# Oracle Enterprise Taxation Management

Database Administrator's Guide

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Oracle Enterprise Taxation Management Database Administrator's Guide

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# Preface

This guide provides instructions for installing and maintaining the database for Oracle Enterprise Taxation Management.

This preface contains these topics:

- **Audience**
- **Related Documents**
- **Updates to this Documentation**
- **Conventions**

## Audience

*Oracle Enterprise Taxation Management Database Administrator's Guide* is intended for database administrators who will be installing and maintaining the database for Oracle Enterprise Taxation Management.

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## Related Documents

For more information, see these Oracle documents:

- *Oracle Enterprise Taxation Management Quick Install Guide*
- *Oracle Enterprise Taxation Management Installation Guide*
- *Oracle Enterprise Taxation Management Optional Third-Party Products Installation Guide*

## Updates to this Documentation

This documentation is provided with the version of the product indicated. Additional and updated information about the operations and configuration of the product is available from the Knowledge Base section of ORACLE MetaLink (http://metalink.oracle.com). Please refer to MetaLink for more information.

# Conventions

The following text conventions are used in this document:

| Convention | Meaning |
| --- | --- |
| **boldface** | Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary. |
| *italic* | Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values. |
| monospace | Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter. |

# Chapter 1

## Database Overview

This section provides an overview of the Oracle Enterprise Taxation Management database, including:

- **Supported Database Platforms**
- **Database Maintenance Rules**

# Supported Database Platforms

This section defines the platforms on which Oracle Enterprise Taxation Management is verified to operate.

## Supported Platforms Summary Table

Oracle Enterprise Taxation Management supports Oracle Database Server 10g and 11g on all operating systems on which those servers are available. Oracle Enterprise Taxation Management has been tested and certified on the following platforms:

| Platform | Database Version |
|---|---|
| AIX 5.3 TL6 (POWER 64-bit)<br>AIX 6.1 (POWER 64-bit) | Oracle Database Server 10.2.0.3 (64-bit)<br>Oracle Database Server 11.1.0.6 (64 Bit) |
| HP-UX 11.23 (Itanium2 64-bit) | Oracle Database Server 10.2.0.3 (64-bit)<br>Oracle Database Server 11.1.0.6 (64 Bit) |
| HP-UX 11.31 (Itanium2 64-bit) | Oracle Database Server 10.2.0.3 (64-bit)<br>Oracle Database Server 11.1.0.6 (64 Bit) |
| Oracle Enterprise Linux 5  (64-bit)<br>AMD64/ EM64T (64-bit) | Oracle Database Server 11.1.0.6 (64 Bit) |
| Red Hat Enterprise Linux (64-bit)<br>AMD64/ EM64T (64-bit) | Oracle Database Server 11.1.0.6 (64 Bit) |
| Solaris 10 (SPARC 64-bit) | Oracle Database Server 10.2.0.3 (64-bit)<br>Oracle Database Server 11.1.0.6 (64 Bit) |
| Windows 2003 Server R2 SP2<br>(x86_64 64-bit) | Oracle Database Server 10.2.0.3 (64-bit)<br>Oracle Database Server 11.1.0.6 (64 Bit)<br>SQL Server 2005 SP2 |
| z/OS 1.9 (64-bit) | DB2 9.1 |

Refer to MetaLink Doc 579539.1 for details of additional database platforms supported.

## Support for Software Patches and Upgrades

Due to the ongoing nature of software improvement, vendors will issue patches and service packs for the operating systems, application servers and database servers on top of specific versions that Oracle Enterprise Taxation Management has been tested with.

If it is necessary to apply an upgrade, please do that in a test environment prior to updating the Oracle Enterprise Taxation Management production environment.

The only exceptions from this rule are Hibernate and C3PO software. For these the exact versions mentioned in this guide must be installed. Please always check with Oracle Enterprise Taxation Management support prior to installing Hibernate and C3PO updates.

Always contact Oracle Enterprise Taxation Management support prior to applying vendor updates that do not guarantee backward compatibility.

# Database Maintenance Rules

The database supplied with the product consists of the following elements:

- A set of users to administrate, execute and read the database schema provided.

- A set of database roles to implement security for each of the users provided.

- A schema containing the base database objects used by the product.

The installation of these components is outlined in the installation section of this document.

## What is Permitted to Be Changed

During and after installation of the product the following changes may be performed by the database administrator personnel on site:

- Users supplied by product may be changed to site standards.

- Database objects may be added to the schema according to database naming standards outlined later in this document.

- Database views and indexes may be created against base database objects.

- Database storage attributes for base indexes and base tables may be changed according to site standards and hardware used.

- Tablespace names, attributes and locations may be changed according to site standards.

- Database topology (that is, base table/index to tablespace, tablespace to data file, datafile to location) may be altered according to tuning and/or site standards.

- Database triggers may be created against base database objects unless they attempt to contravene base data integrity rules.

- Database initialization and parameter settings may be altered to site standards unless otherwise advised by Oracle Support or outlined in this document.

## What is Not Permitted to Be Changed

In order to maintain the operations of the product and upgradability, during and after installation of the product the following changes may *not* be performed by the database administrator personnel on site:

- Roles provided must not be altered in any way.

- Base objects must not be removed or altered in the following ways:

  - Columns in base tables must not be altered in anyway (altered, removed or added).

  - Columns in Indexes must not be altered or removed.

  - Tables must not be renamed or removed.

  - Base Views must not be renamed or removed.

  - Base indexes must not be removed.

# Chapter 2

## Database Installation

This section provides the steps required to install or upgrade the Oracle Enterprise Taxation Management database, including:

- **Installation Overview**

- **Oracle Database Installation**

- **DB2 Database Installation**

- **SQL Server Database Installation**

# Installation Overview

> Note. Refer to the Oracle Enterprise Taxation Management *Installation Guide* for the hardware and software versions required for the installation on the Unix Server or Windows Server. This installation is for Oracle Enterprise Taxation Management V2.2.0 and the upgrade of Oracle Enterprise Taxation Management V2.1.5.

There are three types of installations to be considered.

- **Initial Install** - a database with no demo data.

- **Upgrade Install** - a database upgrade from V2.1.0  to V2.2.0.

- **Demo Install** - a database populated with demo data.

For an Initial Install or Demo Install you will create an empty database on the Unix or Windows server and then populate the database with data. For a database Upgrade Install you will upgrade your current Oracle Enterprise Taxation Management database.

> Note.  Prior to the installation of the database schema for the product, please ensure that the Database Management System software is installed according to your site standards and the installation guide provided by the database vendor.

# Oracle Database Installation

The following section outlines the instructions for installing the Oracle Database for Oracle Enterprise Taxation Management.

> Note: The installation tools outlined in this guide run on Windows and UNIX/ Linux only. If the database server is installed on a platform not supported by the utilities then the site should use the Windows utilities to execute the installation.

## Database Creation

This step is not required if you are performing a database upgrade from a previous version of the application.

> Note. The Unix and Windows installs will create an empty database with at least one tablespace for storing the application objects before running the install. The default name of the application tablespace is CISTS_01. If you do not use the default name or want to spread the application objects across multiple tablespaces, you must edit the Storage.par file, supplied with the install package, before the installation process.

### Unix

The files are located in the Unix folder within the Database Creation folder.

1. FTP the install.zip file from the Unix folder to a temporary directory on the UNIX server.

2. Extract the scripts from this file by entering the command (or an equivalent):

   ```
   gunzip install.zip
   ```

3. To create the database set the ORACLE_HOME and ORACLE_BASE variables.

4. Execute the utility cdxdba.plx by entering following command:

   ```
   perl cdxdba.plx
   ```

5. The script will prompt for parameter values:

   • Enter the instance name (DEMO) : DEMO

   • Enter ORACLE_BASE: the directory where the setup files for the database will be created (/orasw/app/oracle) :

   • Enter ORACLE_HOME: the folder where the current version of Oracle software is installed (/orasw/app/oracle/product/10203) :

   • Enter ORACLE_DATA: the directory where the data files for the database will be created (/db05/oradata) :

   • Enter the character set for the database (UTF8) :

6. Enter the values based on the settings of your database server. You can also accept the default values displayed if they match your database server settings. You will be prompted to confirm the settings and select Y or N to create the database.

   ```
   ORACLE_SID: DEMO
   ORACLE_HOME: /orasw/app/oracle/product/10203
   ORACLE_BASE: /orasw/app/oracle
   ORACLE_DATA: /db05/oradata
   Character Set: UTF8
   Do you want to continue (Y/N)?
   ```

7. Once the database has been created, you will be prompted with the questions:

```
      Do you want to import a demo database dump into this database (Y/
N)?
```

- Select N to exit the database utility.

- Select Y to import the Demo Install data.

For the Demo Install use the dump file exp_demo.dmp.

```
      Do you want to import a demo database dump into this database (Y/
N)? Y
```

- Enter the name of the dump file (exp_demo.dmp):

- Enter the name of the log file (exp_demo.log):

```
      Ready to import the CISADM schemainto the database, do you want to
continue (Y/N)? Y
```

> Note. Update the oratab, tnsnames.ora and listener.ora files for the new database and check the connectivity to this database from another server and from your desktop.

### Windows

The files are located in the Windows folder within the Database Creation folder. You should be logged in as a user who is a member of local ORA_DBA group on that server. The ORA_DBA group should have "administrator" privileges assigned to it.

1. To create a database, run the utility CDXDBA.exe located in the Windows folder.

    The utility will display a list with the following options:

    > E - Export a schema from the database

    > R - Refresh a schema with a database dump.

    > C - Create/Recreate a local database.

    > H - See help for the command line options.

2. Select option C to create an empty database on your machine.

    Follow the prompts to complete the install.

3. Once the database has been created you can exit the utility or select the R - Refresh a schema with a database dump file to load the Demo Install data.

    Option R causes the utility to drop all the objects from the schema and import the schema from a database dump file.

    For the Demo Install use the dump file exp_demo.dmp.

    > Note. Update the oratab, tnsnames.ora and listener.ora files for the new database and check the connectivity to this database from another server and from your desktop.

## Security Configuration

The configuration utility and scripts are located in the Security folder.

Execute the OraGenSec.exe utility.

The script will prompt for parameter values:

```
      Enter the Oracle user that owns the schema (e.g. CISADM): cisadm
      Enter the password for the CISADM user: cisadm
      Enter the name of the Oracle Database: database name
```

```
    Enter a comma-separated list of Oracle users in which synonyms need
to be created (e.g. cisuser,cisread): cisuser,cisread
```

The utility configures security for the CISADM schema objects.

# Populating Language Data

At this point, the Oracle Enterprise Taxation Management demo database is ready for usage. Please note that this database contains data in ENGLISH language only. If you use any other supported language, you must first run the NEWLANG batch program to duplicate the data entries for that language. For more information on running this batch program, refer to the User Documentation, Defining Background Processes.

You can also install the language specific demo data packages (if available) into the database. Please contact your Oracle representative to receive information on these packages

# Initial Installation

This section describes the initial installation of the Database.

## Database Script and Utilities Installation

Unzip the database.zip file to your desktop.

The database folder contains several files that will be referred to in the installation process.

Setup a Microsoft Windows desktop with the Oracle Client installed.

## Create Database

The Initial installation requires the following to be installed before the installation can be started:

- A database must be created. Site standard techniques or tools may be used to create the database. The templates for creating the database are located under the relevant database version subdirectory of the "Database Creation" directory under:

    - ocreatedb.sql - Create Database

    - ocreatedbcatalog.sql - Build database catalog tables.

    - ocreatedbfiles.sql - Create data files for tablespaces

    - oinit.ora - Sample initialization parameters for the database

- The users and roles for the product. Templates for this activity are located under the relevant database version subdirectory of the "Database Creation" directory as createcdxusers.sql.

    Note. Please alter a copy of the above files for sire specific changes.

    Note. The CDXDBA utility provided in the "Database Creation" folder may be used to automate the process. See "Database Creation" for more details.

## Install

The files for the Initial Install are located in the Install-Upgrade folder.

The folder contains the scripts and utilities that you will run in order to complete the installation process.

The process prompts for the names of three database users during this process:

- A user that will own the application schema (for example, CISADM).

- A user that has select/update/insert/delete (read-write) privileges to the objects in the application schema. The application will access the database as this user. (for example, CISUSER).

- A user with read-only privileges to the objects in the application schema. (for example, CISREAD).

Perform the following steps:

1. Run CDXDBI.exe. The utility prompts you to enter values for the following parameters:

    - The name of the target database.

    - The password for the SYSTEM user account in the database (in silent mode).

    - The name of the owner of the Database Schema.

    - The password for the user (in silent mode).

    - The Oracle user with read-write privileges to the Database Schema

    - The Oracle user with read-only privileges to the Database Schema

2. The utility at this point is ready to perform the initial install and prompts you for permission to start the process.

3. If you chose to continue, CDXDBI first checks for the existence of each of the users specified and prompts for their password, default tablespace, and temporary tablespace, if they do not exist.

4. After setting up the roles and users, the utility continues upgrading schema and system data definitions. If an error occurs while executing an SQL or another utility, it logs and displays the error message and allows you to re-execute the current step.

## CDXDBI performs the following tasks:

1. Interacts with the user to collect information about the name of Oracle account that will own the application schema (for example, CISADM), password of this account, password of the SYSTEM account in the database, and the name of the Oracle account that the application user will use (for example, CISUSER), and the name of the Oracle account that will be assigned read-only privileges to the application schema (for example, CISREAD).

2. Connects to the database as SYSTEM account, checks whether the user already has the application schema installed to verify whether this is an initial installation.

3. Verifies whether the tablespace names already exist in Storage.par file (the process aborts, if not).

4. Installs the schema, installs the system data, and configures security.

5. Maintains upgrade log tables in the database.

6. Updates release id when the upgrade is completed successfully.

7. If an error occurs while executing a SQL script or another utility, it logs and displays the error message and allows you to re-execute the current step. Log files CDXDBI###.log are created in the same folder as CDXDBI and contains all the SQL commands executed against the database along with the results. The log files are incremental so that the results are never overwritten. If warning messages are generated during the upgrade, CDXDBI prompts the user at the end of the process. Users should check the log files to verify the warning messages. Warning messages are only alerts and do not necessary mean a problem exists.

## Post-Install Tasks:

Refer to the **Populating Language Data** on page 2-5 if the application is to run in another language other than ENGLISH.

## Database Statistics Generation

During an install process, new database objects may be added to the target database. Before starting to use the database, generate the statistics for these new objects.

# Upgrade Install

Note. For a database upgrade the database must be at the release level V2.1.0 Service Pack 2.

The files for the Upgrade Install are located in the Install-Upgrade folder.

The above folder contains the scripts and utilities that the user has to run in order to complete the installation process.

Before running an Upgrade Install, it is very important that you make a full backup of the target database or schema.

## Install

The steps included in this process will upgrade the rest of the system data to V2.2.0.

The process prompts for the names of three database users during this process:

•   A user that will own the application schema (for example, CISADM).

•   A user that has read-write privileges to the objects in the application schema. The application will access the database as this user. (for example, CISUSER).

•   A user with read-only privileges to the objects in the application schema. (for example, CISREAD).

Following are the steps involved:

1.   Review and edit the Storage.par file to set the tablespace names. The instructions for editing the file are included in the file itself.

2.   Run CDXDBI.exe. The utility prompts you to enter values for the following parameters:

    •   The name of the target database.

    •   The password for the SYSTEM user account in the database (in silent mode).

    •   The name of the owner of the Database Schema.

    •   The password for the user (in silent mode).

    •   The Oracle user with read-write privileges to the Database Schema

    •   The Oracle user with read-only privileges to the Database Schema

3.   The utility at this point is ready to perform the upgrade install and prompts you for permission to start the process.

4.   If you chose to continue, CDXDBI first checks for the existence of each of the users specified earlier and prompts for their password, default tablespace, and temporary tablespace, if they do not exist.

5.   After setting up the roles and users, the utility continues upgrading schema and system data definitions. If an error occurs while executing an SQL or another utility, it logs and displays the error message and allows you to re-execute the current step.

### CDXDBI performs the following tasks:

1.   Interacts with the user to collect information about the name of Oracle account that will own the application schema (for example, CISADM), password of this account, password of the SYSTEM account in the database, and the name of the Oracle account that the application user will use (for example, CISUSER), and the name of the Oracle account that will be assigned read-only privileges to the application schema (for example, CISREAD).

2.   Connects to the database as SYSTEM account, checks whether the user already has the application schema installed to verify whether this is an upgrade installation.

3. Verifies whether the upgrade path from the current release id to the target release id is supported by the upgrade.

4. Verifies whether the tablespace names already exist in Storage.par file (the process aborts, if not).

5. Upgrades the schema, upgrades the system data, and configures security.

6. Maintains upgrade log tables in the database.

7. Updates release id when the upgrade is completed successfully.

8. If an error occurs while executing a SQL script or another utility, it logs and displays the error message and allows you to re-execute the current step. Log files CDXDBI###.log are created in the same folder as CDXDBI and contains all the SQL commands executed against the database along with the results. The log files are incremental so that the results are never overwritten. If warning messages are generated during the upgrade, CDXDBI prompts the user at the end of the process. Users should check the log files to verify the warning messages. Warning messages are only alerts and do not necessary mean a problem exists.

### Post-Install

Refer to the **Populating Language Data** on page 2-5 if the application is to run in another language other than ENGLISH.

### Database Statistics Generation

During an install process, new database objects may be added to the target database. Before starting to use the database, generate the statistics for these new objects.

### Oracle init.ora parameters recommendations

The following additional init.ora oracle database parameters are recommended to improve database performance.

```
optimizer_index_cost_adj = 1
optimizer_index_caching = 100
```

### Environment Registration

Note. If the target database is registered as a configuration laboratory or archiving database in another database, or another database has been registered as a configuration laboratory or archiving database in this database, it is required that you upgrade the registration at this stage.

The detailed instructions for environment registration can be found in the Oracle Enterprise Taxation Management user documentation. Please refer to this documentation before executing the Environment registration utility EnvSetup.exe included in the post-install folder.

## Demo Install

The Initial installation requires the following to be installed before the installation can be started:

• A database must be created. Site standard techniques or tools may be used to create the database. The templates for creating the database are located under the relevant database version subdirectory of the "Database Creation" directory under :

  • ocreatedb.sql - Create Database

  • ocreatedbcatalog.sql - Build database catalog tables.

  • ocreatedbfiles.sql - Create data files for tablespaces

  • oinit.ora - Sample initialization parameters for the database

• The users and roles for the product. Templates for this activity are located under the relevant database version subdirectory of the "Database Creation" directory as createcdxusers.sql.

Note: Please alter a copy of the above files for sire specific changes.

Note: The CDXDBA utility provided in the "Database Creation" folder may be used to automate the process.

## Install

Complete the application **Database Creation** on page 2-3 to create the database and import the Demo Install data into the database.

The Database Creation contains the instructions for the import of the Demo Install data.

## Post-Install

Configure the security for the database. Refer to **Security Configuration** on page 2-4.

Refer to the **Populating Language Data** on page 2-5 if the application is to run in another language other than ENGLISH.

# DB2 Database Installation

The Demo database contains sample accounts, premises, rates, bills, payments, etc. to illustrate the features of the Oracle Enterprise Taxation Management system. The Initial database contains the control tables and system tables that are needed for initializing the system.

## Loading Install Datasets

The majority of all mainframe datasets distributed by Oracle are now packaged on MVS for transfer using the TSO transmit (XMIT) command. This is done to turn PDS(s) and other files into Fixed Block LRECL 80 files that can be easily transferred with any binary transfer utility on the client site. The process to get MVS datasets from Oracle to the customer involves following steps.
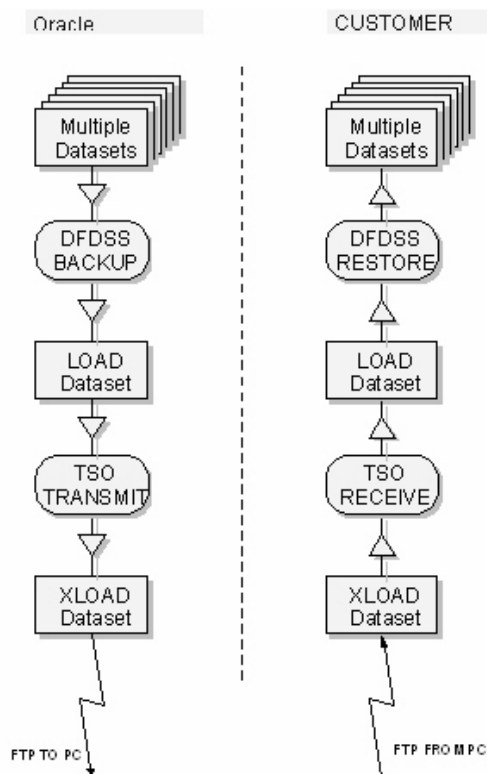


The above processes allow Oracle to provide all of the software electronically to the customer. The processes involve the following steps:

- Backup the multiple datasets (e.g. LOAD, LOAD1, LOADn dataset).

- TSO TRANSMIT the LOAD, LOAD1, LOADn dataset to the XLOAD, XLOAD1, XLOADn dataset. The TSO Transmit function convert's the LOAD dataset to a FB LRECL 80 Dataset (the XLOAD dataset).

- FTP the XLOAD, XLOAD1, XLOADn dataset to the PC.

- On the customer side, reverse the process.

    Note. The Receive portion of the process above requires that the TSO Receive command be allowed to receive a certain number of records (Currently 1,950,000). See the documentation for OUTLIM(n1) under "Statements/ Parameters for IKJTSOxx" in the "OS/390 MVS Initialization and Tuning Reference" for more information.

### Transferring the LOAD Datasets to MVS

There are a number of steps that must be followed to transfer the Oracle LOAD data to the mainframe so that we can use DFDSS restore against the Load dataset.

The following steps outline how to transfer the Oracle Load Data to MVS and then perform a restore against the Load dataset:

Select the appropriate install (DEMO or INITIAL) and perform the steps as described.

### Choose a High Level Qualifier (HLQ)

Choose the <HLQ> to put all of the installed software into. The restoration of the LOAD dataset will create the following datasets.

The JCL in the members provided have the <HLQ> set to DB8B.CD.TX2201SF. As part of installation, all occurrences of the DB8B.CD.TX2201SF need to be changed to your default standards.

| DSNAME | Purpose |
|---|---|
| <HLQ>.CNTL | JCL |
| <HLQ>.SYSIN | DDL, Runstats, Data scripts |
| <HLQ>.LOAD.CNTL | Load Control Statements |
| <HLQ>.tsname.UNLD | Load Input Flat Files |

### Transferring the initial Install Datasets

The following members are contained in XLOADIN dataset

| Name | Purpose |
|---|---|
| DB8B.CD.TX2201SF.CNTL | JCL members to create an empty database |
| DB8B.CD.TX2201SF.SYSIN | SYSIN members |
| DB8B.CD.TX2201SF.INIT | JCL to load and unload data |
| DB8B.CD.TX2201SF.INIT.LOAD.CNTL | Load DML |
| DB8B.CD.TX2201SF.INIT.*.UNLD | Unloaded data |

### Create Load Datasets

The job **V220CIN** is supplied as an ASCII text file on the installation media.

The following datasets are created by the job:

- **LOADIN** - Dataset contains a DFDSS backup that has been placed in TSO TRANSMIT format.

- **LOADINX** - Dataset is the output from the XLOAD dataset after it has been put through a "TSO RECEIVE" command.

- Modify the job **V2200CIN** to suit your installation standards.

- Run job **V220CIN** to create the datasets LOADINX , LOADIN.

**FTP LOADINX to MVS**

By default, MVS FTP creates an incompatible dataset for our needs. By predefining the LOADINX and LOADIN ftp dataset in step 1, we can ensure that the dataset is created correctly on the mainframe and that the LOADIN and LOADINX data is correctly stored in that dataset.

FTP the appropriate binary LOAD*X installation file into the LOAD*X dataset created in above.

**Receive Load Files**

The job V220RIN is supplied as an ASCII text file on the installation.

Modify the job V220RIN to suit your installation standards.

Run job V220RIN to "TSO RECEIVE" LOADINX dataset into the LOADIN.

**Extract Load Files**

The job V220EIN is supplied as an ASCII text file on the installation media.

The V220EIN job restores the LOAD datasets using the DFDSS restore function.

Modify the V220ENI job to suit your installation standards.

Run job V210EIN to restore all the datasets from the LOADIN dataset.

## Transferring the DEMO Install Datasets

The following members are contained in XLOADDM dataset:

| Name | Purpose |
| --- | --- |
| DB8B.CD.TX2201SF.CNTL | JCL members to create an empty database |
| DB8B.CD.TX2201SF.SYSIN | SYSIN members |
| DB8B.CD.TX2201SF.DEMO | JCL to load and unload data |
| DB8B.CD.TX2201SF.DEMO.LOAD.CNTL | Load DML |
| DB8B.CD.TX2201SF.DEMO.*.UNLD | Unloaded data |

**Create Load Datasets**

The job **V220CDM** is supplied as an ASCII text file on the installation

The following datasets are created by the job :

- **LOADDM** - Dataset contains a DFDSS backup that has been placed in TSO TRANSMIT format.

- **LOADDMX** - Dataset is the output from the XLOAD dataset after it has been put through a "TSO RECEIVE" command.

- Modify the job **V220CDM** to suit your installation standards.

- Run job **V220CDM** to create the datasets **LOADDMX** , **LOADDM**.

**FTP LOADDMX* to MVS**

By default, MVS FTP creates an incompatible dataset for our needs. By predefining the LOADDMX* and LOADDM* ftp datasets in step 1, we can ensure that the datasets are created correctly on the mainframe and that the LOADDM* and LOADDMX* data is correctly stored in that dataset.

FTP the appropriate binary **LOADDMX**\* installation files into the LOADDMX* datasets created in above.

**Receive Load Files**

The job **V220RDM** is supplied as an ASCII text file on the installation.

Modify the job **V220RDM** to suit your installation standards.

Run job **V220RDM** to "TSO RECEIVE" LOADDMX* dataset into the LOADDM*.

### Extract Load Files

The job **V220EDM** is supplied as an ASCII text file on the installation media.

The **V220EDM** job restores the LOADDM* datasets using the DFDSS restore function.

Modify the **V220EDM** job to suit your installation standards.

Run job **V220EDM** to restore all the datasets from the LOADDM* dataset.

## Performing the Database Creation and Install

This section contains the necessary steps to implement the new database deliverables. Modify them to suit site standards. SQLID in each SYSIN member is set to V2101R1, AV2101R1, or SYSADM.

> Note: This process is the same for both the INITIAL and DEMO database creation.

The default installation procedure is provided with the following default values for each version, release, and maintenance:

| | |
|---|---|
| <HLQ> | DB8B.CD.TX2201SF |
| CURRENT SQLIDS | SYSADM, AV2201SF |
| OWNER ID | V2201SF |
| STOGROUPS | GV2201SF, GV2201SF |
| DATABASE | TX2201SF |

Before submitting any jobs, you must modify all members in the datasets <HLQ>.CNTL and <HLQ>.SYSIN to suit your environment. Most modifications require the replacement of the values above with your site values. Check each piece of JCL to ensure that other DSNs are correct.

The JCL provided here is in the PDS **<HLQ>.CNTL.**

## V2.2.0 Schema and Data Creation for INITIAL Database

The below steps can be run against a database to create a Demo database. Run these jobs if you intend to create a demo database.

> Note. Before submitting jobs, you must modify members to suit your environment standards.

- V220DDL - Create FULL DDL (storage group, database, tablespaces, tables, indexes, views, synonyms, grants for select and grants for update) --- located in <HLQ>.CNTL

- V2201LD0-V2101LDA - LOAD Initial Database Data    --- located in <HLQ>.INIT

- V2201IRUN - RUNSTATS for each Table Space --- located in <HLQ>.CNTL

- Run DB2Gensec from a PC to generate security

- V2201UL0-V2201ULA - If needed, Unload Data Demo Database Data --- located in <HLQ>.INIT

# V2.2.0 Schema and Data Creation for DEMO Database

- The below steps can be run against a database to create a Demo database. Run these jobs if you intend to create a demo database.

- Note. Before submitting jobs, you must modify members to suit your environment standards.

