

**Oracle Utilities Customer Care and Billing
Integration to Oracle JD Edwards
Financials for General Ledger and
Accounts Payable**

Implementation Guide

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Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable, Release 12.1 Implementation Guide

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Audience

This document is intended for anyone implementing the Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Documentation and Resources

For more information regarding this integration, foundation technology and the edge applications, refer to the following documents:

Product Documentation

Topic	Description
Integration documentation:	
Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable Release Notes	
Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable Implementation Guide	Refer to the Oracle Utilities applications documentation page: http://docs.oracle.com/cd/E72219_01/documentation.html
Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable Installation Guide	
Edge application documentation:	
Oracle Utilities Customer Care and Billing	
Oracle JD Edwards Financials for General Ledger (GL) and Accounts Payable (AP)	

Additional Documentation

Resource	Location
SOA Suite 12c documentation	Refer to the SOA documentation at: http://www.oracle.com/technetwork/middleware/soasuite/documentation/index.html
Oracle Support	Visit My Oracle Support at https://support.oracle.com regularly to stay informed about updates and patches. Access the support site for the Edge Application Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1) or refer to the Oracle Utilities Integrations page at http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm
Oracle Technology Network (OTN) Latest versions of documents	http://www.oracle.com/technetwork/index.html
Oracle University for training opportunities	http://education.oracle.com/
Web Services Security	For more information about Web services security using Oracle Fusion Middleware 12c refer to https://docs.oracle.com/middleware/12211/cross/webservicetasks.htm .
Oracle Fusion Middleware 12c documentation	Refer to the Oracle applications documentation page: http://docs.oracle.com/en/middleware/
Oracle Fusion Middleware “What's New In Oracle WebLogic Server” Section: Standards Support, Supported Configurations and WebLogic Server Compatibility, Database Interoperability	http://docs.oracle.com/middleware/1221/wls/NOTES/toc.htm
For additional information on the type of database to use.	
Instructions on installing this integration on non-Windows/ Linux platforms	Refer to Oracle Support Knowledge Article ID 1349320.1.

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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.
<i>italic</i>	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.

Abbreviations

Abbreviations used in this guide are listed below:

Abbreviation	Expanded Form
BPEL	Business Process Execution language
CCB or OUCCB	Oracle Utilities Customer Care and Billing
JDE	Oracle JD Edwards Financials for General Ledger and Accounts Payable
SOA	Service Oriented Architecture

Part 1

Understanding the Integration

This section provides an overview of the participating applications and information regarding the business processes addressed by this integration. It includes the following chapters:

- [Overview](#)
- [Understanding the Integration Process](#)

Chapter 1

Overview

This document provides configuration and administration information for the integration between Oracle Utilities Customer Care and Billing and Oracle JD Edwards Financials for General Ledger (GL) and Accounts Payable (AP).

- [Prerequisites](#)
- [About the Integration Product](#)
- [Supported Business Processes](#)
- [Process Scheduling](#)
- [Best Practices](#)

Prerequisites

All participating applications must be installed, set up, and working properly.

About the Integration Product

This section provides general information about the functionality and processing of the Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable. This is a direct integration using SOA.

About the Products

The following products are involved in the integration:

- [Oracle Utilities Customer Care and Billing](#)
- [Oracle JD Edwards Financials for General Ledger and Accounts Payable](#)

Oracle Utilities Customer Care and Billing

Oracle Utilities Customer Care and Billing (CCB) is a customer and billing system that manages all aspects of customer service needed by most utilities to operate their business. Basic objects form the core of the system: person, account, premise, service agreement, and service point. These objects hold demographic, geographic, and financial information about a company's customers and properties. Related to these objects are the processes that they manage: bills, payments, meter readings, field activities, etc.

Note: Refer to the [Documentation and Resources](#) section for a reference to the product matrix which provides current application version details.

Oracle JD Edwards Financials for General Ledger and Accounts Payable

Oracle JD Edwards Financial Management is a family of applications in the Oracle JD Edwards Financials for General Ledger and Accounts Payable product line. This system helps to automate and standardize business processes by providing a single repository of physical and financial data on an organization's equipment and assets. This information can then be incorporated into the budgeting and planning process. Accounts Payable, Accounts Receivable, and General Ledger functionalities can be used to manage disbursements and collections, monitor credit risks, and capture and access financial information based on configurable requirements.

Note: Refer to the [Documentation and Resources](#) section for a reference to the product matrix which provides current application version details.

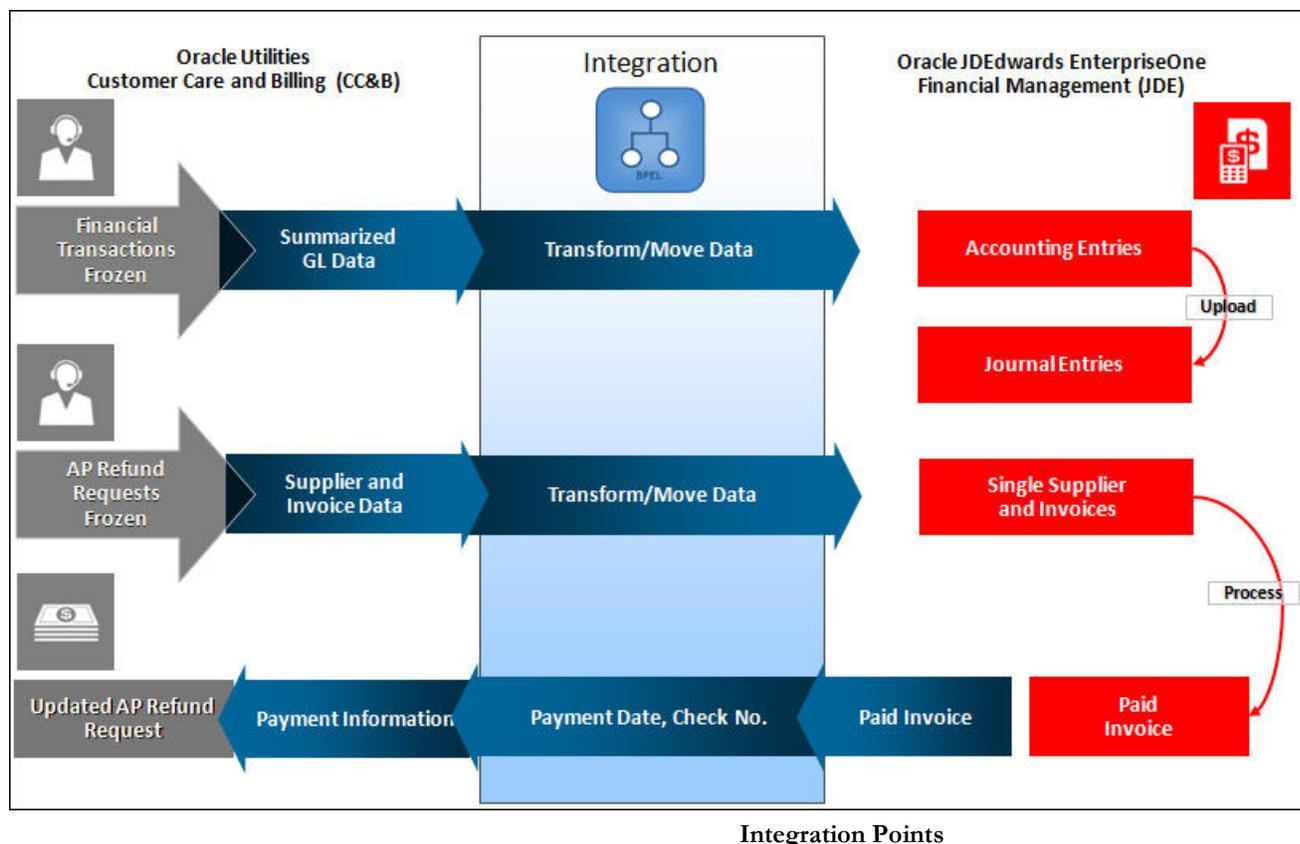
Supported Business Processes

This integration of products incorporates three areas of key functionality to facilitate the transfer of information between two applications. Data is sent from Oracle Customer Care and Billing to Oracle JD Edwards Financials for General Ledger and Accounts Payable and vice versa to support the following transactions and actions:

Business Process	Description
A bill is created/ cancelled	The general ledger is updated with journal information.
A payment is created/ cancelled	
An adjustment is created/ cancelled	
An adjustment whose type indicates AP Request is created	Customer and AP Request information is used to create a one-time supplier and supplier site. An account payable voucher is created and associated with this supplier and supplier site.

Oracle JD Edwards Financials for General Ledger and Accounts Payable	Oracle Utilities Customer Care and Billing
A payment is created for an invoice related to an Oracle Utilities Customer Care and Billing AP request.	Payment information is sent from Oracle JD Edwards Financials for General Ledger and Accounts Payable to Oracle Utilities Customer Care and Billing. The AP Request is updated with payment information.
A check related to an invoice linked to an AP request is re-issued.	
A check related to an invoice linked to an AP request is voided and the liability is closed.	The AP request and its associated adjustment are cancelled.

The following diagram provides a visual representation of these processes:



Process Scheduling

Depending on the size and complexity of your accounting system and business practices, transactions generated in either of the participating applications are sent to the alternate application on a daily or weekly schedule. Schedule the transfer of this information between applications to occur according to a frequency that is most appropriate for your organization.

Best Practices

The following sections provide business information that helps achieve accurate and error-free movement of data between Oracle Utilities Customer Care and Billing and Oracle JD Edwards Financials for General Ledger and Accounts Payable.

- [One-Time Configuration Settings](#)
- [General Ledger Integration](#)
- [Accounts Payable \(AP\) Request and AP Data Integrations](#)

Note: Information on how to configure settings that are specific to the integration is provided in the chapter titled [Configuring the Integration](#). Refer to product specific documentation for information on how to complete product specific configuration tasks.

One-Time Configuration Settings

Some one-time configuration settings must be coordinated manually to ensure proper results from the movement of data between the two applications.

General Ledger Configuration

Oracle JD Edwards Financials for General Ledger and Accounts Payable General Ledger is the source of truth for all General Ledger information. Oracle Utilities Customer Care and Billing is considered to be the sub-ledger. It is assumed that the General Ledger has already been configured to accommodate your business needs.

Distribution Codes

Oracle Utilities Customer Care and Billing uses distribution codes to map sub-ledger transactions to the General Ledger Accounts. As part of your Oracle Utilities Customer Care and Billing setup, it is assumed that you have properly mapped your distribution codes to the General Ledger chart of accounts.

General Ledger Divisions for Non-Integrated Transactions

If some of the transactions created in Oracle Utilities Customer Care and Billing must not be integrated to your General Ledger, you must configure a separate General Ledger Division for these transactions. You must then configure the integration product to distinguish which General Ledger Division must be integrated with the General Ledger (it ignores all others).

General Ledger Integration

Oracle JD Edwards Financials for General Ledger and Accounts Payable General Ledger accounts is structured using account segments. These are set up in your existing Oracle JD Edwards Financials for General Ledger and Accounts Payable configuration according to your business practices. Oracle Utilities Customer Care and Billing distribution codes must be configured to mirror the segments in Oracle JD Edwards Financials for General Ledger and Accounts Payable. The segment positions are separated by dots '.' in Oracle Utilities Customer Care and Billing so that the first segment is Account, the second segment is Department ID, and so on.

Create your chart of accounts in the Oracle JD Edwards Financials for General Ledger and Accounts Payable General Ledger, then set up your Oracle Utilities Customer Care and Billing distribution codes to map to the General Ledger account structure using dot separators.

There is a dual use of the word account, for the Oracle JD Edwards Financials for General Ledger and Accounts Payable general ledger accounts and the Oracle Utilities Oracle Utilities Customer Care and Billing customer billing accounts. A customer billing account is a collection of information associated with a customer that is used in the Oracle Utilities Customer Care and Billing payment and billing process, and does not relate to the Oracle JD Edwards Financials for General Ledger and Accounts Payable accounting definition of account (General Ledger Account). The Oracle Utilities Customer Care and Billing distribution code is used to map to the Oracle JD Edwards Financials for General Ledger and Accounts Payable General Ledger account.

The following sections cover:

- [Oracle JD Edwards Financials for General Ledger and Accounts Payable General Ledger Settings](#)
- [Oracle Utilities Customer Care and Billing General Ledger Settings](#)
- [General Ledger Settings in Integration Layer](#)
- [Accounting](#)

Oracle JD Edwards Financials for General Ledger and Accounts Payable General Ledger Settings

Configure General Ledger settings in Oracle JD Edwards Financials for General Ledger and Accounts Payable according to the following guidelines, keeping in mind that Oracle JD Edwards Financials for General Ledger and Accounts Payable is the source of truth for the general ledger.

- **Journal Import Process:** Schedule the Journal import process to create journals from Oracle Utilities Customer Care and Billing information inserted into interface tables by the integration software. When you configure Oracle JD Edwards to run this process automatically at a preset time, ensure you have matched this timing with the timing of other actions completed by Oracle Utilities Customer Care and Billing and the integration product. Alternatively, you may use the user interface within Oracle JD Edwards Financials for General Ledger and Accounts Payable to run the Journal Import process manually.
- **Accounting Entry Definition:** If not already configured, pre-configure an accounting entry in Oracle JD Edwards Financials for General Ledger and Accounts Payable to indicate the staging table where incoming accounting entries must be stored. Ensure that all mandatory fields on the staging tables are mapped.
- The integration software relies on other Oracle JD Edwards Financials for General Ledger and Accounts Payable configuration information, including: Calendars, Ledger, Journal source, Journal Category. These are usually already configured as part of your implementation. If these do not already exist, configure them for the integration software to run correctly.

Oracle Utilities Customer Care and Billing General Ledger Settings

Configure General Ledger settings in Oracle Utilities Customer Care and Billing according to the following guidelines, keeping in mind that Oracle JD Edwards Financials for General Ledger and Accounts Payable is the overriding source for the general ledger.

- Schedule the GLASSIGN and GLS batch processes to run at an appropriate time of day. These processes get sub ledger information in Oracle Utilities Customer Care and Billing and all information that has not been posted to the General Ledger, making them ready to extract, transform and load to the General Ledger. When you configure Oracle Utilities Customer Care and Billing to run this process automatically at a preset time, ensure you have coordinated this timing with the timing of other actions done by Oracle JD Edwards Financials for General Ledger and Accounts Payable and the integration product. (Alternatively you may use the standard user interface within Oracle Utilities Customer Care and Billing to run these batch processes manually).

- Verify that the Oracle Utilities Customer Care and Billing General Ledger Division match the General Ledger Business Unit in Oracle JD Edwards Financials for General Ledger and Accounts Payable.
- Ensure that Distribution Codes are configured in Oracle Utilities Customer Care and Billing to properly reflect the General Ledger accounts that must be debited and credited for each type of financial transaction created.

General Ledger Settings in Integration Layer

As part of the technical configuration, you must configure the following information:

- E-mail address of the person who must be notified if the integration software detects and logs an error while performing the integration.
- The Ledger ID, Ledger Source, and Ledger Category to use for journals in Oracle JD Edwards Financials for General Ledger and Accounts Payable that came from Oracle Utilities Customer Care and Billing through the integration.
- If you enter an Oracle Utilities Customer Care and Billing GL Division name in the BPEL configuration table, then only financial transactions associated with this GL Division are extracted for integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable GL. Leave this configuration information blank if you want all Oracle Utilities Customer Care and Billing financial transactions to be integrated to Oracle JD Edwards Financials for General Ledger and Accounts Payable GL.

Note: If all Oracle Utilities Customer Care and Billing financial transactions must come across the integration, then do not specify any General Ledger Divisions in the integration product configuration table.

Accounting

The following shows the basic accounting debits and credits that can be achieved through the setup indicated above:

Oracle Utilities Customer Care and Billing Event	Debit Account	Credit Account
Charges generated by billing	Accounts Receivable	Revenue
Customer making payment	Cash	Accounts Receivable
AP Request adjustment	Accounts Receivable	Accounts Payable Clearing

Accounts Payable (AP) Request and AP Data Integrations

This section covers:

- [Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Settings](#)
- [Oracle Utilities Customer Care and Billing AP Settings](#)
- [Integration Software AP Settings](#)
- [Accounting](#)

Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Settings

The Oracle JD Edwards Financials for General Ledger and Accounts Payable Batch Voucher Processor (R04110ZA) is run as scheduled to read the data from the AP Voucher Build Interface tables and create single payment vouchers corresponding to the Oracle Utilities Customer Care and Billing AP Requests. This process can be run manually or scheduled to run at a pre-determined time.

Configuration needed for AP Request and AP Payment integration includes:

- **Batch Voucher Processor (R04110ZA):** Schedule this process to create vouchers from the AP Check Request and Customer data that is staged in the Batch Voucher Transaction tables. When you configure Oracle JD Edwards Financials for General Ledger and Accounts Payable to run this process automatically at a preset time, ensure you have matched this timing with the timing of other actions done by Oracle Utilities Customer Care and Billing and the integration product. (Alternatively, you can run the batch process manually).
- **Configure Offset Account:** The account corresponding to this AAI (AAI - Automatic Accounting Information) will be used as a credit account for the vouchers created in Oracle JD Edwards by AP Request interface.
- **Payment Terms Code:** Create a new payment terms code for processing the payments for Oracle Utilities Customer Care and Billing customers. These codes are used to define defaults such as when payments must be made based on the invoice date, which status must be paid, any applicable discounts, rebates and other pertinent payment information.

Note: For specific guidelines on configuring these settings, refer the Oracle JD Edwards Financials for General Ledger and Accounts Payable User documentation.

Oracle Utilities Customer Care and Billing AP Settings

Configure Accounts Payable settings in Oracle Utilities Customer Care and Billing according to the following guidelines, keeping in mind that Oracle JD Edwards Financials for General Ledger and Accounts Payable is the overriding source for the general ledger account information.

- **CIS Division:** The Oracle Utilities Customer Care and Billing CIS Division characteristic value for AP Business Unit must match the AP Business ID in Oracle JD Edwards Financials for General Ledger and Accounts Payable.
- **Characteristic for Distribution Code:** An Oracle Utilities Customer Care and Billing characteristic associated with the distribution code assigned to an adjustment type used to create AP Requests in Oracle Utilities Customer Care and Billing must be setup and its value must match the value in the Accounting Combinations defined in Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Note: For more information on the configuration settings referenced in this section, refer the Oracle Utilities Customer Care and Billing user documentation.

Integration Software AP Settings

The integration product extracts AP Requests that have not been processed yet from Oracle Utilities Customer Care and Billing. After the necessary translations and

transformations on the Supplier/Invoice data extracted from Oracle Utilities Customer Care and Billing are applied, the data is loaded into the Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Invoice Interface tables.

This integration product requires you to configure the following:

- E-mail address of the person who must be notified if the integration software detects and logs an error while performing the AP Request and AP Data integrations.
- Oracle Utilities Customer Care and Billing characteristic type holding the Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Business Unit.
- AP Voucher information required by Oracle JD Edwards Financials for General Ledger and Accounts Payable including Company, Business Unit, Ledger Type, and Currency Mode.

Accounting

The following shows the basic accounting debits and credits that can be achieved through the above AP setup:

Event	Debit Account	Credit Account
AP Request Adjustment in Oracle Utilities Customer Care and Billing (As part of the General Ledger Integration)	Accounts Receivable	Accounts Payable Clearing
AP Invoice Created in Oracle JD Edwards Financials for General Ledger and Accounts Payable	Accounts Payable Clearing	AP Liability
AP Invoice Payment in Oracle JD Edwards Financials for General Ledger and Accounts Payable	AP Liability	Cash

Chapter 2

Understanding the Integration Process

This chapter provides detailed business process overviews and technical overviews of each of the business processes facilitated by this integration. These include the following:

- [About the Integration](#)
- [Integration Business Processes](#)

About the Integration

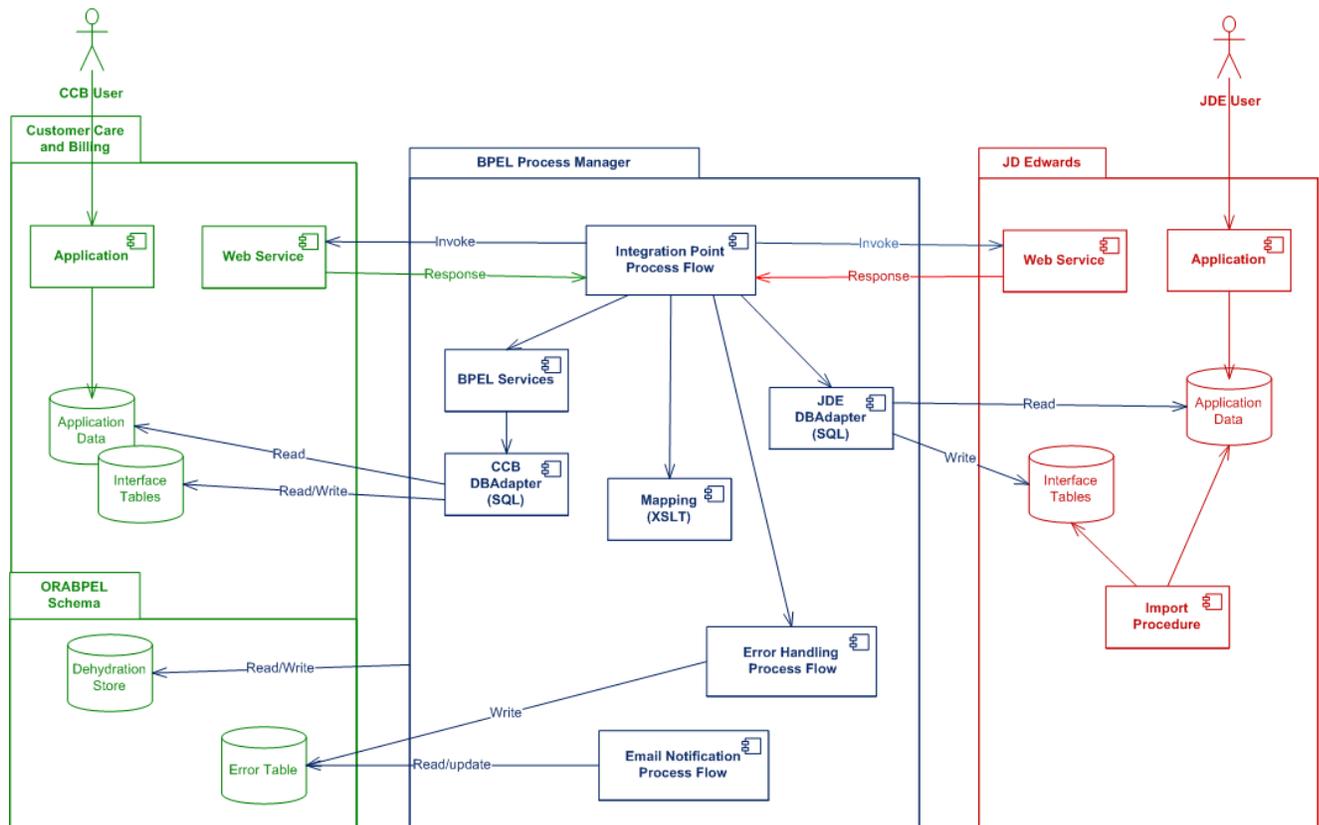
This is a direct integration between Oracle Utilities Customer Care and Billing and Oracle JD Edwards Financials.

- This integration use two types of end-to-end integration processes: Asynchronous and Synchronous.
- Most of the integration processes interact with edge applications using data base adapters except for CCBCancellationWebService process where it invokes the Oracle Utilities Customer Care and Billing web service and for JDESupplierManagerWebService process where it invokes the Oracle JD Edwards web service.
- These integration processes extract data from the source application database tables and convert the data extracted from source data base table into an XML format.
- Then, the source XML data is transformed into the target application format using XSLT.
- The transformed data is inserted into the target application database tables.
- When the target system receives this data, it validates and converts imported data into the appropriate format of entries in the target application.
- In case of any error in the process, the error data is inserted into the INTEGRATION_ERROR_STORE table and an optional email notification is sent based on the configuration.
- The extension processes are present for the main integration processes.
- The pre-extension and post-extension scopes are executed based on the extension flags enabled in the INTEGRATION_LOOKUP_TABLE.

- The extension point flags are defaulted to 'false' in the INTEGRATION_LOOKUP_TABLE table.

The following table shows the integration process, source application, and target application, tables, and process used to load the data that is imported from the other system:

Integration Process	Source System	Target System	Process	Target Table
General Ledger	Oracle Utilities Customer Care and Billing	Oracle JD Edwards Financials for General Ledger and Accounts Payable	Journal Import	F0911Z1
AP Request	Oracle Utilities Customer Care and Billing	Oracle JD Edwards Financials for General Ledger and Accounts Payable	Payables Open Interface Import	Voucher Transactions - F0411Z1 Journal Entry Transactions - F0911Z1
AP Data	Oracle JD Edwards Financials for General Ledger and Accounts Payable	Oracle Utilities Customer Care and Billing		The appropriate AP Request within Oracle Utilities Customer Care and Billing.



High Level Architecture Diagram

Integration Schema

The integration requires a database to host the required integration schema. This schema can be created in any of the following:

- an integration database, if one exists.
- as part of the Oracle Utilities Customer Care and Billing database.
- as part of another database as determined by your specific technical needs.

The tables listed here are created in the integration schema defined during installation, for the purpose of this integration product.

Note: The integration does not require any database objects to be added to Oracle Utilities Customer Care and Billing or Oracle JD Edwards Financials for General Ledger and Accounts Payable databases other than the objects mentioned here.

The following new database tables are required to operate the Oracle Utilities Customer Care and Billing process integration for the Oracle JD Edwards Financials for General Ledger and Accounts Payable Financials product:

Table Name	Description
INTEGRATION_LOOKUP_TABLE	A lookup table to store all the configuration parameters used by the BPEL processes. This table is also used to configure the email addresses to be notified if errors occur. This table is seeded with data at the time of integration product installation.
INTEGRATION_PROCESS_ACTIVATION	This table is used to activate or de-activate various integration points available in the Integration product. This table is seeded with data at the time of integration pack installation and is by default populated to activate all the available integration points in the product.
INTEGRATION_ERROR_STORE	The table is used to hold the information regarding the errors encountered during integration transactions. A record is inserted for each error encountered by the BPEL processes. The mail notification process, MailNotification, accesses this table to get the error information needed to construct the notification email. This table is delivered with no data.

