Oracle® Retail Financial Integration
Cloud Service for Oracle Retail
Merchandise Operations Management
and Oracle Financials
Implementation Guide





Oracle Retail Financial Integration Cloud Service for Oracle Retail Merchandise Operations Management and Oracle Financials Implementation Guide, Release 24.0.201.0

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Contents

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Documentation Accessibility	Vi
Customer Support	Vi
Review Patch Documentation	i.
Improved Process for Oracle Retail Documentation Corrections	İ
Oracle Help Center (docs.oracle.com)	i.
Conventions	i
Understanding the Oracle Retail Financial Integra Merchandise Operations Management and Oracl Fusion Financials)	
Overview	1-
Key Benefits	1
Participating Applications Overview	1
Oracle Retail Merchandising System	1
Oracle Retail Sales Audit	1
Oracle Retail Invoice Matching	1-5
Oracle Payables	1-
Oracle General Ledger	1-5
Retail Sales Financial Business Process Flow	1-
Retail Inventory Financial Business Process Flow	1-
Retail Merchandise Procure to Pay Business Process Flow	1-8
Solution Assumptions and Constraints	1-10
Reviewing Life Cycle Management for Reference	Data
Suppliers Information Integration	2-:
Suppliers Information Integration Supplier Integration Overview	2-: 2-:



	Solution Assumptions and Constraints	2-3
	Financials Cloud:-Supplier Integration Details	2-3
	Data Requirements (CFIN)	2-4
	Supplier Filter	2-5
	Supplier Error Handling	2-6
	Retail: - Class Diagram	2-8
	Start or Run Initial Load of Supplier Parties from CFIN	2-8
	Payment Terms Integration	2-24
3	Requesting Chart of Accounts Validation	
	Requesting Chart of Accounts Combination Validation	3-1
	Prerequisites	3-1
	Solution Assumptions and Constraints	3-2
	Financials Cloud:- Chart of Accounts CombinationValidation Integration Flow	3-2
	Oracle Retail Interfaces	3-4
	Data Requirements	3-4
	Process Integration for Inventory Valuation and Revenue Recognition Accounting Entries Overview	4-1
	Business Process Flow for the Integration of Accounting Entries	4-1
	Prerequisites	4-2
	Facts and Constraints	4-2
	Performing Setup Tasks	4-2
	Setup Tasks Specific to Oracle Financials (General Ledger)	4-2
	Configuring and Generating Data in Oracle Retail	4-3
	Configuring the Data in Oracle Retail	4-3
	Generating the Data in Oracle Retail	4-3
	Picking Up and Transforming the Data	4-4
	Running the Process Integration for Accounting Entries (CFIN)	4-6
5	Reviewing Process Integration for Retail Merchandise Procure to	Pay
	Process Integration for Retail Merchandise Procure to Pay Overview	5-1
	Prerequisites	5-2
	Assumptions and Constraints	5-2
	Assumptions and Constraints Performing Setup Tasks	
	·	5-2



	Configuring and Generating Data in Oracle Retail	5-4
	Configuring the Data in Oracle Retail	5-4
	Generating the Data in Oracle Retail	5-4
	Configuring and Running the Process Integration for Retail Merchandise Procure to Pay	5-4
	Configuring the Process Integration for Retail Merchandise Procure to Pay	5-5
	Running the Process Integration for Accounting Entries (CFIN)	5-6
6	Implementing Oracle Retail Merchandise Integration Pack for Orac Financials (CFIN Financials)	cle
	Setting Up Oracle Retail Applications	6-1
	Setting Up Oracle General Ledger (GL)	6-1
	Setting Up Oracle Payables	6-2
	RFI Database Schema Topology	6-2
	Setting Up Cross-References for Oracle Retail IDs and Oracle Entities	6-3
	Setting Up Oracle Domain Value Maps	6-3
	Synchronizing Freight Terms Manually	6-4
	Synchronizing Currency Exchange Rate Types Manually	6-4
	Synchronizing Currency Codes Manually	6-4
	Synchronizing Chart of Accounts Segments Manually	6-4
	Synchronizing Financial Calendar Manually	6-5
	Working with Cross-References	6-5
	Working with Domain Value Maps (DVM)	6-6
	RFI - Manage DVM Graphical User Interface	6-17
	Handling Errors	6-18
	Supplier Information and GL Account Validation Integration Flows	6-18
	Bulk Adapters Interfaces	6-19
	RMS Account Entry	6-19
	ReIM Account Entry	6-19
	ReIM Invoice Entry	6-20
	Logs	6-20
	Global Logs	6-21
	RFI Logs	6-21
	Understanding the RFI Administration User Interface	6-21
	Scheduling Adapters	6-21
	Global Logs	6-23
	Understanding the RFI Manage Configurations Page	6-24
	Runtime System Configurations	6-24
	Service Configurations	6-25



7 Configuring Web Service Security



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Preface

The Oracle Retail Financial Integration represents the second release of the direct integration solution between Oracle Retail Merchandising Suite and enterprise financial systems. Because the concept of retail financial integration continues to be strategic to Oracle Retail, this integration is designed to better match other Oracle Retail provided integration patterns and so has the benefit of being easier to implement and support. The Oracle Retail Financial Integration is aligned with our overall integration strategy. This version of the Oracle Retail Financial Integration adds integration between Oracle Retail Merchandising System and Oracle Financials Cloud (CFIN). Integration best practices have been applied to this integration so that it can be easily implemented and supported by our retail customers. The Oracle Retail Financial Integration is supported by Oracle for customers who have purchased the Oracle Retail Integration Bus product. As with most packaged integration, the base package provides the most common integration content to satisfy end-to-end scenarios, but customers will tend to make some integration and mapping changes to meet their specific needs. This release includes technical and design documentation to assist customer specific deployments.

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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.



1

Understanding the Oracle Retail Financial Integration for Oracle Retail Merchandise Operations Management and Oracle Financials (Cloud Fusion Financials)

Note:

Any reference to Oracle Financials in this book refers to only Oracle Fusion Cloud Financials (CFIN) application., The E-Business Suite (EBS) and PeopleSoft Financials are not supported with RICS cloud version.

This chapter provides an overview of the Oracle Retail Financial Integration (RFI) for Oracle Retail Merchandise Operations Management (MOM) and Oracle CFIN and discusses:

- Key benefits
- · Participating applications
- Retail Sales Financial business process flow
- Retail Inventory Financial business process flow
- Retail Procure to Pay business process flow
- Solution assumptions and constraints

Overview

The Oracle Retail Financial Integration (RFI) provides integration to a robust enterprise financial system (CFIN) which complements the Oracle Retail Merchandising system in a retail customer environment.

From here on any reference in the document to Oracle GL / AP / Paybles should be interpreted as a reference to Oracle fusion CFIN (GL /AP / Procurement). This would assume CFIN is being integrated with RFI.

Oracle Retail Financial Integration (RFI) includes the following four processes:

- Life Cycle Data Management This process provides data synchronization for the initial load prior to implementation and incremental data creation and maintenance after implementation. This process synchronizes the supplier data from the Financials System (CFIN/Procurement) to the Oracle Retail Merchandising System (RMS).
- Inventory Valuation (Retail stock ledger) This process enables the posting of accounting
 entries generated from transactions that change the value of sellable products at a
 retailer's inventory locations (stores and warehouses) to the appropriate ledgers from
 Oracle Retail Merchandising stock ledger to Oracle General Ledger (Oracle GL). This
 process records the financial impact of changes in the sellable inventory in store and

- warehouse locations. Valuation of sellable inventory in the stores and warehouses is based on the processing of transactions for movement, pricing, costing, and sale of the inventory. This valuation is captured and processed in Oracle Retail stock ledger. These transactions include sales, shipments from warehouse to store, store receipts, store transfers, returns to vendors, price changes, stock counts, and shrinkage due to theft or damage.
- Retail Revenue Recognition This process enables posting of accounting entries generated from sales and returns transactions from the retailer's stores for revenue and cash reconciliation to the appropriate ledgers. In this process, the data flows from Oracle Retail Sales Audit (ReSA) to Oracle GL. This process records the financial impact of sale/return, cash reconciliation, and void transactions from stores. The Revenue Recognition process begins when store transactions (sales and returns) are processed by ReSA. For each store transaction, ReSA generates the appropriate accounting entries to be posted to the Oracle GL. Each accounting entry has a valid account code segment combination based on the transaction type, business unit, and location (store or warehouse).
- Retail Merchandising Procure to Pay This process begins with the Oracle Retail Invoice Matching (ReIM) application. Invoices from suppliers for retail merchandise are matched to the original purchase order (PO) for the merchandise and the receipt of the merchandise by the retailer. A proper match of invoice, PO, and receipt trigger the payment authorization of the supplier's invoice. Invoices may be authorized for payment prior to receipt of goods for which prepayment is required. When the authorization for payment is generated, the appropriate accounting distribution is also generated to support the payment authorization. The Retail Merchandise Procure to Pay integration automates the processing of invoice payments, adjustments, and write-offs from ReIM to Oracle Payables and GL. Other accounting transactions are generated from ReIM to write off aged receipts that were never invoiced and to post accounting distribution for manually paid or prepaid invoices after receipt.

This diagram illustrates the Oracle Retail to Oracle Financials process flow:



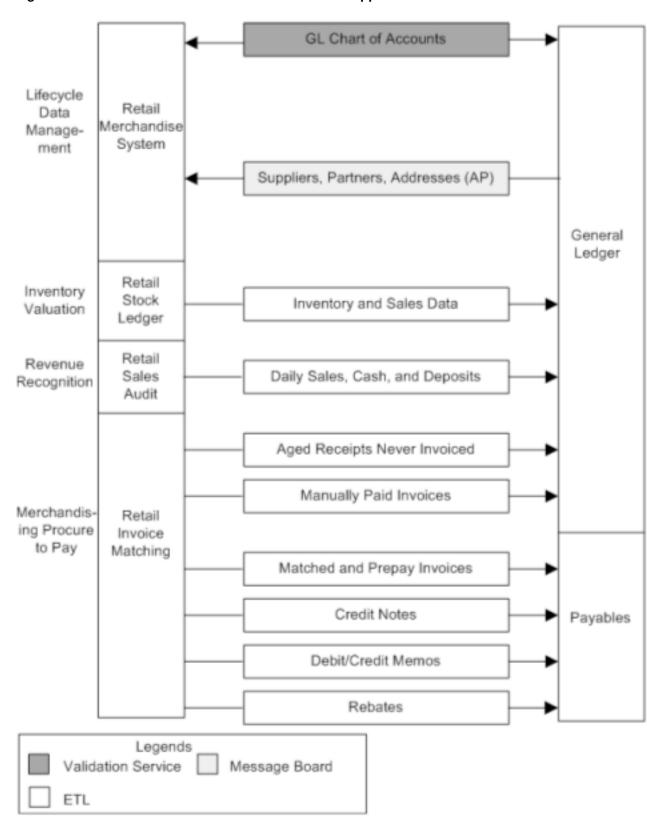


Figure 1-1 Oracle Retail to Oracle Cloud Financials Application RFI Process Flow



RFI does not synchronize chart of accounts from Oracle GL to Oracle Retail but only validates chart of accounts available in Oracle Retail against Oracle GL. Chart of accounts are combinations of account code segments. Because transaction types are defined and assigned combinations of code segments for proper handling of the financial impacts in Oracle Retail, the code combinations are validated by a service provided by the Oracle GL. This ensures that the accounting entries generated by the transactions are valid when they are posted to Oracle GL.

Key Benefits

The following are the key benefits of RFI:

- This integration is not a point-to-point integration between the Financial System (CFIN) and Oracle Retail applications. RFI implementation is independent of the version of integrated applications with some exceptions. An Oracle Retail Financial Integration (RFI) layer serves as an intermediate thin layer of application between Financial application (CFIN) and Oracle Retail Merchandise Foundation CS. This integration remains synchronized with the new releases of the edge applications.
- Audited transaction data is exported to the Financial applications days before the traditional audit process permits. The Financials applications can use this timely data in a proactive manner, which results in increased productivity and operational efficiencies.
- Total cost of ownership for Oracle and its customers is reduced.

Participating Applications Overview

This section provides an overview of the applications participating in the RFI:

- Oracle Retail Merchandising System (Oracle Retail Merchandising Foundation Cloud Services)
- Oracle Retail Sales Audit (Oracle Retail Merchandising Foundation Cloud Services)
- Oracle Retail Invoice Matching (Oracle Retail Invoice Matching Cloud Services)
- Oracle Payables (Oracle Retail Cloud Procurement)
- Oracle General Ledger (Oracle Fusion Cloud Financials)

Oracle Retail Merchandising System

Oracle Retail Merchandising (RMS) is an integrated solution for global retailing. This solution enables retailers to better manage, control, and perform crucial day-to-day merchandising activities. From new product introduction to inventory management, RMS provides retailers with a complete end-to-end solution and is the most comprehensive and integrated solution for global retailing. For more information, see the Oracle Retail Merchandising Foundation Cloud Services guides.

Oracle Retail Sales Audit

Oracle Retail Sales Audit (ReSA) provides retailers with a flexible tool that evaluates and ensures accuracy and completeness of point of sale (POS) data. Real time access to this audited sales data ensures integrity of information throughout the retail



enterprise. With a highly configurable sales audit application, the retailer can maintain existing business practices while providing for future options as the operations grow and change.

ReSA enables retailers to receive POS transaction data, cleanse it, and export the data to the Oracle Merchandising system and the Oracle Retail Data Warehouse. By providing corporate control and visibility to sales audit information, ReSA enables retailers to make better decisions to improve merchandise operations and transform the economics of their business. For more information, see the latest Oracle Retail Sales Audit guides under the Oracle Retail Merchandising Foundation Cloud Services.

Oracle Retail Invoice Matching

Oracle Retail Invoice Matching (ReIM) is a market-leading solution for retailers who need an automated application to better manage reconciliation and payment of purchase orders. This advanced solution enables account payables teams to resolve discrepancies on invoices quickly before payments are made. A highly automated, multidimensional matching engine minimizes time spent on manual reviews. Automated routing provides an effective method to ensure that accurate information is delivered to the right internal teams for resolution and compliance controls. For more information, see the latest Oracle Retail Invoice Matching Cloud Service guides.

Oracle Payables

Oracle Payables provides automated invoice and payment processing to ensure timely and accurate payment for goods and services. Best-practice business processes match purchase orders, receipts, and invoices and provide online approvals to identify exceptions and increase control over disbursements.

Oracle Payables delivers built-in controls to help an enterprise meet regulatory requirements, enforce compliance, reduce risk, and implement due-diligence best practices reducing cycle times and errors. Other features include a flexible, user-defined system setup, extensive vendor maintenance, digital signatures; financials sanction validation, and powerful inquiry and analytical capabilities. For more information, see the Oracle Financials Cloud and Procurement Guides.

Oracle General Ledger

Oracle General Ledger (GL) offers a fully automated close and consolidation solution for legal and management reporting, including support for Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS). Transactions are automatically processed and validated according to the best-practice business processes and control settings. In addition, an enterprise can proactively control expenditures by automatically checking spending requests against budget. With real time reporting and information access, an enterprise can achieve complete visibility into financial results. For more information, see the Oracle Financials Cloud Guide.

Retail Sales Financial Business Process Flow

The Retail Sales Financial business process consists of the post channel sales, cash, and deposits from ReSA to Oracle GL integration flow.

This diagram illustrates the Retail Sales Financial business process flow:



Store Sales Transactions Returns End of Day Transactions ReSA(Sales Audit) Sales Audit ReSA Map Update Merchandis e Hierarchy to GL Accounts RMS Financial Export to Financial Transaction General Stage Table Date Table Ledger Daily Stock Monthly Stock Ledger Table Ledger Table Errors Accounting (General Ledger) No Maintain Chart of Automatically Post Accounts to General Legends Ledger Included Tasks Required Integration Points

Figure 1-2 Retail Sales Financial business process flow

Retail Sales Financial Management (Sales Audit)

ReSA sends summarized sales audit information to Oracle GL for the Sales Journal. The sales audit information includes channel sales, cash, and deposits. The ReSA Export processes select and format corrected and pre audited data from the ReSA database so that it can be sent to Financials system (CFIN)

ReSA includes programs to automatically extract the required totals data and to format it to generic data files from a financial staging table for import into Oracle GL via Bulk Data Integrator (BDI) and RFI. Sales audit data from ReSA is also posted directly to the RMS stock ledger and can be integrated into Oracle GL through the stock ledger to the financial staging table and the accounting entry table via BDI and RFI. Before data is imported into Oracle GL, a batch process writes balanced records to the financial staging table using the appropriate General Ledger account combinations (maintained in Cross Reference tables in ReSA).

For journal entries also BDI and RFI process is used to load the accounting entries into the CFIN. RFI internally uses PL/SQL packages which transforms the data and generates a CFIN FBDI (File Based Data Integration) file. This file is then loaded into

GL Interface tables by RFI via the CFIN ERP Integration of webservices, this load and handle the data on the CFIN side.