- V220DDL - Create FULL DDL (storage group, database, tablespaces, tables, indexes, views, synonyms, grants for select and grants for update) --- located in <HLQ>.CNTL

- V2201LD0-V2201LDA - LOAD Demo Database Data   --- located in <HLQ>.DEMO

- V2201IRUN - RUNSTATS for each Table Space --- located in <HLQ>.CNTL

- Run DB2Gensec from a PC to generate security

- V2201UL0-V2201ULA - If needed, Unload Data Demo Database Data --- located in <HLQ>.DEMO

# SQL Server Database Installation

This section contains the necessary steps to create an Initial Install database, Upgrade Install and a Demo database.

There are three types of installations to be considered.

**Initial Install** - a database with no demo data.

**Upgrade Install** - a database upgrade from V2.1.0 Service Pack 2.

**Demo Install** - a database populated with demo data.

For the Initial Install you will create an empty database and then populate the database with system data. For the Demo Install you will use the MS SQL Server attach function to create the DEMO database. For the Upgrade Install Oracle Enterprise Taxation Management V2.1.0 Service Pack 2 database is upgraded to V2.2.0.

> Note. Install the Database Scripts and Utilities then select the Install you require and follow the instructions. The installation of MS SQL Server has to be completed before continuing with the Oracle Enterprise Taxation Management Database Installation.

## Database Script and Utilities Installation

Unzip the database.zip file on the MS SQL Server database server.

The database folder contains several files and folders that will be referred to in the installation process.

## Initial Install

Follow the steps in the section **Database Creation** on page 2-16.

Complete Option C - Create an Empty database in the Oracle Enterprise Taxation Management Database Creation Section.

> Note. Configure an ODBC connection to the database server with the Administrator user-id, connecting to the master database as the default database.

Complete Option S - Configure the security for the database.

Complete Option I - Initial Install Data Import in the Oracle Enterprise Taxation Management Database Creation Section.

### Database Statistics Generation

During an install process, new database objects may be added to the target database. Before starting to use the database, generate the statistics for these new objects.

## Upgrade Install

Follow the steps in the section **Database Creation** on page 2-16.

Complete Option U - Upgrade a Database in the Oracle Enterprise Taxation Management Database Creation Section.

> Note. Configure an ODBC connection to the database server with the Administrator user-id, connecting to the master database as the default database.

Complete Option S - Configure the security for the database.

### Database Statistics Generation

During an install process, new database objects may be added to the target database. Before starting to use the database, generate the statistics for these new objects.

# Demo Install

Follow the steps in the section **Database Creation** on page 2-16.

Complete Option A - Create the DEMO database in the Oracle Enterprise Taxation Management Database Creation Section.

> Note. Configure an ODBC connection to the database server with the Administrator user-id, connecting to the master database as the default database.

Complete Option S - Configure the security for the database.

### Database Statistics Generation

During an install process, new database objects may be added to the target database. Before starting to use the database, generate the statistics for these new objects.

# Database Creation

Follow these instructions to create a SQL Server database.

> Note. This install creates an empty Oracle Enterprise Taxation Management SQL Server database or attaches the Oracle Enterprise Taxation Management SQL Server DEMO database or updates an existing database at versions V2.0.5 Service Pack 1.

### Execute the SQL Server Database Utility

The files are located in the Database Creation folder.

If you experience problems during the process and cannot access a database you have created or cannot start SQL Server, examine the SQL Server error log and SQL Server Books Online for more information about the errors experienced.

To create a database, start the utility CDXDBA.exe.

This utility provides the following:

```
MS SQL Server Database Utility
A - Create the DEMO database
C - Create an empty database
S - Configure Security for a database
I -Initial Install Data Import
U -Upgrade a Database
H - See help for the command line options
Q - Quit
Select an option
```

Follow the prompts to complete the install.

### Option A - Create the DEMO database
- Enter the MS SQL Server Name (e.g. server-name): sf-pdnt-022

- Enter the name of the MS SQL Server administrator account (e.g. sa): sa

- Enter the password for MS SQL Server administrator account: sa

- Enter the directory where the data files for the database will be created (D:\SQLServerData\MSSQL\Data):

The utility creates the database. The log files are located in the create folder.

- Creating the folder create\CD2202DM to hold setup files for the database.

- Creating the database files in folder create\CD2202DM.

- Copying Database files to D:\SQLServerData\MSSQL\Data...

- Connecting to sf-pdnt-022 user sa to create the database CD2202DM ...

- Creating the Application user AV2202DM ...

- DEMO Database CD2202DM processing is complete.

## Option C - Create an Empty database

- Enter the MS SQL Server Name (e.g. server-name): sf-pdnt-022

- Enter the name of the MS SQL Server administrator account (e.g. sa): sa

- Enter the password for MS SQL Server administrator account: sa

- Enter the database name (CD2202D1) : CD2202D1

- Enter the collation of the database (SQL_Latin1_General_CP1_CS_AS) :

- Enter the directory where the data files for the database will be created (D:\SLServerData\MSSQL\Data):1

- Enter the name of the CCB Application user that will connect to the database (A2202D1):AV2202D1

- Enter the password for the CCB Application user: AV2202D1

The utility creates the database. The log files are located in the create folder.

- Creating the folder create\CD2202D1 to hold setup files for the database.

- Creating the database files in folder create\CD2202D1.

- Connecting to sf-pdnt-022 user sa to create the database CD2202D1 ...

- Creating the Application user AV2202D1 ...

- Creating the database tables in CD2202D1 ...

- Creating the database views in CD2202D1 ...

- Database CD2202D1 processing is complete.

Check the log files to for errors.

## Option S - Configure Security for a Database

- Enter the name of the MS SQL Server administrator account(e.g. sa): sa

- Enter the password for MS SQL Server administrator account: sa

- Enter the database name (CD2202D1):CD2202D1

- Enter the ODBC connection (CCBODBC):

- Enter the name of the CCB Application user that will connect to the database

-  (AV2202D1):AV2202D1

The utility configures security for the database and user. The log files are located in the logs folder.

- Generating security ...

- Security privileges generated successfully, Now Exiting ...

- Check the log file Security.log in the folder logs for errors.

Check the log files to for errors.

**Option I - Initial Install Data Import**

- Enter the name of the MS SQL Server administrator account(e.g. sa): sa

- Enter the password for MS SQL Server administrator account: sa

- Enter the database name (CD2202D1):CD2202D1

- Enter the ODBC connection (CCBODBC):

- Enter the name of the CCB Application user that will connect to the database

-  (AV2202D1):AV2202D1

The utility imports and configures the data.

- Initial Install Data import processing is complete.

Check the log files to for errors.

**Option U - Upgrade a Database**

- Enter the name of the MS SQL Server administrator account(e.g. sa): sa

- Enter the password for MS SQL Server administrator account: sa

- Enter the database name (CD2202D1):CD2102D1

- Enter the ODBC connection (CCBODBC):

- Enter the name of the CCB Application user that will connect to the database

- (AV2202D1):AV2102D1

The utility upgrades and configures the data.

- Database Upgrade processing is complete.

Check the log files to for errors.

# Security Configuration

This utility can run separately or you can run it from the Oracle Enterprise Taxation Management Database Creation - option S.

 The configuration utility is located in the security folder.

> Note. Configure an ODBC connection to the database server with the Administrator user-id, connecting to the master database as the default database.

Execute the MSgensec.exe utility. The sample script MSGenSec.bat is available for use.

The script will prompt for parameter values:

- Enter the name of the MS SQL Server administrator account(e.g. sa): sa

- Enter the password for MS SQL Server administrator account:

- Enter the name of the Database (e.g. CD2202D1): CD2202D1

- Enter the name of the ODBC Connection (e.g. CCBODBC): CCBODBC

- Enter the user for which Security privileges need to be created (e.g. AV2202D1): AV2202D1

The utility configures security for the user.

- Connecting to CD2202D1 as sa...

- Generating security ...

- Security privileges generated successfully, Now Exiting ...

- Press Enter to Continue ...

# Chapter 3

## Database Design

This section provides a standard for database objects (such as tables, columns, and indexes) for products using the Oracle Utilities Framework. This standard helps smooth integration and upgrade processes by ensuring clean database design, promoting communications, and reducing errors. Just as Oracle Utilities Framework goes thorough innovation in every release of the software, it is also inevitable that the product will take advantage of various database vendors' new features in each release. The recommendations in the database installation section include only the ones that have been proved by vigorous QA processes, field tests and benchmarks. This section includes:

- **Database Object Standard**

- **Column Data Type and Constraints**

- **Standard Columns**

# Database Object Standard

This section discusses the rules applied to naming database objects and the attributes that are associated with these objects.

## Categories of Data

A table can belong to one of the three categories:

- Control (admin)

- Master

- Transaction.

For purposes of physical table space design, metadata and control tables can belong to the same category.

Example of tables in each category:

- **Control:** SC_USER, CI_ADJ_TYPE, F1_BUS_OBJ

- **Master:** CI_PER, CI_PREM,

- **Transaction:** F1_FACT, CI_FT

All tables have the category information in their index name. The second letter of the index carries this information. See **Indexes** on page 3-3 for more information.

## Naming Standards

The following naming standards must be applied to database objects.

### Table

Table names are prefixed with the owner flag value of the product. For customer modification **CM** must prefix the table name. The length of the table names must be less than or equal to 30 characters. A language table should be named by suffixing **_L** to the main table. The key table name should be named by suffixing **_K** to the main table.

It is recommended to start a table name with the 2-3 letter acronym of the subsystem name that the table belongs to. For example, **MD** stands for metadata subsystem and all metadata table names start with **CI_MD**.

Some examples are:

- CI_ADJ_TYPE

- CI_ADJ_TYPE_L

A language table stores language sensitive columns such as a description of a code. The primary key of a language table consists of the primary key of the code table plus language code (LANGAGUE_CD).

A key table accompanies a table with a surrogate key column. A key value is stored with the environment id that the key value resides in the key table.

The tables prior to V2.0.0 are prefixed with CI_ or SC_.

### Columns

The length of a column name must be less than or equal to 30 characters. The following conventions apply when you define special types of columns in the database.

- Use the suffix **FLG** to define a lookup table field. Flag columns must be CHAR(4). Choose lookup field names carefully as these column names are defined in the lookup table (CI_LOOKUP_FLD) and must be prefixed by the product owner flag value.

- Use the suffix **CD** to define user-defined codes. User-defined codes are primarily found as the key column of the admin tables.

- Use the suffix **ID** to define system assigned key columns.

- Use the suffix **SW** to define Boolean columns. The valid values of the switches are 'Y' or 'N'. The switch columns must be CHAR(1)

- Use the suffix **DT** to define Date columns.

- Use the suffix **DTTM** to define Date Time columns.

- Use the suffix **TM** to define Time columns.

Some examples are:

- ADJ_STATUS_FLG

- CAN_RSN_CD

## Indexes

Index names are composed of the following parts:

### [X][C/M/T]NNN[P/S]

- **X** - letter X is used as a leading character of all base index names prior to Version 2.0.0. Now the first character of product owner flag value should be used instead of letter X. For client specific implementation index in Oracle, use CM.

- **C/M/T** - The second character can be either C or M or T. C is used for control tables (Admin tables). M is for the master tables. T is reserved for the transaction tables.

- **NNN** - A three-digit number that uniquely identifies the table on which the index is defined.

- **P/S/C** - P indicates that this index is the primary key index. S is used for indexes other than primary keys. Use C to indicate a client specific implementation index in DB2 implementation.

Some examples are:

- XC001P0

- XT206S1

- XT206C2

- CM206S2

> Warning! Do not use index names in the application as the names can change due to unforeseeable reasons.

## Oracle Implementations

If a customer decides not to use the default table space name (CISTS_01) for all tables, or default index name (CISTS_01) they will need to maintain the storage.par file. The cdxdbi process uses this file to create an initial install or perform an application database upgrade. This configuration file is used for all new object created in the database. This file also allows database administrators to control the storage allocation for the database objects.

 **Format:** Object Type:Object Name:Tablespace name:Parallel prompt: Comments.

For optimum storage allocation, database administrators should create multiple tablespaces with extents sized to store different types of tables/indexes. They can then edit this file before each upgrade and installation process in order to allocate the tables and indexes across these table

spaces. Tables and indexes can be created in parallel by setting the degree of parallelism. The default value is 1.

In order to easily identify the tables, the table names are included for each index as a comment.

Tablespace and parallel information for only the new objects is used. Therefore, for initial installs, information for each object should be reviewed. For upgrades, tablespace information for only the objects added in the current release needs to be reviewed.

Be careful while editing this file. Make sure that the tablespace names being used exist in the database. Do not change the basic format of this file.

## Sequence

The base sequence name must be prefixed with the owner flag value of the product.

## Trigger

The base trigger name must be prefixed with the owner flag value of the product.

When implementers add database objects, such as tables, triggers and sequences, the name of the objects should be prefixed by CM. For example, Index names in base product are prefixed by X; the Implementers' index name must not be prefixed with X.

# Column Data Type and Constraints

This section discusses the rules applied to column data type and constraints, and the attributes that are associated with these objects.

## User Defined Code

User Defined Codes are defined as CHAR type. The length can vary by the business requirements but a minimum of eight characters is recommended. You will find columns defined in less than eight characters but with internationalization in mind new columns should be defined as CHAR(10) or CHAR(12). Also note that when the code is referenced in the application the descriptions are shown to users in most cases.

## System Assigned Identifier

System assigned random numbers are defined as CHAR type. The length of the column varies to meet the business requirements. Number type key columns are used when a sequential key assignment is allowed or number type is required to interface with external software. For example, Notification Upload Staging ID is a Number type because most EDI software uses a sequential key assignment mechanism. For sequential key assignment implementation, the DBMS sequence generator is used in conjunction with Number Type ID columns.

## Date/Time/Timestamp

Date, Time and Timestamp columns are defined physically as DATE in Oracle. In DB2 the DATE, TIME and TIMESTAMP column types, respectively, are used to implement them. Non-null constraints are implemented only for the required columns.

## Number

Numeric columns are implemented as NUMBER type in Oracle and DECIMAL type in DB2. The precision of the number should always be defined. The scale of the number might be defined. Non-null constraints are implemented for all number columns.

## Fixed Length/Variable Length Character Columns

When a character column is a part of the primary key of a table define the column in CHAR type. For the non-key character columns, the length should be the defining factor. If the column length should be greater than 10, use VARCHAR2 type in Oracle and VARCHAR type in DB2.

## Null Constraints

The Non-null constraints are implemented for all columns except optional DATE, TIME or TIMESTAMP columns.

## Default Value Setting

The rules for setting the database default values are as follows:

- When a predefined default value is not available, set the default value of Non-null CHAR or VARCHAR columns to blank except the primary key columns.

- When a predefined default value is not available, set the default value Non-null Number columns to 0 (zero) except the primary key columns.

- No database default values should be assigned to the Non Null Date, Time, and Timestamp columns.

## Foreign Key Constraints

Referential integrity is enforced by the application. In the database do not define FK constraints. Indexes are created on most of Foreign Key columns to increase performance.

# Standard Columns

This section discusses the rules applied to standard columns and the attributes that are associated with these objects.

## Owner Flag

Owner Flag (OWNER_FLG) columns exist on the system tables that are shared by multiple products. Oracle Utilities Framework limits the data modification of the tables that have owner flag to the data owned by the product.

## Version

The Version column is used to for optimistic concurrency control in the application code. Add the Version column to all tables that are maintained by a Row Maintenance program irrespective of the language used (COBOL or JAVA).

# Chapter 4

## Database Implementation Guidelines

The following section outlines the general implementation guidelines for the database components, including:

- **Oracle Database Implementation Guidelines**
- **DB2 Database Implementation Guidelines**.

Note: Refer to MetaLink 560367.1 for more advice

# Oracle Database Implementation Guidelines

This section provides guidelines for implementing the Oracle database.

## Optimizer Mode

Please set the Optimizer Mode in Init.ora to 'CHOOSE'.

## Index Organized Tables (IOT)

Consider creating the following tables as IOT in the production size databases.

CI_FT (Financial Transactions) - Index on the FT_ID.

CI_TREND (Trend Table) - Index on the primary key. Create additional indexes.

Note. There is a slight chance that the upgrade will fail on IOT tables when the primary key structure is changed in the base tables.

## Oracle Partitioning

If you use a base index for the partitioning key, rename the index to CM**.

If you use the primary key index of the table as the partitioning key:

• Make the index non-unique.

• Primary constraints should still exist.

The upgrade on the partitioned table will work the best if the partitioning key is not unique. This allows the upgrade tool to drop the PK constraints if the primary key columns are modified and recreate the PK constraints without dropping the index.

## Tables to consider for Partitioning

The following is the list of the tables we suggest are candidates for partitioning. The partitioning key is the primary key of the table.

| Table Name | Reason for Partitioning |
|---|---|
| CI_ACCT | Volume of data |
| CI_ACCT_MSG | Volume of data |
| CI_ADJ | Payment process |
| CI_ADJ_K | Payment process |
| CI_ADM_RVW_SCH | Billing process |
| CI_APAY_CLR_STG | Billing process |
| CI_BILL | Volume of data |
| CI_BILL_EXCP | Volume of data |
| CI_BILL_K | Volume of data |
| CI_BILL_MSG_PRM | Billing process |
| CI_BILL_MSGS | Volume of data |
| CI_BILL_ROUTING | Volume of data |

| Table Name | Reason for Partitioning |
| --- | --- |
| CI_BILL_SA | Billing process |
| CI_BSEG | Volume of data |
| CI_BSEG_K | Volume of data |
| CI_BSEG_CALC | Volume of data |
| CI_BSEG_CALC_LN | Volume of data |
| CI_BSEG_EXCP | Billing process |
| CI_BSEG_ITEM | Billing process |
| CI_BSEG_MSG | Billing process |
| CI_BSEG_READ | Volume of data |
| CI_BSEG_SQ | Volume of data |
| CI_COLL_EVT | ADM process |
| CI_COLL_EVT_K | ADM process |
| CI_COLL_EVT_CC | ADM process |
| CI_COLL_PROC | ADM process |
| CI_COLL_PROC_K | ADM process |
| CI_COLL_PROC_SA | ADM process |
| CI_FA | Activation process |
| CI_FA_K | Activation process |
| CI_FA_STEP | Activation process |
| CI_FT | Volume of data |
| CI_FT_K | Volume of data |
| CI_FT_GL | Volume of data |
| CI_FT_PROC | Billing process |
| CI_MR | Volume of data |
| CI_MR_K | Volume of data |
| CI_MR_REM | MR upload process |
| CI_MTR | Volume of data |
| CI_MTR_CONFIG | Volume of data |
| CI_MTR_CONFIG_K | Volume of data |
| CI_PAY_EVENT | Payments process |
| CI_PAY_EVENT_K | Payments process |
| CI_PAY_SEG | Payments process |
| CI_PAY_SEG_K | Payments process |

| Table Name | Reason for Partitioning |
| --- | --- |
| CI_PAY_TNDR | Payments process |
| CI_PAY_TNDR_K | Payments process |
| CI_PER | Volume of data |
| CI_PREM | Volume of data |
| CI_REG | Volume of data |
| CI_REG_K | Volume of data |
| CI_SA | Volume of data |
| CI_SA_REL | Volume of data |
| CI_SA_SP | Volume of data |
| CI_SA_SP_FA | Activation process |
| CI_SEV_EVT | Severance process |
| CI_SEV_EVT_CC | Severance process |
| CI_SEV_EVT_DEP | Severance process |
| CI_SEV_EVT_FA | Severance process |
| CI_SEV_PROC | Severance process |
| CI_SEV_PROC_K | Severance process |
| CI_SP | Volume of data |
| CI_WO_EVT | Write off process |
| CI_WO_EVT_CC | Write off process |
| CI_WO_PROC | Write off process |
| CI_WO_PROC_K | Write off process |
| CI_WO_PROC_SA | Write off process |

# DB2 Database Implementation Guidelines

This section provides guidelines for the DB2 database.

## Clustering

Cluster the tables by the Primary Key of the table.

## Tables to consider for Partitioning

The following is the list of the tables we suggest are candidates for partitioning. The partitioning key is the primary key of the table.

| Table Name | Reason for Partitioning |
| --- | --- |
| CI_ACCT | Volume of data |
| CI_ACCT_MSG | Volume of data |
| CI_ADJ | Payment  process |
| CI_ADJ_K | Payment process |
| CI_ADM_RVW_SCH | Billing process |
| CI_APAY_CLR_STG | Billing process |
| CI_BILL | Volume of data |
| CI_BILL_EXCP | Volume of data |
| CI_BILL_K | Volume of data |
| CI_BILL_MSG_PRM | Billing process |
| CI_BILL_MSGS | Volume of data |
| CI_BILL_ROUTING | Volume of data |
| CI_BILL_SA | Billing process |
| CI_BSEG | Volume of data |
| CI_BSEG_K | Volume of data |
| CI_BSEG_CALC | Volume of data |
| CI_BSEG_CALC_LN | Volume of data |
| CI_BSEG_EXCP | Billing process |
| CI_BSEG_ITEM | Billing process |
| CI_BSEG_MSG | Billing process |
| CI_BSEG_READ | Volume of data |
| CI_BSEG_SQ | Volume of data |
| CI_COLL_EVT | ADM process |
| CI_COLL_EVT_K | ADM process |
| CI_COLL_EVT_CC | ADM process |

| Table Name | Reason for Partitioning |
|---|---|
| CI_COLL_PROC | ADM process |
| CI_COLL_PROC_K | ADM process |
| CI_COLL_PROC_SA | ADM process |
| CI_FA | Activation process |
| CI_FA_K | Activation process |
| CI_FA_STEP | Activation process |
| CI_FT | Volume of data |
| CI_FT_K | Volume of data |
| CI_FT_GL | Volume of data |
| CI_FT_PROC | Billing process |
| CI_MR | Volume of data |
| CI_MR_K | Volume of data |
| CI_MR_REM | MR upload process |
| CI_MTR | Volume of data |
| CI_MTR_CONFIG | Volume of data |
| CI_MTR_CONFIG_K | Volume of data |
| CI_PAY_EVENT | Payments process |
| CI_PAY_EVENT_K | Payments process |
| CI_PAY_SEG | Payments process |
| CI_PAY_SEG_K | Payments process |
| CI_PAY_TNDR | Payments process |
| CI_PAY_TNDR_K | Payments process |
| CI_PER | Volume of data |
| CI_PREM | Volume of data |
| CI_REG | Volume of data |
| CI_REG_K | Volume of data |
| CI_SA | Volume of data |
| CI_SA_REL | Volume of data |
| CI_SA_SP | Volume of data |
| CI_SA_SP_FA | Activation process |
| CI_SEV_EVT | Severance process |
| CI_SEV_EVT_CC | Severance process |
| CI_SEV_EVT_DEP | Severance process |

| Table Name | Reason for Partitioning |
|---|---|
| CI_SEV_EVT_FA | Severance process |
| CI_SEV_PROC | Severance process |
| CI_SEV_PROC_K | Severance process |
| CI_SP | Volume of data |
| CI_WO_EVT | Write off process |
| CI_WO_EVT_CC | Write off process |
| CI_WO_PROC | Write off process |
| CI_WO_PROC_K | Write off process |
| CI_WO_PROC_SA | Write off process |

## Locking Strategy

For most of tables, page locking is recommended.  This reduces overhead and increases performance for the application.

Row-level locking is recommended on the tables that multiple threaded batch programs run on the tables that can not be partitioned for the particular batch job. This is to promote the concurrent access of the tables.

The following tables are identified for row-level locking.

| Table Name |
|---|
| CI_BATCH_INST |
| CI_BATCH_RUN |
| CI_BATCH_THD |
| CI_BCHG_LINE_UP |
| CI_BCHG_UP |
| CI_DEP_CTL |
| CI_DEP_CTL_ST |
| CI_FA_STP_STGUP |
| CI_MR_STAGE_UP |
| CI_MRR_STGE_UP |
| CI_MSG_LOG |
| CI_MSG_LOGPARM |
| CI_NT_UP |
| CI_NT_UP_XSPL |
| CI_PAY_ST |
| CI_PAY_TNDR_ST |

| Table Name |
| --- |
| CI_RR_STAGE_UP |
| CI_TNDR_CTL |
| CI_TNDR_DEP |
| CI_TNDR_END_BAL |
| CI_TNDR_ST_EXCP |
| CI_TREND |
| CI_TURN_IN |

# Chapter 5

## Conversion Tools

This section describes the following database conversion tools:

- **Oracle Conversion Tool**
- **DB2 Conversion Tool**
- **SQL Server Conversion Tool**

# Oracle Conversion Tool

This section explains how to set up the application database configuration in Oracle to run the Conversion Tool Kit.

## Database Configuration

The Conversion Tool Kit requires at least two sets of schema. One is to hold the staging data that the conversion tool gets the data from and performs validations. We call this schema the staging database. The target schema, which is referred to as the production database, is where the conversion tool inserts the validated data. Both the production database and the staging databases can reside in a single Oracle database or in different databases that are connected via a database link. Only the single database configuration is supported.

The following schematic diagram shows a sample configuration of both the production and staging environments in which the Conversion Tool Kit operates. There is no limit to how many staging databases can be configured for one production database. However, the production and staging databases must be the same release level.
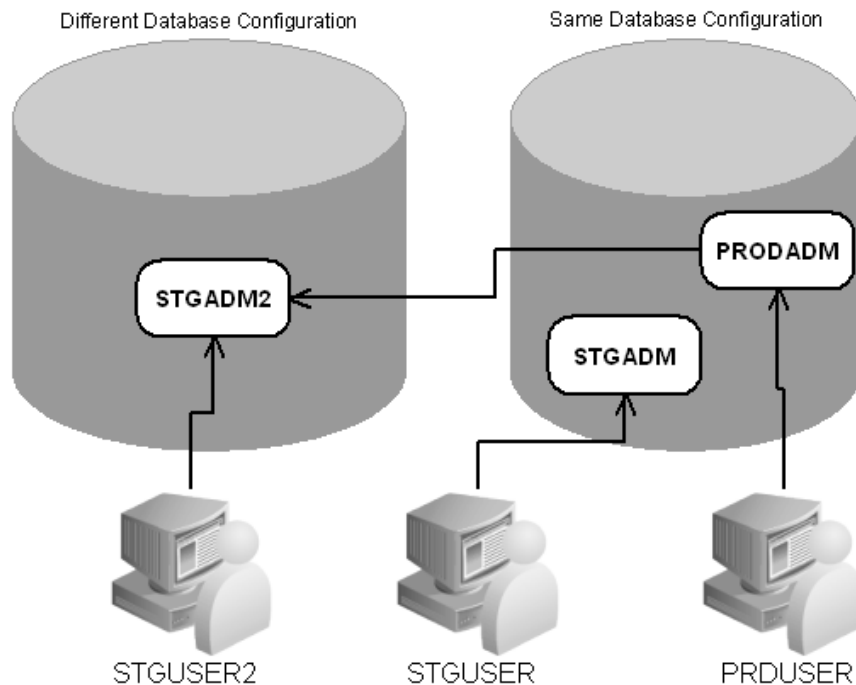


All the tables and views for the application are defined in the production database. The staging database has the same set of tables and views as the production database, except the tables that are grouped as part of the business configuration (control tables). Details on the differences of the tables of the two databases and of the conversion tool functionality are found in the Conversion Tool document.

## Script Installation

1. Set the environment variable $CONV_HOME to the directory in which to install the conversion toolkit database scripts. The following is an example command you execute to achieve this in a UNIX environment.

   > set CONV_HOME  /usr/scott/convtoolkit

2. Copy the cdxconv.tar.Z file to the $CONV_HOME directory.

3. Change to your $CONV_HOME directory:

    cd $ CONV_HOME

4. Uncompress and untar the file.

    Note.  This overwrites files you currently have.

    For example:

    uncompress cdxconv.tar.Z

    tar xvf cdxconv.tar

This will create a folder "cdxconv" in your current directory. The directory contains the following files.

- create_ctlviews.sql - create views on production control tables in the staging database

- create_cxviews.sql - create cx* views on the master/transaction tables in the production database

- drop_ctltbls.sql - drop control tables in the staging database

- grant_ctltbls.sql - grant privileges on the control tables to the staging owner

- grant_ctlviews.sql - grant privilege on the control table views to the staging application user

- grant_cxtbls.sql - grant privileges on the master/transaction tables in the production database to the staging owner

- grant_cxviews.sql - grant privileges on the cx* views to the staging application user

- createck_tbls.sql - create generated key tables

- createck_pkix.sql - create generated table primary key indexes

- createck_secix.sql - create generated table secondary indexes

- oragensec.bat -  batch file to configure database security

This section of this document guides you through the steps to create the databases for the conversion tool kit.  All scripts mentioned are found in $CONVHOME/scripts.  The UNIX userid that you use to run these scripts should have its profile setup to run oracle server processes such as sqlplus.  These scripts assume that the password for the system user of the Oracle databases is 'system'.  Scan the script directory for 'system' and replace it with the correct password before running any sql scripts.