Integration Business Processes

This section covers the following:

- [General Ledger](#)
- [AP Request](#)
- [AP Data](#)

General Ledger

For general ledger transactions, Oracle Utilities Customer Care and Billing is considered the sub-ledger and Oracle JD Edwards Financials for General Ledger and Accounts Payable considered the general ledger:

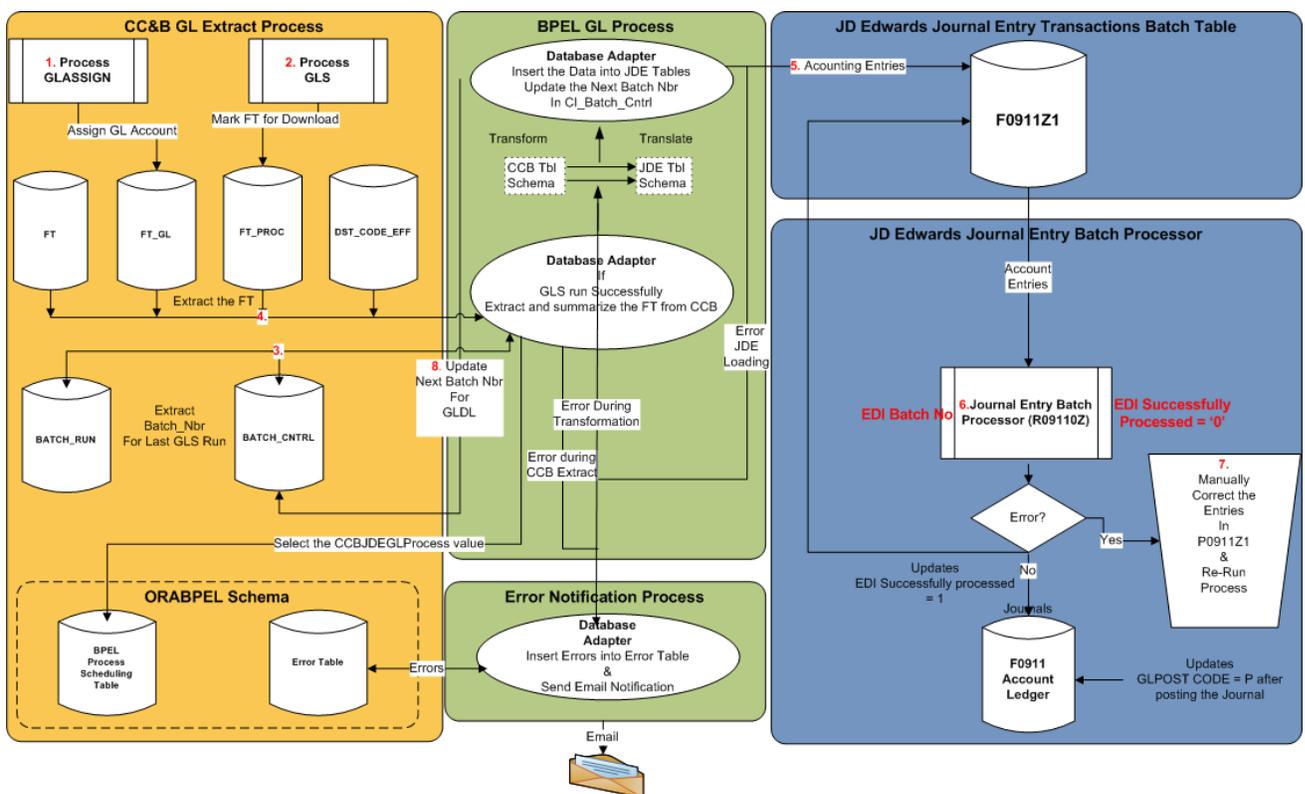
- General Ledger transactions are written in one direction; from Oracle Utilities Customer Care and Billing to Oracle JD Edwards Financials for General Ledger and Accounts Payable.
- Financial transactions are moved from the sub-ledger to the general ledger when two consecutive Oracle Utilities Customer Care and Billing batch processes, GLASSIGN and GLS, are run according to a set schedule. These are standard processes released with Oracle Utilities Customer Care and Billing.
- The GLASSIGN and GLS processes group all of the financial transactions in Oracle Utilities Customer Care and Billing that need to be included in a batch.

The Integration Point looks for batches of financial transactions that are ready to be sent, extracts and summarizes the data, translates the data from a sub-ledger format to the format required by the general ledger, and writes it to the Oracle JD Edwards Financials for General Ledger and Accounts Payable General Ledger integration table, F0911Z1. The standard General Ledger integration table released with the Oracle JD Edwards Financials for General Ledger and Accounts Payable is used.

- Once the entries are created in Oracle JD Edwards Financials for General Ledger and Accounts Payable staging table, the standard Journal Import process, R09110Z, must be executed to create the necessary journal entries within the General Ledger.

This can be accomplished by scheduling the standard Oracle JD Edwards Financials for General Ledger and Accounts Payable General Ledger Journal Import process or by manually running this process through the Standard user interface provided within Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Note: Refer to the Oracle Utilities Customer Care and Billing documentation for more information on GLASSIGN and GLS.



GL Process Diagram

The steps for GL process flow:

1. Run the GLASSIGN batch program in Oracle Utilities Customer Care and Billing.
2. Run GLS batch program in Oracle Utilities Customer Care and Billing.
3. BPEL process extracts FT information from Oracle Utilities Customer Care and Billing.

4. BPEL process updates the Next_Batch_Nbr for GLDL in CI_BATCH_CTRL table in Oracle Utilities Customer Care and Billing.
5. GL BPEL process transforms and inserts the data into Oracle JD Edwards Financials for General Ledger and Accounts Payable Table: F0911Z1
6. GL BPEL process updates the Last_Update_DateTime in CI_BATCH_CTRL table in Oracle Utilities Customer Care and Billing.
7. Run Journal Import process in Oracle JD Edwards Financials for General Ledger and Accounts Payable to import transactions.
8. Any errors in Oracle JD Edwards Financials for General Ledger and Accounts Payable interface tables must be corrected in Oracle JD Edwards Financials for General Ledger and Accounts Payable and Journal Import process must be re-run.

Logic Used in General Ledger integration Point

BPEL polls to verify whether FTs are ready for extraction

Oracle BPEL Process Manager polls Oracle Utilities Customer Care and Billing to verify whether financial transactions are ready for extraction.

```
If GLS has run since the last run of the integration
AND the GLS run has completed successfully
Retrieve the Batch of Rows identified in CI_BATCH_RUN (created by
GLS)
Else
Do nothing
```

Update the NEXT BATCH NUMBER in CI_BATCH_CNTRL

```
Increment by 1 the NEXT_BATCH_NBR in CI_BATCH_CTRL WHERE BATCH_CD
is GLDL
```

Extract Financial Transactions from Oracle Utilities Customer Care and Billing.

```
Select the information shown in the table below:
FROM CI_FT_PROC, CI_FT_GL, CI_FT FT, CI_DST_CODE_EFF
WHERE the rows were marked by GLS as belonging to the latest batch
that is ready to be integrated
```

```
Summarize and group the rows
BY FTPR.BATCH_NBR, FTGL.DST_ID, FTGL.GL_ACCT, FT.CIS_DIVISION,
FT.GL_DIVISION, FT.CURRENCY_CD, DST.STATISTICS_CD,
FT.ACCOUNTING_DT, DST.FUND_CD
```

Extract Information

Field	Description
Source System	Set to CCB
BATCH_NBR	The batch number for the group of FTs extracted. The batch number is assigned to the financial transaction when GLS is run.
DIST_ID	The distribution code used in Oracle Utilities Customer Care and Billing to derive the GL account information. A sample data example is R - ELERES for electric residential revenue financial transactions
GL_ACCT	The actual GL account with '!' separating the substructure numbers like department. For example 101.73653.8873..87

Field	Description
CIS_DIVISION	The CIS Division
GL_DIVISION	The GL Division
CURRENCY_CD	The currency type, such as USD
STATISTICS_CD	The identifier of the type of statistical amount being sent to GL such as KWH for electricity or CCF for gas..
ACCOUNTING_DT	The effective accounting date for the GL transactions
AMOUNT	The dollar amount of the GL debit or credit
STATISTIC_AMOUNT	The quantity associated with the statics code

When the above query is executed successfully, continue by executing the following:

Update the LAST UPDATE TIME FOR GLDL in CI_BATCH_CNTRL

Set the last update date and time by setting
 CI_BATCH_CNTRL LAST_UPDATE_DTTM to SYSDATE WHERE BATCH_CD = 'GLDL'

Composites

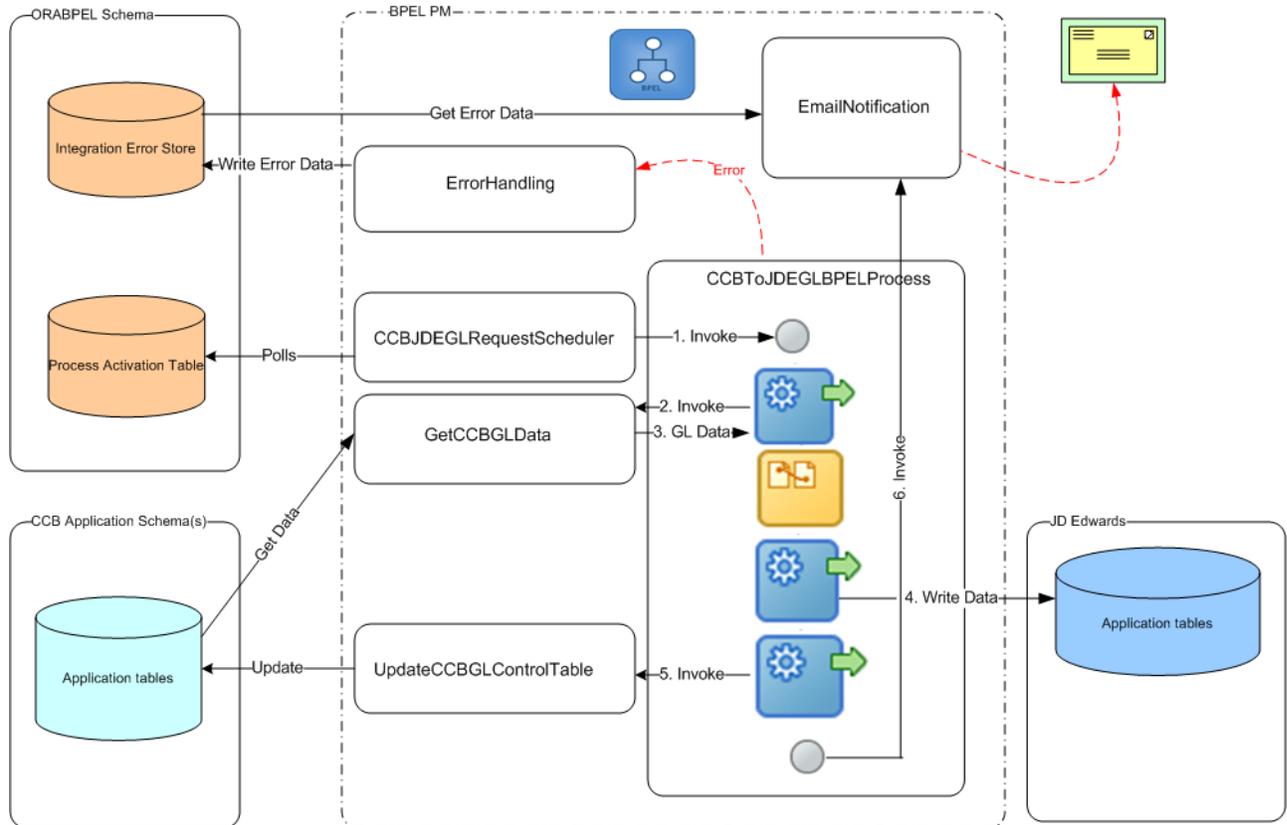
The following is the list of processes that comprise the GL Integration between Customer Care and Billing and Oracle JD Edwards Financials for General Ledger and Accounts Payable:

Process Name	CCBJDEGLRequestScheduler
Description	Polls the INTEGRATION_PROCESS_ACTIVATION table in the integration Schema at predefined intervals and invokes the CCBToJDEGLBPELProcess
Calls to	CCBToJDEGLBPELProcess
Calls from	None
Inputs	None
Outputs	None
Synch/Asynch	Asynchronous
Exceptions/Errors	Possible Exceptions - None

Process Name	CCBT0JDEGLBPELProcess
Description	Main process of the GL Integration. Gets the GL data from Oracle Utilities Customer Care and Billing, transforms it and inserts it into Oracle JD Edwards Financials for General Ledger and Accounts Payable Journal Entry interface table F0911Z1. Additionally updates Oracle Utilities Customer Care and Billing Batch Control table with the next batch number. Invokes services for error handling and e-mail notification
Calls to	GetCCBGLData, UpdateCCBGLControlTable, ErrorhandlingProcess (if an error occurs), Email Notification
Calls from	CCBJDEGLRequestScheduler
Inputs	None
Outputs	None
Synch/Asynch	Asynchronous
Exceptions/Errors	Possible Exceptions - BPEL Remote Fault, BPEL Binding Fault
Process Name	GetCCBGLData
Description	Checks if GL data is available in Oracle Utilities Customer Care and Billing for transfer. If data is available it returns a dataset to the calling process
Calls to	ErrorhandlingProcess (if an error occurs)
Calls from	CCBT0JDEGLBPELProcess
Inputs	Input String object containing the Integration Point name invoking this BPEL process For example: JDE
Outputs	SelectCCBGLRecordsOutput xml object
Synch/Asynch	Synchronous
Exceptions/Errors	Possible Exceptions – BPEL Remote Fault, BPEL Binding Fault
Process Name	UpdateCCBGLControlTable
Description	Updates the next batch number in the GL Batch Control table available in the Oracle Utilities Customer Care and Billing Database
Calls to	ErrorhandlingProcess (if an error occurs)
Calls from	CCBT0JDEGLBPELProcess
Inputs	None
Outputs	None

Process Name	UpdateCCBGLControlTable
Synch/Asynch	Synchronous
Exceptions/Errors	Possible Exceptions – BPEL Remote Fault, BPEL Binding Fault

The BPEL flow for GL Transaction integration point is shown below:



Database Tables Involved in Integration

Oracle Utilities Customer Care and Billing

The following Oracle Utilities Customer Care and Billing tables are used when extracting Financial Transaction data for sending to the GL as Journal Vouchers.

- CI_FT
- CI_FT_GL
- CI_DST_CODE_EFF
- CI_FT_PROC (FT Process)
- CI_BATCH_CTRL (Batch Control)
- CI_BATCH_RUN
- CI_BATCH_JOB

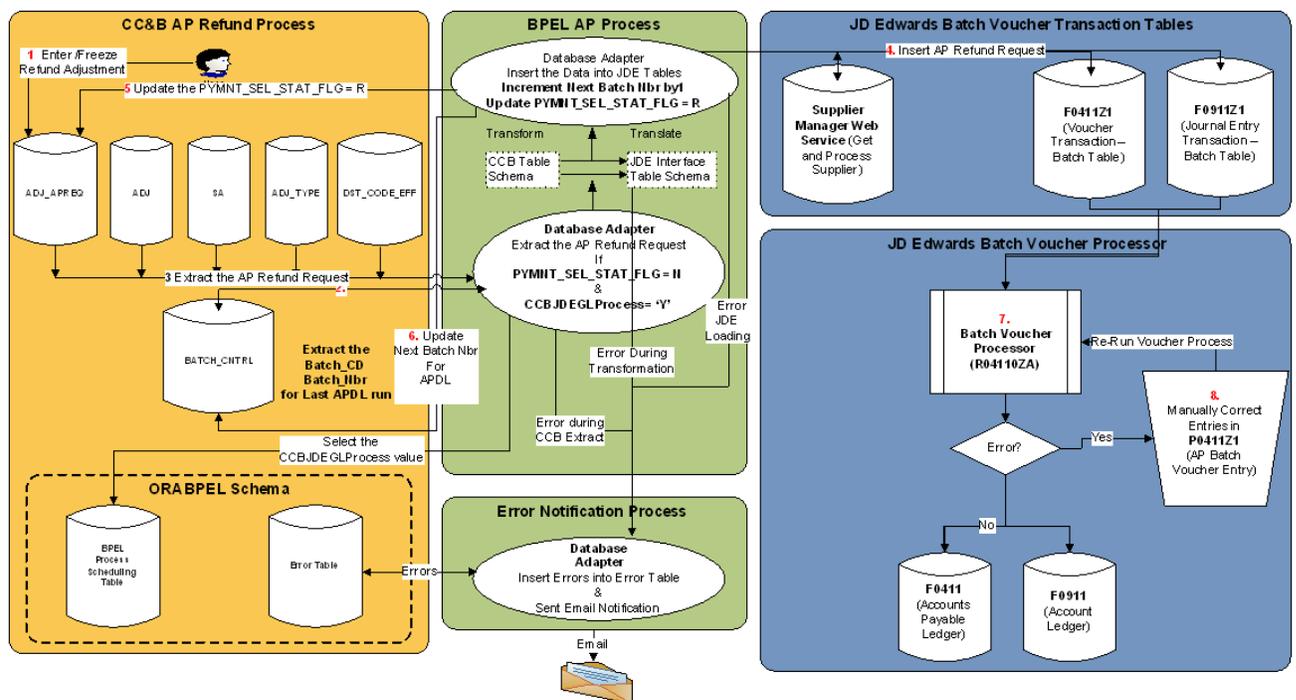
Neither the GLDL flat file header record layout nor the GLDL flat file detail record layout is used in this integration.

Oracle JD Edwards Financials for General Ledger and Accounts Payable Tables

JD Edwards F0911Z1 table is used to stage the incoming accounting entries from Oracle Utilities Customer Care and Billing.

AP Request

- AP Request transactions are written in one direction from Oracle Utilities Customer Care and Billing to Oracle JD Edwards Financials for General Ledger and Accounts Payable. Customer, customer account, and AP Request information is extracted from Oracle Utilities Customer Care and Billing and exported to the Oracle JD Edwards Financials for General Ledger and Accounts Payable. Customer and AP Request information is used to create a one-time supplier and supplier site that is used for voucher creation.
- Once the customer and refund request data is loaded into Oracle JD Edwards Financials for General Ledger and Accounts Payable by the integration product, the standard Voucher Batch process, R04110ZA, must be executed. This can be accomplished using a scheduled process or by manually running the process through the standard user interface provided within the Oracle JD Edwards Financials for General Ledger and Accounts Payable product.
- The integration extracts AP Requests from Oracle Utilities Customer Care and Billing where the status of the AP Request is 'N' which indicates that the AP Request is 'Not Selected for Payment'. Once the data has been integrated, the integration software updates the AP Request status in Oracle Utilities Customer Care and Billing to 'R' indicating it has been 'Requested for Payment'.



AP Request Business Process Diagram

These are the steps in AP request process:

1. Create and Freeze Adjustment in Oracle Utilities Customer Care and Billing.
2. BPEL process extracts AP Refund Request information from Oracle Utilities Customer Care and Billing.
3. BPEL process transforms and calls SupplierManager Web service to query or create a source Supplier.
4. BPEL process transforms and inserts the data into Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Voucher (F0411Z1) and Journal Entry (F0911Z1) interface tables.
5. BPEL updates the status of AP Request in Oracle Utilities Customer Care and Billing.
6. BPEL process updates the Next_Batch_Nbr for APDL in CI_BATCH_CTRL table in Oracle Utilities Customer Care and Billing if there are no pending or error records.
7. Run AP batch Voucher Processor (R04110ZA) in Oracle JD Edwards Financials for General Ledger and Accounts Payable to import Vouchers.

Note: Any errors in Oracle JD Edwards Financials for General Ledger and Accounts Payable interface tables must be corrected in Oracle JD Edwards Financials for General Ledger and Accounts Payable and Import process must be re-run.

Logic Used in AP Request integration Point

Update the NEXT BATCH NUMBER in the CI_BATCH_CNTRL

Increment the NEXT_BATCH_NBR by 1 in CI_BATCH_CNTRL where the BATCH_CD is APDL

BPEL Polls to verify whether AP Requests are ready for extraction

Oracle BPEL Process Manager Poll Oracle Utilities Customer Care and Billing to verify whether AP requests are ready for extraction.

If there are AP Requests where the CI_ADJ_APREQ PYMNT_SEL_STAT_FLG is N (Not selected for Payment)
AND the associated adjustment is in a frozen status
Then process the AP Requests that have not been integrated before
and mark them all with the next APDL Batch Number
Else do nothing

Extract of Customer and AP Refund Request

An extract of Customer and AP refund request is made from Oracle Utilities Customer Care and Billing.

Select the following information
AP_REQ_ID, GL_ACCT, CHAR_VAL, SA_ID, ADJ_ID, CRE_DT, ADJ_TYPE_CD,
CIS_DIVISION, CHAR_VAL, ENTITY_NAME, COUNTRY, ADDRESS1, ADDRESS2,
ADDRESS3, ADDRESS4, CITY, NUM1, NUM2, COUNTY, HOUSE_TYPE, STATE,
POSTAL, CURRENCY_CD, CURRENCY_PYMNT, GEO_CODE, IN_CITY_LIMIT,
PYMNT_METHOD_FLG, ADJ_AMT, SCHEDULED_PAY_DT

FROM CI_ADJ_APREQ, CI_ADJ, CI_SA, CI_ADJ_TYPE, CI_DST_CODE_EFF,
CI_DST_CD_CHAR, CI_CIS_DIV_CHAR
Where the PYMNT_SEL_STAT_FLG status flag is N (Not Selected for
Payment)
AND the Adjustment is frozen

(Refer to the mapping table within this document for more details)

UPDATE CI_ADJ_APREQ Status

```
UPDATE CI_ADJ_APREQ
SET PYMNT_SEL_STAT_FLG to R (Requested for Payment)
```

Update the NEXT BATCH NUMBER in the CI_BATCH_CNTRL table

```
Increment the NEXT_BATCH_NBR by 1 in CI_BATCH_CNTRL where the
BATCH_CD is APDL
```

Composites

The following is the list processes that comprise the AP Request Integration between Oracle Utilities Customer Care and Billing and Oracle JD Edwards Financials for General Ledger and Accounts Payable:

Process Name	CCBToJDEAPRequestScheduler
Description	Polls the INTEGRATION_PROCESS_ACTIVATION table in the integration Schema at predefined intervals and invokes the CCBToJDEAPBPELProcess
Calls to	CCBToJDEAPBPELProcess
Calls from	
Inputs	None
Outputs	None
Synch/Asynch	Asynchronous
Exceptions/Errors	Possible Exceptions - None

Process Name	CCBToJDEAPBPELProcess
Description	Main process of the AP Integration. Gets the AP request data from Oracle Utilities Customer Care and Billing, transforms it and inserts it into Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Voucher Build Interface tables (F0911Z1, F0411Z1). Additionally, updates status in two of the Oracle Utilities Customer Care and Billing tables. Invokes services for error handling and e-mail notification
Calls to	GetCCBAPData, JDESupplierManagerWebService, UpdateCCBAPControlTable, UpdateCCBAPAdjReqTable, ErrorhandlingProcess (if an error occurs), Email Notification
Calls from	CCBToJDEAPRequestScheduler
Inputs	None
Outputs	None
Synch/Asynch	Asynchronous
Exceptions/Errors	Possible Exceptions – BPEL Remote Fault, BPEL Binding Fault

Process Name	GetCCBAPData
Description	Checks if AP request data is available in Oracle Utilities Customer Care and Billing for transfer. If data is available, it returns a dataset to the calling process
Calls to	ErrorhandlingProcess (if an error occurs)
Calls from	CCBToJDEAPBPELProcess
Inputs	Input String object containing the Integration Point name invoking this BPEL process. For example: JDE, etc
Outputs	SelectCCBRecordsWithTemplate xml object
Synch/Asynch	Synchronous
Exceptions/Errors	Possible Exceptions - BPEL Remote Fault, BPEL Binding Fault

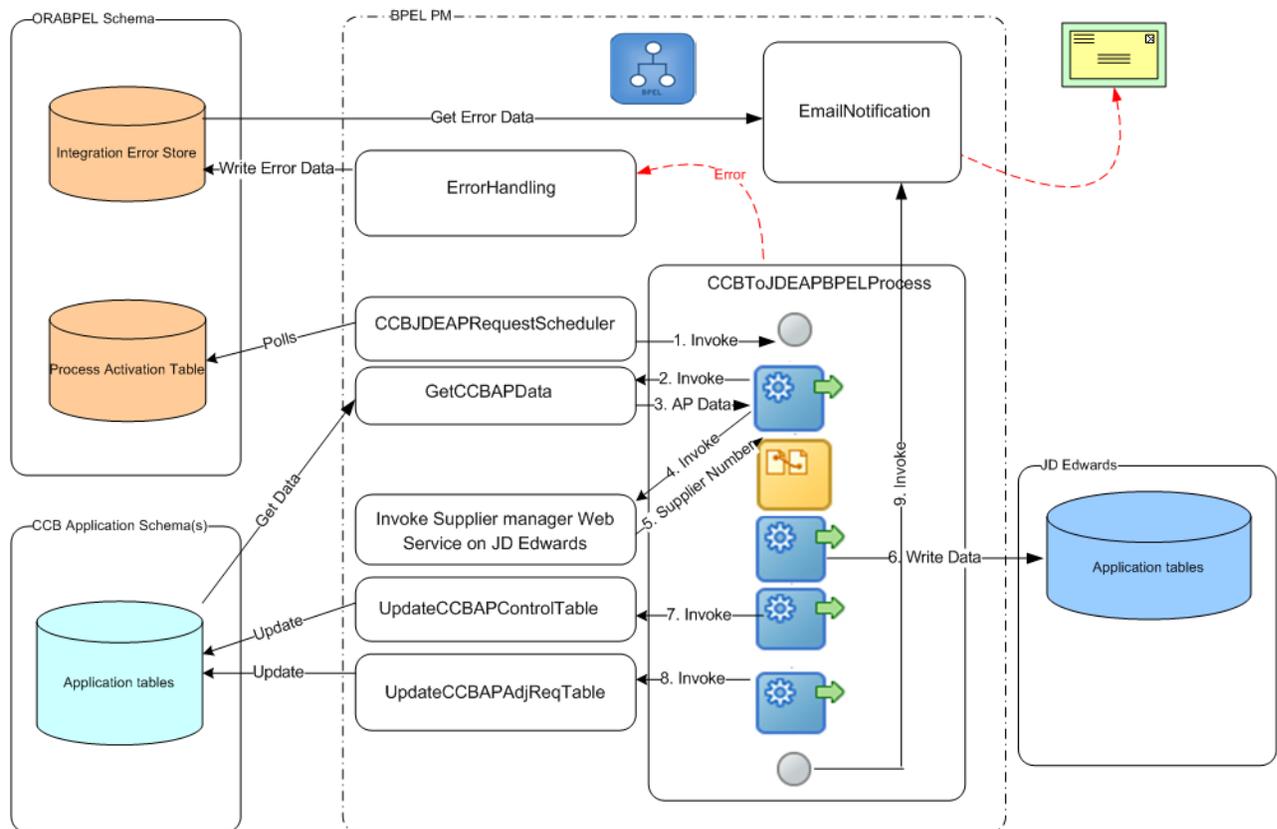
Process Name	JDESupplierManagerWebService
Description	Invoke the Supplier Manager Web service method “getSupplier” in Oracle JD Edwards to verify that the customer for the AP Request coming from Oracle Utilities Customer Care and Billing is already setup in Oracle JD Edwards as a Supplier. If not found it will invoke the “processSupplier” method of the same web service to create a Supplier in Oracle JD Edwards corresponding to the Customer in Oracle Utilities Customer Care and Billing
Calls To	ErrorhandlingProcess (if an error occurs)
Calls From	CCBToJDEAPBPELProcess
Inputs	JDESupplierManagerWebServiceProcessRequest XML Object containing information for the Supplier to be created
Outputs	EntityID/SupplierNumber
Synch/Asynch	Synchronous
Exceptions/Errors	Possible Exceptions - BPEL Remote Fault, BPEL Binding Fault

Process Name	UpdateCCBAPControlTable
Description	Updates the next batch number in the AP Batch Control table available in the Oracle Utilities Customer Care and Billing Database
Calls to	ErrorhandlingProcess (if an error occurs)
Calls from	CCBToJDEAPBPELProcess
Inputs	None
Outputs	None

Process Name	UpdateCCBAPControlTable
Synch/Asynch	Synchronous
Exceptions/Errors	Possible Exceptions - None

Process Name	UpdateCCBAPAdjReqTable
Description	Updates PYMNT_SEL_STAT_FLG to R in the Oracle Utilities Customer Care and Billing AP Adjustment Request table CI_ADJ_APREQ for the provided AP request ID
Calls to	None
Calls from	CCBToJDEAPBPELProcess
Inputs	CIAdjApreqCollection xml object
Outputs	None
Synch/Asynch	Synchronous
Exceptions/Errors	Possible Exceptions – None

The BPEL flow for AP Request integration point is shown below:



Database Tables Involved in Integration

Oracle Utilities Customer Care and Billing

- The Customer Care and Billing CI_ADJ_APREQ table is considered an interface table for this integration point even though it is a core table within Customer Care and Billing. BPEL extracts the data directly from the core tables. The following tables are used when extracting AP Request information from Customer Care and Billing.
- CI_ADJ_APREQ
- CI_ADJ
- CI_SA
- CI_ACCT
- CI_ACCT_PER
- CI_PER
- CI_PER_NAME
- CI_DST_CD_CHAR
- CI_CIS_DIV_CHAR
- CI_DST_CODE_EFF

Oracle JD Edwards Financials for General Ledger and Accounts Payable Tables

The following AP Invoice staging tables are used to stage the incoming AP Requests from Oracle Utilities Customer Care and Billing.

