Oracle Utilities Work and Asset Cloud Service Integration to Oracle ERP Financial Cloud

Configuration Guide

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Oracle Utilities Work and Asset Cloud Service Integration to Oracle ERP Financial Cloud Configuration Guide, Release 20C

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Preface

Welcome to the Oracle Utilities Work and Asset Cloud Service Integration to Oracle ERP Financial Cloud Configuration Guide.

Audience

This document is intended for anyone implementing the integration between Oracle Utilities Work and Asset Cloud Service and Oracle ERP Financial Cloud for Chart of Accounts Synchronization and General Ledger Extract.

Documentation and Resources

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

Product Documentation

Topic	Description
Oracle Utilities Work and Asset Cloud Service Integration to Oracle ERP Financial Cloud documentation	Refer to the Oracle Utilities applications documentation page: http://docs.oracle.com/cd/E72219_01/ documentation.html
Oracle Utilities Work and Asset Cloud Service documentation	
Oracle Application Financial Cloud - General Ledger	https://docs.oracle.com/en/cloud/saas/ financials/20d/faigl/toc.htm
Oracle Application Financial Cloud	https://docs.oracle.com/en/cloud/saas/ financials/20d/books.html

Additional Documentation

Resource	Location
Oracle Support	Visit My Oracle Support at https:// support.oracle.com regularly to stay informed about updates and patches.
Oracle Technology Network (OTN) Latest versions of documents	http://www.oracle.com/technetwork/index.html

Resource	Location
Oracle University for training opportunities	http://education.oracle.com/

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support for the hearing impaired. Visit: http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs

Conventions

The following text conventions are used in this document:

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

Acronyms

The following terms are used in this document:

Term	Expanded Form
Object Storage	Oracle Cloud Infrastructure Object Storage
Oracle ERP Cloud	Oracle Enterprise Resource Planning Cloud Application
Oracle UCM	Oracle's Universal Content Management or Oracle Webcenter Content Server
WACS	Oracle Utilities Work and Asset Cloud Service
GL	General Ledger
FIN	Financial
FBDI	Oracle ERP File Based Data Import

Chapter 1

Introduction

This chapter provides an overview about Oracle Utilities Work and Asset Cloud Service Integration to Oracle ERP Financial Cloud using Oracle Integration Cloud. It also provides information about software requirements, participating applications and supported business processes by this integration.

The chapter includes the following:

- Overview of the Integration
- About Oracle Utilities Work and Asset Management
- About Oracle ERP Financial Cloud
- About Oracle Integration Cloud
- Software Requirements

Overview of the Integration

Oracle Utilities Work and Asset Cloud Service Integration to Oracle ERP Financial Cloud helps facilitate the transfer of chart of accounts and ledger information between the two applications.

This integration supports three key functionalities:

- One Way Integration from Oracle ERP Financial Cloud to Oracle Utilities Work and Asset Cloud Service for creation of Cost Center and Expense Account using Chart of Account strings that are validated within ERP and stored in Account Combinations.

- One way Integration from Oracle Utilities Work and Asset Cloud Service to Oracle ERP Financial Cloud for journal creation that sends General Ledger information for material issues, returns, purchase, labor cost, freight, PO adjustment and tax.

The following diagram provides a high-level representation of the integration.
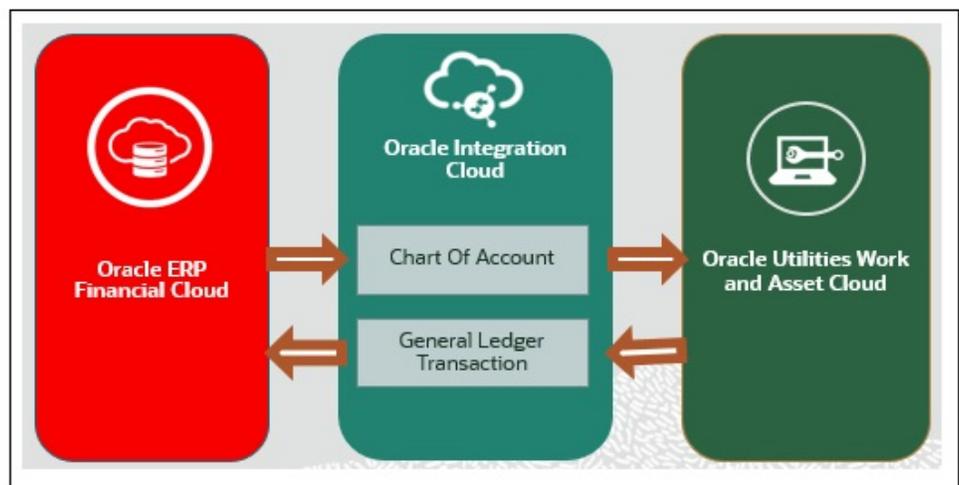
Chart of Accounts

- Oracle ERP Financial Application Cloud stores all the valid Account code combinations in the Manage Account combination table. The extract of the Chart of Accounts is based on segments and mandatory parameters which allow the customer flexibility to use varied combination to extract.

- Chart of Accounts is used to record transactions in a company's general ledger. As part of the accounting cycle, the CoA is used in the journaling process (performing journal entries) and also serves as the title for each ledger. In general, all accounts are filed under one of five categories: assets, liabilities, owner's equity, revenue, and expenses.

- Each company will have its own Chart of Accounts numbering system and can assign a number for identification purposes. A block of numbers can be assigned to one of those five categories and then be further divided into sub-categories. Gaps can be left between sub-category listings to allow for the addition of new accounts.

This integration includes:

- **Oracle ERP Financial Cloud Initiated**: Business Intelligence report created using the OTN Accelerator package is a prerequisite for the integration.

- Run the Report for Chart of Accounts, selecting all the mandatory parameters based on the business requirement. The extract is published in UCM in XML format.

- Report Extract is available for extract of chart of account. Report will only filter enabled code combination and the Allowed posting flag as "Y".

- Business User can use the filters provided in the report to extract data pertaining to the integration. Filter is available for all the segments in the extract requiring few mandatory parameters.

- Guide on how to configure and run the report, check the setup configuration guide for Chart of Accounts.

- Oracle Utilities Work and Asset Cloud Flow: This Chart of Accounts integration uses the Seeder Sync objects, and requires the following Oracle Utilities Work and Asset Cloud Service admin data setup for the integration.

- External System and master configuration helps to derive the cost center and expense account from the General Ledger string received from ERP.

  Refer to for details about Oracle Work and Asset Cloud Service configuration.

Chart of Accounts Sync Flow – Initial / Incremental Load
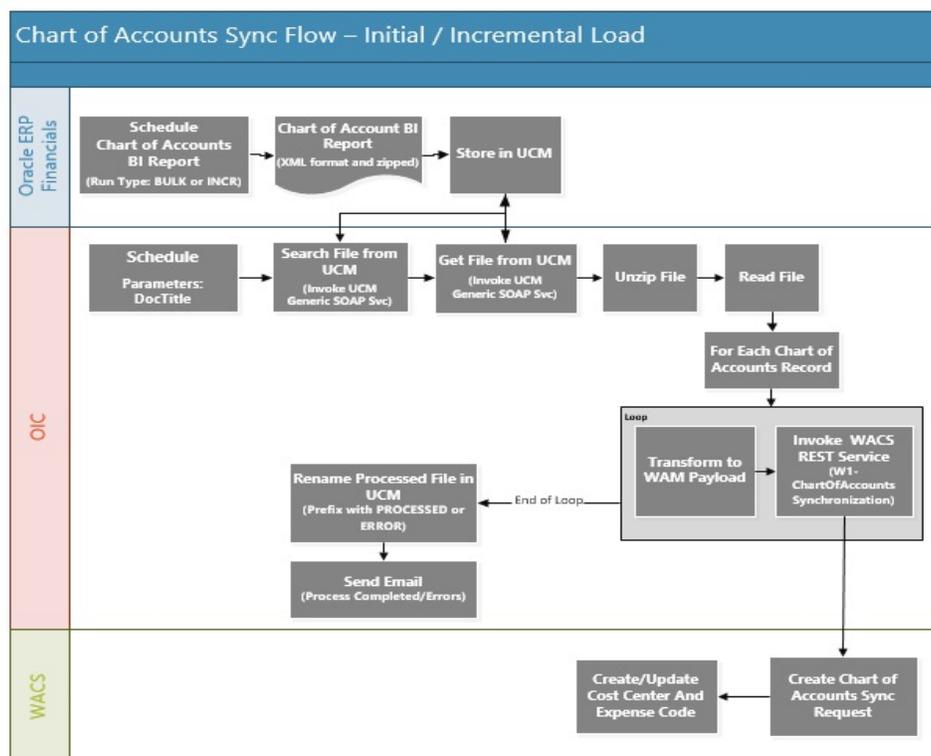
General Ledger Integration

The objective of General Ledger interface is to integrate the General Ledger transactions originating in Oracle Utilities Work and Asset Cloud Service with Oracle ERP Financial Cloud - General Ledger. As Oracle Utilities Work and Asset Cloud Service users take actions within the application that necessitates sending the accounting entries to Oracle ERP Financial, this interface extracts the General Ledger transaction data from Oracle Utilities Work and Asset Cloud Service, translate it and move it to cloud as Journal voucher transactions in the General Ledger.