## Preparing the Production Database

If the production database does not exist create the database under the production schema owner (CISADM).

> If the production database is upgraded from the previous version of the application make sure all public synonyms that are created on the application tables are deleted.  Instead, each application user should have private synonyms created on the application tables in order for the conversion tool configuration to work.

## Preparing the Staging Database

Multiple staging databases can be setup to facilitate the conversion process if the customer data can be moved to the application in phases or concurrently by different project groups.

Once you have created a staging owner (STGADM), application user (STGUSER) and read access user (STGREAD), install the initial database option in the staging schema. The rest of the steps are discussed below.

### Creating the Staging Tables

You must create the staging tables in the production database under different owners.

1.  Logon to the production database as STGADM and execute the following sqls.

    *   drop_ctltbls.sql

2.  Logon to the production database as CISADM and execute the following sqls

    *   grant_cxtbls.sql

    *   grant_ctltbls.sql

3.  Logon to the production database as STGADM and execute the following sqls.

    *   create_cxviews.sql

    *   grant_cxviews.sql

    *   create_ctlviews.sql

    *   grant_ctlviews.sql

    *   createck_tbls.sql

    *   createck_pkix.sql

    *   createck_secix.sql

4.  Compile all invalid views.

5.  Next, you need to configure security. First make sure that you have the SQLNET connection setup for the new conversion database.

    Edit OraGenSec.bat to include the password for STGADM schema owner and database name.

    This file now should be transferred to the workstation that has the application upgrade software for the current release installed.

    The script then should be executed to configure the security as documented in **Security Configuration** on page 2-4.

# DB2 Conversion Tool

This section is an overview and configuration guide for the Conversion Tool Database Installation. It describes how to set up the Oracle Enterprise Taxation Management database configuration in DB2 to run the Conversion Tool Kit.

## Database Configuration

The Conversion Tool is a set of Cobol Programs that reside on the Oracle Enterprise Taxation Management Application Server that process data in a number of databases to convert that data into the production database. A separate Oracle Enterprise Taxation Management application server is provided that contains the additional Conversion Toolkit Programs.

See the "Conversion Tool" document supplied with this release for more information on how the Conversion Tool interacts with the different databases.

The different DB2 databases can be illustrated as follows:
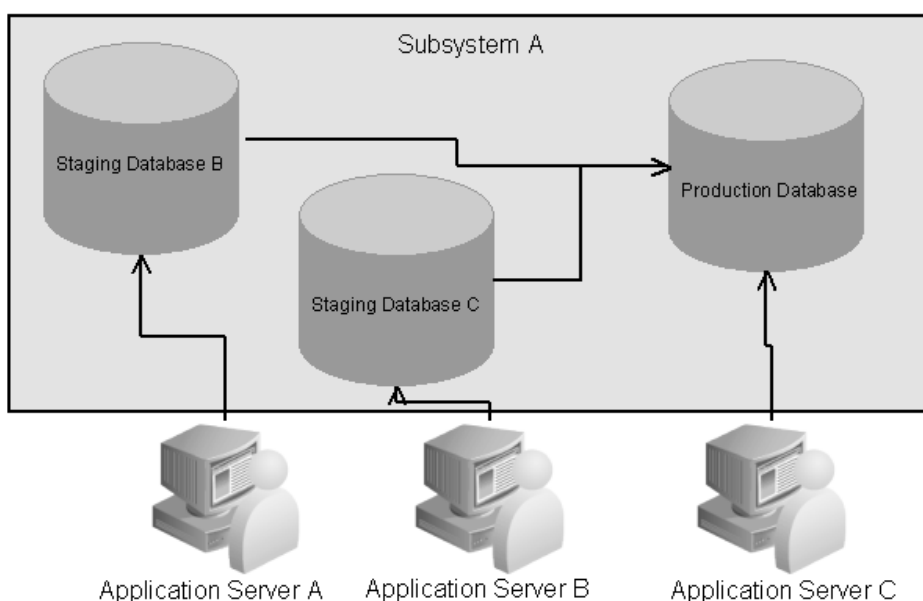


In the above diagram application server A and application server B are doing validation on separate staging databases. Both application servers, after doing validation, put the validated data into the same production database. Application server C accesses the production data.

## Conversion Tool Installation

This section provides instructions for installing the DB2 component of the V2.2.0 conversion tool.

### Load Install Datasets

The majority of all mainframe datasets distributed by Oracle are packaged on MVS for transfer using the TSO transmit (XMIT) command. This is done to turn PDS(s) and other files into Fixed Block LRECL 80 files that can be easily transferred with any binary transfer utility on the client site.

The process to get MVS datasets from Oracle to the customer involves following steps.
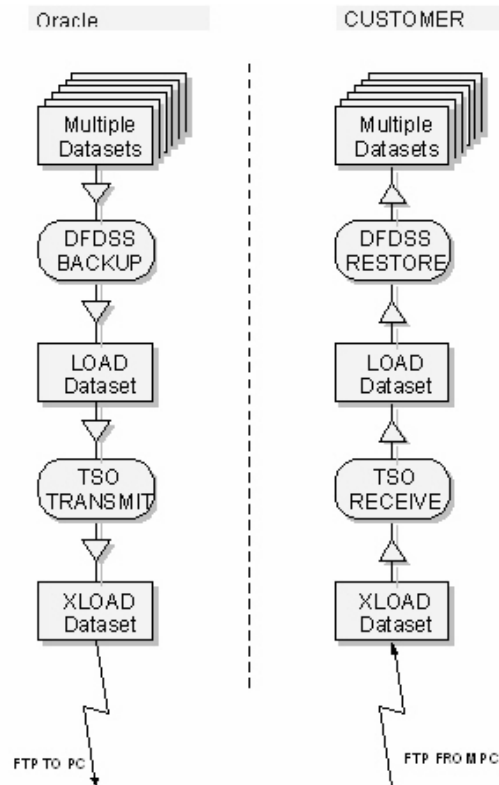


The above processes allow Oracle to provide all of the software electronically to the customer.

The processes involve the following steps:

- Backup the Multiple datasets to one dataset (the LOAD dataset).

- TSO TRANSMIT the LOAD dataset to the XLOAD dataset. The TSO Transmit function convert's the LOAD dataset to a FB LRECL 80 Dataset (the XLOAD dataset).

- FTP the XLOAD dataset to the PC.

- On the customer side, reverse the process.

> Note. The Receive portion of the process above requires that the TSO Receive command be allowed to receive a certain number of records (Currently 600,000). See the documentation for OUTLIM(n1) under "Statements/ Parameters for IKJTSOxx" in the "OS/390 MVS Initialization and Tuning Reference" for more information.

### Transferring the LOAD Dataset to MVS

There are a number of steps that must be followed to transfer the Oracle LOAD data to the mainframe so that we can use DFDSS restore against the Load dataset.

The following steps outline how to transfer the Oracle Load Data to MVS and then perform a restore against the Load dataset.

### Choose a High Level Qualifier (HLQ)

Choose the <HLQ> to put all of the installed software into. The restoration of the LOAD dataset will create the following datasets.

The JCL in the members provided have the <HLQ> set to DB8B.CD.TX2201CV.CONV as part of installation, all occurrences of the DB8B.CD.TX2201CV.CONV will need to be changed to your default standards.

| DSNAME | Purpose |
|---|---|
| <HLQ>.CNTLJ | CL |
| <HLQ>.SYSIN | DDL and DCL Scripts |

### Create Load Datasets

The job **V220CCV** is supplied as an ASCII text file on the installation media.

The following datasets are created by the job:

**LOADCVX** - Dataset contains a DFDSS backup that has been placed in TSO TRANSMIT format.

**LOADCV** - Dataset is the output from the XLOAD dataset after it has been put through a "TSO RECEIVE" command.

- Modify the job **V220CCV** to suite your installation standards.

- Run job **V220CCV** to create the datasets **LOADCVX** and **LOADCV**.

### FTP LOADCVX to MVS

MVS FTP will by default create an incompatible dataset for our needs. By predefining the LOADCVX ftp dataset, we can ensure that the dataset is created correctly on the mainframe and that the LOADCVX data is correctly stored in that dataset.

FTP binary the LOADCVX installation file into the **LOADCVX** dataset created in the step above.

### Receive Load File

The job **V220RCV** is supplied as an ASCII text file on the installation media.

- Modify the job **V220RCV** to suit your installation standards.

- Run job **V220RCV** to "TSO RECEIVE" the LOADCVX dataset into the LOADCV.

### Extract Load File

The job **V220ECV** is supplied as an ASCII text file on the installation media

(Software\Database\V2050RST.JCL).

The **V220ECV** job restores the LOADCV dataset using the DFDSS restore function.

- Modify the **V220ECV** job to suite your installation standards.

- Run job **V220EST** to restore all the datasets from the LOADCV dataset.

The default installation procedure is provided with the following default values for each version, release, and maintenance:

<HLQ>DB8B.CD.TX2201CV.CONV

CURRENT SQLIDSSYSADM, <STGOWNER>, <STGUSER>

OWNER ID <STGOWNER>, <PRDOWNER>

Before submitting any jobs you must modify all members in the datasets <HLQ>.CNTL and <HLQ>.SYSIN to suit your environment. Most modifications require the replacement of the values above with your site values. Check each piece of JCL to ensure that other DSNs are correct. Check each SYSIN member to ensure that all variables in "<>" are replaced to your naming standards.

The JCL provided here is in the PDS <HLQ>.CNTL.

# Preparing the Staging Conversion Database

Multiple staging databases can be set up to facilitate the conversion process if the customer data can be moved to Oracle Enterprise Taxation Management in phases or concurrently by different project groups.

You create the staging tables in the production database under a different owner.

- Create a V2.2.0 database under the staging schema owner (<STGOWNER>). Create an application user <STGUSER>. Make sure all SQL scripts in the following steps are replaced with your naming standards accordingly.

- Apply any modifications to the staging database that are required for the customized codes. This includes the system data changes such as new messages that are added as a part of customization. At this point the staging database should have an exact schema like the production database.

- Submit V220003 - Drop control tables from staging database

- Submit V220004 - Create CX Views

- Submit V220005  - Grant SELECT, INSERT on CX Views

- Submit V220006 - Create Control Views

- Submit V220007 - Grant SELECT,INSERT,DELETE, UPDATE on Control Views

- Submit V220008 - Create Conversion Key tablespaces

- Submit V220009 - Create Conversion Key tables

- Submit V220010 - Create Conversion Key primary indexes

- Submit V220011 - Create Conversion Key secondary indexes

- Submit V220012 - Create synonyms for Control Views

- Submit V220013 - Create synonyms for CX Views

- Submit V220014 - Create synonyms for Conversion Key Tables

- Submit V220015 - Grant SELECT,INSERT,DELETE, UPDATE on Conversion Key Tables

- Submit V220016 - Re-create view dependency objects from previous DROPS

- Submit V220017 - Grant SELECT on view dependency objects

- Submit V220018 - Create synonyms for view dependency objects

# SQL Server Conversion Tool

This document explains how to set up the MS SQL Server Conversion Tool.

## Database Configuration

The Conversion Tool Kit requires two databases, a staging and production database. The staging database holds data that the conversion tool gets from an external source; the data is configured and validated for conversion into the production database. The production database is where the conversion tool inserts the validated data from the staging database. The production and staging databases must be at the same release level.
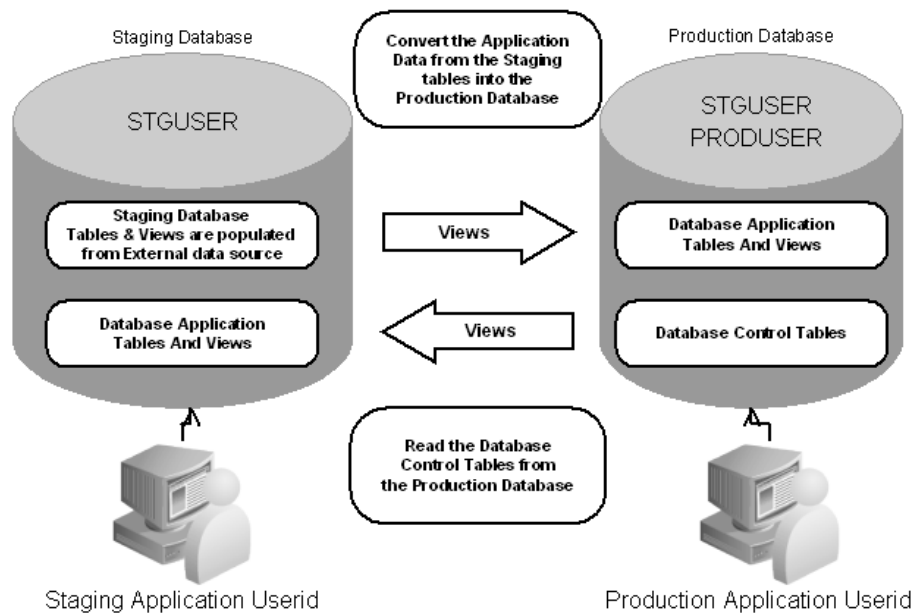


Details on the differences of the tables of the two databases and of the conversion tool functionality are found in the Conversion Tool document.

## Script Installation

Unzip the folder cdxconv.zip on to your desktop. This will create a folder cdxconv.

The cdxconv directory contains the following SQL files.

- create_ctlviews.sql - create views on production control tables in the staging database
- create_cxviews.sql - create cx* views on the master/transaction tables in the production database
- drop_ctltbls.sql - drop control tables in the staging database
- grant_ctlviews.sql - grant privilege on the control table views to the staging database user
- grant_cxviews.sql - grant privileges on the cx* views to the staging database user
- createck_tbls.sql - create generated key tables in the staging database
- createck_pkix.sql - create generated table primary key indexes in the staging database
- createck_secix.sql - create generated table secondary indexes in the staging database

- grant_cktables.sql - grant privileges on the ck* tables to the staging database user

This section of this document guides you through the steps to configure the databases for the conversion tool kit.

Scan the SQL scripts in the cdxconv folder for 'PRDDATABASE' and replace it with the database name before running any scripts.

Scan the SQL scripts in the cdxconv folder for 'STGUSER' and replace it with the correct user-id in your production database before running any scripts.

# Preparing the Production Database

If the production database does not exist create a standard database. This database will contain all the control tables that will be used by the Conversion Tool Kit.

Refer to the Database Creation section of the MS SQL Server Database Installation. Control tables values can be loaded using the Initial Install Data Import and any additional data specific to the customers needs.

The database will contain:

- Database Tables and Views
- PRODUSER - database user, which has access to the Database tables and Views.

# Preparing the Staging Database

Create the staging database in the same way as the Production Database.

The database will contain;

- Database Tables and Views
- STGUSER - database user, which has access to the Database tables and Views.

Add the STGUSER to the Production Database - sign on to Query Analyzer with MS SQL Server the Administrator account, select the Production Database and add the user;

exec sp_adduser 'STGUSER','STGUSER', 'public'

Configure Security in the Production Database for the STGUSER. (Refer to the Security configuration section in the MS SQL Server Database Installation.

### Configure the Staging Database

Sign on to Query Analyzer with the MS SQL Server Administrator account, select the Staging Database and execute the following in the order defined below.

- drop_ctltbls.sql
- create_ctlviews.sql
- create_cxviews.sql
- grant_ctlviews.sql
- grant_cxviews.sql
- createck_tbls.sql
- createck_pkix.sql
- createck_secix.sql
- grant_cktables.sql

The staging and production databases are ready for use.

# Appendix A

## Upgrades to the Oracle Enterprise Taxation Management Database

This section describes the database upgrade process for the Oracle Enterprise Taxation Management database from V2.1.5 to V2.2.0.The upgrade process is designed to preserve business logic and associated data implemented in ETM 2.1.5 and make it usable with the V2.2.0 database schema. The changes that do not require data upgrade are not described in this section. The tasks that need to be performed after running the upgrade scripts are included.

The upgrade scripts do not turn on the newly added functionality by default. For new functionality, refer to the V2.2.0 User Guides. In the last section of this document you will find a list of the new tables that were added in V2.2.0.

This section includes:

- **Automatic Data Upgrade**
- **Schema Change**
- **New System Data**

# Automatic Data Upgrade

This section describes what the upgrade script will populate in new tables and columns. If custom modification development standards were followed then custom modifications will be preserved.

## Address Type

Address type flag (ADDR_TYPE_FLG) is added to the Person Seasonal Address (CI_PER_ADDR_SEAS). The valid base value of this flag is: Seasonal (C1SN). For the existing seasonal address records this flag will be set to Seasonal by the upgrade process.

## Obligation Type Characteristics Table

Sequence Number (SEQ_NUM), Adhoc Characteristic Value (ADHOC_CHAR_VAL), Foreign Key Characteristic values 1 thru 5 (CHAR_VAL_FK1 to CHAR_VAL_FK5) is added to this table. The Sequence Number (SEQ_NUM) is now part of the primary key. The reason for making the sequence number part of the key is to allow users to define more than one characteristic value for the same characteristic type. The upgrade script will set the Sequence number (SEQ_NUM) to 5 for all the existing records, after adding these columns.

## Person Type Table

Person Type table is added as a new admin table. Two new rows (Person (P) & Business (B)) will be added to this table by the upgrade process for backward compatibility.

## Person Type

Person Type Code is added to the Person (CI_PER). Person or Business Flag is being dropped. The upgrade script will set the value to the Person Type Code based on the existing values of Person or Business Flag. If the Person or Business flag value is 'P' the person type Code is set to 'P', If the Person or Business flag value is 'B' the person type Code is set to 'B'

## Tax Type

Business Object Code (BUS_OBJ_CD) is added to the Tax Type (CI_SVC_TYPE). This business object will be used by the config tools to perform updates of these records. For the existing Tax types this value will be set to C1-TaxTypeStandard by the upgrade process. Tax Role Applicability Flag (TAX_ROLE_APP_FLG ) is added to the Tax Type. For the existing Tax Types this value will be set to Not Allowed (C1NA).

## Obligation Type

Filing Period Validity Flag (FILING_PERIOD_VALDTY_FLG) is added to the Obligation Type (CI_SA_TYPE). For the existing Obligation Types this value will be set to Not Allowed (C1NA).

# Schema Change

## New Tables

The following new tables are added to Oracle Enterprise Taxation Management V2.2.0.

| Table Name | Description |
| --- | --- |
| CI_ACCT_PER_CHAR | Account Person Characteristics |
| CI_AM_ACTIVITY_TYPE | Activity Type |
| CI_AM_ACTIVITY_TYPE_L | Activity Type Language |
| CI_AM_REQ | Activity Request |
| CI_AM_REQ_K | Activity Request Key |
| CI_AM_REQ_LOG | Activity Request Log |
| CI_AM_REQ_LOG_PARM | Activity Request Log Message Parameters |
| CI_APPR_PROF | Approval Profile |
| CI_APPR_PROF_L | Approval Profile Language |
| CI_APPR_REQ | Approval Request |
| CI_APPR_REQ_CHAR | Approval Request Characteristic |
| CI_APPR_REQ_K | Approval Request Key |
| CI_APPR_REQ_LOG | Approval Request Log |
| CI_APPR_REQ_LOG_PARM | Approval Request Log Message Parameters |
| CI_ASSET | Asset |
| CI_ASSET_CHAR | Asset Characteristics |
| CI_ASSET_K | Asset Key |
| CI_ASSET_LOG | Asset Log |
| CI_ASSET_LOG_PARM | Asset Log Message Parameters |
| CI_ASSET_REL | Asset Relationship |
| CI_ASSET_REL_CHAR | Asset Relationship Characteristics |
| CI_ASSET_REL_K | Asset Relationship Key |
| CI_ASSET_REL_LOG | Asset Relationship Log |
| CI_ASSET_REL_LOG_PARM | Asset Relationship Log Message Parameters |
| CI_ASSET_REL_TYPE | Asset Relationship Type |
| CI_ASSET_REL_TYPE_CHAR | Asset Relationship Type Characteristic |
| CI_ASSET_REL_TYPE_L | Asset Relationship Type Language |
| CI_ASSET_TYPE | Asset Type |

| Table Name | Description |
| --- | --- |
| CI_ASSET_TYPE_CHAR | Asset Type Characteristics |
| CI_ASSET_TYPE_L | Asset Type Language |
| CI_ASSET_TYPE_LOG | Asset Type Log |
| CI_ASSET_TYPE_LOG_PARM | Asset Type Log Message Parameters |
| CI_ASSET_TY_RELTY | Asset Type Valid Relationship Type |
| CI_ASSET_TY_SATY | Asset Type Valid Obligation Type |
| CI_BILL_EVT | Tax Bill Event |
| CI_BILL_EVT_CHAR | Tax Bill Event Characteristics |
| CI_BILL_EVT_K | Tax Bill Event Key |
| CI_BILL_EVT_LOG | Tax Bill Event Log |
| CI_BILL_EVT_LOG_PARM | Tax Bill Event Message Parameter |
| CI_BILL_EVT_TYPE | Tax Bill Event Type |
| CI_BILL_EVT_TYPE_CHAR | Tax Bill Event Type Characteristics |
| CI_BILL_EVT_TYPE_L | Tax Bill Event Type Language |
| CI_BILL_EVT_TYPE_LOG | Tax Bill Event Type Log |
| CI_BILL_EVT_TYPE_LOG_PARM | Tax Bill Event Type Message Parameter |
| CI_COLL_CASE | Collection Case |
| CI_COLL_CASE_CHAR | Collection Case Characteristic |
| CI_COLL_CASE_K | Collection Case Key |
| CI_COLL_CASE_LOG | Collection Case Log |
| CI_COLL_CASE_LOG_PARM | Collection Case Log Message Parameters |
| CI_COLL_CASE_OD | Collection Case Overdue Process |
| CI_COLL_CASE_TYPE | Collection Case Type |
| CI_COLL_CASE_TYPE_CHAR | Collection Case Type Characteristics |
| CI_COLL_CASE_TYPE_L | Collection Case Type Language |
| CI_COLL_CASE_TYPE_LOG | Collection Case Type Log |
| CI_COLL_CASE_TYPE_LOG_PARM | Collection Case Type Log Message Parameters |
| CI_DEBT_CAT | Debt Category |
| CI_DEBT_CAT_CHAR | Debt Category Characteristic |
| CI_DEBT_CAT_L | Debt Category Language |
| CI_DEBT_CAT_PRIO | Debt Category Priority |
| CI_DEBT_CAT_PRIO_CHAR | Debt Category Priority Characteristic |

| Table Name | Description |
| --- | --- |
| CI_DEBT_CAT_PRIO_L | Debt Category Priority Language |
| CI_FILING_CAL | Filing Calendar |
| CI_FILING_CAL_L | Filing Calendar Language |
| CI_FILING_CAL_PERIOD | Filing Period |
| CI_FORM_BATCH_HDR | Form Batch Header |
| CI_FORM_BATCH_HDR_CHAR | Form Batch Header Characteristics |
| CI_FORM_BATCH_HDR_LOG | Form Batch Header Log |
| CI_FORM_BATCH_HDR_LOG_PARM | Form Batch Header Log Message Parameters |
| CI_FORM_TYPE | Form Type |
| CI_FORM_TYPE_CHAR | Form Type Characteristics |
| CI_FORM_TYPE_L | Form Type Language |
| CI_FORM_TYPE_LOG | Form Type Log |
| CI_FORM_TYPE_LOG_PARM | Form Type Log Message Parameters |
| CI_FORM_TYPE_REL | Child Form Type |
| CI_FORM_TY_CAL_PERIOD | Form Type Valid Filing Period |
| CI_OP_PROC | Overpayment Process |
| CI_OP_PROC_CHAR | Overpayment Process Characteristic |
| CI_OP_PROC_K | Overpayment Process Key |
| CI_OP_PROC_LOG | Overpayment Process Log |
| CI_OP_PROC_LOG_PARM | Overpayment Process Log Message Parameters |
| CI_OP_PROC_TYPE | Overpayment Process Type |
| CI_OP_PROC_TYPE_CHAR | Overpayment Process Type Characteristic |
| CI_OP_PROC_TYPE_L | Overpayment Process Type Language |
| CI_OP_PROC_TYPE_LOG | Overpayment Process Type Log |
| CI_OP_PROC_TYPE_LOG_PARM | Overpayment Process Type Log Message Parameters |
| CI_PAY_CHAR | Payment Characteristic |
| CI_PAY_TNDR_CHAR | Payment Tender Characteristic |
| CI_PER_TYPE | Person Type |
| CI_PER_TYPE_CHAR | Person Type Characteristic |
| CI_PER_TYPE_L | Person Type Language |
| CI_PI_CTRL | P&I Control |

| Table Name | Description |
| --- | --- |
| CI_PI_CTRL_CHAR | P&I Control Characteristic |
| CI_PI_CTRL_L | P&I Control Language |
| CI_PI_CTRL_LOG | P&I Control Log |
| CI_PI_CTRL_LOG_PARM | P&I Control Log Message Parameters |
| CI_PI_RULE | P&I Rule |
| CI_PI_RULE_CHAR | P&I Rule Characteristics |
| CI_PI_RULE_L | P&I Rule Language |
| CI_REG_FORM | Registration Form |
| CI_REG_FORM_CHAR | Registration Form Characteristic |
| CI_REG_FORM_K | Registration Form Key |
| CI_REG_FORM_LOG | Registration Form Log |
| CI_REG_FORM_LOG_PARM | Registration Form Log Message Parameters |
| CI_SA_TYPE_PI_CTRL | Obligation Type P&I Control |
| CI_SVC_TYPE_CHAR | Tax Type Characteristic |
| CI_TAX_FORM | Tax Form |
| CI_TAX_FORM_CHAR | Tax Form Characteristic |
| CI_TAX_FORM_K | Tax Form Key |
| CI_TAX_FORM_LOG | Tax Form Log |
| CI_TAX_FORM_LOG_PARM | Tax Form Log Message Parameters |
| CI_TAX_ROLE | Tax Role |
| CI_TAX_ROLE_CAL | Tax Role Filing Calendar |
| CI_TAX_ROLE_CHAR | Tax Role Characteristic |
| CI_TAX_ROLE_K | Tax Role Key |
| CI_TNDR_CTL_CHAR | Tender Control Characteristics |
| CI_WAIVER | Waiver |
| CI_WAIVER_CHAR | Waiver Characteristic |
| CI_WAIVER_K | Waiver Key |
| CI_WAIVER_LOG | Waiver Log |
| CI_WAIVER_LOG_PARM | Waiver Log Message Parameters |
| CI_WAIVER_TYPE | Waiver Type |
| CI_WAIVER_TYPE_CHAR | Waiver Type Characteristic |
| CI_WAIVER_TYPE_L | Waiver Type Language |
| CI_WAIVER_TYPE_LOG | Waiver Type Log |

| Table Name | Description |
|---|---|
| CI_WAIVER_TYPE_LOG_PARM | Waiver Type Log Message Parameters |

## Deprecated Tables

None

## Unsupported Tables

None

## Added Columns

The following Table Columns are added to Oracle Enterprise Taxation Management V2.2.0.

| Table | Column | Required | Upgrade Note |
|---|---|---|---|
| CI_ACCT | BO_DEFN_AREA | N | |
| CI_ADJ | APPR_REQ_ID | N | |
| CI_ADJ | THRU_DT | N | |
| CI_ADJ_TYPE | ADJ_TYPE_CAT_FLG | N | |
| CI_ADJ_TYPE | APPR_PROF_CD | N | |
| CI_ADJ_TYPE | DEBT_CAT_CD | N | |
| CI_ADJ_TYPE | DEBT_CAT_PRIO_CD | N | |
| CI_ADJ_TYPE | TRANS_BUS_OBJ_CD | N | |
| CI_CC | BO_DEFN_AREA | N | |
| CI_CC_TYPE | TRANS_BUS_OBJ_CD | N | |
| CI_CUST_CL | TRANS_BUS_OBJ_CD | N | |
| CI_FT | DEBT_CAT_CD | N | |
| CI_FT | DEBT_CAT_PRIO_CD | N | |
| CI_PAY | SEQ_NUM | N | |
| CI_PER | BO_DEFN_AREA | N | |
| CI_PER | PER_TYPE_CD | Y | Person Type Table Person Type |
| CI_PER_ADDR_SEAS | ADDR_TYPE_FLG | Y | Address Type |
| CI_PREM | BO_DEFN_AREA | N | |

| Table | Column | Required | Upgrade Note |
|-------|--------|----------|--------------|
| CI_PREM_TYPE | TRANS_BUS_OBJ_CD | N | |
| CI_SA | ASSET_ID | N | |
| CI_SA | BO_DEFN_AREA | N | |
| CI_SA | CALC_THRU_DT | N | |
| CI_SA | FILING_CAL_CD | N | |
| CI_SA | FILING_END_DT | N | |
| CI_SA | OVRD_FILING_DUE_DT | N | |
| CI_SA | OVRD_PAY_DUE_DT | N | |
| CI_SA | TAX_ROLE_ID | N | |
| CI_SA_TYPE | DEBT_CAT_CD | N | |
| CI_SA_TYPE | DEBT_CAT_PRIO_CD | N | |
| CI_SA_TYPE | FILING_PERIOD_VALDTY_FLG | Y | Obligation Type |
| CI_SA_TYPE | PAY_GRACE_DAYS | N | |
| CI_SA_TYPE | TRANS_BUS_OBJ_CD | N | |
| CI_SA_TYPE_CHAR | ADHOC_CHAR_VAL | N | |
| CI_SA_TYPE_CHAR | CHAR_VAL_FK1 | N | |
| CI_SA_TYPE_CHAR | CHAR_VAL_FK2 | N | |
| CI_SA_TYPE_CHAR | CHAR_VAL_FK3 | N | |
| CI_SA_TYPE_CHAR | CHAR_VAL_FK4 | N | |
| CI_SA_TYPE_CHAR | CHAR_VAL_FK5 | N | |
| CI_SA_TYPE_CHAR | SEQ_NUM | Y | Obligation Type Characteristics Table |
| CI_SA_TYPE_CHAR | SRCH_CHAR_VAL | Y | Database defaults to a single space. |

| Table | Column | Required | Upgrade Note |
|---|---|---|---|
| CI_SVC_TYPE | BO_DEFN_AREA | N | |
| CI_SVC_TYPE | BUS_OBJ_CD | N | |
| CI_SVC_TYPE | TAX_ROLE_APP _FLG | Y | Tax Type |

## Dropped Columns

None

## Unsupported Table Columns

None

## Column Format Change

| Table Name | Column Name | From | To |
|---|---|---|---|
| CI_DST_CODE_ EFF | GL_ACCT | VARCHAR2 48 | VARCHAR2 254 |
| CI_FT_GL | GL_ACCT | VARCHAR2 48 | VARCHAR2 254 |
| CI_ITEM_TYPE | SVC_TYPE_CD | CHAR 2 | CHAR 12 |
| CI_MODEL | SVC_TYPE_CD | CHAR 2 | CHAR 12 |
| CI_RS | SVC_TYPE_CD | CHAR 2 | CHAR 12 |
| CI_SA_TYPE | SVC_TYPE_CD | CHAR 2 | CHAR 12 |
| CI_SVC_TYPE(L) | SVC_TYPE_CD | CHAR 2 | CHAR 12 |
| CI_UOM | SVC_TYPE_CD | CHAR 2 | CHAR 12 |

# New System Data

This section lists the new system data that are added for business process configuration.