- JD Edwards F0911Z1
- JD Edwards F0411Z1

AP Data

- AP Data transactions are written in one direction from Oracle JD Edwards Financials for General Ledger and Accounts Payable Accounts Payable to Oracle Utilities Customer Care and Billing.
- Payment information for system-generated checks to customers is generated and processed in Oracle JD Edwards Financials for General Ledger and Accounts Payable and then exported to Oracle Utilities Customer Care and Billing. This payment information corresponds to the AP Refund Requests originally generated in Oracle Utilities Customer Care and Billing and exported to Oracle JD Edwards Financials for General Ledger and Accounts Payable for payment processing. The Integration Point updates the original AP Request in Oracle Utilities Customer Care and Billing with the details of the payment, including the check number and date.
- Once a payment has been created in Oracle JD Edwards Financials for General Ledger and Accounts Payable and the information is integrated to Oracle Utilities Customer Care and Billing, the AP Request status in Oracle Utilities Customer Care and Billing is updated to 'P' indicating that the AP Request has

been paid. Additional statuses that can occur include 'C' - Closed or on Hold and 'X' - Cancelled.

Refer to the table below to review how canceled payments are handled:

Oracle JD Edwards Financials for General Ledger and Accounts Payable Action	Oracle Utilities Customer Care and Billing AP Request Resulting Action	Oracle Utilities Customer Care and Billing Adjustment Resulting Action
Payment is completed	Payment information updated and status changes to "P" for Paid	No change
Payment stopped and placed on hold	Payment status changes to "C" for Closed	No change
Payment is re-issued	Payment information updated and status changes to "P" for Paid	No change
Payment is cancelled and the liability is closed	Payment status changes to "X" for Cancelled	Adjustment is cancelled

Payment Cancellation

When a payment is cancelled in Oracle JD Edwards Financials for General Ledger and Accounts Payable, the following options are available:

- [Re-Issue](#)
- [Initiate Stop/Void Hold](#)
- [Void Cancel](#)

Re-Issue

If a check is re-issued for any reason in Oracle JD Edwards Financials for General Ledger and Accounts Payable, the new information is sent across the integration and is updated on the AP Request in Oracle Utilities Customer Care and Billing and the AP Request status is set to 'P' indicating that the AP Request has been paid.

The AP Request in Oracle Utilities Customer Care and Billing only holds the most recent check information sent (no history of checks re-issued).

Initiate Stop/Void Hold

If a payment is stopped or put on hold, the cancellation information is sent to Oracle Utilities Customer Care and Billing as updates to the AP Request. The AP Request payment status flag in Oracle Utilities Customer Care and Billing is set to 'C' indicating a 'Closed' status. Only the AP Request is affected, the adjustment in Oracle Utilities Customer Care and Billing is not impacted.

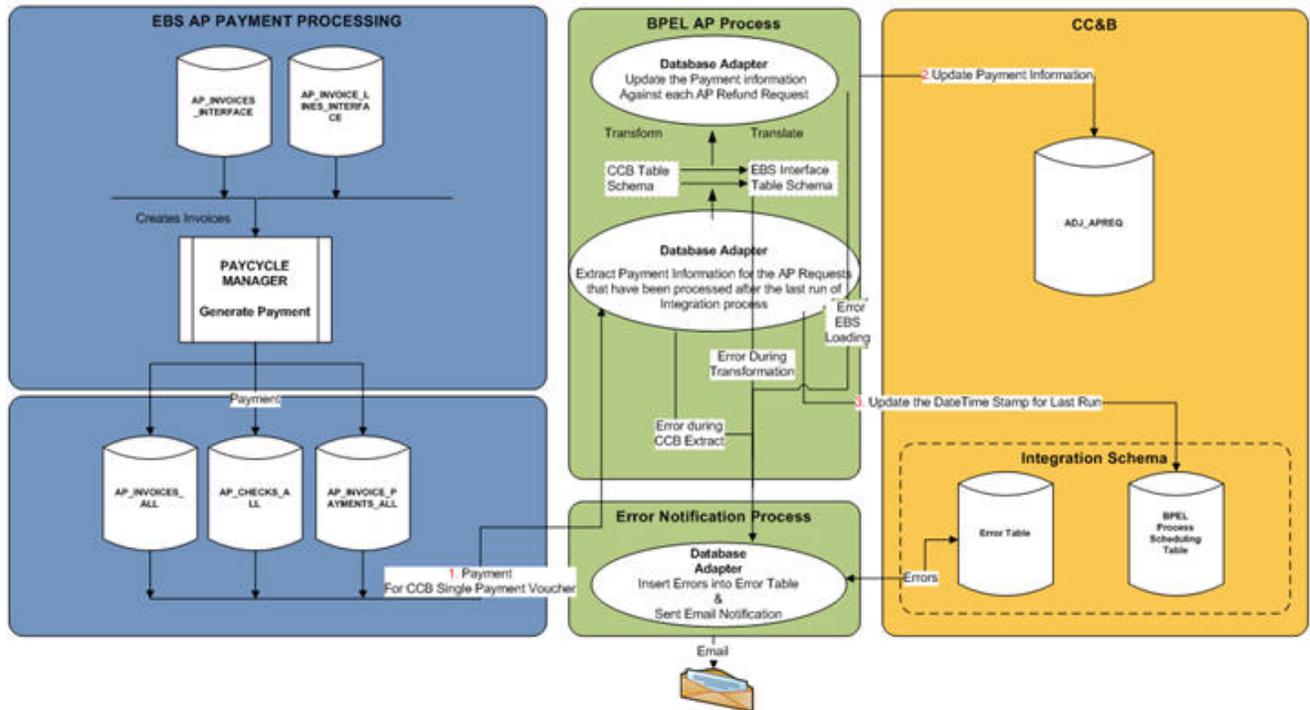
Void Cancel

If the payment is void cancelled and all liability is closed, the integration cancels the AP Request and then calls an Oracle Utilities Customer Care and Billing service to cancel the adjustment related to the request. The AP Request payment status flag in Oracle Utilities Customer Care and Billing is set to 'X' indicating a 'Cancelled' status. The adjustment is

also cancelled using the standard adjustment maintenance object within the Oracle Utilities Customer Care and Billing application software.

An Oracle Utilities Customer Care and Billing algorithm CL_ADCA-CRTD 'Adjustment Cancellation - Create to Do Entry' can be configured to create a To Do List entry to notify the users about the cancellation of the adjustment and AP Request within Oracle Utilities Customer Care and Billing.

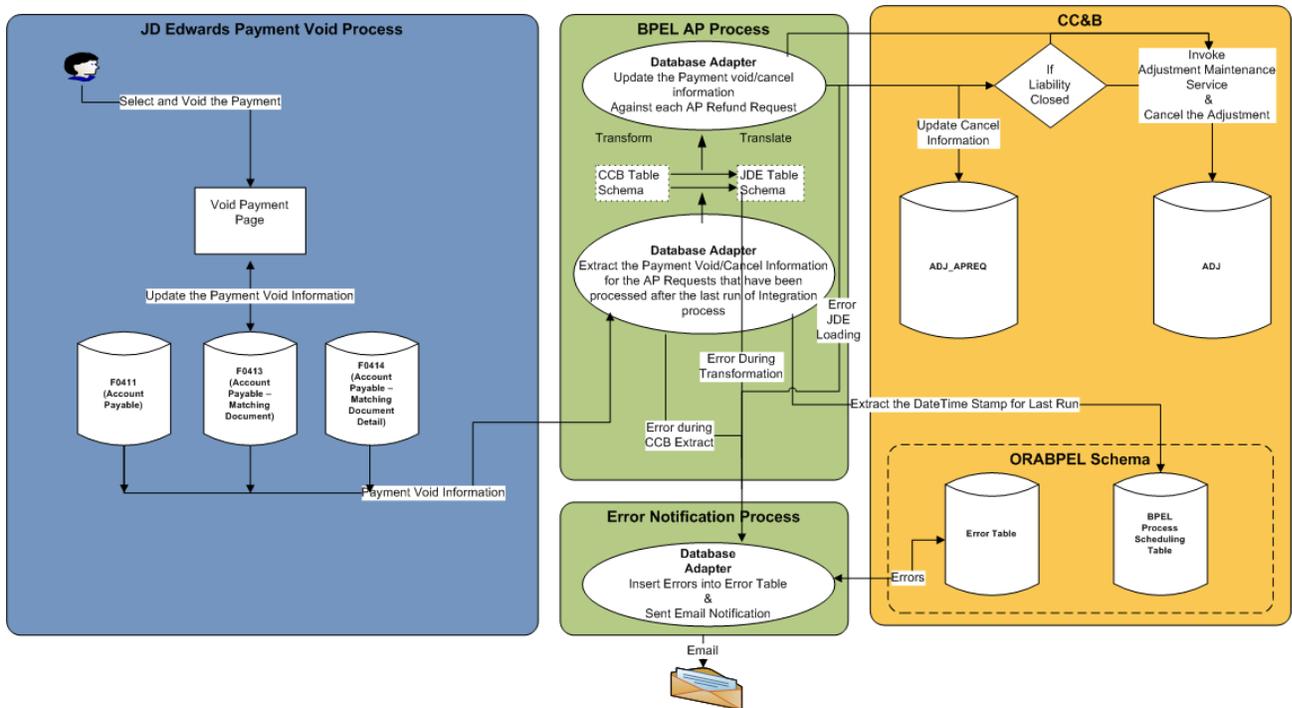
The adjustment cancellation algorithm is shipped and documented as part of standard Oracle Utilities Customer Care and Billing application software.



AP Data Process Diagrams

These are the steps in AP Data process:

1. Payment is made in Oracle JD Edwards Financials for General Ledger and Accounts Payable for invoices originated from Oracle Utilities Customer Care and Billing.
2. BPEL process updates the payment information in Oracle Utilities Customer Care and Billing.
3. BPEL process updates the Last Run Date of AP Data process in Integration schema.



These are the steps in the AP Data process flow when a payment is cancelled in Oracle JD Edwards Financials for General Ledger and Accounts Payable:

1. Payment is cancelled in Oracle JD Edwards Financials for General Ledger and Accounts Payable for invoices originated from Oracle Utilities Customer Care and Billing.
2. The BPEL process updates the Cancellation information in Oracle Utilities Customer Care and Billing.
3. The BPEL process invokes AdjustmentMaintenance Web Service in Oracle Utilities Customer Care and Billing to cancel the adjustment.
4. The BPEL process updates the Last Run Date of AP Data process in the integration schema.

Logic Used in AP Data integration Point

Extract the Payment Information from Oracle JD Edwards Financials for General Ledger and Accounts Payable

SELECT the following information:

```
F0413.RMPYID, F0413.RMDOCM, F0413.RMVDGJ, F0413.RMDMTJ,
F0413.RMPAAP, F0413.RMCBNK, F0413.RMPYE, F0414.RNDOC, F0414.RNPAAP,
F0411.RPDOC, F0411.RPPOST, F0411.RPVINV, F0411.RPURRF, F0411.RPVOD
```

Extract the Payment Information from Oracle JD Edwards that was created between the last and current execution of BPEL.

For each payment selected above, verify that this payment is already applied in Oracle Utilities Customer Care and Billing.

If the payment has been canceled in Oracle JD Edwards Financials for General Ledger and Accounts Payable and the liability has been closed update the CI_ADJ_APREQ

PYMNT_SEL_STAT_FLG to 'X'(Canceled) and invoke the service C1AdjustmentMaintenance to cancel the Adjustment corresponding to this payment.

Composites

The following is the list of composite processes that comprise the AP Data Integration between Oracle Utilities Customer Care and Billing and Oracle JD Edwards Financials for General Ledger and Accounts Payable.

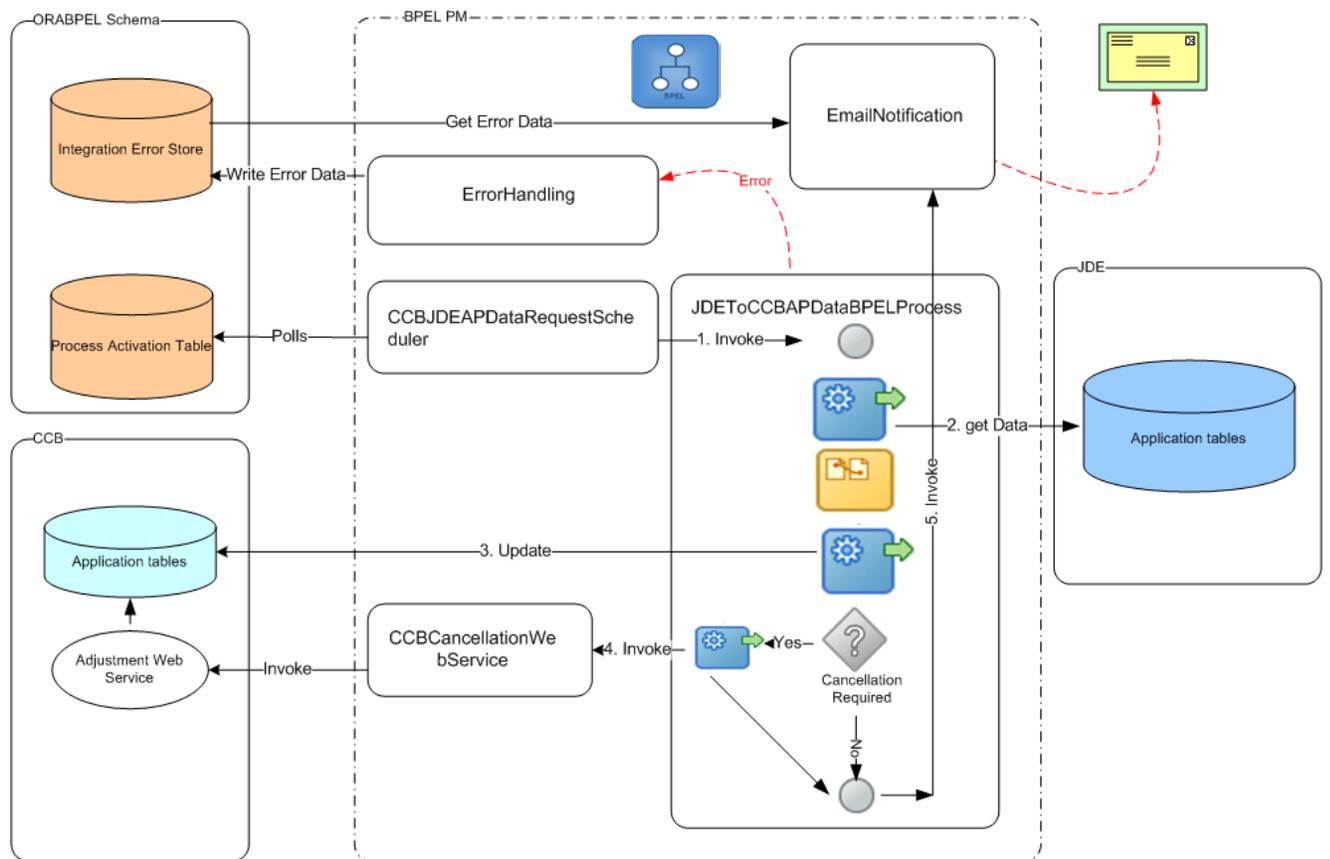
The following is the list processes that comprise the AP Data Integration between Oracle Utilities Customer Care and Billing and Oracle JD Edwards Financials for General Ledger and Accounts Payable:

Process Name	JDECCBAPDataRequestScheduler
Description	Polls the INTEGRATION_PROCESS_ACTIVATION table in the integration Schema at predefined intervals and invokes the JDEToCCBAPDataBPELProcess.
Calls to	JDEToCCBAPDataBPELProcess, ErrorhandlingProcess (if an error occurs).
Calls from	None
Inputs	None
Outputs	None
Synch/Asynch	Asynchronous
Exceptions/Errors	Possible Exceptions – None

Process Name	JDEToCCBAPDataBPELProcess
Description	Main process of the AP Data Integration. Collects all the payment information from Oracle JD Edwards Financials for General Ledger and Accounts Payable application tables (F0413, F0414, F0411), transforms the data and updates the information in the Oracle Utilities Customer Care and Billing table application table CI_ADJ_APREQ
Calls to	CCBCancellationWebService, ErrorhandlingProcess (if an error occurs), Email Notification
Calls from	JDECCBAPDataRequestScheduler
Inputs	None
Outputs	None
Synch/Asynch	Asynchronous
Exceptions/Errors	Possible Exceptions - BPEL Binding fault, BPEL Remote Fault

Process Name	CCBCancellationWebService
Description	This process is a BPEL wrapper to call the Adjustment Maintenance web service in Oracle Utilities Customer Care and Billing to cancel the Adjustment corresponding to the AP Request ID for the given payment
Calls to	ErrorhandlingProcess (if an error occurs)
Calls from	JDEToCCBAPDataBPELProcess
Inputs	String object - AdjustmentID
Outputs	String result - Contains APRequest ID to handle success or error messages
Synch/Asynch	Synchronous
Exceptions/Errors	Possible Exceptions - BPEL Binding Fault, BPEL Remote Fault.

The BPEL flow for AP Data integration point is shown below:



Database Tables Involved in Integration

JD Edwards Financials for General Ledger and Accounts Payable Tables

No JD Edwards Financials for General Ledger and Accounts Payable interface tables are used in this integration point.

The Payment Information is extracted from the following application tables:

- JD Edwards F0413
- JD Edwards F0414
- JD Edwards F0411

Oracle Customer Care and Billing

The CL_ADJ_APREQ application table is updated with the Payment Information received from JD Edwards Financials for General Ledger and Accounts Payable. This table is considered an interface table for the purpose of this integration point even though it is a core Oracle Utilities Customer Care and Billing product table.

Shared Integration Processes

These BPEL processes are used across multiple integration points within this product.

Process Name	Error Handling Process
Description	Invoked only if an error occurs. Inserts data into error table INTEGRATION_ERROR_STORE in the integration Schema
Calls to	None
Calls from	GetCCBGLData, UpdateCCBGLControlTable, CCBToJDEGLBPELProcess, GetCCBAPData, UpdateCCBAPControlTable, CCBToJDEAPBPELProcess, CCBCancellationWebService, JDEToCCBAPDataBPELProcess
Inputs	ErrorHandlingProcessRequest xml object
Outputs	String result
Synch/Asynch	Synchronous
Exceptions/Errors	Possible Exceptions - None
	.
Process Name	MailNotification
Description	This process is invoked at the end of each batch run. If there was any error generated, it assimilates all these messages into an e-mail and sends the email to configured email address
Calls to	None
Calls from	CCBToJDEGLBPELProcess CCBToJDEAPBPELProcess JDEToCCBAPDataBPELProcess

Process Name	MailNotification
Inputs	MailNotificationInputParameters xml object
Outputs	None
Synch/Asynch	Asynchronous
Exceptions/Errors	Possible Exceptions - None

Part 2

Implementing the Integration Product

This section provides details on how to configure the participating applications and middleware layer for this integration. It also includes information on error handling, monitoring, customization options, and data mapping. It includes the following chapters:

- [Configuring the Integration](#)
- [Monitoring and Troubleshooting](#)
- [Customization Options](#)

Chapter 3

Configuring the Integration

This chapter provides a configuration checklist which shows an overview of configuration tasks. The detailed steps and information are included in following sections along with instructions on how to set up security, configure error-handling, and how to verify the implementation once all steps are complete:

- [Integration Configuration Checklist](#)
- [Oracle JD Edwards Financials for General Ledger and Accounts Payable Configuration](#)
- [Oracle Utilities Customer Care and Billing Configuration](#)
- [Integration Product Configuration](#)
- [Verifying the Implementation](#)

Integration Configuration Checklist

Extensive configuration is required to implement the integration between Oracle Customer Care and Billing and Oracle JD Edwards Financials for General Ledger and Accounts Payable. This section provides a list of configuration tasks that may be used as a reference or roadmap, including.

- [Oracle JD Edwards Financials for General Ledger and Accounts Payable Configuration](#)
- [Oracle Utilities Customer Care and Billing Configuration](#)
- [Integration Product Configuration](#)

Oracle JD Edwards Financials for General Ledger and Accounts Payable Configuration

Step	Information	Comments
A1	Company	Identify and document the Company Codes to be used for the integrated data coming from Oracle Customer Care and Billing. For example: 45013 . This is used in checklist steps B4 . If you wish to create a new company for this purpose, it will require that you create an address number for the company followed by the creation of the company.
A2	Business Unit	Identify or create the Business Unit(s) for the company above to be used with the integrated data. For example: US1 . This is used in checklist steps B3 .
A3	Date Pattern	If not already created, create and document the Fiscal Date Pattern for the current Fiscal year.
A4	Chart of Accounts	Identify or create the Oracle JD Edwards Financials for General Ledger and Accounts Payable Chart of Accounts for the Business Unit above to be used by Oracle Customer Care and Billing. These accounts need to be set up as GL Accounts on Distribution codes in Oracle Utilities Customer Care and Billing (Step B2).
A5	Unit of Measure	Create a Unit of Measure user defined code for each statistics code in Oracle Customer Care and Billing. Because of length limitation in JD Edwards, these codes cannot be longer than 2 characters.
A6	Offset Account Template (AAI – Automatic Accounting Instructions)	Identify or Create Offset Account Template (AAI) in Oracle JD Edwards Financials for General Ledger and Accounts Payable for AP requests coming from Oracle Utilities Customer Care and Billing. For example: PCREFD. This will be used in B8 and B9.

Oracle Utilities Customer Care and Billing Configuration

Step	Information	Comment
B1	GL Division	Configure the GL Division(s) to be used in Oracle Utilities Customer Care and Billing. The GL Division must exactly match the Business Unit created in JD Edwards, in step A2 above.
B2	Distribution Codes	Configure your distribution codes. For example: 111.222.... With '111' corresponding to the Object Account and '222' corresponding to the related subsidiary in JD Edwards Chart of account. Refer to details of how the accounts are mapped by the integration application, later in this document.
B3	Business Unit Characteristic Type	Configure a characteristic type to hold the value of the Business Unit to be used. Example characteristic type: JDEBU. This is used in checklist step D3 . The value you create in this characteristic (For example: US1) must match what you documented in step A2 .
B4	Company Characteristic Type	Configure a characteristic type to hold the value of the Company Code to be used. Example characteristic type: JDECO. This is used in checklist step D6 . The value you create in this characteristic (For example: 45013) must match what you documented in step A1 .
B5	Verify Service and Cancel Reason	Verify that the cancel service C1AdjustmentMaintenance is configured and that the Cancel Reason to which it refers is also configured correctly.
B6	Link the characteristic type created in step B3 with the CIS Division	The CIS Division you are using (For example: CA) will now have a characteristic type linked to it (For example: JDEBU) that holds the name of the AP Business Unit to use (For example: US1).
B7	Link the characteristic type created in step B4 with the CIS Division	The CIS Division you are using (For example: CA) will now have a characteristic type linked to it (For example: JDECO) that holds the name of the Company Code to use (For example: 45013).
B8	Offset Account Template (AAI) Characteristic Type	Configure a characteristic type to hold value of Offset Account Template (AAI) to be used. Example characteristic type: TEMPLATE. This will be used in D8.
B9	Link the characteristic type created in step B8 to the appropriate distribution code	The distribution code that you are using for AP request (For example: A/P-OVPY) will need a characteristic type linked to it (For example: TEMPLATE) to hold the value of the Offset Account Template (AAI) to be used in Oracle JD Edwards Financials for General Ledger and Accounts Payable Financial Management.

