAR(30)	Yes	-
VERSION	NUMBER(22,3)	Yes	-

Primary Key:

Key Type	Column Name
Composite	BO_STATUS_REASON_CD
	DELIN_PROC_TYPE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM768P0	Unique	BO_STATUS_REASON_CD
			DELIN_PROC_TYPE_CD

C.27 C1_DIV_GRP

Purpose:	Used to store the details of a division group.
Total Number of Columns:	5

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BO_DATA_AREA	CLOB(4000)	No	''
BUS_OBJ_CD	CHAR(30)	No	''
C1_ACTIVE_INACTIVE_FLG	CHAR(4)	No	-
DIV_GRP_CD	CHAR(8)	No	''
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Simple	DIV_GRP_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM817P0	Unique	DIV_GRP_CD

C.28 C1_DIV_GRP_DTLS

Purpose:	Used to store the divisions included in a division group.
Total Number of Columns:	3

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
CIS_DIVISION	CHAR(5)	Yes	-
DIV_GRP_CD	CHAR(8)	No	-
VERSION	NUMBER(22)	Yes	-

Primary Key:

Key Type	Column Name
Composite	CIS_DIVISION
	DIV_GRP_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM819P0	Unique	CIS_DIVISION
			DIV_GRP_CD

C.29 C1_DIV_GRP_L

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
DESCR	VARCHAR2(60)	No	-
DIV_GRP_CD	CHAR(8)	No	' '
LANGUAGE_CD	CHAR(3)	Yes	-
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Composite	DIV_GRP_CD
	LANGUAGE_CD

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM818P0	Unique	DIV_GRP_CD
			LANGUAGE_CD

C.30 C1_EXTRACT_TEMPLATE_DATASET

Purpose:	Used to store the details of dependent datasets for an extract template.
Total Number of Columns:	5

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
DEP_DATASET	CHAR(30)	Yes	-
EXTRACT_TEMPLATE_CD	CHAR(20)	No	1
SEQ_NUM	NUMBER(22)	No	' '
VERSION	NUMBER(22)	No	-

Primary Key:

Key Type	Column Name
Composite	EXTRACT_TEMPLATE_CD
	SEQ_NUM

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XC1018P0	Unique	EXTRACT_TEMPLATE_CD
			SEQ_NUM
2.	XC1018S1	Non-Unique	EXTRACT_TEMPLATE_CD

C.31 C1_PER_RVW_SCH

Purpose:	Used to store the next credit review date of a person.
Total Number of Columns:	3

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
NEXT_CR_RVW_DT	DATE	Yes	-
PER_ID	CHAR(10)	Yes	-
VERSION	NUMBER(22)	No	' '

Primary Key:

Key Type	Column Name
Composite	NEXT_CR_RVW_DT
	PER_ID

Indexes:

Sr. No.	Index Name	Index Type	Column Name
1.	XM784P0	Unique	NEXT_CR_RVW_DT
			PER_ID

Appendix D : Existing Tables Modified in ORMB Version 6.1.0.0.0

This section lists the existing tables which are modified in Oracle Revenue Management and Billing Version 6.1.0.0.0. It indicates the columns that are newly added, dropped, or modified in these tables.

D.1 C1_ADDRESS

The following table lists the columns that are newly added, modified, or dropped from the C1_ADDRESS table:

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

D.2 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 V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PREMIUM_BENEFIT_SW	Newly Added	-	CHAR(1)	No	-

D.3 C1_BILL_ANOMALY_REQUEST

The following table lists the columns that are newly added, modified, or dropped from the C1_BILL_ANOMALY_REQUEST table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADDED_PI	Newly Added	-	VARCHAR2(1000)	No	-
2.	ANOMALY_PRED_DETAILS	Dropped	XMLTYPE	-	No	-
3.	ANOMALY_SCORE	Dropped	NUMBER(10)	-	No	-
4.	ANOMALY_STATUS_FLG	Dropped	CHAR(4)	-	No	-
5.	CATEGORY_ANMLY_RSN	Newly Added	-	VARCHAR2(4000)	No	-
6.	MESSAGE_CAT_NBR	Dropped	NUMBER(5)	-	No	-
7.	MESSAGE_NBR	Dropped	NUMBER(5)	-	No	-
8.	NUMERICAL_ANMLY_RSN	Newly Added	-	VARCHAR2(4000)	No	-
9.	REMOVED_PI	Newly Added	-	VARCHAR2(1000)	No	-

D.4 C1_BILL_DTLS_VW

The following table lists the columns that are newly added, modified, or dropped from the C1_BILL_DTLS_VW table:

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

D.5 C1_BILL_LVL_DEMO

The following table lists the columns that are newly added, modified, or dropped from the C1_BILL_LVL_DEMO table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BILL_LVL_1	Dropped	CHAR(30)	-	No	-
2.	BILL_LVL_2	Dropped	CHAR(30)	-	No	-
3.	BILL_LVL_3	Dropped	CHAR(30)	-	No	-
4.	BILL_LVL_4	Dropped	CHAR(30)	-	No	-
5.	BILL_LVL_5	Dropped	CHAR(30)	-	No	-
6.	BILL_LVL_6	Dropped	CHAR(30)	-	No	-
7.	BILL_LVL_7	Dropped	CHAR(30)	-	No	-
8.	BILL_LVL_8	Dropped	CHAR(30)	-	No	-
9.	BILL_LVL_ID	Dropped	CHAR(10)	-	No	-
10.	BILLING_GROUP_ID	Dropped	CHAR(10)	-	No	-
11.	BO_DATA_AREA	Dropped	CLOB(4000)	-	No	-
12.	BO_STATUS_CD	Dropped	CHAR(12)	-	No	-
13.	BO_STATUS_REASON_CD	Dropped	VARCHAR2(30)	-	No	-
14.	BUS_OBJ_CD	Dropped	CHAR(30)	-	No	-
15.	CRE_DTTM	Dropped	DATE	-	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
16.	EFFDT	Dropped	DATE	-	No	-
17.	ILM_ARCH_SW	Dropped	CHAR(1)	-	No	-
18.	ILM_DT	Dropped	DATE	-	No	-
19.	IS_REFERRED_SW	Dropped	CHAR(1)	-	No	-
20.	PARENT_PER_ID	Dropped	CHAR(10)	-	No	-
21.	SORT_ID	Dropped	CHAR(10)	-	No	-
22.	SRC_SYSTEM_CD	Dropped	CHAR(10)	-	No	-
23.	STATUS_UPD_DTTM	Dropped	DATE	-	No	-
24.	VERSION	Dropped	NUMBER(22,5)	-	No	-

D.6 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 V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
2.	PRICE_ASGN_ID	Newly Added	-	CHAR(10)	No	-
3.	PRICE_CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
4.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-

D.7 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 V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
2.	CUR_AMT	Newly Added	-	NUMBER(22)	No	-
3.	END_DT	Newly Added	-	DATE	No	-
4.	FT_TYPE_FLG	Newly Added	-	CHAR(2)	No	-
5.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-
6.	START_DT	Newly Added	-	DATE	No	-

D.8 C1_BSEG_ANOMALY_REQUEST

The following table lists the columns that are newly added, modified, or dropped from the C1_BSEG_ANOMALY_REQUEST table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ANOMALY_PRED_DETAILS	Dropped	XMLTYPE	-	No	-
2.	ANOMALY_SCORE	Dropped	NUMBER(10,2)	-	No	-
3.	ANOMALY_STATUS_FLG	Dropped	CHAR(4)	-	No	-
4.	CATEGORY_ANMLY_RSN	Newly Added	-	VARCHAR2(4000)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
5.	MESSAGE_CAT_NBR	Dropped	NUMBER(5)	-	No	-
6.	MESSAGE_NBR	Dropped	NUMBER(5)	-	No	-
7.	NUMERICAL_ANMLY_RSN	Newly Added	-	VARCHAR2(4000)	No	-

D.9 C1_BUS_RULE_PRC

The following table lists the columns that are newly added, modified, or dropped from the C1_BUS_RULE_PRC table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	MINOR_MAX_NUM_OF_DEP	Newly Added	-	NUMBER(22,5)	No	-

D.10 C1_CUST_HIER_INTG

The following table lists the columns that are newly added, modified, or dropped from the C1_CUST_HIER_INTG table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PER_ID1	Newly Added	-	CHAR(10)	No	-
2.	PER_ID2	Newly Added	-	CHAR(10)	No	-

D.11 C1_DIM_ACCT_INTG

The following table lists the columns that are newly added, modified, or dropped from the C1_DIM_ACCT_INTG table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_APAY_ID	Newly Added	-	CHAR(10)	No	-
2.	ACCT_CL_CD	Newly Added	-	CHAR(8)	No	-
3.	ACCT_CL_DESCR	Newly Added	-	VARCHAR2(60)	No	-
4.	ACCT_MGMT_GRP_CD	Newly Added	-	CHAR(10)	No	-
5.	ACCT_MGMT_GRP_DESCR	Newly Added	-	VARCHAR2(60)	No	-
6.	ACCT_NBR	Newly Added	-	VARCHAR2(30)	No	-
7.	ACCT_NBR_TYPE	Newly Added	-	CHAR(8)	No	-
8.	ACCT_NBR_TYPE_DESCR	Newly Added	-	VARCHAR2(60)	No	-
9.	ACCT_PURPOSE	Newly Added	-	VARCHAR2(10)	No	-
10.	ACCT_PURPOSE_TYPE	Newly Added	-	VARCHAR2(10)	No	-
11.	ACCT_TYPE	Newly Added	-	CHAR(8)	No	-
12.	ACCT_USAGE_TYPE	Newly Added	-	CHAR(4)	No	-
13.	ACCT_USAGE_TYPE_DESC	Newly Added	-	VARCHAR2(60)	No	-
14.	APAY_END_DT	Newly Added	-	DATE	No	-
15.	APAY_EXP_DT	Newly Added	-	DATE	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
16.	APAY_MAX_WDRWL_AMT	Newly Added	-	NUMBER(22,5)	No	-
17.	APAY_METHOD	Newly Added	-	VARCHAR2(60)	No	-
18.	APAY_METHOD_FLG	Newly Added	-	CHAR(4)	No	-
19.	APAY_PCT	Newly Added	-	NUMBER(22,5)	No	-
20.	APAY_RTE_TYPE_CD	Newly Added	-	CHAR(10)	No	-
21.	APAY_SRC_CD	Newly Added	-	CHAR(12)	No	-
22.	APAY_START_DT	Newly Added	-	DATE	No	-
23.	APAY_TYPE_FLG	Newly Added	-	CHAR(4)	No	-
24.	APAY_USAGE_FLG	Newly Added	-	CHAR(4)	No	-
25.	BASE_CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
26.	BEHAVIOUR_SCORE	Newly Added	-	VARCHAR2(10)	No	-
27.	BILL_CYC_CD	Newly Added	-	CHAR(4)	No	-
28.	BILL_CYC_DESCR	Newly Added	-	VARCHAR2(60)	No	-
29.	BILL_LEAD_DAYS	Newly Added	-	NUMBER(22,5)	No	-
30.	BILL_MSG	Newly Added	-	VARCHAR2(60)	No	-
31.	BILL_MSG_CD	Newly Added	-	CHAR(4)	No	-
32.	BILL_MSG_TYPE_FLG	Newly Added	-	CHAR(2)	No	-
33.	CIS_DIVISION	Newly Added	-	CHAR(5)	No	-
34.	CIS_DIVISION_DESCR	Newly Added	-	VARCHAR2(60)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
35.	COLL_CL_CD	Newly Added	-	CHAR(10)	No	-
36.	COLL_CL_DESCR	Newly Added	-	VARCHAR2(60)	No	-
37.	CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
38.	CURRENCY_DESC	Newly Added	-	VARCHAR2(60)	No	-
39.	CUST_ID	Newly Added	-	CHAR(10)	No	-
40.	CUST_NAME	Newly Added	-	VARCHAR2(254)	No	-
41.	CUST_TYPE	Newly Added	-	VARCHAR2(60)	No	-
42.	ENCR_EXT_ACCT_ID	Newly Added	-	VARCHAR2(108)	No	-
43.	EXT_ACCT_ID	Newly Added	-	VARCHAR2(50)	No	-
44.	JOINT_APPLICANT_SW	Newly Added	-	VARCHAR2(10)	No	-
45.	MATURITY_DT	Newly Added	-	VARCHAR2(10)	No	-
46.	OD_PROC_SW	Newly Added	-	VARCHAR2(3)	No	-
47.	PRD_CD	Newly Added	-	VARCHAR2(10)	No	-
48.	PRD_CD_DESCR	Newly Added	-	VARCHAR2(10)	No	-
49.	PROD_CL_CD	Newly Added	-	VARCHAR2(10)	No	-
50.	PROD_CL_CD_DESCR	Newly Added	-	VARCHAR2(10)	No	-
51.	PROD_GRP_CD	Newly Added	-	VARCHAR2(10)	No	-
52.	PROD_GRP_CD_DESCR	Newly Added	-	VARCHAR2(10)	No	-
53.	SETUP_DT	Newly Added	-	DATE	No	-

