Oracle Financial Services

Accounting Foundation Cloud Service

Core Functions

Release 22A

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ORACLE
Financial Services

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Oracle Financial Services Accounting Foundation Cloud Service Core Functions

For information on third party licenses, see the AFCS Licensing Information User Manual.

Document Control

This section lists all the details of document control:

Table 1: Document Control

Version Number	Revision Date	Change Log
1.4	September 2022	Updated Data Quality Reports section in the document.
1.3	August 2022	Added Dashboard and Reports chapter in the document.
1.2	July 2022	Updated the CoA Segment Mapping section.
1.1	June 2022	Updated the CoA Segment Mapping Section (Doc 34169080).
1.0	February 2022	Created the document for Release 22A.

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Get Help

Use help icons to access help in the application. If you don't see any help icons on your page, click your user image or name in the global header and select **Show Help Icons**.

Note that not all pages have help icons. You can also access the Oracle Help Center to find guides and videos.

Watch video

Watch: This video tutorial shows you how to find and use help.

You can also read about it instead.

Additional Resources

- Community: Use Oracle Cloud Customer Connect to get information from experts at Oracle, the partner community, and other users.
- Training: Take courses on Oracle Cloud from Oracle University.

Learn About Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program. Videos included in this guide are provided as a media alternative for text-based topics also available in this guide.

Get Support

You can get support at My Oracle Support.

For accessible support, visit Oracle Accessibility Learning and Support.

Get Training

Increase your knowledge of Oracle Cloud by taking courses at Oracle University.

Join Our Community

Use Cloud Customer Connect to get information from industry experts at Oracle and in the partner community. You can join forums to connect with other customers, post questions, and watch events.

Share Your Feedback

We welcome your feedback about Oracle Applications user assistance. If you need clarification, find an error, or just want to tell us what you found helpful, we'd like to hear from you.

You can email your feedback to My Oracle Support.

Thanks for helping us improve our user assistance!

About Accounting Foundation Cloud Service

Accounting Foundation Cloud Service (AFCS) enables you to collate, standardize, quality-assess, repair, enrich, group and publish data from multiple sources for purposes of accounting and financial reporting. AFCS works with Oracle ERP Financials Cloud Accounting Hub and GL to facilitate this. It enables you to choose an optimal chart of accounts in your General Ledger and maintain a separate Management Ledger with additional information grain. The two ledgers will be driven off the same set of journals and therefore be in alignment.

AFCS also facilitates reconciliation between balance figures obtained from core systems against customer-accounts and accounting balance figures in your ledgers. The service's governance facility will oversee all involved processes. Information held in AFCS will be available for analysis, reporting and extraction for external use. You may add your own analytical content to that which is provided with the service.

Accessing the Accounting Foundation Cloud Service

See the AFCS Get Started for information on how to subscribe and set up the service.

Setting Up Your Service

This section provides the details on setting up Accounting Foundation Cloud Service (AFCS).

Topics:

Domain

Domains represent business segments that you operate. The list of domains available with your service will be listed for you to choose from. Your choice will determine data and metadata artefacts that are deployed by the service for your use. You may choose one or more domains and subsequently revise your choice with additional domains, as needed. You will not, however, be allowed to drop domains once selected and deployed. Please note that additional domains, even when chosen in error, will not adversely affect your usage of the service.

Select your Domain

The domain which is available as part of the catalog is displayed. The steps to select a domain are as follows:

1. In the **Choose Domain** Page, select the required domain to deploy from the list of Domains.

   In case you are logging in for the first time, you can select one more multiple domains.

2. Click **Continue**.
   A confirmation message is displayed.

   "Do you wish to continue with your selections?
   **Selections are not reversible once the deployment is complete. New selections can be added later.*

3. Click **Yes** to proceed or click **No** in case you wish to revert. If you have selected **Yes**, the deployment process for the selected domain begins.
   The status of the deployment is displayed.

Deploy the Domain

On the **Deploy Domain** page, the selected domains are deployed, and it displays the status of the deployment.

Click **Deploy** to initiate application configuration.

The status of the following is displayed:

- Deploy Catalog

  This step deploys a physical instance of data structures according to the Domains chosen.

- Deploy Dimension Rules

  This step deploys Dimension used by the service, including those designated Slowly Changing Dimensions.

- Generate Data Connections

  This step deploys Data Services required to facilitate movement of data within the deployed data structures.

- Generate Data Quality Checks

  This step generates and deploys Data Quality assessment routines based on specification in the Data Catalog

- Applying Redaction Policy

  This step applies required data protection via redaction instruction to portions of the Catalog that has been marked sensitive, including Personally Identifiable Information (PII).

- Refresh Data Interfaces

  This step generates and deploys the logical abstraction layer to facilitate Data Services based on specifications in the Catalog.

- Deploy Subledger Applications

  This step generates and deploys definitions of Subledger Applications packaged by the service our of the box. The set of SLAs thus deployed will be based on the Catalog structures deployed, which in turn is decided by user-choice of Domains in the earlier step.

- Generate Pipelines

  This step generates and deploys definitions in the service's Process Management Framework for sequences of tasks that are required to carry out functional outcomes of the service.

The deployment steps are noted with a successful or failure icon. Only when all the deployment steps are successful, you can click **Continue** to proceed.

Legal Entity

This step allows you to define one or more Legal Entities for which the service maintains the Management Ledger and perform related functional tasks. For a Legal Entity, a Management Ledger is maintained and is required to provide such information by way of financial reports as a reporting entity. The service supports preparation and maintenance of a hierarchy of Legal Entities, based on which the following information may be captured.

Topic:

- Legal Entity Settings

  > **NOTE**
  > Maximum levels supported for Legal Entity hierarchy in Balance reconciliation is 5.

Legal Entity Settings

Use the Legal Entity Settings to set up the Reporting Currency.

To set the Reporting Currency, follow these steps:

1. To navigate to the Legal Entity Settings, on the Home Page, click **Administration**, and click **Legal Entity**. The **Legal Entity** Settings Page is displayed.
2. On the **Legal Entity** Page, all the available Legal Entities are listed on the Left Hand Side. To set up the Reporting Currency and the Fiscal Year for a Legal Entity, select the required Legal Entity, and do the following:
   - Set the fiscal period to open for posting entries by disabling or closed for posting entries by enabling the **Locked?** option. An open posting period is when the selected posting period is set to open and the other posting periods stay closed.
   - Set the **Reporting Currency** to required standard. This Reporting Currency is used during the Execution Process in the Process Orchestration.
3. Click **Save** to save the Legal Entity Settings.

Fiscal Period

Use this setup to configure the Fiscal Period for a specific Legal Entity or to compile Fiscal Periods.

Topics:

Set Up Fiscal Periods

You can add or edit a Fiscal Period.

To add or edit a Fiscal Period, do the following:

1. During the Deployment Process, the User with the Administrator Privileges can set up Fiscal Periods using this procedure or after the Deployment Process, the Administrator can manage the Fiscal Periods by navigating to the Fiscal Period Settings. To navigate to the Fiscal Period Settings, on the Home Page, click **Administration**, and click **Fiscal Period**.

   The Fiscal Period Settings Page is displayed. During the Deployment Process, User with the Administrator Privileges can set up Fiscal Periods using the same procedure.
2. On the **Setup** Tab, there are four built-in Fiscal Year Quarters. They are **Quarter 1**, **Quarter 2**, **Quarter 3**, and **Quarter 4**. Select the required Quarter for a specific Entity and then proceed to add or edit a Fiscal Period.
3. To create a new Fiscal Period, do the following:
   a. Click **Add Fiscal Period**. A new row is added in the Fiscal Periods list with a new Fiscal Period Name and other details. To edit the Fiscal Period Name, double-click the Fiscal Period Name Value and do the changes.
   b. To select the starting month for the Fiscal Period, double-click the Start Month Value and select the required value in the list. By default, this field displays January.
   c. To select the starting day of the selected Fiscal Period Start Month, double-click the Start Day Value and select the required value in the list.

d. Similarly, select the Values for End Month and End Day for the selected Fiscal Period. You need to verify these values for all Quarters.

4. To edit an existing Fiscal Period, double-click the Values of the Fiscal Period Name, Quarter Name, Start Month, Start Day, End Month, End Day, and then do the changes.
5. Click **Save** to save these details for the new or edited Fiscal Period.
6. To delete an existing Fiscal Period, click the **Delete** Button associated with it.

   A Warning Message is displayed: *Do you want to delete <Fiscal Period Name>?* with **Yes** and **No**. Click **Yes** to delete the Fiscal Period.