Integration Product Configuration

Task	Description
Setting Configuration Properties	Set Configurations properties that are used by integration processes. Configuration is done in the INTEGRATION_LOOKUP_TABLE and INTEGRATION_PROCESS_ACTIVATION tables.
Setting Error Handling for the integration	Setup error notification

Oracle JD Edwards Financials for General Ledger and Accounts Payable Configuration

Configure GL accounts and other information in Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Note: For steps to configure the GL, refer to your product-specific user documentation.

- [GL Integration Point](#)
- [AP Request Integration Point](#)
- [AP Data Integration Point](#)

GL Integration Point

This section includes:

- [Configuring Company](#)
- [Configuring Address Number for Business Unit](#)
- [Configuring Business Unit](#)
- [Configuring Chart of Accounts](#)
- [Configuring JD Edwards Unit of Measure](#)

Configuring Company

Create a Company and attach the Date Pattern created above. The Oracle JD Edwards Financials for General Ledger and Accounts Payable architecture requires that you - Create a Company, attach a Business Unit to the company, and attach Accounts to the Business Unit.

Navigation: JD Edwards Financials Menu > Financials > General Accounting > General Accounting System Setup > Organization & Account Setup > Company Names & Numbers

Field Label	Example Value	Comments
Company	45013	Company Number
Name	CCB Oracle Company	Name of the company
Setup Company Tab		

Field Label	Example Value	Comments
General Accounting – Fiscal Date Pattern	R	Date Pattern from Jan 1 to Dec 31
General Accounting – Number of periods	12	How many periods you use.
General Accounting – Current Period	7	Current period of the calendar for GL
General Accounting – Beginning of Fiscal Year	1/1/2011	Beginning of Fiscal Year - GL
Accounts Payable – Current Period	7	Current period of the calendar for AP
Accounts Payable – Beginning of Fiscal Year	1/1/2011	Beginning of Fiscal Year - AP
Accounts Receivable – Current Period	7	Current period of the calendar for AR
Accounts Receivable – Beginning of Fiscal Year	1/1/2011	Beginning of Fiscal Year - AR
Financial Reporting – Reporting Period	1	Reporting period of the company
Financial Reporting – Reporting Year	8	Reporting year of the company
52 Period Accounting Tab		
52 Period Accounting – 52 Period normal number of periods	52	52 period calendar
Currency Tab		
Domestic Currency	USD	US Dollars

Configuring Address Number for Business Unit

Business Unit requires an Address Number. While creating a Business Unit, attach the address number in the Business Unit Creation process.

Navigation: JD Edwards Financials Menus > Foundation Systems > Address Book > Daily Processing > Address Book Revision

Field Label	Example Value	Comments
Alpha Name	CCB GL Business Unit	Business Unit Name
Long Address Number	CCBBU	Alternate Address Key
Search Type	F	Facility
Business Unit	US1	Address Number Belong to Business unit
Mailing Name	CCB GL Business Unit	Mailing Address

Field Label	Example Value	Comments
Address Line1	500 Oracle Parkway	Mailing Address
City	Redwood city	Mailing City
State	CA	Mailing State
Postal Code	94065	Mailing Postal Code
Country	US	Mailing Country

Configuring Business Unit

Create a Business Unit and attach the Address Number created above.

Navigation: JD Edwards Financials Menus > Financials > General Accounting > General Accounting System Setup > Organization & Account Setup > Review and Revise Business Unit

Field Label	Example Value	Comments
Business Unit	US1	Created Business Unit US1
Revise Single BU Tab		
Description	CCB GL Business Unit	Description of the Business Unit
Company	45013	Attach the company to which this Business Unit belongs to
Level of Detail	5	Level of Detail of the Business Unit
Business Unit Type	IS	Income Statement Business Unit
Sub ledger Inactive Code	NULL	Active Sub ledger triggered for the Business Unit
Model Account/ Consolid.	NULL	Non-Model Consolidation
More Detail Tab		
Address Number	54615	Address number of Business Unit created using P01012

Configuring Chart of Accounts

Create accounts and attach the accounts to the Business Unit. GL Accounts corresponding to all the possible Distribution Codes that may show up on GL transactions in Oracle Utilities Customer Care and Billing should be setup in JD Edwards Financials for General Ledger and Accounts Payable. The GL Accounts in Oracle Utilities Customer Care and Billing should match with the Chart of Accounts in JD Edwards Financials for General Ledger and Accounts Payable.

For example: If the GL account for Distribution code 'A/P-OVPY' is 100000.10000 in Oracle Utilities Customer Care and Billing with GL Division of US1, JD Edwards should have an account where Business Unit = 'US1', Object Account = "100000", and Subsidiary = "10000". In case the Subsidiary is not being used in JD Edwards and the GL Account in Oracle Utilities Customer Care and Billing is 100000, JD Edwards should have an account where Business Unit = 'US1', Object Account = "100000".

Navigation: JD Edwards Financials Menus > Financials > General Accounting > General Accounting System Setup > Organization & Account Setup > Review and Revise Accounts

Field Label	Example Value	Comments
Account Number	Keep as Null	Account number will be created at run time.
Revise Single Account Tab		
Business Unit/Object/Subsidiary	US1.100000.10000	Account Structure is Business Unit.Object Account.Subsidiary
Description	CCB AP OVPY	Description of the Account.
Account Level of Detail	6	Account Level of Detail
Posting Edit	Null	Allows Posting
Currency Code	USD	Currency Code for the Account

Configuring JD Edwards Unit of Measure

Associate Oracle Utilities Customer Care and Billing Statistics Code values to Oracle JD Edwards Financials for General Ledger and Accounts Payable Units of measure. Identify the unique values of Statistics codes and set them up as Oracle JD Edwards Financials for General Ledger and Accounts Payable Units of measure. The Oracle JD Edwards Financials for General Ledger and Accounts Payable Unit of measure length is String (2). The Oracle Utilities Customer Care and Billing code value is Char (8). Due to this length constraint, the Oracle Utilities Customer Care and Billing Statistics Codes should be set to a length of 2. You must manually synchronize Oracle Utilities Customer Care and Billing (Statistics Codes) and the Oracle JD Edwards Financials for General Ledger and Accounts Payable (Units of Measure) values.

Navigation: JD Edwards Financials Menus > Financials > Accounts Payable > User Defined Codes

Field Label	Example Value	Comments
UDC 00/UM (Product Code/ User Defined Code)		
Codes	CF	This value must be manually synchronized with the Oracle Utilities Customer Care and Billing Statistics Code.
Description	Cubic Feet	
Codes	TH	This value must be manually synchronized with the Oracle Utilities Customer Care and Billing Statistics Code.
Description	Thermal	

Field Label	Example Value	Comments
Codes	KH	This value must be manually synchronized with the Oracle Utilities Customer Care and Billing Statistics Code.
Description	Kilowatt Hour	

AP Request Integration Point

It includes the following:

- [Configuring the JD Edwards Accounts corresponding to AP Overpayment account in Oracle Utilities Customer Care and Billing](#)
- [Configuring Offset Account \(AAI - Automatic Accounting Information\) in JD Edwards Financials for General Ledger and Accounts Payable](#)

Configuring the JD Edwards Accounts corresponding to AP Overpayment account in Oracle Utilities Customer Care and Billing

Use GL Integration Point - Chart of Account creation structure to create the Accounts.

Configuring Offset Account (AAI - Automatic Accounting Information) in JD Edwards Financials for General Ledger and Accounts Payable

The account corresponding to this AAI will be used as a credit account for the vouchers created in JD Edwards by AP Request interface.

In the example below, an AAI with name PCREFD is being created and the account associated to it is US1.100000.10000. In Oracle Customer Care and Billing you will be creating a Characteristic to hold the name of this AAI. While configuring the template in Oracle Customer Care and Billing you will be excluding the Trade account from AAI Name.

For example in this case, the template name configured in Oracle Customer Care and Billing is 'REFD'.

Field Label	Value Type	Comments
Item Number	PCREFD	Offset Name. PC is for Trade Account. Template Name is REFD
Company	45013	Offset (AAI) is configured for the company
System	04	Accounts Payable
Sequence No	4.020	Sequence in Trade Account
Business Unit	US1	Part of Account Structure (Business Unit)
Object Account	100000	Part of Account Structure (Object Account)
Subsidiary	10000	Part of Account Structure (Subsidiary)

Configure Bank Account for the company 45013 with GL Account US1.100000.10000 with the Fast Path P0030G.

AP Data Integration Point

No configuration is required in Oracle JD Edwards Financials for General Ledger and Accounts Payable for this integration point. Product-delivered application tables are used for selecting data from Oracle JD Edwards Financials for General Ledger and Accounts Payable to export payment information to Oracle Utilities Customer Care and Billing.

Oracle Utilities Customer Care and Billing Configuration

To configure the Oracle Utilities Customer Care and Billing portion of the integration define settings for all three integration points.

Note: For instructions on specific steps in Oracle Utilities Customer Care and Billing, refer the user documentation.

This section includes:

- [GL Integration Point](#)
- [AP Request Integration Point](#)
- [AP Data Integration Point](#)

GL Integration Point

To enable this integration point, configure the following information in Oracle Utilities Customer Care and Billing:

- [Configuring GL Division](#)
- [Configuring Distribution Codes](#)
- [Configuring GLASSIGN and GLS for Oracle Utilities Customer Care and Billing Extract](#)

Configuring GL Division

Map your GL Division in Oracle Utilities Customer Care and Billing to the GL Business Unit in Oracle JD Edwards Financials for General Ledger and Accounts Payable GL Business Unit. To do this find out what GL Business Unit(s) you will be using within the GL. Then, create GL Divisions in Oracle Utilities Customer Care and Billing to match these exactly. Then, associate these GL Divisions with the appropriate Service Agreement Types in Oracle Utilities Customer Care and Billing.

Configuring Distribution Codes

Map your distribution codes in Oracle Utilities Customer Care and Billing with the appropriate GL Accounts in the Oracle JD Edwards Financials for General Ledger and Accounts Payable GL. First, configure the distribution codes and then assign them to various entities within the Oracle Utilities Customer Care and Billing applications.

Oracle JD Edwards Financials for General Ledger and Accounts Payable GL accounts is structured using the Business Unit, Object Account code, and Subsidiary code. These are set up in your existing Oracle JD Edwards Financials for General Ledger and Accounts Payable configuration according to your business practices. Oracle Utilities Customer Care and Billing distribution codes must be configured to mirror the segments in Oracle JD Edwards Financials for General Ledger and Accounts Payable. The segment positions in Oracle Utilities Customer Care and Billing are dot '.' separated so that the first segment

is the Object Account, and the second segment is the Subsidiary as shown in the following table.

Oracle JD Edwards Financials for General Ledger and Accounts Payable Account Column name	Oracle Utilities Customer Care and Billing Distribution (GL_ACCT) segment position
OBJ	Position1
SUB	Position 2

* Use a dot (.) as the delimiter to indicate a break between positions.

A sample GL Account string is 100000.10000.

When interpreted by the standard mapping in the product this GL Account String in the sub ledger equates to the following in the Oracle JD Edwards Financials for General Ledger and Accounts Payable GL:

- Object Account 100000
- Subsidiary 10000

Note: The GL Division is mapped to Business Unit in Oracle JD Edwards Chart of Accounts.

For example:

Field Label	Example Value	Comments
Distribution Code	Example: R-ELERES	The distribution code to be used for financial transactions of a certain type.
Description	Example: Electric residential revenue	A description of how the distribution code is used.
GL Account Algorithm	GLCNST-DFLT	The standard product, or customer modified, algorithm you use for determining the GL Account String from the distribution code.
GL Account Details	1 of 1	Create at least one set of account details as needed by your chosen algorithm above. Only one will be used based on the status and effective date.
Effective Date	01-01-1900	The date you wish the following GL Account string to become active and used by the system, and therefore the integration software.
Status	Active	Only active status accounts will be used by the product and therefore the integration.
GL Account	100000.10000	Input the GL Account String as explained above.

Note: Only fields relevant to the integration are included in this table.

Configuring GLASSIGN and GLS for Oracle Utilities Customer Care and Billing Extract

To successfully execute extracts from Oracle Utilities Customer Care and Billing, two processes must be configured with the appropriate batch parameters and set to run on a scheduled basis. These processes can be scheduled using the Oracle Utilities Customer Care and Billing scheduling tool or an enterprise scheduler that meets the open architecture standards used by Oracle Utilities Customer Care and Billing.

AP Request Integration Point

This includes the following:

- [Configuring the AP Operating Unit Characteristic Type](#)
- [Configure the Company Characteristic Type](#)
- [Configure the Offset Account Template \(AAI\) Characteristic Type](#)

Configuring the AP Operating Unit Characteristic Type

For each CIS Division used in Oracle Utilities Customer Care and Billing, you must configure a Characteristic Value to have the AP Operating Unit to be used in Oracle JD Edwards Financials for General Ledger and Accounts Payable GL.

Complete the following configuration in Oracle Utilities Customer Care and Billing to reference the AP Operating Unit corresponding to the CIS Division as follows.

1. Create a Characteristic Type.

Admin menu > C > Characteristic Type

The value for this characteristic type stores the value of Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Business Unit. In this example, it is JDEBU. Use the name of the Business Unit established for this purpose in Oracle JD Edwards Financials for General Ledger and Accounts Payable.

2. Set up the details on the Characteristic Type as follows:

Field Label	Value	Comments
Characteristic Type	JDEBU	The code associated with your characteristic type. This will be used in further steps.
Description	Oracle JD Edwards Financials for General Ledger and Accounts Payable Business Unit	A description of the use for this characteristic type.
Type of Char Value	Predefined Value	No freeform text is allowed; only a predefined set of values.
Allow Search by Char Val	Allowed	Allow Searches
Characteristic Value	US1	The name of the Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Business Unit to be used.
Description	US1 Business Unit	

3. Select the **Characteristic Entities** tab to allow the Characteristic Type to be associated with the CIS Division:

Field Label	Value	Comments
Characteristic Entity	CIS Division	This characteristic type can be inserted on a CIS Division.

Configure the Company Characteristic Type

For each CIS Division used, in Oracle Utilities Customer Care and Billing, the Company to be used in Oracle JD Edwards Financials for General Ledger and Accounts Payable must be configured.

Complete the following configuration in Oracle Utilities Customer Care and Billing to reference the Company corresponding to the CIS Division as follows.

1. Create a Characteristic Type.
Admin menu > C > Characteristic Type

The value for this characteristic type stores the value of the Oracle JD Edwards Financials for General Ledger and Accounts Payable AP Business Unit. In this example, it is JDECO. You will use the name of the Company you have established for this purpose in Oracle JD Edwards Financials for General Ledger and Accounts Payable.

2. Set up the details on the Characteristic Type as follows:

Field Label	Value	Comments
Characteristic Type	JDECO	The code associated with your characteristic type. This will be used in future steps.
Description	Oracle JD Edwards Financials for General Ledger and Accounts Payable Company Code	A description of the use for this characteristic type.
Type of Char Value	Predefined Value	No freeform text is allowed, only a predefined set of values.
Allow Search by Char Val	Allowed	Allow Searches
Characteristic Value	45013	The name of the Oracle JD Edwards Financials for General Ledger and Accounts Payable Company Code to be used.
Description	45013 Company Code	

- Select the Characteristic Entities tab to allow the Characteristic Type to be associated with the CIS Division:

Field Label	Value	Comments
Characteristic Entity	CIS Division	This characteristic type can be inserted on a CIS Division.

- Attach the Characteristic Types, created above, to any CIS Divisions that will be used for AP Request Adjustments. In sample data an example is provided as the CA CIS Division.

Admin menu > C > CIS Division

Field Label	Value	Comments
CIS Division	Example: CA	The CIS Division to be used.
Description	Example: California	A description of how the CIS Division is used.
Characteristic Tab		
Effective Date	Example: 01-01-1900	The date you wish the characteristic type and value to become active and used by the system, and therefore the integration software.
Characteristic Type	Oracle JD Edwards Financials for General Ledger and Accounts Payable Business Unit	The characteristic type you created above.
Characteristic Value	Example: US1	The value you gave to the characteristic type created above.
Characteristic Type	Oracle JD Edwards Financials for General Ledger and Accounts Payable Company Code	The characteristic type you created above.
Characteristic Value	Example: 45013	The value you gave to the characteristic type created above.

Note: Only fields relevant to the integration are included in this table.

Configure the Offset Account Template (AAI) Characteristic Type

For each Distribution Code, used for AP requests in Oracle Utilities Customer Care and Billing, the corresponding Offset Account Template be used in Oracle JD Edwards Financials for General Ledger and Accounts Payable must be configured. The account corresponding to this template will be used as a credit account for the vouchers that are created in JD Edwards by the AP Request interface.

Complete the following configuration in Oracle Utilities Customer Care and Billing to reference the Offset Account Template corresponding to the Distribution Code as follows.

- Create a Characteristic Type.
Admin menu > C > Characteristic Type

The value for this characteristic type stores the value of the Oracle JD Edwards Financials for General Ledger and Accounts Payable Offset Account Template. In the example below, the AAI name created in JD Edwards is PCREFD and the Characteristic value to be specified for the distribution codes corresponding to AP Requests is REFD.

- Set up the details on the Characteristic Type as follows:

Field Label	Value	Comments
Characteristic Type	TEMPLATE	The code associated with your characteristic type. This will be used in future steps.
Description	Oracle JD Edwards Financials for General Ledger and Accounts Payable Offset Account Template	A description of the use for this characteristic type.
Type of Char Value	Predefined Value	No freeform text is allowed, only a predefined set of values.
Allow Search by Char Val	Allowed	Allow Searches
Characteristic Value	REFD	The name of the Oracle JD Edwards Financials for General Ledger and Accounts Payable Offset Account Template to be used.
Description	PCREFD AAI	

- Select the Characteristic Entities tab to allow the Characteristic Type to be associated with the Distribution Code.

Field Label	Value	Comments
Characteristic Entity	Distribution Code	This characteristic type can be inserted on a CIS Division.

- Attach the Characteristic Type, created above, to any distribution code that will be used for AP Request Adjustments. In sample data, an example is provided as the A/P-OVPY Distribution Code that is attached to the REFUNDAP Adjustment Code.
Admin menu > D> Distribution Code

Field Label	Value	Comments
Distribution Code	Example: A/P-OVPY	The distribution code to be used for financial transactions of a certain type.
Description	Example: AP overpayment refund	A description of how the distribution code is used.

Field Label	Value	Comments
GL Account Algorithm	GLCNST-DFLT	The standard product, or customer modified, algorithm you use for determining the GL Account String from the distribution code.
GL Account Details	1 of 1	Create at least one set of account details as needed by your chosen algorithm above. Only one will be used based on status and effective date.
Effective Date	01-01-1900	The date you wish the following GL Account string to become active and used by the system, and therefore the integration software.
Status	Active	Only active status accounts will be used by the product and therefore the integration.
GL Account	US1.100000.10000	Input the GL Account String as explained above.
Characteristic Type	Oracle JD Edwards Financials for General Ledger and Accounts Payable Offset Account Template	The characteristic type you created above.
Characteristic Value	Example: REFD	The value you gave to the characteristic type created above.

AP Data Integration Point

AP payment data is extracted from Oracle JD Edwards Financials for General Ledger (GL) and Accounts Payable (AP) when an AP Request invoice is paid. This data is then translated by JDEToCCBAPDataBPELProcess and inserted into the Oracle Utilities Customer Care and Billing AP Request that originally initiated the invoice.

The CCBCancellationWebService invokes the Oracle Utilities Customer Care and Billing service, **C1AdjustmentMaintenance**, when a payment is canceled and the liability is closed in Oracle JD Edwards Financials for General Ledger (GL) and Accounts Payable (AP). The service uses the cancel reason specified in the integration lookup table when canceling the adjustment associated with an AP Request. The sample data cancel reason comes pre-configured as APVC (Accounts Payable Void Check) in Oracle Utilities Customer Care and Billing version 2.2.0.2 and later.

Verify that the following are configured correctly in Oracle Utilities Customer Care and Billing.

Adjustment Cancel Reason

Create the Adjustment Cancel Reason to be used when canceling an adjustment.

1. Navigate to the **Adjustment Cancel Reason** portal on the **Admin** menu.
2. Provide the **Cancel Reason** and **Description**.

Cancel Adjustment Service (C1AdjustmentMaintenance)

1. Navigate to the **Inbound Service** portal on the **Admin** menu.
2. Verify the **XAI Inbound Service** details.

Field Label	Value	Comments
XAI Inbound Service Name	Adjustment Maintenance	This service is used to change data associated with adjustment transactions.
Description	Adjustment Maintenance for AP Cancel	
Long Description	Adjustment Maintenance for AP Cancel	
Active	Checked	Active checkbox checked.
Request Schema	C1AdjustmentMaintenance.xsd	Used by BPEL to call this service.
Response Schema	C1AdjustmentMaintenance.xsd	Used by BPEL to receive the response from this service.
Transaction Type	Update	Service used to update an existing adjustment transaction.

In Oracle Utilities Customer Care and Billing v2.5.0.x, there is an option to use **C1AdjustmentMaintenance** IWS (Inbound WebService).

1. Navigate to the **Inbound Web Service Deployment** portal on the **Admin** menu.
2. Verify that the **Inbound Web Service C1AdjustmentMaintenance** is deployed

- Click the **WSDL** link to view **C1AdjustmentMaintenance** IWS WSDL.

Integration Product Configuration

At this time there is no user interface for entering the configuration parameters associated with Oracle Utilities Customer Care and Billing Integration to JD Edwards Financials for General Ledger and Accounts Payable. The implementer should use an approved database access tool to establish the appropriate configuration parameters in the following tables and columns. This section includes the following:

- [Setting Configuration Properties](#)
- [Error Handling](#)

Setting Configuration Properties

Set Configurations properties that are used by specific integration processes. Scheduler process configuration is done in INTEGRATION_PROCESS_ACTIVATION table and remaining process configuration is done in INTEGRATION_LOOKUP_TABLE.

Process Activation Manager

The table INTEGRATION_PROCESS_ACTIVATION controls the activation or deactivation of the specific integration points. The initial install defaults all of the START_PROCESS values to 'Y'. Set the START_PROCESS value to 'N' for any given PROCESS_NAME that you do not plan to use.

Set the run frequency to the time interval you wish to have between integration runs for each of the integration points.

PROCESS_NAME	START _PROCESS (Y/N)	RUN _FREQUENCY (Seconds)	NEXT_RUN _INTERVAL (System Use)
CCB_JDE_GL	Y	0	0
CCB_JDE_AP	Y	0	0
JDE_CCB_APDATA	Y	0	0

Note: You cannot use APDATA if you do not also use AP Request.

Process Scheduling

You may schedule these processes independently or using an enterprise scheduling tool. To schedule the processes independently you may schedule the Oracle Utilities Customer Care and Billing processes using the standard tools available with the Oracle Utilities Customer Care and Billing product. You may schedule the Oracle JD Edwards Financials for General Ledger and Accounts Payable processes using the standard tools shipped with the Oracle JD Edwards Financials for General Ledger and Accounts Payable product. You may schedule the BPEL processes to run at the time intervals you have configured. Each of the main BPEL processes that form this process integration, have been designed to first look and see if data exists that should be extracted. If data exists it is extracted, transformed and loaded to the target system. If data does not exist then the process does nothing until the next time it tries again.

For example, schedule the Oracle Utilities Customer Care and Billing GL processes to run at 6 AM each weekday morning. Then initiate the BPEL GL process at 7:00 AM and have it run every 4 hours to see if data exists. Accounting staff could then schedule the Journal Entry Batch Processor (R09110Z) to run at 9:00 AM each morning using the Oracle JD Edwards Financials for General Ledger and Accounts Payable Process Scheduler.

You may run the integration manually by initiating each process using the tools provided with each application. Or you can use an enterprise scheduler to initiate all, or some, of the processes mentioned above.

The frequency of the run for each integration point is at the client's discretion. As a default each integration point will run every two minutes from the time you start them the first time. If data exists the integration will be done for the integration point. Otherwise the system will do nothing and then the integration point will try again 2 minutes later.

If you wish to extend the time between runs you may insert a value of time, in seconds, in the RUN_FREQUENCY column of the INTEGRATION_PROCESS_ACTIVATION table for the appropriate integration point. This column controls the timing of the integration points 'waking up' to see if there is data to integrate. The integration points only check this table every 2 minutes so you cannot schedule the runs in less than 2 minute increments. You can schedule longer increments if desired.

Set the run frequency to the time interval, in 120 second increments, you wish to have between integration runs for each of the integration points..

PROCESS_NAME	START _PROCESS (Y/N)	RUN _FREQUENCY (Seconds)	NEXT_RUN_INT ERVAL (System Use)
CCB_JDE_GL	Y	14400	0
CCB_JDE_AP	Y	7200	0
JDE_CCB_APDATA	Y	7200	0

In the above example, the GL integration point looks for data every four hours (14,400 seconds) and the AP Request and AP Data integration points look for data to integrate every two hours (7200 seconds).