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

D.12 C1_DIM_CUST_INTG

The following table lists the columns that are newly added, modified, or dropped from the C1_DIM_CUST_INTG table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADDRESS	Newly Added	-	VARCHAR2(254)	No	-
2.	ADDRESS_2	Newly Added	-	VARCHAR2(254)	No	-
3.	ADDRESS_3	Newly Added	-	VARCHAR2(254)	No	-
4.	ADDRESS_4	Newly Added	-	VARCHAR2(254)	No	-
5.	CITY	Newly Added	-	VARCHAR2(90)	No	-
6.	COMPANY_TYPE	Newly Added	-	VARCHAR2(30)	No	-
7.	CONTACT_NUMBER	Newly Added	-	VARCHAR2(24)	No	-
8.	CONTACT_TYPE	Newly Added	-	CHAR(12)	No	-
9.	COUNTRY_CODE	Newly Added	-	CHAR(3)	No	-
10.	COUNTRY_DESCRIPTION	Newly Added	-	VARCHAR2(60)	No	-
11.	COUNTY	Newly Added	-	VARCHAR2(90)	No	-
12.	CUSTOMER_ID	Newly Added	-	CHAR(10)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
13.	CUSTOMER_NAME	Newly Added	-	VARCHAR2(254)	No	-
14.	DESIGNATION	Newly Added	-	CHAR(120)	No	-
15.	DIVISION	Newly Added	-	VARCHAR2(60)	No	-
16.	DIVISON_CD	Newly Added	-	CHAR(5)	No	-
17.	EMAIL_ID	Newly Added	-	VARCHAR2(254)	No	-
18.	EMPLOYEMENT_STATUS	Newly Added	-	CHAR(3)	No	-
19.	EMPLOYER_NAME	Newly Added	-	VARCHAR2(120)	No	-
20.	EMPLOYMENT_TYPE	Newly Added	-	VARCHAR2(30)	No	-
21.	GEOGRAPHICAL_CODE	Newly Added	-	CHAR(11)	No	-
22.	GROSS_ANNUALSALARY	Newly Added	-	NUMBER(22)	No	-
23.	HOUSE_TYPE	Newly Added	-	CHAR(2)	No	-
24.	ID_TYPE	Newly Added	-	VARCHAR2(60)	No	-
25.	ID_TYPE_CD	Newly Added	-	CHAR(8)	No	-
26.	IN_CITYLIMIT	Newly Added	-	CHAR(1)	No	-
27.	INDUSTRY_TYPE	Newly Added	-	VARCHAR2(30)	No	-
28.	L1_PARENT_ID	Newly Added	-	VARCHAR2(10)	No	-
29.	L1_PARENT_NAME	Newly Added	-	VARCHAR2(64)	No	-
30.	L2_PARENT_ID	Newly Added	-	VARCHAR2(10)	No	-
31.	L2_PARENT_NAME	Newly Added	-	VARCHAR2(64)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
32.	L3_PARENT_ID	Newly Added	-	VARCHAR2(10)	No	-
33.	L3_PARENT_NAME	Newly Added	-	VARCHAR2(64)	No	-
34.	L4_PARENT_ID	Newly Added	-	VARCHAR2(10)	No	-
35.	L4_PARENT_NAME	Newly Added	-	VARCHAR2(64)	No	-
36.	L5_PARENT_ID	Newly Added	-	VARCHAR2(10)	No	-
37.	L5_PARENT_NAME	Newly Added	-	VARCHAR2(64)	No	-
38.	LANGUAGE	Newly Added	-	CHAR(3)	No	-
39.	LANGUAGE_DESCRIPTION	Newly Added	-	VARCHAR2(60)	No	-
40.	NAME_TYPE_FLG	Newly Added	-	CHAR(4)	No	-
41.	OCCUPATION_TYPE	Newly Added	-	CHAR(120)	No	-
42.	PER_ID_NBR	Newly Added	-	VARCHAR2(90)	No	-
43.	PER_OR_BUS_FLG	Newly Added	-	CHAR(2)	No	-
44.	PH_COUNTRY_CD	Newly Added	-	CHAR(3)	No	-
45.	POSTAL_CODE	Newly Added	-	CHAR(12)	No	-
46.	RECEIVE_MARKETINGINFORMATION	Newly Added	-	VARCHAR2(60)	No	-
47.	STATE_CODE	Newly Added	-	CHAR(6)	No	-
48.	STATE_DESCRIPTION	Newly Added	-	VARCHAR2(60)	No	-