> **NOTE:**
> The Fiscal Periods set up in this Fiscal Period Module are associated with the Legal Entity. This Fiscal Period Attribute is sourced as a part of the Legal Entity.

Compile Fiscal Periods

To assign a Year or a Fiscal Year for the Fiscal Periods of the Legal Entity, use the Compile Fiscal Periods Process.

To compile a set of Fiscal Periods for a Year, do the following:

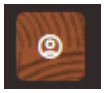
1. During the Deployment Process, the User with the Administrator Privileges can set up Compile Fiscal Periods using this procedure or after the Deployment Process, the Administrator can compile the Fiscal Periods by navigating to the Fiscal Period Settings. To navigate to the Fiscal Period Settings, on the Home Page, click **Administration**, and click **Fiscal Period**. The Fiscal Period Settings Page is displayed. Select the **Compile** Tab. During the Deployment Process, User with the Administrator Privileges can set up Fiscal Periods using the same procedure.
2. On the **Compile** Tab, select a range for a Year. Click **Start Date** and select the required value. Then click **End Date** and select the required values. Click **Compile**.
   A Calendar of Fiscal Periods for the Legal Entity for the selected Date Range is generated.

Configure Parameters

The Parameters are constant-value, run-time, or current-date variables intended for use with AFCS. Apart from a seeded set of System Parameters, you can add, modify, or remove them as needed.

Understanding the Parameters Window

To access the Parameters window, follow these steps.

1. Navigate to **Subledger Application** Summary Page.
2. Click  from Top-right corner and select **Administration**. Select **Parameters** option from LHS.
   The **Parameters Summary Window** is displayed.
3. You can make use of the Search option to search for a specific Source.

4. Click **Add** to create a Parameter.
   For more information, see Defining a Parameter Section.

Fields in Parameters Window

Fields displayed in the Parameters Window are explained in the following table.

Table: Fields in Parameters Window

Fields	Description
Fields marked in red asterisk(*) are mandatory	
Parameter Name	The name for the placeholder that you want to define. For example, MISDATE, which can be used as a placeholder for Date.
Parameter Description	The description for the parameter you want to define. In this example, the description can be, "MISDATE can be used to substitute the date values for each day, dynamically, in mmddyyyy format."
Parameter Type	There are three parameter data types: • Constant data type is selected for substituting a constant value. • RunTime data type is selected for substituting a value, dynamically, in run time. In the example that is used here, MISDATE can be selected as Run Time because it is used to make a substitution dynamically. • CurrDate data type is selected for substituting a value as Current System Date.
Value	Only for constant types. Holds the actual value of the parameter.

Defining a Parameter

To define a new Parameter, follow these steps:

1. Click **Add** to define a parameter on the **Parameters Summary**. The **Parameters** Window is displayed.
2. Enter the fields, which are explained in the Fields and their Description Section.
3. Click **Save**.

Modifying and Viewing a Parameter

You can edit or view an existing Parameter.

To edit or view a parameter, follow these steps:

1. To edit or view a Parameter, select the required parameter from the **Parameters Summary**.

   The details of the selected Parameter are displayed. You can modify or view the details.
2. Only the Parameter Name, Parameter description, Parameter Type, and the Value / Default Value / Date Format can be edited on this window. Update the required details.
3. Click **Save** to save the changes made.

Deleting a Parameter

To delete an existing parameter, follow these steps:

1. On the **Parameters Summary**, click **Delete** .
   A confirmation dialog box is displayed.
2. Click **Yes**. The Parameter details are deleted.

> **NOTE:**
> Delete is enabled only in the following cases:
> If the parameter is not used by any higher object, for example, Connector/EDD.
> If the parameter is pre-seeded.

Dependency

Clicking **Dependency** lists where the entire parent Parameter has a dependency.

Managing Users and Entitlements

Before the service can be used for configuration of its business functions and execution of ensuing processes, you have to define users, configure their access rights and define their entitlements / privileges. This ensures that authentication, security and access control are imposed on the service and the data it processes.

For information on how to manage users and user privileges in AFCS, see the Security and User Management Guide.

Connecting to your Oracle ERP Service

For your service to carry out its business functions, it is necessary for it to communicate and exchange data with your Oracle ERP Financials Accounting Hub Cloud Service instance. This section describes the steps you need to take to facilitate this.

AHCS Instance Details

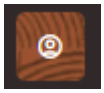
Topic:

- Configure ERP Settings

Configure ERP Settings

The ERP Settings Window is used to establish the connection between AFCS and other applications. In case, you wish to do changes post-deployment, it can be done in ERP Settings.

To configure ERP Settings, follow these steps:

1. Navigate to **Subledger Application** Summary Page.
2. Click  from Top-right corner and select **Administration**.
3. Select **ERP Settings** from the Left Menu.

   The ERP Settings Window is displayed.
4. Enter the following details:
   - **URL for Accounting Hub Cloud Service:**

     Enter the URL assigned to you as part of your Oracle ERP Cloud AHCS subscription here. This information is specific to your tenancy on Oracle Cloud and subscription to ERP Cloud AHCS Instance.

     For example:

     `https://abc.de.fg.oraclecloud.com`
   - **Version:**

     Enter the version of the AHCS Instance.
   - **User ID:**

     Enter the User Identification assigned to you for the AHCS Instance here.
   - **Password**:

     Enter the password for your AHCS Instance here.
   - **Event Type Column Name:**

     This is pre-populated with the TRANSACTION_TYPE value, the auto-generated value for the Transaction Type Column Name in the Register Transaction Source System step.

If you modify the auto-generated value for Transaction Type Column Name in the Register Transaction Source System step, edit the pre-populated text and capture the assigned column name here.

- **Line Number Column Name**:

  This is pre-populated with the LINE NUMBER value, the auto-generated value for Line Number Column Name in the Register Transaction Source System step.

  If you modify the auto-generated value for the Line Number Column Name in the Register Transaction Source System step, edit the pre-populated text and capture the assigned column name here.

- **Date Format**:

  Enter the date format in which your instance of AHCS accepts the date columns. If you do not enter a value here, the date field uses the default format.

5. Click **Save** or **Test Connection**.

   For more information, see the Verification of ERP Setting Section.

   After you save, the entered settings are used while producing the Transaction Template. This is a one-time setup activity. Do not change these settings unless required by changes to your instance of AHCS.

Verification of ERP Settings

The **Test Connection** option on the ERP Setting Window allows you to check the established ERP Connection.

To perform changes post-deployment, see ERP settings.

Configuring Accounting Content

This section provides information about configuring the Subledger Application.

Related Topics:

- Subledger Applications
- How to Register an SLA
- Event and Journal Grouping

Subledger Application Definition

Oracle ERP Financials Accounting Hub and General Ledger reflect the traditional segregation between the general ledger and associated subledgers. Detailed transactional information is captured in the subledgers and periodically imported and posted in summary or detail to the ledger. Your service aligns with this and allows you to define Subledger Applications (SLAs) aligned with contract and transaction types associated with financial instruments you process.

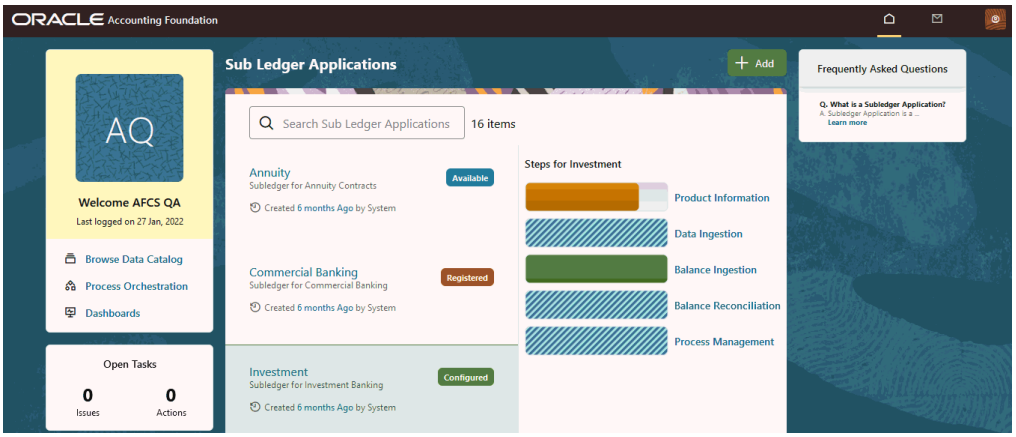
After the service set up is complete, Subledger Applications Page is displayed. The service provides a set of pre-configured SLAs, aligned with contract and transaction types related to the Domains you chose. It is also possible to define your own SLAs.