Every 2 minutes each integration point checks this table with the following logic:

```

If START_Process flag is NOT Y do nothing
else
  If Run Frequency is 0 run the IP
else
  If next run interval is =< 0 run the integration point AND set
Next_run_interval = run_frequency
else
  DO not run the Integration Point, just set Next_run_interval =
Next_run_interval - 120 (the polling interval set in BPEL)

```

General Ledger (GL)

The following processes must be run in sequence to extract, transform and load GL transactions from Oracle Utilities Customer Care and Billing to Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Product	Process Name	Description
Oracle Utilities Customer Care and Billing	GLASSIGN	Assigns GL account numbers to the GL details associated with financial transactions by referencing the distribution code that calls the appropriate assignment algorithm.
Oracle Utilities Customer Care and Billing	GLS	Follows GLASSIGN to create financial transaction (FT) download staging records for all financial transactions that are ready to be posted to the GL.
BPEL	CCBTtoJDEGLBPELProcess	Extracts financial transactions from Oracle Utilities Customer Care and Billing into BPEL to be transformed and prepared for upload to Oracle JD Edwards Financials for General Ledger and Accounts Payable.
Oracle JD Edwards Financials for General Ledger and Accounts Payable	Journal Entry Batch Processor	Reads the staged data in the Journal Entry Transactions Batch Table and creates journal entries in the Oracle JD Edwards Financials for General Ledger and Accounts Payable GL (F0911), Accounts Ledger Table. This process can be scheduled or run manually.

AP Request

The following processes must be run in sequence to extract, transform and load AP Requests from Oracle Utilities Customer Care and Billing to Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Product	Process Name	Description
BPEL	CCBToJDEAPBPELProcess	Extracts AP Requests from Oracle Utilities Customer Care and Billing into BPEL to be transformed and prepared for upload to Oracle JD Edwards Financials for General Ledger and Accounts Payable.
Oracle JD Edwards Financials for General Ledger and Accounts Payable	Batch Voucher Processor	Receives invoice data using tables F0911Z1 (Journal Entry Transactions Batch Table) and F0411Z1 (Voucher Transactions Batch Upload Table) into Oracle JD Edwards Financials for General Ledger and Accounts Payable. Batch Voucher Processor creates Journal entries in the Oracle JD Edwards Account Ledger (F0911) and Voucher in Accounts Payable Ledger (F0411).

AP Data

The following process must be run, sometime after the Oracle JD Edwards Financials for General Ledger and Accounts Payable check run, to extract, transform and load AP Data from Oracle JD Edwards Financials for General Ledger and Accounts Payable to Oracle Utilities Customer Care and Billing.

Product	Process Name	Description
BPEL	JDEToCCBAPDataBPELProcess	Extracts all payments and cancelations created during pay cycle processing.

Note: The BPEL processes noted above are exposed as a standard, stand alone, SOAP Web Service. They can therefore be invoked as regular Web services by the BPEL console or any platform supporting scheduling web service invoke activities. These services do not require any external inputs to run. Industry standard enterprise scheduling tools that support this capability may therefore be used to initiate these processes if desired.

There is an open source tool bundled with the SOA Suite called Quartz, which can be used as a scheduler. In fact the BPEL Process Manager uses the Quartz scheduler internally.

Lookup Table

The database table INTEGRATION_LOOKUP_TABLE contains configurable parameters used in the integration for the GL, AP Data, and AP Request integration points. The values for these parameters must be set to match your configuration of Oracle Utilities Customer Care and Billing and Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Note: No user interface exists in this release. Use approved database tools to set column values.

INTEGRATION_KEY	Default INTEGRATION_VALUE	Comments
CCB_JDE_AP CCB_JDE_GL JDE_CCB_APDATA		Ensure that integration points are enabled in the INTEGRATION_PROCESS_ACTIVATION table as needed. Set RUN_FREQUENCY times, in seconds, for each integration point as needed. The default is every 1800 seconds or 30 minutes.
CCB.JDE.GL.EMAIL	abc.gl@xyz.com.	Enter the E-mail address to be notified if errors occur in the GL integration point. For example: abc.gl@xyz.com.
CCB.JDE.GLEDUS	CCBGDATA	This is used to populate EDI - User ID in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1). You may choose not to change this value.
CCB.JDE.GLEXA	CCBGDATA	This is used to populate Name - Alpha Explanation in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1). You may choose not to change this value.
CCB.JDE.GLEDTR	J	This is used to populate EDI - Transaction Type in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1).
CCB.JDE.GLDCT	JE	This is used to populate Document Type in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1).
CCB.JDE.GLICUT	G	This is used to populate Batch Type in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1).
CCB.JDE.GLSBL	Null	This is used to populate Sub ledger - G/L in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1).
CCB.JDE.GLSBLT	Null	This is used to populate Sub ledger Type in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1).
CCB.JDE.GL.ANI.SEPARATOR	. (Dot)	This is used as a separator while creating the Account Number for Oracle JD Edwards Financials.

INTEGRATION_KEY	Default INTEGRATION_VALUE	Comments
CCB.JDE.GL.GL_DIVISION	US1	If this value is Null then financial transactions associated with all GL divisions in Oracle Utilities Customer Care and Billing are integrated. If this column has a value then only financial transactions associated with this specific GL Division indicated are integrated. For example: Null or US1.
CCB.JDE.GL.XFORMCCBCOLL.PRE.E XTN.FLAG	false	If set to true, the pre transformation extension service is invoked at the collection level; after retrieving all the GL records from Oracle Utilities Customer Care and Billing and before any transformation is done.
CCB.JDE.GL.AFTERJDECOLLINSERT. POST.EXTN.FLAG	false	If set to true, the post transformation extension service is invoked after all the records are inserted in the Oracle JD Edwards Financials for General Ledger and Accounts Payable interface table.
CCB.JDE.AP.EMAIL	abc.ap@oracle.com	Enter the Email address to be notified if errors occur in the AP Request integration point. For example: abc.ap@oracle.com
CCB.JDE.AP.ICUT	V	This is used to populate Batch Type in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1).
CCB.JDE.AP.CHAR_TYPE_CD_ORGID	JDEBU	Identifies the characteristic type in Oracle Utilities Customer Care and Billing that stores the JD Edwards Business Unit.
CCB.JDE.AP.LT	AA	This is used to populate Ledger Types in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1).
CCB.JDE.AP.CRRM	D	This is used to populate Currency Mode (Foreign or Domestic) in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1) and Oracle JD Edwards Financials for General Ledger and Accounts Payable - Voucher Transactions Batch Upload Table (F0411Z1).
CCB.JDE.AP.CHAR_TYPE_CD_COMP ANY	JDECO	Identifies the characteristic type in Oracle Utilities Customer Care and Billing that stores the JD Edwards Company.

INTEGRATION_KEY	Default INTEGRATION_VALUE	Comments
CCB.JDE.AP.DCT	PV	This is used to populate Document Type in Oracle JD Edwards Financials for General Ledger and Accounts Payable - Journal Entry Transactions Batch Table (F0911z1) and Oracle JD Edwards Financials for General Ledger and Accounts Payable - Voucher Transactions Batch Upload Table (F0411Z1).
CCB.JDE.AP.CHAR_TYPE_CD	TEMPLATE	Characteristic type code for the characteristic setup in Oracle Utilities Customer Care and Billing to hold the Offset Account Template (AAI – Automatic Accounting Information) for the account to be used in JD Edwards as the Credit account for incoming AP Request transactions.
CCB.JDE.AP.PYIN	?	Set this to a valid payment instrument code to be used while creating the Supplier during AP Request integration transactions. This code should correspond to payments being made via a check.
CCB.JDE.APREQUEST.XFORMCCBCO LL.PRE.EXTN.FLAG	false	If set to true, the pre transformation extension service is invoked at the collection level; after retrieving all the AP Request records from Oracle Utilities Customer Care and Billing and before any transformation is done.
CCB.JDE.APREQUEST.XFORMCCBRE CORD.PRE.EXTN.FLAG	false	If set to true, the pre transformation extension service is invoked at the record level; before transforming the AP Request record from Oracle Utilities Customer Care and Billing to Oracle JD Edwards Financials for General Ledger and Accounts Payable format.
CCB.JDE.APREQUEST.XFORMJDERE CORD.POST.EXTN.FLAG	false	If set to true, the post transformation extension service is invoked at the record level, after the record is inserted in the Oracle JD Edwards Financials for General Ledger and Accounts Payable Interface tables.
JDE.CCB.APDATA.EMAIL	abc@oracle.com	Enter the Email address to be notified if errors occur in the AP Data integration point.
JDE.CCB.APDATA.RPTORG	CCBAPREQ	Transaction Originator. No need to change.
JDE.CCB.APDATA.LASTRUNDTM	11-02-2008 10:01:01	Last updated time of AP Data BPEL process run. This is used to determine the payment data to be extracted and moved across the integration point. This column is updated by the integration application each time the AP Data BPEL process is run.
JDE.CCB.CANCEL.CANCEL_REASON	APVC	Oracle Utilities Customer Care and Billing

INTEGRATION_KEY	Default INTEGRATION_VALUE	Comments
JDE.CCB.APDATA.XFORMJDEPAYME NTSCOLL.PRE.EXTN.FLAG	false	If set to true, the pre transformation extension service is invoked at the collection level after retrieving all the payment records from Oracle JD Edwards Financials for General Ledger and Accounts Payable and before any transformation is done.
JDE.CCB.APDATA.XFORMJDEPAYME NTSRECORD.PRE.EXTN.FLAG	false	If set to true, the pre transformation extension service is invoked at the record level before transforming the Oracle JD Edwards Financials for General Ledger and Accounts Payable payment record from Oracle JD Edwards Financials for General Ledger and Accounts Payable to Oracle Utilities Customer Care and Billing format.
JDE.CCB.APDATA.PROCESSPAYMEN TINFO.PRE.EXTN.FLAG	false	If set to true, the pre processing extension point is invoked. Base payment and cancellation processing are not invoked.
JDE.CCB.APDATA.PROCESSPAYMEN TINFO.POST.EXTN.FLAG	false	If set to true, the post processing extension point is invoked. After the base payment and cancellation processing are invoked, additional processing can be done here.
CCB.JDE.ADMIN_EMAIL	abc@oracle.com	Enter the Email address of administrator to be notified if errors occur for this integration.
CCB.JDE.APREQUEST.XFORMJDERE CORD.POST.EXTN.FLAG	false	If set to true, the post transformation extension service is invoked at the record level before the record is inserted in the Oracle JD Edwards Financials for General Ledger and Accounts Payable Interface tables.
CCB.JDE.CCB.ADJ.MAINT.URL	http:// CCB_hostname:CCB_port/ ouaf/XAIApp/xaiserver/ C1AdjustmentMaintenance(XAI) or http:// CCB_hostname:CCB_port/ ouaf/webservices/ C1AdjustmentMaintenance(I WS)	Enter cancellation URL of Oracle Utilities Customer Care and Billing.
CCB.JDE.ENDPOINT	http://jdehost:jdeport/ servicename/ SupplierManager	Enter supplier manager endpoint.
CCB.JDE.PORTTYPE	Supplier manager port.	Enter port type of supplier manager.

INTEGRATION_KEY	Default INTEGRATION_VALUE	Comments
CCB.JDE.SERVICENAME	SupplierManagerService.	Enter service name of supplier manager.
CCB.JDE.VERSION	9.X	8.X or 9.1 or 9.X Enter appropriate version for Oracle JD Edwards Financials for General Ledger and Accounts Payable. Provide 8.X to invoke JDE 8.X supplier manager web service Provide 9.1 to invoke JDE 9.1 supplier manager web service Provide 9.X to invoke JDE 9.2 or higher version web service.

Note: The INTEGRATION_PROCESS_ACTIVATION and INTEGRATION_LOOKUP_TABLE tables are created in the integration schema, during installation, for the BPEL processes to access these tables.

Error Handling

If errors occur during the main integration processes, they are logged in the Integration Error table, INTEGRATION_ERROR_STORE and the Mail Notification sub process is invoked.

The integration has an error table in the integration schema which keeps a record of all transactions that have failed either during BPEL processing, including insertion of data in the target system.

When errors are found during data extraction Oracle BPEL Process Manager inserts errors into the error table, INTEGRATION_ERROR_STORE. There is no user interface to access this table however the error notification process, if configured, notifies the user by e-mail of the error and the error details. The layout of the error table INTEGRATION_ERROR_STORE is shown below:

COLUMN	DATA TYPE
SOURCE_SYSTEM	VARCHAR2 (3)
INT_BATCH_NUMBER	NUMBER
INTERFACE_NAME	VARCHAR2 (30)
BPEL_INSTANCE_ID	NUMBER
ERROR_CODE	VARCHAR2(400)
ERROR_SUMMARY	VARCHAR2 (3000)
ERROR_MESSAGE	VARCHAR2 (3000)
NOTIFIED	VARCHAR2 (1)
LAST_UPDATE_DATE_TIME	DATE

If errors occur during the extraction or load process for any of the integration points, the system logs an error in `INTEGRATION_ERROR_STORE`. Business data is stored in the `ERROR_MESSAGE` field of the table, and the information is also included in the notification e-mail.

The e-mail notification sub process reads the information in the error table and sends an e-mail notification, based on settings configured for the integration layer.

Each time the e-mail notification process runs it picks up records from the BPEL error table where `NOTIFIED = 'N'` (meaning that notifications have not yet been sent). It loops through all the distinct `INTERFACE_NAME` entries and sends one email to the corresponding email address (specific to the interface name) with the error information of all the entries in the table. So if there are 6 records with `INTERFACE_NAME='GL'` one e-mail is sent out to the email address corresponding to the GL interface. After the email is sent, the system updates the indicator so that `NOTIFIED = 'Y.'`

This e-mail contains the following information about each of the 6 GL transactions that failed:

- Subject: "Source System" "Target System" "Interface Name" "Process Instance"
- Body:
- Source system
- Integration batch number
- BPEL Instance ID
- Error Code
- Error Summary
- Error Message

Steps to Enable E-mail Notification

Perform the following steps:

1. Log in to the Enterprise Manager console.
2. Expand **SOA** and then right-click. From the menu, click **SOA Administration**, and then click **Workflow Properties**.
3. Select **E-mail** from the drop-down list.
4. Enter the e-mail IDs in the **From** address field.

Verifying the Implementation

The best way to verify the implementation is to start each application individually then manually running the integration points:

- [GL Integration Point](#)
- [AP Request Integration Point](#)
- [AP Data Integration Point](#)

GL Integration Point

1. Identify Financial Transactions in CI_FT table that need to be sent to Oracle JD Edwards Financials for General Ledger and Accounts Payable GL for creating Journal Entries. If needed, generate a bill, adjustment or payment event to create financial transactions.
2. Run the GLASSIGN process to assign the Account Number to the FT in CI_FT.
3. Run the GLS process to mark the FTs in the CI_FT table for download. The staging process to create a GL download (GLS) creates a staging record for every financial transaction that is ready for download. This process populates the FT / Batch Process table with the unique ID of all financial transactions to be interfaced to the GL. This process marks each staging record with the batch process ID (defined on the installation record) for the GL interface. It also stamps the current run number for the respective batch control record.

Note: The integration BPEL process uses the information on this staging table to create the consolidated journal entries that are interfaced to your GL. The Oracle BPEL process reads the CI_BATCH_JOB table to check for new BATCH_JOB_ID and BATCH_JOB_STAT_FLG.

4. Run the GLS process.
5. Invoke the GL Integration Point process from Oracle BPEL Process Manager or wait for its next run to occur. The package should do the following:
 - Select the FT in the CI_FT table based on the batch code and the run number provided to it by Oracle BPEL Process Manager.
 - Extract and group (summarize) the Financial Transactions (FT) and push them into Oracle BPEL Process Manager.
 - Update the Distribution status to 'D' after extracting the FT and increment the NEXT_BATCH_NBR in the CI_BATCH_CTL table.
 - Data is transformed by the BPEL process and written to the GL journal staging table in Oracle JD Edwards Financials for General Ledger and Accounts Payable.
6. Use the Oracle JD Edwards Financials for General Ledger and Accounts Payable import Process to load the GL data into the Oracle JD Edwards Financials for General Ledger and Accounts Payable GL base tables.

AP Request Integration Point

1. Create an AP Request for a refund customer in Oracle Utilities Customer Care and Billing. You will need to generate an adjustment of the appropriate type to do this.
2. Run the GLASSIGN process to assign the Account Number to the FT in CI_FT.
3. Invoke the Oracle BPEL Integration Point Process to extract the AP Request Information, and the corresponding customer information from Oracle Utilities Customer Care and Billing, transform it, and load it into JD Edwards Financials for General Ledger and Accounts Payable AP Invoice Interface tables.
4. Run AP batch Voucher Processor (R04110ZA) in Oracle JD Edwards Financials for General Ledger and Accounts Payable to import Vouchers.

AP Data Integration Point

1. Generate a payment in JD Edwards Financials for General Ledger and Accounts Payable for a Voucher created by the Customer Care and Billing AP Request process above.
2. Invoke the Oracle BPEL Integration Point process to update the AP Check Request table (CI_ADJ_APREQ) with the Payment Information from Oracle JD Edwards Financials for General Ledger and Accounts Payable.
3. If you wish to further test a cancellation of payment functionality, cancel the Payment you made above in JD Edwards Financials for General Ledger and Accounts Payable.
4. Invoke the Oracle BPEL Process Manager process to update the AP Check Request table (CI_ADJ_APREQ) with the Payment Information from Oracle JD Edwards Financials for General Ledger and Accounts Payable. This cancels the AP Request and adjustment in Oracle Utilities Customer Care and Billing.

Chapter 4

Monitoring and Troubleshooting

If your integration is configured properly and your data is entered correctly into Oracle Utilities Customer Care and Billing and Oracle JD Edwards Financials for General Ledger and Accounts Payable, you should not experience errors related to the integration. The following sections address some common scenarios which may produce errors and offer possible solutions toward error resolution.

This chapter provides information on the following:

- [Monitoring from Oracle Utilities Customer Care and Billing](#)
- [Monitoring from Oracle JD Edwards Financials for General Ledger and Accounts Payable](#)
- [Monitoring from Integration](#)
- [Troubleshooting](#)

Monitoring from Oracle Utilities Customer Care and Billing

Errors related to the online integration invocation from Oracle Utilities Customer Care and Billing are stored in the CCB_ENVIRONMENT_NAME/logs/system folder.
Example: V24_V24020_CCB_SOA12C_CERT_LIN_ORA_WLS/logs/system

Errors related to batch integration invocation from Oracle Utilities Customer Care and Billing are stored in the \$SPLOUTPUT/CCB_ENVIRONMENT_NAME folder.
Example: /spl/sploutput/V24020_CCB_SOA12C_CERT_LIN_ORA_WLS

Example: If any error occurs when GLASSIGN or GLS batches are run are reported in Oracle Utilities Customer Care and Billing product batch run tree. Then you must correct the underlying condition causing the error and then rerun the batch processes. The rest of the integration cannot occur until the two Oracle Utilities Customer Care and Billing batch processes have successfully completed.

For more information about errors and notifications, see the Oracle Utilities Customer Care and Billing documentation.

Monitoring from Oracle JD Edwards Financials for General Ledger and Accounts Payable

Any error occurs during the execution of the journal generator process are reported in Oracle JD Edwards Financials for General Ledger and Accounts Payable process monitor. The monitor shows the status of the process and an error log.

Monitoring from Integration

Use any of the following to monitor the integration:

- [Monitoring Using WebLogic SOA Enterprise Manager](#)
- [Monitoring Using WebLogic Logs](#)
- [Monitoring Using Integration Error Store table](#)

Monitoring Using WebLogic SOA Enterprise Manager

Perform the following steps to monitor through WebLogic SOA Enterprise Manager:

1. Log in to the WebLogic SOA Server Enterprise Manager, and then navigate to **SOA > soa-infra > CCB-JDE**.
All composite processes deployed for integration are available under the partition CCB-JDE.
2. Select the appropriate process to list all the instances for the processes sorted by time of execution.
3. Click the appropriate process instance and it displays the flow for the process. The composite flow lists all activities in the process instance.

Monitoring Using WebLogic Logs

Log in to the machine where SOA server is installed. The SOA logs are stored in:

```
<WebLogic installation folder>/user_projects/domains/<SOA Domain name>/servers/<SOA Server name>/logs
```

Example: /Oracle/Middleware/Oracle_Home/user_projects/domains/soa_domain/servers/soa_server1/logs

Monitoring Using Integration Error Store table

Errors occurring during the integration such as when financial transactions are extracted or summarized, when data formats are translated, or when data is inserted into one of the edge applications are logged and reported by the integration product in the INTEGRATION_ERROR_STORE table.

Use standard database (SQL based) tools to view the error information in the table if necessary, however the e-mail notification you receive must include all of the information necessary to investigate and correct the error.

If errors occur during the extraction or load process for any of the integration points, the system logs an error in INTEGRATION_ERROR_STORE. Business data is stored in

the ERROR_MESSAGE field of the table, and the information is also included in the notification email.

The following sections indicate where to locate error messages and logged error data in each of the integration point:

- [GL Integration Point](#)
- [AP Request Integration Point](#)
- [AP Data Integration Point](#)

GL Integration Point

If errors occur during the extraction of Financial Transactions from Oracle Utilities Customer Care and Billing tables or during loading these transactions into Oracle JD Edwards Financials for General Ledger and Accounts Payable F0911Z1 table, BPEL inserts the error into INTEGRATION_ERROR_STORE.

The following business data is stored in the ERROR_MESSAGE field of INTEGRATION_ERROR_STORE. This information is included in the notification e-mail.

TABLE	COLUMN	DATA TYPE
CI_FT_PROC	BATCH_NBR	NUMBER (10)
CI_FT_GL	DST_ID	CHAR (10)
CI_FT_GL	GL_ACCT	VARCHAR2 (48)
CI_FT	CIS_DIVISION	CHAR (5)
CI_FT	GL_DIVISION	CHAR (5)

The GL integration point utilizes set based processing. If BPEL detects an error, with any part of the batch, the entire batch is rejected.

AP Request Integration Point

If errors occur during the extraction of Financial Transactions from Oracle Utilities Customer Care and Billing tables or during loading these transactions into Oracle JD Edwards Financials for General Ledger and Accounts Payable Voucher and Journal Interface tables, BPEL inserts the error into INTEGRATION_ERROR_STORE.

The following business data is stored in the ERROR_MESSAGE field of INTEGRATION_ERROR_STORE. This information is included in the notification e-mail.

TABLE	COLUMN	DATA TYPE
CI_ADJ_APREQ	AP_REQ_ID	CHAR (12)
	BATCH_NBR	NUMBER (10)
	ENTTTY_NAME	VARCHAR2 (64)
	SCHEDULED_PAY_DT	DATE

TABLE	COLUMN	DATA TYPE
CI_ADJ	ADJ_ID	CHAR (12)
	CRE_DT	CHAR (12)
	ADJ_TYPE_CD	CHAR (8)
	ADJ_AMT	NUMBER (15,2)
CI_SA	CIS_DIVISION	CHAR (5)

AP Data Integration Point

The following business data is stored in the ERROR_MESSAGE field of INTEGRATION_ERROR_STORE. This information is included in the notification e-mail.

TABLE	COLUMN	DATA TYPE
F0413	PYID - Payment ID	NUMBER (15)
	DOCM - Payment Number	NUMBER (8)
	DMTJ - Check/ITM Date	DATE (6)
	CBNK – Bank Account Number	STRING (20)
F0414	PYE – Payee Number	NUMBER (8)
	DOC – Invoice ID	NUMBER (8)
F0411	PAAP - Payment Amount	NUMBER (15)
	VINV – Invoice Number	STRING (25)
	URRF – User Reserved Reference	STRING (15)

Troubleshooting

The following sections detail error scenarios which may occur, and how to resolve them. Usually when errors occur, you must correct configuration settings, data errors, or both:

- The General Ledger Integration uses set based processing. This means that either all or none of the transactions in a batch are successful.
- The AP Request Integration uses row-by-row processing.

- The AP Data Integration uses row-by-row processing.

Error Scenario	Interface	Process	Details	Resolution
Data failed to insert in the JD Edwards Financials for General Ledger and Accounts Payable interface table.	GL integration process	BPEL Process	If one row fails to insert into the Oracle JD Edwards Financials for General Ledger and Accounts Payable Interface table during a batch, the entire batch rolls back. In this instance the BPEL process shows a status of error and an error notification is sent via email.	Re-establish the connections between BPEL and the edge applications if necessary. Correct the configuration and/or transactional data in the Oracle Utilities Customer Care and Billing database if necessary. Make sure that the GLASSIGN and GLS processes are run again. The integration process must also be re-run once you have taken the above actions.
Data successfully inserted in Oracle JD Edwards Financials for General Ledger and Accounts Payable interface table, but data has errors.	GL integration process	Oracle JD Edwards Financials for General Ledger and Accounts Payable Process	If the integration process completes successfully and data is inserted into the Oracle JD Edwards Financials for General Ledger and Accounts Payable interface tables, but the data has errors in it, the Journal Generator process may not be able to process the data and create journal vouchers from it.	Correct the information directly in Oracle JD Edwards Financials for General Ledger and Accounts Payable and import the journal voucher using the online tools provided in Oracle JD Edwards Financials for General Ledger and Accounts Payable.
Journal Generator process cannot complete successfully.	GL integration process	Oracle JD Edwards Financials for General Ledger and Accounts Payable Process	When the Journal Generator process encounters errors, the error status/reason associated with the Journal Generator process is also identified in the Oracle JD Edwards Financials for General Ledger and Accounts Payable Process monitor. All the rows in the interface table remain unprocessed and the Distribution Status remains unchanged as 'N'.	Correct the information directly in Oracle JD Edwards Financials for General Ledger and Accounts Payable and load the journal voucher using the online tools provided in Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Error Scenario	Interface	Process	Details	Resolution
Journal Generator process completes successfully with bad data.	GL integration process	Oracle JD Edwards Financials for General Ledger and Accounts Payable Process	In this instance, journals are created for the row of bad data, which can be detected and rectified by viewing, editing and loading the journal online.	<p>Correct the information directly in Oracle JD Edwards Financials for General Ledger and Accounts Payable and import the journal voucher using the online tools provided in Oracle JD Edwards Financials for General Ledger and Accounts Payable.</p> <p>After the process is successfully completed the Distribution Status of all the rows in the Interface table are updated to 'D'.</p>
Row of bad data in Oracle JD Edwards Financials for General Ledger and Accounts Payable interface table does not get picked up.	GL integration process	Oracle JD Edwards Financials for General Ledger and Accounts Payable Process	The Journal Generator process does not error out and the row of bad data in the Oracle JD Edwards Financials for General Ledger and Accounts Payable interface table does not get picked up. This situation can occur if the Accounting Date lies outside the Open Period.	<p>Correct the Accounting Date manually in Oracle JD Edwards Financials for General Ledger and Accounts Payable.</p> <p>After the process has completed successfully the Distribution Status of the row still remains in 'N'.(does not change to 'D').</p>
GL Account Mapping inconsistency	GL integration process	BPEL, Oracle Utilities Customer Care and Billing Setup	When the Journal Voucher is created in Oracle JD Edwards Financials for General Ledger and Accounts Payable the Accounting information is incorrect.	Since the source of truth is Oracle JD Edwards Financials for General Ledger and Accounts Payable GL, the user needs to correct the Accounting Structure in the Oracle Utilities Customer Care and Billing distribution code using information from the Oracle JD Edwards Financials for General Ledger and Accounts Payable GL.
Wrong GL Operating Unit	GL integration process	Oracle Utilities Customer Care and Billing	The financial information being sent to Oracle JD Edwards Financials for General Ledger and Accounts Payable has the wrong Operating Unit associated with it.	Correct the GL Division setup in Oracle Utilities Customer Care and Billing to match the GL Operating Unit in Oracle JD Edwards Financials for General Ledger and Accounts Payable.