This integration includes:

- Batch process "W1-ERPGL" in Oracle Utilities Work and Asset Cloud Service extracts all General Ledger transaction and load the zip file to Object storage. This batch process creates a file using the Journal Import FBDI template.

  Note: Import Journal FBDI process is used to import ledger lines in Oracle ERP Financial Cloud. ion a batch in created in Oracle Utilities Work and Asset Cloud Service using the FBDI template.

- **ERP Flow**: Batch process "Load to Interface" picks the transaction data from the UCM interface, inserts the information into an ERP interface table and invokes a journal import data into the Oracle ERP Financial Cloud application.

- Financial interface procedure(s) picks transaction information from the interface table and imports the data into Financial General Ledger.

- The data imported into Oracle ERP Financial Cloud will be posted by submitting the Posting Journal Program as per the business process. "Import Journal" will load the records to the actual journal table that are then open for posting.

  For more information about batch configurations, refer to Chapter 4: Configuring Oracle ERP Financial Cloud and *Oracle ERP Financial Cloud Configurations For Oracle Work And Asset Cloud Service Integration To Oracle ERP Financial Cloud Setup Guide 20C.*

- Verification of data can be done in ERP before making the posting.

- All the transaction are based on the existing code combinations interfaced by ERP system. Any correction or changes in the transaction would be new transaction to adjust the values (if needed).

GL Extract End to End Process

CCS
- Run Batch Process W1-ERPGL (GL Extract for Oracle Financial Cloud)
- Create GL Extract File (CSV format and zipped)
- Store in Object Storage

OIC
- Schedule
- File Location ?
- Object Storage
- Invoke REST API to Get File from Object Storage
- Ready file for upload
- Use ERP Adapter Import Bulk Data into Oracle ERP Cloud option to load and import data into ERP Cloud
- Return Process Id

Oracle ERP Financials
- Pass reference id and filename
- Import Bulk Data
- Send Email and Bell Notification
- GL Extract File Upload to UCM (CSV format and zipped)
- Load and Import

About Oracle Utilities Work and Asset Management

The most comprehensive, integrated, and scalable financial management solution available, Oracle Utilities Work and Asset Management offers extensive support for global companies in a wide variety of industries. Whether challenge is streamlining accounting and general ledgers, complying with new revenue recognition guidelines, automating expense processing, or reporting on new KPIs, Oracle Utilities Work and Asset Management module can handle these requirements.

Used by businesses of all sizes, Oracle Utilities Work and Asset Management offers comprehensive modern financial management applications and tools that easily integrate and scale as your business grows. Designed for collaboration and real-time access to the latest data, Oracle Utilities Work and Asset Management gives companies insights faster to help minimize costs and increase productivity.

An important benefit of Oracle Utilities Work and Asset Management is the delivery of a deep and versatile internal control system, highlighting critical information and messages for prioritization. Built on open standards, Oracle Utilities Work and Asset Management readily extends into legacy systems, third-party applications, and Oracle Cloud Marketplace partner offerings to deliver custom integrated solutions for business.

- General Ledger and Accounting

  - Multi-Dimensional Reporting Platform: Analyze account balances by any dimension in real time.

- • Self-Service Reporting: Monitor and address your top concerns with mobile capabilities.

    - • Collaborative Close: Improve visibility with a collaborative close process.

    - • Visualization Capabilities: Interact with account balances and view them from different perspectives.

    - • Agile Accounting: Create accounting for disparate source systems and easily adapt rules as accounting policies change.

    - • Control: Centralize accounting rules for your subledgers to ensure accounting policies are consistently applied.

    - • Analysis across the Enterprise: Expand business insight by using supporting references to analyze results by multiple dimensions.

    - • Audit and Reconciliation: Utilize real-time, multi-dimensional reporting with drill down to subledger details for quick access to supporting information.

- • Payable and Asset

    - • Invoices and Payments: Control supplier balances, invoices, and payments.

    - • Integrated Imaging: Automate imaging with optical character recognition (OCR) and reduce errors.

    - • Assets: Track and account fixed assets.

    - • Cash Management: Manage bank accounts, cash positions, and cash forecasts.

About Oracle ERP Financial Cloud

Oracle ERP Financial Cloud is a cloud-based, end-to-end business management solution designed for mid-sized to enterprise-level customers. It offers a suite of applications including material planning, financial accounting, analytics, and self-service reporting.

Oracle's accounting features include a Business Intelligence module to identify trends from enterprise data. Billing departments have access to a payables and assets dashboard where they can reconcile statements, track supplier invoices and payments, account for fixed assets, and manage multiple bank accounts. Expenses can be entered via mobile devices and are updated in real-time. Invoice imaging is integrated, so supplier invoices and other documents are scanned and posted automatically.

Oracle ERP Financial Cloud uses "Rapid Implementation" technology that enables quick data migration from a currently used system to cut down on implementation time and costs. Users can also integrate Oracle ERP Financial Cloud with their current solution and leverage the Oracle technologies to unite all business processes into a single view.

About Oracle Integration Cloud

Oracle Integration Cloud is a unified platform to integrate the applications, automate processes, and create applications.

Using the Process Builder the business processes can be rapidly designed, automated, and managed in the cloud. Using integrations connect the applications into a continuous business flow. The integrations can be quickly developed and activated between both the

applications that live in the cloud; and the applications still live on premises. The lookups help to match application specific codes between the two applications.

Integration Insights and Stream Analytics helps to simplify and extract business metrics and create custom dashboards.

Software Requirements

The application supported versions are:

- Oracle Utilities Work and Asset Cloud Service - 20C

- Oracle Integration Cloud - v20.4.2.0.0 and higher

- Oracle ERP Financial Cloud - 20D or higher

Chapter 2

Solution Architecture

This chapter provides an overview of the application architecture used by the integration, including:

- Solution Overview
- Business Flows

Solution Overview

The technical aspects involved in Oracle Utilities Work and Asset Cloud Service Integration to Oracle ERP Financial Cloud are:

- The integration layer is made up of integration processes deployed on Oracle Integration Cloud.

- The integration processes interact with other applications using the following adapters:

    - Oracle ERP Cloud Adapter to import bulk data into Oracle ERP Financial Cloud by performing FBDI-compliant bulk operations like Journal Entries.

    - REST Adapter to interact with Oracle Cloud Infrastructure Object Storage REST APIs

    - Oracle Utilities Adapter to interact with Oracle Utilities Work and Asset Cloud Service REST APIs.

    - SOAP Adapter to interaction with Oracle UCM Generic Web Service to search, get and rename files in Oracle UCM.

- The integration pattern used for the solution is:

    - One-way asynchronous for all flows

Refer to the Business Flows section for more information on each integration process.

Business Flows

The integration supports the following business processes:

- Chart of Accounts Synchronization Process (Oracle ERP Financial Cloud Initiated)

- General Ledger Extract Process (Oracle Utilities Work and Asset Cloud Service Initiated)

Chart of Accounts Synchronization Process (Oracle ERP Financial Cloud Initiated)

This integration process is used to synchronize Chart of Accounts from Oracle ERP Financial Cloud to Oracle Utilities Work and Asset Cloud Service as cost center and expense code combination.

On initial load, only chart of accounts in active status are sync from Oracle ERP Financials. For incremental sync, active and inactive chart of account records are sync from Oracle ERP Financials.