The Subledger Applications Page displays user name, last log in details and open tasks if any.

Subledger Application Summary

To understand the Subledger Application Summary Window, follow these steps:

1. From the **Oracle Financial Services Accounting Foundation Cloud** Page, select **Subledger Applications**. The **Subledger Application Window** is displayed.



2. You can search for Subledger Name or Subledger Short Name. A list of pre-packaged Subledgers appears. For more information, see pre-packaged Subledgers section.

> **NOTE:**
> Pre-packaged Subledgers are not editable through the Subledger Application Window.

3. In the **Subledger Application** Page, you can view the status of the SLA. The status of the SLA can be as follows:
    a. **Draft**
    b. **Ready for Registration**
    c. **Registered**
    d. **Configured**
    e. **Available**
4. Click a Subledger Application to view the steps and the status of the Subledger Application. The steps of the SLA are as follows:
    a. **Product Information**. For details, see section Subledger Applications.
    b. **Date Ingestion**.
    For details, see section External Data Descriptors and Connectors.
    c. **Balance Ingestion**.
    For details, see section Connectors.
    d. **Balance Reconciliation**.
    For details, see section Reconciliation.
    e. **Process Management**.
    For details, see section PMF.

    Hover on the steps to know the status of each of them in percentage.
5. On the Subledger Application page, click **Add** to create a new Subledger.
For, more information, see the Adding a Subledger section.
6. See Register an SLA Section for more details on registering Subledger Applications configured in this application.

Pre-packaged Subledgers

Table: List of Seeded Subledgers

Subledger Application	Contract Types
Annuity	Annuity Contracts
Commercial Banking	Correspondent Accounts
	Swaps Contracts
	Loan Contracts
	Merchant Cards
	Term Deposit Contracts
	Casa

	Bill Contracts
	Over Draft Accounts
	Commitment Contracts
	Leases Contracts
	Cards
	Letter Of Credit Contracts
Investment	Swaps Contracts
	Credit Derivatives
	Foreign Exchange Contracts
	Option Contracts
	Futures Contracts
	Investments
	Repo Contracts
Islamic Banking	Ijarah Accounts
	Istisna Accounts
	Mudarbah Accounts
	Murabahah Accounts
	Musharkah Accounts
	Salam Accounts
	Sukuk Accounts
Passthrough	Accounting Entries
Policy Loan	Loan Contracts
Retail Banking	Loan Contracts
	Term Deposit Contracts
	Casa
	Annuity Contracts
	Over Draft Accounts

	Cards
Treasury	Correspondent Accounts
	Swaps Contracts
	Credit Derivatives
	Foreign Exchange Contracts
	Option Contracts
	Futures Contracts
	Borrowings
	Investments
	Commitment Contracts
	Repo Contracts

CoA Segment Mapping

This interface allows you to map segment codes employed in your ERP Financials Cloud service Chart of Accounts to Dimensions in AFCS. This information is required to be configured once prior to initial ingestion of balance information from your ERP Financials Cloud Service into AFCS. Balance information is ingested into Staging entities General Ledger and Management Ledger, corresponding to GL and Supporting Reference Balance information using this mapping.

The Ledger Balance Data from the AHC appear in the form of CoA Segment Columns. The CoA Segments are defined differently for each CoA Structure Instance and therefore, there is an option to select the appropriate dimension for each segment.

The Subledger CoA Mapping window displays the seeded dimension names, which are a part of the data model, and it is possible to select dimensions against each COA segment as required.

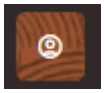
The list of predefined dimensions required in the application and which are mapped to CoA segments are as follows:

- General Ledger Account Code
- Legal Entity Code
- Account Branch Code
- GAAP Code
- Currency Code
- Product Code
- Organization Unit Code
- Business Unit Code

Mapping Segments

Depending on the CoA or accounting principles followed, the AFCS predefined dimensions can be mapped with the list of CoA Segments.

To map the segments, follow these steps:

1. Navigate to **Subledger Application** Summary Page.
2. Click  from Top-right corner and select **Administration**. Select **CoA Mapping** option from LHS. The **Subledger Chart of Account Map** Window is displayed. The **Attribute** Column displays the list of predefined dimensions and the **Chart Of Account Segment** displays the CoA Segment Value with a drop-down list of CoA Segments CoA_SEGMENT1, CoA_SEGMENT2, and so on.
3. Select the **NONE** option when the dimension is not required to be mapped or used.
4. Select the required CoA Segments and click **Save**.
5. These segment values are replaced with the dimension columns as mapped in the inbound connector and the data is loaded as per the mapping into the staging tables of the ledger loaded as mapped into Data Foundation.
6. After it is saved, the Insert Connectors automatically get mapped for GL.

> **NOTE:**
> Specify the CoA Segment as the attributes in AFCS. For example, if you map the CoA Segment 1 to GL Code, all the extracts from AHCS with column header as CoA Segment 1 are loaded as GL Code in AFCS.
> The predefined dimensions with * must be mapped to some of the other CoA Segments to get values, as they are not null columns.

Event and Journal Grouping

> **NOTE:**
> This is the part of the SLA Header and Line Mapping Sections.

Event or Transaction types refer to accounting events that are captured when transactions are committed or processed. While creating a Subledger, different transaction types are created so that all the transactions can be classified into one or the other event type and are used for creating journal lines. Examples of transaction types can be withdrawal, deposits, servicing, fees, charges, and so on.

Transaction types are required to collect the transaction data and process it into accounting data necessary to form the Subledger information. Data from different Source Systems come together and are processed depending on these categories to form ledger information.

> **NOTE**
> To use pre-packaged SLAs, you must standardize Transaction Types to those defined in the SLA before processing.

Subledger Event Grouping functionality is introduced to the group data, based on a few seeded dimensions while extracting and then posting them to AHC. Grouping is based on dimensions and significance. Similarly, while loading the data from AHC to STG_GL_DATA, aggregation based on the dimensions and the basic primary key columns of the GL data table helps in maintaining the uniqueness of the table without any errors.

Grouping functionality includes combining data based on some preseeded columns in both header and line-level data. When data is grouped on some dimensions and transaction numbers are not considered for grouping, there is a requirement to regenerate the transaction numbers. As aggregate columns are different in header and line level, aggregation happens separately for header and line data. However, the only connection between the line and header data is the transaction number. Therefore, to maintain the connection, pair up the corresponding header and line connectors along with a mapping table, which maintains actual transaction numbers with a map to newly generated or replaced transaction numbers.

Grouping functionality includes the following components:

- Event Group Summary
- Defining an Event Group
- Managing Group Attributes

Subledger Event Grouping Summary

To understand the Subledger Event Grouping summary window, follow these steps:

1. From the Oracle Financial Services Data Foundation Integration with Accounting Hub Cloud Service window, select AHC Administration and then select Subledger Event Grouping.

   The **Subledger Event Grouping** window is displayed with a list of pre-packaged event groups information for transmission to the Accounting Hub.

2. The Subledger Event Grouping window displays the Event Group Name, Header Connector, and Line Connectors.

   a. **Event Group Name**: It is the generic name given to identify a Header and Line Connector mapping. The pre-packaged Subledger connectors and names are displayed.

   b. **Header Connector**: Displays the Header Connector's name.

   c. **Line Connectors**: Displays the Line Connector's name.

3. You can search for Subledger Event Grouping Name.
4. You can define an Event Group, Manage Group Attributes, and Delete user-defined group events.
5. Click Delete if you want to delete a Subledger Event Group.

It is not possible to delete a pre-packaged Subledger Event Group.

Defining an Event Group

To define an event group, follow these steps:

1. From the **Subledger Event Grouping** window, click to define the event group. The **Define Event Group** window is displayed.
2. Enter the required details and click **Save**.

Managing Group Attributes

To manage group attributes, follow these steps:

From the **Subledger Event Grouping** window, click to manage group attributes. The **Manage Group Attributes** window is displayed with the **Available Event Groups**.

Subledger Attributes

The Subledger Attributes user interface provides a list of seeded Header and Line Attributes, which can be mapped to an SLA while defining it. These attributes cannot be edited. You can also add multiple attributes to the list of attributes, which can be mapped to an SLA during SLA Configuration. The ledger balances can be calculated based on these Subledger Attributes. To accommodate Custom Attributes, there is an option to add Custom Attributes that can vary from user-to-user to configure Custom Subledger. These custom attributes can help in creating rules and extracting ledger balances in a required way.