Retail Inventory Financial Business Process Flow

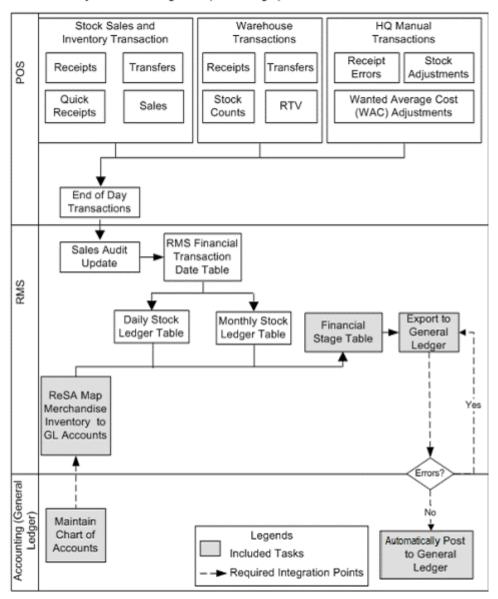
The Retail Inventory Financial business process consists of the following integration flows:

- Post stock ledger from RMS to Oracle GL
- Post write-offs (aged receipts, not invoiced to ledger) from RMS to Oracle GL

This diagram illustrates the Retail Inventory Financial business process flow:

Figure 1-3 Oracle Retail Inventory Financials (CFIN) business process flow

Retail Inventory Financial Management (Stock Ledger)





The stock ledger in RMS records financial results of the merchandising processes that occur in the Retail system, such as buying, selling, price changes, transfers, and so on. All of these transactions are recorded in the RMS stock ledger and rolled up to the subclass or location level for days, weeks, and months. Daily and period-based financial information is scheduled to be loaded into the Financials. RMS sends three levels of stock ledger information to Oracle GL:

Monthly - no access to detailed reference information

Daily by subclass, class, or department - no access to detailed reference information.

Daily by transaction

The stock ledger transactions to be loaded into Financials system (CFIN) are placed on the financial staging table through the use of table triggers or batch, by means of the appropriate General Ledger account combinations (maintained in the RMS cross-reference table in Oracle Retail).

For journal entries also BDI and RFI process is used to load the accounting entries into the CFIN. RFI internally uses PL/SQL packages which transforms the data and generates a CFIN FBDI (File Based Data Integration) file. This file is then loaded into GL Interface tables by RFI via the CFIN ERP Integration of webservices, this load and handle the data on the CFIN side.

Retail Merchandise Procure to Pay Business Process Flow

The Retail Merchandise Procure to Pay business process consists of the following integration flows:

- Post matched prepaid invoices from ReIM to Oracle GL
- Post manually matched paid Invoices from ReIM to Oracle GL
- Post receipt write-offs from ReIM to Oracle GL
- Post matched invoices for payment from ReIM to Oracle Payables
- Post credit notes (matched or unmatched) for payment adjustment from ReIM to Oracle Payables
- Post debit or credit memos for payment adjustment from ReIM to Oracle Payables
- Post rebates for payment adjustment from ReIM to Oracle Payables
- Post unmatched invoices for prepayment from ReIM to Oracle Payables

This diagram illustrates the Retail Merchandise Procure to pay business process flow:



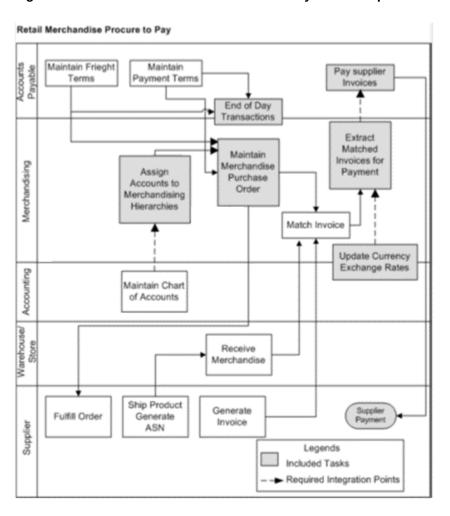


Figure 1-4 Retail Merchandise Procure to Pay business process flow (1 of 2)



Post Post Accounting Unmatched Prepaid Write-offs Invoices Errors? Errors? I Submit Credit Maintain Extract Notes Extract Currencies Unmatched Payment and Types Invoices Submit Demo Adjustments Merchandising Memos Extract Match Submit Prepaid Invoice Releases Maintain Invoices Merchandise Update Purchase Currency Order Exchange Rates Accounts Payables Apply Payment Adjustments Warehouse Receive Pay Supplier Merchandise Supplier Ship Product Supplier Supplier Fulfill Order Generate Payment Payment ASN

Figure 1-5 Retail Merchandise Procure to Pay business process flow (2 of 2)

Retail Merchandise Procure to Pay

The Retail Merchandise Procure to Pay business process flow enables posting of matched invoices, matched credit notes, debit and credit memos, rebates, and unmatched invoices for prepayment from ReIM to Oracle Payables. The payables invoices are placed in the Oracle Payables (AP) Interface tables. Then appropriate Invoice Import using BDI and RFI is run to move the payables invoice into the payables transaction tables.

For Invoices also BDI and RFI process is used to load the data into the CFIN. RFI internally uses PL/SQL packages which transforms the data and generates a CFIN FBDI (File Based Data Integration) file through RFI database. This file is then loaded into AP Interface tables via the CFIN ERP Integration of webservices, this service loads and handle the data on the CFIN side.

Solution Assumptions and Constraints

The following are the assumptions made for the RFI solution:

- The Financials applications (CFIN) are implemented prior to the implementation of the RFI.
- Oracle Retail manually creates and stores the valid charts of accounts in the appropriate GL Cross Reference tables (for ReSA, RMS, and ReIM).
- The Retail stock ledger supports multiple currencies. All transaction-level information is stored in the local currency of the store or warehouse where the transaction occurred.
- The currency rates are not passed to Retail. That interface is not supported between CFIN and Oracle Retail.
- Oracle Retail sends the accounting date and the transaction date with its transactions. These dates should not be changed or manipulated in Oracle Financials application.
- Accounting entry errors that are found from accounting entries are handled manually on both the Oracle Retail and Oracle Financials application side.
- Use or sales tax accounting information is passed as part of the accounting entries between Oracle Retail and Oracle Financials.
- Value-added tax (VAT) is calculated in Oracle Retail. VAT calculation is passed as a part
 of the accounting entry.
- Oracle Retail stock ledger determines the valuation of inventory for merchandise being directly procured. This information is passed to Oracle Financials as the accounting entries.
- RMS, through the Retail stock ledger, provides Financials with the value of ending inventory at cost using the method that the retailer indicates (cost method or retail method of accounting) by means of an adjusting entry.
- Accounting entries are automatically posted to Oracle General Ledger.
- Both Oracle Financials and Oracle Retail support multiple organizations in one application instance.
- Before running the interfaces for data migration, XREF/DVM values in RFI_XREF_DVM table is validated against the transaction data set that needs to be posted from Oracle Retail to Oracle Financials.

The following is a constraint that occurs for the RFI solution:

 Customers switching from one financial application to another are not compatible with this RFI.



Additional assumptions and constraints exist for each of the process integration flows. They are covered in the respective chapters.



2

Reviewing Life Cycle Management for Reference Data

This chapter discusses the following process integrations:

Supplier information integration



Currency Exchange Rates synchronization from CFIN is not supported by RFI.

Suppliers Information Integration

This section provides an overview of the process integration for initial loading and incremental synchronization of suppliers' information between Oracle Payables/Procurement and Oracle Retail Merchandising System (RMS) and discusses:

- Supplier integration details
- Data requirements

Supplier Integration Overview

In the integrated environment, Oracle Payables acts as a payable, and RMS handles supplier payments, merchandise write-offs, and prepaid adjustments.

Merchandise suppliers are suppliers of goods and services that the retailer sells to customers. Oracle Payables and RMS require sharing of suppliers' information between them. RMS requires the supplier information for several key functions including creation and management of items and purchase orders. Oracle Payables requires suppliers' information for supplier payment. For end-to-end business integration, same supplier instance and related information must be shared between these two systems.

Between the two systems, Oracle Payables/Procurement is the source of valid suppliers and their Remit to Location and Order from addresses

The supplier integration synchronizes supplier's information from Oracle Payables to RMS through these integration flows:

- Load initial suppliers from Oracle Payables to RMS: Enables the loading of all active merchandise suppliers, the current effective supplier locations and their current effective remit and order to addresses.
- Incremental creation and updates of suppliers from Oracle Payables to RMS: Enables the synchronization of incremental creation and updates of the active suppliers from Oracle Payables to RMS.

Note:

For incremental loads, Oracle Payables/Procurement doesn't propagate deleted suppliers information to Retail.

This integration is not a point-to-point integration between Oracle Payables and RMS. A RFI layer serves as an intermediate thin layer of application between Oracle Payables and RMS. As a part of the supplier integration, Oracle Payables sends the suppliers' information to the RFI layer and the RFI layer delivers the information to RMS. The RFI layer performs message filtering, message transformation, and message routing. Because this integration is not a point-to-point integration, the vendor number (ID) in Oracle Payables is not similar to the supplier number (ID) in Oracle Retail.

Prerequisites

These are the prerequisites for this integration:

Note:

For more information about initial load of the Org Id and Payment term cross reference table, see 'section Setting up Cross-References for Oracle Retail IDs and Oracle Entities.

The following DVM's/XREFs are available in RFI XREF DVM table:

- ADDRESS_COUNTRY_DVM
- CURR_CODE_DVM
- LANGUAGE CODE DVM
- STATE_DVM
- SUPPLIER_ADDRESS_TYPE_DVM
- SUPPLIER_PRIMARY_SITE_FLAG_DVM
- SUPPLIER_STATUS_CODE_DVM
- FREIGHT_TERMS_XREF
- PAYMENT_TERMS_XREF
- ORG_ID_XREF
- SUPPLIER_XREF
- SUPPLIER_SITE_XREF
- SUPPLIER_SITE_NAME_XREF

Freight terms synchronization between both the systems is a manual process. The Supplier XREF, Supplier Site XREF and Supplier Site Name XREF data are populated by a Supplier Integration Adapter; the values are required during the Supplier Update flow.



Solution Assumptions and Constraints

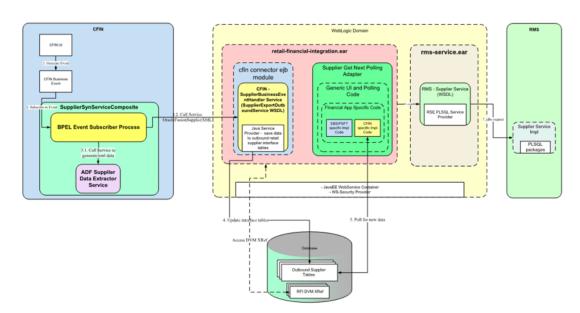
The integration design assumes that:

- 1. Oracle Payables/Procurement is the source system for merchandise suppliers, their contacts, locations, addresses and other attributes.
- 2. You can create suppliers and suppliers' locations in Oracle Payables/Procurement.
- 3. You can maintain the relationship between suppliers, suppliers' locations in Oracle Payables/Procurement. This integration is a one-way synchronization. Any update to supplier information in RMS is not synchronized with Oracle Payables/Procurement. The volume of data that is handled by the process depends on the server configuration.
- 4. Oracle sends the suppliers in batches based on different criteria.
- The CFIN system sends all the information, related to supplier using RFI SupplierExportOutbound API.

Financials Cloud:-Supplier Integration Details

This diagram illustrates the supplier integration flow with Financials Cloud:

Figure 2-1 RMS CFIN Supplier Integration Flow



RMS CFIN Supplier integration flow (CFIN to RMS)

These services are specific to sync supplier integration flows:

- SUPPLIEREXPORTOUTBOUNDSERVICE Supplier Export Outbound Service
- Supplier EJB Service
- RMS Supplier Service
- RIBforRMS Vendor Subscriber



Supplier Sequence Incremental Load

When you initiate the process:

- Oracle Payables invokes the "SUPPLIEREXPORTOUTBOUNDSERVICE"
 Business Event service with Supplier payload message whenever a supplier is
 created or updated (by passing complete supplier extract for updated/new
 supplier). Any errors during service call could be found on notification section on
 CFIN UI. This RFI Export Service URL needs to be configured in CFIN side so that
 CFIN can invoke it.
- 2. The export outbound service extracts all the supplier, supplier sites and supplier contacts from incoming Cloud Financials message and moves the supplier, supplier sites and supplier contacts into RFI Database Staging tables RFI_SUPP_STAGE, RFI_SUPP_SITES_STAGE, RFI_SUPP_CONTACTS_STAGE respectively. Any error during stage data load could be found on RFI_ODI_LOGS table (rfi app schema).
- **3.** A Configured Timer for RFI Supplier service invokes the Supplier EJB service. By Default this service runs at every 10 mins.
- 4. The Supplier EJB service picks up the records from the RFI Database Staging tables RFI_SUPP_STAGE, RFI_SUPP_SITES_STAGE, RFI_SUPP_CONTACTS_STAGE and transforms the Organization id using ORG_ID_XREF, Currency Code using CURR_CODE_DVM, Language using LANGUAGE_DVM, Payment terms and Freight terms using PAYMENT_TERMS_XREF and FREIGHT_TERMS_XREF respectively. Any error for missing DVM/XREF will be reported in RFI supplier.log. Check Adapter log for such details. Only when Supplier fails with any data error then 'is_data_processed ind' of that supplier turns to 'E'.

For valid data, RFI then invokes the RMS Supplier Service is invoked -with the transformed supplier records. This RMS service creates the actual supplier in RMS. If there are any errors in Supplier EJB service, the errors are added to the logs file and also to the RFI_ODI_LOGS table. The Supplier logs can be viewed using the RFI Adapter Manager screens in RFI Administration GUI and Logs table can be viewed from View Logs screen.

5. If the transaction from RMS is successful, Retail Id cross references for supplier, supplier site and supplier site name are stored in the cross reference table RFI_XREF_DVM. The cross references updated is SUPPLIER_XREF, SUPPLIER_SITE_XREF and SUPPLIER_SITE_NAME_XREF respectively.

Note:

Transformation applies the DVM and invokes create or update web service from RMS. It also updates the cross-reference table after the Retail web service call. This RMS service URL needs to be configured in RFI side.

Data Requirements (CFIN)

The process integration for supplier information requires the following data:

Suppliers must be assigned to at least one GL business unit (set of books)



- For this integration, Oracle suppliers must be created with these status attributes:
 - Classification of supplier. Other type of vendors such as attorneys, employees, and HCM are not synchronized with Oracle Retail. All suppliers except employee are synced.
 - The Open for ordering option is selected. If the supplier is approved but is not open for ordering, the RFI layer on the RMS side changes its status to inactive. CFIN and EBS do not have an approval status.

Note:

Only contacts associated with supplier sites or addresses will be synchronized from Oracle Payables to RMS. Multiple contacts can be associated with one address in CFIN.

For Retail to Oracle Financials integration, only certain suppliers with specific criteria are sent to Retail:

- Supplier must have at least one or more address or site
- Supplier address or site must be a purchasing and/or a payment purpose.
- If a supplier has one address or site, it must be both a purchasing and payment purpose.
- If a supplier has two or more addresses, one address may be a purchasing site and other address a payment site.
- Supplier address or site without a purchasing or payment purpose will not be sent to Retail.
- Only Supplier address or site(s) which are active, are interfaced to Retail. Deactivate date for the site should either be NULL or a future-date in Oracle Financials (CFIN).
- In the contact details and purpose, the phone area code, fax number and email address
 are meant for general contact information such as a main operator number or a general
 company inquiry email address. This information should not be passed to Retail. In CFIN
 implementation some contact details are mandatory to create/update a supplier in Retail,
 a dummy contact is created if no contact information is passed by Oracle Cloud
 Financials.
- Supplier Recommendation
 - Data cleansing prior to Supplier Initial Load: It is recommended that for each supplier, you must select a supplier site as a primary pay site. The values on the primary pay site are used as the default values for any supplier attributes such as payment terms and freight terms that are missing during the integration.
 - Integration Supplier Logic: Payment/Freight terms and other attributes of parent supplier are defaulted from the primary Pay site. If the supplier does not have a primary pay site, then the first purchasing site is used. If no payment or freight terms are defined at supplier or any supplier purchasing site, and there is no primary pay site, then the supplier transfer fails or errors.

Supplier Filter

RFI provides a feature to filter and reject the incoming supplier data which is not intended for RMS. This filter works at supplier staging data and will restrict configured supplier data to flow toward RMS.



Supplier filter Setup and Assumptions:

- DVM 'VENDOR FILTER XREF' is added to configure the supplier filter option.
- Customers can view/edit/create supplier filter criteria using manage DVM screen or access RFI_XREF_DVM table directly (cloud - via AMS support route or DDS).
- Customer can select any field from RFI_SUPP_STAGE table as filter column. Only
 one fil-ter column is allowed to be selected. Multiple columns selection as filter is
 not allowed.
- Customer can configure any string value (provided it's under the selected filter column length) as filter value. Multiple filter values (<1000) can be selected by creating multiple records in RFI XREF DVM table with same filter column.
- Logging captures the filter column and filter value(s) for analysis.
- Category type for filter is 'VENDOR FILTER XREF'. Customer can't change this.
- If no record is entered for this catgory type in RFI_XREF_DVM table then no
 records will get filtered and everything will get processed (provided they pass the
 validations).
- This functionality works for CFIN financial source point.
- Filtered supplier will be ignored from processing and will remain on RFI SUPP staging tables till it is manually deleted.
- When customer removes or changes the filter criteria, filtered stage record can be processed again without any issue.
- Records matching the filter criteria will get excluded from processing.
- EX:

```
Insert into rfi_xref_dvm (CATEGO-RY_TYPE,CATEGORY_TYPE_DESC,COMMON_ID,RETL_ID,EXT_SYSTEM_ID, EXT_SYSTEM)

values ('VENDOR_FILTER_XREF','Supplier Filter Criteria', '1001',

'VENDOR_TYPE_LOOKUP_CODE', 'TAX AUTHORITY', 'CFIN');

Insert into rfi_xref_dvm (CATEGO-RY_TYPE,CATEGORY_TYPE_DESC,COMMON_ID,RETL_ID,EXT_SYSTEM_ID, EXT_SYSTEM)

values ('VENDOR_FILTER_XREF','Supplier Filter Criteria', '1002',

'VENDOR_TYPE_LOOKUP_CODE', 'Any other value', 'CFIN');
```

Supplier Error Handling

All the error related to supplier stage table load via export outbound service/event subscription is recorded in RFI_ODI_LOGS table. Refer this table to find incremental or initial upload related errors.