The diagram shows a graphical representation of the Chart of Accounts Synchronization integration process.
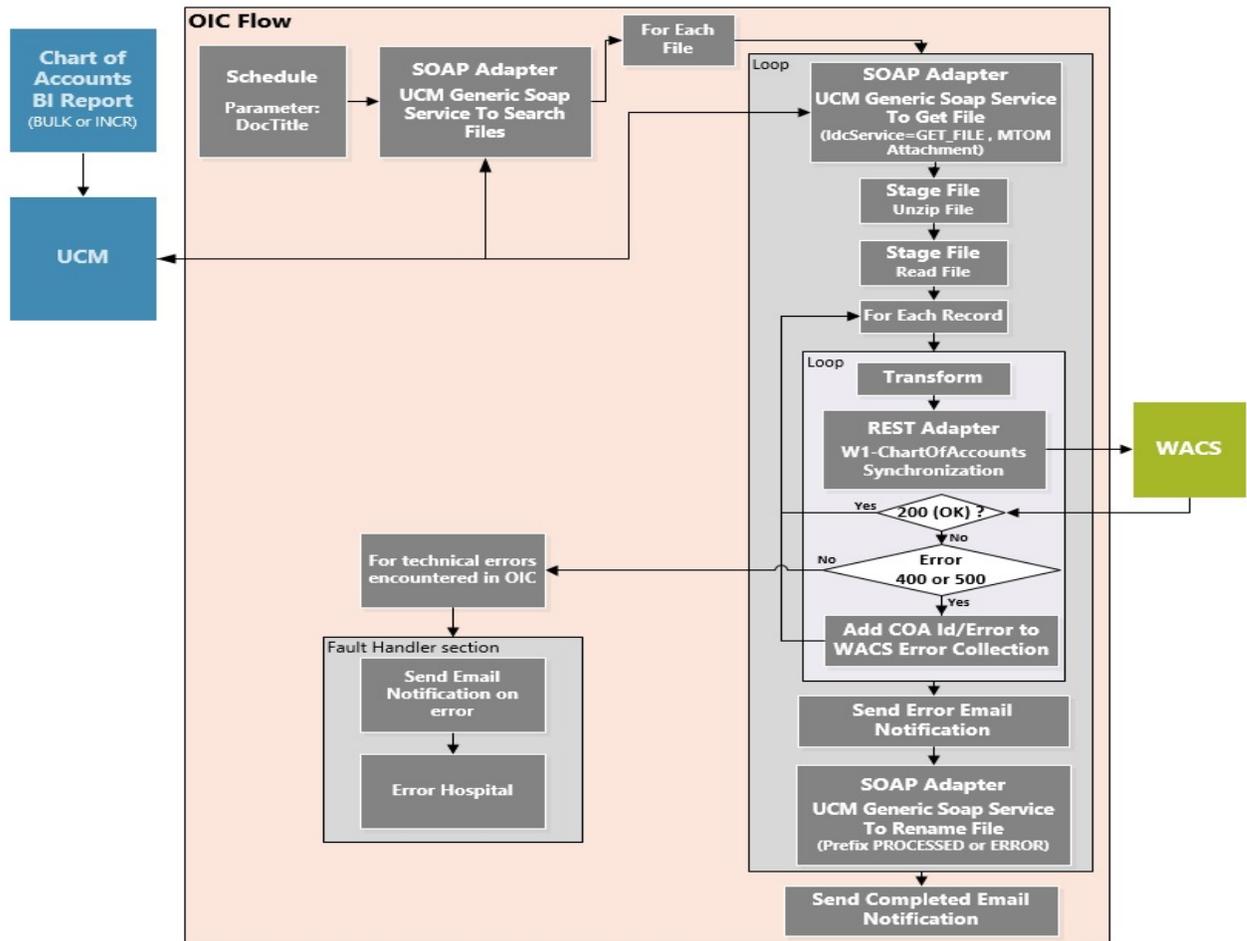
Processing Details

This is a scheduled integration process deployed on Oracle Integration Cloud and does the following activities:

1. This process is triggered by a schedule and has one schedule parameter.

Parameter	Description	Default
DocTitle	Filename of the Chart of Accounts Report created in Oracle ERP Financials	FIN_COA_WACS

Define the integration schedule for this process and make sure it coordinates with the Chart of Account BIP Report schedule in Oracle ERP Financials.

Note that Chart of Accounts BIP Report should always run first in Oracle ERP Financial Cloud before this integration process is ran so the file to process is available in Oracle Universal Content Management (Oracle UCM).

2. Invoke the UCM Generic SOAP service to search for Chart of Account file(s) in Oracle UCM with Doc Title equal to the DocTitle schedule parameter.

   If the schedule of the Chart of Accounts BIP report and this integration process are in sync, the search result list should return only one file. If not, it may return more than one file sorted by the doc created date in ascending order.

3. For each file in the search result list:

   • Invoke the UCM Generic SOAP service to get the Chart of Accounts File from UCM given the Doc ID obtained from the search result.

   • Unzip the file

   • Read the File

   • For each chart of account record in the file, the process does the following:

     • Transform the Chart of Accounts information received from Oracle ERP Financials to the Oracle Utilities Work and Asset Cloud Service format.

       Note: Refer to the *Oracle Utilities Work and Asset Cloud Service Integration to Oracle ERP Financial Cloud Data Mapping Guide 20C* for more details about mapping.

     • Invoke the W1-ChartOfAccountsSynchronization WACS REST API.

     • If the WACS REST API returns:

       • Status 200 (OK), process the next chart of account record in the file

       • Error status 400 or 500, add the Chart of Accounts ID in error and the error details to the WACS Error Collection. Then, it continues to process the next Chart of Accounts record.

       • Error status NOT 400 or 500, stop the process and send out an error email notification from the global fault handler. These errors are considered technical or remote faults (Sample Error Status: 401, 404, 503, etc)

   • Check if the error count in the Oracle Utilities Work and Asset Cloud Service Error Collection reached the value in property name maxerrorcount.per.emailnotification defined in the configuration properties lookup.

     • If yes, send an error email notification with the chart of account records in error.

       Note: This property maxerrorcount.per.emailnotification determines the number of errors sent out in an error email notification and how frequent an error email notification is sent out.

   • When all Chart of Accounts records in the file are processed, invoke the UCM Generic SOAP service to rename the file.

     • If no record are in error, prefix the filename with 'PROCESSED-'

     • Else, prefix the filename with 'ERROR-'

4. After all files are processed, send a process completed email notification with the name of the file(s) processed, record processed count per file and records in error count per file, if any.

> **Note**: All email notification are optional. By default, this is enabled to true in the Configuration Properties file.

Technical Details

The following table describes the integration process and the respective Oracle Utilities Work and Asset Cloud Service artifacts used in this integration process.

Artifacts	Value
Integration Process Name	Oracle Utilities ERPFIN WACS ChartOfAccounts Sync
Integration Package Name	outl.ba.wacs_erp_fin.1_0_0
UCM Generic SOAP Service	https://{UCM_host_name}:{UCM_port}/idcws/ GenericSoapPort?WSDL To search for files, use: IdcService="GET_SEARCH_RESULTS" To get a file, use: IdcService="GET_FILE" To rename a file, use: IdcService="UPDATE_DOCINFO"
WACS REST IWS	W1-ChartOfAccountsSynchronization Chart of Accounts Synchronization Computed URL: https://{host}:{port}/{tenant}/ {domain}/rest/apis/ asset/financials/ chartOfAccountsSynchronization Method: POST URI: /

General Ledger Extract Process (Oracle Utilities Work and Asset Cloud Service Initiated)

This integration process is used to transfer all approved General Ledger transactions from Oracle Utilities Work and Asset Cloud Service to Oracle ERP Financial Cloud for General Ledger for journal creation via data file.

Oracle Utilities Work and Asset Cloud Service creates the GL Extract file, following the Oracle ERP Journal Import FBDI template, in csv and zip format.

The file is picked up by the integration process and uploaded to Oracle ERP Financial Cloud using Oracle ERP Adapter Import Bulk Data action for Import Journal. This is just a file pass through and no transformation will be done by the integration.

Make sure the GL extract batch process (W1-ERPGL) in Oracle Utilities Work and Asset Cloud Service is ran before running this integration process.