Adding a Subledger Attribute

To add a Subledger Attribute, follow these steps:

1. From the **Subledger Application** Window, select **Subledger Attributes**.
   The **Subledger Attributes** Window is displayed with a list of seeded data with Logical and Physical Name.
2. Click **Add** to add a new attribute.
   The **Add Attribute** Window is displayed.
3. Enter the **Logical Name** and **Physical Name**.
   Physical Name can have only numbers and alphabets in Upper Case.
4. Select the **Domain**, **Attribute Type**, and **Transaction/Passthrough** Details from the drop-down list.
   Transaction or Passthrough is a type of Subledger. Use this attribute for Transaction Type of Subledger or Passthrough Type of Subledger.
5. If the new attribute added is a Header Type, it appears in Transaction Information. If the new attribute added is a Line Type, it appears in Line Information in SLA.
6. Click **Save**.

> **NOTE:**
> You can delete only a new attribute that has been added but not a seeded attribute. If the added attribute is already mapped in the SLA and saved, it cannot be deleted.

Registering Accounting Content with your ERP Service

This section contains the following topics:

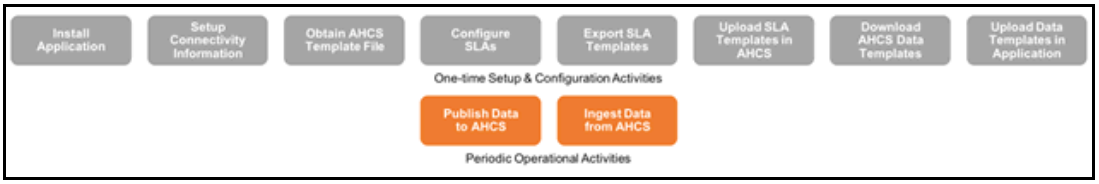
Registration of SLAs with Accounting Hub Service

Topics:

Registration of SLAs

> **NOTE:**
> Before registering the Account Content with ERP Service, you must configure details in Details, Event Types, and Attribute tabs.
> For more information, see the Adding a Subledger Application Section.

Figure 1: Periodic Operational Activities



To register the SLAs with Accounting Hub Service, follow these steps:

1. From the **Subledger Application** Summary Window select the SLA that must be registered.
2. From the Subledger Application Summary Window, click the **Actions** drop-down and select **Download Template**. A file with the XLSM extension is downloaded to the Client Machine. This XLSM file maintains the template in `XlaSourceSystemSetup.xlsm` with Subledger Application details filled in.

In the **Instructions** sheet, all the details are explained. Note that, the XLSM file must not be manually modified. The details that follow are to aid with the users' understanding of the content of the files and how it participates in the integration process.

In the **Source System** sheet, the Name and Short Name given in the Subledger Application Window are displayed.

> **NOTE**
> The Name or Short Name, which appears in the row, must have the event type name along with the Subledger Application Name following the EVENT_TYPE_NAME_SLA_NAME Pattern, as shown in the preceding image. The Transaction Type name is appended with the SLA name to maintain the uniqueness of transaction types across all Subledger Applications. The Short Name is limited by AHCS Specifications to 30 characters and those employed by FSDF Integration for AHCS must consider this.

In the **Transaction Information** sheet, those Transaction Type Names and Short Names against which Journal Display is set to Yes is displayed through the AHCS User Interface.

In the **Line Information** sheet, those Transaction Type Names, and Short Names against which Journal Display is set to Yes are displayed through the AHCS User Interface.

> **NOTE**
> The three mandatory columns are listed in a greyed area for both Transaction Information and Line Information.

3. Click **Validate** in the Source System Tab of the XLSM file to check if there are any errors in the template. Note that this step must be performed manually.

> **NOTE**
> The XLSM files must not be manually modified. If you want to make changes to the files, make the required changes using the SLA User Interface and follow the steps to download the template again.

4. Click **Generate ZIP**, in the Source System Tab of the XLSM file, to compress required content and prepare the ZIP file. Note that this step must be performed manually.
5. Upload the ZIP file thus generated to your instance of AHCS. See the AHCS User-Documentation for details on how this must be performed.

> **NOTE**
> In AHCS, map the Entered Amount and Entered Currency in the Manage Accounting Attributes Window to Transaction Amount and Transaction Currency before proceeding with the configuration of Accounting Rules.

6. Once the generated ZIP file is uploaded to your instance of AHCS, download the data template generated by AHCS corresponding to the SLA registered through the Download Data Template Function in AHCS.

See the Oracle Financials Documentation for details on how this must be performed.

7. Click Register from the Actions drop-down list.
8. Drag the data template generated by AHCS File from your instance of AHCS into the window.

   Alternatively, you can click **Browse** and select the file.

   After successful completion, the SLA Definition is now registered.

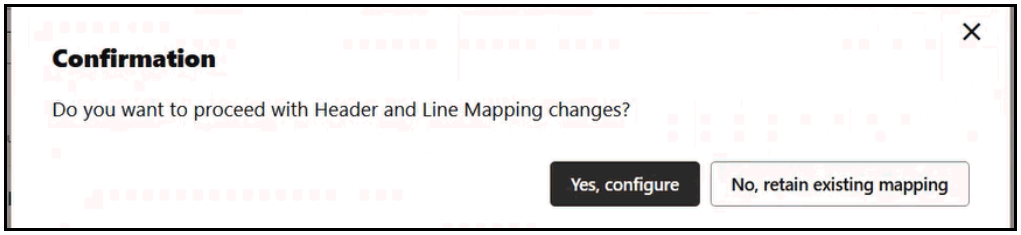
Configuring an SLA

The SLA Configuration is used to create the connectors.

To configure an SLA, follow these steps:

1. Navigate to the **Subledger Application Summary** Window and select **Product Information**.
2. Click **Configure** after defining the Header Mapping and Line Mapping.

   For more information, see the Adding a Subledger Section.



Publishing SLAs

The SLA Publish function is used to create the Pipeline for SLA.

To create a pipeline for SLA, follow these steps:

1. Navigate to the SLA and select **Product Information**.
2. Navigate to **Review** Tab after defining the Header Mapping and Line Mapping.
   For more information, see the Adding a Subledger Section.
3. Click **Publish** to create an Execution Pipeline for the SLA.

   To access the Pipeline, go to the Subledger Application Window and select the required SLA. The Process Management Link will be available in the selected SLA.

   For more information, see the Managing Data Section.

Adding a Subledger Application

This section provides information for adding a Subledger Application (SLA).

Other Topics Included Here:

- Accounting Balance Ingestion
- Journal Extraction

To add a Subledger, do as follows:

1. Click **Add** to create a new Subledger. A **New** Page is displayed.
2. In **Details**,
    a. Enter the following details fields:
        - Specify a unique Subledger Application Name
        - Describe the Subledger Application
        - Specify a unique code for Subledger Application
        - Specify the Ledger Name

    b. Select the Event Class, either **Transaction** or **Passthrough**.

    c. Select the **Products** and click **Next**.

    Based on the selected Event Class, the Product list is updated.

    The "Save Successful" Confirmation Message is displayed. The SLA details are successfully saved.

    The status of the Subledger is changed to **Draft** and **Created By** details are added.
3. In **Event Types**,
    a. From the list of event types available in the application, select the required event type.

    b. Click **Add Event Type** to add a new event type if not available.

    A **New** window is displayed.

    c. Enter the following details:
        - Name
        - Code
        - Description

    d. Select the **Event Class**. Either **Passthrough** or **Transaction**.

    e. Click **Save**.

    A new event type is added to the list of Event Types.

    f. Search for an Event Type in the Search Field Box.

    g. Click **Next**.
4. In **Attributes**,
    a. From the list of attributes available in the application, select the required attribute.

    b. Click **Add Attribute** to add a new attribute if not available.

    A **New** window is displayed.

    c. Enter the following details:
        - Name

- Physical Name
- Domain

d. Select the **Attribute Type**. Either **Header** or **Line**.

e. Select the **Event Class**. Either **Passthrough** or **Transaction**.

f. Click **Save**.

A new attribute is added to the list of Attributes.

g. Search for an Attribute in the Search Field Box.

h. Click **Next**.

> **NOTE:**
> Before proceeding with Header Mapping, you must register the SLA.
> For more information, see the Registering Accounting Content with your ERP Service Section.

5. In **Header Mapping**,

   a. Select the required **Data Mapping** from the Left Menu.

   b. Enter the **Header Data Mapping Name in** Specify the Header Data Mapping Name Field. This is auto-populated field. You can change as required

   c. Define the mapping from list of Subledger Attributes and Account Attributes using the corresponding check-box. Only selected Subledger attribute will be used.

   d. Click **Next**.

> **NOTE:**
> Here, you can see the list of Product tables and respective columns. You must ensure that the data selected in the Product and Transaction Tables is available in the Staging Tables too.