## Algorithm Type

The following algorithm types are new to Oracle Enterprise Taxation Management V2.2.0.

| Algorithm Type | Description |
| --- | --- |
| ADJT-CA | Payoff Amt = 0 / Current Amt = Adj Amount (no GL) |
| C1-ADDR-INFO | Address Information |
| C1-ADJAPREQT | Determine Adjustment Approval Requirements |
| C1-ADJAPVAL | Adjustment Approval Profile Validation |
| C1-ADJAR-INF | Adjustment Approval Request Information |
| C1-ADJAREQEM | Create Email For Adjustment Approval |
| C1-AGCY-TODO | Standard Coll Case - Agy Referral With No Progress |
| C1-AM-VALID | Activity Type Validation |
| C1-APR-TMOUT | Adjustment Approval Request Timeout |
| C1-ARAS-INFO | Asset/Asset Relationship Information |
| C1-ARLC-INFO | Location Asset Relationship Information |
| C1-ARPR-INFO | Person Asset Relationship Information |
| C1-ASMOBL-BL | Assessment / Obligation Outstanding |
| C1-ASRP-INFO | Asset - Real Property Information |
| C1-ATLOC-VAL | Asset Type - Validate Address Relationship Type |
| C1-ATOBT-VAL | Asset Type - Validate Obligation Types |
| C1-BO-FTINFO | Form Type Information |
| C1-BRG-CLMSL | Business Reg Form - Clear Missing Info Issues List |
| C1-BRG-CLSPL | Business Reg Form - Clear Suspense Issues List |
| C1-BRG-COMTD | Business Reg Form - Complete To Do Entries |
| C1-BRG-CRATR | Business Reg Form - Create Account / Tax Role |
| C1-BRG-CSCOT | Business Reg Form - Create Customer Contact |
| C1-BRG-IDTTP | Business Reg Form - Identify Taxpayer |

| Algorithm Type | Description |
| --- | --- |
| C1-BRG-MSINF | Business Reg Form - Check for Missing Information |
| C1-BRG-SPVT | Business Reg Form - Validat Suspense Explanation |
| C1-BRG-SUSTD | Business Reg Form - Create Suspense To Do Entry |
| C1-BRG-VAMON | Business Reg Form - Transition From Validate |
| C1-BRG-WTLON | Business Registration Form - Waiting for too long |
| C1-BRG-WTVT | Business Reg Form - Transition if No Missing Info |
| C1-CALC-PI | Calculate P&I to Today |
| C1-CANFRMADJ | Cancel Form Adjustments |
| C1-CC-CHKSPP | Check Payment Plan Scheduled Payments |
| C1-CC-INITOP | Initiate Overpayment Process |
| C1-CCAL-COCS | Highlight Open Collection Cases |
| C1-CCC-AGCYR | Standard Collection Case - Cancel Agency Referrals |
| C1-CCSL-TODO | Standard Coll Case - Letter Waiting Time Too Long |
| C1-CFTZ-CMRV | Compliance Review |
| C1-CFTZ-RPDC | Set Debt Category for Refund Payment |
| C1-CHISSUETR | Tax Form - Check the Issues or Wait Lists |
| C1-CHK-REL | Check Required Relationships |
| C1-CHK-WAIV | Waiver - Check Ongoing Waiver |
| C1-CK-ASM-BL | Check Assessments Balance |
| C1-CL-COLLCS | Close Collection Case |
| C1-CLR-RSN | Clear Reasons for Transfer/Adjust/Reversal |
| C1-COL-CS-CM | Determine if Collection Case is Complete |
| C1-COMP-TODO | Tax Form - Complete To Do Entries |
| C1-COMPTXFRM | Complete a Form Transfer/Adjust |
| C1-CR-COL-CS | Create Collection Case |
| C1-CREASMT | Create Individual Income Assessment |
| C1-CREINDOB | Create Individual Income Obligation |

| Algorithm Type | Description |
| --- | --- |
| C1-CREOVPY | Individual Income - Create Overpayment Process |
| C1-CRETXAR | Create Spouse / Account / Tax Role |
| C1-DC-VAPRIO | Debt Category - Check if Linked to Priority |
| C1-DCP-VLIST | Debt Category Priority - Validate List |
| C1-DCP-VMISS | Debt Category Priority - Check Debt Cat Missing |
| C1-DEL-ADJ | Delete Rejected Adjustment(s) |
| C1-DET-APRVR | Determine Approvers |
| C1-DR-PAYPP | Pay a Payment Plan |
| C1-ERR-AGCYR | Standard Coll Case - Error if Active Agy Referral |
| C1-FBH-FCNT | Form Batch Header - Compare Form Count to Actual |
| C1-FBH-FCNTR | Form Batch Header-Total Number of Forms Count Req |
| C1-FBH-INFO | Form Batch Header Information |
| C1-FRZ-ADJ | Freeze Approved Adjustment(s) |
| C1-INDOBEX | Check Individual Income Obligation Existence |
| C1-INDTXCRE | Create Individual Income Tax Credit |
| C1-INIFRMADJ | Tax Form - Initiate Form Adjust |
| C1-INIFRMTRF | Tax Form - Initiate Form Transfer |
| C1-INV-TODO | Standard Coll Case - Create Investigation To Do |
| C1-ITF-CLMSL | Tax Form - Clear Missing Issue List |
| C1-ITF-CLSPL | Tax Form - Clear Suspense Issue List |
| C1-MO-CCINFO | Collection Case Information |
| C1-MO-RFINFO | Registration Form Information |
| C1-NT-CS-CRX | Auto Pay Expiring Credit Card Notice |
| C1-NTFY-APPR | Notify Approver |
| C1-OBASM-AMT | Determine Amounts for Obligation / Assessments |
| C1-OBL-DTMBO | Determine Obligation BO |
| C1-OBLOVRDDT | Recalc P&I and create log if override dates change |

| Algorithm Type | Description |
| --- | --- |
| C1-OBLVALDFP | Obligation - Validate Obligation Filing Period |
| C1-ONWAIV-IN | Waiver - Ongoing Waiver Information |
| C1-OP-ACNAMT | Apply Contribution Amounts |
| C1-OP-BALCHG | Check for Obligation Balance Change |
| C1-OP-CAFUFP | Carry Forward to a Future Filing Period |
| C1-OP-CALINT | Calculate Interest Using A Rate-Able Adjustment |
| C1-OP-CHKOBC | Check for Obligation Balance Change |
| C1-OP-CHKOTO | Check for Overpayment Approval Timeout |
| C1-OP-COMPTD | Complete To Do Entries For Overpayment Process |
| C1-OP-CREREF | Create Refund FT |
| C1-OP-CTDISS | Create To Do for Issues |
| C1-OP-DETACT | Determine Initial Action on Overpayment |
| C1-OP-INFO | Overpayment Process Information |
| C1-OP-INTRF | Calculate Interest Using a Rate Factor |
| C1-OP-INTSDT | Determine Interest Start Date |
| C1-OP-OFFST | Offset Credits to Other Obligations |
| C1-OP-OPAPEM | Create Email for Overpayment Approval |
| C1-OP-REJECT | Reject an Overpayment Process |
| C1-OP-STAPPR | Start Approval |
| C1-OP-TRNAPP | Transition to Approved |
| C1-OP-VACRED | Validate Automatic Overpayment Process |
| C1-OP-WROFF | Write Off Overpayment |
| C1-OPT-VADTE | Validate Automatic Overpayment Process Type |
| C1-OT-CRCC | Create Customer Contact |
| C1-OT-GFTDFT | Populate Bill Segment FTs Group FT ID |
| C1-OT-GFTVAL | Validate Group FT's Obligation |
| C1-OT-LEVFEE | Levy a Fee |
| C1-OT-TOMR | Trigger Overdue Monitor Review |
| C1-OT-TPPRVW | Trigger Pay Plan Review |
| C1-OTWAIV-IN | Waiver - One Time Waiver Information |

| Algorithm Type | Description |
| --- | --- |
| C1-PAYFRM | Pay a Form or Filing Period |
| C1-PI-CALC | Penalty and Interest Calculation |
| C1-PI-DB-STD | Standard Determine Detailed Balance |
| C1-PI-ELIGCH | P&I Eligibility Check By Characteristic |
| C1-PI-FTLIST | FT List Retriever |
| C1-PI-PD-BAL | Prepare Periodic Balance |
| C1-PI-PR-ACR | Adjust Calculation Periods for Accruals |
| C1-PI-PR-CRD | Obligation Type - Adjust Calc Periods for Credits |
| C1-PI-PR-PIC | Obligation Type - Build P&I Control Periods |
| C1-PI-PR-WVR | Prepare Waiver Details |
| C1-PI-PS-CSH | Cash Accounting Clean-up |
| C1-PI-PS-UPD | Update P&I Charges |
| C1-PI-PS-WV1 | Process One-time Waivers |
| C1-PI-PS-WV2 | Process Ongoing Waivers |
| C1-PI-RP-MNT | Monthly Calculation |
| C1-PI-RP-RF | Rate Factor Calculation |
| C1-PI-RP-WV1 | One-time Waiver |
| C1-PI-RP-WV2 | Ongoing Waiver |
| C1-PIBSFZCAN | Cancel Related Adjustments for Bill Segment |
| C1-PIC-RLREQ | Standard P&I Control - P&I Rule Required |
| C1-PINCFT | Check Non-Cancelled Assessment FT |
| C1-PIPYCN | Bring P&I Up to Date On Pay Cancel |
| C1-PIPYFZ | Bring P&I Up to Date On Pay Freeze |
| C1-PIR-NTEXC | Monthly Charge P&I Rule - Validate NTE Fields |
| C1-PP-FIXAMT | Schedule Fixed-Amount Payments |
| C1-PP-FIXDUR | Schedule Fixed-Duration Payments |
| C1-PYFZ-PYAS | Match a Payment to an Assessment |
| C1-REQ-INF | Activity Request Information |
| C1-RMC-DCREQ | Monthly Charge P&I Rule - Debt Category Req |
| C1-RMC-INFO | Monthly Charge P&I Rule - Information |

| Algorithm Type | Description |
| --- | --- |
| C1-RMC-PICV | Monthly Charge P&I Rule - Validate P&I Control |
| C1-RSC-DCREQ | Simple Calculation P&I Rule - Debt Category Req |
| C1-RSC-INFO | Simple Calculation P&I Rule - Information |
| C1-RSC-PICV | Simple Calculation P&I Rule - Validate P&I Control |
| C1-SCC-VAL | Standard Collection Case Validation |
| C1-SCCT-VAL | Standard Collection Case Type Validation |
| C1-SNGL-REL | Check Single-Only Relationships |
| C1-SPOUSEEX | Check Spouse Existence |
| C1-STOP-PAYP | Standard Collection Case - Stop Pay Plan |
| C1-SUT-CHKOB | Sales and Use Short - Check Obligation Existence |
| C1-SUT-CREAS | Sales and Use Short Tax Form - Create Assessment |
| C1-SUT-CREOB | Sales and Use Short Tax Form - Create Obligation |
| C1-SUT-VAL | Sales and Use Short Tax Form - Validate |
| C1-SUTY-INFO | Sales and Use Short Tax Form Type - Information |
| C1-TF-ACCEX | Sales and Use - Check Account/Tax Role Existence |
| C1-TF-CLRMSE | Tax Form - Clear Manual Suspense Explanation |
| C1-TRFPAY | Find or Transfer Payment |
| C1-TRNFRMV | Transition from Validate |
| C1-TRNPTOV | Transition from Pending to Validate |
| C1-TRNTOV | Transition to Validate if No Missing Information |
| C1-TT-VCVAL | Tax Type - Validate Variable Calendar |
| C1-TX-WTLON | Tax Form - Waiting for too long |
| C1-TXACEX | Check Account/Tax Role Existence |
| C1-TXCRETD | Tax Form - Create ToDo for Suspense |
| C1-TXF-INFO | Tax Form Information |
| C1-TXFCRECC | Tax Form - Create Customer Contact |
| C1-TXR-VARCI | Variable Calendar Tax Role Information |

| Algorithm Type | Description |
| --- | --- |
| C1-TXR-VDTCH | Tax Role - Validate Date Change |
| C1-TXR-VEFFD | Tax Role - Validate Filing Calendar Effective Date |
| C1-TXR-VFCRQ | Tax Role - Validate Variable Calendar |
| C1-TXR-VOVRL | Variable Calendar Tax Role - Validate Overlap |
| C1-TXTPEX | Tax Form - Check Taxpayer Existence |
| C1-UNDO-TA | Tax Form - Undo Transfer/Adjust |
| C1-VAL-SUP | Tax Form - Validate Form Suspense Issues |
| C1-VALFRMTY | Form Type - Validate Tax Form Type |
| C1-VALINDTXF | Validate Individual Income Tax EZ Tax Form |
| C1-VALINFTY | Validate Individual Tax Form Type |
| C1-VALOTWAIV | Waiver - Prevent Changes to Waiver Amount |
| C1-VALTXFRM | Common Tax Form Validation |
| C1-VALWAIV | Waiver - Prevent Changes to Waiver After Pending |
| C1-VCTXRLPRE | Variable Calendar Tax Role - Pre-Processing |
| C1-WAIV-RCPI | Waiver - Recalculate P&I |
| C1-WRITE-OFF | Write Off |

## Algorithm

The following Algorithms are Oracle Enterprise Taxation Management owned system data in V2.2.0.

| Algorithm | Description |
| --- | --- |
| C1-ACTXEXTS | Individual Income EZ TF - Check Acc/ TaxRole Exist |
| C1-ADDR-INFO | Address Information |
| C1-ADJAP-DF | Adjustment Approval Profile Validation - Default |
| C1-ADJARI-DF | Adjustment Approval Request Information |
| C1-ADJREQTDF | Determine Adjustment Approval Requirements Default |
| C1-AGCY-TODO | Standard Coll Case - Agy Referral With No Progress |

| Algorithm | Description |
| --- | --- |
| C1-AM-VALID | Activity Type Validation |
| C1-ARAS-INFO | Asset/Asset Relationship Information |
| C1-ARLC-INFO | Location Asset Relationship Information |
| C1-ARPR-INFO | Person Asset Relationship Information |
| C1-ASRP-INFO | Asset - Real Property Information |
| C1-ATLOC-VAL | Asset Type - Validate Address Relations Type |
| C1-ATOBT-VAL | Asset Type - Validate Obligation Types |
| C1-BO-FTINFO | Form Type Information |
| C1-BRG-CLMSL | Business Reg Form - Clear Missing Issues List |
| C1-BRG-CLSPL | Business Reg Form - Clear Suspense Issues List |
| C1-BRG-COMTD | Business Reg Form - Complete To Do Entries |
| C1-BRG-CRATR | Business Reg Form - Create Account / Tax Role |
| C1-BRG-CSCOT | Business Reg Form - Create Customer Contact |
| C1-BRG-IDTTP | Business Reg Form - Identify Taxpayer |
| C1-BRG-MSINF | Business Reg Form - Check for Missing Information |
| C1-BRG-SPVT | Business Reg Form - Validate Suspense Explanation |
| C1-BRG-SUSTD | Business Reg Form - Create To Do |
| C1-BRG-VAMON | Business Reg Form - Transition From Validate |
| C1-BRG-WTLON | Business Reg Form - Waiting For Too Long |
| C1-BRG-WTVT | Business Reg Form - Transition From Wait |
| C1-CANFRMADJ | Cancel Form Adjustments |
| C1-CCAL-COCS | Highlight Open Collection Cases |
| C1-CCC-AGCYR | Standard Collection Case - Cancel Agency Referrals |
| C1-CCSL-TODO | Standard Coll Case - Letter Waiting Time Too Long |
| C1-CHISSUETR | Tax Form - Transition If There Are Issues |
| C1-CHK-REL | Check Required Relationships |

| Algorithm | Description |
| --- | --- |
| C1-CHK-WAIV | Waiver - Check Ongoing Waiver |
| C1-CLR-RSN | Clear Reasons for Transfer/Adjust/Reversal |
| C1-CMPFRM | Tax Form - Complete a Form Transfer/Adjust |
| C1-COMP-TODO | Tax Form - Complete To Do Entries |
| C1-CRE-INDOB | Individual Income EZ TF - Create Ind Income Oblig |
| C1-CRE-TXR | Individual Income EZ TF - Create Spouse/Acc/TaxRl |
| C1-CREASMT | Individual Income EZ TF - Create Ind Incme Assmnt |
| C1-CREOVRP | Individual Income EZ TF - Create Overpymt Process |
| C1-CRETXCRE | Individual Income EZ TF - Create Income Tax Credit |
| C1-DC-VAPRIO | Debt Category - Check if Linked to Priority |
| C1-DCP-VLIST | Debt Category Priority - Validate List |
| C1-DCP-VMISS | Debt Category Priority - Check Debt Cat Missing |
| C1-DEL-ADJ | Delete Rejected Adjustments |
| C1-DET-APRVR | Determine Approvers |
| C1-ERR-AGCYR | Standard Coll Case - Error if Active Agy Referral |
| C1-FBH-FCNT | Form Batch Header - Compare Form Count to Actual |
| C1-FBH-FCNTR | Form Batch Header-Total Number of Forms Count Req |
| C1-FBH-INFO | Form Batch Header Information |
| C1-FRZ-ADJ | Freeze Approved Adjustments |
| C1-INIT-ADJ | Tax Form - Initiate Form Adjust |
| C1-INIT-TFR | Tax Form - Initiate Form Transfer |
| C1-INV-TODO | Standard Coll Case - Create Investigation To Do |
| C1-ITF-CLMSL | Tax Form - Clear Missing Issues List |
| C1-ITF-CLSPL | Tax Form - Clear Suspense Issue List |
| C1-MO-CCINFO | Collection Case Information |

| Algorithm | Description |
| --- | --- |
| C1-MO-DTFTBO | Return Business Object of FT |
| C1-MO-RFINFO | Registration Form Information |
| C1-NT-CS-CRX | Auto Pay Expiring Credit Card Notice |
| C1-NTFY-APPR | Notify Approver |
| C1-OBL-DTMBO | Determine Obligation BO |
| C1-OBLIGEXTS | Individual Income EZ TF - Check Obligation Exists |
| C1-OBLOVRDDT | Adjust override due dates |
| C1-OBLVALDFP | Obligation - Validate Obligation Filing Period |
| C1-ONWAIV-IN | Waiver - Ongoing Waiver Information |
| C1-OP-ACNAMT | Apply Contribution Amounts |
| C1-OP-BALCHG | Check for Obligation Balance Change |
| C1-OP-CAFUFP | Carry Forward to a Future Filing Period |
| C1-OP-CHKOBC | Check for Obligation Balance Change |
| C1-OP-CINTRN | Calculate Interest Rate-Able Adj - Non-Offset-able |
| C1-OP-CINTRO | Calculate Interest Rate-Able Adj - Offset-able |
| C1-OP-COMPTD | Complete To Do Entries For Overpayment Process |
| C1-OP-CREREF | Create Refund FT |
| C1-OP-CTDISS | Create To Do for Issues |
| C1-OP-DETACT | Determine Initial Action on Overpayment |
| C1-OP-INFO | Overpayment Process - Information |
| C1-OP-INTRFN | Calc Int Using a Rate Factor - Non-offset-able |
| C1-OP-INTRFO | Calc Interest Using a Rate Factor - Offset-able |
| C1-OP-INTSDT | Determine Interest Start Date |
| C1-OP-OFFST | Offset Credits to Other Obligations |
| C1-OP-REJECT | Reject an Overpayment Process |
| C1-OP-STAPPR | Start Approval |
| C1-OP-TRNAPP | Transition to Approved |
| C1-OP-VACRED | Validate Automatic Overpayment Process |

| Algorithm | Description |
| --- | --- |
| C1-OP-WROFF | Write Off Overpayment |
| C1-OPT-VADTE | Validate Automatic Overpayment Process Type |
| C1-OT-GFTDFT | Populate BS FT's Group FT ID |
| C1-OT-GFTVAL | Validate Group FT's Obligation |
| C1-OTWAIV-IN | Waiver - One Time Waiver Information |
| C1-PE-VAL | Transition from Pending to Validate |
| C1-PI-CALC | Penalty and Interest Calculation |
| C1-PI-DB-STD | Standard Determine Detailed Balance |
| C1-PI-FTLIST | Penalty and Interest FT List Retriever |
| C1-PI-PAYCAN | Re-calculate P&I charges on canceling of payment |
| C1-PI-PAYFRZ | Re-calculate P&I charges on freezing of payment. |
| C1-PI-PD-BAL | Prepare Periodic Balance |
| C1-PI-PR-ACR | Adjust Calculation Periods for Accruals |
| C1-PI-PR-CRD | Adjust Calculation Periods for Credits |
| C1-PI-PR-PIC | Build P&I Control Periods |
| C1-PI-PR-WVR | Prepare Waiver Details |
| C1-PI-PS-UPD | Update P&I Charges |
| C1-PI-PS-WV1 | Process One-time Waivers |
| C1-PI-PS-WV2 | Process Ongoing Waivers |
| C1-PI-RP-MNT | Monthly Calculation |
| C1-PI-RP-RF | Rate Factor Calculation |
| C1-PI-RP-WV1 | One-time Waiver |
| C1-PI-RP-WV2 | Ongoing Waiver |
| C1-PIC-RLREQ | Standard P&I Control - P&I Rule Required |
| C1-PINCFT | Check Non-Cancelled Assessment FT |
| C1-PIR-NTEXC | Monthly Charge P&I Rule - Validate NTE Fields |
| C1-REQ-INF | Activity Request Information |
| C1-RMC-DCREQ | Monthly Charge P&I Rule - Debt Category Req |
| C1-RMC-INFO | Monthly Charge P&I Rule - Information |

| Algorithm | Description |
| --- | --- |
| C1-RMC-PICV | Monthly Charge P&I Rule - Validate P&I Control |
| C1-RSC-DCREQ | Simple Calculation P&I Rule - Debt Category Req |
| C1-RSC-INFO | Simple Calculation P&I Rule - Information |
| C1-RSC-PICV | Simple Calculation P&I Rule - Validate P&I Control |
| C1-SCC-VAL | Standard Collection Case Validation |
| C1-SCCT-VAL | Standard Collection Case Type Validation |
| C1-SNGL-REL | Check Single-Only Relationships |
| C1-SPEXTS | Check Spouse Existence |
| C1-SPOUSEEX | Check Spouse Existence |
| C1-STOP-PAYP | Standard Collection Case - Stop Pay Plan |
| C1-SUT-CHKOB | Sales and Use Short - Check Obligation Existence |
| C1-SUT-CREAS | Sales and Use Short Tax Form - Create Assessment |
| C1-SUT-CREOB | Sales and Use Short Tax Form - Create Obligation |
| C1-SUT-VAL | Sales and Use Short Tax Form - Validate |
| C1-SUTY-INFO | Sales and Use Short Tax Form Type - Information |
| C1-TF-ACCEX | Seles and Use - Check Account/Tax Role Existence |
| C1-TF-CLRMSE | Tax Form - Clear Manual Suspense Explanation |
| C1-TO-VAL | Transition to Validate if No Missing Information |
| C1-TPEXTS | Check Taxpayer Existence |
| C1-TRN-DF-NS | Transition to Default Next Status |
| C1-TRN-VAL | Transition from Validate |
| C1-TRN-VL-NS | Business Reg Form - Transition to Validate |
| C1-TT-VCVAL | Tax Type - Validate Variable Calendar |
| C1-TX-WTLON | Wait For Too Long |
| C1-TXCRETD | Tax Form - Create ToDo for Suspense |
| C1-TXF-INFO | Tax Form Information |
| C1-TXFCRECC | Tax Form - Create Customer Contact |

| Algorithm | Description |
|---|---|
| C1-TXFVALFLD | Common Tax Form Validation |
| C1-TXR-VARCI | Variable Calendar Tax Role Information |
| C1-TXR-VDTCH | Tax Role - Validate Date Change |
| C1-TXR-VEFFD | Tax Role - Validate Filing Calendar Effective Date |
| C1-TXR-VFCRQ | Tax Role - Validate Variable Calendar |
| C1-TXR-VOVRL | Variable Calendar Tax Role - Validate Overlap |
| C1-UNDO-TA | Tax Form - Undo Transfer/Adjust |
| C1-VAL-SUP | Tax Form - Validate Form Suspense Issues |
| C1-VALFRMTY | Form Type - Validate Tax Form Type |
| C1-VALINFRM | Individual Income EZ TF- Validate Ind Income Tax |
| C1-VALINFTY | Validate Individual Tax Form Type |
| C1-VALOTWAIV | Waiver - Prevent Changes to Waiver Amount |
| C1-VALWAIV | Waiver - Prevent Changes to Waiver After Pending |
| C1-VCTXRLPRE | Variable Calendar Tax Role - Pre-Processing |
| C1-WAIT | Tax Form - Wait for too long |
| C1-WAIV-RCPI | Waiver - Recalculate P&I |

## Application Service

The following Application Services are new to Oracle Enterprise Taxation Management V2.2.0.