The following diagram shows a graphical representation of the General Ledger Extract integration process.
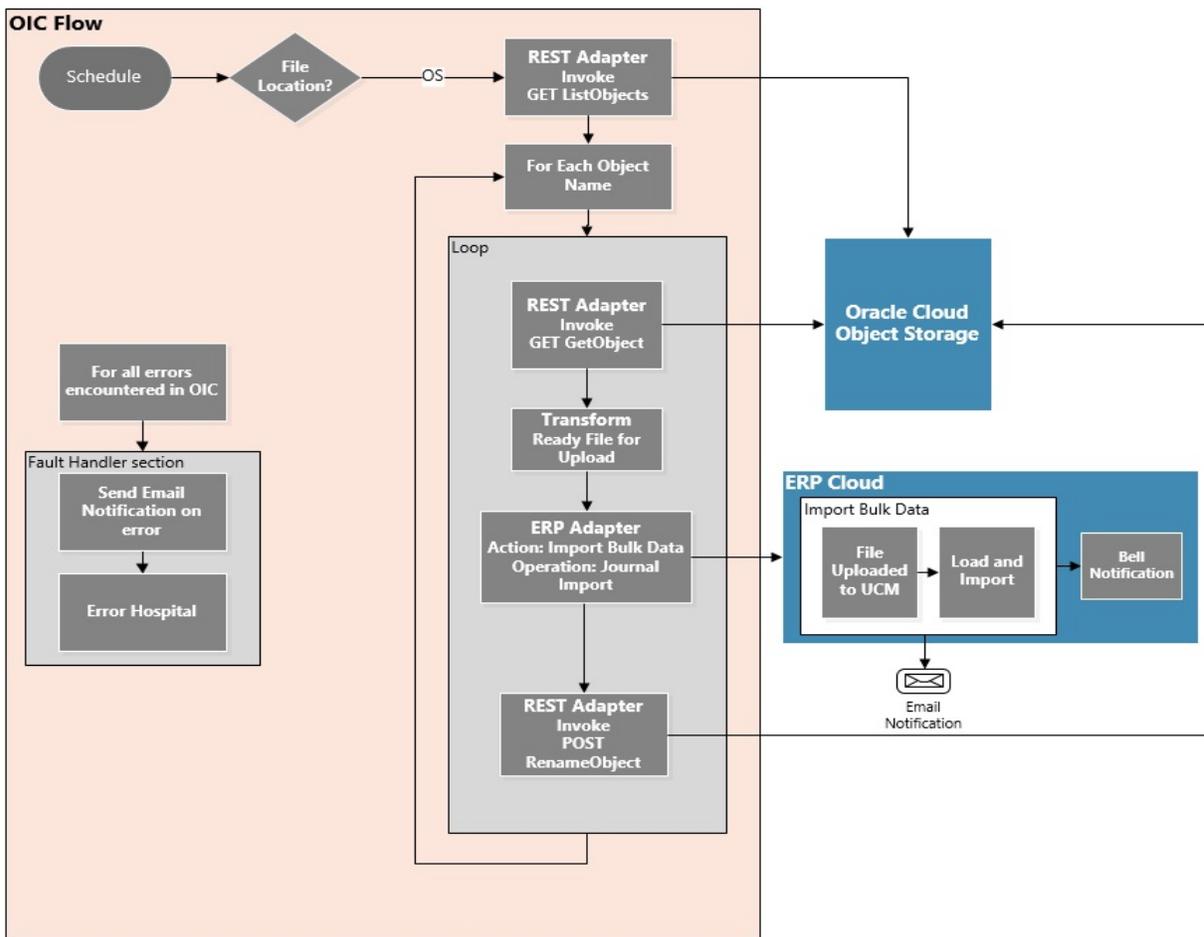
Processing Details

This asynchronous integration process is deployed on Oracle Integration Cloud and does the following activities:

1. This process is triggered by a schedule. Define the integration schedule for this process and make sure it coordinates with the GL Extract batch process (W1-ERPGL) schedule in Oracle Utilities Work and Asset Cloud Service.

    Note: GL Extract batch process (W1-ERPGL) should always be run first before this integration process is ran so the GL extract file is available in Object Storage.

2. Get default information from WACS-ERPFIN Integration Configuration Properties (OUTL-BRT-WACS_ERPFIN_ConfigProps) lookup. This lookup should be configured first to make this integration work.

3. Determine the file location of the GL Extract file from property name wacs.filelocation.flag in OUTL-BRT-WACS_ERPFIN_ConfigProps Lookup. This is defaulted to OS for object storage.

4. If the extract file is in Object Storage, it invokes the Object Storage - List Objects REST API to get the list of files to be processed.

Only files that starts with the string entered in property name gl.extract.filename.prefix in the OUTL-BRT-WACS_ERPFIN_ConfigProps Lookup are returned.

5. Repeat the following steps for each file to process.

    a. Invokes the Object Storage: Gets Object REST API to get the actual file to process.

    b. Prepares the file to be uploaded to Oracle ERP Financial Cloud.

    c. Use ERP Adapter Import Bulk data option with operation Journal Import to load and import the GL data into Oracle ERP Financial Cloud.

    Note: Bell and email notifications are enabled for any case in the Oracle ERP Financial Cloud Adapter. This means when the load and import process are done, bell and email notification are sent out as long as these notifications are setup in the ERP.

    d. After the file is uploaded to Oracle ERP Financial Cloud, rename the file just processed in Object Storage. Invoke the Object Storage - Rename Object REST API by adding a prefix to the filename. This prefix is obtained from the property name os.prefixtag.fileuploaded in the OUTL-BRT-WACS_ERPFIN_ConfigProps Lookup.

6. Error Handling for this process.

    Any errors encountered in the process are handled by the global fault handler.

    Retry Option: Rerun from Oracle Integration Cloud

7. An optional email notification with error details are sent to the user(s) configured in the OUTL-BRT-WACS_ERPFIN_Email_ID lookup. Property name email.flag in the OUTL-BRT-WACS_ERPFIN_ConfigProps Lookup must be set to 'true' to receive email notification when errors are encountered.

Technical Details

The following table describes the integration processes and the respective Oracle Utilities Work and Asset Cloud Service and Oracle Utilities Work and Asset Management artifacts used in this integration process.

Artifacts	Value
Integration Process Name	Oracle Utilities WACS ERPFIN GL Extract Upload
Integration Package Name	outl.ba.wacs_erp_fin.1_0_0

Artifacts	Value
Object Storage REST APIs	Object Storage Service API Endpoint https://{OSLocation_host_name} To get list of files: Method: GET URI: /n/{namespaceName}/b/{bucketName}/o Query Parameters: prefix To get file: Method: GET URI: /n/{namespaceName}/b/{bucketName}/o /{objectName} To rename file: Method: POST URI: /n/{namespaceName}/b/{bucketName}/ actions/renameObject
ERP Cloud Adapter	Bulk Import Data Action: Import Bulk Data into Oracle ERP Financial Cloud Operation: Import Journals

Chapter 3

Configuring Oracle Utilities Work and Asset Cloud Service

This chapter elaborates about the configuration of about various data, messages and catalog for the integration used by Oracle Utilities Work and Asset Cloud Service. It includes the following sections:

- One-Time Configuration Setup
- Configuring Admin Data
- Scheduling the Batch Process
- Managing Catalog Services

One-Time Configuration Setup

Certain one-time configuration settings must be coordinated manually to make sure of the proper flow of data between the two applications.

General Ledger Configuration

Oracle Utilities Work and Asset Management for General Ledger and Accounts Payable is the source of truth for all General Ledger information. Oracle Utilities Work and Asset Cloud Service 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 Work and Asset Cloud Service uses distribution codes to map sub-ledger transactions to the General Ledger accounts. As part of the Oracle Utilities Work and Asset Cloud Service set up, it is assumed that the distribution codes are properly mapped to the Oracle Utilities Work and Asset Management General Ledger chart of accounts.

Chart of Accounts

Oracle ERP Financial Cloud uses Chart of Accounts for tracking financial transactions. Each Chart of Accounts consists of a series of accounting segment strings. Financial transactions can be charged against these strings.

The Chart of Accounts Synchronization Process should be ran for initial load so the Chart of Accounts segments from Oracle ERP Financial Cloud are sent to Oracle Utilities Work and Asset Cloud Service, and the Cost Center and Expense Code used in Oracle Utilities Work and Asset Cloud Service can be derived from the segments. Transactions from other Oracle Utilities Work and Asset Cloud Service integration flows can then reference these Chart of Accounts.

> **Note**: Chart of Accounts Synchronization Process for incremental sync should also be setup and run to get the updates for Chart of Accounts in Oracle ERP Financial Cloud, if any.

Configuring Admin Data

For GL Extract

To configure Oracle Utilities Work and Asset Cloud Service admin data setup for the GL Extract integration:

1. Login to Oracle Utilities Work and Asset Cloud Service.

2. Navigate to **Algorithm**.

   Define the **Journal Categories** in algorithm **W1ERPGLEXREC**.

   The parameter values for the different journal categories must be a valid value in **Manage Journal Categories Setup Task** page in Oracle ERP Financial Cloud.

3. Navigate to **Master Configuration** > **ERP Integration Master Config**.

   Define the Ledger ID, Journal Source and Delimiter parameters under the Financial

Configuration section of the ERP Integration Master Configuration.

The Ledger ID provided must be a valid value in **Manage Primary Ledgers** page in Oracle ERP Financial Cloud.

The Journal Entry Source provided must be a valid value in the Manage Journal Sources Setup Task page in Oracle ERP Financial Cloud.

Define the Delimiter to be used for the GL Extract integration. This is the same delimiter used in the Chart of Accounts integration.

4. Navigate to **Master Configuration** > **Financial Master Configuration**.

    Define the GL Extract Batch Code under the Financial Transaction Parameters section. This value must be set to W1-ERPGL batch control.

5. If applicable, navigate to ERP Integration.

    Define the Owning System of the Maintenance Objects responsible for generating Financial Transactions and GLs. The Owning System must be set to Work and Asset Management.

For Chart of Accounts Synchronization

To configure Oracle Utilities Work and Asset Cloud Service admin data setup for the Chart of Accounts Sync integration:

1. Navigate to **External System**.

    Define the External System representing the Oracle ERP system. This will be referenced in other Admin objects.

2. Navigate to **Master Configuration** > **Seeder Sync Request Master Configuration.**
    a. Create a row for the ERP External System and Cost Center Maintenance Object (MO): W1-COSTCTR for Chart of Account Sync Integration.
    b. Defines the Ongoing Sync Request Business Object and Key Reference View for the Chart of Accounts integration. The Ongoing Sync Request Business Object processes the Sync Request. The Key Reference View tracks previously synced Chart of Accounts, and is used to determine if the Sync Request transaction will add or update Cost Centers and Expense Codes.