6. In **Line Mapping**,

   a. Select the required **Data Mapping** from the Left Menu. Here, you can see the list of Transaction Tables and respective columns. You must ensure that the data selected in the Product and Transaction Tables is available in the Staging Tables too.

   b. Specify the header data mapping name in **Specify the line data mapping name** Field. This is auto-populated field. You can change as required.

   c. Define the mapping from list of Subledger Attributes and Account Attributes using the corresponding check-box. Only selected Subledger attribute will be used.

7. Click **Yes** to configure or click **No** to retain the existing mapping when the "Do you want to proceed with Header and Line Mapping changes?" confirmation message is displayed.

   For more information, see the SLA Configuration Section.

8. Click **Next**.

In **Review**, you can view the details of the SLAs. In the Review Tab, the details of the connectors defined for the SLA (current SLA) can be viewed.

9. Click **Publish**.

   The SLAs which have connectors are auto-generated. You cannot modify the Seeded Connector.

10. Click **Yes** to continue when the "Do you want to Proceed? Subledger application will not be available for any modification and will be locked for execution." confirmation message is displayed.

    A pipeline is automatically created for the SLA in **Process Management**. Execute the Pipeline using the **As of Date** parameter.

    For more details, see the Executing the SLA Pipelines Section.

11. Click **Yes** to continue.

    The "Publish Successful" Confirmation Message is displayed after the SLA is published. The status changes to **Available**.

12. Click the SLA to view the **Connector** Page.

    For more details, see the Creating Connectors Section.

Accounting Balance Ingestion

The AFCS has a predefined process to extract the General Ledger Balance from your ERP Financials Cloud Service and ingest it into AFCS. This is achieved by executing the GL Balances Process.

Prerequisite

Before executing the GL Balances Process, perform the following to ensure that the files are available on the ERP Financial Cloud Service:

1. Define an extract job in the BI Cloud Console for the following BIV objects:
   - FscmTopModelAM.FinGlAccountsCodeComboAM.CodeCombinationPVO
   - FscmTopModelAM.FinGlInquiryBalancesAM.BalancePVO

   The extract path must be chosen as Universal Content Manager (UCM) for the BI Cloud Console Extract and the specified columns must be selected in a specified order according to the above-listed sheets.

2. Schedule an extract job for the BIVs created in the previous step.
3. After the files are extracted, download a sample extract file for all the BIV Object extracts and check for column orders.

   If the column order is not matching, then update the column order in the EDDs as per the respective extracted data files.

GL Balances Process

The GL Balances Process consists of components that perform the following tasks.

1. General Ledger Balance Extraction - Downloads extracted data files from the ERP Financial Cloud Service.
2. Balance Ingestion - Loads data from the downloaded files to AFCS.

Executing GL Balances Process

To execute the GL Balances Process, follow these steps:

1. To execute, navigate to **Process Modeller** UI using **Process Orchestration** Option.
2. Search for GL Balances Process and execute using the **As of Date** Parameter.

   For more details on how to view the execution status in the Process Monitor Window, see the Managing Processes Section.

Copying a Subledger Application

To copy a Subledger, follow these steps:

1. From the **Subledger Application** window, select a Subledger and click **Copy**.

   The **Save Subledger** Window is displayed.
2. Enter the **Name** and **Short Name** and click **Save**.

   All the properties are copied except the Name and Short Name as it must be unique.

   For example, see the following table:

   Table: Connector Name Before and After Copy

Connector Name Before Copy	Connector Name After Copy
AH Com Bill Contract Header AH Com Casa Header	AH (copied SLA Name) followed by Hdr1, Hdr2, and Hdr3
AH Com Commitment Header	AH (copied SLA Name) followed by Hdr1, Hdr2, and Hdr3

   Similarly, for Line Mapping, the name after copy displays **AH <SLAname> Ln1**.

   The EDD Name is also replaced with the copied name in the **Connector** Window in the **AH SLA <SLA name> Header** and **AH SLA <SLA name> Line** Format.

Executing the SLA Pipelines

The SLA Pipelines are auto-generated during the SLA Publish process with all required components for Event Posting. The auto-generated process names start with **ERP Integration for** followed by the SLA Name.

For example, For Passthrough, the Process Name is **ERP Integration for Passthrough**.

Prerequisite

Before executing the SLA Pipelines, ensure that the respective SLAs are Published and the status is **Available**.

SLA Pipeline Process

Each SLA Pipeline Process consists of components that perform the following tasks.

1. Event Grouping and Extraction Connectors - Extracts Header and Line Information.
2. Event Posting - Compresses Header and Line Data into a ZIP File, uploads the ZIP File to UCM, schedules the ESS job, and monitors the status.
3. Persists Events - If Event Posting is successful, the Header Information is persisted in the process area. This data will be used to exclude posted records and submit only incremental data during multiple runs on a SLA on the same date.

Executing SLA

To view and execute the SLA Pipelines, follow these steps:

1. Navigate to the **Subledger Application** Window.
2. Select an SLA.
3. Click **Process Management** to display the List of Processes linked to the selected SLA.
4. To execute a pipeline, click the required Process to open it in the **Process Flow Canvas**.
5. Click **Execute this Connector** using the **As of Date** parameter.

   The **Process Modeller Summary** Window is displayed.

   For more details on how to view the execution status in the Process Monitor Window, see the Managing Processes Section.

Managing Data Catalog

Data Catalog is the logical representation of the underlying Data Model, which is contextualized by the Metadata to enable a better understanding of the Data Model and the Enterprise-wide Data.

Data structures underlying AFCS are delivered, deployed, viewed, extended and managed with associated metadata through Data Catalog. The Data Catalog has the following traits:

- Representation of data structures in Business Terms.
- Representation of data structures in technical terms, including their physical manifestation and properties.
- Alignment of data structures with Domains.
- Metadata, including Data Model and quality constraints.

This section provides information about how you may access, view, extend and manage your Data Catalog.

Accessing the Catalog

To access the Data Catalog, navigate to the Catalog Viewer. To navigate to the Catalog Viewer, on the Home Page, select **Browse Data Catalog**. The **Catalog Viewer** Page is displayed. The deployed Domain, its corresponding Subject Areas, and all the relevant Entities are listed on the Catalog Viewer Page by default. Click the **Previous** or **Next** Arrow Buttons to navigate through the complete list of Entities.

For more information, see the OFS AFCS Data Catalog Release 22A.

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For more information, see the OFS AFCS Data Catalog Release 22A.

Viewing Catalog Content

Catalog Viewer is the Viewing Framework of the Data Catalog.

Use the Catalog Viewer User Interface to see and understand the Catalog Components equivalent to the Data Model granularity. For more information about the Catalog Viewer, see the *Catalog Viewer* Section in the OFS AFCS Data Catalog Release 22A.

Extending Catalog Content

The Catalog Extension allows you to extend the Seeded Catalog Contents to support a new or client-specific business use cases. You can create new definitions or customize the existing definitions based on context.

For more information about extending the Data Catalog, see the *Catalog Extension* Section in the OFS AFCS Data Catalog Release 22A.

Managing Data

This section provides details about exchange of data between AFCS and external systems. This is facilitated through logical abstraction of the Data Catalog exposed as Application Data Interfaces (ADI). External Data Descriptors (EDD) are defined through the user interface, which also facilitates the mapping of EDDs to ADIs, forming Connectors.

Related Topics:

- External Data Descriptor
- Connectors

File Operations

The file operation is a process by which you can add files that must be processed to the object-store. You can upload any CSV or text file that you wish to be stored in the object store and this can be processed later.

To upload and download any text file you must use the **File Operations** Window.

To upload a file, do the following:

1. Navigate to **Accounting Foundation** > **Administration**.
2. Click **File Operations**.
3. Click **Upload File**.
   The **Upload File** window is displayed.
4. Select **Files Upload** and then enter the **File Name**.
5. Select the **File** format from the drop-down.
   The supported file types are: CSV, XLSX, and Text.
6. Enter the **File Size** (in bytes).

   It is possible to click **Add** to add more files and also click Delete to delete the added file.
7. Click **Generate**.
   This generates a PAR (pre-authenticated request) url which is valid for 24 hours. This generates the PAR url, which is used to upload the file into the object-store.

   For more information on using the PAR URL, see the Working with Pre-Authenticated Requests Section in https://docs.oracle.com/en-us/iaas/Content/Object/Tasks/usingpreauthenticatedrequests.htm.