| Application Service | Description |
|---|---|
| C1-ADJAPPRVLREQBOAS | Adjustment Approval Request BO |
| C1-APAYEXPCRREQBOAS | Activity Request - Expire AutoPay Credit Card BO |
| C1-APAYEXPCRTYPEBOAS | Activity Type - Expiring AutoPay Credit Card BO |
| C1-ASSET | Asset MO |
| C1-ASSETREL | Asset Relationship MO |
| C1-ASSETRELTYPE | Asset Relationship Type MO |
| C1-ASSETRPBOAS | Real Property Asset BO |

| Application Service | Description |
| --- | --- |
| C1-ASSETTYPE | Asset Type MO |
| C1-ASTYRPRBOAS | Real Property Asset Type BO |
| C1-BUSREGFORMBOAS | Business Registration Form BO |
| C1-BUSREGFRMTYBO | Business Registration Form Type BO |
| C1-FORMBATCHHEADER | Form Batch Header MO |
| C1-FORMTYPEM | Form Type MO |
| C1-GENFORMBATCHHDR | Form Batch Header BO |
| C1-INDFRMTYPEBOAS | Individual Income Tax Form Type BO |
| C1-INDXFRMBOAS | Individual Income EZ Tax Form BO |
| C1-ONWAIVERTYBO | Ongoing Waiver Type BO |
| C1-OTWAIVERTYBO | One Time Waiver Type BO |
| C1-OVPPROCBOAS | Individual Taxpayer Overpayment Process BO |
| C1-OVPPROCM | Overpayment Process MO |
| C1-OVPPRTYBOAS | Individual Taxpayer Overpayment Process Type BO |
| C1-OVRPAYTYPM | Overpayment Process Type MO |
| C1-PICONTROL | P&I Control MO |
| C1-PIRULE | P&I Rule MO |
| C1-STANDARDPICONTROL | Standard P&I Control BO |
| C1-STNDCOLLCASEBO | Standard Collection Case BO |
| C1-STNDCOLLCASETYBO | Standard Collection Case Type BO |
| C1-SUTXFRMBOAS | Sales and Use Short Tax Form BO |
| C1-SUTXFRMTYBOAS | Sales and Use Short Tax Form Type BO |
| C1-TAXFORMBOAS | Parent Tax Form BO |
| C1-TAXFORMM | Tax Form MO |
| C1-WAIVERBO | Waiver BO |
| C1-WAIVERM | Waiver MO |
| C1-WAIVERTYM | Waiver Type MO |
| C1ACMACR | Sample & Submit Request Portal |
| C1ACMACT | Activity Type Portal |
| C1ACMARQ | Sample & Submit Request Query Portal |
| C1APROF | Approval Profile Portal |

| Application Service | Description |
| --- | --- |
| C1ARTYPE | Asset Relationship Type Portal |
| C1ASSETP | Asset Portal |
| C1ASSETQ | Asset Query Portal |
| C1ASTYPE | Asset Type Portal |
| C1CLCQRY | Collection Case Query Portal |
| C1CLCSTY | Collection Case Type Portal |
| C1COLCAS | Collection Case Portal |
| C1DBCTPR | Debt Category Priority Portal |
| C1DBTCAT | Debt Category Portal |
| C1FBH | Form Batch Header Portal |
| C1FBHQ | Form Batch Header Query Portal |
| C1FRTM | Form Type Portal |
| C1FRTYSP | Form Type Query Portal |
| C1LABALP | Control Central - Account Balance Information Zone |
| C1LTBALP | Control Central - Taxpayer Balance Information Zone |
| C1OPTYPE | Overpayment Process Type Portal |
| C1OVPP | Overpayment Process Portal |
| C1OVPPQ | Overpayment Process Query Portal |
| C1PERTYP | Person Type Portal |
| C1PICTRL | P&I Control Portal |
| C1PIRULE | P&I Rule Portal |
| C1RGFRM | Registration Form Portal |
| C1RGFRMQ | Registration Form Query Portal |
| C1TXFRM | Tax Form Portal |
| C1TXFRMQ | Tax Form Query Portal |
| C1TXROLE | Tax Role Portal |
| C1TXRQRY | Tax Role Query Portal |
| C1TXTYPE | Tax Type Portal |
| C1WAIVP | Waiver Portal |
| C1WAIVQ | Waiver Query Portal |
| C1WAIVTY | Waiver Type Portal |

| Application Service | Description |
| --- | --- |
| CILCAMRP | Activity Request MO |
| CILCPMPP | Location Management |
| CILCRGFP | Registration Form MO |
| CILCTAXP | Tax Role MO |
| CILLCCSP | Collection Case MO |
| CILMONPP | Monitor Pay Plan Service |
| CILTAMTP | Activity Type MO |
| CILTAPFP | Approval Profile MO |
| CILTCCYP | Collection Case Type MO |
| CILTDBCP | Debt Category MO |
| CILTDCPP | Debt Category Priority MO |
| CILTFCAP | Filing Calendar |
| CILTPTYP | Person Type MO |
| CILTXMLP | Add XML Extract Service |

The following access modes have been added to the existing application services

| Application Service | Description | Access Mode |
| --- | --- | --- |
| CILCSVAP | Service Agreement | Reinstate SA (RSA) |
| CILAADUP | Adjustment | Submit for Approval (S) |
| CILPCAPP | Create One-Off Automatic Payment | Change (C) |

## Batch Control

The following Batch Controls are new to V2.2.0.

| Batch Control | Description |
| --- | --- |
| C1-ACTRQ | Activity Request Monitor (Deferred) |
| C1-ACTTY | Activity Type Monitor |
| C1-APRPR | Approval Request Monitor |
| C1-APRTR | Approval Request Monitor (Deferred) |
| C1-ARQPR | Activity Request Monitor |
| C1-ASRPR | Asset Relationship Monitor |
| C1-ASTPR | Asset Monitor |

| Batch Control | Description |
| --- | --- |
| C1-ATYPR | Asset Type Monitor |
| C1-CALPI | Calculate Penalty And Interest |
| C1-CLCPR | Collection Case Monitor |
| C1-CLCTY | Collection Case Type Monitor |
| C1-FBHM | Form Batch Header Monitor |
| C1-FBHMD | Form Batch Header Monitor (Deferred) |
| C1-FRMTY | Form Type Monitor |
| C1-OPMN | Overpayment Process Monitor |
| C1-OVPTY | Overpayment Process Type Monitor |
| C1-PICTL | P&I Control Monitor |
| C1-RGFRD | Registration Form Monitor (Deferred) |
| C1-RGFRM | Registration Form Monitor |
| C1-TXMTD | Tax Form Monitor (Deferred) |
| C1-TXMTR | Tax Form Monitor |
| C1-WAIV | Waiver Monitor |
| C1-WAVTY | Waiver Type Monitor |
| CIPVAPCI | Insert CI_ACCT_PER_CHAR |
| CIPVAPCV | Foreign Key validation for CI_ACCT_PER_CHAR |
| CIPVCCCI | Insert CI_COLL_CASE_CHAR |
| CIPVCCCV | Foreign Key Validation for CI_COLL_CASE_CHAR |
| CIPVCCLI | Insert CI_COLL_CASE_LOG |
| CIPVCCLV | Foreign Key Validation for CI_COLL_CASE_LOG |
| CIPVCCOI | Insert CI_COLL_CASE_OD |
| CIPVCCOV | Foreign Key Validation for CI_COLL_CASE_OD |
| CIPVCCPI | Insert CI_COLL_CASE_LOG_PARM |
| CIPVCCPV | Foreign Key Validation for CI_COLL_CASE_LOG_PARM |
| CIPVCCSI | Insert CI_COLL_CASE |
| CIPVCCSK | Generate CI_COLL_CASE keys |
| CIPVCCSV | Foreign Key Validation for CI_COLL_CASE |

| Batch Control | Description |
| --- | --- |
| CIPVOPCI | Insert CI_OP_PROC_CHAR |
| CIPVOPCV | Foreign Key validation for CI_OP_PROC_CHAR |
| CIPVOPLI | Insert CI_OP_PROC_LOG |
| CIPVOPLV | Foreign Key validation for CI_OP_PROC_LOG |
| CIPVOPMI | Insert CI_OP_PROC_LOG_PARM |
| CIPVOPMV | Foreign Key validation for CI_OP_PROC_LOG_PARM |
| CIPVOPPI | Insert CI_OP_PROC |
| CIPVOPPK | Generate CI_OP_PROC keys |
| CIPVOPPV | Foreign Key validation for CI_OP_PROC |
| CIPVPYCI | Insert CI_PAY_CHAR |
| CIPVPYCV | Foreign Key validation for CI_PAY_CHAR |
| CIPVTFCI | Inserter for CI_TAX_FORM_CHAR |
| CIPVTFCV | Foreign Key Validation for CI_TAX_FORM_CHAR |
| CIPVTFLI | Inserter for CI_TAX_FORM_LOG |
| CIPVTFLV | Foreign Key Validation for CI_TAX_FORM_LOG |
| CIPVTLPI | Inserter for CI_TAX_FORM_LOG_PARM |
| CIPVTLPV | Foreign Key Validation for CI_TAX_FORM_LOG_PARM |
| CIPVTNCI | Insert CI_PAY_TNDR_CHAR |
| CIPVTNCV | Foreign Key validation for CI_PAY_TNDR_CHAR |
| CIPVTXCI | Insert CI_TAX_ROLE_CHAR |
| CIPVTXCV | Foreign Key validation for CI_TAX_ROLE_CHAR |
| CIPVTXFI | Insert CI_TAX_FORM |
| CIPVTXFK | Generate CI_TAX_FORM keys |
| CIPVTXFV | Foreign Key validation for CI_TAX_FORM |
| CIPVTXRI | Insert CI_TAX_ROLE |
| CIPVTXRK | Generate CI_TAX_ROLE keys |

| Batch Control | Description |
| --- | --- |
| CIPVTXRV | Foreign Key validation for CI_TAX_ROLE |
| VAL-CLCS | Validate Collection Case |
| VAL-OVPY | Validate Overpayment Process |
| VAL-TAXR | Validate tax role |
| VAL-TXFR | Validate Tax Form |

No new parameters have been added to the existing Batch control.

## Business Object

The following Business Objects are Oracle Enterprise Taxation Management owned system data in V2.2.0.

| Business Object | Description |
| --- | --- |
| C1-AccountMainPerson | Account - Get Main Person ID |
| C1-Adjustment | Adjustment - Read Main Details |
| C1-AdjustmentApprovalProfile | Adjustment Approval Profile |
| C1-AdjustmentApprovalRequest | Adjustment Approval Request |
| C1-AdjustmentType | Adjustment Type - Main Details |
| C1-AssetAssetRelType | Asset to Asset Relationship Type |
| C1-AssetAssetRelationship | Asset to Asset Relationship |
| C1-BusRegistrationFormType | Business Registration Form Type |
| C1-BusinessPerson | Business Person |
| C1-BusinessRegistrationForm | Business Registration Form |
| C1-Country | Country - Main Details |
| C1-DebtCatPriority | Debt Category Priority |
| C1-DebtCategory | Debt Category |
| C1-ExpireCreditCardCustContact | Auto Pay Credit Cards Expiration Notice Customer Contact |
| C1-FilingPeriodObligation | Filing Period Based Obligation |
| C1-FinancialTransaction | Financial Transaction |
| C1-FormBatchHeader | Form Batch Header - Manual Data Entry |
| C1-GenericAccount | Generic Account |
| C1-GenericObligation | Obligation - Read Main Details |
| C1-IndIncomeEZTaxForm | Individual Income EZ Tax Form |

| Business Object | Description |
| --- | --- |
| C1-IndividualIncomeEZTaxFormTy | Individual Income EZ Tax Form Type |
| C1-IndividualPerson | Individual Person BO |
| C1-LocationAddress | Location - Get Address |
| C1-LocationAssetRelType | Location Asset Relationship Type |
| C1-LocationAssetRelationship | Location Relationship |
| C1-MonthlyChargePIRule | Monthly Charge P&I Rule |
| C1-NotifyExpiringCreditCardReq | Auto Pay with Expiring Credit Cards Activity Request |
| C1-NotifyExpiringCreditCardTyp | Auto Pay with Expiring Credit Cards Activity Type |
| C1-OblAuditLog | Obligation Audit Log |
| C1-ObligationType | Obligation Type - Main Details |
| C1-OneTimeWaiver | One time Waiver |
| C1-OngoingWaiver | Ongoing Waiver |
| C1-OverdueProcessAccount | Overdue Process - Get Account |
| C1-OverdueProcessCreationDate | Overdue Process - Get Creation Date |
| C1-OvrpyProcAutoCredRef | Individual Taxpayer Overpayment Process |
| C1-OvrpyProcTypeAutoCredRef | Individual Taxpayer Overpayment Process Type |
| C1-PerTypeBus | Business Person Type |
| C1-PerTypeInd | Individual Person Type |
| C1-PersonAssetRelType | Person Asset Relationship Type |
| C1-PersonAssetRelationship | Person Relationship |
| C1-PersonContactDetails | Person - Get Contact Details |
| C1-RealPropertyAsset | Real Property Asset |
| C1-RealPropertyAssetType | Real Property Asset Type |
| C1-SAAuditLog | Obligation Audit Log |
| C1-SalesAndUseTaxForm | Sales and Use Short Tax Form |
| C1-SalesAndUseTaxFormTy | Sales and Use Short Tax Form Type |
| C1-SimpleCalculationPIRule | Simple Calculation P&I Rule |
| C1-StandardCollectionCase | Standard Collection Case |
| C1-StandardCollectionCaseType | Standard Collection Case Type |
| C1-StandardPIControl | Standard P&I Control |
| C1-TaxForm | Tax Form |

| Business Object | Description |
| --- | --- |
| C1-TaxRoleVariableCalendar | Variable Calendar Tax Role |
| C1-TaxTypeStandard | Standard Tax Type |
| C1-TaxTypeVariableCalendar | Variable Calendar Tax Type |
| C1-Waiver | Waiver |
| C1-WaiverTypeOneTime | One time Waiver Type |
| C1-WaiverTypeOngoing | Ongoing Waiver Type |

## FK Reference

The following FK References are new to V2.2.0.

| FK Reference | Description |
| --- | --- |
| C1-ACCTY | Account Type |
| C1-ACTRQ | Activity Request |
| C1-ACTTY | Activity Type |
| C1-ADJAR | Adjustment Approval |
| C1-ADJCA | Adjustment Cancel Reason |
| C1-ADJTY | Adjustment Type |
| C1-APROF | Approval Profile |
| C1-AREQ | Approval Request |
| C1-ARTYP | Asset Relationship Type |
| C1-ASREL | Asset Relationship |
| C1-ASSET | Asset |
| C1-ASTYP | Asset Type |
| C1-BOMO | Business Objects for MO |
| C1-COLCS | Collection Case |
| C1-COLCT | Collection Case Type |
| C1-CUR | Currency |
| C1-DCAT | Debt Category |
| C1-DCTPR | Debt Category Priority |
| C1-DIVIS | Division |
| C1-DSTCD | Distribution Code |
| C1-FBHDR | Form Batch Header |
| C1-FCAL | Filing Calendar |

| FK Reference | Description |
| --- | --- |
| C1-FLPRD | Filing Period |
| C1-FRMTY | Form Type |
| C1-FT | Financial Transaction |
| C1-ODTMP | Overdue Process Template |
| C1-OVRPR | Overpayment Process |
| C1-OVRPT | Overpayment Process Type |
| C1-PAYPL | Pay Plan |
| C1-PCTRL | P&I Control |
| C1-PERRT | Person Relationship Type |
| C1-PERTY | Person Type |
| C1-PRULE | P&I Rule |
| C1-RFACT | Rate Factor |
| C1-RGFRM | Registration Form |
| C1-RSCHD | Rate Schedule |
| C1-TXFRM | Tax Form |
| C1-TXRL | Tax Role |
| C1-WAIV | Waiver |
| C1-WATY | Waiver Type |
| C1AS-BO | BO Option - Approval Script |
| C1PD-BO | BO Option - Activity Request Preview Derivation |
| C1PV-BO | BO Option - Activity Request Preview Map |
| C1RM-BO | BO Option - Maintain Relationship BPA Script |
| C1RS-BO | BO Option - Reject Script |
| C1SU-BO | BO Option - Related Entity Search UI Map |
| C1TC-BO | BO Option - Form Type / Child Form Type Maintain UI Map |
| C1TF-BO | BO Option - Form Type / Filing Period Maintain UI Map |
| SATYPE | Obligation Type |

## Maintenance Object

The following Maintenance Objects are new to V2.2.0.

| MO code | Description |
| --- | --- |
| C1-ACM-ACTRQ | Activity Request |
| C1-ACM-ACTTY | Activity Type |
| C1-APPR PROF | Approval Profile |
| C1-APPR REQ | Approval Request |
| C1-ASRELTYPE | Asset Relationship Type |
| C1-ASSET | Asset |
| C1-ASSETREL | Asset Relationship |
| C1-ASSETTYPE | Asset Type |
| C1-COL-CASE | Collection Case |
| C1-COL-CSTY | Collection Case Type |
| C1-DEBTCAT | Debt Category |
| C1-DEBTCATPR | Debt Category Priority |
| C1-FIL-CAL | Filing Calendar |
| C1-FORMTY | Form Type |
| C1-FRMHDR | Form Batch Header |
| C1-OVERPAY | Overpayment Process |
| C1-OVRPAYTYP | Overpayment Process Type |
| C1-PERTYPE | Person Type |
| C1-PICONTROL | P&I Control |
| C1-PIRULE | P&I Rule |
| C1-REG-FRM | Registration Form |
| C1-TAX-ROLE | Tax Role |
| C1-TAXFORM | Tax Form |
| C1-WAIVER | Waiver |
| C1-WAIVERTY | Waiver Type |

## Portal

The following Portals are new to V2.2.0.

| Portal | Description |
| --- | --- |
| C1ACMACR | Sample & Submit Request |

| Portal | Description |
| --- | --- |
| C1ACMACT | Activity Type |
| C1ACMARQ | Sample & Submit Request Query |
| C1ADJAPRVL | Adjustment Approval |
| C1APROF | Approval Profile |
| C1CLCQRY | Collection Case Query |
| C1CLCSTY | Collection Case Type |
| C1COLCAS | Collection Case |
| C1DBCTPR | Debt Category Priority |
| C1DBTCAT | Debt Category |
| C1FBH | Form Batch Header |
| C1FBHQ | Form Batch Header Query |
| C1FRTM | Form Type |
| C1FRTYSP | Form Type Query |
| C1OPTYPE | Overpayment Process Type |
| C1OVPP | Overpayment Process |
| C1OVPPQ | Overpayment Process Query |
| C1PERTYP | Person Type |
| C1PICTRL | P&I Control |
| C1PIRULE | P&I Rule |
| C1RGFRM | Registration Form |
| C1RGFRMQ | Registration Form Query |
| C1TXFRM | Tax Form |
| C1TXFRMQ | Tax Form Query |
| C1TXROLE | Tax Role |
| C1TXRQRY | Tax Role Query |
| C1TXTYPE | Tax Type |
| C1WAIVP | Waiver |
| C1WAIVQ | Waiver Query |
| C1WAIVTY | Waiver Type |

## Portal Zone

The following Portal Zones are added to V2.2.0

| Portal | Zone |
|---|---|
| C1ACMACR | C1-ACMACL |
| C1ACMACR | C1-ACMARACTN |
| C1ACMACR | C1-ACMARD |
| C1ACMACT | C1-ACMACD |
| C1ACMACT | C1-ACMACT |
| C1ACMACT | C1-ACMATACTN |
| C1ACMARQ | C1-ACTREQACT |
| C1ADJAPRVL | C1-ADJINFO |
| C1ADJAPRVL | C1-AREQDISP |
| C1ADJAPRVL | C1-AREQLOG |
| C1APROF | C1-APROFACTN |
| C1APROF | C1-APROFADJT |
| C1APROF | C1-APROFDISP |
| C1APROF | C1-APROFQRY |
| C1CLCQRY | C1-CLCSQRY |
| C1CLCSTY | C1-CLCSTY |
| C1CLCSTY | C1-CLCSTYLST |
| C1CLCSTY | C1-COLCSTYAC |
| C1CLCSTY | C1-COLCSTYLG |
| C1COLCAS | C1-COLCASE |
| C1COLCAS | C1-COLCASEAC |
| C1COLCAS | C1-COLCASELG |
| C1COLCAS | C1-COLCASEOD |
| C1DBCTPR | C1-DBCATPRAC |
| C1DBCTPR | C1-DBCATPRDM |
| C1DBCTPR | C1-DBCATPRIF |
| C1DBTCAT | C1-DEBTCATAC |
| C1DBTCAT | C1-DEBTCATDM |
| C1DBTCAT | C1-DEBTCATIF |
| C1FBH | C1-FBHACTN |
| C1FBH | C1-FBHDR |

| Portal | Zone |
| --- | --- |
| C1FBH | C1-FBHDRFRMS |
| C1FBH | C1-FBHDRLG |
| C1FBHQ | C1-FBHQZ |
| C1FRTM | C1-FRMTYPLOG |
| C1FRTM | C1-FRMTYST |
| C1FRTM | C1-FRTYCH |
| C1FRTM | C1-FRTYFP |
| C1FRTM | C1-FRTYMT |
| C1FRTYSP | C1-FRTYQRY |
| C1OPTYPE | C1-OPTACTN |
| C1OPTYPE | C1-OVRPTDISP |
| C1OPTYPE | C1-OVRPTINFO |
| C1OPTYPE | C1-OVRPTLOG |
| C1OVPP | C1-OVPACTN |
| C1OVPP | C1-OVRPAYLOG |
| C1OVPP | C1-OVRPYAPP |
| C1OVPP | C1-OVRPYDISP |
| C1OVPPQ | C1-OVRPAYQRY |
| C1PERTYP | C1-PERTYACTN |
| C1PERTYP | C1-PERTYDISP |
| C1PERTYP | C1-PERTYINFO |
| C1PICTRL | C1-PCTRL |
| C1PICTRL | C1-PCTRLLG |
| C1PICTRL | C1-PCTRLLIST |
| C1PICTRL | C1-PCTRLOBTY |
| C1PICTRL | C1-PICTRLST |
| C1PICTRL | C1-PRULELIST |
| C1PIRULE | C1-PRULE |
| C1PIRULE | C1-PRULEACTN |
| C1RGFRM | C1-RGFACTN |
| C1RGFRM | C1-RGFRM |
| C1RGFRM | C1-RGFRMLG |
| C1RGFRMQ | C1-RGFRMQRY |

| Portal | Zone |
|---|---|
| C1TXFRM | C1-TXFRM |
| C1TXFRM | C1-TXFRMLG |
| C1TXFRM | C1-TXFRMREL |
| C1TXFRM | C1-TXFRMST |
| C1TXFRMQ | C1-TXFRQRY |
| C1TXROLE | C1-TXRLACTN |
| C1TXROLE | C1-TXRLDISP |
| C1TXROLE | C1-TXRLOBL |
| C1TXRQRY | C1-TXRLQRY |
| C1TXTYPE | C1-TXTYPACTN |
| C1TXTYPE | C1-TXTYPDISP |
| C1TXTYPE | C1-TXTYPINFO |
| C1WAIVP | C1-EXCHRGS |
| C1WAIVP | C1-RELWAIVER |
| C1WAIVP | C1-WAHDRS |
| C1WAIVP | C1-WAIVDISP |
| C1WAIVP | C1-WAIVERLOG |
| C1WAIVQ | C1-WAIVERQRY |
| C1WAIVTY | C1-WAIVTYST |
| C1WAIVTY | C1-WATYPEDSP |
| C1WAIVTY | C1-WATYPELG |
| C1WAIVTY | C1-WTYPELIST |
| CI_ACCTINFO | C1-AI-BALINF |
| CI_CUSTINFO | C1-CI-BALINF |
| CI_DASHBOARD | F1-USRCHKOUT |

## Script

The following Scripts are Oracle Enterprise Taxation Management owned system data in V2.2.0.

| Script | Description |
|---|---|
| C1-AMReqDisp | ActivityRequest-BOandMapDerivation |

| Script | Description |
|---|---|
| C1-AMTypDisp | Activity Type - Retrieve BO and display map |
| C1-AOPPre | Automatic Overpayment Process - Pre-processing |
| C1-AProfActn | Approval Profile - Retrieve Action Details for Display |
| C1-AProfAdjT | Approval Profile - Check if Linked to an Adjustment Type |
| C1-AProfDisp | Approval Profile - Retrieve BO and display map |
| C1-AProfZ | ApprovalProfile-ActionMapDerivation |
| C1-ARInProg | Approval Request - Check if in Approval In Progress State |
| C1-ARelTypNS | Asset Relationship Type - Retrieve Action Details for Display |
| C1-AReqDisp | Approval Request - Retrieve Display Service Script and Map |
| C1-AReqLogAd | ApprovalRequest-AddUserLogEntry |
| C1-AReqTran | Approval Request - Transition to Approve or Reject |
| C1-ASEAddLog | Asset-AddUserLogEntry |
| C1-ASRAddLog | AssetRelationship-AddUserLogEntry |
| C1-ASTAddLog | AssetType-AddUserLogEntry |
| C1-AcReqActn | Activity Request - Retrieve Action Details for Display |
| C1-AcReqZ | ActivityRequest-ActionMapDerivation |
| C1-AcTypActn | Activity Type - Retrieve Action Details for Display |
| C1-AcTypZ | ActivityType-ActionMapDerivation |
| C1-AccCmpRvw | Compliance Review |
| C1-AcctExist | Sales and Use Short Tax Form - Check Account/Tax Role Existence By Account Number |
| C1-ActReqAdd | Activity Request-Add |
| C1-ActReqCan | Activity Request-Cancel |
| C1-ActReqChg | Activity Request-Change |
| C1-ActReqInf | Activity Request-Information |
| C1-ActTxTyp | TaxRole-SelectAccountandTaxType |

| Script | Description |
| --- | --- |
| C1-ActTypSel | Activity Type - Select Active |
| C1-AdUOPTLog | Overpayment Process Type - Add User Log Entry |
| C1-AddCCLog | Collection Case - Add User Log Entry |
| C1-AddCCTLog | Collection Case Type - Add User Log Entry |
| C1-AddColCas | Create Collection Case |
| C1-AddFrLog | Tax Form - Add User Log Entry |
| C1-AddFrmTyL | Form Type - Add Log (BPA Script) |
| C1-AddUOPLog | Overpayment Process - Add User Log Entry |
| C1-AddrInfo | Address Information |
| C1-AdjAPReqt | Adjustment Approval Profile - Determine Approval Requirements |
| C1-AdjAPVal | Adjustment Approval Profile - Validate |
| C1-AdjARDisp | Adjustment Approval Request - Retrieve Details for Display |
| C1-AdjARInfo | Adjustment Approval Request - Information |
| C1-AdjAReqEm | Adjustment Approval Request - Create Email |
| C1-AdjAprovS | Adjustment Approval Request - Approve |
| C1-AdjRejS | Adjustment Approval Request - Reject |
| C1-AdjReqPre | Adjustment Approval Request - Pre-processing |
| C1-AgcyToDo | Standard Collection Case - Create To Do for Agency Referral With No Progress |
| C1-AppConAmt | Overpayment Process - Apply Contribution Amounts |
| C1-ApprOvrpy | Overpayment Process - Approve Processing |
| C1-AprTmout | Adjustment Approval Request Timeout |
| C1-ArAstInfo | Asset/Asset Relationship Information |
| C1-ArLocInfo | Location Asset Relationship Information |
| C1-ArPerInfo | Person Asset Relationship Information |
| C1-AsRAcTypZ | Asset Relationship Type - Action Map Derivation |

| Script | Description |
|---|---|
| C1-AsRelMain | Asset Relationship - Maintain |
| C1-AsRelTypZ | Asset Relationship Type - Derivation |
| C1-AsTypMain | Asset Type - Maintain |
| C1-AsTypNS | Asset Type - Retrieve Action Details for Display |
| C1-AsTypZ | Asset Type - Action Map Derivation |
| C1-AsnAdjNxt | Adjustment Approval Request - Assign to Next Approval Role |
| C1-AssetAcZ | Asset - Action Map Derivation |
| C1-AssetAcct | Asset - Retrieve Current Account |
| C1-AssetMain | Asset - Maintain |
| C1-AssetRPS | Real Property Asset - Retrieve Details for Display |
| C1-AssetRpNS | Real Property Asset - Retrieve Action Details for Display |
| C1-AssetTypZ | Asset Type - Derivation |
| C1-AssetZ | Asset - Derivation |
| C1-AstRPInfo | Real Property Asset Information |
| C1-AutoOPVal | Overpayment Process - Validate Automatic Overpayment Process |
| C1-BRFActnZ | Business Registration Form - Action Map Derivation |
| C1-BRGClrMsL | Business Registration Form - Clear Missing Info Issues List |
| C1-BRGClrSsL | Business Registration Form - Clear Suspense Issues List |
| C1-BRGCmToDo | Business Reg Form - Complete To Do Entries |
| C1-BRGCrAcTr | Business Reg Form - Create Account/Tax Role |
| C1-BRGCrCC | Business Reg Form - Create Customer Contact |
| C1-BRGCrePer | Business Registration Form - Create Business Person |
| C1-BRGIdenTp | Business Registration Form - Identify Taxpayer |
| C1-BRGMisInf | Business Registration Form - Check Missing Info |