    The following table shows a sample reference:

Maintenance Object	Ongoing Sync Request BO	Ongoing Sync Key Reference View	Identifier Type
W1-COSTCTR (Cost Center)	W1-OngoingSync RequestCostCtr (Cost Center Ongoing Sync Request)	W1_ON_COST_CE NTER_VW (Ongoing Sync Key Cost Center View)	W1EI

3. Navigate to **Master Configuration > Master Data Synchronization Configuration**.

   Create a Key Reference Mapping row for the Cost Center Foreign Key Reference and ERP External System. This row should reference Initial and Ongoing Sync Key Reference Views to track Cost Centers that have already been synced. This configuration will be used to convert external keys to Oracle Utilities Work and Asset Cloud Service keys.

   The following table shows a sample reference:

FK Reference	Initial Sync Key Reference View	Ongoing Sync Key Reference View	External System	Identifier Type
W1-CSCTR (Cost Center)	W1_INI_COST_CENTER_VW (Initial Sync Key Cost Center View)	W1_ON_COST_CENTER_VW (Ongoing Sync Key Cost Center View)	ERP External System	W1EI

4. Navigate to **Master Configuration** > **Financial Master Configuration.**

   In the **Cost Center Parameters** section, set **Validate Cost Center/Expense Code** to **Yes**. This allows the Expense Code collection to be visible on the Cost Center Portal.

5. Navigate to **Data Area**.

   Create a Cost Center Account Segments Data Area that references the "W1-CostCenterAccountSegments" as an Extended Data Area.

   This Data Area defines how the Account Segments will be stored within the Cost Center object. The schema should define 10 segments and 10 descriptions, with the element names matching the ERP Integration Master Config - Financial Configuration mappings. All elements should be group by the CM element "cmAccountSegments".

Sample Schema Reference

```
<schema>
    <cmAccountSegments type="group">
        <company mdField="ACCOUNT_SEGMENT"
mapXML="BO_DATA_AREA"/>
        <companyDescription mdField="DESCR100"
mapXML="BO_DATA_AREA"/>
        <lob mdField="ACCOUNT_SEGMENT" mapXML="BO_DATA_AREA"/>
        <lobDescription mdField="DESCR100"
mapXML="BO_DATA_AREA"/>
        <costCenter mdField="ACCOUNT_SEGMENT"
mapXML="BO_DATA_AREA"/>
        <costCenterDescription mdField="DESCR100"
mapXML="BO_DATA_AREA"/>
        <expenseCode mdField="ACCOUNT_SEGMENT"
mapXML="BO_DATA_AREA"/>
        <expenseCodeDescription mdField="DESCR100"
mapXML="BO_DATA_AREA"/>
```

```
            <product mdField="ACCOUNT_SEGMENT"
    mapXML="BO_DATA_AREA"/>
            <productDescription mdField="DESCR100"
    mapXML="BO_DATA_AREA"/>
            <intercompany mdField="ACCOUNT_SEGMENT"
    mapXML="BO_DATA_AREA"/>
            <intercompanyDescription mdField="DESCR100"
    mapXML="BO_DATA_AREA"/>
            <segment7 mdField="ACCOUNT_SEGMENT"
    mapXML="BO_DATA_AREA"/>
            <segment7Description mdField="DESCR100"
    mapXML="BO_DATA_AREA"/>
            <segment8 mdField="ACCOUNT_SEGMENT"
    mapXML="BO_DATA_AREA"/>
            <segment8Description mdField="DESCR100"
    mapXML="BO_DATA_AREA"/>
            <segment9 mdField="ACCOUNT_SEGMENT"
    mapXML="BO_DATA_AREA"/>
            <segment9Description mdField="DESCR100"
    mapXML="BO_DATA_AREA"/>
            <segment10 mdField="ACCOUNT_SEGMENT"
    mapXML="BO_DATA_AREA"/>
            <segment10Description mdField="DESCR100"
    mapXML="BO_DATA_AREA"/>
        </cmAccountSegments>
    </schema>
```

6. Navigate to **Master Configuration** > **ERP Integration Master Config**.

   a. In the **Main** section, define the Oracle ERP External System.

   b. In the **Financial Configuration** section, 10 segments must be populated. One must be the Cost Center segment and another the Expense Code segment defined. The Delimiter will define the separation character sent in the REST Web Service request.

   The following table shows a sample reference.

Sequence	Element Name	Account Segment Type	Include in Cost Center
1	cmAccountSegments/ company		No
2	cmAccountSegments/lob		No
3	cmAccountSegments/ costCenter		Yes
4	cmAccountSegments/ expenseCode	Expense Code	No
5	cmAccountSegments/ product		No
6	cmAccountSegments/ intercompany		No
7	cmAccountSegments/ segment7		No

Sequence	Element Name	Account Segment Type	Include in Cost Center
8	cmAccountSegments/ segment8		No
9	cmAccountSegments/ segment9		No
10	cmAccountSegments/ segment10		No

7. Navigate to **Business Object** > **Cost Center Ongoing Sync Request BO**.

For Cost Center Ongoing Sync Request BO Lifecycle: The Cost Center Ongoing Sync Request is used for SOA-based ERP integrations. The configuration for these existing integrations needs to be modified as follows.

a. On the Pending Lifecycle Status, a deferred monitor is enabled by default. This defers processing of the Sync Request until the Ongoing Sync Request - Pending (W1-SIOPE) Batch Control job is run. Clearing this deferred monitor would allow immediate processing of the Sync Request. This is an optional change.

b. SOA-based ERP integrations required positive/negative acknowledgement messages to be returned to the ERP system. These are not need for the Oracle Application Cloud - ERP Financial Cloud integrations. On the Cost Center Ongoing Sync Request Business Object, inactivate the following lifecycle algorithms. To inactivate the algorithm, add an option within the Status with an Inactive Algorithm Option Type and the name of the algorithm within the Value field.

  a. Synchronized (SYNCHRONIZED) Status - Create Positive Acknowledgement for ERP (W1-CPOSAERP)

  b. Negative Acknowledgement Sent (NEG-ACK-SENT) Status - Create Negative Acknowledgement (W1-CRENEGACK)

Scheduling the Batch Process

Run the following Oracle Utilities Work and Asset Cloud Service Batch Processes to create the extracts:

-

GL Extract For Oracle Utilities Work and Asset Management Batch Process

- Schedule the W1-ERPGL batch process to create the GL extract file. Some of the batch parameters are already defaulted. Make sure these parameters are defined.

  - fileName: Name of the GL extract file. As a preference, add the batch code and batch number to make the file name unique. Also, add the batch thread number if this is run multi-threaded.

Example file name: GLEXTRACTFILE_{BC}_{BN}.csv.

In this example the system variables {BC} - Batch Code and {BN}- Batch Number are added to the file name.

Note: The beginning of the extract file name entered here, without any system variables, should be defined in the property name gl.extract.filename.prefix of the OUTL-BRT-WACS_ERPFIN_ConfigProps in Oracle Integration Cloud. In the example above, only the GLEXTRACTFILE part should be defined.

- filePath: Give the path name to the object storage where the file will be stored.

Example Path: file-storage://OS-APP/Int-Export

Refer to the *Object Storage Setup Guide 20C* at: https://docs.oracle.com/cd/F35460_01/index.htm

Note: When this batch process is scheduled to run automatically at a preset time, make sure to have coordinated this timing with the GL Extract Oracle Integration Cloud process schedule.

Managing Catalog Services

The catalog service is used by Oracle Integration Cloud to communicate with the respective application. It is configured in Catalog URL in the Oracle Integration Cloud connection.

To configure the catalog service in Oracle Utilities Work and Asset Cloud Service:

1. Login to Oracle Utilities Work and Asset Cloud Service.

2. Navigate to the **Web Service Catalog** page either from the **Admin** menu or the **Search** menu.

3. Select **REST Web Service Class**.

4. Add the REST inbound web services mentioned below to the catalog.

Service Type	Service Name	Device Verification
Inbound Web Service	W1-ChartOfAccounts Synchronization	

For more information about configuration, refer to the Oracle Utilities Work and Asset Cloud Service documentation at: https://docs.oracle.com/cd/E72219_01/documentation.html

Chapter 4

Configuring Oracle ERP Financial Cloud

This chapter describes the configuration required to integrate Oracle ERP Financial Cloud and Oracle Utilities Work and Asset Cloud Service.

- ERP Configuration for General Ledger

-

ERP Configuration for General Ledger

This section focuses on the configuration requirements for Journal Integration between Oracle ERP Financial Cloud and Oracle Utilities Work and Asset Cloud Service. The General Accounting module under the Finance umbrella in ERP can handle journals, period close, and general accounting. The process starts with Oracle Utilities Work and Asset Cloud Service running the batch to collect all journals on financial transactions. Oracle Integration Cloud processes to get the General Ledger extract file created in Oracle Utilities Work and Asset Cloud Service and load the file into the Oracle ERP Financial Cloud through "import bulk data integration" (FBDI).