Data Ingress

External Data Descriptor

External Data Descriptors (EDD) are definitions of specific data content from External Data Sources (EDS). Each EDS may have a number of EDDs defined against it. EDD definitions can be used for ingesting data into AFCS Data Foundation or extracting data from it.

AFCS also supports the usage of control information while ingesting data into the Data Foundation. Such control information may also be defined as EDDs.

1. From the **Subledger Applications** page, select the required SLA.

   The steps for the selected SLA is displayed.

2. Click **Data Ingestion** to define **External Data Descriptors** and **Connectors**. You can also manage data ingestion by configuring sources, mapping to catalogue and required transformation.
3. Click **External Data Descriptors**. The **External Data Descriptors** Summary Page is displayed.
4. You can search of the required EDD in the search box.
5. Click **Add** to configure additional EDDs. For details, see section Defining an External Data Descriptor.
6. Click **Delete** to delete an existing EDD. For details, see section Deleting an External Data Descriptor.

Data Tab

The following table describes the fields in the Data Tab.

Table: Data Tab Description

Fields	Description Fields marked in red asterisk (*) are mandatory
Data File Name	You can add multiple data files to an EDD. For example, you need to add the Term Deposits Contracts data file. There are Term Deposits Contracts data files for Retail as well as Corporate accounts. Therefore, to get both these details, you first add the Term Deposits Contracts data file for Retail accounts, such as td_contracts%#MISDATE%_1.csv, and as the next record, add Term Deposits Contracts data file for Corporate accounts. This is recommended to break the huge file into small files. Optimize file size is 3 GB per file. **Example**: td_contracts%#MISDATE%_1.csv
Record Delimiter	The records are stored differently in different operating systems. The options available are: • MS-DOS • Unix • No Record Delimiter • Other For example, select Unix.
File Format	There are two options: • **Fixed Length**: The file has records and columns with a fixed length. Each column has a predetermined and unchanging size, set when the record layout is designed, and the sum of the column sizes add up to the record size. • **Delimited**: There is a separation of the records and columns using a delimiter character like a comma, semicolon, hyphen, and so on. For example, select Delimited.

Text Qualifier	A character that identifies a text. This is used when some characters exist within a text. Generally, double quotes are used, prefixed, and suffixed with text. This is optional.
Skip Number Of Records	Provide the number of records to be skipped. The records are skipped from the top. Generally, this is used to skip Headers.
Decimal Separator	This mentions up to which decimal digit you want to view the result.
Read from template	A template contains all the values and is in Excel file format. If the template is not available, you must create it manually by clicking Add, under the Source Data Elements tab. If the template is available, you can browse for the template. See the File EDD Template. You can also drop the template in the area "Drop template here or click to select ".
Select Template (*.xls,*.xlsx,*.CSV Files Only	Click **Browse** and select the required template.
Data Elements	
Name	Name of the field in EDD. **Example**: Field name in a file or column name in a table. **NOTE**: The Field name of XML type must not be more than 25 characters and for others must not be more than 30 characters.
Type	This shows the Data type of the field. **Example**: String, Number, EBCDIC, and so on.
Length	This is applicable only for the EBCDIC format. This is the length of the EBCDIC data type. In the case of a file, it is length only.
Precision	This is used to specify the decimal point. **Example**: 10.3.
Format	Specify the format for columns of type date here. If left blank, a default format of DD/MM/YYYY is assumed and used. **NOTE**: • The default format is fixed and does not change with database or system language settings. • For data ingestion, enter the format in which date fields are provided. • For data extraction, enter the format in which extracted date fields must be recorded. For example, in the file extract, to represent the date, 31st January 2020, as "31/01/2020", specify the format as DD/MM/YYYY for the date columns.
Record Type Code	This identifies the Record type in a file where Header, Trailer, and Data are of different record length and type. The values can be any string available in the text file. This value is only possible for the first field in a file. **Example**: The values can be DATA; CTRL to specify it is a control record.

Control Tab

In the Control tab, DIH enables you to:

1. Reconcile between source data received and data loaded into AFCS, using the control information available from the source system. This feature is used to implement record count validation or

amount reconciliation from a source file. It also allows specifying a threshold for validation. The specified threshold is compared with the difference (record count or amount) to perform the validation. Only in case, the difference is more than the threshold value the execution fails.

2. The threshold can be absolute or percentage value. The connector execution process considers the threshold type while performing reconciliation.
3. Generate control information for File extracts from AFCS. Specifying control for extract EDDs generates control details, based on the configuration in the EDD. Both record count and amount value (sum, average, max, and so on) for specific columns are recorded into the control file.

> **NOTE:**
> This option is applicable only for File type EDDs (ASCII and EBCDIC).

The following fields must be configured to achieve this functionality.

Table: Control Tab Description

Fields	Description Fields marked in red asterisk(*) are mandatory
When **Separate File** is selected as **Yes**.	
File Name	Specify the name of the file.
File Format	There are two options: • **Fixed Length**: The file has records and columns with a fixed length. Each column has a predetermined and unchanging size, set when the record layout is designed, and the sum of the column sizes add up to the record size. • **Delimited**: There is a separation of the records and columns using a delimiter character like a comma, semicolon, hyphen, and so on. In the previous example, select Delimited.
Column Delimiter	If the File Format is selected as Fixed Length, the Column Delimiter would by default be Other. If the File format is selected as Delimited, the following options are available in the drop-down list. • Other • Space • Semicolon • Comma • Tab In the previous example, select **Comma**.
Record Type Code	Used to uniquely identify a record within a file. A Financial Institution sometimes provides files that have data and control records within the same file. In that case, to distinguish between data record and control record, the first field is Record Type. It has a specific value to identify that. Here, specify the value that identifies the Data. Values can be 'DATA' and so on. For the Control record, the value is specified under the Control tab. Only the first field of a file is used for Record Type.

Record Delimiter	The records are stored differently in different operating systems. The following options are available: • MS-DOS • Unix • No Record Delimiter • Other For example, select Unix.
Skip number of records	Provide the number of records to be skipped. The records are skipped from the top. Generally, this is used to skip Headers.
Text Qualifier	A character that identifies a text. This is used when some characters exist within a text. Generally, double quotes are used, prefixed, and suffixed with text. This is optional.
Decimal separator	Specify up to which decimal digit you want to view the result.
Record Type Length	The length of the record type value to pick up the correct record. For example, if the control record is "DATATotal Records400" and DATA is the Record type, the length is '4'. This is applicable only for Control records that are of Fixed length.
Control Name Length	Based on the previous example, the Control name is "Total Records". Therefore, the Control Name Length is '13'.
Control Value Length	Based on the previous example, the Control value is 400. Hence, the length of the control value is '3'.
When **Separate File** is selected as **No**.	
Record Type Code	Used to uniquely identify a record within a file. A Financial Institution sometimes provides files that have data and control records within the same file. In that case, to distinguish between data record and control record, the first field is Record Type. It has a specific value to identify that. Here, specify the value that identifies the Data. Values can be 'DATA' and so on. For the Control record, the value is specified under the Control tab. Only the first field of a file is used for Record Type.
Control Value Length	Based on the previous example, the Control value is 400. Hence, the length of the control value is '3'
Control Name Length	Based on the previous example, the Control name is "Total Records". Hence, the Control Name Length is '13'.
Controls	
Control Name	Specify the name of the control.
Aggregation Method	Select either **Aggregation Method** or **Count**. The supported aggregation methods are as follows: • Min • Max • Average • Sum
Aggregation Column Name	Select the column on which the aggregation method is applied. NOTE: For count, no column needs to be selected.

Threshold Type	This field is optional. There are two selections of threshold, percentage, or absolute. If the percentage is selected, the reconciliation difference in percent is matched against this threshold value. If absolute is selected, the absolute percent difference is matched against this threshold value.
Threshold Value	Specify the difference value in percent or absolute.

Transformation Tab

The following table describes the fields in the Transformation Tab.

Table: Transformation Tab Description

Fields	Description Fields marked in red asterisk(*) are mandatory
Transformation Type	A drop-down listing different types of transformation supported. Currently, the only Aggregation is supported.
If the T**ransformation Type** is selected as **None**:	
Derived Data Elements	
Name	Name of the derived field in EDD. **NOTE**: Field names must not be more than 30 characters.
Type	Shows the Data type of the field. **Example**: Varchar2, Number, Date, and so on.
Expression	When you select the 'Add option', the Specify Expression window is displayed. Here, you can select the required Entities, Functions, and Operators. That is, you can write your expression. Enter the field name and click OK. Now the newly created field name is listed.
If the **Transformation Type** is selected as **Aggregation**:	
Derived Data Elements	
Name	Name of the derived field in EDD. Note: Field names must not be more than 30 characters.
Type	This shows the Data type of the field. Example: Varchar2, Number, Date, and so on.
Expression	When you select the 'Add option', the Specify Expression window is displayed. Here, you can select the required Entities, Functions, and Operators. That is, you can write your expression. Enter the field name and click OK. Now the newly created field name is listed.
Aggregation Properties	
Group By	This is available when Aggregation is selected.
Having	This is available when Aggregation is selected.