RFI then process the staged records via supplier adapter. Any error found during the conversion of stage record to payload creation for RMS will be logged into RFI logs (supplier.log). There are two types of validation in RFI while processing stage supplier data:

 Data compatibility validation (If any of purchasingSiteFlag & paySiteFlag values are not set for any of the sites for that supplier it will be errored out, not a fit for RMS). 2. DVM xref validation for data (If any of the required DVMs are missing then RMS supplier service will not be called until that missing DVM is fixed).

Assumptions/Conditions:

If any stage supplier data fails at data compatibility validation then it means data needs to be corrected manually or sent again to RFI STAGE table through financial systems. IS_PROCESSED status of that stage supplier record will be marked as 'E' in RFI_SUPP_STAGE table. These record will then be ignored from next run of supplier service. These records will stay in stage table until customer gets it deleted manually. Logs will capture IS_PROCESSED indicator change for that supplier for further analysis.

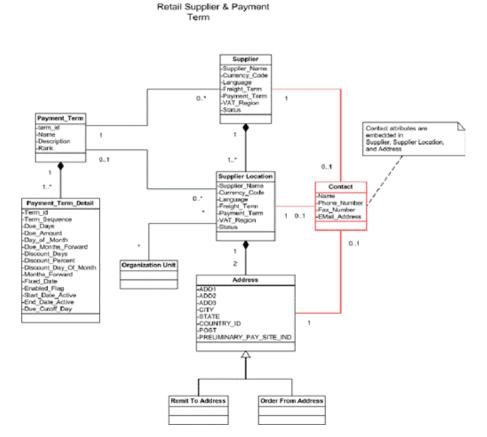
Records failed due to DVM xref validation will not go through status change as DVM data can be corrected and same supplier data can be processed without any change. All the missing DVM errors will be logged in RFI logs.

- Processed supplier data will be auto purged from stage table during next execution cycle.
- Any supplier failed due to missing DVM/XREF will stay in stage table and will get reprocessed in next execution cycle again. User needs to check Error log for failure details.
- In one execution cycle only latest 1000 supplier records will be processed. Other pending records will be picked on next subsequent cycles.



Retail: - Class Diagram

Figure 2-2 Supplier Relation in Retail



Start or Run Initial Load of Supplier Parties from CFIN

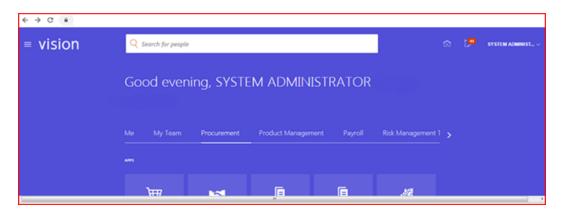
The purpose of this flow is to load the existing active Suppliers, Supplier Sites, and Supplier Contacts from CFIN into Retail.

These are the steps to load the Supplier details initially from Oracle CFIN to Retail.

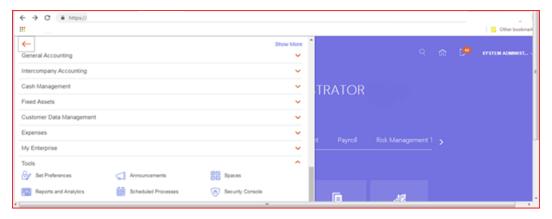
Download supplier data from CFIN: The first step is to extract the supplier profile data from CFIN. This can be done as follows.

1. Login to CFIN. You need to have access to the Oracle ERP Cloud Procurement module and to the Oracle Business Intelligence module to perform this task.

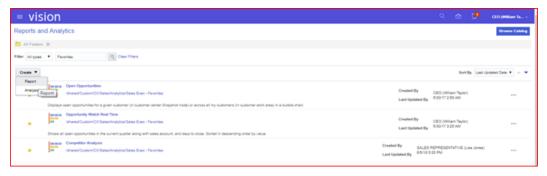




2. On the left-hand side menu go to Tools and then Reports and Analysis.

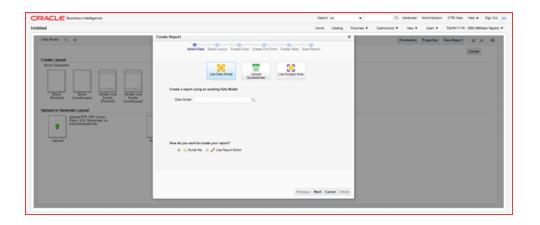


There is no standard repost in CFIN to extract the required supplier data. Therefore you need to create a new report for this purpose.



4. The system will then open the Oracle Business Intelligence on the Create Report screen. Click Cancel on the wizard dialog.





Note:

You can skip all the previous steps if you have direct access to Oracle Business Intelligence.

- 5. You will need to extract at least two data entities. Supplier contacts are optional:
 - Mandatory
 - Supplier data
 - Supplier Site data
 - Optional
 - Supplier Contacts data

Note:

If there are no supplier contacts, RFI will generate a supplier contact with description NO CONTACTS as contacts as mandatory in Oracle Retail.

Note:

Supplier Site Invoice Currency, Supplier Site Payment Terms and Supplier Site Freight Terms, although not mandatory in CFIN, are required, as mandatory attributes in the extraction.

6. To start the extraction process, click New on the Oracle Business Intelligence home page and then, on the drop-down menu Data Model. Please note you need to have the right access privileges to access the creation of new Data Models in Oracle Business Intelligence.

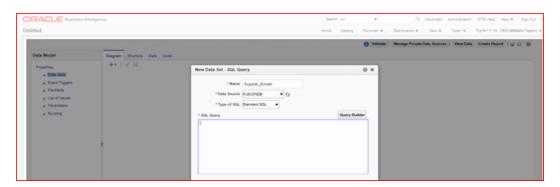




On the Data Model screen, tab Diagram, click SQL Query.



8. Then, give a name to your Data Model, choose the Data Source which in a standard implementation would be FUSIONDB. Please note that in your implementation this maybe have a different name so choose the Data Source where your Oracle Procurement Cloud module is implemented.



Then, on the SQL Query text area copy and paste the following SQL statement and click OK.

```
select "POZ_SUPPLIERS_V"."VENDOR_NAME" as "VENDOR_NAME",

"POZ_SUPPLIERS_V"."VENDOR_ID" as "VENDOR_ID",

"POZ_SUPPLIERS_V"."SEGMENT1" as "SUPPLIER_NUM",

"POZ_SUPPLIERS_V"."PARTY_ID" as "PARTY_ID",

"POZ_SUPPLIERS_V"."ENABLED_FLAG" as "ENABLED_FLAG",

"POZ_SUPPLIERS_V"."VENDOR_TYPE_LOOKUP_CODE" as "VENDOR_TYPE_LOOKUP_CODE",

"POZ_SUPPLIERS_V"."VENDOR_NAME_ALT" as "VENDOR_NAME_ALT",

"POZ_SUPPLIERS_V"."DUNS_NUMBER_C" as "DUNS_NUMBER_C",

"POZ_SUPPLIERS_V"."CUSTOMER_NUM" as "CUSTOMER_NUM",

"POZ_SUPPLIERS_V"."ONE_TIME_FLAG" as "ONE_TIME_FLAG",

"POZ_SUPPLIERS_V"."PARENT_PARTY_ID" as "PARENT_PARTY_ID",
```



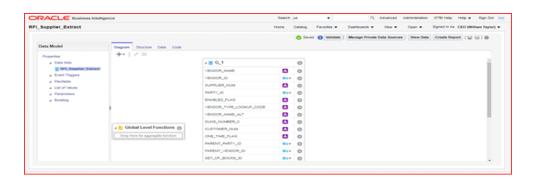
```
"POZ SUPPLIERS V". "PARENT VENDOR ID" as "PARENT VENDOR ID",
     "POZ SUPPLIERS V". "SET OF BOOKS ID" as "SET OF BOOKS ID",
     "POZ SUPPLIERS V". "ORGANIZATION TYPE LOOKUP CODE" as
"ORGANIZATION TYPE LOOKUP CODE",
     "POZ SUPPLIERS V". "START DATE ACTIVE" as "START DATE ACTIVE",
     "POZ SUPPLIERS V"."END DATE ACTIVE" as "END DATE ACTIVE",
     "POZ SUPPLIERS V"."ALLOW AWT FLAG" as "ALLOW AWT FLAG",
     "POZ SUPPLIERS V". "AWT GROUP ID" as "AWT GROUP ID",
     "POZ SUPPLIERS V". "BANK CHARGE BEARER" as "BANK CHARGE BEARER",
     "POZ SUPPLIERS V". "NI NUMBER" as "NI NUMBER",
     "POZ SUPPLIERS V". "BUSINESS RELATIONSHIP" as "BUSINESS RELATIONSHIP",
     "POZ SUPPLIERS V". "CORPORATE WEBSITE" as "CORPORATE WEBSITE",
     "POZ SUPPLIERS V". "TAX REPORTING NAME" as "TAX REPORTING NAME"
          "FUSION"."POZ SUPPLIERS V" "POZ SUPPLIERS V"
 from
           "POZ SUPPLIERS V"."BUSINESS RELATIONSHIP" = 'SPEND AUTHORIZED'
where
```

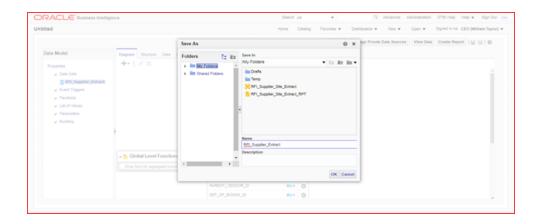
This will extract all the Suppliers that are approved for transactions on the system (i.e. Business Relationship = "SPEND_AUTHORIZED").



You need to replace the name of the schema on the SQL statement (i.e. "from"FUSION"."POZ_SUPPLIERS_V" "POZ_SUPPLIERS_V") with the name of the schema of your implementation.

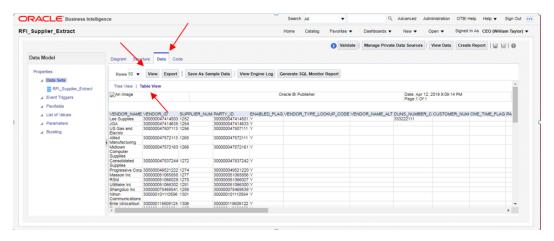
10. The system will generate the data model and display it on the screen. Save the data model to your personal folder.



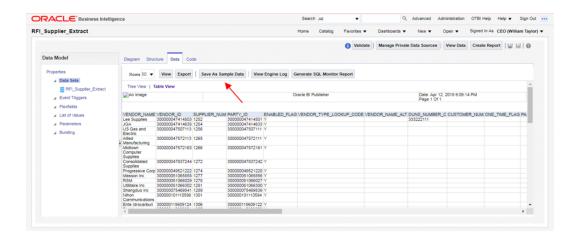


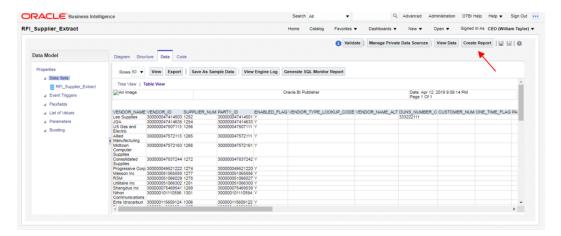


11. Click on the Data tab, option View and the option Table View.



12. Save the sample data by clicking on Save As Sample Data.



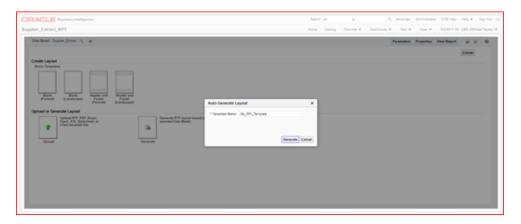


- 13. Then, save the data model again and click the option Create Report.
- 14. Then, the system will display the Create Report screen. The data model you just created will appear in the Data Model field. Then click on the option Use Report Editor option and then Finish. At this point the system will ask you to save your report.

15. After you save the report, the system will display the Report Editor. Choose the option Generate RTF layout based on selected Data Model.



16. Generate this layout as your template (give it a name and click Generate).



17. The system will generate the report template. Click on the option View List.



18. On the Output Formats column tick the Data option and also the Apply Style Template option.

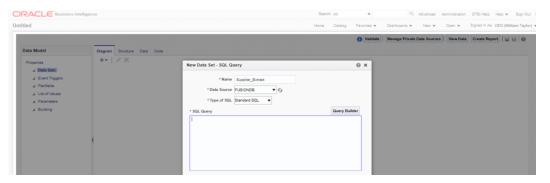




19. Save the report and then click on the View Report option. The system will display the report and the related data. Then export the data by clicking on the option Export and then Data.



- **20.** The system will generate a XML file and will prompt you to save it to your localhost. For this extraction the procedure is concluded.
- 21. The next extraction is for Supplier Sites data. Execute steps 1. to 8.



22. On the SQL Query text area copy and paste the following SQL statement and click QK:

```
select "POZ SUPPLIERS V". "SEGMENT1" as "SUPPLIER NUM",
"POZ SUPPLIER SITES V". "VENDOR SITE ID" as "VENDOR SITE ID",
"POZ SUPPLIER SITES V". "INACTIVE DATE" as "INACTIVE DATE",
"POZ SUPPLIER SITES V". "VENDOR ID" as "VENDOR ID",
"POZ SUPPLIER SITES V". "PRC BU ID" as "PRC BU ID",
"POZ SUPPLIER SITES V". "PARTY SITE ID" as "PARTY SITE ID",
"POZ SUPPLIER SITES V". "VENDOR SITE CODE" as "VENDOR SITE CODE",
"POZ SUPPLIER SITES V". "PURCHASING SITE FLAG" as "PURCHASING SITE FLAG",
"POZ SUPPLIER SITES V". "RFQ ONLY SITE FLAG" as "RFQ ONLY SITE FLAG",
"POZ SUPPLIER SITES V". "PAY SITE FLAG" as "PAY SITE FLAG", "AP TERMS TL". "NAME" as
"TERMS ID", "POZ SUPPLIER SITES V"."EXCLUDE FREIGHT FROM DISCOUNT"
as"EXCLUDE FREIGHT FROM DISCOUNT", "POZ SUPPLIER SITES V". "PAY ON CODE" as
"PAY ON CODE", "POZ SUPPLIER SITES V"."DEFAULT PAY SITE ID"
as DEFAULT PAY SITE ID", "POZ SUPPLIER SITES V". "MATCH OPTION" as "MATCH OPTION",
"POZ SUPPLIER SITES V". "PCARD SITE FLAG" as "PCARD SITE FLAG",
"POZ SUPPLIER SITES V"."COUNTRY OF ORIGIN CODE" as "COUNTRY OF ORIGIN CODE",
"POZ SUPPLIER SITES V"."EMAIL ADDRESS" as "EMAIL ADDRESS",
"POZ SUPPLIER SITES V". "PRIMARY PAY SITE FLAG" as "PRIMARY PAY SITE FLAG",
"POZ SUPPLIER SITES V". "PARTY SITE NAME" as "PARTY SITE NAME",
"POZ SUPPLIER SITES V"."DUNS NUMBER" as "DUNS NUMBER",
"POZ SUPPLIER SITES V"."LANGUAGE CODE" as "LANGUAGE CODE",
"POZ SUPPLIER SITES V". "ADDRESS LINE1" as "ADDRESS LINE1",
"POZ SUPPLIER SITES V"."ADDRESS LINE2" as "ADDRESS LINE2",
"POZ SUPPLIER SITES V". "ADDRESS LINE3" as "ADDRESS LINE3",
```



```
"POZ SUPPLIER SITES V". "ADDRESS LINE4" as "ADDRESS LINE4",
"POZ SUPPLIER SITES V". "ADDRESS LINES ALT" as "ADDRESS LINES ALT",
"POZ SUPPLIER SITES V"."CITY" as "CITY", "POZ SUPPLIER SITES V"."STATE" as
"STATE", "POZ SUPPLIER SITES V". "COUNTY" as "COUNTY",
"POZ SUPPLIER SITES V"."COUNTRY" as "COUNTRY", "POZ SUPPLIER SITES V"."ZIP"
as "ZIP", "POZ SUPPLIER SITES V". "PROVINCE" as "PROVINCE",
"POZ SUPPLIER_SITES_V"."TP_HEADER_ID" as "TP_HEADER_ID",
"POZ SUPPLIER SITES_V"."VENDOR_SITE_CODE_ALT" as"VENDOR_SITE_CODE_ALT",
"POZ SUPPLIER SITES V"."ATTENTION AR FLAG" as "ATTENTION AR FLAG",
"POZ SUPPLIER SITES V". "AREA CODE" as "AREA CODE",
"POZ SUPPLIER SITES V". "PHONE" as "PHONE",
"POZ SUPPLIER SITES V"."CUSTOMER NUM" as "CUSTOMER NUM",
"POZ SUPPLIER SITES V"."FREIGHT TERMS LOOKUP CODE"
as"FREIGHT_TERMS_LOOKUP_CODE", "POZ_SUPPLIER SITES V"."FOB LOOKUP CODE" as
"FOB LOOKUP CODE", "POZ SUPPLIER SITES V"."FAX" as "FAX",
"POZ SUPPLIER SITES V"."FAX AREA CODE" as "FAX AREA CODE",
"POZ SUPPLIER SITES V"."TERMS DATE BASIS" as "TERMS DATE BASIS",
"POZ_SUPPLIER_SITES_V"."PAY_GROUP_LOOKUP_CODE" as"PAY_GROUP_LOOKUP_CODE",
"POZ SUPPLIER SITES V". "PAYMENT PRIORITY" as "PAYMENT PRIORITY",
"POZ SUPPLIER SITES V". "PAY DATE BASIS LOOKUP CODE"
as"PAY DATE BASIS LOOKUP CODE",
"POZ SUPPLIER SITES V"."INVOICE CURRENCY CODE" as "INVOICE CURRENCY CODE",
"POZ SUPPLIER SITES V". "PAYMENT CURRENCY CODE" as "PAYMENT CURRENCY CODE",
"POZ SUPPLIER SITES V". "HOLD ALL PAYMENTS FLAG" as "HOLD ALL PAYMENTS FLAG",
"POZ SUPPLIER SITES V". "HOLD FUTURE PAYMENTS FLAG"
as"HOLD FUTURE PAYMENTS FLAG", "POZ SUPPLIER SITES V". "HOLD REASON" as
"HOLD REASON", "POZ SUPPLIER SITES V". "HOLD UNMATCHED INVOICES FLAG"
as"HOLD UNMATCHED INVOICES FLAG",
"POZ SUPPLIER SITES V". "PHONE COUNTRY CODE" as "PHONE COUNTRY CODE",
"POZ SUPPLIER SITES V"."PHONE EXTENSION"
as "PHONE EXTENSION", "POZ SUPPLIER SITES V"."FAX COUNTRY CODE" as
"FAX COUNTRY CODE", "POZ SUPPLIER SITES V"."TAX COUNTRY CODE" as
"TAX COUNTRY CODE", "POZ SUPPLIER SITES V". "PAY ON USE FLAG" as
"PAY ON USE FLAG", "POZ SUPPLIERS V". "BUSINESS RELATIONSHIP" as
"BUSINESS RELATIONSHIP", "POZ SUPPLIER SITES V"."LOCATION ID" as
"LOCATION ID" from "FUSION".POZ SUPPLIERS V" "POZ SUPPLIERS V",
"FUSION".POZ SUPPLIER SITES V" "POZ SUPPLIER SITES V",
"FUSION"."AP TERMS TL" "AP TERMS TL" where
"POZ SUPPLIER SITES V". "VENDOR ID" = POZ SUPPLIERS V. VENDOR ID and
("POZ SUPPLIER SITES V"."PURCHASING SITE FLAG"='Y'
or"POZ SUPPLIER SITES V"."PAY SITE FLAG"='Y') and
"POZ SUPPLIER SITES V"."TERMS ID" = "AP TERMS TL"."TERM ID" and
"AP TERMS TL"."LANGUAGE"='US' and "POZ SUPPLIERS V"."BUSINESS RELATIONSHIP"
='SPEND AUTHORIZED'
```

This will extract only Purchasing and Payment Supplier Sites.