Oracle Utilities Work and Asset Cloud Service generates a data file based on the Journal Import Template in a comma-separated value (CSV) format. Oracle Utilities Work and Asset Cloud Service places the generated file to Object Storage. Oracle Integration Cloud flow picks file from Object Storage or server and places in UCM.

The file is scheduled within ERP from the UCM folder. The following figure shows the process to load the data to the GL_Interface table.

UCM account: fin/generalLedger/import
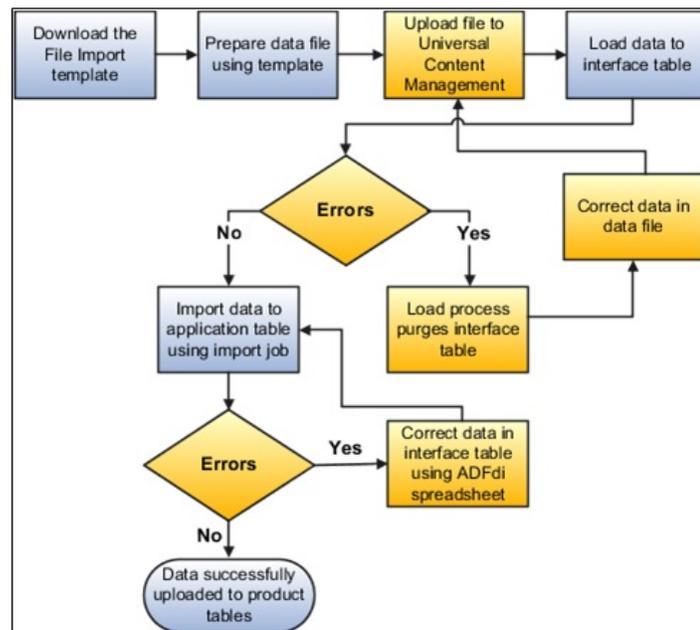
This section includes the following:

- Configuration Overview for General Ledger
- Scheduling the Import Journal

Configuration Overview for General Ledger

In addition to the set up to run General Ledger in ERP, to import journals with a specific source, create a reference source in ERP.

Journal import creates journal entries from accounting data imported from Oracle and non-Oracle feeder systems. It supports multiple charts of accounts, as well as foreign

currency, intercompany, statistical, budget, and encumbrance journals. It creates journal entries from data in the GL_INTERFACE table.

Defining Journal Sources

Journal sources identify the origin of the journal entries. General Ledger supplies a number of predefined journal sources. In addition, define one journal source for Oracle Utilities Work and Asset Management, non-Oracle feeder systems to help track imported journal entries.

If journal approval is enabled in the system for set of books, set up journals with a specific journal source approved by higher management levels before the journal can be posted. This will follow the usual setup defined in ERP.

To create a new journal source:

1. Login to the system.

2. Navigate to the **Journal Sources** window.

3. Enter a unique **Name** and **Description** for the journal entry source. The source name cannot be deleted after saving the work.

4. Choose whether to **Import Journal References** from the feeder systems to maintain a mapping of summarized transactions. This information is stored in the GL_IMPORT_REFERENCES table.

5. Check whether to **Freeze Journals** for this journal entry source.

   If the checkbox is selected, journals from this source cannot be changed in the **Enter Journals** window. If it is not selected, changes can be made to journals from this source.

6. Check whether to **Require Journal Approval** for this journal source.

7. If journal approval is enabled for the set of books and a journal is entered whose journal source requires journal approval, the batch must be approved before it can be posted.

8. (Average Balance Processing only) From the list, select an **Effective Date Rule** for the journal source.

   Note that the **Effective Date Rule** field does not appear unless the average balance processing is enabled for at least one set of books.

   • **Fail**: Journal Import rejects transactions when the effective date is not a valid business day. Posting does not take place.

   • **Leave Alone**: Journal import accepts all transactions regardless of the effective date.

   • **Roll Date**: Journal import accepts the transaction, but roll the effective date back to the nearest valid business day within the same period. If there is no prior valid business day within the same period, the effective date is rolled forward.

9. Save the work.

To manage a journal source:

1. Login to the ERP environment.

2. Navigate to **Others** > **Set up and Maintenance** > **Financials** > **General Ledger** > **Manage Journal Source**.
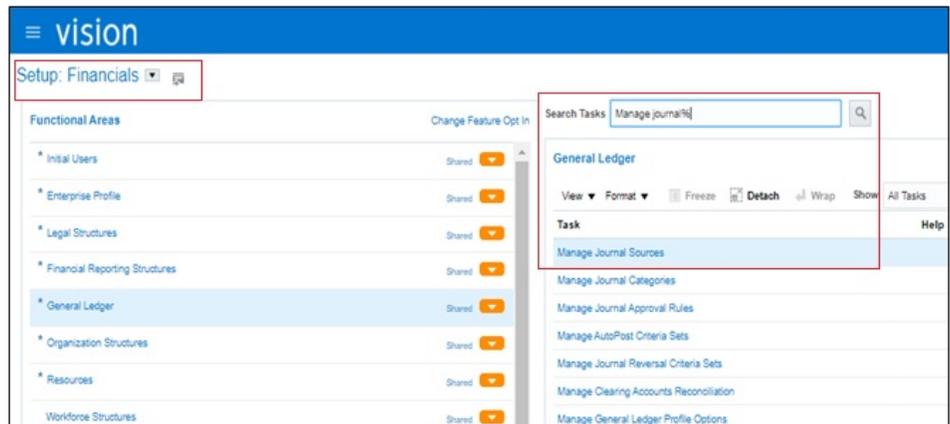
3. Click "+" to add the source.
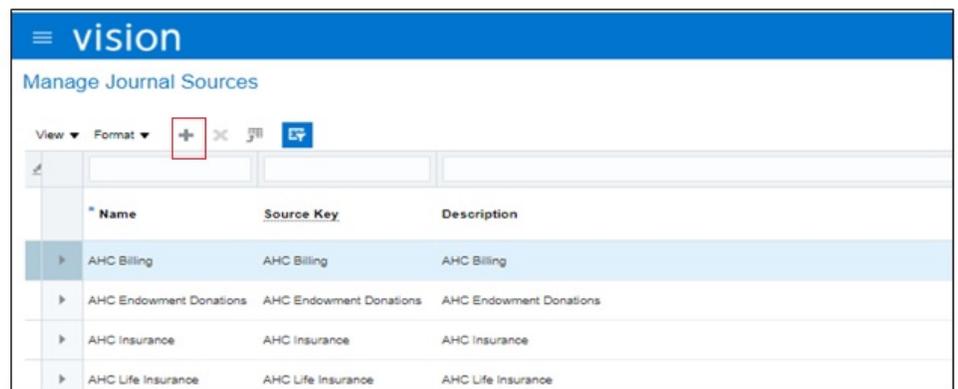
4. Add the following details:

    Name: WACS Transfer

    Source Key: WACS Coexistence

    Description: WACS Suite Coexistence

    Other details on the task needs to be configured based on the business. (Approval is not needed as they are already approved in Oracle Utilities Work and Asset Cloud Service)

5. Click **Save and Close**.

Scheduling the Import Journal

The file selected from UCM loads the records into the interface table. For the records to transfer to journal, ERP needs to run the Import Journal Process.

It is recommended to schedule the "Import Journal" batch once everyday, as all the records in the interface table may match to net debit and credit. Any mismatch in total of debit and credit may result in error and needs to be corrected in Oracle Utilities Work and Asset Cloud Service to rerun the files.

To schedule this batch to run over time as per the business requirement:

1. Login to the system.

2. Navigate to **Tools** > **Scheduled Processes**.

3. From the **Name** list, select **Import Journals**. Click **OK**.

4. Enter the **Source** created in **Define Journal Source**.

5. Click **Advance** > **Schedule**.

6. Enter the **Schedule** details.

7. Select **Frequency** and **Start Date**.

8. Click **Submit**.

Chapter 5

Importing, Configuring, and Testing Integration Connections

This chapter provides the configuration settings required for the integration, including:

- Importing the Oracle Integration Cloud Package from Oracle Cloud Marketplace

- Verifying the Package Import

- Configuring Connections in Oracle Integration Cloud

- Setting up Certificates for Security

Importing the Oracle Integration Cloud Package from Oracle Cloud Marketplace

All integration points are shipped as part of single package (.par) file.