Error Scenario	Interface	Process	Details	Resolution
Data in AP Request row and BPEL process does not fail.	AP Request integration process	Oracle Utilities Customer Care and Billing Process	If a particular AP Request has an error in Oracle Utilities Customer Care and Billing, it is not picked by the integration process but the remaining requests of that BPEL run are picked up and inserted into the interface tables and the BPEL process status is successful. If one or more rows have failed at any point in the integration their information is logged in the integration log table and an error email is generated.	Correct the specific AP Request in error using the tools provided by Oracle Utilities Customer Care and Billing. Then rerun the BPEL integration process.
Error Data in Oracle JD Edwards Financials for General Ledger and Accounts Payable staging table and the process fails.	AP Request integration process	Oracle JD Edwards Financials for General Ledger and Accounts Payable Process	All the data is successfully inserted into the JD Edwards Financials for General Ledger and Accounts Payable Interface tables, but there is an error while running the AP Request process.	Load the Vouchers directly into JD Edwards Financials for General Ledger and Accounts Payable and resolve any incorrect data.
Error Data in Oracle JD Edwards Financials for General Ledger and Accounts Payable staging table and the process does not fail.	AP Request integration process	Oracle JD Edwards Financials for General Ledger and Accounts Payable Process	JD Edwards Financials for General Ledger and Accounts Payable Voucher Build process ends successfully but the Vouchers are in recycle status.	Load the Invoices directly in Oracle JD Edwards Financials for General Ledger and Accounts Payable and resolve any incorrect data.
The integration is unable to update the AP Request table with payment information.	AP Data integration process	BPEL Process	It is likely that the error is technical in nature (data mapping etc).	Review BPEL error table and product error logs. Update BPEL and/or product configurations as needed to correct the errors reported. Re-run the integration once corrections have been made.
The integration is unable to invoke the Adjustment Maintenance Service.	AP Data integration process	BPEL Process	It is likely that the error is technical in nature (service retired etc).	Review BPEL error table and product error logs. Update BPEL and/or product configurations as needed to correct the errors reported. Re-run the integration once corrections have been made.

Chapter 5

Customization Options

This chapter provides information on the various methods that can be used to extend or customize the integration:

- [Extension Methods](#)
- [Steps to Implement Extension Points](#)
- [Steps to Implement Custom Transformations](#)
- [Migrating Custom Components](#)

Extension Methods

The integration process allows extensibility of transaction messages using the following methods:

- [Pre-transformation Extension Point](#)
- [Post-transformation Extension Point](#)
- [Custom Transformations](#)

The integration layer defines an external call from each extension point which accepts the source/target XML as input and gives the source /target XML as output. The integration layer points to an abstract WSDL and can be plugged in by a concrete WSDL by the implementation team.

This helps the implementation to invoke any external web service and transform the respective XML.

Pre-transformation Extension Point

The pre-transformation extension point is invoked before the main transformation is executed. This transformation helps in transforming the source XML coming as an input to the integration process and helps the implementation to invoke any external web service and transform the input XML.

Post-transformation Extension Point

The post transformation extension point is invoked after the main transformation is executed. This transformation helps in transforming the target XML that is input into the

target system and helps the implementation to invoke external web services and/or transform the output XML.

Custom Transformations

This integration has placeholders for custom elements in the incoming schema and outgoing schema at record level. When querying data into incoming schema the custom elements will be empty. This can be populated through the Extension points.

The custom transformations have a standard template to map elements to existing fields that are still unmapped and a custom template to map custom elements. The main transformation invokes custom transformation. Empty custom transformations are shipped with the product.

Note: The custom elements in the target variable are not passed to the Database Adapter but they are passed to Post Collection Extension point.

Steps to Implement Extension Points

To implement extension points, perform the following:

1. This integration has pre-transformation and post-transformation extension points which can be used to invoke web services and transform the payload.
2. The desired extension point can be triggered from the process by enabling the pre- and post-transformation extension flags defined in the integration lookup table.
3. The processes that include extension points have their own concrete wsdl. This is used to read the endpoint location for the extension service.
4. The binding and service elements for the extension service needs to be added to the concrete wsdl in the product install home at CCB_JDE_INSTALL_HOME/MDS-Artifacts/ MetaData/ExtensionServiceLibrary and the wsdl needs to be updated in MDS.
5. These concrete wsdl files are located in MDS under the directories /apps/CCB-JDE/MetaData/ExtensionServiceLibrary. For instructions about updating MDS, refer to the *Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable Release 12.1 Media Pack Installation Guide*.

6. Re-deploy the composite or restart the SOA server for the extension point to invoke the web service in the concrete wsdl.

For example: To enable the extension points for CCBToJDEAPBPelProcess add the binding and service elements to the CCBToJDEAPBPelProcessExtensionConcrete.wsdl.

```

    <binding name="CCBToJDEAPBPelProcessV1ExtensionServiceBinding"
type="tns:CCBToJDEAPBPelProcessV1ExtensionService">
    <soap:binding transport="http://schemas.xmlsoap.org/soap/
http"/>
    <operation name="PreXformCollectionCCBtoJDE">
    <soap:operation style="document"
soapAction="PreXformCollectionCCBtoJDE"/>

    <input>
        <soap:body use="literal" namespace="http://
xmlns.oracle.com/CCBToJDEAPBPelProcess/
CCBToJDEAPBPelProcessExtension/V1"/>
    </input>
    <output>
        <soap:body use="literal" namespace="http://
xmlns.oracle.com/CCBToJDEAPBPelProcess/
CCBToJDEAPBPelProcessExtension/V1"/>
    </output>
    <fault name="fault">
    <soap:fault name="fault" use="literal"
encodingStyle=""/>
    </fault>
    </operation>
    <operation name="PostXformCollectionCCBtoJDE">
    <soap:operation style="document"
soapAction="PostXformCollectionCCBtoJDE"/>
    <input>
        <soap:body use="literal" namespace="http://
xmlns.oracle.com/CCBToJDEAPBPelProcess/
CCBToJDEAPBPelProcessExtension/V1"
parts="postXformCollection1"/>
        <soap:header
message="tns:PostXformCollectionCCBtoJDE_msg"
part="postXformCollection2"
use="literal"/>
    </input>
    <output>
        <soap:body use="literal" namespace="http://
xmlns.oracle.com/CCBToJDEAPBPelProcess/
CCBToJDEAPBPelProcessExtension/V1"
parts="postXformCollection1"/>
        <soap:header
message="tns:PostXformCollectionCCBtoJDE_msg"
part="postXformCollection2"
use="literal"/>
    </output>
    <fault name="fault">
    <soap:fault name="fault" use="literal"
encodingStyle=""/>

```

```

        </fault>
    </operation>
</binding>
<service name="CCBToJDEAPReqProcessExtension">
    <port name="CCBToJDEAPBPELProcessV1ExtensionService_pt"
binding="tns:CCBToJDEAPBPELProcessV1ExtensionServiceBinding">

        <soap:address location="http:// xyz.us.oracle.com:0/soa-
infra/services/default/CCBJDEExtensionProcess/
CCBToJDEAPReqProcessExtension"/>
    </port>
</service>

```

- For the custom BPEL process invoked from the extension point to be in the same global transaction as the main BPEL process, make sure that the transaction flag on the Custom BPEL component is set to "Required" and ws-at properties are set as follows.

```

<component name="ExtensionService">
    <implementation.bpel src="ExtensionService.bpel"/>
    <property name="bpel.config.transaction"
        many="false" type="xs:string">required</property>
</component>

```

- Also, if AIA Foundation pack is installed in the same managed server as this integration, then "oracle/no_authentication_service_policy" must be attached to the service and "oracle/no_authentication_client_policy" must be attached to all the references of the custom BPEL process invoked from the Extension Points.

Steps to Implement Custom Transformations

To implement custom transformations, perform the following:

- Each process in the integration has its own XSD files for the incoming and outgoing messages. The messages have custom elements at record level which can be used to pass additional data.
- Each XSD has a corresponding CustomType xsd in which the complexType elements for each customElements tag are defined.
- To pass additional elements in the customElements tag the corresponding complexType needs to be modified. Add the additional elements required in both the complexType elements i.e. XSD for both edge applications.
- The custom XSD files are located in the product install home under the directories CCB_JDE_INSTALL_HOME/MDS-Artifacts/CCB-JDE/MetaData/ApplicationObjectLibrary/OUCCB/V1/schemas and CCB_JDE_INSTALL_HOME/MDS-Artifacts/CCB-JDE/MetaData/ApplicationObjectLibrary/JDE/V1/schemas/
- The custom elements in the incoming message can be populated through the Extension points.
- Each transformation file has a corresponding Custom XSL, and standard and custom templates are defined in the Custom XSL.
- Each transformation invokes the standard and custom templates at the record level.

8. The Custom XSL has a standard template to map elements that are still unmapped coming from the Oracle Utilities Customer Care and Billing DB Adapter Table schema to fields in the Oracle JD Edwards DB Adapter Table schema or vice versa.
9. The Custom XSL has a custom template to map custom elements. The custom xsl files are located in the product install home under the directory
CCB_JDE_INSTALL_HOME/services/industry/Utilities/
EnterpriseBusinessFlow/<Process Name>/xsl
10. After updating the XSL files in the product install home, update MDS using the ant scripts and restart the SOA server.

Refer to the instructions for updating MDS located in the *Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable Release 12.1 Media Pack Installation Guide*.

For example:

"CCB Schema: GetCCBAPData.xsd

"JDE Schema: InsertIntoJDEVoucher_table.xsd

To modify the AP Data integration process to map GEO_CODE from Oracle Utilities Customer care and Billing to Oracle JD Edwards , modify Transformation_JDEVoucher_Custom.xml.

```
<xsl:template name=" JDEVoucher_customElements">
  <!-- Customers add tranformations here -->
  <ns0:vlnetst>
    <xsl:value-of select="/ns1:GetCCBAPDataProcessResponse/
ns1:result/ns2:SelectCCBAPRecordsWithTemplateOutput/
ns2:B.GEO_CODE"/>
  </ns0:vlnetst>
</xsl:template>
</xsl:stylesheet>
```

Migrating Custom Components

This section includes the following:

- [Migrating Custom Composites](#)
- [Migrating Custom XSLs](#)

Migrating Custom Composites

All integration services provided with this integration pack have extension points available to extend the functionality using custom composites. All custom extension composites can be migrated from 11g to 12c. Ensure you have a proper backup of the 11g process before doing the upgrade from 11g to 12c.

Open the 11g composite in Jdeveloper 12.1.3 and save the composite. The directory structure of the composite changes and some files are added and deleted.

Perform these manual changes when migrating from 11g to 12c:

1. All the transformations currently are either in xsl folder or under the composite directory, should be moved to Transformations folder and all references in the .bpel file should be changed accordingly.
2. All the WSDLs should be moved to WSDLs folder manually.
3. All the BPEL files should be moved to BPEL folder.
4. All the XSD files should be moved to a Schemas folder.
5. All the adapter related files should be moved to Adapters folder.
6. All human task related artifacts should be moved to HumanTasks folder.
7. All the mediator artifacts should be moved to Mediators folder.

Ensure that there are no errors and deploy directly from JDev or using DeploUndeployUtility.xml file.

To deploy individual composites using DeploUndeployUtility:

1. Execute the following commands in the Command prompt for Linux and Windows respectively:

Linux:

```
cd $PRODUCT_HOME/bin
ant -f DeployUndeployUtility.xml -DInstallProperties=$PRODUCT_HOME/
config/InstallProperties.xml DeployComposite
```

Windows:

```
cd %PRODUCT_HOME%\bin
ant -f DeployUndeployUtility.xml -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml
DeployComposite
```

2. Validate the following parameters when prompted with default values during deployment. Press **Enter** to use the default prompted value.
 - **Composite Name:** The name of the custom composite to be deployed to SOA server. This parameter does not have a default value.
 - **Composite Folder Location:** The folder name should be an absolute path beginning with %PRODUCT_HOME%/services/industry/Utilities/<EBF/utility>.

For example: to deploy the composite from %PRODUCT_HOME%/services/industry/Utilities/EBF, then pass %PRODUCT_HOME%/services/industry/Utilities/EBF to this property.

The default value for this property is %PRODUCT_HOME%/services/industry/Utilities/EBF, as most of the business-specific composites reside in this folder.

Note: make sure the custom composite is located on the server physical directory/PRODUCT_HOME where the integration is running.

- **SOA Partition Name:** The SOA partition name to which the composite should be deployed.

For more information on deploying/undeploying individual composites refer to the *Oracle Utilities Customer Care and Billing Integration to Oracle JD Edwards Financials for General Ledger and Accounts Payable Release 12.1 Media Pack Installation Guide*, under *Deploying/Undeploying Individual Composites*.

Note: It is not mandatory for customers to migrate their custom/extension composite from 11g to 12c. The 11g custom composite service can still be called by the 12c CCB-JDE flows.

Migrating Custom XSLs

Same Custom XSLs previously available in 11g are now available in 12c. In order to ensure that the source/target mapping feature is not lost, do not copy the XSL as is from 11g to 12c but instead manually merge those changes from the 11g version of XSL to 12c version of XSL. Redeploy the modified processes either from JDEV or using the DeploUndeployUtility file as specified above.

Appendix A

Data Mapping

This appendix provides mapping details for each integration point, including:

- [GL Transaction](#)
- [AP Request](#)
- [AP Data](#)

GL Transaction

This section covers the following:

- [Oracle Utilities Customer Care and Billing to JD Edwards GL Transaction Staging Table: F0911Z1](#)

Oracle Utilities Customer Care and Billing to JD Edwards GL Transaction Staging Table: F0911Z1

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
EDUS	String (10)	EDI - User ID				Derived from BPEL. Identifies as GL Conversion Value = 'CCBGLDATA'
EDTY	Char (1)	Type Record				This field is not mapped to CCB field. Value = Null.
EDSQ	Numeric (2)	Record Sequence				This field is not mapped to CCB field. Value = Null.
EDTN	String (22)	EDI - Transaction Number	CL_FT_PROC	BATCH_NBR	NUMBER (10)	Identifies a Transaction. This is just a cross reference back to the source system. This is the CCB GLDL Batch Number.
EDCT	String (2)	EDI - Document Type				This field is not mapped to CCB field. Value = Null.
EDLN	Numeric (7)	EDI - Line Number				Derived from BPEL. Identifies a transaction within a batch Value = Sequential Number starting from 1000. Initialize to 1000. Add every time 1000. In BPEL when it was coded as 1. It displays as .001 in Oracle JD Edwards Financials for General Ledger and Accounts Payable. When it is coded as 1000 in Oracle JD Edwards Financials for General Ledger and Accounts Payable it displays as 1.000. So, it was decided to initialize and add with 1000. In Oracle JD Edwards Financials for General Ledger and Accounts Payable, it should be 1.000.
EDTS	String (6)	EDI - Transaction Set Number				This field is not mapped to CCB field. Value = Null.
EDFT	String (10)	EDI - Translation Format				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
EDDT	Date (6)	EDI - Transmission Date				Populated by JDE Journal Entry Batch Processor Initial value derived by BPEL Value = Null
EDER	Char (1)	EDI - Send/Receive Indicator				Derived from BPEL. Identifies the transaction as Both (Inbound and Outbound) Value = 'B'
EDDL	Numeric (5)	EDI - Detail Lines Processed				This field is not mapped to CCB field. Value = Null.
EDSP	Char (1)	EDI - Successfully Processed				Derived from BPEL Value = '0'
EDTC	Char (1)	EDI - Transaction Action				Derived from BPEL. Identifies the transaction as Addition Value = 'A'
EDTR	Char (1)	EDI - Transaction Type				Derived from BPEL. Identifies the transaction type as Journal. Value = 'J'
EDBT	String (15)	EDI - Batch Number	CL_FT_PROC	BATCH_NBR	NUMBER (10)	Identifies a Transaction. This just a cross reference back to the source system. This is the CCB GLDL Batch Number.
EDGL	Char (1)	Batch File Create G/L Record				This field is not mapped to CCB field. Value = Null.
EDAN	Numeric (8)	User Address Number				This field is not mapped to CCB field. Value = Null.
KCO	String (5)	Document Company				Populated by JDE Journal Entry Batch Processor Initial value derived by BPEL Value = '0'
DCT	String (2)	Document Type				Derived from BPEL. Identifies the Document Type as Journal entry Value = 'JE'

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
DOC	Numeric (8)	Document (Voucher, Invoice, etc.)				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null.
DGJ	Date (6)	Date - For G/L (and Voucher) - Julian	CL_FT	ACCOUNTING_DT	DATE	Date when Accounting Entry created Logic to convert date to Julian date is attached at bottom.
JELN	Numeric (7)	Journal Entry Line Number				This field is not mapped to CCB field. Value = Null.
EXTL	String (2)	Line Extension Code				This field is not mapped to CCB field. Value = Null.
POST	Char (1)	G/L Posted Code				This field is not mapped to CCB field. Value = Null.
ICU	Numeric (8)	Batch Number				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null.
ICUT	String (2)	Batch Type				Derived from BPEL. Identifies the Batch Type as General Accounting. Value = 'G'
DICJ	Date (6)	Date - Batch (Julian)				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL Value = Null
DSYJ	Date (6)	Date - Batch System Date				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL Value = Null
TICU	Numeric (6)	Batch Time				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
CO	String (5)	Company				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null.
ANI	String (29)	Account Number - Input (Mode Unknown)	CI_FT and CI_FT_GL	GL_DIVISION. GL_ACCT Position 1.Position 2	Varchar2 (48)	Combination of JDE Fields Business Unit.Object Account.Subsidiary Account Separator needs to be externalized in BPEL
AM	Char (1)	Account Mode - G/L				Derived from BPEL. Identifies the Account Mode as Long Account Number (ANI). Value = '2'
AID	String (8)	Account ID				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null
MCU	String (12)	Business Unit	CI_FT	GL_DIVISION	Char (5)	
OBJ	String (6)	Object Account	CI_FT_GL	GL_ACCT Position 1	Varchar2 (48)	
SUB	String (8)	Subsidiary	CI_FT_GL	GL_ACCT Position 2	Varchar2 (48)	
SBL	String (8)	Subledger - G/L				This field is not mapped to CCB field. Value = Null.
SBLT	Char (1)	Subledger Type				This field is not mapped to CCB field. Value = Null.
LT	String (2)	Ledger Types				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null.
PN	Numeric (2)	Period Number - General Ledger				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
CTRY	Numeric (2)	Century				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null.
FY	Numeric (2)	Fiscal Year				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null.
FQ	String (4)	Fiscal Quarter (Obsolete)				This field is not mapped to CCB field. Value = Null.
CRCD	String (3)	Currency Code - From	CL_FT	CURRENCY_CD	CHAR (3)	
CRR	Numeric (15)	Currency Conversion Rate - Spot Rate				This field is not mapped to CCB field. Value = Null.
HCRR	Numeric (15)	Historical Currency Conversion Rate				This field is not mapped to CCB field. Value = Null.
HDGJ	Date (6)	Historical Date - Julian				This field is not mapped to CCB field. Value = Null.
AA	Numeric (15)	Amount	CL_FT_GL	AMOUNT	NUMBER (15,2)	
U	Numeric (15)	Units	CL_FT_GL	STATISTIC_AMOUNT	NUMBER (15,2)	CCB Units has to be multiplied with 100, while populating in Oracle JD Edwards Financials for General Ledger and Accounts Payable Transaction Tables.
UM	String (2)	Unit of Measure	CL_DST_CODE_EFF	STATISTICS_CODE	CHAR (8)	If Statistics Amount doesn't have value and Statistics code has Value, pass Null to UM field for that record.
GLC	String (4)	G/L Offset				This field is not mapped to CCB field. Value = Null.
RE	Char (1)	Reverse or Void (R/V)				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
EXA	String (30)	Name - Alpha Explanation				Derived from BPEL. Identifies as GL Conversion Value = 'CCBGLDATA'
EXR	String (30)	Name - Remark Explanation	CL_DST_CODE_EFF	DST_ID	CHAR (10)	
R1	String (8)	Reference 1 - JE, Voucher, Invoice, etc.				This field is not mapped to CCB field. Value = Null.
R2	String (8)	Reference 2				This field is not mapped to CCB field. Value = Null.
R3	String (8)	Reference 3 - Account Reconciliation				This field is not mapped to CCB field. Value = Null.
SFX	String (3)	Document Pay Item				This field is not mapped to CCB field. Value = Null.
ODOC	Numeric (8)	Document - Original				This field is not mapped to CCB field. Value = Null.
ODCT	String (2)	Document Type - Original				This field is not mapped to CCB field. Value = Null.
OSFX	String (3)	Document Pay Item - Original				This field is not mapped to CCB field. Value = Null.
PKCO	String (5)	Document Company (Purchase Order)				This field is not mapped to CCB field. Value = Null.
OKCO	String (5)	Document Company (Original Order)				This field is not mapped to CCB field. Value = Null.
PDCT	String (2)	Document Type - Purchase Order				This field is not mapped to CCB field. Value = Null.
AN8	Numeric (8)	Address Number				This field is not mapped to CCB field. Value = Null.
CN	String (8)	Payment Number				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
DKJ	Date (6)	Date - Check - Julian				This field is not mapped to CCB field. Value = Null.
DKC	Date (6)	Date - Check Cleared				This field is not mapped to CCB field. Value = Null.
ASID	String (25)	Serial Number				This field is not mapped to CCB field. Value = Null.
BRE	Char (1)	Batch Rear End Posted Code				This field is not mapped to CCB field. Value = Null.
RCND	Char (1)	Reconciled Code				This field is not mapped to CCB field. Value = Null.
SUMM	Char (1)	Summarized Code				This field is not mapped to CCB field. Value = Null.
PRGE	Char (1)	Purge Code				This field is not mapped to CCB field. Value = Null.
TNN	Char (1)	Flag for 1099				This field is not mapped to CCB field. Value = Null.
ALT1	Char (1)	G/L Posting Code - Alternate 1				This field is not mapped to CCB field. Value = Null.
ALT2	Char (1)	G/L Posting Code - Alternate 2				This field is not mapped to CCB field. Value = Null.
ALT3	Char (1)	G/L Posting Code - Alternate 3				This field is not mapped to CCB field. Value = Null.
ALT4	Char (1)	G/L Posting Code - Alternate 4				This field is not mapped to CCB field. Value = Null.
ALT5	Char (1)	G/L Posting Code - Alternate 5				This field is not mapped to CCB field. Value = Null.
ALT6	Char (1)	G/L Posting Code - Cash Basis Acct				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
ALT7	Char (1)	Commitment Relief Flag				This field is not mapped to CCB field. Value = Null.
ALT8	Char (1)	Billing Control				This field is not mapped to CCB field. Value = Null.
ALT9	Char (1)	Currency Update				This field is not mapped to CCB field. Value = Null.
ALT0	Char (1)	G/L Posting Code - Alternate 0				This field is not mapped to CCB field. Value = Null.
ALTT	Char (1)	G/L Posting Code - Alternate T				This field is not mapped to CCB field. Value = Null.
ALTU	Char (1)	G/L Posting Code - Alternate U				This field is not mapped to CCB field. Value = Null.
ALTV	Char (1)	Stocked Inventory Commitment				This field is not mapped to CCB field. Value = Null.
ALTW	Char (1)	G/L Posting Code - Alternate W				This field is not mapped to CCB field. Value = Null.
ALTX	Char (1)	Consumption Tax Cross Reference				This field is not mapped to CCB field. Value = Null.
ALTZ	Char (1)	G/L Posting Code - Account Debit Balance				This field is not mapped to CCB field. Value = Null.
DLNA	Char (1)	Delete Not Allowed				This field is not mapped to CCB field. Value = Null.
CFF1	Char (1)	Client Free Form - Alternate 1				This field is not mapped to CCB field. Value = Null.
CFF2	Char (1)	Client Free Form - Alternate 2				This field is not mapped to CCB field. Value = Null.
ASM	Char (1)	Lease Cost Ledger Posted Code				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
BC	Char (1)	Bill Code				This field is not mapped to CCB field. Value = Null.
VINV	String (25)	Supplier Invoice Number				This field is not mapped to CCB field. Value = Null.
IVD	Date (6)	Date - Invoice				This field is not mapped to CCB field. Value = Null.
WR01	String (4)	Categories - Work Order 01				This field is not mapped to CCB field. Value = Null.
PO	String (8)	Purchase Order				This field is not mapped to CCB field. Value = Null.
PSFX	String (3)	Purchase Order Suffix				This field is not mapped to CCB field. Value = Null.
DCTO	String (2)	Order Type				This field is not mapped to CCB field. Value = Null.
LNID	Numeric (6)	Line Number				This field is not mapped to CCB field. Value = Null.
WY	Numeric (2)	Fiscal Year - Weekly				This field is not mapped to CCB field. Value = Null.
WN	Numeric (2)	Fiscal Period - Weekly				This field is not mapped to CCB field. Value = Null.
FNLP	Char (1)	Closed Item - As Of Processing				This field is not mapped to CCB field. Value = Null.
OPSQ	Numeric (5)	Sequence Number - Operations				This field is not mapped to CCB field. Value = Null.
JBCD	String (6)	Job Type (Craft) Code				This field is not mapped to CCB field. Value = Null.
JBST	String (4)	Job Step				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
HMCU	String (12)	Business Unit - Home				This field is not mapped to CCB field. Value = Null.
DOI	Numeric (2)	DOI Sub				This field is not mapped to CCB field. Value = Null.
ALID	String (25)	Outsider Lease or Well ID				This field is not mapped to CCB field. Value = Null.
ALTY	String (2)	ID Type				This field is not mapped to CCB field. Value = Null.
DSVJ	Date (6)	Date - Service/Tax				This field is not mapped to CCB field. Value = Null.
TORG	String (10)	Transaction Originator				This field is not mapped to CCB field. Value = Null.
REG#	Numeric (8)	Registration Number				This field is not mapped to CCB field. Value = Null.
PYID	Numeric (15)	Payment ID (Internal)				This field is not mapped to CCB field. Value = Null.
USER	String (10)	User ID				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null
PID	String (10)	Program ID				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null
JOBN	String (10)	Work Station ID				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null
UPMJ	Date (6)	Date - Updated				Derived from BPEL. Identifies the date of upload. Value = System Date Logic to convert date to Julian date is attached at bottom.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
UPMT	Numeric (6)	Time - Last Updated				Derived from BPEL. Identifies the time of upload. Value = System Time Logic to convert time to JDE time is attached at bottom.
CRRM	Char (1)	Currency Mode-Foreign or Domestic Entry				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null
ACR	Numeric (15)	Amount - Currency				This field is not mapped to CCB field. Value = Null.
DGM	Numeric (2)	Date - For G/L (and Voucher) - MO				This field is not mapped to CCB field. Value = Null.
DGD	Numeric (2)	Date - For G/L (and Voucher) - DA				This field is not mapped to CCB field. Value = Null.
DGY	Numeric (2)	Date - For G/L (and Voucher) - YR				This field is not mapped to CCB field. Value = Null.
DG#	Numeric (2)	Date - For G/L (and Voucher) - CTRY				This field is not mapped to CCB field. Value = Null.
DICM	Numeric (2)	Date - Batch - MO				This field is not mapped to CCB field. Value = Null.
DICD	Numeric (2)	Date - Batch - DA				This field is not mapped to CCB field. Value = Null.
DICY	Numeric (2)	Date - Batch - YR				This field is not mapped to CCB field. Value = Null.
DIC#	Numeric (2)	Date - Batch - CTRY				This field is not mapped to CCB field. Value = Null.
DSYM	Numeric (2)	Date - Batch System Date - MO				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
DSYD	Numeric (2)	Date - Batch System Date - DA				This field is not mapped to CCB field. Value = Null.
DSYY	Numeric (2)	Date - Batch System Date - YR				This field is not mapped to CCB field. Value = Null.
DSY#	Numeric (2)	Date - Batch System Date - CTRY				This field is not mapped to CCB field. Value = Null.
DKM	Numeric (2)	Date - Check - MO				This field is not mapped to CCB field. Value = Null.
DKD	Numeric (2)	Date - Check - DA				This field is not mapped to CCB field. Value = Null.
DKY	Numeric (2)	Date - Check - YR				This field is not mapped to CCB field. Value = Null.
DK#	Numeric (2)	Date - Check - CTRY				This field is not mapped to CCB field. Value = Null.
DSVM	Numeric (2)	Date - Service/Tax - MO				This field is not mapped to CCB field. Value = Null.
DSVD	Numeric (2)	Date - Service/Tax - DA				This field is not mapped to CCB field. Value = Null.
DSVY	Numeric (2)	Date - Service/Tax - YR				This field is not mapped to CCB field. Value = Null.
DSV#	Numeric (2)	Date - Service/Tax - CTRY				This field is not mapped to CCB field. Value = Null.
HDGM	Numeric (2)	Historical Date - MO				This field is not mapped to CCB field. Value = Null.
HDGD	Numeric (2)	Historical Date - DA				This field is not mapped to CCB field. Value = Null.
HDGY	Numeric (2)	Historical Date - YR				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
HDG#	Numeric (2)	Historical Date - CTRY				This field is not mapped to CCB field. Value = Null.
DKCM	Numeric (2)	Date - Check Cleared - MO				This field is not mapped to CCB field. Value = Null.
DKCD	Numeric (2)	Date - Check Cleared - DA				This field is not mapped to CCB field. Value = Null.
DKCY	Numeric (2)	Date - Check Cleared - YR				This field is not mapped to CCB field. Value = Null.
DKC#	Numeric (2)	Date - Check Cleared - CTRY				This field is not mapped to CCB field. Value = Null.
IVDM	Numeric (2)	Date - Invoice - MO				This field is not mapped to CCB field. Value = Null.
IVDD	Numeric (2)	Date - Invoice - DA				This field is not mapped to CCB field. Value = Null.
IVDY	Numeric (2)	Date - Invoice - YR				This field is not mapped to CCB field. Value = Null.
IVD#	Numeric (2)	Date - Invoice - CTRY				This field is not mapped to CCB field. Value = Null.
ABR1	String (12)	Managerial Analysis Code 1				This field is not mapped to CCB field. Value = Null.
ABR2	String (12)	Managerial Analysis Code 2				This field is not mapped to CCB field. Value = Null.
ABR3	String (12)	Managerial Analysis Code 3				This field is not mapped to CCB field. Value = Null.
ABR4	String (12)	Managerial Analysis Code 4				This field is not mapped to CCB field. Value = Null.
ABT1	Char (1)	Managerial Analysis Type 1				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
ABT2	Char (1)	Managerial Analysis Type 2				This field is not mapped to CCB field. Value = Null.
ABT3	Char (1)	Managerial Analysis Type 3				This field is not mapped to CCB field. Value = Null.
ABT4	Char (1)	Managerial Analysis Type 4				This field is not mapped to CCB field. Value = Null.
ITM	Numeric (8)	Item Number - Short				This field is not mapped to CCB field. Value = Null.
PM01	Char (1)	Posting Code 1 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM02	Char (1)	Posting Code 2 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM03	Char (1)	Posting Code 3 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM04	Char (1)	Posting Code 4 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM05	Char (1)	Posting Code 5 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM06	Char (1)	Posting Code 6 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM07	Char (1)	Posting Code 7 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM08	Char (1)	Posting Code 8 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM09	Char (1)	Posting Code 9 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM10	Char (1)	Posting Code 10- Managerial Accounting.				This field is not mapped to CCB field. Value = Null.