| Script | Description |
|---|---|
| C1-BRGPerBO | Business Registration Form - Retireve Person Type BO Details |
| C1-BRGPerPer | Business Registration Form - Create Business Person to Person link |
| C1-BRGSpVal | Business Reg Form - Validate Suspense Explanation |
| C1-BRGSuToDo | Business Registration Form - Create Suspense To Do Entry |
| C1-BRGValMon | Business Registration Form - Check Issues Lists and Transition to Next State |
| C1-BRGValPP | Business Registration Form - Validate Business Person to Person link |
| C1-BRGWaitLo | Business Registration Form - Create To Do if Waiting for Information Too Long |
| C1-BRGWtVal | Business Reg Form - Generic BO Status Monitor |
| C1-BalDtls | Control Central - Find Balance for Balance Details Zone |
| C1-BusRFNS | Business Registration Form - Retrieve Action Details for Display |
| C1-BusRFS | Business Registration Form - Retrieve Details for Display |
| C1-BusRegDSS | Business Registration Form Type - Retrieve Details for Display |
| C1-CCActnZ | Collection Case - Action Map Derivation |
| C1-CCAdCoAgR | Collection Case - Add Collection Agency Referral |
| C1-CCAdCustC | Collection Case - Add Customer Contact |
| C1-CCAdPayPl | Collection Case - Add Pay Plan |
| C1-CCCAgcyR | Standard Collection Case - Cancel Agency Referrals |
| C1-CCSLToDo | Standard Collection Case - Create To Do if Sent Letter Waiting Time Too Long |
| C1-CCTActnZ | Collection Case Type - Action Map Derivation |
| C1-CCTransfr | Collection Case Transfer |
| C1-CFFilePer | Overpayment Process - Carry Forward to a Future Filing Period |
| C1-CalIndTax | Calculate Tax Amount using a rate |

| Script | Description |
| --- | --- |
| C1-CalcIntRF | Overpayment Process - Calculate Interest Using a Rate Factor |
| C1-CalcIntRt | Overpayment Process - Calculate Interest Using a Rate-Able Adjustment |
| C1-CanFrmAdj | Cancel Form Adjustments |
| C1-CancFrmAd | Tax Form - Cancel Form Adjustments |
| C1-CheckOTWv | Waiver - Prevent Changes to Waiver Amount after Pending status |
| C1-CheckWaiv | Waiver - Prevent Changes to Waiver after Pending status |
| C1-ChgPayDat | Change Payment Effective Date |
| C1-ChkAcTxRl | Individual Income EZ Tax Form - Check Account/Tax Role Existence |
| C1-ChkBalChg | Overpayment Process - Check for Obligation Balance Change |
| C1-ChkFBHSt | Form Batch Header - Check Status |
| C1-ChkObExst | Check Obligation Existence for a Tax Form |
| C1-ChkPICtrl | P&I Control - Check P&I Control Status |
| C1-ChkReqRel | Check Required Relationships |
| C1-ChkSchPay | Check Payment Plan Scheduled Payments |
| C1-ChkSngRel | Check Single-Only Relationships |
| C1-ChkSpExst | Individual Income EZ Tax Form - Check Spouse Existence |
| C1-ChkTpExst | Individual Income EZ Tax Form - Check Taxpayer Existence |
| C1-CkNCnAsFt | Check Non-Cancelled Assessment FT |
| C1-ClearRsn | Tax Form - Clear Reasons for Transfer/Adjust/Reversal |
| C1-ClsCollCs | Close Collection Case |
| C1-CmpTxFrm | Tax Form - Complete a Form Transfer/Adjust |
| C1-CmplToDo | Tax Form - Complete ToDo Entries |
| C1-ColCaseOd | Collection Case - Check if Linked Overdue Processes Exist |
| C1-ColCaseZ | Collection Case - Derivation |
| C1-ColCsGoTo | Collection Case - Go to Most Recent Collection Case |

| Script | Description |
| --- | --- |
| C1-ColCsTyNS | Collection Case Type - Retrieve Action Details for Display |
| C1-ColCsTypZ | Collection Case Type - Derivation |
| C1-CreAssmnt | Individual Income Tax EZ TF - Create Individual Income Assessment |
| C1-CreIndOb | Individual Income Tax EZ Form - Create Individual Income Obligation |
| C1-CreOvpy | Individual Income EZ Tax Form - Create Overpayment Process |
| C1-CreSpAcTx | Individual Income EZ Tax Form - Create Spouse / Account / Tax Role |
| C1-CreTxCrdt | Individual Income Tax EZ Form - Create Individual Income Tax Credit |
| C1-CreTxFrCC | Tax Form - Create Customer Contact |
| C1-CreateRef | Overpayment Process - Create Refund FT |
| C1-CrteTaxRl | Create Tax Role |
| C1-DCPVList | Debt Category Priority - Validate List |
| C1-DbCPrActZ | Debt Category Priority - Action Map Derivation |
| C1-DbCatActZ | Debt Category - Action Map Derivation |
| C1-DbCtPrAct | Debt Category Priority - Retrieve Action Details for Display |
| C1-DbtCatPrZ | Debt Category Priority - Derivation |
| C1-DebCatAct | Debt Category - Retrieve Action Details for Display |
| C1-DebtCatZ | Debt Category - Derivation |
| C1-DeleteAdj | Delete Rejected Adjustment(s) |
| C1-DetAction | Overpayment Process - Determine Action on Overpayment |
| C1-DetApprvs | Adjustment Approval Request - Determine Approvers |
| C1-DetIntDt | Overpayment Process - Determine Interest Start Date |
| C1-DetTaxBal | Control Central - Wraps business service that determines taxpayer balance |
| C1-EntrRFTy | Registration Form - Select Form Type |
| C1-EntrTFTy | Tax Form - Select Form Type |
| C1-EntrWty | Waiver - Select Customer and Waiver Type |

| Script | Description |
| --- | --- |
| C1-ErrAAgcyR | Standard Collection Case - Error if Active Agency Referral Exists |
| C1-ExpCardLe | Activity Request - Auto Pay Expiring Credit Card Notice |
| C1-ExpCreDis | Activity Request - Retrieve Expiring Credit Cards Request Details for Display |
| C1-ExpCreDsp | Activity Type - Expiring Credit Card Type Retrieve Details for Display |
| C1-ExpCrePrv | Activity Request - Preview Expiring Credit Cards |
| C1-ExstChrgs | Waiver - Check if there are waivers for adjustments |
| C1-FBHActnZ | Form Batch Header - Action Map Derivation |
| C1-FBHAddLog | FormBatchHeader-AddUserLogEntry |
| C1-FBHFCntR | Form Batch Header - Total Number of Forms Count Required |
| C1-FBHFCntV | Form Batch Header - Compare Form Count to Actual Forms & Compare Form Types Count to Actual Forms |
| C1-FBHIdVal | Form Batch Header - Validate Form Batch Header Id |
| C1-FBHInfo | FormBatchHeaderInformation |
| C1-FBHMFrm | FormBatchHeader-FormMaintain |
| C1-FBHMaint | FormBatchHeader-Maintain |
| C1-FBHPost | FormBatchHeader-PostProcessing |
| C1-FBHSbTyV | Form Batch Header - Validate Form Sub type |
| C1-FBHSeTyV | Form Batch Header - Validate Form Batch Header Select Type |
| C1-FBHVQF | Form Batch Header - Validate Query Filters |
| C1-FBHdrNS | Form Batch Header - Retrieve Action Details for Display |
| C1-FBHdrZ | FormBatchHeader-Derivation |
| C1-FT-Nav | Financial Transaction - Navigate to FT Maintenance Page |
| C1-FTDtls | ControlCentral-RetrieveFTDetails |
| C1-FndTrfPay | Find/TransferPayment |

| Script | Description |
|--------|-------------|
| C1-FormTypeM | Form Type - Maintain (BPA Script) |
| C1-FreezeAdj | Freeze Approved Adjustment(s) |
| C1-FrmBHDisp | Form Batch Header - Retrieve Details for Display |
| C1-FrmTyInfo | Form Type Information |
| C1-FrmTyList | Form Type - Build Active Form Type List |
| C1-FrmTyNS | Form Type - Retrieve BO Next States |
| C1-FrmTyZ | Form Type - Derivation |
| C1-GoToTxFrm | Tax Form - Go to Selected Tax Form |
| C1-GoToWaiv | Waiver - Go to Selected Waiver |
| C1-INTyDisp | Individual Income Tax Form Type - Retrieve Details for Display |
| C1-INTyPre | Individual Income Tax Form Type - Pre-processing |
| C1-ITFClrMsL | Individual Income EZ Tax Form - Clear Missing Issue List |
| C1-ITFClrSsL | Tax Form - Clear Suspense Issue List |
| C1-ITFCrePer | Individual Income EZ Tax Form - Create Person |
| C1-ITFDisp | Individual Income EZ Tax Form - Retrieve Details for Display |
| C1-ITFPost | Individual Income EZ Tax Form - Post-processing |
| C1-ITFPre | Individual Income EZ Tax Form - Pre-processing |
| C1-ITFTyVal | Individual Income EZ Tax Form Type - Validate Tax Form Type |
| C1-IniFrmAdj | Tax Form - Initiate Form Adjust |
| C1-IniFrmTrf | Tax Form - Initiate Form Transfer |
| C1-InitOvrpy | Overpayment Process - Initiate Overpayment Process |
| C1-InvToDo | Standard Collection Case - Create Investigation To Do |
| C1-MainAProf | Approval Profile - Maintain |
| C1-MainAcTyp | Activity Type - Maintain |
| C1-MainColCs | Collection Case - Maintain |
| C1-MainColTy | Collection Case Type - Maintain |

| Script | Description |
| --- | --- |
| C1-MainDPrio | Debt Category Priority - Maintain |
| C1-MainDbCat | Debt Category - Maintain |
| C1-MainFrTyC | Form Type - Child Form Type Maintain (BPA Script) |
| C1-MainFrTyF | Form Type - Filing Period Maintain (BPA Script) |
| C1-MainOPPrc | Overpayment Process - Maintain |
| C1-MainOPTyp | Overpayment Process Type - Maintain |
| C1-MainPerTy | Person Type - Maintain |
| C1-MainTxRle | Tax Role - Maintain |
| C1-MainTxTyp | Tax Type - Maintain |
| C1-NotToExcV | Monthly Charge P&I Rule - Validate Not To Exceed Fields |
| C1-NtfyAppr | Notify Approver |
| C1-ONWInfo | Waiver - Ongoing Waiver Information |
| C1-OPActnZ | Overpayment Process - Action Map Derivation |
| C1-OPCmpToDo | Complete To Do Entries For Overpayment Process |
| C1-OPEmailGT | Overpayment Process - Go To Overpayment Portal from Email |
| C1-OPTActnZ | Overpayment Process Type - Action Map Derivation |
| C1-OPValidte | Overpayment Process - Validate Automatic Overpayment Process |
| C1-OTWInfo | Waiver - One Time Waiver Information |
| C1-OTWaivS | One Time Waiver - Retrieve Details for Display |
| C1-ObEvtLog | Create Log and Recalc P&I when Overriding Due Date |
| C1-OblAsmAmt | Determine Amounts for Obligation / Assessments |
| C1-OblBalChg | Overpayment Process - Check for Obligation Balance Change - Approval In Progress |
| C1-OblCreCC | Create Customer Contact |
| C1-OblLevFee | Levy a Fee |

| Script | Description |
|--------|-------------|
| C1-OblValFP | Obligation - Validate Obligation Filing Period |
| C1-ObligExst | Individual Income EZ Tax Form - Check Individual Income Obligation Existence |
| C1-OffstCred | Overpayment Process - Offset Credit to Other Obligations |
| C1-OnWaivS | Ongoing Waiver - Retrieve Details for Display |
| C1-OpCCSAlrt | Highlight Open Collection Cases |
| C1-OpCreToDo | Create To Do for Issues |
| C1-OpPrcInfo | Overpayment Process - Information |
| C1-OpTyNxtSt | Overpayment Process Type - Retrieve Action Details for Display |
| C1-OpyApTime | Overpayment Process - Check for Overpayment Approval Timeout |
| C1-OpyAppDsp | Overpayment Process - Overpayment Approval Display |
| C1-OpyOptV | Overpayment Process - Select Overpayment Process Type Validation |
| C1-OverProcS | Overpayment Process - Retrieve Details for Display |
| C1-OverProcZ | Overpayment Process - Derivation |
| C1-OvpAsnApr | Overpayment Process - Assign to Next Approver |
| C1-OvpyAppEm | Overpayment Process - Create Email |
| C1-OvpyNxtSt | Overpayment Process - Retrieve Action Details for Display |
| C1-OvpyTyLst | Overpayment Process Type - Build Overpayment Process Type List |
| C1-OvrPrQryV | Overpayment Process - Validate Query Filters |
| C1-OvrPrcGT | Overpayment Process - Go to Most Recent Overpayment Process |
| C1-OvrPrcTyZ | Overpayment Process Type - Derivation |
| C1-OvrpyAppT | Overpayment Process - Overpayment Approval Visibility |
| C1-PCtrlMain | P&I Control - Maintain |
| C1-PCtrlNS | P&I Control - Retrieve BO Next States |

| Script | Description |
| --- | --- |
| C1-PCtrlObTy | P&I Control - Check if Linked to an Obligation Type |
| C1-PCtrlZ | P&I Control - Derivation |
| C1-PICAddLog | P&I Control - Add User Log Entry |
| C1-PICPost | P&I Control - Post-processing |
| C1-PICPre | P&I Control - Pre-processing |
| C1-PIRuleReq | Standard P&I Control - Check P&I Control's Rules |
| C1-PRlActnZ | P&I Rule - Action Map Derivation |
| C1-PRuleAct | P&I Rule - Retrieve Action Details for Display |
| C1-PRuleMain | P&I Rule - Maintain |
| C1-PRuleZ | P&I Rule - Derivation |
| C1-PayAsmObl | Pay an Assessment or an Obligation |
| C1-PayDebtCt | Set Debt Category for Refund Payment |
| C1-PayPPlan | Pay a Payment Plan |
| C1-PenFBHLst | Form Batch Header - Build Pending Form Batch Header List |
| C1-PerTypAcZ | Person Type - Action Map Derivation |
| C1-PerTypAct | Person Type - Retrieve Action Details for Display |
| C1-PerTypeZ | Person Type - Derivation |
| C1-PreAsstRP | Real Property Asset - Pre-processing |
| C1-PreBusRF | Business Registration Form - Pre-processing |
| C1-RFFTyV | Registration Form - Validate Form Type |
| C1-RFSTyV | Registration Form - Validate Selection Type |
| C1-RMC-DCReq | Monthly Charge P&I Rule - Debt Category Required |
| C1-RMC-VCtrl | Monthly Charge P&I Rule - Validate P&I Control |
| C1-RMCInfo | Monthly Charge P&I Rule - Information |
| C1-RPAsTyS | Real Property Asset Type - Retrieve Details for Display |
| C1-RSC-DCReq | Simple Calculation P&I Rule - Debt Category Required |

| Script | Description |
| --- | --- |
| C1-RSC-VCtrl | Simple Calculation P&I Rule - Validate P&I Control |
| C1-RSCInfo | SimpleCalculationP&IRule-Information |
| C1-ReTypMain | AssetRelationshipType-Maintain |
| C1-RegFrmNS | Registration Form - Retrieve BO Next States |
| C1-RegFrmZ | RegistrationForm-Derivation |
| C1-RejOvrpy | OverpaymentProcess-RejectProcessing |
| C1-RelWaiver | Waiver - Check if there are waivers linked to the adjustment char entities |
| C1-ReqLetter | ActivityRequest-CreateLetter |
| C1-ReqValTyp | ActivityRequest-ValidateActivityType |
| C1-RgFrmALog | RegistrationForm-AddUserLogEntry |
| C1-RgFrmGoTo | Registration Form - Go to most recent registration form |
| C1-RgFrmInfo | RegistrationFormInformation |
| C1-RgFrmMain | RegistrationForm-Maintain |
| C1-RqUsrLgAd | ActivityRequest-AddUserLogEntry |
| C1-SCC-Val | StandardCollectionCaseValidation |
| C1-SCCT-Val | StandardCollectionCaseTypeValidation |
| C1-SUTChkOb | Sales and Use Short Tax Form - Check Obligation Existence |
| C1-SUTCreAs | Sales and Use Short Tax Form - Create Assessment |
| C1-SUTCreOb | Sales and Use Short Tax Form - Create Obligation |
| C1-SUTDisp | Sales and Use Short Tax Form - Retrieve Details for Display |
| C1-SUTPre | Sales and Use Short Tax Form - Pre-processing |
| C1-SUTVal | SalesandUseShortTaxForm-Validate |
| C1-SUTyDisp | Sales and Use Short Tax Form Type - Retrieve Details for Display |
| C1-SUTyInfo | Sales and Use Short Tax Form Type - Information |
| C1-SUTyPre | Sales and Use Short Tax Form Type - Pre-processing |

| Script | Description |
| --- | --- |
| C1-SdShwFTZn | FormType-ShouldDisplayZoneinPortal |
| C1-SdShwRlZn | P&IRule-ShouldDisplayZoneinPortal |
| C1-SelOblOPT | Overpayment Process - Select Overpayment Process Type |
| C1-StartAppr | OverpaymentProcess-StartApproval |
| C1-StndCCAPP | StandardCollectionCase-AddaPayPlan |
| C1-StndCCAg | Standard Collection Case - Add a Collection Agency Referral |
| C1-StndCCD | Standard Collection Case - Retrieve Details for Display |
| C1-StndCCNS | Standard Collection Case - Retrieve Action Details for Display |
| C1-StndCCSL | StandardCollectionCase-SendLetter |
| C1-StndCCTD | Standard Collection Case Type - Retrieve Details for Display |
| C1-StndCCTrf | Standard Collection Case - Transfer Collection Case |
| C1-StopPayP | StandardCollectionCase-StopPayPlan |
| C1-TFActnZ | TaxForm-ActionMapDerivation |
| C1-TFFTyV | TaxForm-ValidateFormType |
| C1-TFrmTyVal | FormType-ValidateTaxFormType |
| C1-TRoleOblT | TaxRole-CheckifLinkedtoObligations |
| C1-TRoleQryV | TaxRole-ValidateTaxRoleQueryFilters |
| C1-TRoleZ | TaxRole-Derivation |
| C1-TTVarCVal | TaxType-ValidateVariableCalendar |
| C1-TaxFormGT | TaxForm-Gotomostrecenttaxform |
| C1-TaxFrmNS | TaxForm-RetrieveBONextStates |
| C1-TaxFrmZ | TaxForm-Derivation |
| C1-TaxRlActZ | TaxRole-ActionMapDerivation |
| C1-TaxRleAct | Tax Role - Retrieve Action Details for Display |
| C1-TaxRleGT | TaxRole-GotoMostRecentTaxRole |
| C1-TaxTyActZ | TaxType-ActionMapDerivation |
| C1-TaxTypAct | Tax Type - Retrieve Action Details for Display |
| C1-TaxTypeZ | TaxType-Derivation |

| Script | Description |
|--------|-------------|
| C1-TrFrm | Form Batch Header - Transfer Form |
| C1-TranApprv | Overpayment Process - Transition to Approve |
| C1-TransAppr | Overpayment Process - Transition to Approved |
| C1-TransFBHV | Form Batch Header - Validate Transfer Form Batch Header |
| C1-TrgMonRvw | Trigger Overdue Monitor Review |
| C1-TrgPPRvw | Trigger Pay Plan Review |
| C1-TrnFrPToV | Tax Form - Transition from Pending to Validate |
| C1-TrnFrmV | Tax Form - Transition from Validate |
| C1-TrnToVal | Tax Form - Transition to Validate if No Missing Information |
| C1-TxCreToDo | Tax Form - Create ToDo for Suspense |
| C1-TxFNS | Tax Form - Retrieve Action Details for Display |
| C1-TxFrCheck | Tax Form - Check If Related Tax Form Exists |
| C1-TxFrMaint | Tax Form - Maintain |
| C1-TxFrmInfo | Tax Form Information |
| C1-TxRVEffDt | Tax Role - Validate Filing Calendar Effective Date |
| C1-TxRlFCReq | Tax Role - Validate Variable Calendar |
| C1-TxRlFlPrd | Tax Role - Retrieve Effective Filing Period |
| C1-TxRlOvrlp | Tax Role - Variable Calendar Tax Role Validate Overlap |
| C1-TxRlVCInf | Tax Role - Variable Calendar Tax Role Information |
| C1-TxRleGoTo | Tax Role - Go to Selected Tax Role |
| C1-TxRlePreS | Tax Role - Preprocessing |
| C1-UndoTfrAd | Tax Form - Undo Transfer/Adjust |
| C1-VCTxRlPrA | Variable Calendar Tax Role - Pre-processing |
| C1-VCTxRlPre | Variable Calendar Tax Role - Pre-processing |
| C1-ValActTyp | Activity Type Validation |

| Script | Description |
| --- | --- |
| C1-ValAdReTy | Asset Type - Validate Address Relationship Type |
| C1-ValAssetQ | Asset - Validate Query Filters |
| C1-ValColCsQ | Collection Case Query Zone - Validate Query Filters |
| C1-ValFRTyQ | Form Type - Validate Query Filters |
| C1-ValFrmFil | Tax Form - Validate Form Filing |
| C1-ValInFrm | Individual Income EZ Tax Form - Validate Individual Income Tax |
| C1-ValIssue | Tax Form - Validate Form Suspense Issues |
| C1-ValOblTyp | Asset Type - Validate Obligation Types |
| C1-ValRgFrmQ | Registration Form - Validate Query Filters |
| C1-ValTaxFrm | Tax Form - Validate Query Filters |
| C1-ValTxForm | Tax Form - Validates fields that are common to tax form. |
| C1-ValWaivQ | Waiver - Validate Query Filters |
| C1-ValWaiver | Waiver - Check Ongoing Waiver |
| C1-ValidOPT | Overpayment Process Type - Validate Automatic Overpayment Process Type |
| C1-VarCalTRD | Variable Calendar Tax Role - Retrieve Details for Display |
| C1-WaTyAddLg | Waiver Type - Add User Log Entry |
| C1-WaitTLong | Tax Form - Create To Do if Waiting for Information Too Long |
| C1-WaivHdrNS | Waiver - Retrieve BO Next States |
| C1-WaivMaint | Waiver - Maintain |
| C1-WaivReCPI | Waiver - Recalculate P&I |
| C1-WaivTyIni | Build Active Waiver Type List |
| C1-WaivTyNS | Waiver Type - Retrieve BO Next States |
| C1-WaivTyV | Waiver - Validate selected Waiver Type |
| C1-WaivTypZ | Waiver Type - Derivation |
| C1-WaivTypeM | Waiver Type - Maintain |
| C1-WaivZ | Waiver - Derivation |
| C1-WrOffOvPy | Overpayment Process - Write Off Overpayment |
| C1-WvAddLog | Waiver - Add User Log Entry |

## To do Type

The following To Do types are new to V2.2.0.

| To Do Type | Description |
| --- | --- |
| C1-ACTRQ | Activity Request Monitor (Deferred) Errors |
| C1-ACTTY | Activity Type Monitor Errors |
| C1-ADAPP | Adjustments Requiring Approval |
| C1-AGCY | Collection Case Agency Referral Waiting Too Long |
| C1-APRPR | Approval Request Monitor Errors |
| C1-APRTR | Approval Request Monitor (Deferred) Errors |
| C1-ARQPR | Activity Request Monitor Errors |
| C1-ASRPR | Asset Relationship Monitor Errors |
| C1-ASTPR | Asset Monitor Errors |
| C1-ATYPR | Asset Type Monitor Errors |
| C1-CALPI | Calculate Penalty and Interest Errors |
| C1-CCSL | Collection Case Sent Letter Waiting Too Long |
| C1-CLCPR | Collection Case Monitor Errors |
| C1-CLCTY | Collection Case Type Monitor Errors |
| C1-FBHM | Form Batch Header Monitor Errors |
| C1-FBHMD | Form Batch Header Monitor Errors (Deferred) |
| C1-FRMTY | Form Type Monitor Errors |
| C1-OPMON | Overpayment Process Monitor Errors |
| C1-OVAPP | Overpayments Requiring Approval |
| C1-OVISS | Overpayment Process Issues Detected |
| C1-OVPTY | Overpayment Process Type Monitor Errors |
| C1-OVPYX | Overpayment Processes Canceled for Underpaid Obligations |
| C1-PICTL | P&I Control Monitor Errors |
| C1-PINV | Collection Case Pending Investigation |
| C1-RGFRD | Registration Form Monitor (Deferred) Errors |
| C1-RGFRM | Registration Form Monitor Errors |

| To Do Type | Description |
|---|---|
| C1-SUSRG | Suspended Registration Forms |
| C1-SUSTX | Suspended Tax Forms |
| C1-TXMTD | Tax Form Monitor Errors (Deferred) |
| C1-TXMTR | Tax Form Monitor Errors |
| C1-WAIV | Waiver Monitor Errors |
| C1-WATRG | Registration Form Waiting for Information Too Long |
| C1-WATTX | Tax Forms Waiting for Information Too Long |
| C1-WAVTY | Waiver Type Monitor Errors |

## UI Map

The following UI Maps are Oracle Enterprise Taxation Management owned system data in V2.2.0.