To import a pre-built integration from Oracle Cloud Marketplace:

1. Launch the Oracle Cloud Marketplace portal.

   https://cloudmarketplace.oracle.com/marketplace/en_US/homePage.jspx

2. Click **Applications**.

3. Search for "Oracle Utilities Work and Asset Cloud Service".

4. Browse through the list of applications and select the pre-built integration package to import.

5. Click **GetApp**.

6. Review and accept "Oracle Standard Terms and Restrictions".

7. Click **Next**. MyOracle Support portal opens.

8. Download the integration package from MyOracle Support.

9. When prompted, select the server where the pre-built integration file should be uploaded.

   The pre-built integration is imported as a package file that is visible on the **Packages** page in Oracle Integration Cloud.

10. On the **Integrations** page, the individual integrations of the imported package file that are designated with a BUILT BY ORACLE message are displayed.

Important! This note is applicable only for existing customers. Make sure to take a backup of the existing package and lookups, and perform the cleanup before proceeding with the new package import. The cleanup includes deactivating the existing flows in this package and deleting the package, connections, lookups and libraries used in the integration.

To import a package in Oracle Integration Cloud:

1. Login to Oracle Integration Cloud.

2. Navigate to **Integrations** > **Designer** > **Packages**.

3. Click **Import**.

4. Select the .par file downloaded from Oracle Cloud Marketplace.

5. Verify if the package is imported is successfully.

Verifying the Package Import

To verify the package import was successful:

1. Verify that the following integrations are imported successfully.

   • Oracle Utilities ERPFIN WACS ChartofAccounts Sync

   • Oracle Utilities WACS ERPFIN GL Extract Upload

2. Verify if the following connections are in place.

- Oracle Utilities SOAP UCM Gen Svc for WACS-ERPFIN

- Oracle Utilities REST WACS for WACS-ERPFIN

- Oracle Utilities REST WACS OS for WACS-ERPFIN

- Oracle Utilities ERP FIN for WACS-ERPFIN

3. Make sure that the following look ups are imported successfully.

- OUTL-BRT-WACS_ERPFIN_ConfigProps

- OUTL-BRT-WACS_ERPFIN_Email_ID

- OUTL-BRT-WACS_ERPFIN_COAStatus

Configuring Connections in Oracle Integration Cloud

After the packages are imported and verified, the respective connections have to be configured.

This section describes the procedure to set up the following connections:

- Configuring Oracle Utilities SOAP UCM Gen Svc for WACS-ERPFIN Connection

- Configuring Oracle Utilities REST WACS for WACS-ERPFIN Connection

- Configuring Oracle Utilities REST WACS OS for WACS-ERPFIN Connection

- Configuring Oracle Utilities ERP FIN for WACS-ERPFIN Connection

Configuring Oracle Utilities SOAP UCM Gen Svc for WACS-ERPFIN Connection

This connection is used to communicate with Oracle Universal Content Management using the SOAP adapter.

Configure the Oracle Utilities SOAP UCM Gen Svc for WACS-ERPFIN connection:

1. Specify the WSDL URL.

   The Oracle UCM Web Service follows this format: https://{ERP Cloud host}/ idcws/GenericSoapPort?WSDL

2. From the **Security Policy** drop-down list, select **Basic Authentication**.

3. Provide **Username** and **Password** to connect to Oracle UCM.

4. Click **Test** at the upper-right corner.

5. After the connection is tested successfully, click **Save**.

Configuring Oracle Utilities REST WACS for WACS-ERPFIN Connection

This connection is used to communicate with Oracle Utilities Work and Asset Cloud Service using the Oracle Utilities adapter.

Configure the Oracle Utilities REST WACS for WACS-ERPFIN connection:

1. Specify the Oracle Utilities Work and Asset Cloud Service REST web catalog to the catalogURL section.

   The REST Catalog URL follows this format: https://{host}:{port}/{tenant}/ {domain}/{appName}/rest/openapi/iws/catalog

2. In the **Security Policy** section, select **Basic Authentication**.

3. Provide **Username** and **Password** to connect to Oracle Utilities Work and Asset Cloud Service.

4. From the **Security Policy** drop-down list, select **Basic Authentication**.

5. Click **Test** at the upper-right corner.

6. After the connection is tested successfully, click **Save**.

Configuring Oracle Utilities REST WACS OS for WACS-ERPFIN Connection

This connection is used to communicate with Oracle Infrastructure Cloud Object Storage using the REST adapter.

To configure the Oracle Utilities REST WACS OS for WACS-ERPFIN connection:

1. In the **Connection Properties** section, enter the object storage API endpoint use by Oracle Utilities Work and Asset Cloud Service in the Connection URL.

   Refer to Oracle Cloud Infrastructure Documentation/API Reference and Endpoints to see the Object Storage Service API and endpoints (https:// docs.cloud.oracle.com/en-us/iaas/api/).

2. In the Security section:

   a. Select the OCI Signature Version 1 security policy.

   b. Provide the following Object Storage information:

      • Tenancy OCID

      • User OCID

      • Upload the private key

      • Fingerprint (obtained from object storage after register the public key for the appropriate user)

      For more information, refer to the Object Storage Setup Guide 20C at: https://docs.oracle.com/cd/F35460_01/index.htm

3. On the **Connection** page, enter the user name and password. Click **Test**.

4. After the connection is tested successfully, click **Save**.

Configuring Oracle Utilities ERP FIN for WACS-ERPFIN Connection

This connection is used to communicate with Oracle ERP Financial Cloud application using the Oracle ERP Cloud Adapter.

To configure the Oracle Utilities ERP FIN for WACS-ERPFIN connection:

1. Enter the ERP Services Catalog WSDL URL.

   The ERP Services Catalog WSDL URL follows this format: https://{ERP Cloud host}/fndAppCoreServices/ServiceCatalogService?wsdl

2. Enter the ERP Event Catalog URL.

   The ERP Event Catalog URL follows this format: https://{ERP Cloud host}/soa-infra

3. In the **Security Policy** section, select **Username Password Token**.

4. Enter the **Username** and **Password** to connect to Oracle ERP Financial Cloud.

5. Click **Test**.

6. After the connection is tested successfully, click **Save**.

Setting up Certificates for Security

Important! Skip this section if there are valid CA certificates for the integration.

If there are no valid certificates for this integration, download the Oracle Utilities Work and Asset Cloud Service certificates and upload them to Oracle Integration Cloud to handshake with Oracle Utilities Work and Asset Cloud Service.

To download the Oracle Utilities Work and Asset Cloud Service certificate:

1. Login to Oracle Utilities Work and Asset Cloud Service.

2. Click the URL on the top-left corner.

3. On the **Security** tab, click **View Certificate**.

4. On the **Details** tab, click **Export**.

5. Save the certificate.

To upload the certificate to Oracle Integration Cloud:

1. Login to Oracle Integration Cloud with Admin credentials.

2. Navigate to **Settings** > **Certificates**.

3. On the **Certificate** window, click **Upload**.

4. Select **Certificate Type** as **Trust Certificate**.

5. Provide the **Certificate Alias Name**.

6. Select the certificate to upload.

7. Click **Upload**.

Chapter 6

Configuring Lookups, Error Handling, and Email Notifications

This chapter describes the lookups configuration, error handling for faults encountered, and email notifications for this integration. It includes the following sections:

- Configuring Lookups
- Error Handling
- Email Notifications

Configuring Lookups

The following table lists the lookups that are part of this integration.

This lookup is used for Char of Accounts Synchronization Integration Process.

DVM Name	Description
OUTL-BRT-WACS_ERPFIN_COAStatus	Map ERP Financial Chart of Account Code Combination Status to WACS Chart of Account Status

The following lookups are used by all the integration processes.

DVM Name	Description
OUTL-BRT-WACS_ERPFIN_ConfigProps	Maps PropertyName column to the respective Value Column. Do not change the values in PropertyName column.
OUTL-BRT-WACS_ERPFIN_Email_ID	Maps from and to recipient values to the mentioned email IDs.User can configure multiple emails by putting comma to separate the email IDs.

Editing Lookups

To edit a lookup:

1. Login to Oracle Integration for Cloud.
2. Navigate to **Integrations** > **Designer** > **Lookups**.
3. Select the look up to edit.
4. Make the necessary changes.
5. Click **Save** and **Close**.

Configuration Properties

OUTL-BRT-WACS_ERPFIN_ConfigProps lookup contains the properties that can be configured and defaulted in the integration.

Properties used by all Integration Processes

Property Name	Sample Value	Description
email.flag	true	If this value is set to true, email notification will be sent out. Valid values: true/false. Default to true.

Properties used for Chart of Accounts Synchronization Process

Property Name	Sample Value	Description
wacs.externalsystem	ERP	External System defined in WACS for Oracle ERP Cloud Application
maxerrorcount.per.emailn otification	100	This value controls the number of errors to be sent out in an error email notification. When the error count reaches this value, an error email notification is sent out. It will keep sending an email notification for every interval of the maximum error count. Example: There are 150 records to be processed and this property is set to 50. When the process reached its 50th error record then an email notification listing the 50 error records is sent. For every 50 error records an email notification is sent out.