Note:

You need to replace the name of the schema on the SQL statement (i.e. "from"FUSION"."POZ_SUPPLIERS_V" "POZ_SUPPLIERS_V") by the name of the schema of your implementation.

23. Execute steps 10. to 16. Once you perform those steps the system will show the Supplier Sites report. Then execute steps 17 and 18.



- 24. The next extraction is for Supplier Contacts data, which is optional. Execute steps 1 to 8.
- 25. On the SQL Query text area copy & paste the following SQL statement and click OK:

```
select
           "POZ SUPPLIER CONTACTS V". "PARTY NAME" as "PARTY NAME",
     "POZ SUPPLIER CONTACTS V"."FULL NAME" as "FULL NAME",
     "POZ SUPPLIER CONTACTS V". "PER PARTY ID" as "VENDOR CONTACT ID",
     "POZ SUPPLIER CONTACTS V". "VENDOR SITE ID" as "VENDOR SITE ID",
     "POZ SUPPLIER CONTACTS V"."VENDOR ID" as "VENDOR ID",
     "POZ SUPPLIER CONTACTS V"."FIRST NAME" as "FIRST NAME",
     "POZ SUPPLIER CONTACTS V". "MIDDLE NAME" as "MIDDLE NAME",
     "POZ SUPPLIER CONTACTS V"."LAST NAME" as "LAST NAME",
     "POZ SUPPLIER CONTACTS V". "PREFIX" as "PREFIX",
     "POZ SUPPLIER CONTACTS V"."TITLE" as "TITLE",
     "POZ SUPPLIER CONTACTS V". "AREA CODE" as "AREA CODE",
     "POZ SUPPLIER CONTACTS V". "PHONE" as "PHONE",
     "POZ SUPPLIER CONTACTS V". "PHONE COUNTRY CODE" as "PHONE COUNTRY CODE",
     "POZ SUPPLIER CONTACTS V". "PHONE EXTENSION" as "PHONE EXTENSION",
     "POZ SUPPLIER CONTACTS V". "MAIL STOP" as "MAIL STOP",
     "POZ SUPPLIER CONTACTS V". "CONTACT NAME ALT" as "CONTACT NAME ALT",
     "POZ SUPPLIER CONTACTS V"."FIRST NAME ALT" as "FIRST NAME ALT",
     "POZ_SUPPLIER_CONTACTS_V"."LAST_NAME_ALT" as "LAST_NAME ALT",
     "POZ_SUPPLIER_CONTACTS V"."DEPARTMENT" as "DEPARTMENT",
     "POZ SUPPLIER CONTACTS V"."JOB TITLE" as "JOB TITLE",
     "POZ_SUPPLIER_CONTACTS_V"."PERSON_NAME_SUFFIX" as "PERSON NAME SUFFIX",
     "POZ SUPPLIER CONTACTS V"."ADMINISTRATIVE CONTACT" as
"ADMINISTRATIVE CONTACT",
     "POZ SUPPLIER CONTACTS V". "STATUS" as "STATUS",
     "POZ SUPPLIER CONTACTS V"."EMAIL ADDRESS" as "EMAIL ADDRESS",
     "POZ SUPPLIER CONTACTS V"."ALT AREA CODE" as "ALT AREA CODE",
     "POZ SUPPLIER CONTACTS V"."ALT PHONE" as "ALT PHONE",
     "POZ SUPPLIER CONTACTS V"."FAX AREA CODE" as "FAX AREA CODE",
     "POZ SUPPLIER CONTACTS V"."FAX" as "FAX",
     "POZ SUPPLIER CONTACTS V". "FAX COUNTRY CODE" as "FAX COUNTRY CODE",
     "POZ SUPPLIER CONTACTS V"."FAX EXTENSION" as "FAX EXTENSION",
     "POZ SUPPLIER CONTACTS V". "MOBILE COUNTRY CODE" as "MOBILE COUNTRY CODE",
     "POZ SUPPLIER CONTACTS V". "MOBILE AREA CODE" as "MOBILE AREA CODE",
     "POZ SUPPLIER_CONTACTS_V"."MOBILE" as "MOBILE",
     "POZ SUPPLIER CONTACTS V". "INACTIVE DATE" as "INACTIVE DATE",
     "POZ SUPPLIER CONTACTS V". "ORG PARTY SITE ID" as "ORG PARTY SITE ID",
     "POZ SUPPLIER CONTACTS V". "PARTY SITE ID" as "PARTY SITE ID",
     "POZ SUPPLIER SITES V". "PURCHASING SITE FLAG" as "PURCHASING SITE FLAG",
     "POZ SUPPLIER SITES V". "VENDOR SITE CODE" as "VENDOR SITE CODE",
     "POZ SUPPLIER SITES V". "PAY SITE FLAG" as "PAY SITE FLAG",
     "POZ SUPPLIERS V". "SEGMENT1" as "SUPPLIER NUM",
     "POZ SUPPLIERS V"."BUSINESS RELATIONSHIP" as "BUSINESS RELATIONSHIP"
```

```
from "FUSION"."POZ_SUPPLIERS_V" "POZ_SUPPLIERS_V",
    "FUSION"."POZ_SUPPLIER_SITES_V" "POZ_SUPPLIER_SITES_V",
    "FUSION"."POZ_SUPPLIER_CONTACTS_V" "POZ_SUPPLIER_CONTACTS_V"

where "POZ_SUPPLIER_CONTACTS_V"."VENDOR_SITE_ID"

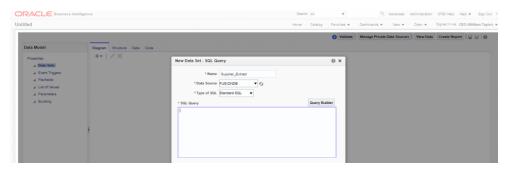
=POZ_SUPPLIER_SITES_V.VENDOR_SITE_ID

and "POZ_SUPPLIER_CONTACTS_V"."VENDOR_ID" =POZ_SUPPLIERS_V.VENDOR_ID

and ("POZ_SUPPLIER_SITES_V"."PURCHASING_SITE_FLAG" ='Y'

or "POZ_SUPPLIER_SITES_V"."PAY_SITE_FLAG" ='Y')

and "POZ_SUPPLIERS_V"."BUSINESS_RELATIONSHIP" ='SPEND_AUTHORIZED'
```



26. Execute steps 10. to 16. Once you perform those steps the system will show the Supplier Contacts report. Then execute steps 17 and 18.

Upload Suppliers data to RFI: CFIN initial supplier data can be uploaded in RFI either by:

- Running the scripts (By AMS via SR or by on premise customers having full permission and access) or
- By using the RFI UI screen Supplier Upload

Supplier upload by Scripts: A wrapper script supplier_initial_load.sh is provided to load the existing Suppliers, Suppliers Sites and Contacts from flat files previously extracted from Cloud Financials to RFI staging tables. This file is available in the RFI pack, folder \$INSTALL DIR/etl-based-integration/retail-to-cfin-etl-flows/setup-data/dml.

- Before running the supplier_initial_laod.sh script you should take into consideration the following notes:
 - If the previous version of supplier_inital_load.sh have been executed perform the following commands into your RFI database:

```
o ALTER TABLE RFI_SUPP_STAGE MODIFY VENDOR_ID VARCHAR2(50);
o ALTER TABLE RFI_SUPP_SITES_STAGE MODIFY VENDOR_ID VARCHAR2(50);
```

- The staging tables RFI_SUPP_STAGE, RFI_SUPP_SITES_STAGE and RFI_SUPP_CONTACTS_STAGE should be present in the RFI database and empty.
- INSTALL_DIR and JAVA_HOME (JDK 1.8 or above) environment variables needs to be set.

Ex. INSTALL_DIR=/home/unix_user/staging_dir/retail-financial-integration-solution

- This script is meant to be executed one time and one time only, if for some reason the loading process into RFI fails, the following steps need to be performed to run the script again:
 - Drop all temporary tables that are created during script runtime.



- Truncate the staging tables if for some reason only part of the data were loaded.
- Correct any errors in data set that you may encounter during load.
- As previously mentioned, this script will load Suppliers, Suppliers Sites and Contacts into RFI being Supplier Sites Contacts the only data set optional to be imported.
 Since some Site Contacts information is mandatory in Oracle Retail, if you choose to do not import them into RFI, default ones will be created for each site.
- 2. Run supplier_initial_load.sh (./supplier_inital_load.sh).
- 3. The script will request some information to perform correctly:
 - Oracle RFI database server hostname (rfi_db_server)
 - Oracle RFI database port (1521)
 - Oracle RFI database service name (rfipdb)
 - Oracle RFI database username (rfi_db_user)
 - Oracle RFI database password
 - File path for Supplier data extracted from CFIN (No white spaces should be present in the file path)
 - File path for Supplier Sites data extracted from CFIN (No white spaces should be present in the file path)
 - If you chose to integrate Contacts, file path for Supplier Site Contacts data extracted from CFIN (No white spaces should be present in the file path)

```
Enter the RFI database host name:rfi_db_server
Enter the RFI database port: 1521
Enter the RFI database service name: rfipdb
Enter the RFI database username: rfi16
Enter the RFI database password:
Enter Supplier Data file path: /home/oracle/rfi_stage/supplier.xml
Enter Supplier Sites file path: /home/oracle/rfi_stage/supplier_site.xml
Do you wish to import Suppliers Contacts? [Y/N] N
```

4. Temporary tables will be created.



```
Creating SUPP_DATA_INIT_LOAD_TEMP table

Table created.

Creating SUPP_SITE_INIT_LOAD_TEMP table

Table created.

Creating SUPP_CONTACTS_INIT_LOAD_TMP table

Table created.

Table created.

Temporary tables created
Initial load script start...
```

5. Data will be loaded into Temporary tables.

```
Loading data into SUPP_DATA_INIT_LOAD_TEMP temporary table...
Run Status:
Number of rows inserted: 21569

Loading data into SUPP_SITE_INIT_LOAD_TEMP temporary table...
Run Status:
Number of rows inserted: 56354

Loading data into Staging tables...
```

6. Suppliers, Supplier Sites, Supplier Contacts records are pushed to RFI Staging tables RFI_SUPP_STAGE, RFI_SUPP_SITES_STAGE, and RFI_SUPP_CONTACTS_STAGE respectively and temporary tables dropped.

```
Loading data into Staging tables...

Loading data into RFI_SUPP_STAGE table...
Run Status:
Number of rows inserted: 21569

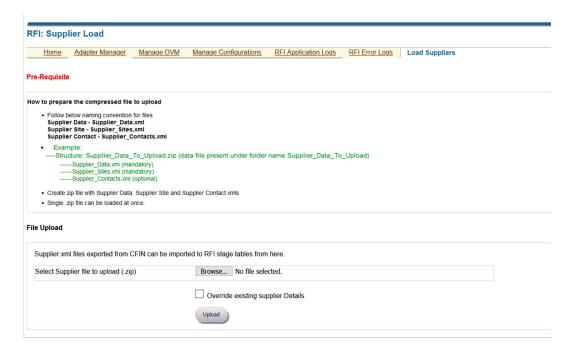
Loading data into RFI_SUPP_SITES_STAGE table...
Run Status:
Number of rows inserted: 56354

Loading data into RFI_SUPP_CONTACTS_STAGE table...
Run Status:
Number of rows inserted: 56354
```

- 7. The number of rows inserted into Temporary tables should be the same for staging tables.
- 8. Once the initial supplier details are moved to RFI Staging tables, the records are sent to Retail similar to the Supplier Incremental Loading process.

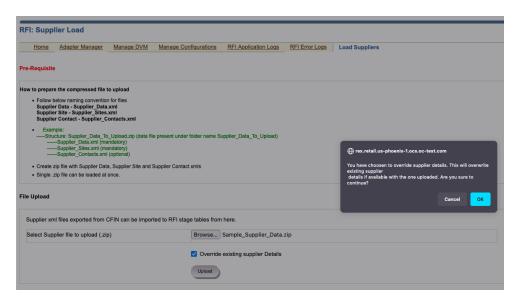
RFI Supplier upload by UI screen: Follow below steps to upload the supplier through UI-

- 1. Login to the RFI UI with valid credentials. Navigate to the Load Suppliers tab.
- 2. Create a compressed file (.zip) with Supplier xmls exported from CFIN. It is mandatory to follow below naming convention for suppliers to be loaded successfully. Make sure the CSV files doesn't have any control m characters in them, else it would fail upload. Keep all the required files inside a folder and then zip them.
- Read the Pre-Requisite section carefully before uploading files.



- Click the Browse button under the File upload section. Browse for the .zip file created in the above step.
- Click the Override existing supplier Details check box to override existing suppliers (if found) with the details specified in the xml. A confirmation window appears asking to confirm selections.





6. Click OK to continue with the current selection or Cancel to reselect.



RFI does not support partial update of supplier details.

- 7. If the supplier ID that you are trying to upload is already available in RFI stage tables and the Override existing supplier Details check box is checked, then all details about that supplier are deleted from the RFI stage tables and the new details specified in the xml are loaded into the stage table.
- 8. If the supplier ID that you are trying to upload is already available in RFI stage tables and the Override existing supplier Details check box is NOT checked, then the supplier load process is terminated with an exception and no data gets loaded into the RFI stage tables.
- **9.** The status of the supplier upload process is displayed in the Supplier Upload Status section. Navigate to the RFI Application Logs section for detailed logs.





Note:

- A single .zip file can be uploaded at once. Multiple file upload is not supported.
- No other file formats except .xml are supported.
- Ensure that the zip file has single entry for Supplier Data, Supplier Site and Supplier Contact

Payment Terms Integration

This integration is not supported by RFI for CFIN/EBS. Instead, users are expected to upload any incremental changes to exchange rates using the RMS Foundation Data Load functionality.



Requesting Chart of Accounts Validation

This chapter describes how to request the chart of accounts combination validation and discusses:

- Oracle Retail interfaces
- Oracle GL interfaces
- Data requirements

Requesting Chart of Accounts Combination Validation

Oracle General Ledger (GL) is the system of record for chart of accounts segment combinations. Chart of accounts (segments) combinations are set up manually in Oracle Retail Merchandising System (RMS), Retail Invoice Matching (ReIM), and Retail Sales Audit (ReSA). This manual setup enables assignment of transaction data in sales audit, stock ledger, and invoice match to specific account codes. ReIM also creates segment combinations dynamically during the invoice match transaction processing.

While creating the valid segment combinations, Oracle Retail validates each created combination individually against Oracle GL. Any valid segment combination in Oracle Retail must exist as a valid combination in Oracle GL. Oracle Retail publishes the segment combination to Oracle GL for validation. Oracle GL verifies the combination and returns the status to Oracle Retail. If the combination is valid, the combination is stored in the Oracle retail database tables for future validation purpose.