Column	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Column	Data Type	Remarks
BCRC	String (3)	Currency Code - Base				Populated by JDE Journal Entry Batch Processor. Initial value derived by BPEL. Value = Null
EXR1	String (2)	Tax Expl Code 1				This field is not mapped to CCB field. Value = Null.
TXA1	String (10)	Tax Rate/Area				This field is not mapped to CCB field. Value = Null.
TXITM	Numeric (8)	Tax - Short Item Number				This field is not mapped to CCB field. Value = Null.
ACTB	String (10)	Activity-Based Costing Activity Code				This field is not mapped to CCB field. Value = Null.
STAM	Numeric (15)	Amount - Tax				This field is not mapped to CCB field 0
CTAM	Numeric (15)	Amount - Foreign Tax				This field is not mapped to CCB field. Value = Null.
AG	Numeric (15)	Amount - Gross	CL_FT_GL	AMOUNT	NUMBER(15, 2)	CCB amount to be multiplied by 100 before populating in Oracle JD Edwards Financials for General Ledger and Accounts Payable transaction tables.
AGF	Numeric (15)	Amount - Foreign Gross				This field is not mapped to CCB field. Value = Null.
TKTX	Char (1)	Track Taxes Flag				This field is not mapped to CCB field. Value = Null.
DLNID	Numeric (6)	Distribution Line Number				This field is not mapped to CCB field. Value = Null.
CKNU	String (25)	Receipt Number				This field is not mapped to CCB field. Value = Null.

AP Request

This section covers the following:

- [Oracle Utilities Customer Care and Billing to JD Edwards Supplier Manager Web Service \(for Creating the Supplier in JD Edwards\)](#)
- [Oracle Utilities Customer Care and Billing to JD Edwards Table: F0911Z1](#)
- [Oracle Utilities Customer Care and Billing to JD Edwards Table: F0411Z1](#)

Oracle Utilities Customer Care and Billing to JD Edwards Supplier Manager Web Service (for Creating the Supplier in JD Edwards)

JDE Web Service Field Name	Data type (Length)	Oracle Utilities Customer Care and Billing Table Name	CCB Input Field	Data type (Length)	Lookup Table Values	Comments
Address Book.Business Unit	String(12)				CCB.JDE.AP.CHAR_T YPE_CD_ORGID	
Address Book.entityName	String(40)	CI_ADJ_APREQ	ENTITY_NAME	VARCHAR2 (64)		If CCB Entity Name length is more than 40 characters, truncate Entity Name to fit 40 string length in Oracle JD Edwards Financials for General Ledger and Accounts Payable.
Address Book.entityTypeCode	String(1)					Set to 'V' for Vendor/Supplier
Entity.entityLongID	String(20)	CI_ADJ_APREQ	AP_REQ_ID	CHAR (12)		
Address.AddressLine1	String(40)	CI_ADJ_APREQ	ADDRESS1	VARCHAR2 (64)		If CCB Address length is more than 40 characters, the integration transaction will get rejected.
Address.AddressLine2	String(40)	CI_ADJ_APREQ	ADDRESS2	VARCHAR2 (64)		If CCB Address length is more than 40 characters, the integration transaction will get rejected.
Address.AddressLine3	String(40)	CI_ADJ_APREQ	ADDRESS3	VARCHAR2 (64)		If CCB Address length is more than 40 characters, the integration transaction will get rejected.
Address.AddressLine4	String(40)	CI_ADJ_APREQ	ADDRESS4	VARCHAR2 (64)		If CCB Address length is more than 40 characters, the integration transaction will get rejected.
Address.City	String(25)	CI_ADJ_APREQ	CITY	VARCHAR2 (30)		If CCB City Name length is more than 25 characters, truncate CCB. City Name to fit 25 string length in Oracle JD Edwards Financials for General Ledger and Accounts Payable.

JDE Web Service Field Name	Data type (Length)	Oracle Utilities Customer Care and Billing Table Name	CCB Input Field	Data type (Length)	Lookup Table Values	Comments
Address.StateCode	String(3)	CI_ADJ_APREQ	STATE	CHAR (6)		
Address.Postalcode	String(12)	CI_ADJ_APREQ	POSTAL	CHAR (12)		
Address.CountryCode	String(3)	CI_ADJ_APREQ	COUNTRY	CHAR (3)		Both CCB and Oracle JD Edwards Financials for General Ledger and Accounts Payable, Country codes should be manually sync up the length of the codes.
Address.CountyCode	String(25)	CI_ADJ_APREQ	COUNTY	VARCHAR2 (30)		
AddressBook.Processing.Actiontype	String(1)					Set to '1'
Supplier.Processing.Actiontype	String(1)					Set to '1'
Financial.PaymentInstrumentCode	Char(1)				CCB,JDE.AP.PYIN	
Financial.CurrencyCode Accounts Payable	String(3)	CI_ADJ	CURRENCY_CD	CHAR (3)		
Supplier.CurrencyCode AddressBook	String(3)	CI_ADJ	CURRENCY_CD	CHAR (3)		
Supplier.ShowPricePick List	Char(1)					Set to '1'

Oracle Utilities Customer Care and Billing to JD Edwards Table: F0911Z1

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
EDUS	String (10)	EDI - User ID				Derived from BPEL. Identifies as AP Request Conversion Value = 'CCBAPREQ' Configuration Parameter
EDTY	Char (1)	Type Record				This field is not mapped to CCB field. Value = Null.
EDSQ	Numeric (2)	Record Sequence				This field is not mapped to CCB field. Value = Null.
EDTN	String (22)	EDI - Transaction Number				Derived from BPEL. Identifies a transaction within a batch Value = Sequential Number starting from 1.
EDCT	String (2)	EDI - Document Type				This field is not mapped to CCB field. Value = Null.
EDLN	Numeric (7)	EDI - Line Number				Derived from BPEL. Identifies a transaction within a batch. Value = Sequential Number starting from 1000. Initialize to 1000. Add every time with 1000. In BPEL when it was coded as 1, it displays as .001 in Oracle JD Edwards Financials for General Ledger and Accounts Payable. When it is coded as 1000 in Oracle JD Edwards Financials for General Ledger and Accounts Payable it displays as 1.000. So it was decided to initialize and add with 1000. In Oracle JD Edwards Financials for General Ledger and Accounts Payable, it should be 1.000.
EDTS	String (6)	EDI - Transaction Set Number				This field is not mapped to CCB field. Value = Null.
EDFT	String (10)	EDI - Translation Format				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
EDDT	Date (6)	EDI - Transmission Date				Populated by JDE Batch Voucher Processor Initial value derived by BPEL. Value = Null.
EDER	Char (1)	EDI - Send/Receive Indicator				Derived from BPEL. Identifies the transaction as Both (Inbound and Outbound) Value = 'B'
EDDL	Numeric (5)	EDI - Detail Lines Processed				This field is not mapped to CCB field. Value = Null.
EDSP	Char (1)	EDI - Successfully Processed				Derived from BPEL Value = '0'
EDTC	Char (1)	EDI - Transaction Action				Derived from BPEL. Identifies the transaction as Addition. Value = 'A'
EDTR	Char (1)	EDI - Transaction Type				Derived from BPEL. Identifies the transaction type as Voucher. Value = 'V'
EDBT	String (15)	EDI - Batch Number	CI_ADJ_APREQ	BATCH_NBR		Identifies a Transaction within the batch.
EDGL	Char (1)	Batch File Create G/L Record				This field is not mapped to CCB field. Value = Null.
EDAN	Numeric (8)	User Address Number				This field is not mapped to CCB field. Value = Null.
KCO	String (5)	Document Company				Derived from BPEL. Identifies the CO as CCB Company. Value = '45013' Configuration Parameter
DCT	String (2)	Document Type				Derived from BPEL. Identifies the Document Type as Voucher. Value = 'PV' Configuration Parameter
DOC	Numeric (8)	Document (Voucher, Invoice, etc.)				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
DGJ	Date (6)	Date - For G/L (and Voucher) - Julian				Derived from BPEL. Identifies the GL Date. Value = System Date Logic to convert date to Julian date is attached at bottom.
JELN	Numeric (7)	Journal Entry Line Number				This field is not mapped to CCB field. Value = Null.
EXTL	String (2)	Line Extension Code				This field is not mapped to CCB field. Value = Null.
POST	Char (1)	G/L Posted Code				This field is not mapped to CCB field. Value = Null.
ICU	Numeric (8)	Batch Number				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
ICUT	String (2)	Batch Type				Derived from BPEL. Identifies the Batch Type as Voucher. Value = 'V' Configuration Parameter
DICJ	Date (6)	Date - Batch (Julian)				This field is not mapped to CCB field. Value = Null.
DSYJ	Date (6)	Date - Batch System Date				This field is not mapped to CCB field. Value = Null.
TICU	Numeric (6)	Batch Time				This field is not mapped to CCB field. Value = Null.
CO	String (5)	Company	CI_CIS_DIV_CHAR	CHAR_VAL	VARCHAR2 (16)	Mapped to the characteristic value in CCB.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
ANI	String (29)	Account Number - Input (Mode Unknown)	CI_CIS_DIV_CHAR CI_DST_CODE_EF F	CHAR_VAL. GL_ACCT(Position 1).GL_ACCT(Position 2)	VARCHAR2 (48)	Derived from BPEL. Combination of JDE Fields. Concatenate following fields separated by dots. Business Unit. Object Account. Subsidiary Business Unit = CI_CIS_DIV_CHAR.CHAR_VAL Object Account = CI_DST_CODE_EFF (GL_ACCT - Position 1) Subsidiary = CI_DST_CODE_EFF (GL_ACCT - Position 2) Populate Subsidiary - Only If GL Account second segment is present. Account Separator externalized in BPEL
AM	Char (1)	Account Mode - G/L				Derived from BPEL. Identifies the Account Mode as Long Account Number (ANI). Value = '2'
AID	String (8)	Account ID				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
MCU	String (12)	Business Unit	CI_CIS_DIV_CHAR	CHAR_VAL	CHAR (16)	Mapped to the characteristic value in CCB.
OBJ	String (6)	Object Account	CI_DST_CODE_EF F	GL_ACCT (Position 1)	VARCHAR2 (48)	CCB CI_DST_CODE_EFF (GL_ACCT) Position 1 should not be more than 6 characters. If the CCB GL account has more than 1 embedded dots, all the segments after segment 2 will be ignored and will not be mapped to the JDE account.
SUB	String (8)	Subsidiary	CI_DST_CODE_EF F	GL_ACCT (Position 2)	VARCHAR2 (48)	If the CCB GL account does not have a second segment, SUB will not be populated. CCB CI_DST_CODE_EFF (GL_ACCT) Position 2 should not be more than 8 characters. If the CCB GL account has more than 1 embedded dots, all the segments after segment 2 will be ignored and will not be mapped to the JDE account.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
SBL	String (8)	Subledger - G/L				This field is not mapped to CCB field. Value = Null.
SBLT	Char (1)	Subledger Type				This field is not mapped to CCB field. Value = Null.
LT	String (2)	Ledger Types				Derived from BPEL. Identifies the transaction as GL. Value = 'AA' Configuration Parameter
PN	Numeric (2)	Period Number - General Ledger				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
CTRY	Numeric (2)	Century				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
FY	Numeric (2)	Fiscal Year				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
FQ	String (4)	Fiscal Quarter (Obsolete)				This field is not mapped to CCB field. Value = Null.
CRCO	String (3)	Currency Code - From	CI_ADJ	CURRENCY_CD	CHAR (3)	
CRR	Numeric (15)	Currency Conversion Rate - Spot Rate				This field is not mapped to CCB field. Value = Null.
HCRR	Numeric (15)	Historical Currency Conversion Rate				This field is not mapped to CCB field. Value = Null.
HDGJ	Date (6)	Historical Date - Julian				This field is not mapped to CCB field. Value = Null.
AA	Numeric (15)	Amount	CI_ADJ	ADJ_AMT	NUMBER (15,2)	
U	Numeric (15)	Units				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
UM	String (2)	Unit of Measure				This field is not mapped to CCB field. Value = Null.
GLC	String (4)	G/L Offset				This field is not mapped to CCB field. Value = Null.
RE	Char (1)	Reverse or Void (R/V)				This field is not mapped to CCB field. Value = Null.
EXA	String (30)	Name - Alpha Explanation				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
EXR	String (30)	Name - Remark Explanation	CI_ADJ_APREQ	ENTITY_NAME	VARCHAR2 (64)	This is just the person name. You can truncate it to match the JDE field length.
R1	String (8)	Reference 1 - JE, Voucher, Invoice, etc.				This field is not mapped to CCB field. Value = Null.
R2	String (8)	Reference 2				This field is not mapped to CCB field. Value = Null.
R3	String (8)	Reference 3 - Account Reconciliation				This field is not mapped to CCB field. Value = Null.
SFX	String (3)	Document Pay Item				This field is not mapped to CCB field. Value = Null.
ODOC	Numeric (8)	Document - Original				This field is not mapped to CCB field. Value = Null.
ODCT	String (2)	Document Type - Original				This field is not mapped to CCB field. Value = Null.
OSFX	String (3)	Document Pay Item - Original				This field is not mapped to CCB field. Value = Null.
PKCO	String (5)	Document Company (Purchase Order)				This field is not mapped to CCB field. Value = Null.
OKCO	String (5)	Document Company (Original Order)				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
PDCT	String (2)	Document Type - Purchase Order				This field is not mapped to CCB field. Value = Null.
AN8	Numeric (8)	Address Number				Entity ID for Supplier Created via the invocation of Supplier Manager Web Service.
CN	String (8)	Payment Number				This field is not mapped to CCB field. Value = Null.
DKJ	Date (6)	Date - Check - Julian				This field is not mapped to CCB field 0
DKC	Date (6)	Date - Check Cleared				This field is not mapped to CCB field 0
ASID	String (25)	Serial Number				This field is not mapped to CCB field. Value = Null.
BRE	Char (1)	Batch Rear End Posted Code				This field is not mapped to CCB field. Value = Null.
RCND	Char (1)	Reconciled Code				This field is not mapped to CCB field. Value = Null.
SUMM	Char (1)	Summarized Code				This field is not mapped to CCB field. Value = Null.
PRGE	Char (1)	Purge Code				This field is not mapped to CCB field. Value = Null.
TNN	Char (1)	Flag for 1099				This field is not mapped to CCB field. Value = Null.
ALT1	Char (1)	G/L Posting Code - Alternate 1				This field is not mapped to CCB field. Value = Null.
ALT2	Char (1)	G/L Posting Code - Alternate 2				This field is not mapped to CCB field. Value = Null.
ALT3	Char (1)	G/L Posting Code - Alternate 3				This field is not mapped to CCB field. Value = Null.
ALT4	Char (1)	G/L Posting Code - Alternate 4				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
ALT5	Char (1)	G/L Posting Code - Alternate 5				This field is not mapped to CCB field. Value = Null.
ALT6	Char (1)	G/L Posting Code - Cash Basis Acct				This field is not mapped to CCB field. Value = Null.
ALT7	Char (1)	Commitment Relief Flag				This field is not mapped to CCB field. Value = Null.
ALT8	Char (1)	Billing Control				This field is not mapped to CCB field. Value = Null.
ALT9	Char (1)	Currency Update				This field is not mapped to CCB field. Value = Null.
ALT0	Char (1)	G/L Posting Code - Alternate 0				This field is not mapped to CCB field. Value = Null.
ALTT	Char (1)	G/L Posting Code - Alternate T				This field is not mapped to CCB field. Value = Null.
ALTU	Char (1)	G/L Posting Code - Alternate U				This field is not mapped to CCB field. Value = Null.
ALTV	Char (1)	Stocked Inventory Commitment				This field is not mapped to CCB field. Value = Null.
ALTW	Char (1)	G/L Posting Code - Alternate W				This field is not mapped to CCB field. Value = Null.
ALTX	Char (1)	Consumption Tax Cross Reference				This field is not mapped to CCB field. Value = Null.
ALTZ	Char (1)	G/L Posting Code - Account Debit Balance				This field is not mapped to CCB field. Value = Null.
DLNA	Char (1)	Delete Not Allowed				This field is not mapped to CCB field. Value = Null.
CFF1	Char (1)	Client Free Form - Alternate 1				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
CFE2	Char (1)	Client Free Form - Alternate 2				This field is not mapped to CCB field. Value = Null.
ASM	Char (1)	Lease Cost Ledger Posted Code				This field is not mapped to CCB field. Value = Null.
BC	Char (1)	Bill Code				This field is not mapped to CCB field. Value = Null.
VINV	String (25)	Supplier Invoice Number	CI_ADJ	ADJ_ID	CHAR (12)	
IVD	Date (6)	Date - Invoice	CI_ADJ	CRE_DT	DATE	Logic to convert date to Julian date is attached at bottom.
WR01	String (4)	Categories - Work Order 01				This field is not mapped to CCB field. Value = Null.
PO	String (8)	Purchase Order				This field is not mapped to CCB field. Value = Null.
PSFX	String (3)	Purchase Order Suffix				This field is not mapped to CCB field. Value = Null.
DCTO	String (2)	Order Type				This field is not mapped to CCB field. Value = Null.
LNID	Numeric (6)	Line Number				This field is not mapped to CCB field. Value = Null.
WY	Numeric (2)	Fiscal Year - Weekly				This field is not mapped to CCB field. Value = Null.
WN	Numeric (2)	Fiscal Period - Weekly				This field is not mapped to CCB field. Value = Null.
FNLP	Char (1)	Closed Item - As Of Processing				This field is not mapped to CCB field. Value = Null.
OPSQ	Numeric (5)	Sequence Number - Operations				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
JBCD	String (6)	Job Type (Craft) Code				This field is not mapped to CCB field. Value = Null.
JBST	String (4)	Job Step				This field is not mapped to CCB field. Value = Null.
HMCU	String (12)	Business Unit - Home				This field is not mapped to CCB field. Value = Null.
DOI	Numeric (2)	DOI Sub				This field is not mapped to CCB field. Value = Null.
ALID	String (25)	Outsider Lease or Well ID				This field is not mapped to CCB field. Value = Null.
ALTY	String (2)	ID Type				This field is not mapped to CCB field. Value = Null.
DSVJ	Date (6)	Date - Service/Tax				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
TORG	String (10)	Transaction Originator				This field is not mapped to CCB field. Value = Null.
REG#	Numeric (8)	Registration Number				This field is not mapped to CCB field. Value = Null.
PYID	Numeric (15)	Payment ID (Internal)				This field is not mapped to CCB field. Value = Null.
USER	String (10)	User ID				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
PID	String (10)	Program ID				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
JOBN	String (10)	Work Station ID				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
UPMJ	Date (6)	Date - Updated				Derived from BPEL. Identifies the Date of upload. Value = System Date Logic to convert date to Julian date is attached at bottom.
UPMT	Numeric (6)	Time - Last Updated				Derived from BPEL. Identifies the Time of Upload. Value = System Time Logic to convert time to JDE time is attached at bottom.
CRRM	Char (1)	Currency Mode-Foreign or Domestic Entry				Derived from BPEL. Identifies the transaction as Domestic Value = 'D' Configuration Parameter
ACR	Numeric (15)	Amount - Currency				This field is not mapped to CCB field. Value = Null.
DGM	Numeric (2)	Date - For G/L (and Voucher) - MO				This field is not mapped to CCB field. Value = Null.
DGD	Numeric (2)	Date - For G/L (and Voucher) - DA				This field is not mapped to CCB field. Value = Null.
DGY	Numeric (2)	Date - For G/L (and Voucher) - YR				This field is not mapped to CCB field. Value = Null.
DG#	Numeric (2)	Date - For G/L (and Voucher) - CTRY				This field is not mapped to CCB field. Value = Null.
DICM	Numeric (2)	Date - Batch - MO				This field is not mapped to CCB field. Value = Null.
DICD	Numeric (2)	Date - Batch - DA				This field is not mapped to CCB field. Value = Null.
DICY	Numeric (2)	Date - Batch - YR				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
DIC#	Numeric (2)	Date - Batch - CTRY				This field is not mapped to CCB field. Value = Null.
DSYM	Numeric (2)	Date - Batch System Date - MO				This field is not mapped to CCB field. Value = Null.
DSYD	Numeric (2)	Date - Batch System Date - DA				This field is not mapped to CCB field. Value = Null.
DSYY	Numeric (2)	Date - Batch System Date - YR				This field is not mapped to CCB field. Value = Null.
DSY#	Numeric (2)	Date - Batch System Date - CTRY				This field is not mapped to CCB field. Value = Null.
DKM	Numeric (2)	Date - Check - MO				This field is not mapped to CCB field. Value = Null.
DKD	Numeric (2)	Date - Check - DA				This field is not mapped to CCB field. Value = Null.
DKY	Numeric (2)	Date - Check - YR				This field is not mapped to CCB field. Value = Null.
DK#	Numeric (2)	Date - Check - CTRY				This field is not mapped to CCB field. Value = Null.
DSVM	Numeric (2)	Date - Service/Tax - MO				This field is not mapped to CCB field. Value = Null.
DSVD	Numeric (2)	Date - Service/Tax - DA				This field is not mapped to CCB field. Value = Null.
DSVY	Numeric (2)	Date - Service/Tax - YR				This field is not mapped to CCB field. Value = Null.
DSV#	Numeric (2)	Date - Service/Tax - CTRY				This field is not mapped to CCB field. Value = Null.
HDGM	Numeric (2)	Historical Date - MO				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
HDGD	Numeric (2)	Historical Date - DA				This field is not mapped to CCB field. Value = Null.
HDGY	Numeric (2)	Historical Date - YR				This field is not mapped to CCB field. Value = Null.
HDG#	Numeric (2)	Historical Date - CTRY				This field is not mapped to CCB field. Value = Null.
DKCM	Numeric (2)	Date - Check Cleared - MO				This field is not mapped to CCB field. Value = Null.
DKCD	Numeric (2)	Date - Check Cleared - DA				This field is not mapped to CCB field. Value = Null.
DKCY	Numeric (2)	Date - Check Cleared - YR				This field is not mapped to CCB field. Value = Null.
DKC#	Numeric (2)	Date - Check Cleared - CTRY				This field is not mapped to CCB field. Value = Null.
IVDM	Numeric (2)	Date - Invoice - MO				This field is not mapped to CCB field. Value = Null.
IVDD	Numeric (2)	Date - Invoice - DA				This field is not mapped to CCB field. Value = Null.
IVDY	Numeric (2)	Date - Invoice - YR				This field is not mapped to CCB field. Value = Null.
IVD#	Numeric (2)	Date - Invoice - CTRY				This field is not mapped to CCB field. Value = Null.
ABR1	String (12)	Managerial Analysis Code 1				This field is not mapped to CCB field. Value = Null.
ABR2	String (12)	Managerial Analysis Code 2				This field is not mapped to CCB field. Value = Null.
ABR3	String (12)	Managerial Analysis Code 3				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
ABR4	String (12)	Managerial Analysis Code 4				This field is not mapped to CCB field. Value = Null.
ABT1	Char (1)	Managerial Analysis Type 1				This field is not mapped to CCB field. Value = Null.
ABT2	Char (1)	Managerial Analysis Type 2				This field is not mapped to CCB field. Value = Null.
ABT3	Char (1)	Managerial Analysis Type 3				This field is not mapped to CCB field. Value = Null.
ABT4	Char (1)	Managerial Analysis Type 4				This field is not mapped to CCB field. Value = Null.
ITM	Numeric (8)	Item Number - Short				This field is not mapped to CCB field. Value = Null.
PM01	Char (1)	Posting Code 1 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM02	Char (1)	Posting Code 2 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM03	Char (1)	Posting Code 3 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM04	Char (1)	Posting Code 4 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM05	Char (1)	Posting Code 5 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM06	Char (1)	Posting Code 6 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM07	Char (1)	Posting Code 7 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM08	Char (1)	Posting Code 8 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
PM09	Char (1)	Posting Code 9 - Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
PM10	Char (1)	Posting Code 10- Managerial Accounting.				This field is not mapped to CCB field. Value = Null.
BCRC	String (3)	Currency Code - Base				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
EXR1	String (2)	Tax Expl Code 1				This field is not mapped to CCB field. Value = Null.
TXA1	String (10)	Tax Rate/Area				This field is not mapped to CCB field. Value = Null.
TXITM	Numeric (8)	Tax - Short Item Number				This field is not mapped to CCB field. Value = Null.
ACTB	String (10)	Activity-Based Costing Activity Code				This field is not mapped to CCB field. Value = Null.
STAM	Numeric (15)	Amount - Tax				This field is not mapped to CCB field. Value = Null.
CTAM	Numeric (15)	Amount - Foreign Tax				This field is not mapped to CCB field. Value = Null.
AG	Numeric (15)	Amount - Gross				This field is not mapped to CCB field. Value = Null.
AGF	Numeric (15)	Amount - Foreign Gross				This field is not mapped to CCB field. Value = Null.
TKTX	Char (1)	Track Taxes Flag				This field is not mapped to CCB field. Value = Null.
DLNID	Numeric (6)	Distribution Line Number				This field is not mapped to CCB field. Value = Null.
CKNU	String (25)	Receipt Number				This field is not mapped to CCB field. Value = Null.