Properties used for GL Extract Integration Process

Property Name	Sample Value	Description
wacs.filelocation.flag	OS	Define the file location where WACS store the extract files. Default value: OS (Object Storage)
os.namespace		The Object Storage namespace serves as a container for all your buckets and objects. Define the namespace where the buckets and objects the GL extract file resides. This is use when calling the Object Storage APIs.
os.gl.bucketname		Bucket Name to where the objects or files are stored. Define the bucket name where the GL Extract file is stored. This is used when calling the Object Storage APIs.
gl.extract.filename.prefix	GLEXT	GL Extract file name prefix. This should have the starting value of the batch parameter filename in Batch Process W1-ERPGL. (Ex: filename is GLEXT_001_001).
os.prefixtag.fileuploaded	Uploaded	The text to append to the Ap Req Extract filename to mark the file as processed or uploaded in Object Storage.

Error Handling

This section provides information about the different ways used to handle errors in the integration and also resubmitting the instances after rectifying the errors.

- Error Handling Ways
- Resubmitting the Error Instances in Oracle Integration Cloud
- Reprocess Chart of Accounts (COA) File

Error Handling Ways

In this integration, all integration flows are asynchronous. The next section describes error handling for asynchronous flows.

- Asynchronous Flow Error Handling
- Summary of Integration Error Handling

Asynchronous Flow Error Handling

Technical Fault
This fault occurs when there is a data mismatch or any Xpath related error. When this error occurs, the flow immediately goes to global fault handler and an optional email to the respective user is sent.

Remote Fault
This fault occurs when the target system is down. When this error occurs, the flow immediately goes to global fault handler and an optional email is sent to the respective user.

Business Fault
These faults are application-specific that occurs when there is a problem with the information being processed in the target application due to invalid data or business error validations.

For processing records in a file

When Oracle Utilities Work and Asset Cloud Service returns HTTP status codes 400 or 500, these are considered business faults by the integration. When these errors occur, the flow will not stop but continue to process the next record and the errors will be stored in a temporary error collection. When the file is done processing an optional email is sent with the list of errors to the respective user.

Summary of Integration Error Handling
Integration Process: Chart of Accounts Synchronization (COA Sync)

Type of error	Action	Notification Type	Retry
Technical or Remote Fault	Process Stop	Email	Resubmit Error Instance From OIC

Type of error	Action	Notification Type	Retry
Business Fault (WACS returns Status Not 400 or 500)	Process Stop	Email	Resubmit Error Instance From OIC
Business Fault (WACS returns Status 400 or 500)	Continue Process	Collect errors and send errors in Email	Data Fix in Integration - Reprocess COA file Data Fix in WACS - Run Batch W1-SIOERR to reprocess error sync records

Integration Process: GL Extract Process (GL Extract)

Type of error	Action	Notification Type	Retry
Technical or Remote Fault	Process Stop	Email	Resubmit Error Instance From OIC

Resubmitting the Error Instances in Oracle Integration Cloud

In this integration, all processes are asynchronous, so the resubmit option is in Oracle Integration Cloud if the process ends in a fault.

To resubmit the error instances in Oracle Integration Cloud:

1. Login to Oracle Utilities Work and Asset Management.

2. Navigate **Integrations** > **Monitoring** > **Errors**.

3. Select the integration to resubmit.

4. Click the **Resubmit** icon.

Reprocess Chart of Accounts (COA) File

To reprocess the Chart of Accounts (COA) file:

1. Navigate to Oracle UCM.

2. Make sure the filename of the Chart of Accounts file to reprocess is FIN_COA_WACS. If it has been renamed to ERROR-FIN_COA_WACS, manually change the filename to FIN_COA_WACS so the COA Sync Process will pick up the file again.

3. Login to Oracle Integration Cloud.

4. Navigate to **Integrations** > **Integrations**.

5. Navigate to Oracle Utilities ERPFIN WACS ChartofAccounts Sync integration and click **Run**.

6. Click **Submit Now** to display the **Schedule Parameters**.

7. Click **Submit**.

Email Notifications

This pre-built integration includes a configurable email notification.

To receive an email notification:

1. Login to Oracle Integration Cloud.

2. Navigate to **Integrations** > **Designer** > **Lookups**.

3. Edit the **OUTL-BRT-WACS_ERPFIN_Email_ID.dvm** look up.

   a. In the **from** field, enter the email ID to receive an email from.

   b. In the **to** field, enter the email ID to send the email to.

   c. In the **Email_Id** field, provide the comma separated email IDs.

   Note: In the OUTL-BRT-WACS_ERPFIN_Email_ID lookup, do not edit the values provided under the **Recipient** column.

Chapter 7

Activating and Testing the Integration Flows

This section provides an overview of how integration flows are activated and tested. It includes the following sections:

- Prerequisites
- Activating Integration Flows

Prerequisites

The prerequisites are:

- All lookups and DVMs are setup in the Oracle Integration Cloud.

- Oracle Utilities Work and Asset Cloud Service configurations related to this integration are setup correctly.

  Refer to Chapter 3: Configuring Oracle Utilities Work and Asset Cloud Service for more information.

- Oracle ERP Financial Cloud configurations related to this integration are setup correctly.

  Refer to Chapter 4: Configuring Oracle ERP Financial Cloud for more information.

- Setup the schedule details of all the scheduled processes needed for this integration. Make sure to coordinate the timing of the WACS Batch Process (W1-ERPGL) and ERP Financial Cloud BIP Report (FIN_COA_WACS) by run them first before the OIC Integration Processes.

- Chart of Account integration is a prerequisite to General Ledger. Oracle Utilities Work and Asset Cloud has a limit for 10 segments, similarly Oracle ERP Financial Cloud should also send 10 segments in the integration flow.

  For instructions to set up Chart of Accounts, refer to the Chapter 3: Chart of Accounts section in Chapter 3: Configuring Oracle Utilities Work and Asset Cloud Service.

  Note: Oracle Work and Asset Cloud has a limit of 10 segments. ERP should only send up to 10 segments in the Chart of Account Sync process.

- In the integration, the extract report generates data for Code Combination table within Oracle ERP Financial Cloud. In case the valid code combination are not available in the table, users' needs to manually add the details to the task "Manage Account Combination". Consultant in the integration team implementing the integration needs to list all the valid combination and add to the above-mentioned task in Financial Cloud. (The above action also required to add the segment values in "Manage Value" if not available in Oracle ERP Financial Cloud).

- If the business wants to create a new Chart of Account, follow the usual practice of creating Value sets/Segment and values and defining the configuration for new Chart of accounts.

Activating Integration Flows

To activate the integration flows:

1. Navigate to the integration to activate.

2. Drag the slider for that integration. When prompted to enable tracing, click **Yes** to view the instances.

3. Click **Activate**.

The integration takes time to get activated. The activated integration appears at the top of the integrations list.

Chapter 8

Monitoring and Troubleshooting

This section provides information about monitoring and troubleshooting the integration. It includes the following:

- Oracle Utilities Work and Asset Cloud Service
- Oracle Integration Cloud

Oracle Utilities Work and Asset Cloud Service

For more information about errors and notifications, see the Oracle Utilities Work and Asset Cloud Service documentation.

Oracle Integration Cloud

This section focuses on the monitoring Oracle Integration Cloud and troubleshooting any issues that occur during the integration activation.

Monitoring Integration Flows

Integration flows are monitored using the following:

- Dashboard
- Cloud Logs

To monitor the integration flows from the Oracle Integration Cloud dashboard:

1. Login to Oracle Integration Cloud.
2. On the **Home** page, click **Monitoring**.
3. Select any of the following as required:

    - **Dashboards** - To monitor the complete dashboard of integration.
    - **Integrations** - To monitor each integration.
    - **Tracking** - To monitor instance and flow trace/activity stream of the integration.
    - **Error** - To monitor the integrations in 'error' state. Re-submit the asynchronous integration flows.

To monitor the integration flows using Oracle Integration Cloud logs:

1. Login to Oracle Integration Cloud.
2. On the **Home** page, click **Monitoring**.
3. On the navigation pane, click **Dashboards** to view the overall success/failure rate of the integration.
4. Navigate to the **Logs** menu.
5. In the right pane, click the link to show options for downloading the Oracle Integration Cloud logs or diagnostics logs.
6. In case of any issues, attach the diagnostic logs to a service request for help.

Troubleshooting

If an activation fails, the Integrations page displays an error message.

To troubleshoot the activation error:

1. Click **Download Diagnostic Logs** to download the logs for diagnosing the issue.

2. Select **Enable Tracing**.

    TRACE ENABLED is displayed next to ACTIVE.

Some of the sample cases are as follows:

- For any connectivity errors while activating the integration, make sure the trigger connection is successful. Test the connection and refresh the metadata, and then activate the integration.

- If the integration (Oracle Utilities Work and Asset Management initiated flows) is activated for the first time, ensure the Oracle Utilities Work and Asset Management catalog is configured accurately.