Oracle Retail sends these data for validation to Oracle GL:

- Requesting system (RMS, ReIM, or ReSA)
- Set of books (GL business unit)
- Segment or ChartField combination values

Oracle GL sends the validation status whether the combination is valid. The RFI layer copies all the other information from the original request and sends these response data to Oracle Retail:

- Requesting system (RSM, ReIM, or ReSA)
- Set of books (GL business unit)
- Date
- Validation status valid or invalid

Prerequisites

These are the prerequisites for this integration:

The following DVM's are available in RFI_XREF_DVM table if CFIN is the Oracle Financials system:-

COA_GLELEMENT_REIM_DVM

- COA_GLELEMENT_RESA_DVM
- COA_GLELEMENT_RMS_DVM
- COA_STATUS_DVM

Also, Set of Books should be setup in RMS/ReSA/ReIM similar to CFIN GL

Solution Assumptions and Constraints

This design assumes that:

- The Oracle Retail request contains a field called requesting system that identifies
 the system that is requesting the service so that the correct Retail segment is
 retrieved from the Domain Value Map (DVM) lookup.
- DVM (Retail segments to Oracle accounts) may be set up differently for each system (RMS, ReSA, or ReIM).
- Oracle GL receives the array of the values for each segment. If the structure is segement1-segment2-segment3-segementn, then Oracle GL expects that the array size (in this case is n) and the array of value in the order of 1 to n is passed.
- Multiple sets of GL accounts can be sent from Oracle Retail to the Oracle Financials validation web service.
- Once the validated chart of account is stored in Retail, Oracle GL doesn't send any updates if chart of account becomes invalid.
- The Account Segment values in Oracle Financials system (CFIN) and Retail are same.
- Financial system will return the CCID and status of validation request along with initial combination in response.

Financials Cloud:- Chart of Accounts Combination Validation Integration Flow

These services are delivered with the chart of accounts combination validation integration flow:

- GlAccountValidationServiceCons
- GlAccountValidationService
- GlAccountValidationServiceProviderImpl
- AccountCombinationService

This diagram illustrates the chart of accounts combination validation integration flow:



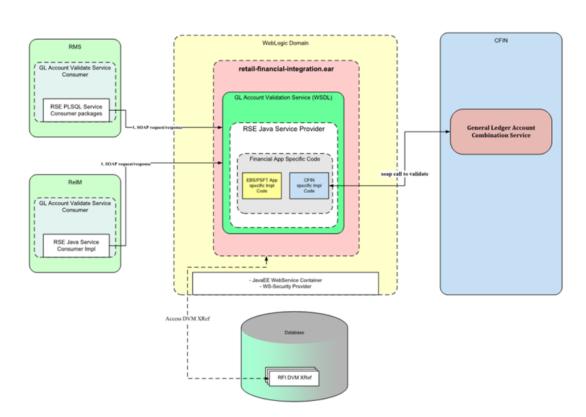


Figure 3-1 Chart of accounts combination validation diagram

RMS CFIN GL Account Validation integration flow (ReIM/RMS to CFIN)

When the chart of accounts validation process is initiated:

- Oracle Retail calls the GlAccountValidationServiceCons Consumer service with Requesting System, Set of Books Id, Segment 1..N values whenever a GL account is required to be validated.
 - The GlAccountValidationServiceCons Consumer service calls the GlAccountValidationService service which routes the request to GlAccountValidationServiceProviderImpl Provider service. Valid System options and RFI service URL needs to be configured in MOM system in order to enable the financial system validation for charts of account.
- The GIAccountValidationServiceProviderImpl Provider service does the following transformations.
 - The Set of Books ID from Oracle Retail is transformed to Ledger ID field in CFIN using Chart of Accounts DVM lookup COA_GLELEMENT_DVM (for e.g. if RMS is the requesting system, COA_GLELEMENT_RMS_DVM is used) lookup has the entry like < Set of Books ID >-SEGMENT1 for Retail value and <ChartOfAccountIdentification/ledger_id>-SEGMENT1 for the Financials Cloud value.
 - The COA_GLELEMENT_DVM lookup is also used to transform the Segment combination in Retail to Segment Combination in Financials Cloud. Any Error during this service call will be logged in RFI GLAccount.log.
- GlAccountValidationServiceProviderImpl Provider service invoked the Financials Cloud AccountCombinationService service validation API which validates the account



- combination and returns valid/invalid status. RFI needs to configure the CFIN account validation URL to call the service.
- 4. Regardless of whether the account is valid or invalid, a transformation occurs in GlAccountValidationServiceProviderImpl Provider service to populate the account_status field. A COA_STATUS_DVM DVM is used to transform CFIN value to the Oracle Retail value.

If the account is valid, then sets the valid CCID received from Financials Cloud account validation API to the response; otherwise, set the '0' CCID to the response variable.

Oracle Retail Interfaces

Retail Outbound Interactions:

 Name: GlAccountValidationServiceCons: Oracle Retail (RMS, RESA, or REIM) invokes this service to determine whether an account is valid with Oracle GL.

Data Requirements

The segment combinations in the GL ACCOUNT MAINTENANCE (Sales Audit), GL CROSS REFERENCE (RMS), and GL CROSS REFERENCE (ReIM) forms must be entered manually.



4

Reviewing Process Integration for Inventory Valuation and Revenue Recognition Accounting Entries

This chapter provides an overview of the process integration for accounting entries from Oracle Retail Sales Audit (ReSA), Retail Merchandising System (RMS), and Retail Invoice Matching (ReIM) to Oracle General Ledger (GL) and discusses how to:

- Perform setup tasks
- Configure and generate data in Oracle Retail applications
- Pick up and transform the data
- Configure and run the process integration for accounting entries

Process Integration for Inventory Valuation and Revenue Recognition Accounting Entries Overview

The process integration for accounting entries enables you to record the financial impact of changes to sellable store and warehouse inventory. It also records the financial impact of sales and returns, cash reconciliation, and void transactions from stores.

The system sends sales audit and stock ledger data in Oracle Retail to Oracle GL through accounting entries. Similarly the system sends the prepaid invoice reversals and write-offs of aged receipts Oracle GL (CFIN). RMS, ReIM, and ReSA are the source for accounting entry. After successful completion of data transfer, the system deletes the data from the source interface tables.

This integration uses the Bulk Data Integrator (BDI) and RFI application to transfer the data from the Oracle Retail applications to the Oracle GL application (CFIN).

The process integration between Oracle Retail (RMS, ReSA, and ReIM) and Oracle GL supports the following integration flows:

- Post stock ledger from RMS to Oracle GL
- Post channel sales, cash, and deposits from ReSA to Oracle GL
- Post write-offs (aged receipts, not invoiced to ledger) from RMS to Oracle GL
- Post prepaid invoice reversals after receipt from ReIM to Oracle GL

Business Process Flow for the Integration of Accounting Entries

The overall process includes:

Table 4-1 Business Process Flow for the Integration of Accounting Entries

Oracle Retail	Step1: Prepare the interface data
Integration Process(BDI and RFI PL/SQL Packages)	Step2 : Integration process will wait for the data to arrive in Retail staging tables.
	Step3 (CFIN) : Retail staging tables data are copied to RFI database via BDI. Then RFI PL/SQL packages transform the data and create a compatible file structure for CFIN.
	Step4 : Delete the data from the source staging tables.
Oracle Financials (Financials Cloud)	Step5 : RFI uploads the zip file to Oracle Universal Content Management Server (UCM) and run the ERP Integration EssJobs to unzip the file, save the .csv data into Financials Cloud Interface tables and import the data to transaction tables.
	Step6 : Launch journal import concurrent program to import data from interface table to journal transaction tables. An event will be raised after the concurrent program is completed. Then manually post to GL.

Prerequisites

Before performing this process integration, ensure that:

The following Domain Value Maps (DVMs) have been entered on the RFI_XREF_DVM table:

- BUSINESS_UNIT_DVM
- SOB_ID_TO_LEDGER_ID_DVM
- CURR_CONV_TYPE_CODE_DVM
- CURR_CODE_DVM

Facts and Constraints

Oracle Retail:

- 1. RMS, ReSA, and ReIM are the source of the accounting entry flow.
- Oracle Retail populates one of the staging tables: STG_FIF_GL_DATA or IM_FINANCIALS_STAGE (depending on whether the RMS or ReIM package is running) on a scheduled basis.
- Data in the Oracle Retail staging tables is deleted after the BDI/RFI job completes successfully and purge retention days criteria is met.

Performing Setup Tasks

This section discusses:

Setup Tasks Specific to Oracle Financials (General Ledger)

Setup Tasks Specific to Oracle Financials (General Ledger)

Set up journal category and source in CFIN, if is the financials system.

- The following DVMs/Xref have been entered on the RFI_XREF_DVM table:
 - BUSINESS_UNIT_DVM
 - SOB_ID_TO_LEDGER_ID_DVM
 - CURR_CODE_DVM
 - CURR_CONV_TYPE_CODE_DVM
 - TAX_DVM
 - SUPPLIER_XREF
- The following email options have been entered in the RFI_XREF_DVM table:
 - RMS GL MSG NOTIFICATION
 - ReIM_GL_MSG_NOTIFICATION

Configuring and Generating Data in Oracle Retail

This section discusses:

- Configuring the data in Oracle Retail
- Generating the data in Oracle Retail

Configuring the Data in Oracle Retail

Before running any accounting data, perform these tasks in RMS and ReIM:

- Set up general ledger (GL) account cross-reference
- Define GL options.

For more information, see the *Oracle Retail Merchandising Foundation Cloud Service User Guides*, "Financial Management," "Stock Ledger," "Maintain general ledger cross reference" and the ReIM User Guide, version 1, "System Administration," "General Ledger Accounts".

Generating the Data in Oracle Retail

RMS stages GL data for subsequent upload into the integrated financial system. A set of batch processes gather and organize the data before using it to populate the related staging table.

These batch designs are included in this functional area

- FIFGLDN1.PC
- FIFGLDN2.PC
- FIFGLDN3.PC

For more information, see the General Ledger (GL) Batch chapter in *RMS Operations Guide, Volume 1*, Release 23.1.000.

In ReIM, the batch process engages in these high-level steps:

 Performs any resolution actions (for example, initiate the creation of payment documents).



2. Calls the posting process to write applicable financial accounting transactions to the financials staging table, IM FINANCIALS STAGE.

The processing occurs after discrepancies for documents have been resolved by resolution documents. Once all of the resolution documents for a matched invoice are built, and all of the RCA/RUA external processing has been confirmed, the process inserts financial accounting transactions to the financials staging table, to represent the resolution and consequent posting of the invoice. The process also inserts financial accounting transactions for the approved documents that are being handled.

Once all of the transactions have been written, the process switches the status of the current invoices or documents to "Posted", and then moves on to the next invoice or document. If a segment look-up fails, the failed record is written to a financials error table.

For more information, see the Chapter 9-26 Financial Posting Batch Design of the latest ReIM Operations Guide.

Picking Up and Transforming the Data

The integration process for accounting entries uses BDI to pick up the data from RMS, ReSA and ReIM, if CFIN is the destination then BDI Jobs transfer the data from MOM schema to RFI schema and then PL/SQL Packages are used to transform the data and to send it to UCM/CFIN.

This flowchart illustrates the process:



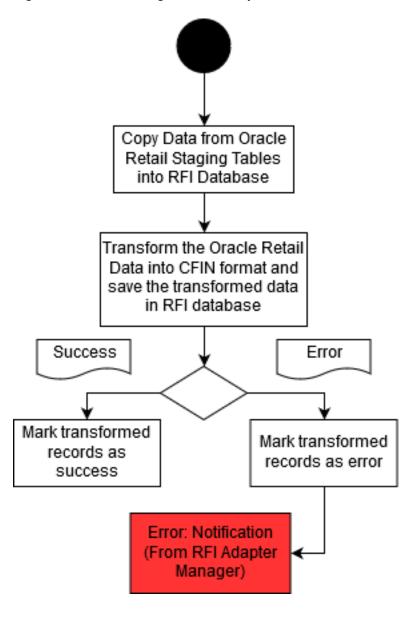


Figure 4-1 Accounting entries load process for CFIN

These tasks are performed as a part of the accounting entries load process:

- BDI system transfers the data from STG_FIF_GL_DATA or IM_FINANCIALS_STAGE
 tables (depending on whether the RMS or ReIM package is running) to RFI schema. BDI
 RFI from RMS process flow takes care of execution of individual jobs to complete the
 data transfer to RFI schema stage tables.
- 2. The data is then picked from stage/stage_hist tables by a PL/SQL package which runs with the timer defined for the bulk adapter. It picks the data from RFI database for history, transforms it and stores it again in Cloud Financials format, ready to be uploaded by RFI into Cloud Financials.
- 3. If the data set has errors, only the specific error is marked as TRANSFORM_ERROR in RFI_CFIN_RMS_ACNT_ENT_STATUS table and the user is notified via email.
- 4. A timer driven service adapter in RFI reads the stored data from RFI DB and sends it to UCM(CFIN) via configured CFIN utility service URL.

5. If The CFIN URL has any access error then corresponding adapter log will have the details. Else if file data has some error then EXT_FIN_SYSTEM_FILES_CONTENT will have the error details.

Running the Process Integration for Accounting Entries (CFIN)

This process in BDI processflow runs every night and gets triggered from POM schedules. On RFI side, for the Bulk Adapter ReIM to Financial - Transform Cfin RMS/ ReIM Account Entry, the button is located in the column to Start/Stop the adapter in Adapter Manager UI page (process triggers automatically in every 10 mins). Corresponding Service adapter also needs to be executed to complete the file transfer to UCM (CFIN) (this process also triggers automatically in every 10 mins).



5

Reviewing Process Integration for Retail Merchandise Procure to Pay

This chapter provides an overview of the process integration for Retail Merchandise Procure to Pay between Oracle Retail Invoice Matching (ReIM) and Oracle Payables and discusses how to:

- · Perform setup tasks
- · Configure and generate data in Oracle Retail
- Pick up and transform the data
- Configure and run the process integration for Retail Merchandise Procure to Pay

Process Integration for Retail Merchandise Procure to Pay Overview

ReIM is the source of matched invoices, credit notes, debit memos, and rebates. Oracle Payables requires these details for payment to the suppliers. Invoices from suppliers for retail merchandise are matched to the original purchase order (PO) for the merchandise and the receipt of the merchandise by the retailer. A proper match of invoice, PO, and receipt trigger the payment authorization of the supplier's invoice. Invoices may be authorized for payment prior to receipt of goods for which prepayment is required. When the authorization for payment is generated, the appropriate accounting distribution is also generated to support the payment authorization. The Retail Merchandise Procure to Pay integration automates the processing of invoice payments, adjustments, and write-offs from ReIM to Oracle Payables and General Ledger. Other accounting transactions are generated from ReIM to write off aged receipts that were never invoiced and to post accounting distribution for manually paid or prepaid invoices after receipt.

This integration uses the Bulk Data Integrator (BDI) and RFI application to transfer the data from the Oracle Retail applications to the Oracle GL application (CFIN).

The process integration between ReIM and Oracle Payables supports the following integration flows:

- Post matched invoices for payment from ReIM to Oracle Payables.
- Post credit notes (matched or unmatched) for payment adjustment from ReIM to Oracle Payables.
- Post debit or credit memos for payment adjustment from ReIM to Oracle Payables.
- Post rebates for payment adjustment from ReIM to Oracle Payables.
- Post unmatched invoices for prepayment from ReIM to Oracle Payables.



Table 5-1 Business Process Flow for integration of Retail Merchandise and voucher posting interface tables in Oracle Financials (CFIN)

Work Location	Step
Oracle Retail (ReIM)	Configure and generate outgoing data from ReIM.
Integration process	The integration process checks for data in the ReIM Invoice Header and Invoice Lines interface tables.
	BDI transfers the data from REIM tables to RFI stage table. RFI then loads and transforms the Oracle Retail data into CFIN data and generate a zip files that contains a .csv file with transformed data.
	Upload the zip file to Oracle Universal Content Management Server (UCM) and run the ERP Integration EssJobs to unzip the file, save the .csv data into Financials Cloud Interface tables and import the data to transaction tables.
	Delete the data from the source tables (ReIM Invoice Header and Invoice Lines interface tables) after a successful load.
Oracle Payables	Launch payables import concurrent program to import data from interface table to payables transaction tables.

Prerequisites

Before performing this process integration, ensure that:

- 1. Chart of accounts code combinations are validated.
- 2. Calendars must be set up for transactions.
 - Supplier synchronization and supplier cross-reference.
 - Supplier address synchronization and supplier address cross-reference.
 - Payment terms synchronization and payment terms cross-reference.
 - Currency code domain value mapping (DVM) and currency exchange rate synchronization.
- 3. Chart of accounts combinations are manually entered into the Oracle Retail and Oracle Financials Application (EBS or PeopleSoft or CFIN).
- 4. The DVM data is set up in RFI_XREF_DVM table that is used as input in the ODI interfaces.

Assumptions and Constraints

The integration design assumes that:

- The data moves from one instance of source database to one instance of target database using BDI and RFI integration.
- 2. If the user loads the same data twice in the Oracle Retail interface table then the data is transported again to the Oracle financials interface tables.
- 3. In the BDI/RFI interface, no business validation is applied to check whether any data is already transported.
- 4. The chart of accounts combinations are valid for invoice lines.



- 5. Invoice lines with invalid combinations are rejected by General Ledger and the correction is a manual process in Oracle Financials applications.
- 6. Oracle GL does not delete the invoices with source as RETL.
- 7. Oracle Retail modifies the IM_AP_STAGE_HEAD and IM_AP_STAGE_DETAIL tables and adds an ORG_UNIT column to map it to BUSINESS_UNIT.

Performing Setup Tasks

This section discusses:

- Setup tasks specific to ReIM
- Setup tasks specific to Oracle General Ledger
- Setup tasks specific to Oracle Payables
- Setup tasks specific to the integration layer

Setup Tasks Specific to ReIM

For more information, see the latest version of the ReIM Operations Guide for details about the setup tasks specific to ReIM.