D.13 C1_DISCREPANCY_RPT_LN

The following table lists the columns that are newly added, modified, or dropped from the C1_DISCREPANCY_RPT_LN table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	HEALTH_PLAN_CD	Newly Added	-	CHAR(30)	No	-
2.	HIOS_ID	Newly Added	-	VARCHAR2(16)	No	-
3.	PAYMENT_TYPE	Newly Added	-	CHAR(30)	No	-
4.	PAYOR_ID_NBR	Newly Added	-	VARCHAR2(90)	No	-
5.	PAYOR_ID_TYPE_CD	Newly Added	-	CHAR(8)	No	-

D.14 C1_EXTRACT_TEMPLATE

The following table lists the columns that are newly added, modified, or dropped from the C1_EXTRACT_TEMPLATE table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DATASET_NAME	Newly Added	-	CHAR(30)	No	-
2.	DATASET_SW	Newly Added	-	CHAR(1)	No	-

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
16.	BSEG_START_DT	Newly Added	-	DATE	No	-
17.	BSEG_STAT_FLG	Newly Added	-	CHAR(2)	No	-
18.	CALC_AMT	Newly Added	-	NUMBER(22)	No	-
19.	CALENDAR_ID	Newly Added	-	CHAR(2)	No	-
20.	CAN_RSN_CD	Newly Added	-	CHAR(4)	No	-
21.	CAN_RSN_DESCR	Newly Added	-	VARCHAR2(60)	No	-
22.	CANCEL_BSEG_ID	Newly Added	-	CHAR(12)	No	-
23.	CIS_DIVISION	Newly Added	-	CHAR(5)	No	-
24.	COMPLETE_DTTM	Newly Added	-	DATE	No	-
25.	CRE_DTTM	Newly Added	-	DATE	No	-
26.	CUR_AMT	Newly Added	-	NUMBER(22)	No	-
27.	CURR_BILL_BAL	Newly Added	-	NUMBER(22)	No	-
28.	CURRENCY_CD	Newly Added	-	CHAR(3)	No	-
29.	DST_ID	Newly Added	-	CHAR(10)	No	-
30.	FREEZE_DT	Newly Added	-	DATE	No	-
31.	FREEZE_SW	Newly Added	-	CHAR(1)	No	-
32.	FREEZE_USER_ID	Newly Added	-	CHAR(8)	No	-
33.	FT_ID	Newly Added	-	CHAR(12)	No	-
34.	FT_TOT_AMT	Newly Added	-	NUMBER(22)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
35.	FT_TYPE_FLG	Newly Added	-	CHAR(2)	No	-
36.	GL_ACCOUNT	Newly Added	-	VARCHAR2(254)	No	-
37.	GL_AMOUNT	Newly Added	-	NUMBER(22)	No	-
38.	GL_CHAR_TYPE_CD	Newly Added	-	CHAR(8)	No	-
39.	GL_CHAR_VAL	Newly Added	-	CHAR(16)	No	-
40.	GL_DIVISION	Newly Added	-	CHAR(5)	No	-
41.	GL_SEQ_NBR	Newly Added	-	NUMBER(22)	No	-
42.	INVOICE_ACCT	Newly Added	-	CHAR(10)	No	-
43.	OTHER_ACTIVITY_AMT	Newly Added	-	NUMBER(22)	No	-
44.	OTHER_ACTIVITY_BS	Newly Added	-	VARCHAR2(60)	No	-
45.	PAYMENTS_RECEIVED_LAST_BILL	Newly Added	-	NUMBER(22)	No	-
46.	POLICY_FK	Newly Added	-	CHAR(14)	No	-
47.	PREV_BILL_ID	Newly Added	-	VARCHAR2(12)	No	-
48.	PREVIOUS_BALANCE	Newly Added	-	NUMBER(22)	No	-
49.	PRODUCT	Newly Added	-	CHAR(30)	No	-
50.	REBILL_SEG_ID	Newly Added	-	CHAR(12)	No	-
51.	REVIEW_YN	Newly Added	-	VARCHAR2(1)	No	-
52.	SA_ID	Newly Added	-	CHAR(10)	No	-
53.	SA_TYPE_CD	Newly Added	-	CHAR(8)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
54.	SRC_MEMBERSHIP_ID	Newly Added	-	CHAR(15)	No	-
55.	TOT_AMT	Newly Added	-	NUMBER(22)	No	-
56.	USAGE_ACCT	Newly Added	-	CHAR(10)	No	-
57.	WIN_START_DT	Newly Added	-	DATE	No	-

D.16 C1_FT_EXT

The following table lists the columns that are newly added, modified, or dropped from the C1_FT_EXT table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	HEALTH_PLAN_CD	Newly Added	-	CHAR(30)	No	-
2.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-