Defining an External Data Descriptor

To define a new EDD from the DIH Designer window, follow these steps:

1. From the **Data Ingestion** summary page, click **Add**.
   The **External Data Descriptor** new window is displayed.
2. In the New page, enter the Data Descriptor Name, Describe the Data Descriptor and then select **Data Source** from the drop-down list. The Data Source is the Source you had created. In this example, it is, DRM_SRC_FILES. The values in Defining an External Data Store example are used. The description comes up automatically.
3. Click **Save as Draft** or click **Save**.
4. Enter the values in the fields as described in the Fields and their Description Section.
5. If data needs to be reconciled post-loading, then click the Control tab. In this version, only the Number of Records controls is possible.
6. To transform the **EDD**, click the **Transformation** Tab.
7. You can add derivation to data elements of the EDD.
   a. Click **Add** to create derived data elements.
   b. To edit the derived data element, click **Edit**. The **Expression** Window is displayed.
   c. The expression can be specified using the data elements defined in the Data tab and functions.
   d. To delete the derived data element, click **Delete**.
8. Click the **Transformation** tab and select the **Transformation Type**.
   a. Select **Aggregation** and click **Edit** to view **Expression Window**.
   b. Specify the Group by clause and Having expression, if applicable.
   c. Define Derived Data Elements for the field to be aggregated under the previous tab.
9. Click **Save**.

Modifying and Viewing an External Data Descriptor

You can edit or view an existing EDD, other than EDDs in Published Status.

> **NOTE:**
> You cannot edit EDDs in Published status.

To edit or view an EDD, follow these steps:

1. Select the required EDD from the **EDD Summary**.
2. The details of the selected EDD are displayed. You can modify or view the details.
3. Update the required details.
4. Click **Save** to save the changes made.

5. Click **Save as Draft** to save and update later.
   The status shows as Draft.

Deleting an External Data Descriptor

This option only checks the higher-order object. That is, if the order has a dependency, you cannot delete it unless the dependency is removed.

For example, assume EDD is used in Connector. Then, unless the Connector is deleted, the used EDD cannot be deleted.

To delete an existing EDD, follow these steps:

1. On the **EDD Summary**, click **Delete**.
   A confirmation dialog box is displayed.
2. Click **Yes**.
   The EDD details are deleted.

Search and Filter

The Search and Filter options in the UI helps you to find the required information. You can enter the nearest matching keywords to search and filter the results by entering information on the search box. You can search for an EDD using either the name, description, status, or type.

For example, enter the EDD keyword as 'Loan Data' in the search box. The search shows the list of all EDD containing the text "Loan Data".

Parameters in EDD Definition

While defining an EDD, the parameter can be used as a placeholder in a data filename.

For example:

Consider a table with two columns, such as Account number and Balance.

Table: EDD Parameters Example

Account Number	Balance
A1	1000
A2	1000
A3	1000
A1	1000
A2	1500
A3	1500

In this example, a customer has three accounts (A1, A2, and A3).

The customer has deposited different amounts on January 1st and 2nd 2014. The CSV data files can be created for those two dates as follows:

- The account transaction for January 1st, 2014 is saved as td_contracts_/01012014/.csv
- The account transaction for January 2nd, 2014 is saved as td_contracts_/01022014/.csv

If a parameter, MISDATE, is defined as a Runtime, this can be used as a placeholder that substitutes date in mmddyyyy format. That is, the data filename can be mentioned as td_contracts_%#MISDATE%.csv. When this file is called, it substitutes the date in the file name, dynamically, in the Runtime.

Parameters Data Types need not always be Runtime. They can be Constants or values like Current Date, which can also be used to substitute a value in a data filename.

Data Egress

Connectors

Connectors allow mapping one or more External Data Descriptors with an Application Data Interface.

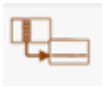
You can configure the Insert Connectors for data exchange.

Icons and Description

To create a connector, you must understand each of the icons at the beginning. While creating a Connector, the icons that are displayed are explained as follows:

Table:Icons and Description

Icon	Description
	Click this icon to view the list of all External Data Descriptors created in the setup. You can drag the desired EDD on the canvas.
	Click this icon to view the list of all ADIs created in the setup. You can drag the desired ADI on the canvas.
	Click this icon to open the Mapping window. You can map the source column to the target column in the window.
	This component is used for defining a join between two entities. Click this icon to open the window where you can define the join condition between two entities.
	This component is used for defining the filter of a given entity. Click this icon to open the window where you can define the filter condition.
	This component is used for defining the lookup condition. Click this icon to open the window where you can define the join condition between two entities.
	This component is used for defining the Derived column. Click this icon to open the window where you can define an expression, which can be mapped to the target column.

Icon	Description
	This component is used for transforming flattened hierarchy entities into parent-child hierarchy entities.
	This component is used for Transpose (Rows to Columns) for a given entity. Click this icon to open the window where you can define the pivot data element and the new columns, which are transposed from multiple rows of source entity.
	This component is used for Transpose (Columns to rows) for a given entity. Click this icon to open the window where you can define the unpivot data element and new rows which are transposed from columns of the source entity.
	This component is used for defining a group by and having a clause for Aggregation. Click this icon to open the window where you can define a group by and having a clause for aggregation.
	Click this button to remove all the nodes added to the canvas.
	This is displayed on the connector window when the connector is published and is opened in view mode. The connector is not editable.
	This is displayed on the connector window when the connector is not published. The connector is editable.

Creating Connectors

The connector allows mapping one or more External Data Descriptor with Application Data Interface. It allows mapping of one or more ADI with EDD as well, in the case of extract type connector.

Ingesting Data into AFCS

To create a Connector for ingesting data into AFCS, follow these steps:

1. On the **Data Ingestion** page, click **Connector**.
   The connectors which are defined are listed here.
2. Click **Add**.
   The **New Connectors Definition** window is displayed.
3. To define a connector, you must have a source with EDD and a target, which is ADI.
4. Click **Source** to select the required EDD from the list defined in the default EDS of the ERP File Extracts..
5. Select the default EDS-ERP File Extracts File Type EDD and drag it to the canvas.
6. Click **Target**.
7. Click **Search** to search for a particular ADI.
8. Select the required ADI. Drag it to the canvas and then link the input and output nodes.

9. Click the input white circle.
   The anchor symbol is displayed. Drag and drop the line to link it to the required component.
10. At any given time, you can right-click the node to either delink or remove links/outline or delete a node.
11. To edit or view the properties, on the **Connector** window, click  .
12. In **Connector Details**, enter the name and description for the connector.
13. In **Pre Load Options,** select the truncate option to be defined in the target.
    - To remove data from the table as per the truncate option specified, select **Truncate**.

    Select **No**, if you do not wish to truncate the table before loading.

    The service will display an option to perform Partial Truncate. This option is not enabled as of 22A and should not be chosen.

    NOTE
    For multi-target loads, the truncate type must be the same for all targets. However, truncate expression may vary.

    - Select **Full Truncate** to fully truncate. Here no expression is required. If you want to truncate the entire table, the Full Truncate option must be selected.
    - Select **Selected Rows** to truncate on the selected expressions. If you remove specific rows, the selected rows option must be selected. Specify the filter condition for the rows to be deleted. Specific rows are removed from the table before load.
      - Click **Edit** to filter the selected rows.
      - Select the required entity and click **Validate**. This validates the expression.
      - Click **Ok** once the expressions are selected.

    In the image, truncate details are selected for Account Address.

Using Filter

To use the filter component, follow these steps:

1. Drag and drop the **Filter** component on the canvas to define a filter on an entity. For example, EDD (Insert Connector) / ADI (Extract Connector).
2. Alternatively, you can navigate to the component using the Tab key and use keyboard shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. It accepts input only from an entity and it can have only one output.
4. If you have multiple entities selected, and you want to have a filter for more than one entity, then you must select as many numbers of filters, connect to the respective entity, and then define their expressions.

5. For example, to add a filter to three entities, drag three filters.
6. At any given time, right-click the filter component to either delink or remove inlinks / outlinks or delete the filter component.
7. Double-click filter component. The **Filter Expression** Window is displayed.
8. The selected entities and parameters are displayed in the **Filter Expression** Window.
9. Specify the required filter expression using columns and parameters.
10. Click **Validate** to verify the correctness of the SQL Expression.
11. Click **OK**.