Setup Tasks Specific to Oracle Payables

Perform the following tasks:

- · Need to check
- Suppliers synchronization
- Supplier locations synchronization
- Payment Terms synchronization
- Chart of account code combination validation
- Currency Exchange Synchronization
- The following DVM have been entered in the RFI_XREF_DVM TABLE:
 - CURR CODE DVM
 - BUSINESS UNIT DVM
 - TAX DVM
 - PROC_ORG_UNIT_TO_FIN_ORG_UNIT_DVM
 - CURR_CONV_TYPE_CODE_DVM
 - COA GLELEMENT REIM DVM
- The following XREF has been populated:
 - ORG ID XREF
 - SUPPLIER_XREF
 - SUPPLIER SITE XREF
 - SUPPLIER_SITE_NAME_XREF
 - PAYMENT TERMS XREF



- TSF_ENTITY_XREF
- The following email options have been entered in the RFI_XREF_DVM TABLE:
 - REIM_AP_MSG_NOTIFICATION

Configuring and Generating Data in Oracle Retail

This section discusses how to:

- Configure the data in Oracle Retail
- · Generate the data in Oracle Retail

Configuring the Data in Oracle Retail

Before running any transaction data, these tasks must be done in ReIM:

- General ledger (GL) account cross-reference is set up.
- GL options are defined.

For more information, see the latest version of the ReIM User Guide, specifically the System Administration and the General Ledger Accounts chapters.

Generating the Data in Oracle Retail

In ReIM, the batch process engages in these high-level steps:

- Performs any resolution actions (for example, instigates the creation of payment documents).
- Calls the posting process to write applicable financial accounting transactions to the financials staging tables IM AP STAGE HEAD and IM AP STAGE DETAIL

The processing occurs after discrepancies for documents have been resolved by resolution documents. Once all of the resolution documents for a matched invoice are built, and all of the RCA/RUA external processing has been confirmed, the process inserts financial accounting transactions to the financials staging table, to represent the resolution and consequent posting of the invoice. The process also inserts financial accounting transactions for the approved documents that are being handled.

Once all of the transactions have been written, the process switches the status of the current invoices or documents to "Posted", and then moves on to the next invoice or document. If a segment look-up fails, the failed record is written to a financials error table. For more information, see the latest version of the ReIM Operations Guide, specifically the Batch Processes chapter.

Configuring and Running the Process Integration for Retail Merchandise Procure to Pay

This section discusses the steps to prerequisite condition.



Configuring the Process Integration for Retail Merchandise Procure to Pay

Part I: Set up client side configuration and DVM files

Enter appropriate values to the DVM table (RFI_XREF_DVM).



EXT_SYSTEM column mentioned below can have only one of the three values, either EBS, PSFTor CFIN. It should not have any value other than CFIN.

Table 5-2 DVM Table

DVM Name (CATEGORY_TYPE Column)	Retail Value (RETL_ID column)	E-Business suite value (EXT_SYSTEM_ID column)	EXT_SYSTEM column
BUSINESS_UNIT_DVM	Enter Retail Value for Business Unit	Enter CFIN Value for Business Unit	CFIN
CURR_CODE_DVM	Enter Retail Value for Currency Code	Enter CFIN Value for Currency Code	CFIN
TAX_DVM	Enter Retail Value for VAT Code	Enter CFIN Value for VAT Code	CFIN

Enter appropriate values for Mail option (RFI_XREF_DVM).

Table 5-3 Mail Option

Name (CATEGORY_TYPE Column)	Retail Value (RETL_ID column)	E-Business suite value (EXT_SYSTEM_ID column)	EXT_SYSTEM column
ReIM_AP_MSG_NOTIFICATION	MAIL_SUBJECT	Enter the mail Subject for Error Notification.	RelM
ReIM_AP_MSG_NOTIFICATION	MAIL_BODY	Enter the mail content for Error Notification, Max length 240 chars	ReIM

The FROM Email Address and TO Email Address List will be specified during RFI deployment and can be updated again using the system options.

Part II: Set up XREF data

Enter appropriate values to the XREF table (RFI_XREF_DVM).



Note:

EXT_SYSTEM column mentioned below can have only one of the three values, either EBS, PSFT or CFIN. It should not have any value other than CFIN.

Table 5-4 XREF Table

XREF Name (CATEGORY_TYPE Column)	Retail Value (RETL_ID column)	E-Business suite value (EXT_SYSTEM_ID column)	EXT_SYSTEM column
SUPPLIER_XREF (Inserted by Supplier Integration Adapter)	Retail Value for Supplier	CFIN Value for Supplier	CFIN
SUPPLIER_SITE_XR EF(Inserted by Supplier Integration Adapter)	Retail Value for Supplier Site	CFIN Value for Supplier Site	CFIN
ORG_ID_XREF (Manual Sync)	Enter Retail Value for Org Unit	Enter CFIN Value for Org Unit	CFIN
PAYMENT_TERMS_X REF (Manual Sync)	Enter Retail Value for Payment Term	Enter CFIN Value for Payment Term	CFIN

Part IV: Scenario test

Running the Process Integration for Accounting Entries (CFIN)

This process in BDI processflow runs every night and gets triggered from POM schedules. On RFI side, for the Bulk Adapter ReIM to Financial - Transform Cfin ReIM Invoice Entry, the button is located in the column to Start/Stop the adapter in Adapter Manager UI page (process triggers automatically in every 10 mins). Corresponding Service adapter also needs to be executed to complete the file transfer to UCM (CFIN) (this process also triggers automatically in every 10 mins).



6

Implementing Oracle Retail Merchandise Integration Pack for Oracle Financials (CFIN Financials)

This chapter discusses the following:

- Setting up Oracle Retail applications
- Setting up Oracle General Ledger
- Setting up Oracle Payables
- Setting up Oracle Domain Value Maps
- Synchronizing freight terms manually
- Synchronizing currency rate types manually
- Synchronizing currency codes manually
- Synchronizing chart of accounts values manually
- Synchronizing financial calendar manually
- Mapping business and organization units
- Working with cross-references
- Working with Domain Value Maps (DVMs)
- Handling errors
- Setting configuration properties

Oracle Retail applications, Oracle General Ledger (GL), and Oracle Payables must be set up for the Oracle Retail to Oracle Retail Financial Integration (RFI) to work properly. This chapter describes these setups in detail.

Setting Up Oracle Retail Applications

Before integration, you must set up Oracle Retail Merchandising System (RMS), Oracle Retail Invoice Matching (ReIM), and oracle Retail Sales Audit.

For more information, see the ReIM Cloud Service Operations Guide, Retail Merchandising Foundation guides, for setting up the Oracle Retail applications.

Setting Up Oracle General Ledger (GL)

To set up Oracle GL, perform these actions:

- Activate service operations, queue, and handlers
- Activate or create routings
- Set up end points (connector properties) for provided services

- Setup recurring run controls for delay publish of effective dated objects
- Activate validation service operations
- Set up cross-reference tables
- Synchronize currency exchange rate

For more information, see the Oracle Fusion Financial Guide.

Setting Up Oracle Payables

To set up Oracle Payables, perform these actions:

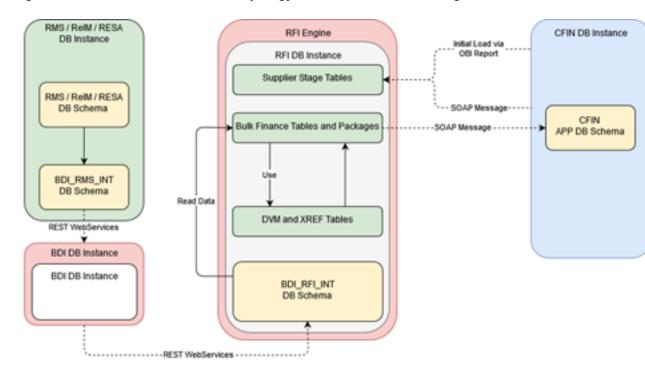
- Activate service operations, queue, and handlers
- Activate or create routings
- Set up end points (connector properties) for provided services
- Set up recurring run controls for delay publish of effective dated objects
- Activate validation service operations
- Set up cross-reference tables
- Synchronize payment terms and vendors

For more information, see the Oracle Fusion Financial Guide.

RFI Database Schema Topology

The diagrams below illustrates the Database schema topology for CFIN integration:-

Figure 6-1 RFI Database Schema Topology for Cloud Financials Integration





Setting Up Cross-References for Oracle Retail IDs and Oracle Entities

Before running the supplier flow, you must manually load ORG_ID_XREF, FREIGHT_TERMS_XREF cross-reference in RFI_XREF_DVM table. Because no automated process for this synchronization is available, you need to load this table manually.

If the EBS or CFIN is Oracle Financials integrating system then PAYMENT_TERMS_XREF should also be manually loaded into RFI_XREF_DVM table. If PeopleSoft is oracle financials integrating system, PAYMENT_TERMS_XREF will be loaded using the initial load script provided with RFI pack.

Setting Up Oracle Domain Value Maps

Set up these Oracle Domain Value Maps (DVMs):

Table 6-1 Oracle Domain Value Maps (DVMs)

Name	Description
ADDRESS_COUNTRY_DVM	Country Code DVM
BUSINESS_UNIT_DVM	Business Unit Mapping
COA_STATUS_DVM	DVM mappings for valid/invalid status in Retail to TRUE/FALSE in Oracle Financials (EBS or PeopleSoft or CFIN)
CURR_CODE_DVM	Currency code mapping
CURR_CONV_TYPE_CODE_D VM	Currency Exchange Conversion Type Mapping
LANGUAGE_CODE_DVM	Language Code DVM
STATE_DVM	State Code DVM
SUPPLIER_ADDRESS_TYPE_ DVM	Supplier Address Type DVM (Order and Remittance), 04/06 in Retail to PURCHASING_SITE_FLAG/ PAY_SITE_FLAG in EBS
SUPPLIER_STATUS_CODE_DV M	Supplier Status DVM
TAX_DVM	Tax code (VAT) DVM
CURRENCY_NOTIFICATION_D VM	Service specific DVM
SUPPLIER_NOTIFICATION_DV M	Service specific DVM
PAYTERMS_NOTIFICATION_DV M	Service specific DVM
COA_GLELEMENT_DVM	Chart of Account Element - Segment Mapping
COA_GLELEMENT_LEDGER_G ROUP_DVM	Ledger Group mapping with Business Unit. Used only when PeopleSoft is the Oracle Financials application



Synchronizing Freight Terms Manually

Freight is the transportation charge paid by retailers when they receive goods from a supplier. Freight term is an agreement between a retailer and a supplier regarding the type and payment of freight. Because the volume of freight terms is low, they are maintained and synchronized manually in Oracle Payables and RMS.

Synchronizing Currency Exchange Rate Types Manually

Oracle Retail allows for multiple currency exchange rate types (such as operational, consolidated, letter of credit or bank, purchase order, customs entry, and transportation) but uses only one type for the default processing-either Operational or Consolidation.

The Oracle Financials system supports any number of currency exchange rate types and allows for multiple currency exchange rate types. Because Oracle Retail uses only one currency exchange rate for the default processing, one exchange rate is selected. The selected currency exchange rate is used by all of the Oracle Retail products that integrate with Oracle Financials (CFIN).

The Oracle Financials system can have separate currency exchange rate types that are not integrated with Oracle Retail. The relationship between Oracle Retail and Oracle rate types is mapped in a Domain Value Mapping (DVM) table.

When the selected currency exchange rate type is manually set up in RMS, RMS uses the Currency Exchange Type Mapping window to map the external exchange type sent by the Oracle Financials system. This currency exchange rate type is used by the Oracle Retail applications for all transactions.

Because the volume of currency exchange rate types is low, they are maintained and synchronized manually in Oracle GL (CFIN) and RMS. These are not synchronized automatically. This synchronization is required for the synchronization of currency exchange rates between Oracle GL and RMS. For more information, see the Oracle Fusion Finance documentation.

Synchronizing Currency Codes Manually

Oracle Retail and Oracle GL synchronize the currency codes manually. The currency codes mapping between Oracle GL and Oracle Retail is required for the sales audit and stock ledger transactions. For more information, see the Oracle Fusion Finance documentation.

Synchronizing Chart of Accounts Segments Manually

A chart of accounts is a listing of all the accounts in the general ledger. You can use a chart of accounts to view specific information about a transaction.

Oracle Retail uses the chart of accounts as reference information to create accounting entries for both sales and inventory transactions. Oracle General Ledger (GL) is the system of record for this information. Oracle Retail also stores and uses the GL accounts.



In Oracle Financials, the chart of accounts implies all the accounting segments and values such as chart of accounts, business unit, and setID. A chart of accounts includes account, department, operating unit, and other segments. The attributes under each segment can differ from those of other segments. For example, Account can have Account Number, Description, Account Type, and VAT Flag, and Department can have Department number, Description, and Manager.

Chart of accounts is manually synchronized from Oracle Payables to Oracle Retail. It is not synchronized automatically.

The chart of accounts is validated based on the currently chart of account. The most current active Chart of Account value row needs to be manually synchronized from Oracle GL to Oracle Retail.

The Oracle Financials system can also create future dated chart of accounts. These future dated charts of accounts need to be re-validated against Oracle Financials system. Also, chart of accounts can be end-dated or disable. The chart of account will need to be manually re-validated.

After the chart of account segment mappings have been set up in both systems, a validation occurs for each Oracle Retail transaction ready to be transmitted to Oracle Financials system

Synchronizing Financial Calendar Manually

The calendars are manually maintained in Oracle Retail and Oracle Financials (CFIN) Suite; they are not automatically synchronized.

Working with Cross-References

Cross-references maps and connects the records within the application network, and they enable these applications to communicate in the same language. The RFI application stores the relationship between applications in a persistent way so that others can refer to it. The following table lists the Oracle Retail to Oracle Financials RFI cross-references:

Table 6-2 Oracle Retail to Oracle Financials RFI cross-references

Cross Reference Table - RFI_XREF_DVM Column: Category_Type	Retail Column Name RETL_ID	EBS Column Name - EXT_SYSTEM_ID	Description	Usage
PAYMENT_TERM S_XREF (manual sync)	Payment Term Value in Retail	Payment Term Value in CFIN	Payment Term Id	Manual Sync for CFIN Integration
FREIGHT_TERMS _XREF (manual sync)	Freight Term Value in Retail	Freight Term Value in CFIN	Freight Term Id	Manual Sync
ORG_ID_XREF	ORG_UNIT_ID in Retail	ORGANIZATION_I D value in CFIN	Organization Unit	Manual Sync.



Table 6-2 (Cont.) Oracle Retail to Oracle Financials RFI cross-references

Cross Reference Table - RFI_XREF_DVM Column: Category_Type	Retail Column Name RETL_ID	EBS Column Name - EXT_SYSTEM_ID	Description	Usage
SUPPLIER_XREF	Supplier Id in Retail	Vendor id in Oracle Financials (CFIN)	Supplier Id	Xref value for Retail is Supplier. The value for Oracle Financials will be Vendor ID. Populated during the supplier integration.
SUPPLIER_SITE_ XREF	Supplier Site Id in Retail	Vendor Site id in Oracle Financials (CFIN)	Supplier Site Id	Xref value for Retail is Supplier Site id. The value for Oracle Financials will be the VendorSiteID .Pop ulated during the supplier integration.
SUPPLIER_SITE_ NAME_XREF	Supplier Site Id in Retail	Supplier Site id in retail plus the supplier site description (common for retail and cfin)	Supplier Site name	Xref value for Retail is Supplier site id. The value for EXT_ID will be the SupplierSiteID SupplierSiteName . Populated during the supplier integration.

Working with Domain Value Maps (DVM)

DVM's are tables containing mapping between related information in the participating applications. They enable you to equate lookup codes and other static values across applications, for example, FOOT and FT or US and USA. These DVM tables are maintained in the RFI layer. The RFI layer uses these DVM tables in transforming the messages from one system in the expected format of the other system.

DVM types are seeded for the Oracle Retail to Oracle Financials flows, and administrators can extend the list of mapped values by adding more maps. The DVM data should be synchronized with what the participating applications use. This synchronization should occur before any initial loads are run or any incremental transactional flows are initiated.

RFI uses the same table RFI_XREF_DVM to store XREF and DVM information, the differentiator is the CATEGORY_TYPE column.



Note:

DVM and Xref (Manual Sync) is not pre-seeded, the values have to be entered manually as give in the sections below.