| Map | Description |
|---|---|
| C1-ActivityRequestActions | Activity Request - Actions |
| C1-ActivityRequestUserLogAdd | Activity Request - Add User Log Entry |
| C1-ActivityTypeActions | Activity Type - Actions |
| C1-AddCollectionCaseTypUserLog | Collection Case Type - Add User Log Entry |
| C1-AddCollectionCaseUserLog | Collection Case - Add User Log Entry |
| C1-AddFormBatchHeaderUserLog | Form Batch Header - Add User Log Entry |
| C1-AddFormTypeLog | Form Type - Add User Log Entry |
| C1-AddWaiverUserLog | Waiver - Add User Log Entry |
| C1-AdjustmentAProfAddUpdate | Adjustment Approval Profile - Maintenance |
| C1-AdjustmentAProfDisplay | Adjustment Approval Profile - Display |
| C1-AdjustmentAReqDisplay | Adjustment Approval Request - Display |
| C1-ApprovalProfileActions | Approval Profile - Actions |
| C1-ApprovalRequestRejectConfM | Approval Request - Select Reject Reason |
| C1-ApprovalRequestUserLogInput | Approval Request - Add User Log Entry |
| C1-AssetAddUserLog | Asset - Add User Log Entry |
| C1-AssetRelAddUserLog | Asset Relationship - Add User Log Entry |
| C1-AssetRelTypeActions | Asset Relationship Type - Actions |
| C1-AssetRelTypeSimpleMaint | Asset Relationship Type - Maintenance |

| Map | Description |
| --- | --- |
| C1-AssetRelationshipMaint | Asset to Asset Relationship - Maintenance |
| C1-AssetSearch | Asset to Asset Relationship - Related Asset Search |
| C1-AssetTypeActions | Asset Type - Actions |
| C1-AssetTypeAddUserLog | Asset Type - Add User Log Entry |
| C1-AssetTypeRealProperty | Real Property Asset Type - Display |
| C1-AssetTypeRealPropertyMaint | Real Property Asset Type - Maintenance |
| C1-BusAddDemographicInfoAddUpd | Business Registration Demographic Info (Bus) - Maintenance |
| C1-BusRFActions | Business Registration Form - Actions |
| C1-BusRegFormTypeAddEdit | Business Registration Form Type - Maintenance |
| C1-BusRegFormTypeDisplay | Business Registration Form Type - Display |
| C1-BusinessRegForm | Business Registration Form - Display |
| C1-BusinessRegFormAddUpdate | Business Registration Form - Maintenance |
| C1-CancelActivityRequest | Activity Request - Cancel |
| C1-CancelBusRegForm | Business Registration Form - Select Cancel Reason |
| C1-ChangePayEffDt | Change Payment Effective Date |
| C1-CollCaseAddAgcyReferral | Collection Case - Add Collection Agency Referral |
| C1-CollCaseTransfer | Collection Case Transfer |
| C1-CollectionCaseQuery3Filter | Collection Case - Filter by Person ID and Creation Date |
| C1-CollectionCaseTypeActions | Collection Case Type - Actions |
| C1-ControlCentralAcctBalInfo | Control Central - Account Balance Information |
| C1-ControlCentralTxpyrBalInfo | Control Central - Taxpayer Balance Information |
| C1-DebtCatActions | Debt Category - Actions |
| C1-DebtCatMaint | Debt Category - Maintenance |
| C1-DebtCatPrioActions | Debt Category Priority - Actions |
| C1-DebtCatPrioMaint | Debt Category Priority - Maintenance |
| C1-DepositConfirmM | Overpayment Process - Deposit/Draft Confirmation |
| C1-EnterActivityType | Activity Request - Select Activity Type |

| Map | Description |
| --- | --- |
| C1-EnterFormSubType | Form Batch Header - Select Form Sub Type |
| C1-ExpiringCreditCardsPreview | Expiring Credit Cards Request - Preview |
| C1-ExpiringCreditCardsReqDisp | Expiring Credit Cards Request - Display |
| C1-ExpiringCreditCardsReqMaint | Expiring Credit Cards Request - Maintenance |
| C1-ExpiringCreditCardsTypDisp | Expiring Credit Cards Activity Type - Display |
| C1-ExpiringCreditCardsTypMaint | Expiring Credit Cards Activity Type - Maintenance |
| C1-FBHSelectionType | Form Batch Header - Enter Selection Type |
| C1-FbhActions | Form Batch Header - Actions |
| C1-FbhDisplay | Form Batch Header Manual Data Entry - Display |
| C1-FormBatchHeaderAddUpdate | Form Batch Header Manual Data Entry - Maintenance |
| C1-FormBatchHeaderQuery1Filter | Form Batch Header - Filter by Creation Date, Status |
| C1-FormBatchHeaderQuery2Filter | Form Batch Header - Filter by External Form Batch ID |
| C1-FormBatchHeaderQuery4Filter | Form Batch Header - Filter by Payment Amount |
| C1-FormPreparerInfo | Form Preparer Information - Display |
| C1-FormPreparerInfoAddUpd | Form Preparer Information - Maintenance |
| C1-FormTypeActions | Form Type - Actions |
| C1-FormTypeAddEditChildFormTyp | Form Type - Form Type / Child Tax Type Maintenance |
| C1-FormTypeAddEditFilingPeriod | Form Type - Form Type / Filing Period Maintenance |
| C1-FormTypeAddEditObjectHeader | Form Type "Add/Edit" Header |
| C1-FormTypeQuery1Filter | Form Type - Filter by Form Type |
| C1-FormTypeQuery2Filter | Form Type - Filter by Description |
| C1-FormTypeQuery4Filter | Form Type - Filter by Filing Calendar/ Filing Period/Status |
| C1-FormTypeQuery5Filter | Form Type - Filter by Subtype / Date / Status |
| C1-IndDemographicInfo | Individual Income EZ Demographic Information - Display |

| Map | Description |
|-----|-------------|
| C1-IndDemographicInfoAddUpd | Individual Income EZ Demographic Information - Maintenance |
| C1-IndIncomeEZAddUpd | Individual Income EZ Tax Form Maintenance |
| C1-IndIncomeEZDisplay | Individual Income EZ Tax Form - Display |
| C1-IndIncomeEZTaxFormTy | Individual Income EZ Tax Form Type - Display |
| C1-IndIncomeEZTaxFormTyAddUpd | Individual Income EZ Tax Form Type - Maintenance |
| C1-IndIncomeLineItems | Individual Income EZ Tax Form Line Items - Display |
| C1-IndIncomeTaxLineItemsAddUpd | Individual Income EZ Tax Form Line Items - Maintenance |
| C1-IssuesList | Issues List |
| C1-IssuesListWithGoTo | Issues List With Go To Functionality |
| C1-LocationRelationshipMaint | Location Asset Relationship - Maintenance |
| C1-LocationSearch | Location to Asset Relationship - Related Location Search |
| C1-MlAddDemographicInfoAddUpd | Business Registration Demographic Info (Mail) - Maintenance |
| C1-MonthlyChargePIRuleAddUpd | Monthly Charge P&I Rule - Maintenance |
| C1-OneTimeWaiverAddUpd | One Time Waiver - Maintenance |
| C1-OneTimeWaiverDisp | One Time Waiver - Display |
| C1-OneTimeWaiverTypeAddUpd | One Time Waiver Type - Maintenance |
| C1-OngoingWaiverAddUpd | Ongoing Waiver - Maintenance |
| C1-OngoingWaiverDisp | Ongoing Waiver - Display |
| C1-OngoingWaiverTypeAddUpdate | Ongoing Waiver Type - Maintenance |
| C1-OvpyTypAutoCrdRefMaint | Individual Taxpayer Overpayment Process Type - Maintenance |
| C1-OvrpayProcActions | Overpayment Process - Actions |
| C1-OvrpayProcAddUserLog | Overpayment Process - Add User Log Entry |
| C1-OvrpayProcQueryByAccountId | Overpayment Process - Filter by Acct ID/ Process Type/Status |
| C1-OvrpayProcQueryByCreateDate | Overpayment Process - Filter by Creation Date, Type & Status |
| C1-OvrpayProcQueryByName | Overpayment Process - Filter by Person Name/Person Type/ID |

| Map | Description |
| --- | --- |
| C1-OvrpayProcSelectOvrpayType | Overpayment Process - Select Overpayment Process Type |
| C1-OvrpayProcTypeAddUserLog | Overpayment Process Type - Add User Log Entry |
| C1-OvrpyAppRejDisplay | Overpayment Approval - Display |
| C1-OvrpyAppReqRejConfM | Overpayment Process - Select Reject Reason |
| C1-OvrpyProcAutoCredRefDisplay | Overpayment Process - Display |
| C1-OvrpyProcAutoCredRefMaint | Overpayment Process - Maintenance |
| C1-OvrpyProcTypeActions | Overpayment Process Type - Actions |
| C1-PIControlActions | P&I Control - Actions |
| C1-PIControlUserLog | P&I Control - Add User Log Entry |
| C1-PRuleActions | P&I Rule - Actions |
| C1-PersonRelationshipMaint | Person Asset Relationship - Maintenance |
| C1-PersonSearch | Person to Asset Relationship - Related Person Search |
| C1-PersonTypeActions | Person Type - Actions |
| C1-PersonTypeBusMaint | Business Person Type - Maintenance |
| C1-PersonTypeIndMaint | Individual Person Type - Maintenance |
| C1-RealPropertyAssetActions | Real Property Asset - Actions |
| C1-RealPropertyAssetDisplay | Real Property Asset - Display |
| C1-RealPropertyAssetMaint | Real Property Asset - Maintenance |
| C1-RealPropertyObsoleteReason | Real Property Asset - Enter Obsolete Reason |
| C1-RegFormByRcvDtFrmTyStatus | Registration Form - Filter by Receive Date, Form Type,Status |
| C1-RegFormMainInfo | Registration Form Main Information - Display |
| C1-RegFormMainInfoAddUpd | Registration Form Main Information - Maintenance |
| C1-RegFormSelectFormType | Registration Form - Select Form Type |
| C1-RegFormUserLog | Business Registration Form - Add User Log Entry |
| C1-SalesAndUseDemoInfo | Sales and Use Tax Form Demographic Information - Display |
| C1-SalesAndUseDemoInfoAddUpd | Sales and Use Tax Form Demographic Information - Maintenance |

| Map | Description |
|---|---|
| C1-SalesAndUseLineItems | Sales and Use Short Tax Form Line Items - Display |
| C1-SalesAndUseLineItemsAddUpd | Sales and Use Short Tax Form Line Items - Maintenance |
| C1-SalesAndUseTaxForm | Sales and Use Short Tax Form - Display |
| C1-SalesAndUseTaxFormAddUpd | Sales and Use Short Tax Form - Maintenance |
| C1-SalesAndUseTaxFormTy | Sales and Use Short Tax Form Type - Display |
| C1-SalesAndUseTaxFormTyAddUpd | Sales and Use Short Tax Form Type - Maintenance |
| C1-SelectAccountForTaxpayer | Select Account for Taxpayer |
| C1-SelectAssetType | Asset - Select Asset Type |
| C1-SelectLetterCustContactType | Select Letter Customer Contact Type |
| C1-SelectTransferFormBatchHdr | Form Batch Header - Select Transfer Form Batch Header |
| C1-SimpleCalcPIRuleAddUpdate | Simple Calculation P&I Rule - Maintenance |
| C1-StandardCollCaseActions | Standard Collection Case - Actions |
| C1-StandardCollCaseDisplay | Standard Collection Case - Display |
| C1-StandardCollCaseMaint | Standard Collection Case - Maintenance |
| C1-StandardCollCaseTypeDisplay | Standard Collection Case Type - Display |
| C1-StandardCollCaseTypeMaint | Standard Collection Case Type - Maintenance |
| C1-StandardPIControlAddUpdate | Standard P&I Control - Maintenance |
| C1-StndCollCaseUncollectReason | Standard Collection Case - Enter Uncollectible Reason |
| C1-SuspendedBusRegForm | Business Registration- Enter Manual Suspended Info Details |
| C1-TXFrmCancelReason | Tax Form - Cancel Confirmation Map |
| C1-TaxFormAdjustReason | Tax Form - Adjust Confirmation |
| C1-TaxFormMainInfo | Tax Form Main Information - Display |
| C1-TaxFormMainInfoAddUpd | Tax Form Main Information - Maintenance |
| C1-TaxFormQuery1Filter | Tax Form - Filter by Receive Date/Form Type/Status/Filing Ty |
| C1-TaxFormQuery5Filter | Tax Form - Filter by Obligation |
| C1-TaxFormReverseReason | Tax Form - Reverse Confirmation UI Map |
| C1-TaxFormSelectFormType | Tax Form - Select Form Type |

| Map | Description |
| --- | --- |
| C1-TaxFormSelectObligationType | Tax Form - Select Obligation Type |
| C1-TaxFormStates | Tax Form - Actions |
| C1-TaxFormTransferReason | Tax Form - Transfer Confirmation |
| C1-TaxFormUserLog | Tax Form - Add User Log Entry |
| C1-TaxFrmSuspenseReason | Tax Form - Enter Manual Suspense Explanation Map |
| C1-TaxRoleActions | Tax Role Actions |
| C1-TaxRoleQueryFilter | Tax Role - Filter by Person Name, Account ID, Tax Role ID |
| C1-TaxRoleSelectTaxType | Tax Role - Select Tax Type |
| C1-TaxRoleVariableCalDisplay | Variable Calendar Tax Role - Display |
| C1-TaxRoleVariableCalMaint | Variable Calendar Tax Role - Maintenance |
| C1-TaxTypeActions | Tax Type - Actions |
| C1-TaxTypeStandardMaint | Standard Tax Type - Maintenance |
| C1-TaxTypeVariableCalMaint | Variable Calendar Tax Type - Maintenance |
| C1-WaitingForInfoBusRegForm | Business Registration- Enter Manual Waiting For Info Details |
| C1-WaivTyInput | Waiver - Input Waiver Type |
| C1-WaiverQuery2Filter | Waiver - Filter by Account ID, Tax Type and Waiver Type |
| C1-WaiverQuery3Filter | Waiver - Filter by Obligation ID |
| C1-WaiverQuery4Filter | Waiver - Filter by Waiver ID |
| C1-WaiverStates | Waiver - Actions |
| C1-WaiverTypeActions | Waiver Type - Actions |
| C1-WaiverTypeUserLog | Waiver Type - Add User Log Entry |

## Zone

The following new Zones are added to V2.2.0.

| Zone | Zone Type | Description |
| --- | --- | --- |
| C1- RETTXROB | F1-DE-SINGLE | Retrieve Most Recent Obligation of Tax Role |
| C1-ACAGCCOLC | F1-DE-SINGLE | Collection Case - Retrieve Active Collection Agency Referral |
| C1-ACCEX | F1-DE-SINGLE | Forms Processing - Verify if Account Exists |

| Zone | Zone Type | Description |
|------|-----------|-------------|
| C1-ACCTSA | F1-DE-SINGLE | Account-GetObligations |
| C1-ACCTTY | F1-DE-SINGLE | Retrieve Account Type for a Given Account |
| C1-ACCTXROLE | F1-DE-SINGLE | Sales and Use Short Tax Form - Retrieve Tax Role for Account |
| C1-ACMACD | F1-MAPDERV | Activity Type |
| C1-ACMACL | F1-DE-SINGLE | Sample & Submit Request Log |
| C1-ACMACT | F1-DE-SINGLE | Activity Type List |
| C1-ACMARACTN | F1-MAPDERV | Actions |
| C1-ACMARD | F1-MAPDERV | Sample&SubmitRequest |
| C1-ACMATACTN | F1-MAPDERV | Actions |
| C1-ACMCTYPCC | F1-DE-SINGLE | Retrieve Contact Types For Contact Class |
| C1-ACTREQACT | F1-DE-QUERY | Sample & Submit Request Search |
| C1-ACTYPE-SR | F1-DE-SINGLE | Retrieve all Account Type with Account Trans BO |
| C1-ADJFTDET | F1-DE-SINGLE | Retrieve Adjustment FT Details |
| C1-ADJINFO | F1-MAPEXPL | AdjustmentInformation |
| C1-AI-BALINF | F1-MAPEXPL | Credit Allocation Detail |
| C1-APC-ALL | F1-DE-SINGLE | Auto Pay Expiring Credit Cards - All |
| C1-APC-CNT | F1-DE-SINGLE | Auto Pay Expiring Credit Cards - Count |
| C1-APC-PRV | F1-DE-SINGLE | Auto Pay Expiring Credit Cards - Preview |
| C1-APROFACTN | F1-MAPDERV | Actions |
| C1-APROFADJC | F1-DE-SINGLE | Approval Profile's Adjustment Type Existence Check |
| C1-APROFADJT | F1-DE-SINGLE | Approval Profile's Adjustment Types |
| C1-APROFDISP | F1-MAPDERV | Approval Profile |
| C1-APROFQRY | F1-DE-SINGLE | Approval Profile List |
| C1-AREQDISP | F1-MAPDERV | Approval Request |

| Zone | Zone Type | Description |
|------|-----------|-------------|
| C1-AREQLOG | F1-DE | Approval Request Log |
| C1-ARTYPEUSG | F1-DE-SINGLE | Retrieve Asset Relationship Types for a Given Usage |
| C1-ASTSQ1 | F1-DE-QUERY | Related Person Name |
| C1-ASTSQ2 | F1-DE-QUERY | Related Location Address |
| C1-ASTSQ3 | F1-DE-QUERY | Related Asset |
| C1-ASTSQ4 | F1-DE-QUERY | External ID |
| C1-ASTSQ5 | F1-DE-QUERY | Asset ID |
| C1-ASTVALOBT | F1-DE-SINGLE | Retrieve Valid Obligation Types for an Asset Type |
| C1-CCCTLTR | F1-DE-SINGLE | Check if Customer Contact Type is for Letter |
| C1-CCLOGCHTY | F1-DE-SINGLE | Find Collection Case Logs for Char Type |
| C1-CCODPROCS | F1-DE-SINGLE | Retrieve Active Overdue Processes Linked to Collection Case |
| C1-CCOLCOTDT | F1-DE-SINGLE | Check for Open To Do for Collection Case and To Do Type |
| C1-CHKDTINFP | F1-DE-SINGLE | Check If Date Range Within Filing Period |
| C1-CHKTTVCAL | F1-DE-SINGLE | Check If Filing Calendar is a Valid Tax Type Filing Calendar |
| C1-CHKWAIVER | F1-DE-SINGLE | Waiver with same Debt Category / Assessment |
| C1-CI-BALINF | F1-MAPEXPL | Credit Allocation Detail |
| C1-CKOBLPIEX | F1-DE-SINGLE | Check if Obligation P&I Control Exists |
| C1-CLCCLLTR | F1-DE-SINGLE | Collection Case - Check if Last Log is a Letter |
| C1-CLCSQ1 | F1-DE-QUERY | Person Name |
| C1-CLCSQ2 | F1-DE-QUERY | Collection Case ID |
| C1-CLCSQ3 | F1-DE-QUERY | Person ID / Creation Date |
| C1-CLCSQRY | F1-DE-MULQRY | Collection Case Search |
| C1-CLCSTY | F1-MAPDERV | Collection Case Type |
| C1-CLCSTYLST | F1-DE | Collection Case Type List |

| Zone | Zone Type | Description |
| --- | --- | --- |
| C1-COLCASE | F1-MAPDERV | Collection Case |
| C1-COLCASEAC | F1-MAPDERV | Actions |
| C1-COLCASELG | F1-DE | Collection Case Log |
| C1-COLCASEOD | F1-DE-SINGLE | Collection Case Overdue Processes |
| C1-COLCODPT | F1-DE-SINGLE | Count Overdue Processes to Collection Case by Taxpayer |
| C1-COLCSTYAC | F1-MAPDERV | Actions |
| C1-COLCSTYLG | F1-DE | Collection Case Type Log |
| C1-DBCATPRAC | F1-MAPDERV | Actions |
| C1-DBCATPRDM | F1-MAPDERV | Debt Category Priority |
| C1-DBCATPRIF | F1-DE-SINGLE | Debt Category Priority List |
| C1-DEBTCATAC | F1-MAPDERV | Actions |
| C1-DEBTCATDM | F1-MAPDERV | Debt Category |
| C1-DEBTCATIF | F1-DE-SINGLE | Debt Category List |
| C1-DOCLCEXCH | F1-DE-SINGLE | Business Registration Form - Document Locator Existence Check |
| C1-EXCHRGS | F1-DE | Existing Charges |
| C1-EXCHRGSEC | F1-DE-SINGLE | Existing Charges Existence Check |
| C1-FBHACTN | F1-MAPDERV | Actions |
| C1-FBHDR | F1-MAPDERV | Form Batch Header |
| C1-FBHDRFRMS | F1-DE | Included Forms |
| C1-FBHDRLG | F1-DE | Form Batch Header Log |
| C1-FBHQZ | F1-DE-MULQRY | Form Batch Header Search |
| C1-FBHQZ1 | F1-DE-QUERY | Creation Date / Status |
| C1-FBHQZ2 | F1-DE-QUERY | External Form Batch ID |
| C1-FBHQZ3 | F1-DE-QUERY | Form Batch Header ID |
| C1-FBHQZ4 | F1-DE-QUERY | Total Payment Amount |
| C1-FCP-SRCH | F1-DE-SINGLE | Retrieve Filing Periods for a Filing Calendar |
| C1-FRMCHARS | F1-DE-SINGLE | Retrieve Adjustment FK characteristics linked to Tax Form |

| Zone | Zone Type | Description |
|------|-----------|-------------|
| C1-FRMOVPYCH | F1-DE-SINGLE | Retrieve Overpayment Process linked to Tax Form |
| C1-FRMTYPLOG | F1-DE | Form Type Log |
| C1-FRMTYQ1 | F1-DE-QUERY | Form Type |
| C1-FRMTYQ2 | F1-DE-QUERY | Description |
| C1-FRMTYQ3 | F1-DE-QUERY | Tax Type / Obligation Type |
| C1-FRMTYQ4 | F1-DE-QUERY | Filing Calendar / Filing Period / Status |
| C1-FRMTYQ5 | F1-DE-QUERY | Subtype / Date / Status |
| C1-FRMTYST | F1-MAPEXPL | Actions |
| C1-FRTYCH | F1-DE-SINGLE | Form Type / Child Form Type |
| C1-FRTYFP | F1-DE-SINGLE | Form Type / Filing Period |
| C1-FRTYMT | F1-MAPDERV | Form Type |
| C1-FRTYQRY | F1-DE-MULQRY | Form Type Search |
| C1-FTXROBFFP | F1-DE-SINGLE | Find Future Filing Obligation same Tax Role Obl Type |
| C1-GETACTTYP | F1-DE-SINGLE | Retrieve Active Activity Types |
| C1-GETADJTY | F1-DE-SINGLE | Adjustment Type - Get Adj Types for an Adjustment Category |
| C1-GETFRMTYP | F1-DE-SINGLE | Form Type - Get Form Type(s) |
| C1-GETPERFRO | F1-DE-SINGLE | Retrieve Obligations for which a Person is Finan Resp |
| C1-GETRFVAL | F1-DE-SINGLE | Get Effective Rate Factor Value |
| C1-IDTYPE-FR | F1-DE-SINGLE | Retrieve ID Type Format |
| C1-INDCDEXCH | F1-DE-SINGLE | Business Registration Form - Industrial Code Existence Check |
| C1-INVMULREL | F1-DE-SINGLE | Retrieve Invalid Multiple Relationships for an Asset |
| C1-MISSASREL | F1-DE-SINGLE | Retrieve Missing Required Relationships for an Asset |
| C1-OB-ASMTOT | F1-DE-SINGLE | Obligation - Retrieve Total Assessed Amount |

| Zone | Zone Type | Description |
|------|-----------|-------------|
| C1-OBLPENDEP | F1-DE-SINGLE | Check Obligation has Pend Direct Dep |
| C1-OBLT-SRCH | F1-DE-SINGLE | Retrieve Obligation Type |
| C1-OBLTYTXTY | F1-DE-SINGLE | Retrieve Obligation Types for a Given Tax Type |
| C1-OBTXF | F1-DE-SINGLE | Tax Form's Check Tax Form for same Obligation |
| C1-ODCOLCASE | F1-DE-SINGLE | Retrieve Open Collection Case Linked to Overdue Process |
| C1-OPENCOCST | F1-DE-SINGLE | Collection Case - Count Open Cases for Taxpayer by Case Type |
| C1-OPENCOLCS | F1-DE-SINGLE | Retrieve Open Collection Case for Taxpayer & Colln Case Type |
| C1-OPNPPCOLC | F1-DE-SINGLE | Retrieve Open Pay Plans for Collection Case |
| C1-OPTACTN | F1-MAPDERV | Actions |
| C1-OVPACTN | F1-MAPDERV | Actions |
| C1-OVPYPRCQ1 | F1-DE-QUERY | Creation Date / Overpayment Process Type / Status |
| C1-OVPYPRCQ2 | F1-DE-QUERY | Name / Person ID Type / Value / Refund Amount |
| C1-OVPYPRCQ3 | F1-DE-QUERY | Account ID / Overpayment Process Type / Status |
| C1-OVRPAYLOG | F1-DE | OverpaymentProcessLog |
| C1-OVRPAYQRY | F1-DE-MULQRY | OverpaymentProcessSearch |
| C1-OVRPTDISP | F1-MAPDERV | OverpaymentProcessType |
| C1-OVRPTINFO | F1-DE | Overpayment Process Type List |
| C1-OVRPTLOG | F1-DE | Overpayment Process Type Log |
| C1-OVRPYAPP | F1-MAPEXPL | OverpaymentApproval |
| C1-OVRPYDISP | F1-MAPDERV | OverpaymentProcess |
| C1-OVRPYINFO | F1-DE-SINGLE | Retrieve Characteristic Linked to Overpayment Process Log |

| Zone | Zone Type | Description |
| --- | --- | --- |
| C1-OWTYPE-SR | F1-DE-SINGLE | Retrieve Business Person Types |
| C1-PCTRL | F1-MAPDERV | P&I Control |
| C1-PCTRLLG | F1-DE | P&I Control Log |
| C1-PCTRLLIST | F1-DE-SINGLE | P&I Control List |
| C1-PCTRLOBTY | F1-DE-SINGLE | Obligation Types |
| C1-PCTRLOTYC | F1-DE-SINGLE | P&I Control's Obligation Types Existence Check |
| C1-PCTRLRLC | F1-DE-SINGLE | P&I Control - P&I Rules Existence Check |
| C1-PERACCT | F1-DE-SINGLE | Person - Get Accounts |
| C1-PERTYACTN | F1-MAPDERV | Actions |
| C1-PERTYDISP | F1-MAPDERV | Person Type |
| C1-PERTYINFO | F1-DE-SINGLE | Person Type List |
| C1-PHTYPE-FR | F1-DE-SINGLE | Retrieve Phone Number Type Format |
| C1-PICTRLST | F1-MAPEXPL | Actions |
| C1-PRULE | F1-MAPDERV | P&I Rule |
| C1-PRULEACTN | F1-MAPDERV | Actions |
| C1-PRULELIST | F1-DE | P&I Rules |
| C1-RACOLLAGY | F1-DE-SINGLE | Retrieve Active Collection Agencies |
| C1-RECENTCAS | F1-DE-SINGLE | Retrieve Most Recent Collection Case of Taxpayer |
| C1-RELWAIVEC | F1-DE-SINGLE | Existing Waivers Existence Check |
| C1-RELWAIVER | F1-DE | Existing Waivers |
| C1-RENCADJFT | F1-DE-SINGLE | Retrieve Non-Cancelled Adjustment FTs Of Assessment |
| C1-RETACCOBL | F1-DE-SINGLE | Retrieve Non-Cancelled Obligations for an Account |
| C1-RETACCTTR | F1-DE-SINGLE | Retrieve All Tax Roles of Account |
| C1-RETACTXRL | F1-DE-SINGLE | Tax Form - Retrieve Tax Role for Account |
| C1-RETACTYBO | F1-DE-SINGLE | Retrieve Transaction BO code from the Account Type |

| Zone | Zone Type | Description |
|------|-----------|-------------|
| C1-RETADDLOC | F1-DE-SINGLE | Retrieve Real Property Address Location |
| C1-RETADJ | F1-DE-SINGLE | Retrieve Frozen Adjustment for an Assessment |
| C1-RETAPYSRC | F1-DE-SINGLE | Retrieve Bank Routing Number's Auto Pay Source |
| C1-RETASSMNT | F1-DE-SINGLE | Retrieve Assessments for an Obligation |
| C1-RETASTOBL | F1-DE-SINGLE | Retrieve Current Obligation Linked to Asset |
| C1-RETASTYPS | F1-DE-SINGLE | Asset Type - Retrieve Active Asset Types |
| C1-RETBOSTAT | F1-DE-SINGLE | Maintenance Object - Retrieve BO Status |
| C1-RETCGDACT | F1-DE-SINGLE | Retrieve Compliance Review Grace Days from the Account Type |
| C1-RETDBCTPR | F1-DE-SINGLE | Retrieve Debt Category Priorities |
| C1-RETDEBCAT | F1-DE-SINGLE | Retrieve Debt Categories |
| C1-RETFCST | F1-DE-SINGLE | Retrieve Filing Calendar's Start Date |
| C1-RETFLPRD | F1-DE-SINGLE | Filing Period - Retrieve Effective Filing Period |
| C1-RETFRMTYS | F1-DE-SINGLE | Form Type - Retrieve Active Form Types |
| C1-RETFTWAIV | F1-DE-SINGLE | Retrieve Waivers for an Assessment |
| C1-RETOB | F1-DE-SINGLE | Forms Processing - Retrieves the obligation |
| C1-RETOBLAC | F1-DE-SINGLE | Retrieve Account for Obligation |
| C1-RETOBLDET | F1-DE-SINGLE | Retrieve Obligation Details |
| C1-RETOBLNOP | F1-DE-SINGLE | Retrieve account obligations not linked to overpayment proc |
| C1-RETOBLST | F1-DE-SINGLE | Retrieve Obligation's Start Date |
| C1-RETOBNCPP | F1-DE-SINGLE | Payment Plans - Retrieve Obligations not in Pay Plan |

| Zone | Zone Type | Description |
|------|-----------|-------------|
| C1-RETOBTCHV | F1-DE-SINGLE | Retrieve Obligation Type's Characteristic Value |
| C1-RETOVPTYP | F1-DE-SINGLE | Retrieve Active Overpayment Process Types |
| C1-RETPAY | F1-DE-SINGLE | Retrieve Payments Processed Prior to Tax Form Processing |
| C1-RETPAYID | F1-DE-SINGLE | Retrieve Payment Event Id for an AutoPay Staging Id |
| C1-RETPIRULE | F1-DE-SINGLE | P&I Control - Retrieve P&I Rules |
| C1-RETPNDFBH | F1-DE-SINGLE | Form Batch Header - Retrieve Pending Form Batch Headers |
| C1-RETPPCOBL | F1-DE-SINGLE | Retrieve Pay Plan Covered Obligations |
| C1-RETPPOBL | F1-DE-SINGLE | Retrieve Pay Plan Obligations |
| C1-RETRF | F1-DE-SINGLE | Retrieve Most Recent Registration Form of Person |
| C1-RETRFPDDT | F1-DE-SINGLE | Retrieve Return Due Date of Obligation's Filing Period |
| C1-RETRGFRMS | F1-DE-SINGLE | Form Batch Header - Retrieve Registration Forms |
| C1-RETROPPR | F1-DE-SINGLE | Retrieve Most Recent Overpayment Process of Obligation |
| C1-RETSUBFTY | F1-DE-SINGLE | Form Type - Retrieve Form Types by Sub Form Type |
| C1-RETTAXFRM | F1-DE-SINGLE | Retrieve all Tax Forms by obligation |
| C1-RETTAXTYP | F1-DE-SINGLE | Retrieve Obligation Type's Tax Type |
| C1-RETTD | F1-DE-SINGLE | Tax Form's Retrieve To Do Entries |
| C1-RETTF | F1-DE-SINGLE | Retrieve Most Recent Tax Form of Obligation |
| C1-RETTODO | F1-DE-SINGLE | Retrieve ToDo Entries by Type and Drill Key |
| C1-RETTPOBL | F1-DE-SINGLE | Retrieve Main Taxpayer Id of Obligation |