D.17 C1_HEALTH_PLAN

The following table lists the columns that are newly added, modified, or dropped from the C1_HEALTH_PLAN table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	HIOS_ID	Newly Added	-	VARCHAR2(16)	No	-

D.18 C1_IND_MEM_INTG

The following table lists the columns that are newly added, modified, or dropped from the C1_IND_MEM_INTG table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BENEFIT_AMT	Newly Added	-	NUMBER(22)	No	-
2.	BENEFIT_ID	Newly Added	-	CHAR(12)	No	-
3.	BENEFIT_SUB_TYPE	Newly Added	-	VARCHAR2(60)	No	-
4.	BENEFIT_SUB_TYPE_CD	Newly Added	-	CHAR(30)	No	-
5.	CONTRACT_TYPE	Newly Added	-	VARCHAR2(60)	No	-
6.	CONTRACT_TYPE_CD	Newly Added	-	CHAR(8)	No	-
7.	DIVISION_DESCRIPTION	Newly Added	-	VARCHAR2(60)	No	-
8.	HEALTH_PLAN_CD	Newly Added	-	CHAR(30)	No	-
9.	MEMBER_AUTO_RENEWAL	Newly Added	-	CHAR(1)	No	-
10.	MEMBERSHIP_CAT_FLG	Newly Added	-	CHAR(4)	No	-
11.	MEMBERSHIP_END_DT	Newly Added	-	DATE	No	-
12.	MEMBERSHIP_ID	Newly Added	-	CHAR(15)	No	-
13.	MEMBERSHIP_START_DT	Newly Added	-	DATE	No	-
14.	MEMBERSHIP_STATUS	Newly Added	-	CHAR(12)	No	-
15.	PER_ID	Newly Added	-	CHAR(10)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
16.	PERSON_NAME	Newly Added	-	VARCHAR2(254)	No	-
17.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-
18.	PRICING_END_DT	Newly Added	-	DATE	No	-
19.	PRICING_RULE_ID	Newly Added	-	CHAR(15)	No	-
20.	PRICING_RULE_TYPE	Newly Added	-	VARCHAR2(60)	No	-
21.	PRICING_RULE_TYPE_CD	Newly Added	-	CHAR(30)	No	-
22.	PRICING_START_DT	Newly Added	-	DATE	No	-
23.	PRIMARY_IDENTIFIERTYPE	Newly Added	-	CHAR(8)	No	-
24.	PRIMARY_IDENTIFIERVALUE	Newly Added	-	VARCHAR2(90)	No	-
25.	PRODUCT	Newly Added	-	VARCHAR2(60)	No	-
26.	PRODUCT_CD	Newly Added	-	CHAR(30)	No	-
27.	PRODUCT_HC_CATEGORY	Newly Added	-	CHAR(4)	No	-
28.	RATE_GUARANTEE_END_DT	Newly Added	-	DATE	No	-
29.	RATE_GUARANTEE_START_DT	Newly Added	-	DATE	No	-
30.	RATE_GUARANTEE_STATUS	Newly Added	-	CHAR(4)	No	-
31.	RELATIONSHIP_TYPE	Newly Added	-	VARCHAR2(60)	No	-
32.	RENEWAL_DATE	Newly Added	-	DATE	No	-
33.	REPRICE_CHAR_TYPE_CD	Newly Added	-	CHAR(8)	No	-
34.	REPRICE_CHAR_VAL	Newly Added	-	VARCHAR2(50)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
35.	SA_ID	Newly Added	-	CHAR(10)	No	-
36.	SA_REL_TYPE_CD	Newly Added	-	CHAR(8)	No	-
37.	SA_RENEWAL_FLG	Newly Added	-	CHAR(4)	No	-

D.19 C1_OFFSET_REQ_ADJ

The following table lists the columns that are newly added, modified, or dropped from the C1_OFFSET_REQ_ADJ table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	FROM_ADJ_ID	Newly Added	-	CHAR(12)	No	-
2.	FROM_BILL_ID	Newly Added	-	CHAR(12)	No	-
3.	TO_ADJ_ID	Newly Added	-	CHAR(12)	No	-
4.	TO_BILL_ID	Newly Added	-	CHAR(12)	No	-

D.20 C1_OFFSET_REQ_DTLS

The following table lists the columns that are newly added, modified, or dropped from the C1_OFFSET_REQ_DTLS table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADJ_ID	Newly Added	-	CHAR(12)	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
2.	BILL_ID	Newly Added	-	CHAR(12)	No	-

D.21 C1_OFFSET_REQ_TYPE

The following table lists the columns that are newly added, modified, or dropped from the C1_OFFSET_REQ_TYPE table:

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

D.22 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 V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	AUDIT_REASON_FLG	Newly Added	-	CHAR(4)	No	-
2.	BSEG_ID	Newly Added	-	CHAR(12)	No	-
3.	CUR_AMT	Newly Added	-	NUMBER(22)	No	-
4.	DESCR	Newly Added	-	VARCHAR2(60)	No	-
5.	FT_TYPE_FLG	Newly Added	-	CHAR(2)	No	-
6.	END_DT	Newly Added	-	DATE	No	-

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
7.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-
8.	START_DT	Newly Added	-	DATE	No	-

D.23 C1_PA_REQ

The following table lists the columns that are newly added, modified, or dropped from the C1_PA_REQ table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ACCT_ID	Newly Added	-	CHAR(10)	No	-
2.	DELIN_PROC_ID	Newly Added	-	CHAR(12)	No	-
3.	DELQ_SW	Newly Added	-	CHAR(1)	No	-
4.	PA_ENTITY_ID	Newly Added	-	CHAR(10)	No	-
5.	PA_ENTITY_TYPE_FLG	Newly Added	-	CHAR(4)	No	-