The following table lists the DVMs for the Oracle Retail to Oracle Financials RFI:

Table 6-3 DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
BUSINESS_U NIT_DVM	RETL_ID, EXT_SYSTE M_ID	This maps Oracle Retail's Set Of Books ID to Oracle GL business unit (Ledger Id). EBS and CFIN Table: GL_LEDGERS Retail Table: FIF_GL_SETUP	111	abc	Applicable for CFIN
COA_STATU S_DVM	RETL_ID, EXT_SYSTE M_ID	This is a hard coded DVM and should not be changed. This maps the EBS value of "TRUE" or "FALSE" to Oracle Retail's value of "valid" or "invalid".	True, False,	Valid/Invalid for CFIN	Applicable for CFIN
ADDRESS_C OUNTRY_DV M		Holds the supplier address country code value mapping between RMS and financial system.	US	US	Applicable for CFIN



Table 6-3 (Cont.) DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
CURR_CONV _TYPE_COD E_DVM	RETL_ID, EXT_SYSTE M_ID	RMS has some set exchange rate type values (Operational, Consolidated, etc.) and CFIN and other financials systems also have exchange rate types (and these may be configurable). A Common exchange rate type that would be used in Financials would be "Spot" and this would correspond to Operational in RMS. So, a DVM between these two values should exist. For ReIM, when we send documents to AP we send an exchange rate when needed, but the rate type we send is always "USER" to ensure that CFIN doesn't try to validate that it is the correct rate for a given date. So we also need to have DVM for "User" rate types.	A,User	CRRNT, User	Applicable for CFIN
CURR_CODE _DVM	RETL_ID, EXT_SYSTE M_ID	Holds the currency code value mapping between RMS and financial system.	USD	USD	Applicable for CFIN
LANGUAGE_ CODE_DVM	RETL_ID, EXT_SYSTE M_ID	Holds the supplier language code value mapping between RMS and financial system.	EN	EN	Applicable for CFIN
COA_GLELE MENT_REIM _DVM	RETL_ID, EXT_SYSTE M_ID	Segment name mappings between REIM and EBS or CFIN. The value lookup has the entry like < Set of Books ID >-SEGMENT1 for Retail value and < Ledger id>-SEGMENT1 for the CFIN value.	111- SEGMENT1, 111- SEGMENT2, 111- SEGMENTN.	123- SEGMENT1, 123- SEGMENT2, 123- SEGMENTN.	Applicable for CFIN



Table 6-3 (Cont.) DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
COA_GLELE MENT_RESA _DVM		Segment name mappings between RESA and EBS or CFIN. The value lookup has the entry like < Set of Books ID >- SEGMENT1 for Retail value and < Ledger id>- SEGMENT1 for the CFIN value.	111- SEGMENT1, 111- SEGMENT2, 111- SEGMENTN.	123- SEGMENT1, 123- SEGMENT2, 123- SEGMENTN.	Applicable for CFIN
COA_GLELE MENT_RMS_ DVM		Segment name mappings between RMS and EBS or CFIN. The value lookup has the entry like < Set of Books ID >-SEGMENT1 for Retail value and < Ledger id>-SEGMENT1 for the CFIN value.	111- SEGMENT1, 111- SEGMENT2, 111- SEGMENTN.	123- SEGMENT1, 123- SEGMENT2, 123- SEGMENTN.	Applicable for CFIN
STATE_DVM	RETL_ID, EXT_SYSTE M_ID	Holds the supplier address State code value mapping between RMS and financial system.	MN	MN	Applicable for CFIN
SUPPLIER_A DDRESS_TY PE_DVM		Holds the supplier Site type value (Pay/ Purchase) mapping between RMS and financial system. RFI sends only two types of address to RMS(Pay/ Purchase). RMS adds 01 type of supplier address in each site by default. Primary supplier in RMS takes the types from first site it processes.	04,06	PURCHASIN G_SITE_FLA G. PAY_SITE_FL AG	Applicable for CFIN
SUPPLIER_S TATUS_COD E_DVM	RETL_ID, EXT_SYSTE M_ID	This maps the supplier's status between Oracle Retail and Oracle Payables."I" for Inactive and "A" for Active status in both Retail and CFIN.	I,A	I,A	Applicable for CFIN
TAX_DVM	RETL_ID, EXT_SYSTE M_ID	This maps the Tax code (VAT) between Oracle Retail and CFIN	S	S	Applicable for CFIN



Table 6-3 (Cont.) DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
SUPPLIER_P RIMARY_SIT E_FLAG_DV M	RETL_ID, EXT_SYSTE M_ID	Holds the Primary site flag value mapping, If site coming from finacial system is primary then same information is passed to RMS wuith this flag value.	Υ	Υ	Applicable for CFIN
FREIGHT_TE RMS_XREF	RETL_ID, EXT_SYSTE M_ID	Holds Freight terms mapping.	1	ORIGIN	Applicable for CFIN
PAYMENT_T ERMS_XREF	RETL_ID, EXT_SYSTE M_ID	Manual Sync	111	xyz corporation	Applicable for CFIN
ORG_ID_XR EF			111	123	Applicable for CFIN
SUPPLIER_X REF			400	445566	Applicable for CFIN
SUPPLIER_S ITE_NAME_X REF			401	401 suppliner site name	Applicable for CFIN
VENDOR_FIL TER_XREF		Supplier Filter Criteria	'VENDOR_TY PE_LOOKUP _CODE, Any column from rfi_Supp_stag e like attributes column	TAX AUTHORITY, Any other value under selected colun length limit	Applicable for CFIN
COA_GLELE MENT_LEDG ER_GROUP_ DVM			11111	US001- RECORDING	Applicable for CFIN
TSF_ENTITY _XREF			111	abc	Applicable for CFIN
PROC_ORG_ UNIT_TO_FI N_ORG_UNI T_DVM			111	abc	Applicable for CFIN
SOB_ID_TO_ LEDGER_ID_ DVM			111	1	Applicable for CFIN



Table 6-3 (Cont.) DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
BUSINESS_U NIT_DVM	RETL_ID, EXT_SYSTE M_ID	This maps Oracle Retail's Set Of Books ID to Oracle GL business unit (Ledger Id). CFIN Table: GL_LEDGERS Retail Table: FIF_GL_SETUP	111	abc	Applicable for CFIN
COA_STATU S_DVM	RETL_ID, EXT_SYSTE M_ID	This is a hard coded DVM and should not be changed. This maps the EBS value of "TRUE" or "FALSE" to Oracle Retail's value of "valid" or "invalid".	True, False,	Valid/Invalid for CFIN	Applicable for CFIN
ADDRESS_C OUNTRY_DV M		Holds the supplier address country code value mapping between RMS and financial system.	US	US	Applicable for CFIN
CURR_CONV _TYPE_COD E_DVM		RMS has some set exchange rate type values (Operational, Consolidated, etc.) and CFIN and other financials systems also have exchange rate types (and these may be configurable). A Common exchange rate type that would be used in Financials would be "Spot" and this would correspond to Operational in RMS. So, a DVM between these two values should exist. For ReIM, when we send documents to AP we send an exchange rate when needed, but the rate type we send is always "USER" to ensure that CFIN doesn't try to validate that it is the correct rate for a given date. So we also need to have DVM for "User" rate types.	A,User	CRRNT, User	Applicable for CFIN



Table 6-3 (Cont.) DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
CURR_CODE _DVM	RETL_ID, EXT_SYSTE M_ID	Holds the currency code value mapping between RMS and financial system.	USD	USD	Applicable for CFIN
LANGUAGE_ CODE_DVM	RETL_ID, EXT_SYSTE M_ID	Holds the supplier language code value mapping between RMS and financial system.	EN	EN	Applicable for CFIN
COA_GLELE MENT_REIM _DVM	RETL_ID, EXT_SYSTE M_ID	Segment name mappings between REIM and EBS or CFIN. The value lookup has the entry like < Set of Books ID >-SEGMENT1 for Retail value and < Ledger id>-SEGMENT1 for the CFIN value.	111- SEGMENT1, 111- SEGMENT2, 111- SEGMENTN.	123- SEGMENT1, 123- SEGMENT2, 123- SEGMENTN.	Applicable for CFIN
COA_GLELE MENT_RESA _DVM		Segment name mappings between RESA and EBS or CFIN. The value lookup has the entry like < Set of Books ID >- SEGMENT1 for Retail value and < Ledger id>-SEGMENT1 for the CFIN value.	111- SEGMENT1, 111- SEGMENT2, 111- SEGMENTN.	123- SEGMENT1, 123- SEGMENT2, 123- SEGMENTN.	Applicable for CFIN
COA_GLELE MENT_RMS_ DVM		Segment name mappings between RMS and EBS or CFIN. The value lookup has the entry like < Set of Books ID >-SEGMENT1 for Retail value and < Ledger id>-SEGMENT1 for the CFIN value.	111- SEGMENT1, 111- SEGMENT2, 111- SEGMENTN.	123- SEGMENT1, 123- SEGMENT2, 123- SEGMENTN.	Applicable for CFIN
STATE_DVM	RETL_ID, EXT_SYSTE M_ID	Holds the supplier address State code value mapping between RMS and financial system.	MN	MN	Applicable for CFIN



Table 6-3 (Cont.) DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
SUPPLIER_A DDRESS_TY PE_DVM		Holds the supplier Site type value (Pay/ Purchase) mapping between RMS and financial system. RFI sends only two types of address to RMS(Pay/ Purchase). RMS adds 01 type of supplier address in each site by default. Primary supplier in RMS takes the types from first site it processes.	04, 06	PURCHASIN G_SITE_FLA G. PAY_SITE_FL AG	Applicable for CFIN
SUPPLIER_S TATUS_COD E_DVM	RETL_ID, EXT_SYSTE M_ID	This maps the supplier's status between Oracle Retail and Oracle Payables."I" for Inactive and "A" for Active status in both Retail and CFIN.	I, A	I, A	Applicable for CFIN
TAX_DVM	RETL_ID, EXT_SYSTE M_ID	This maps the Tax code (VAT) between Oracle Retail and CFIN	S	S	Applicable for CFIN
SUPPLIER_P RIMARY_SIT E_FLAG_DV M	RETL_ID, EXT_SYSTE M_ID	Holds the Primary site flag value mapping, If site coming from finacial system is primary then same information is passed to RMS with this flag value.	Y	Y	Applicable for CFIN
FREIGHT_TE RMS_XREF	RETL_ID, EXT_SYSTE M_ID	Holds Freight terms mapping.	1	ORIGIN	Applicable for CFIN
PAYMENT_T ERMS_XREF	RETL_ID, EXT_SYSTE M_ID	Manual Sync	111	xyz corporation	Applicable for CFIN
ORG_ID_XR EF	RETL_ID, EXT_SYSTE M_ID	Holds Org Unit mapping between retail and financial system	111	123	Applicable for CFIN



Table 6-3 (Cont.) DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
SUPPLIER_X REF	RETL_ID, EXT_SYSTE M_ID	Holds supplier id mapping between retail and financial system, This xref gets automatically created when new supplier is passed from financial system. If this xref is already present then supplier will be considered for update else it will be considered as new.	400	445566	Applicable for CFIN
SUPPLIER_S ITE_XREF	RETL_ID, EXT_SYSTE M_ID	Holds supplier site id mapping between retail and financial system, This xref gets automatically created when new supplier site is passed along with supplier info from financial system. If this xref is already present then supplier site will be considered for update else it will be considered as new.	401	445577	Applicable for CFIN
SUPPLIER_S ITE_NAME_X REF		Holds supplier site id with supplier site name mapping between retail and financial system, This xref gets automatically created when new supplier site is passed along with supplier info from financial system. If this xref is already present then supplier site will be considered for update else it will be considered as new. This Xref is used in CFIN Invoice interface to pass the site code in outgoing file.	401	401 suppliner site name	Applicable for CFIN



Table 6-3 (Cont.) DVMs for Oracle Retail to Oracle Financials RFI

DVM Type	DVM Column Name	Comments	RETL_ID (example)	EXT_SYSTE M_ID (example)	EXT System
VENDOR_FIL TER_XREF	RETL_ID, EXT_SYSTE M_ID	Supplier Filter Criteria	'VENDOR_TY PE_LOOKUP _CODE, Any column from rfi_Supp_stag e like attributes column	AUTHORITY, Any other value under selected	Applicable for CFIN
TSF_ENTITY _ XREF	RETL_ID, EXT_ SYSTEM_ID	Transfer entity to legal entity. Maps RMS TSF_ENTITY_ID value from TSF_ENTITY table.	111	abc	Applicable for CFIN
PROC_ORG_ UNIT_TO_ FIN_ORG_ UNIT_DVM	EXT_	Proc org unit to financial org unit. Maps RMS ORG_ UNIT_ID value from ORG_ UNIT table.	111	abc	Applicable for CFIN
SOB_ID_TO_ LEDGER_ID_ DVM		Maps the set of books id to ledger id	111	abc	Applicable for CFIN

The DVM/XREF table RFI_XREF_DVM has the following table structure:



Table 6-4 RFI_XREF_DVM table structure

Column Names	Description
CATEGORY_TYPE	The DVM or XREF name.
	The below DVM/XREF are Static Values and should be manually entered. The XREF here are manually synchronized.
	ADDRESS_COUNTRY_DVM
	BUSINESS_UNIT_DVM
	COA_GLELEMENT _DVM
	COA_GLELEMENT_RESA_DVM
	COA_GLELEMENT_RMS_DVM
	COA_STATUS_DVM
	CURR_CODE_DVM
	CURR_CONV_TYPE_CODE_DVM
	FREIGHT_TERMS_XREF
	LANGUAGE_CODE_DVM
	ORG_ID_XREF
	PAYMENT_TERMS_XREF
	RMS_GL_MSG_NOTIFICATION
	ReIM_AP_MSG_NOTIFICATION
	ReIM_GL_MSG_NOTIFICATION
	STATE_DVM
	SUPPLIER_ADDRESS_TYPE_DVM
	SUPPLIER_PRIMARY_SITE_FLAG_DVM
	SUPPLIER_STATUS_CODE_DVM
	TAX_DVM
	XREF values inserted by Supplier Integration Adapter SUPPLIER_XREF
	SUPPLIER_SITE_XREF
CATECORY TYPE DESC	
CATEGORY_TYPE_DESC	Description of the DVM or Xref
COMMON_ID	Common identifier for the record. Make sure the Common Id entered for DVM's are below 25000. The Integration Adapter uses database sequence RFI_XREF_SEQUENCE which starts from 25000.
RETL_ID	Retail value
EXT_SYSTEM_ID	CFIN value
EXT_SYSTEM	External system name. Hardcode to "CFIN".

The DVM category types of COA_GLELEMENT_RMS_DVM, COA_GLELEMENT_REIM_DVM, COA_GLELEMENT_RESA_DVM need to maintain the increasing sequence order of COMMON_ID for Segments for GL account validation mapping to avoid issues for mapping between the segments between RFI and external system.

Below is an example for COA_GLELEMENT_RMS_DVM data showing the ordering:

Insert into RFI_XREF_DVM
(CATEGORY_TYPE, CATEGORY_TYPE_DESC, COMMON_ID, RETL_ID, EXT_SYSTEM_ID, EXT_SYSTEM)
values ('COA_GLELEMENT_RMS_DVM', 'ReIM Segment Deion Mapping< Set of Books



```
ID & gt; -SEGMENT1 for Retail value and & lt;
ChartOfAccountIdentification>-SEGMENT1 for CFIN value',25215,'111-SEGMENT1','1-
SEGMENT1', 'CFIN');
Insert into RFI XREF DVM
(CATEGORY TYPE, CATEGORY TYPE DESC, COMMON ID, RETL ID, EXT SYSTEM ID, EXT SYSTEM) values
('COA GLELEMENT RMS DVM', 'ReIM Segment Deion Mapping& lt; Set of Books ID & Camp; gt;-
SEGMENT2 for Retail value and & lt; ChartOfAccountIdentification& gt; -SEGMENT2
for CFIN value',25216,'111-SEGMENT2','1-SEGMENT2','CFIN');
Insert into RFI XREF DVM
(CATEGORY TYPE, CATEGORY TYPE DESC, COMMON ID, RETL ID, EXT SYSTEM ID, EXT SYSTEM) values
('COA GLELEMENT RMS DVM','ReIM Segment Deion Mapping< Set of Books ID & amp;gt;-
SEGMENT3 for Retail value and & amp; lt; ChartOfAccountIdentification & amp; qt; -SEGMENT3
for CFIN value', 25217, '111-SEGMENT3', '1-SEGMENT3', 'CFIN');
Insert into RFI XREF DVM
(CATEGORY TYPE, CATEGORY TYPE DESC, COMMON ID, RETL ID, EXT SYSTEM ID, EXT SYSTEM) values
('COA GLELEMENT RMS DVM','ReIM Segment Deion Mapping< Set of Books ID & amp;gt;-
SEGMENT4 for Retail value and < ChartOfAccountIdentification&amp;gt;-SEGMENT4
for CFIN value', 25218, '111-SEGMENT4', '1-SEGMENT4', 'CFIN');
```

Note:

During the transformation process, if the data set has errors due to incorrect or missing DVM's, the records that are marked as TRANSFORM_ERROR are eligible for an automatic re-transformation during the Adapter's next run. This feature is available if the newly added flag, AUTO_RETRANSFORM_IND in RFI_SYSTEM_OPTIONS table, is set to 'Y'. The default value of flag is 'N'. In order for the customer to update the value of this flag in the database, a support ticket is required. There is no UI option available for updating.

RFI - Manage DVM Graphical User Interface

The RFI UI includes a page "Manage DVM" for viewing, searching, browsing and editing the Cross References (XREF) and DVM records setup in RFI.

RETAIL
RIPE Commission Manager

RETAIL
RIPE Commission Manager

RETAIL
RIPE Commission Manager

| Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager | Manager

Figure 6-2 RFI - Manage DVM Graphical User Interface

When user navigates to the Manage DVM page, it displays the list of all XREF and DVM records in RFI. User can search for specific records based on a field value using the Search

By form in the page. In order to search for records, select corresponding field name in the 'Search By' list based on which the search needs to done. And enter the value to search for in the adjacent text box.

The search will query and display records that match the search string entered. The search is also case-insensitive and has wild card searches.

Example: select Search By 'Category Type' and enter 'dvm' (without quotes) in the search text box, and click 'Search', the page will display all the records with Category Type containing 'dvm' string, say, records with Category Type such as, 'COA_STATUS_DVM', 'SUPPLIER_ADDRESS_TYPE_DVM', 'CURR_CODE_DVM', 'DVM_STATE', 'RFI_DVM_FOR_BUSINESS_UNIT' and so on.

Clicking 'Refresh' button in the page will refresh the page with list of all records. The page will also highlight the record count statistics i.e., 'No. Of Records' fetched / displayed.

In cases when the search string is not found or in the DVM table with matching criteria, error message is displayed indicating no record matching i.e 'No data found for the specified search criteria'.

User can also Update, Delete or Add the DVM/xref data using this screen. User needs to select the record by clicking on row level checkbox in order to make any modification to any record.

By default the supplier related xrefs (SUPPLIER_XREF, SUPPLIER_SITE_XREF, SUPPLIER SITE_NAME_XREF) will not be loaded in initial load of page as well as on search to improve the performance of search. A checkbox is present to enforce the supplier related xref inclusion in search. This check box will auto unchecked after page gets refreshed.