| Zone | Zone Type | Description |
|------|-----------|-------------|
| C1-RETTTVCAL | F1-DE-SINGLE | Retrieve Tax Type Valid Calendars |
| C1-RETTXFRMS | F1-DE-SINGLE | Form Batch Header - Retrieve Tax Forms |
| C1-RETTXRLE | F1-DE-SINGLE | Retrieve Most Recent Tax Role for Account |
| C1-RETTXRLFC | F1-DE-SINGLE | Retrieve Effective Filing Calendar of Tax Role |
| C1-RETTXRLOB | F1-DE-SINGLE | Retrieve Most Recent Obligation for Tax Role |
| C1-RETTYATXR | F1-DE-SINGLE | Retrieve Tax Types Allowing Tax Role |
| C1-RETWAITY | F1-DE-SINGLE | Retrieve Active Waiver Types |
| C1-RETWAIV | F1-DE-SINGLE | Retrieve Waivers for an Obligation |
| C1-RETXAC | F1-DE-SINGLE | Forms Processing - Account Exists for Financially Responsible |
| C1-RETXRL | F1-DE-SINGLE | Forms Processing - Return Tax Role |
| C1-RETYCHTY | F1-DE-SINGLE | Form Type - Retrieve Child Form Type |
| C1-RGFACTN | F1-MAPDERV | Actions |
| C1-RGFRM | F1-MAPDERV | Registration Form |
| C1-RGFRMLG | F1-DE | Registration Form Log |
| C1-RGFRMQ1 | F1-DE-QUERY | Receive Date / Form Type / Status |
| C1-RGFRMQ2 | F1-DE-QUERY | Person Name |
| C1-RGFRMQ3 | F1-DE-QUERY | Address |
| C1-RGFRMQ4 | F1-DE-QUERY | Person ID Type / Value |
| C1-RGFRMQ5 | F1-DE-QUERY | Person Type / Person ID |
| C1-RGFRMQ6 | F1-DE-QUERY | External Form Batch ID / Form Batch Header ID |
| C1-RGFRMQ7 | F1-DE-QUERY | Document Locator |
| C1-RGFRMQRY | F1-DE-MULQRY | Registration Form Search |
| C1-RLTRCCT | F1-DE-SINGLE | Retrieve Letter Customer Contact Types |
| C1-ROBLRETFT | F1-DE-SINGLE | Retrieve Assessment For an Obligation's Return |

| Zone | Zone Type | Description |
|---|---|---|
| C1-RPPOBLTY | F1-DE-SINGLE | Retrieve Pay Plan Obligation Types |
| C1-RRHAGCYR | F1-DE-SINGLE | Collection Agency Referral - Retrieve Latest History |
| C1-RS-SRCH | F1-DE-SINGLE | Retrieve Rate Schedule via Obligation Type's Tax Type |
| C1-RTAOB | F1-DE-SINGLE | Retrieve Obligation for Account and Start Date |
| C1-SUTFPRDEX | F1-DE-SINGLE | Sales and Use Form Ty - Filing Start and End Date Existence |
| C1-TXFRM | F1-MAPDERV | Tax Form |
| C1-TXFRMDLCH | F1-DE-SINGLE | Tax Form -Document Locator Existence Check |
| C1-TXFRMLG | F1-DE | Tax Form Log |
| C1-TXFRMQ1 | F1-DE-QUERY | Receive Date / Form Type / Status / Tax Form Filing Type |
| C1-TXFRMQ2 | F1-DE-QUERY | Person Name |
| C1-TXFRMQ3 | F1-DE-QUERY | Address |
| C1-TXFRMQ4 | F1-DE-QUERY | Person Identifier Type / Value |
| C1-TXFRMQ5 | F1-DE-QUERY | Obligation |
| C1-TXFRMQ6 | F1-DE-QUERY | External Form Batch ID / Form Batch Header |
| C1-TXFRMQ7 | F1-DE-QUERY | Document Locator |
| C1-TXFRMQ8 | F1-DE-QUERY | Account |
| C1-TXFRMREL | F1-DE-SINGLE | Related Tax Form |
| C1-TXFRMRELC | F1-DE-SINGLE | Tax Form - Related Tax Form Existence Check |
| C1-TXFRMST | F1-MAPDERV | Actions |
| C1-TXFRQRY | F1-DE-MULQRY | Tax Form Search |
| C1-TXRLACTN | F1-MAPDERV | Actions |
| C1-TXRLDISP | F1-MAPDERV | Tax Role |
| C1-TXRLEXST | F1-DE-SINGLE | Tax Role - Verify Overlapping Tax Role Exists |
| C1-TXRLOBL | F1-DE-SINGLE | Related Obligations |

| Zone | Zone Type | Description |
|------|-----------|-------------|
| C1-TXRLOBLC | F1-DE-SINGLE | Tax Role's Obligation Existence Check |
| C1-TXRLPRDFC | F1-DE-SINGLE | Retrieve Effective Filing Calendars of Tax Role for a period |
| C1-TXRLQRY | F1-DE-QUERY | Tax Role Search |
| C1-TXTYACCT | F1-DE-SINGLE | Retrieve Tax Types for a Given Account |
| C1-TXTYOBLTY | F1-DE-SINGLE | Retrieve Tax Type for a Given Obligation Types |
| C1-TXTYPACTN | F1-MAPDERV | Actions |
| C1-TXTYPDISP | F1-MAPDERV | Tax Type |
| C1-TXTYPE-RT | F1-DE-SINGLE | Retrieve Tax Types |
| C1-TXTYPINFO | F1-DE-SINGLE | Tax Type List |
| C1-VALOBLSRF | F1-DE-SINGLE | Validate Obligation by Special Role Flag |
| C1-WAHDRS | F1-MAPEXPL | Actions |
| C1-WAIVDISP | F1-MAPDERV | Waiver |
| C1-WAIVERLOG | F1-DE | Waiver Log |
| C1-WAIVERQ1 | F1-DE-QUERY | Person Name / Tax Type / Waiver Type |
| C1-WAIVERQ2 | F1-DE-QUERY | Account ID / Tax Type / Waiver Type |
| C1-WAIVERQ3 | F1-DE-QUERY | Obligation ID |
| C1-WAIVERQ4 | F1-DE-QUERY | Waiver ID |
| C1-WAIVERQRY | F1-DE-MULQRY | Waiver Search |
| C1-WAIVTYST | F1-MAPEXPL | Actions |
| C1-WATYPEDSP | F1-MAPDERV | Waiver Type |
| C1-WATYPELG | F1-DE | Waiver Type Log |
| C1-WTYPELIST | F1-DE | Waiver Type List |

## XAI Inbound Service

The following XAI Inbound Services are new to V2.2.0.

| XAI Inbound Service name | Description |
|--------------------------|-------------|
| C1AdjustmentMaintenance | Adjustment Maintenance |
| CDxPersonMaintenance | Person Maintenance |

# Appendix B

## Upgrades to the Oracle Application Framework Database

This section describes the database upgrade process for the Oracle Utilities Application Framework database from V2.1.0 to V2.2.0. The upgrade process is designed to preserve business logic implemented in ETM 2.1.5 and its associated data and make it usable with the V2.2.0 database schema The changes that do not require data upgrade are not described in this document. The tasks that need to be performed after running the upgrade scripts are included.

The upgrade scripts do not turn on the newly added functionality by default. For new functionality, refer the V2.2.0 User Guides. In the last section of this document you will find a list of the new tables that were added in V2.2.0.

This section includes:

- **Automatic Data Upgrade**
- **Schema Change**
- **New System Data**

# Automatic Data Upgrade

This section describes what the upgrade script will populate in new tables and columns. If custom modification development standards were followed then custom modifications will be preserved..

## Business Object Security

Application Service is added to the Business Object table (F1_BUS_OBJ) to allow BO level security. By the upgrade process the existing customers' BOs will be linked to the Default Application (F1-DFLTS). This service is not secured initially as all user groups in the customer's environment will have access to this application service. Customers can change this column value later if they want to secure a CM owned BO.

## Business Object Instantiation

A new flag Instance Control (INSTANCE_CTRL_FLG) is added to the Business Object table (F1_BUS_OBJ). The valid values are:  Allow New Instances (F1AL) and Do Not Allow New Instances (F1NA). By setting this flag to Do Not Allow New Instances, users can prevent the BO from being instantiated as some BOs are meant to be subclassed and do not contain full implementation of business rules. This is a customizable column.

## Handling Warnings from Script Steps

To manage and expose the warning messages generated by MO in the BPA script, a new Warning Flag (SCR_STEP_WARN_FLG ) is added to the Script Step table. This field is required for the BPA script steps of types invoke BO, invoke BS, or invoke SS. The valid values of this flag are: suppress warnings, warn as error, and pop-up warning.

Existing BPA script steps of types invoke BO, invoke BS, or invoke SS will be populated with a warning flag value of suppress warnings (F1SU).

## Product Owned Data

The Owner (OWNER_FLG) is added to the Business Object, Schema, Algorithm tables in this release. The tables that have Owner added are listed in the Schema Change - Added columns. The existing data in these tables that are not previously released by the product will have Customer Modification (CM) value after upgrade. The data released with the product in these tables are documented in the System Data Change.

## Real-time Web Service Call

A new flag Invocation Type (SENDER_INVOC_TYPE_FLG) is added to specify whether this XAI Sender may be called from the MPL or via the root application as a real-time message. This flag is defaulted to MPL(F1MP) for all existing XAI Senders during the upgrade process.

## Script Engine Version

Script Engine Version Flag (SCR_ENGINE_VER_FLG) is added to the Script table (CI_SCR) to indicate whether the script supports XPATH 1.0 or XPATH 2.0. This flag is defaulted to 1.0 (F110) for all existing CM scripts during the upgrade process.

## Script Step Primary Key field Change

The Script Step table (CI_SCR_STEP) primary key has changed from Script Step Id (SCR_STEP_ID) to Script Code (SCR_CD) and Step Sequence Number (STEP_SEQ_NUM). The Step Sequence Number of existing Script Steps will be populated with Sort Sequence column value.

## UI Map definition

HTML_DEFN column has been moved to F1_MAP table. The column in the F1_MAP_L is no longer used.

## Valid BO Option for a MO

To be available as a BO Option in V2.2.0, the BO Option needs to be associated with the MO of the BO. Prior to V2.2.0 all BO Options were common and not associated with a specific MO. In V2.2.0 only Framework Owned (F1) BO Options are common. Using the upgrade process, the existing customer owned (CM) BO Options will be linked to the MO of each BO via the MO Option Type Valid BO Option.

## XAI Inbound Service Description

A new long description (DESCRLONG) is added to XAI Inbound Service (CI_XAI_IN_SVC_L). The existing description from DESCR254 column will be moved to this column.

## XAI Authentication

Four new XAI options are added for XAI Soap Message Authentication: System Authentication Class (SDAC), System Authentication Profile (SDAP), Attempt Classic Authentication (SDCA) and Enforce SOAP Authentication (SDSA). Upgrade process will add these new XAI options with default values for backward compatibility.

| XAI Option | Default value |
|---|---|
| System Authentication Class (SDAC) | |
| System Authentication Profile (SDAP) | FULL |
| Attempt Classic Authentication (SDCA) | Y |
| Enforce SOAP Authentication (SDSA) | Y |

# Schema Change

## New Tables

The following new tables are added to Oracle Utilities Application Framework V2.2.0.

| Tables | Description |
| --- | --- |
| CI_MD_MO_ALG | Maintenance Object Algorithm |
| F1_BUS_EVT_LOG | Business Event Log |
| F1_BUS_EVT_LOG_CHAR | Business Event Log Characteristics |
| F1_BUS_EVT_LOG_K | Business Event Log Key |
| F1_BUS_EVT_LOG_MSG_PARM | Business Event Log Message Parameters |
| F1_BUS_OBJ_ALG | Business Object Algorithm |
| F1_BUS_OBJ_STATUS | Business Object Status |
| F1_BUS_OBJ_STATUS_ALG | Business Object Status Algorithm |
| F1_BUS_OBJ_STATUS_L | Business Object Status Language |
| F1_BUS_OBJ_STATUS_OPT | Business Object Status Option |
| F1_BUS_OBJ_TR_RULE | Business Object Transition Rule |
| F1_BUS_OBJ_TR_RULE_L | Business Object Transition Rule Language |
| F1_FACT | Fact |
| F1_FACT_CHAR | Fact Characteristics |
| F1_FACT_K | Fact Key |
| F1_FACT_LOG | Fact Log |
| F1_FACT_LOG_PARM | Fact Log Parameters |

## Deprecated Tables

None

## Unsupported Tables

The following tables and will be deprecated in a future release.

- CI_SCR_STEP_K
- CI_XAI_SVC_VERS (L)
- CI_MODULE

## Added Columns

The following Table Columns are added to Oracle Utilities Application Framework V2.2.0.

| Table | Column | Required | Upgrade Note |
|---|---|---|---|
| CI_ALG | OWNER_FLG | Y | Product Owned Data |
| CI_ALG_L | OWNER_FLG | Y | Product Owned Data |
| CI_ALG_PARM | OWNER_FLG | Y | Product Owned Data |
| CI_ALG_VER | OWNER_FLG | Y | Product Owned Data |
| CI_CHAR_ENTITY | OWNER_FLG | Y | Product Owned Data |
| CI_CHAR_TYPE | OWNER_FLG | Y | Product Owned Data |
| CI_CHAR_TYPE_L | OWNER_FLG | Y | Product Owned Data |
| CI_CHAR_VAL | OWNER_FLG | Y | Product Owned Data |
| CI_CHAR_VAL_L | OWNER_FLG | Y | Product Owned Data |
| CI_MD_MENU_ITEM_L | OVRD_LABEL | N | |
| CI_SCR | APP_SVC_ID | N | |
| CI_SCR | BUS_OBJ_CD | N | |
| CI_SCR | OWNER_FLG | Y | Product Owned Data |
| CI_SCR | SCR_ENGINE_VER_FLG | Y | Script Engine Version |
| CI_SCR_CRT | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_CRT_GRP | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_CRT_GRP_L | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_DA | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_FLD_MAP | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_FLD_MAP | SCR_CD | Y | Script Step Primary Key field Change |
| CI_SCR_FLD_MAP | STEP_SEQ_NUM | Y | Script Step Primary Key field Change |
| CI_SCR_L | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_PRMPT | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_PRMPT | SCR_CD | Y | Script Step Primary Key field Change |
| CI_SCR_PRMPT | STEP_SEQ_NUM | Y | Script Step Primary Key field Change |
| CI_SCR_PRMPT_L | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_PRMPT_L | SCR_CD | Y | Script Step Primary Key field Change |

| Table | Column | Required | Upgrade Note |
|---|---|---|---|
| CI_SCR_PRMPT_L | STEP_SEQ_NUM | Y | Script Step Primary Key field Change |
| CI_SCR_STEP | SCR_STEP_WARN_FLG | Y | Handling Warnings from Script Steps |
| CI_SCR_STEP | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_STEP | STEP_SEQ_NUM | Y | Script Step Primary Key field Change |
| CI_SCR_STEP_L | OWNER_FLG | Y | Product Owned Data |
| CI_SCR_STEP_L | SCR_CD | Y | Script Step Primary Key field Change |
| CI_SCR_STEP_L | STEP_SEQ_NUM | Y | Script Step Primary Key field Change |
| CI_UI_ZONE | OWNER_FLG | Y | Product Owned Data |
| CI_VAL_FK_ERR | PK_VALUE7 | N | |
| CI_VAL_FK_ERR | PK_VALUE8 | N | |
| CI_VAL_FK_ERR | PK_VALUE9 | N | |
| CI_VAL_FK_ERR | PK_VALUE10 | N | |
| CI_VAL_FK_ERR | FK_FLD_NAME7 | N | |
| CI_VAL_FK_ERR | FK_FLD_NAME8 | N | |
| CI_VAL_FK_ERR | FK_FLD_NAME9 | N | |
| CI_VAL_FK_ERR | FK_FLD_NAME10 | N | |
| CI_VAL_FK_ERR | FK_VALUE7 | N | |
| CI_VAL_FK_ERR | FK_VALUE8 | N | |
| CI_VAL_FK_ERR | FK_VALUE9 | N | |
| CI_VAL_FK_ERR | FK_VALUE10 | N | |
| CI_XAI_IN_SVC_L | DESCRLONG | Y | XAI Inbound Service Description |
| CI_XAI_SENDER | SENDER_INVOC_TYPE_FLG | Y | Real-time Web Service Call |
| CI_ZONE_HDL_PRM | ZONE_HDL_PARM_OVRD | N | |
| F1_BUS_OBJ | APP_SVC_ID | N | Business Object Security |
| F1_BUS_OBJ | INSTANCE_CTRL_FLG | Y | Business Object Instantiation |
| F1_BUS_OBJ | LIFE_CYCLE_BO_CD | N | |
| F1_BUS_OBJ | OWNER_FLG | Y | Product Owned Data |

| Table | Column | Required | Upgrade Note |
|-------|--------|----------|--------------|
| F1_BUS_OBJ | PARENT_BO_CD | N | |
| F1_BUS_OBJ_L | OWNER_FLG | Y | Product Owned Data |
| F1_BUS_OBJ_OPT | OWNER_FLG | Y | Product Owned Data |
| F1_BUS_SVC | OWNER_FLG | Y | Product Owned Data |
| F1_BUS_SVC_L | OWNER_FLG | Y | Product Owned Data |
| F1_DATA_AREA | OWNER_FLG | Y | Product Owned Data |
| F1_DATA_AREA_L | OWNER_FLG | Y | Product Owned Data |
| F1_EXTSYS_OUTMSG_PROF | OUTMSG_RESP_XSL | N | |
| F1_MAP | HTML_DEFN | N | UI Map definition |
| F1_MAP | OWNER_FLG | Y | Product Owned Data |
| F1_MAP | UI_MAP_TYPE_FLG | N | |
| F1_MAP_L | OWNER_FLG | Y | Product Owned Data |
| F1_OUTMSG | XML_RAW_RESPONSE | N | |
| F1_OUTMSG | XML_RESPONSE | N | |
| F1_SCHEMA | OWNER_FLG | Y | Product Owned Data |

## Dropped Columns

The following columns are deprecated in this release.

- PRIORITY on CI_TD_TYPE
- APP_SVC_ID on CI_TD_TYPE

## Unsupported Table Columns

These columns will be deprecated in a future release.

- CI_SCR_STEP, CI_SCR_STEP_L, CI_SCR_PRMPT, CI_SCR_PRMPT_L, CI_SCR_FLD_MAP: SCR_STEP_ID column is not used.
- CI_XAI_IN_SVC_L: DESCR254 column is not used.
- CI_XAI_IN_SVC: XAI_VERSION_ID column is not used.
- CI_XAI_JDBC_CON: DATABASE_NAME column is not used.
- F1_MAP_L: HTML_DEFN column is not used.

## Column Format Change

| Table Name | Column Name | From | To |
|---|---|---|---|
| F1_MAP | MAP_CD | VARCHAR2  30 | CHAR    30 |
| F1_MAP_L | MAP_CD | VARCHAR2  30 | CHAR 30 |
| CI_ZONE_HDL_PRM | ZONE_HDL_PARM_VAL | VARCHAR2  2000 | VARCHAR2  4000 |
| CI_ZONE_PRM | ZONE_PARM_VAL | VARCHAR2  2000 | VARCHAR2  4000 |

# New System Data

This section lists the new system data that are added for business process configuration.

## Algorithm Type

The following algorithm types are new to V2.2.0.

| Algorithm Type | Description |
| --- | --- |
| F1-BIPR-INV | Creates URL for opening BI Publisher Reports |
| F1-FACT-ATTR | Fact Information |
| F1-FACT-STER | Fact Transition Error |
| F1-GEN-BOMON | Generic Business Object Status Monitor |
| F1-MASK | Mask Data |
| F1-MOBO | Determine Specific Business Object |
| F1-STD-DTMBO | Determine Standard Business Object |

## Algorithm

The following Algorithms are Framework Owned system data in V2.2.0.

| Algorithm | Description |
| --- | --- |
| F1-STD-DTMBO | Determine Standard Business Object |

## Application Service

The following Application Services are new to V2.2.0.

| Application Service | Description |
| --- | --- |
| CILTDASP | Data Access Role - (ConfigLab) Maintenance Object |
| CILTRSCP | To Do Role - (ConfigLab) Maintenance Object |
| CILTUSCP | User Maintenance - (ConfigLab) Maintenance Object |
| F1-DFLTS | Default Application Service |
| F1USERLOG | Show User Log (Debugging Tool) |
| FWLFACTP | Fact Maintenance Object |
| FWLTBELP | Business Event Log Maintenance Object |
| FWLZWLZP | Work List Zone |

# Batch Control

The following Batch Controls are new to V2.2.0.

| Batch Control | Description |
| --- | --- |
| F1-FCTRN | Fact Monitor |
| F1-FKVBP | Foreign Key Validator |
| F1-TDEER | To Do Entry External Routing |

# Business Object

The following Business Objects are Framework Owned system data in V2.2.0.

| Business Object | Description |
| --- | --- |
| F1-Algorithm | Algorithm |
| F1-AuditCommon | Business Event Log for Field Change |
| F1-BOAddAlgorithm | Add Algorithm to a BO |
| F1-BOAlgorithm | Algorithm for a BO |
| F1-BOAlgorithmType | Algorithm Type for a BO |
| F1-BOParent | Business Object Parent Information |
| F1-BOPlugInScript | Plug In Script for a BO |
| F1-BatchControl | Batch Control |
| F1-EmailMessage | Email Message |
| F1-OutboundMessageType | Outbound Message Type |
| F1-ToDoTypeExternalRoute | To Do Type External Route Details |

# FK Reference

The following FK References are new to V2.2.0.

| FK Reference | Description |
| --- | --- |
| F1-BELOG | Business Event log |
| F1-UGUSR | User Group (Users) |
| F1BF-MO | MO Option - BO Code Field Name |
| F1BX-BO | BO Option - Business Object |
| F1DU-BO | BO Option - Display UI Map |
| F1IA-BO | BO Option - Inactive Algorithm |
| F1IA-BOS | BO Status Option - Inactive Algorithm |
| F1IA-MO | MO Option - Inactive Algorithm |
| F1MB-MO | MO Option - Maintenance BPA Script |

| FK Reference | Description |
| --- | --- |
| F1NO-BO | BO Option - Navigation Option |
| F1PB-MO | MO Option - Physical Business Object |
| F1PM-MO | MO Option - Periodic Monitor Process |
| F1PO-BO | BO Option - Post processing Script |
| F1PO-BOS | BO Status Option - Post processing Script |
| F1PR-BO | BO Option - Pre processing Script |
| F1PR-BOS | BO Status Option - Pre processing Script |
| F1RF-MO | MO Option - BO Restricted Field Name |
| F1SM-BOS | BO Status Option - State Transition UI Map |
| F1SS-BO | BO Option - Display Map Script |
| F1ST-MO | MO Option - Status |
| F1TY-MO | MO Option - Type Field |
| F1UU-BO | BO Option - Maintenance UI Map |
| NDS | Notification Download Staging |

## Maintenance Object

The following Maintenance Objects are new to V2.2.0.

| MO code | Description |
| --- | --- |
| F1-BUSEVTLOG | Business Event Log |
| F1-FACT | Fact |

## Script

The following Scripts are Framework-owned system data in V2.2.0.

| Script | Description |
| --- | --- |
| F1-BOProc | Business Object Processing |
| F1-BOTreeZn | BO Tree Zone - Check if parent BO exists |
| F1-CfmSave | Confirm Save Status |
| F1-EnterBO | Select BO from dropdown |
| F1-EnviURL | Build Environment URL |
| F1-GenBoMon | Generic Business Object Status Monitoring Plug-in Script |
| F1-GetBO | Determine Specific Business Object |

| Script | Description |
| --- | --- |
| F1-GetBOOpts | Retrieve and Validate Standard BO Options (SS) |
| F1-GetBOSOpt | Retrieve and Validate Standard Transition BO Status Options (SS) |
| F1-GetValOpt | Retrieve and Validate Standard BO Options |
| F1-HandleErr | Error Handling |
| F1-LogFactEr | Log Fact Transition Error |
| F1-MainProc | Main Processing |
| F1-MkBOAlg | Make BO Algorithm |
| F1-MkBOAlgSS | Make BO Algorithm (Server Script) |
| F1-MsgComp | Compare Error Messages |
| F1-Navigate | Common Navigation |
| F1-RetBOOpt | Retrieve and Validate a Single BO Option |
| F1-RetBOs | Retrieve Business Objects for MO |
| F1-ReturnBtn | Return button with label |
| F1-ShldShwZn | Zone Visibility - Should Display Zone in Portal |
| F1-ValBO | Validate Business Object |

## To do Type

The following To Do type is new to V2.2.0.

| To Do Type | Description |
| --- | --- |
| F1-TDEER | To Do Entry External Routing Errors |

## Portal

The following Portal is new to V2.2.0.

| Portal | Description |
| --- | --- |
| F1_SUMM_BO | Business Object Summary |

## Portal Zone

The following Portal Zones are added to V2.2.0

| Portal | Zone |
|---|---|
| CI_DASHBOARD | F1-WORKLIST |
| F1_SUMM_BO | F1-BOOPTS-TR |
| F1_SUMM_BO | F1-BOTREE |
| F1_SUMM_BO | F1-BUSOBJ-TR |
| F1_SUMM_BO | F1-SCHEMA-US |
| F1_SUMM_BO | F1-SCHHDR-BO |

### UI Map

The following UI Maps are Framework Owned system data in V2.2.0.

| Map | Description |
|---|---|
| F1-ConfirmDelete | Delete Confirmation |
| F1-ConfirmSaveStatus | Confirm Save |
| F1-ContextGenerateHTML | Generate a UI Map from a Map Schema |
| F1-ContextMakeBOAlgorithm | Make a BO Algorithm (Context Map) |
| F1-DisplayError | Display Error |
| F1-EnterBusinessObject | Enter Business Object |
| F1-EnterCopyToKey | Enter Copy To Key |
| F1-ExplorerHeader | Default Header for Data Explorers |
| F1-FileUploadPopup | File Upload Dialog |
| F1-FileUploadXMLDataContainer | File Upload XML Data Container |
| F1-HTMLEditorHeader | HTML Editor Zone Header |
| F1-MakeBOAlgorithm | Make a BO Algorithm (Entry Map) |
| F1-UIMapHeader | Default Header for UI Maps |
| F1-WorkListHeader | Header for the Dashboard Work List |

## XAI Inbound Service

The following XAI Inbound Service is new to V2.2.0.

| XAI Inbound Service name | Description |
|---|---|
| F1-EmailService | Real-time Email Service |

## Zone Type

The following Zone Types are new to V2.2.0.

| Zone Type code | Description |
| --- | --- |
| F1-DE-MULQRY | Multi Query Data Explorer |
| F1-WORKLIST | Work List |

## Zone

The following new Zones are added to V2.2.0.

| Zone | Zone Type | Description |
| --- | --- | --- |
| F1-BOOPTS-TR | SIMPLE | Options |
| F1-BOTREE | F1-DE | Business Object Hierarchy |
| F1-BUSOBJ-TR | SIMPLE | Rules |
| F1-GENUIMAP | F1-MAPEXPL | Generate HTML |
| F1-MKBOALG | F1-MAPEXPL | Create a BO Algorithm |
| F1-RBOSTCOND | F1-DE-SINGLE | Retrieve Business Object Status Condition |
| F1-WORKLIST | F1-WORKLIST | Work List |

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