D.24 C1_PA_REQ_TYPE

The following table lists the columns that are newly added, modified, or dropped from the C1_PA_REQ_TYPE table:

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

D.25 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 V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	HEALTH_PLAN_CD	Newly Added	-	CHAR(30)	No	-
2.	HIOS_ID	Newly Added	-	VARCHAR2(16)	No	-
3.	PAYMENT_TYPE	Newly Added	-	CHAR(30)	No	-
4.	PAYOR_ID_NBR	Newly Added	-	VARCHAR2(90)	No	-
5.	PAYOR_ID_TYPE_CD	Newly Added	-	CHAR(8)	No	-
6.	PRICEITEM_CD	Newly Added	-	CHAR(30)	No	-

D.26 C1_PAY_TNDR_REQ

The following table lists the columns that are newly added, modified, or dropped from the C1_PAY_TNDR_REQ table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHECK_NBR	Format Change	CHAR(10)	CHAR(30)	No	-

D.27 C1_PRC_RULE_TYPE_AUDIT_EVENT

The following table lists the columns that are newly added, modified, or dropped from the C1_PRC_RULE_TYPE_AUDIT_EVENT table:

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

D.28 C1_PRC_RULE_TYPE_PRICEITEM

The following table lists the columns that are newly added, modified, or dropped from the C1_PRC_RULE_TYPE_PRICEITEM table:

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

D.29 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 V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	BILL_ID	Newly Added	-	CHAR(12)	No	-
2.	PREV_BILL_ID	Newly Added	-	VARCHAR2(12)	No	-

D.30 C1_PRICING_GRP_RULE_BL

The following table lists the columns that are newly added, modified, or dropped from the C1_PRICING_GRP_RULE_BL table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	SEQNO	Newly Added	-	NUMBER(22,5)	No	-
2.	SEQ_NUM	Dropped	NUMBER(22,3)	-	No	-

D.31 C1_RECON_TYPE

The following table lists the columns that are newly added, modified, or dropped from the C1_RECON_TYPE table:

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

D.32 C1_REPRC_MEMB_CHAR

The following table lists the columns that are newly added, modified, or dropped from the C1_REPRC_MEMB_CHAR table:

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CRE_DTTM	Newly Added	-	DATE	No	-
2.	UPD_DTTM	Newly Added	-	DATE	No	-

D.33 CI_ACCT

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DRAG_DAYS	Newly Added	-	NUMBER(22,3)	No	-
2.	PAID_THR_DT	Newly Added	-	DATE(7)	No	-
3.	SKIP_AUTOM_SW	Newly Added	-	CHAR(1)	No	-

D.34 CI_ACCT_APAY

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ENTITY_NAME	Newly Added	-	VARCHAR2(254)	No	-

D.35 CI_ADJ

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

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
2.	ENTITY_ID	Newly Added	-	CHAR(14)	No	-

D.36 CI_MEMBERSHIP

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	REPRC_AFTER_DT	Newly Added	-	DATE	No	-
2.	TERM_DATE	Newly Added	-	DATE	No	-

D.37 CI_PAY_TNDR

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHECK_NBR	Format Change	CHAR(10)	CHAR(30)	No	-

D.38 CI_PAY_TNDR_ST

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHECK_NBR	Format Change	CHAR(10)	CHAR(30)	No	-

D.39 CI_PER

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADV_DEP_AMT	Newly Added	-	NUMBER(22,15)	No	-
2.	ADV_DEP_GRACE_DAYS	Newly Added	-	NUMBER(22,3)	No	-
3.	ADV_DEP_LVL_FLG	Newly Added	-	CHAR(4)	No	-
4.	COLL_CL_CD	Newly Added	-	CHAR(10)	No	-
5.	CR_REVIEW_DT	Newly Added	-	DATE	No	-
6.	DRAG_DAYS	Newly Added	-	NUMBER(22)	No	-
7.	POSTPONE_CR_RVW_DT	Newly Added	-	DATE	No	-

D.40 CI_PEVT_DTL_ST

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHECK_NBR	Format Change	CHAR(10)	CHAR(30)	No	-

D.41 CI_POLICY

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	ADV_DEP_ACCT_ID	Newly Added	-	CHAR(12)	No	-
2.	ADV_DEP_AMT	Newly Added	-	NUMBER(22,15)	No	-
3.	ADV_DEP_APPL_SW	Newly Added	-	CHAR(1)	No	-
4.	ADV_DEP_GRACE_DAYS	Newly Added	-	NUMBER(22,3)	No	-

D.42 CI_REPRC_ENTITY_DTL

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

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

D.43 CI_REPRC_REQ_DTL

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

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

D.44 CI_UPLPAY_STG

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

Sr. No.	Column Name	Modification Type	Data Type in V6.0.0.0.0	Data Type in V6.1.0.0.0	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	CHECK_NBR	Format Change	CHAR(10)	CHAR(30)	No	-

Appendix E : Algorithms and Algorithm Types Dropped in ORMB Version 6.1.0.0.0

This section lists the algorithms and algorithm types which are dropped in Oracle Revenue Management and Billing Version 6.1.0.0.0.

E.1 Algorithm Types

No algorithm types are dropped in Oracle Revenue Management and Billing Version 6.1.0.0.0.

E.2 Algorithms

No algorithms are dropped in Oracle Revenue Management and Billing Version 6.1.0.0.0.