Handling Errors

This section discusses how you can handle errors in the application.

Supplier Information and GL Account Validation Integration Flows

The errors are logged in Supplier.log and GLAccount.log log files respectively. These log files are created in the Application Server where RFI application is deployed.

The logs can be viewed from the RFI Adapter Manager Screens. The RFI Adapter Manager can be accessed using the URL:

http://<Application Server Name>:<Port>/<RFI Application Deployed Name>

The following information is available in the logs

- DVM/XREF mapping not available
- Any error returned by Web service
- Any RFI application errors

Any other ODI errors during execution are logged in the RFI_ODI_LOGS table.

If there are any interface errors or transformation error records, an error notification is sent from RFI Adapter Manager to the To Email Address list specified during RFI deployment. The adapter logs can be viewed from the RFI Adapter Manager Screens. The RFI Adapter Manager screens can be accessed using the URL:



http://<Application Server Name>:<Port>/<RFI Application Deployed Name>

Bulk Adapters Interfaces

Whenever an error occurs during a Transform or a Dump process due to a missing DVM/XREF, missing system options or a case of an invoice detail with no invoice header associated, last one will only occur for the RFI Invoice Entry Interface, the specific status table of that interface will be updated.

Table 6-5 Status Table of each RFI Interface

RFI Interface	Status Table
RMS Account Entry	RFI CFIN RMS ACNT ENTRY STATUS
ReIM Account Entry	RFI_CFIN_REIM_ACNT_ENT_STATUS
ReIM Invoice Entry	RFI_CFIN_AP_INV_INT_STATUS

As shown in the table above, each interface has its own Status table to monitor how the process is running. Because of that the troubleshooting process can differ from entity to entity.

RMS Account Entry

Whenever an error occurs during the Transform or Dump process the values for the "STATUS" column on the "RFI_CFIN_RMS_ACNT_ENTRY_STATUS" table are updated with the values showed in the table below. In order to make it easier to troubleshoot the problem that lead to the error, the error message (e.g "Missing XPTO_DVM cross reference.") is added to the column "ERROR_MESSAGE" present in the same table.

Table 6-6 Status Value for each Process

Process	Table	Column	Value
Transform	RFI_CFIN_RMS_ACNT_ENTRY_STA TUS	STATUS	TRANSFORM_ER ROR
Dump	RFI_CFIN_RMS_ACNT_ENTRY_STATUS	STATUS	DUMP_ERROR

After the issue that caused the records to fail is resolved, it's possible to re-process those records. In order to make this possible, is necessary to manually update the value of the column "STATUS" on the "RFI_CFIN_RMS_ACNT_ENTRY_STATUS" to "TO_RETRANSFORM" for all the records that had previously failed and are now solved, this status indicates that the records are ready to be re-processed in the next execution.

RelM Account Entry

The ReIM Account Entry interface follow the same logic as RMS Account Entry interface to fix and re-process the records for the Transform and Dump execution. The only difference in this case is the status table. For this entity, the values for the "STATUS" column are updated on the "RFI_CFIN_REIM_ACNT_ENT_STATUS" table.



Table 6-7 Status Value for each Process

Process	Table	Column	Value
Transform	RFI_CFIN_REIM_ACNT_ENT_STATUS	STATUS	TRANSFORM_E RROR
Dump	RFI_CFIN_REIM_ACNT_ENT_STATUS	STATUS	DUMP_ERROR

ReIM Invoice Entry

The ReIM Invoice Entry interface follows the same steps already described above for the ReIM Account Entry and the RMS Account Entry interfaces. In this case, the values for the "STATUS" column needed to be updated on the "RFI_CFIN_AP_INV_INT_STATUS" table.

Table 6-8 Status Value for each Process

Process	Table	Column	Value
Transform	RFI_CFIN_AP_INV_INT_STATUS	STATUS	TRANSFORM_E RROR
Dump	RFI_CFIN_AP_INV_INT_STATUS	STATUS	DUMP_ERROR
Dump	RFI_CFIN_AP_INV_INT_STATUS	STATUS	DETAIL_WITH_N O_HEAD_ERRO R

Unlike the two previous interfaces, that only have one possible error status for the Transform process and other for the Dump process, the ReIM Invoice Entry interface has two status errors that can occur on a Dump process. This happens because of the head detail structure, in some situations, we can have invoices with no header leading to the "DETAIL_WITH_NO_HEAD_ERROR" error status.

Logs

The table below describe all the log files that are used to better troubleshoot and identify possible errors, all these can be viewed from the RFI Adapter Manager Screens.

Table 6-9 Log files written by RFI

Log Name	Log Description
CfinTransformInvoiceEntry.log	Keeps track of the all the Transform and Dump processes for the ReIM Invoice Entry.
CfinTransformReimAccountEntry.log	Keeps track of the all the Transform and Dump processes for the ReIM Account Entry.
CfinTransformRmsAccountEntry.log	Keeps track of the all the Transform and Dump processes for the RMS Account Entry.
InvoiceEntry.log	Keeps track of the actions that are made when uploading an RelM Invoice Entry to the Financial System.



Table 6-9 (Cont.) Log files written by RFI

Log Name	Log Description
RMSAccountEntry.log	Keeps track of the actions that are made when uploading an RMS Account Entry to the Financial System.
REIMAccountEntry.log	Keeps track of the actions that are made when uploading an RelM Account Entry to the Financial System.
ErrorNotification.log	Keeps track of the actions that are needed to be made when sending the error notifications.

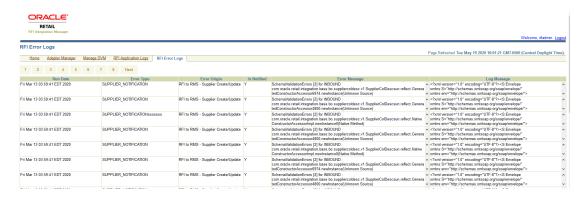
Global Logs

Global logs for Adapter Timers are logged in RfiGlobal.log file and can be viewed from the RFI Adapter Manager Screens. For more information about the errors generated by Oracle Retail or Oracle applications, see that product's documentation.

RFI Logs

The RFI Error Logs screen shows the contents of the table RFI_ODI_LOGS.

Figure 6-3 RFI Error Logs Screen



Understanding the RFI Administration User Interface

RFI provides an Administration UI where the Integration adapter timers could be started/ stopped and also the logs can be viewed for the individual adapters. The RFI Administration user interface can be accessed using the URL:

http://<Application Server Name>:<Port>/<RFI Application Deployed Name>

Scheduling Adapters

Schedulers are created for the RFI Integration Adapters at the time of RFI Application deployment. The following adapter schedule can be updated by changing values of below mentioned properties configured at the time of deployment:



- Currency Rate
 - scheduler.currencyRate.timer.delyToStart
 - * Start time in minutes from the time of deployment or restart of Application Server.
 - scheduler.currencyRate.timer.interval
 - * Interval, the time between the initial run to the next run in minutes

Similarly, for:

- Supplier
 - scheduler.supplier.timer.delyToStart
 - scheduler.supplier.timer.interval
- ODI Error Mail Notification
 - scheduler.mail.timer.delyToStart
 - scheduler.mail.timer.interval
- · Payment Terms For PeopleSoft integration only
 - scheduler.paymentTerms.timer.delyToStart
 - scheduler.paymentTerms.timer.interval

The adapters can be stopped/started from the RFI Adapter Manager Screens Logs. (The errors are logged in Supplier.log and GLAccount.log log.) These log files are created in the Application Server where the RFI application is deployed. The logs can be viewed from the RFI Adapter Manager Screens.



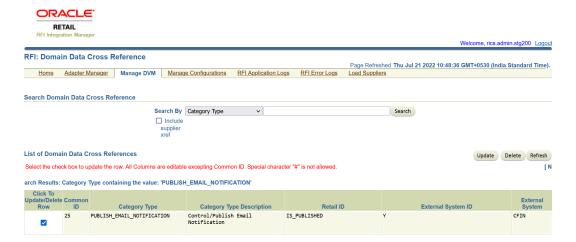
RFI Error email notifications are turned off by default. Users can turn it ON anytime by updating the value of DVM 'PUBLISH_EMAIL_NOTIFICATION'.

Follow the steps below to enable error email notification.

- 1. Login to the RFI application with valid credentials.
- 2. Navigate to the Manage DVM tab.
- Search for Category Type 'PUBLISH EMAIL NOTIFICATION'.
- 4. Update the value of the EXT_SYSTEM_ID column to N and save changes.



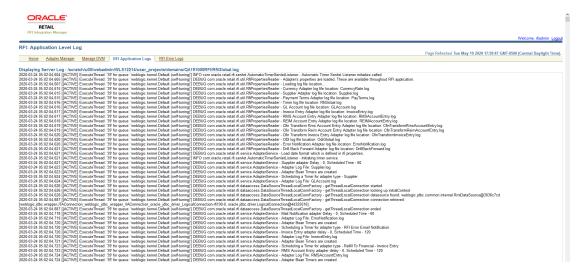
Figure 6-4 Enable Email Notification



Global Logs

Global Logs for Adapter Timers are logged in RfiGlobal.log file and can be viewed from the RFI Adapter Manager screens.

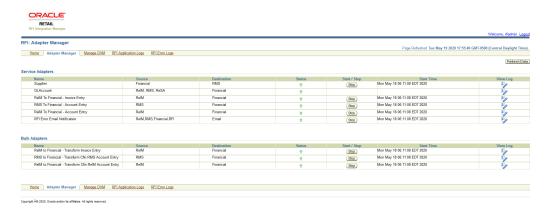
Figure 6-5 RFI Application Logs Screen



ORACLE RETAIL RFI: Adapter Manager Page Refreshed Tue Sep 01 2015 15:53:26 GMT-0500 (Central Daylight Time). Home Adapter Manager Domain Data Cross Reference RFI Application Logs Refresh Data Mon Aug 31 00 38 46 FDT 2015 Supplier Financial RMS Mon Aug 31 00:38:46 EDT 2015 (Stop) ReIM RMS ReSA GI Account Financial RFI Error Email Notification RelM.RMS.Financial RFI Email Mon Aug 31 00:38:46 EDT 2015 (Stop) Bulk Adapters Name RMS To Financial - Account Entry NO LAST RUN DATA ReIM To Financial - Account Entry RelM Financial NO LAST RUN DATA RelM To Financial - Invoice Entry RelM NO LAST RUN DATA Home Adapter Manager Domain Data Cross Reference RFI Application Logs Copyright @ 2015, Oracle and/or its affiliates. All rights reserved.

Figure 6-6 RFI Adapter Manager Screen - RSFT/EBS

Figure 6-7 RFI Adapter Manager Screen - CFIN



In the above screens, the option of Payterms Service Adapter would be available only if PeopleSoft is the Oracle Financials system.

Understanding the RFI Manage Configurations Page

RFI provides a Manage Configuration UI screen where the System level and Service level configurations are be updated without requiring support ticket and application bounce. It also provides Diagnostics screen where we can ping the web services consumed by RFI.

Runtime System Configurations

User can update configurations at RFI using various UI options available at RFI web page. But there are possibilities that these configurations may be overwritten while upgrading RFI from one version to other. RFI runtime configuration framework is

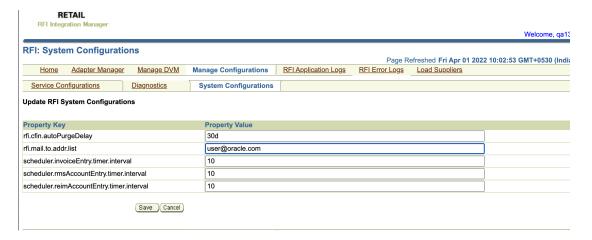
developed as solution to these problems which preserves configurations updated via UI in database.

The runtime configurations help to preserve the customer specific configurations between the patches. These properties are preserved and restored from DB table RFI_RUNTIME_CONFIG_OVERRIDE and merged into rfi.properties. Any updates to these parameters are persisted in database. These properties are Adapter specific and for new configuration property a support ticket is required.

Below are some of the parameters which can be updated through the UI screens:

- autoPurgeDelay. Default 30
- rfi.mail.to.addr.list
- Adapter Timers Interval default 10

Figure 6-8 RFI Manage System Configurations Screen



Service Configurations

The Service configurations UI Screen helps to provision to update the connection details for external application/services URLs. For example, to update hostname and port. Also, for provisioning updating of the security details for external application/services. For example, to update username and password for an alias of other Integrated RFI services like RMS, CFIN. This is useful during the password rotation scenarios i.e., when the other applications have their passwords rotated.



Figure 6-9 RFI Manage Service Configurations Screen

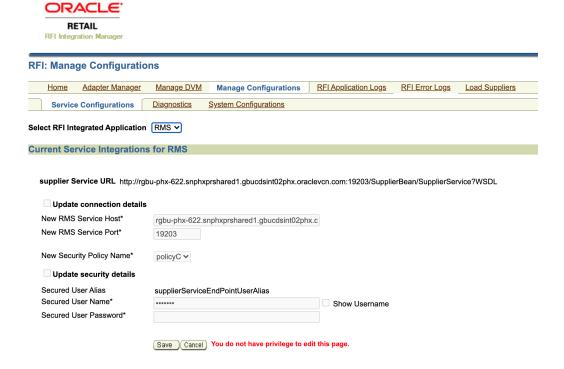
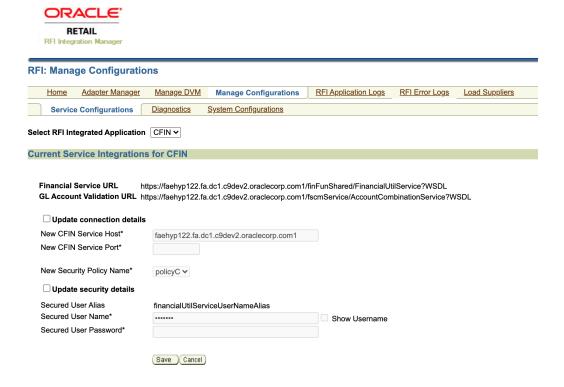


Figure 6-10 RFI Manage Service Configurations Screen





- Users will be provided option either update connection details or security details or both. Update of connection and security details will apply to all the services in scope.
- Updating connection details will update the service/URLs in the UI and the properties file
- Updating security details will update the credentials in the UI and the corresponding wallet

Diagnostics Configurations

The diagnostics screen is added in RFI under Manage Configurations which will list all the web services consumed by RFI. This ping features checks connectivity from RFI to other Integrated systems. As depicted in the screenshot, the table shows the Service Name, WSDL URL, Alias and Ping button and status for each web service.

Ping All and reset button are also available to ping all listed services and to reset to default ping statuses.

The ping feature internally uses the rfi.properties to get the services list.

- **Supplier service:** Supplier service from RMS offers ping operations. RFI supplier service includes method to invoke ping operation for supplier service from RMS.
- 2. Account Combination service: Account Combination service from CFIN does not offer any ping operations. RFI invokes account combination service offered by CFIN with default values. Successful response (status field of response is set to "invalid" as request has default combination.) from CFIN will confirm connectivity to CFIN from RFI.
- If deep ping in step #2 is successful, it ensures that even credentials set up in RFI for CFIN web services are valid.



Figure 6-11 RFI Diagnostics Screen

- Click the Ping button to check connectivity of listed service. Red in the Status column indicates an error in connectivity. Green in the Status column indicates successful connectivity.
- Click the Ping All button to ping all listed web services. Check the Status column to know status of ping.
- Click the Reset button to reset previous ping status.



7

Configuring Web Service Security

Web service providers are secured using security policies. There are many security policies available to use in the WebLogic server. When a service provider is secured with a particular policy, the service consumer will have to provide the required information (like username, password, certificate etc) for the provider to validate, authenticate and secure the service invocation. Two such security policy configurations are certified by Oracle for RFI. These are referred to as Policy A and an unsecured policy in this document.

Policy A is Username Token over HTTPS. The transport layer of the service invocation
uses https for this policy. The consumers will have to provide the username and
password for invoking the service.

When RFI is a Web service consumer, either Policy A or unsecured can be setup for the provider service. The consumer must be configured with corresponding Policy A or Unsecured setting. For example, if RMS supplier service is configured with policy A, the RFI Web service consumer should be configured to Policy A.

When the RFI acts as a Web service provider, service can be either unsecured or secured only with Policy A. For example, for GL Account validation Web service, supplied by RFI can be secured using only policy A else it needs to be unsecured; policy setting in RMS should be configured to use Policy A.

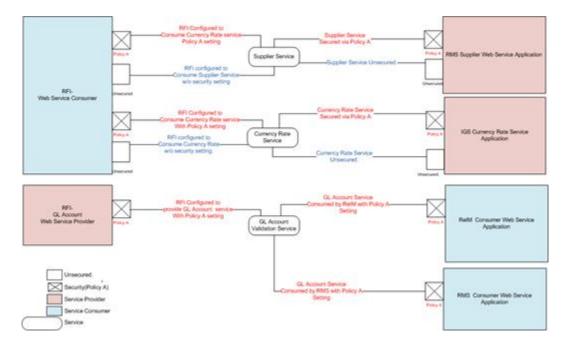


Figure 7-1 Security Configurations

The above diagram shows the security configurations that are needed for web service providers and consumers. If RMS Supplier Web service is configured with Policy A configuration then the corresponding RFI consumer should be configured to use Policy A.

The RFI GL account Web service can be configured secured with only Policy A or it can be unsecured.

. For invoking services over SSL, RFI will need to provide a username and password for authentication of the service. User credentials are recommended to be stored in Oracle credential wallets. These wallets should be accessible to service consumer.

RFI will also need to provide a username and password for user authentication with the service. User credentials are recommended to be stored in a wallet file.

RFI uses credential wallets, a password-protected container, for storing authentication information.