Oracle Utilities Customer Care and Billing to JD Edwards Table: F0411Z1

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
EDUS	String (10)	EDI - User ID				Derived from BPEL. Identifies as AP Request Conversion. Value = 'CCBAPREQ' Configuration Parameter
EDTY	Char (1)	Type Record				This field is not mapped to CCB field. Value = Null.
EDSQ	Numeric (2)	Record Sequence				This field is not mapped to CCB field. Value = Null.
EDTN	String (22)	EDI - Transaction Number				Derived from BPEL. Identifies a transaction within a batch. Value = Sequential Number starting from 1.
EDCT	String (2)	EDI - Document Type				This field is not mapped to CCB field. Value = Null.
EDLN	Numeric (7)	EDI - Line Number				Initialize to 1000. Add every time with 1000. In BPEL when it was coded as 1, it is displayed as .001 in JDE. When it is coded as 1000 in JDE, it is displayed as 1.000. So it was decided to initialize and add with 1000. In JDE it should be 1.000.
EDTS	String (6)	EDI - Transaction Set Number				This field is not mapped to CCB field. Value = Null.
EDFT	String (10)	EDI - Translation Format				This field is not mapped to CCB field. Value = Null.
EDDT	Date (6)	EDI - Transmission Date				Populated by JDE Batch Voucher Processor Initial value derived by BPEL. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
EDER	Char (1)	EDI - Send/Receive Indicator				Derived from BPEL. Identifies the transaction as Both (Inbound and Outbound) Value = 'B'.
EDDL	Numeric (5)	EDI - Detail Lines Processed				This field is not mapped to CCB field. Value = Null.
EDSP	Char (1)	EDI - Successfully Processed				Derived from BPEL Value = '0'
EDTC	Char (1)	EDI - Transaction Action				Derived from BPEL. Identifies the transaction as Addition. Value = 'A'
EDTR	Char (1)	EDI - Transaction Type				Derived from BPEL. Identifies the transaction type as Voucher. Value = 'V'
EDBT	String (15)	EDI - Batch Number	CI_ADJ_APREQ	BATCH_NBR		Identifies the transaction within the batch
EDGL	Char (1)	Batch File Create G/L Record				This field is not mapped to CCB field. Value = Null.
EDDH	Char (1)	Batch File Discount Handling Flag				This field is not mapped to CCB field. Value = Null.
EDAN	Numeric (8)	User Address Number				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
KCO	String (5)	Document Company	CI_CIS_DIV_CHA R	CHAR_VAL	CHAR (16)	Obtained from characteristic value in CCB.
DOC	Numeric (8)	Document (Voucher, Invoice, etc.)				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
DCT	String (2)	Document Type				Derived from BPEL. Identifies the Document Type as Voucher. Value = 'PV' Configuration Parameter
SFX	String (3)	Document Pay Item				This field is not mapped to CCB field. Value = Null.
SFXE	Numeric (2)	Pay Item Extension Number				This field is not mapped to CCB field. Value = Null.
DCTA	String (2)	Document Type - Adjusting				This field is not mapped to CCB field. Value = Null.
AN8	Numeric (8)	Address Number				Entity ID for Supplier Created via the invocation of Supplier Manager Web Service.
PYE	Numeric (8)	Payee Address Number				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
SNT0	Numeric (8)	Address Number - Approver				This field is not mapped to CCB field. Value = Null.
DIVJ	Date (6)	Date - Invoice - Julian	CI_ADJ	CRE_DT	DATE	Logic to convert date to Julian date is attached at bottom.
DSVJ	Date (6)	Date - Service/Tax				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
DDJ	Date (6)	Date - Net Due	CI_ADJ_APREQ	SCHEDULED_PAY_DT	DATE	Logic to convert date to Julian date is attached at bottom.
DDNJ	Date (6)	Date - Discount Due - Julian				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
DGJ	Date (6)	Date - For G/L (and Voucher) - Julian				Derived from BPEL. Identifies the GL Date. Value = System Date Logic to convert date to Julian date is attached at bottom.
FY	Numeric (2)	Fiscal Year				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. 0
CTRY	Numeric (2)	Century				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. 0
PN	Numeric (2)	Period Number - General Ledger				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. 0
CO	String (5)	Company	CI_CIS_DIV_CHAR	CHAR_VAL	CHAR (16)	Obtained from characteristic value in CCB.
ICU	Numeric (8)	Batch Number				This field is not mapped to CCB field. Value = Null.
ICUT	String (2)	Batch Type				Derived from BPEL. Identifies the transaction type as Voucher. Value = 'V' Configuration Parameter
DICJ	Date (6)	Date - Batch (Julian)				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
BALJ	Char (1)	Balanced - Journal Entries				Derived from BPEL. Value = 'Y'

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
PST	Char (1)	Pay Status Code				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
AG	Numeric (15)	Amount - Gross	CI_ADJ	ADJ_AMT	NUMBER (15,2)	
AAP	Numeric (15)	Amount Open				This field is not mapped to CCB field. Value = Null.
ADSC	Numeric (15)	Discount Available				This field is not mapped to CCB field. Value = Null.
ADSA	Numeric (15)	Discount Taken				This field is not mapped to CCB field. Value = Null.
ATXA	Numeric (15)	Amount - Taxable				This field is not mapped to CCB field. Value = Null.
ATXN	Numeric (15)	Amount - Non-Taxable				This field is not mapped to CCB field. Value = Null.
STAM	Numeric (15)	Amount - Tax				This field is not mapped to CCB field. Value = Null.
TXA1	String (10)	Tax Rate/Area				This field is not mapped to CCB field. Value = Null.
EXR1	String (2)	Tax Expl Code 1				This field is not mapped to CCB field. Value = Null.
CRRM	Char (1)	Currency Mode-Foreign or Domestic Entry				Derived from BPEL. Identifies the transaction as Domestic. Value = 'D' Configuration Parameter
CRCD	String (3)	Currency Code - From	CI_ADJ	CURRENCY_CD	CHAR (3)	
CRR	Numeric (15)	Currency Conversion Rate - Spot Rate				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
ACR	Numeric (15)	Amount - Currency				This field is not mapped to CCB field. Value = Null.
FAP	Numeric (15)	Amount - Foreign Open				This field is not mapped to CCB field. Value = Null.
CDS	Numeric (15)	Amount - Foreign Discount Available				This field is not mapped to CCB field. Value = Null.
CDSA	Numeric (15)	Amount - Foreign Discount Taken				This field is not mapped to CCB field. Value = Null.
CTXA	Numeric (15)	Amount - Foreign Taxable				This field is not mapped to CCB field. Value = Null.
CTXN	Numeric (15)	Amount - Foreign Non-Taxable				This field is not mapped to CCB field. Value = Null.
CTAM	Numeric (15)	Amount - Foreign Tax				This field is not mapped to CCB field. Value = Null.
GLC	String (4)	G/L Offset	CI_DST_CD_CHA R	CHAR_VAL	CHAR (16)	Obtained from a characteristic value in CCB.
GLBA	String (8)	G/L Bank Account				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
POST	Char (1)	G/L Posted Code				This field is not mapped to CCB field. Value = Null.
AM	Char (1)	Account Mode - G/L				Derived from BPEL. Identifies the Account Mode as Long Account Number (ANI). Value = '2'
AID2	String (8)	Account ID				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
MCU	String (12)	Business Unit	CI_CIS_DIV_CHA R	CHAR_VAL	CHAR (16)	Obtained from Characteristic value in CCB.
OBJ	String (6)	Object Account				
SUB	String (8)	Subsidiary				This field is not mapped to CCB field. Value = Null.
SBLT	Char (1)	Subledger Type				This field is not mapped to CCB field. Value = Null.
SBL	String (8)	Subledger - G/L				This field is not mapped to CCB field. Value = Null.
BAID	String (8)	Bank Transit Short ID				This field is not mapped to CCB field. Value = Null.
PTC	String (3)	Payment Terms Code				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
VOD	Char (1)	Void Flag				This field is not mapped to CCB field. Value = Null
OKCO	String (5)	Document Company (Original Order)				This field is not mapped to CCB field. Value = Null
ODCT	String (2)	Document Type - Original				This field is not mapped to CCB field. Value = Null
ODOC	Numeric (8)	Document - Original				This field is not mapped to CCB field. Value = Null
OSFX	String (3)	Document Pay Item - Original				This field is not mapped to CCB field. Value = Null
CRC	String (3)	Payment Handling Code				Derived from BPEL. Value = Null
VINV	String (25)	Supplier Invoice Number	CI_ADJ	ADJ_ID	CHAR (12)	

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
PKCO	String (5)	Document Company (Purchase Order)				This field is not mapped to CCB field. Value = Null
PO	String (8)	Purchase Order				This field is not mapped to CCB field. Value = Null
PDCT	String (2)	Document Type - Purchase Order				This field is not mapped to CCB field. Value = Null
LNID	Numeric (6)	Line Number				This field is not mapped to CCB field. Value = Null
SFXO	String (3)	Order Suffix				This field is not mapped to CCB field. Value = Null
OPSQ	Numeric (5)	Sequence Number - Operations				This field is not mapped to CCB field. Value = Null
VR01	String (25)	Reference				This field is not mapped to CCB field. Value = Null
UNIT	String (8)	Unit				This field is not mapped to CCB field. Value = Null
MCU2	String (12)	Business Unit 2				This field is not mapped to CCB field. Value = Null
RMK	String (30)	Name - Remark	CI_ADJ_APREQ	AP_REQ_ID	CHAR (12)	Set to 'Refund No:< AP_REQ_ID>'
RF	String (2)	Frequency - Recurring				This field is not mapped to CCB field. Value = Null
DRF	Numeric (3)	Recurring Frequency # of Payments				This field is not mapped to CCB field. Value = Null
CTL	String (13)	Control/Statement Field				This field is not mapped to CCB field. Value = Null
FNLP	Char (1)	Closed Item - As Of Processing				This field is not mapped to CCB field. Value = Null

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
U	Numeric (15)	Units				This field is not mapped to CCB field. Value = Null
UM	String (2)	Unit of Measure				This field is not mapped to CCB field. Value = Null
PYIN	Char (1)	Payment Instrument				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
TXA3	String (10)	Tax Rate/Area 3 - Withholding				This field is not mapped to CCB field. Value = Null
EXR3	String (2)	Tax Expl Code 3 - Withholding				This field is not mapped to CCB field. Value = Null
RP1	Char (1)	A/R - AP - Miscellaneous Code 1				This field is not mapped to CCB field. Value = Null
RP2	Char (1)	A/R - AP - Miscellaneous Code 2				This field is not mapped to CCB field. Value = Null
RP3	Char (1)	A/R - AP - Cash Rcpts/Inv Reg Code				This field is not mapped to CCB field. Value = Null
AC07	String (3)	Category Code - Address Book 07				This field is not mapped to CCB field. Value = Null
TNN	Char (1)	Flag for 1099				This field is not mapped to CCB field. Value = Null
DMCD	Char (1)	Domestic Entry w/Mult Currency Distr				This field is not mapped to CCB field. Value = Null
ITM	Numeric (8)	Item Number - Short				This field is not mapped to CCB field. Value = Null
HCRR	Numeric (15)	Historical Currency Conversion Rate				This field is not mapped to CCB field. Value = Null

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
HDGJ	Date (6)	Historical Date - Julian				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null.
URC1	String (3)	User Reserved Code				This field is not mapped to CCB field. Value = Null.
URDT	Date (6)	User Reserved Date				This field is not mapped to CCB field. Value = Null.
URAT	Numeric (15)	User Reserved Amount				This field is not mapped to CCB field. Value = Null.
URAB	Numeric (8)	User Reserved Number				This field is not mapped to CCB field. Value = Null.
URRF	String (15)	User Reserved Reference	CI_ADJ_APREQ	AP_REQ_ID	CHAR (12)	
TORG	String (10)	Transaction Originator				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
USER	String (10)	User ID				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
PID	String (10)	Program ID				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
UPMJ	Date (6)	Date - Updated				Derived from BPEL. Identifies the Date of upload. Value = System Date Logic to convert date to Julian date is attached at bottom.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
UPMT	Numeric (6)	Time - Last Updated				Derived from BPEL. Identifies the Time of Upload. Value = System Time Logic to convert time to JDE time is attached at bottom.
JOB#	String (10)	Work Station ID				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
DIM	Numeric (2)	Date - Invoice - MO				This field is not mapped to CCB field. Value = Null.
DID	Numeric (2)	Date - Invoice - DA				This field is not mapped to CCB field. Value = Null.
DIY	Numeric (2)	Date - Invoice - YR				This field is not mapped to CCB field. Value = Null.
DI#	Numeric (2)	Date - Invoice - CTRY				This field is not mapped to CCB field. Value = Null.
DSVM	Numeric (2)	Date - Service/Tax - MO				This field is not mapped to CCB field. Value = Null.
DSVD	Numeric (2)	Date - Service/Tax - DA				This field is not mapped to CCB field. Value = Null.
DSVY	Numeric (2)	Date - Service/Tax - YR				This field is not mapped to CCB field. Value = Null.
DSV#	Numeric (2)	Date - Service/Tax - CTRY				This field is not mapped to CCB field. Value = Null.
DDM	Numeric (2)	Date - Net Due - MO				This field is not mapped to CCB field. Value = Null.
DDD	Numeric (2)	Date - Net Due - DA				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
DDY	Numeric (2)	Date - Net Due - YR				This field is not mapped to CCB field. Value = Null.
DD#	Numeric (2)	Date - Net Due - CTRY				This field is not mapped to CCB field. Value = Null.
DDNM	Numeric (2)	Date - Discount Due - MO				This field is not mapped to CCB field. Value = Null.
DDND	Numeric (2)	Date - Discount Due -DA				This field is not mapped to CCB field. Value = Null.
DDNY	Numeric (2)	Date - Discount Due - YR				This field is not mapped to CCB field. Value = Null.
DDN#	Numeric (2)	Date - Discount Due - CTRY				This field is not mapped to CCB field. Value = Null.
DGM	Numeric (2)	Date - For G/L (and Voucher) - MO				This field is not mapped to CCB field. Value = Null.
DGD	Numeric (2)	Date - For G/L (and Voucher) - DA				This field is not mapped to CCB field. Value = Null.
DGY	Numeric (2)	Date - For G/L (and Voucher) - YR				This field is not mapped to CCB field. Value = Null.
DG#	Numeric (2)	Date - For G/L (and Voucher) - CTRY				This field is not mapped to CCB field. Value = Null.
DICM	Numeric (2)	Date - Batch - MO				This field is not mapped to CCB field. Value = Null.
DICD	Numeric (2)	Date - Batch - DA				This field is not mapped to CCB field. Value = Null.
DICY	Numeric (2)	Date - Batch - YR				This field is not mapped to CCB field. Value = Null.
DIC#	Numeric (2)	Date - Batch - CTRY				This field is not mapped to CCB field. Value = Null.

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
HDGM	Numeric (2)	Historical Date - MO				This field is not mapped to CCB field. Value = Null
HDGD	Numeric (2)	Historical Date - DA				This field is not mapped to CCB field. Value = Null
HDGY	Numeric (2)	Historical Date - YR				This field is not mapped to CCB field. Value = Null
HDG#	Numeric (2)	Historical Date - CTRY				This field is not mapped to CCB field. Value = Null
DOCM	Numeric (8)	Document - Matching(Payment or Item)				This field is not mapped to CCB field. Value = Null
TNST	String (20)	Transit Number - Bank				Populated by JDE Batch Voucher Processor. Initial value derived by BPEL. Value = Null
YC01	String (3)	Category Code - AP Ledger 01				This field is not mapped to CCB field. Value = Null
YC02	String (3)	Category Code - AP Ledger 02				This field is not mapped to CCB field. Value = Null
YC03	String (3)	Category Code - AP Ledger 03				This field is not mapped to CCB field. Value = Null
YC04	String (3)	Category Code - AP Ledger 04				This field is not mapped to CCB field. Value = Null
YC05	String (3)	Category Code - AP Ledger 05				This field is not mapped to CCB field. Value = Null
YC06	String (3)	Category Code - AP Ledger 06				This field is not mapped to CCB field. Value = Null
YC07	String (3)	Category Code - AP Ledger 07				This field is not mapped to CCB field. Value = Null

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
YC08	String (3)	Category Code - AP Ledger 08				This field is not mapped to CCB field. Value = Null
YC09	String (3)	Category Code - AP Ledger 09				This field is not mapped to CCB field. Value = Null
YC10	String (3)	Category Code - AP Ledger 10				This field is not mapped to CCB field. Value = Null
DTXS	Char (1)	Deferred Tax Status - VAT				This field is not mapped to CCB field. Value = Null
BCRC	String (3)	Currency Code - Base				This field is not mapped to CCB field. Value = Null
ATAD	Numeric (15)	Amount - To Distribute				This field is not mapped to CCB field. Value = Null
CTAD	Numeric (15)	Amount - Currency To Distribute				This field is not mapped to CCB field. Value = Null
NRTA	Numeric (15)	Non-Recoverable Tax Amount				This field is not mapped to CCB field. Value = Null
FNRT	Numeric (15)	Foreign Non-Recoverable Tax				This field is not mapped to CCB field. Value = Null
TAXP	Char (1)	Purchasing Taxable Y/N				This field is not mapped to CCB field. Value = Null
PRGF	Char (1)	Purge Flag				This field is not mapped to CCB field. Value = Null
GFL5	Char (1)	Generic Flag 5				This field is not mapped to CCB field. Value = Null
GFL6	Char (1)	Generic Flag 6				This field is not mapped to CCB field. Value = Null
GAM1	Numeric (15)	Generic Amount 1				This field is not mapped to CCB field. Value = Null

Columns	Data Type	Description	Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Remarks
GAM2	Numeric (15)	Generic Amount 2				This field is not mapped to CCB field. Value = Null
GEN4	String (25)	Generic String 4	CI_ADJ_APREQ	ADDRESS1, ADDRESS2, ADDRESS3, ADDRESS4,	VARCHAR2 (256)	Concatenate Address 1, 2, 3 and 4. Truncate the length to 25 and insert to the field.
GEN5	String (25)	Generic String 5	CI_ADJ_APREQ	CITY, STATE, COUNTRY	VARCHAR2 (39)	Concatenate City, State, Country. Truncate it to match JDE field length.
WTAD	Numeric (15)	Future - Withholding Tax Amount Domestic				This field is not mapped to CCB field. Value = Null
WTAF	Numeric (15)	Future - Withholding Tax Amount Foreign				This field is not mapped to CCB field. Value = Null
SMMF	Char (1)	Summarized Flag				This field is not mapped to CCB field. Value = Null
PYWP	Char (1)	Pay When Paid				This field is not mapped to CCB field. Value = Null
PWPG	Numeric (15)	Pay When Paid Group Number				This field is not mapped to CCB field. Value = Null
NETST	Char (1)	Netting Status Code				This field is not mapped to CCB field. Value = Null

AP Data

This section covers the following:

- [JD Edwards Financials for General Ledger and Accounts Payable to Oracle Utilities Customer Care and Billing](#)

JD Edwards Financials for General Ledger and Accounts Payable to Oracle Utilities Customer Care and Billing

Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Description	Oracle JD Edwards Financials for General Ledger and Accounts Payable Table	Columns	Data Type	Remarks
CI_ADJ_APREQ	PAY_DOC_ID	VARCHAR2 (20)	Advice ID	F0413	PYID	Number (15)	
CI_ADJ_APREQ	PAY_DOC_DT	DATE	Advice Date	F0413	DMTJ	Date (6)	Date is converted from Julian (JDE) to Date (CCB) format. Logic is attached in the document.
CI_ADJ_APREQ	PYMNT_ID	CHAR (10)	Payment Number	F0413	DOCM	Number (8)	
CI_ADJ_APREQ	PAID_AMT	NUMBER (15,2)	Paid Amount	F0414	PAAP	Number (15)	Divide the amount by 100 and change the negative sign to positive Sign and populate to CCB field.
CI_ADJ_APREQ	PYMNT_SEL_ST AT_FLG	CHAR (1)	PaymentSelections Status				Derived from BPEL. Value = 'P'.
CI_ADJ_APREQ	AP_REQ_ID	CHAR (12)	AP Request ID	F0411	URRF	String (15)	
CI_ADJ_APREQ	ADJ_ID	CHAR (12)	Adjustment ID	F0411	VINV	String (25)	In case of close liability the 'AdjustmentMaintenance' service will be invoked for this Adjustment ID.

Oracle Utilities Customer Care and Billing Table	Columns	Data Type	Description	Oracle JD Edwards Financials for General Ledger and Accounts Payable Table	Columns	Data Type	Remarks
CI_ADJ_APREQ	PYMNT_SEL_ST AT_FLG	CHAR (1)	PaymentSelections Status				Derived from BPEL. When F0413.RMVDGJ (Void Date) > 108031 and RPVOD <> 'V' then Value='C' When F0413.RMVDGJ <> 0 and RPPOST = 'D' and RPVOD = 'V') then Value='X'
CI_ADJ	ADJ_STATUS_FL G	CHAR (2)	Adjustment Status Flag				60
CI_ADJ	CAN_RSN_CD	CHAR (4)	Cancel Reason Code				APVC