Appendix F : Parameters Added or Removed from Algorithm Types in ORMB Version 6.1.0.0.0

No parameters are newly added or removed from the existing algorithm types in Oracle Revenue Management and Billing Version 6.1.0.0.0.

Appendix G : Option Types Added or Removed from Feature Configurations in ORMB Version 6.1.0.0.0

This section lists the option types which are newly added or removed from the existing feature configurations in Oracle Revenue Management and Billing Version 6.1.0.0.0.

Feature Configuration	Option Type (Removed from 6.1.0.0.0)	Option Type (Added in 6.1.0.0.0)
C1_CMO	-	Use Legacy Person Phone and Email
C1-ASOBLNG	-	Additional Repricing
	-	Audit Reason Field mapping
	-	Benefit Full Snapshot Upload
	-	Delete Repricing
	-	Individual Membership Configurations
	-	Membership Active Status
	-	Membership Terminated Status
	-	Policy Active Status
	-	Policy Pending Reinstatement Status
	-	Policy Pending Termination Status
	-	Zero Dollar Benefit Charge
C1-FLUPLD	-	File decryption PGP public key alias
	-	File decryption PGP private key file path
	-	File decryption PGP public key file path
C1-INVREQ	-	Membership Search

Appendix H : Characteristic Types Dropped in ORMB Version 6.1.0.0.0

No characteristic types are dropped in Oracle Revenue Management and Billing Version 6.1.0.0.0.

Appendix I : Batch Controls Dropped in ORMB Version 6.1.0.0.0

No batch controls are dropped in Oracle Revenue Management and Billing Version 6.1.0.0.0.

Appendix J : Parameters Added or Removed from Batch Controls in ORMB Version 6.1.0.0.0

No batch control parameters are newly added or removed in Oracle Revenue Management and Billing Version 6.1.0.0.0.

Appendix K : Changing the DB User Password

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

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

AIX, Linux:

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

Windows:

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

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

AIX, Linux:

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

Windows:

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


Appendix L : ORMB V6.1.0.0.0 Rollup Packs

Instead of individually applying the patches, you can download and apply the release-specific rollup packs. To view the list of rollup packs that you need to apply on the application environment and database, refer to the [ORMB V6.1.0.0.0 Patch Guide](#) (Document ID: 3000929.1) on [My Oracle Support](#).

L.1 Applying a Rollup Pack on the Application Environment

Once you install Oracle Revenue Management and Billing Version 6.1.0.0.0, you need to apply the rollup packs listed in the [ORMB V6.1.0.0.0 Patch Guide](#) (Document ID: 3000929.1). 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_V6.1.0.0.0_App_Rollup`, `RMB_V6.1.0.0.0_DB_Rollup`, and `RMB_V6.1.0.0.0_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_V6.1.0.0.0_App_Rollup` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/RMB_V6.1.0.0.0_App_Rollup
```

Windows:

```
cd <DESTINATION_FOLDER_1>\RMB_V6.1.0.0.0_App_Rollup
```

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

5. Install the patch using the following command:

AIX, Linux:

```
./installSFgroup.sh
```

Windows:

```
installSFgroup.cmd
```

L.2 Applying a Rollup Pack on the Database

Once you install Oracle Revenue Management and Billing Version 6.1.0.0.0, you need to apply the rollup packs listed in the [ORMB V6.1.0.0.0 Patch Guide](#) (Document ID: 3000929.1). 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_V6.1.0.0.0_App_Rollup`, `RMB_V6.1.0.0.0_DB_Rollup`, and `RMB_V6.1.0.0.0_PFDs`.

3. Change to the `RMB_V6.1.0.0.0_DB_Rollup` folder using the following command:

AIX, Linux:

```
cd <DESTINATION_FOLDER_1>/RMB_V6.1.0.0.0_DB_Rollup
```

Windows:

```
cd <DESTINATION_FOLDER_1>\RMB_V6.1.0.0.0_DB_Rollup
```

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

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

Windows:

```
ouafDatabasePatch.cmd
```

AIX, Linux:

```
ouafDatabasePatch.sh
```

Appendix M : New Tables Added in OUAF Version 4.5.0.1.1

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

M.1 CI_MD_FLD_ADDTL

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

Column Details:

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

Primary Key:

Key Type	Column Name
Simple	FLD_NAME

Indexes:

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

M.2 F1_BATCH_RUN_ANALYTICS_SNAP

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

Column Details:

Column Name	Data Type	Nullable (Yes or No)	Default Value
BATCH_BUS_DT	DATE	Yes	-

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

Primary Key:

Key Type	Column Name
Composite	BATCH_CD
	BATCH_NBR
	BATCH_RERUN_NBR

Indexes:

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

Sr. No.	Index Name	Index Type	Column Name
			BATCH_CD
			BATCH_NBR
			BATCH_RERUN_NBR

M.3 F1_BATCH_THD_ANALYTICS_SNAP

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

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
VERSION	NUMBER(22,5)	No	1

Primary Key:

Key Type	Column Name
Composite	BATCH_CD
	BATCH_NBR
	BATCH_RERUN_NBR
	BATCH_THREAD_NBR
	SCHEDULER_ID

Indexes:

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

M.4 F1_MIGR_OBJ_DATA

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

Column Details:

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

Column Name	Data Type	Nullable (Yes or No)	Default Value
VERSION	NUMBER(22,5)	No	1

Primary Key:

Key Type	Column Name
Composite	MIGR_OBJ_ID
	SEQ_NUM

Indexes:

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

M.5 F1_MO_UPD_BACKUP

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

Column Details:

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

Primary Key:

None

Indexes:

None

M.6 F1_REDACTION_RULE

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

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

Primary Key:

Key Type	Column Name
Simple	REDACT_RULE_CD

Indexes:

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

M.7 F1_REDACTION_RULE_L

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

Column Details:

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

Primary Key:

Key Type	Column Name
Composite	LANGUAGE_CD
	REDACT_RULE_CD

Indexes:

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

M.8 SEC_INVENTORY

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

Column Details:

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

Primary Key:

Key Type	Column Name
Simple	SECRET_NAME

Indexes:

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

Appendix N : Existing Tables Modified in OUAF Version 4.5.0.1.1

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

N.1 CI_BATCH_RUN

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.0.0	Data Type in V4.5.0.1.1	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	LOG_FILE_NAME	Newly Added	-	VARCHAR2(254)	No	-

N.2 CI_CURRENCY_CD

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

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

N.3 F1_CRYPTO_KEY

The following table lists the columns that are newly added, modified, or dropped from the F1_CRYPTO_KEY table:

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

N.4 F1_CRYPTO_KEY_RING

The following table lists the columns that are newly added, modified, or dropped from the F1_CRYPTO_KEY_RING table:

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

N.5 F1_CRYPTO_KEY_RING_L

The following table lists the columns that are newly added, modified, or dropped from the F1_CRYPTO_KEY_RING_L table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.0.0	Data Type in V4.5.0.1.1	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	OWNER_FLG	Newly Added	-	CHAR(4)	No	-

N.6 F1_ETL_MP_CTRL

The following table lists the columns that are newly added, modified, or dropped from the F1_ETL_MP_CTRL table:

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

N.7 F1_MENU_APP_SVCS_VW

The following table lists the columns that are newly added, modified, or dropped from the F1_MENU_APP_SVCS_VW table:

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

N.8 F1_MIGR_DATA_ST

The following table lists the columns that are newly added, modified, or dropped from the F1_MIGR_DATA_ST table:

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

N.9 F1_MIGR_OBJ

The following table lists the columns that are newly added, modified, or dropped from the F1_MIGR_OBJ table:

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

N.10 F1_MIGR_OBJ_SQL

The following table lists the columns that are newly added, modified, or dropped from the F1_MIGR_OBJ_SQL table:

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.0.0	Data Type in V4.5.0.1.1	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	PK_VALUE1	Newly Added	-	VARCHAR2(254)	No	-

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

N.11 F1_PROC_PANEL

The following table lists the columns that are newly added, modified, or dropped from the F1_PROC_PANEL table:

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

N.12 SC_APP_SERVICE_L

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

Sr. No.	Column Name	Modification Type	Data Type in V4.5.0.0.0	Data Type in V4.5.0.1.1	Data Migration Required (Yes or No)	Column Value After Data Migration
1.	DESCRLONG	Newly Added	-	VARCHAR2(4000)	No	-

N.13 F1_CRYPT0_KEY_RING_LINK

The following table lists the columns that are newly added, modified, or dropped from the F1_CRYPT0_KEY_RING_LINK table:

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

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

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

O.1 Algorithm Types

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

O.2 Algorithms

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

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

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

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

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

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

Batch Control	Parameters (Removed from 4.5.0.1.1)		Parameters (Added in 4.5.0.1.1)	
	Sequence Number	Parameter	Sequence Number	Parameter
F1CHAREX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1COLOTX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1CONTEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1COUNYX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1CUBEEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1CUBEWX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1CURREX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1DATAAX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring

Batch Control	Parameters (Removed from 4.5.0.1.1)		Parameters (Added in 4.5.0.1.1)	
	Sequence Number	Parameter	Sequence Number	Parameter
F1DATASX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1DISPFX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1DISPNX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1ENTYGX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1ETLMLX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1EXTLPX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1FAACTX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1FIELDX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring

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

Batch Control	Parameters (Removed from 4.5.0.1.1)		Parameters (Added in 4.5.0.1.1)	
	Sequence Number	Parameter	Sequence Number	Parameter
	-	-	100	Signature Key Ring
F1INSTYX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1WSANX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1WSAPX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1WSSCX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1JMSCTX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1LANGEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1LOOKPX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1MAINJX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring

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

Batch Control	Parameters (Removed from 4.5.0.1.1)		Parameters (Added in 4.5.0.1.1)	
	Sequence Number	Parameter	Sequence Number	Parameter
	-	-	100	Signature Key Ring
F1MKMTMX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1MKTPCX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1MKTPPX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1MKTPTX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1MSTCGX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1NAVKYX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1NAVOTX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1NTDWEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring

Batch Control	Parameters (Removed from 4.5.0.1.1)		Parameters (Added in 4.5.0.1.1)	
	Sequence Number	Parameter	Sequence Number	Parameter
	-	-	100	Signature Key Ring
F1NTDWFY	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1NTUPEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1NTXIDX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1OUTMPX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1-PDBEX	-	-	895	Encryption Key Ring
	-	-	896	Signature Key Ring
F1-PDUPL	-	-	860	Encryption Key Ring
	-	-	870	Signature Key Ring
F1PERFTX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1PERFYX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1PHONEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring

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

Batch Control	Parameters (Removed from 4.5.0.1.1)		Parameters (Added in 4.5.0.1.1)	
	Sequence Number	Parameter	Sequence Number	Parameter
	-	-	100	Signature Key Ring
F1SECTEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1SERVEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1STASEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1STATSX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1STSRNX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1STSSTX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1SVCTKX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring
	-	-	100	Signature Key Ring
F1TABLEX	-	-	80	Do Not Apply Redaction Rules
	-	-	90	Encryption Key Ring

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

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

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

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