> **NOTE:**
> You do not need to add the 'WHERE' clause for the filter.
> 1. For File data loading, use the filter expression of the Number type along with single quotes. For example: N_DRAWN_AMOUNT ='40000'.
> 2. For the Date field, see To_CHAR function for comparison.
> 3. Parameters can also be used in the filter expression. The date format must be a valid SQL Date Format.
>
> For Example:
> [EDD_GL_DATA].[EXTRACTION_DATE] = TO_DATE(#DIHDEV.MIS_DATE,'dd-MM-yyyy').

Using Join

To use the join component, follow these steps:

1. Drag and drop the **Join**  component on the Connector Window to link multiple entities. For example, EDDs (Insert Connector) / ADIs (Extract Connector).
2. Alternatively, you can navigate to the component using the Tab key and use keyboard shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. The Join component accepts input from two entities.
4. To join more than two entities, drag another join component. Link the output of the first join to the input of the second join and then connect the other entities. You can repeat this for multiple entities. Select the Source Entity and click **Ok**.
5. At any given time, right-click the join component to either delink or remove inlinks / outlinks or delete a join component.
6. Double-click the join component to define a join condition. The Join window is displayed:
7. Here you see the selected entities in the left and right tab.
8. You can drag and reorder the left and right tab to choose the right/left entity in a join condition.
9. To join entities, the select column from the left and right tab and click **Add Join**. This displays the joined entities. You can join multiple entities.

10. To remove two joined conditions, select two columns from the left and right tab, and click **Remove Join**. The joined condition is removed from the list.
11. Click **Reset** to reset all the joined conditions.
12. Click **Ok**.

> **NOTE:**
> This creates an inner join between the connected EDDs.

Using Lookup

To use the lookup component, follow these steps:

1. Drag and drop the **Lookup**  component on the canvas to define a filter on an entity. For example, EDD (Insert Connector) / ADI (Extract Connector).
2. Alternatively, you can navigate to the component using the Tab key and use keyboard shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. You can lookup values from an entity using this component.

> **NOTE:**
> The lookup component accepts input from two entities. One from Value Entity and the other one from the Lookup Entity.

4. At any given time, right-click the lookup component to either delink or remove inlinks / outlinks or delete a lookup component.
5. Double-click the lookup component to define a lookup condition. The Lookup Window is displayed:
6. Here you see the connected entities in the left and right tab.
7. The entity that is on the right side of the window is the lookup entity. You can change the lookup entity by moving it to the right side. The “LookUp Entity” field displays the entity specified for lookup.
8. To specify lookup condition, select data elements from left and right entities and click Add Join . Lookup Condition is displayed as follows:
9. To remove a lookup condition, select data elements from left and right entities and click Remove Join. The Lookup Condition is removed from the list.
10. Click **Reset** to reset the Lookup Condition.
11. Click **Ok**.

> **NOTE:**
> This creates a left outer join between the connected entities.

Using Aggregation for an EDD

To use the aggregation component, follow these steps:

1. Drag and drop the **Aggregation**  component on the canvas to define an aggregation on an EDD.
2. Alternatively, you can navigate to the component using the Tab key and use key board shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. It accepts input only from an EDD and it can have only one output.
4. If you have multiple EDDs to be aggregated then you must select as many numbers of aggregation components, connect to the respective EDD, and then define their group by and having clauses.
5. For example, to add aggregation to three EDDs, drag three aggregation components.
6. At any given time, right-click the aggregation component to either delink or remove inlinks / outlinks or delete the aggregation component.
7. Double-click the aggregation component to define an aggregation condition. The Aggregation Window is displayed:
8. Here you see the selected EDD under the Entity Tab.
9. Select the group by columns and specify an expression for the having clause.
10. Click **Reset** to reset all the aggregation conditions.
11. Click **Validate** to verify the correctness of the SQL Expression.
12. Click **Ok**.

Using Aggregation for Entire Dataset

To use the aggregation component, follow these steps:

1. Drag and drop the **Aggregation**  component on the canvas to define an aggregation on the entire dataset.
2. Alternatively, you can navigate to the component using the Tab key and use keyboard shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. It accepts input only from the mapping component or filter that is connected to the mapping component.
4. At any given time, right-click the aggregation component to either delink or remove inlinks / outlinks or delete the aggregation component.
5. Double-click the aggregation component to define an aggregation condition. The Aggregation Window is displayed:
6. Here you see the selected EDD under the Entity Tab.
7. Select the group by columns and specify an expression for the having clause.

8. Click **Reset** to reset all the aggregation conditions.
9. Click **Validate** to verify the correctness of the SQL Expression.
10. Click **Ok.**

Using Transpose (Rows to Columns) for an EDD

To use the Transpose (Rows to Columns) component, follow these steps:

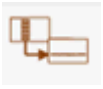
1. Drag and drop the **Transpose** (Rows to Columns)  component on the canvas to define a Transpose (Rows to Columns) component on an EDD.
2. Alternatively, you can navigate to the component using the Tab key and use keyboard shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. It accepts input only from an EDD and it can have only one output.
4. If you have multiple EDDs selected, and you want to have a Transpose (Rows to Columns) component for more than one EDD, then you must select as many numbers of Transpose (Rows to Columns) components, connect to the respective EDD, and then define their expressions.

   NOTE:
   The output can be connected to Join, Lookup, and Mapping.
   For example, to add the Transpose (Rows to Columns) component to three EDDs, drag three Transpose (Rows to Columns) Components.

5. At any given time, right-click the Transpose (Rows to Columns) component to either delink or remove inlinks / outlinks or delete a Transpose (Rows to Columns) Component.
6. Double-click the component to transpose the entity rows into columns. The Transpose Row to Column window is displayed.
7. Here you see the selected EDD and Parameters.
8. Specify the pivot data element to transpose rows into columns.
9. Specify the Row Value – Transposed Column – Expression combination. You must have a minimum of two combinations.
10. Click Review to review the transformation. The Review Transformation Window displays the sample of the Transformation Data.
11. Click **Ok**.

Using Transpose (Columns to Rows) for an EDD

To use the Transpose (Columns to Rows) component, follow these steps:

1. Drag and drop the **Transpose** (Columns to Rows)  component on the Connector Window to define a Transpose (Columns to Rows) Component on an EDD.
2. Alternatively, you can navigate to the component using the Tab key and use keyboard shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. It accepts input only from an EDD and it can have only one output.
4. If you have multiple EDDs selected, and you want to have Transpose (Columns to Rows) component for more than one EDD, then you must select as many numbers of Transpose (Columns to Rows) Components, connect to the respective EDD, and then define their expressions.

   NOTE:
   The output can be connected to Join, Lookup, and Mapping.

5. For example, to add the Transpose (Columns to Rows) component to three EDDs, drag three Transpose (Columns to Rows) components.
6. At any given time, right-click the Transpose (Columns to Rows) component to either delink or remove inlinks / outlinks or delete a Transpose (Columns to Rows) component.
7. Double-click the component to transpose the entity columns into rows. The Transpose Column to Row window is displayed.
8. Here you see the selected EDD and its parameters.
9. Specify the Unpivot Data Element to transpose columns into rows.
10. Specify the Header Column Name and Value Column Name.
11. Specify the Column Value (Header column) and Expression Pair (Value Column) for each transposed row. You must have a minimum of two pairs.
12. After specifying the Unpivot Data Elements, click Auto Transpose. This will transpose columns into rows based on the unpivot data elements selected.
13. You can also click  drag and drop the columns.
14. Click **Review** to review the transformation.
    The Review Transformation window displays the sample of the transformation data.
15. Click **Ok**.

Using Derived Column

To use the Derived Column component, follow these steps:

1. Drag and drop **Derived Column**  component on the canvas.

2. Alternatively, you can navigate to the component using the Tab key and use key board shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. Connect the Derived Column to the mapping.

   NOTE:
   The output must be connected to the mapping.

4. At any given time, right-click the expression component to either delink or remove outlinks or delete an Expression Component.
5. Double-click the Derived Column Component.
6. The Derived Expression window for Derived Column is displayed.
7. Click Add to define a new Derived Column.
8. Click Edit to specify the name and expression of the Derived Column. You see the selected EDDs in the right tab.
9. Click **Validate** in case you wish to verify the correctness of the SQL Expression.
10. Click **Apply**.
11. Repeat the steps for as many Derived Columns.
12. Click **Ok**.

Using Mapping

1. Double-click **Mapping**. The Mapping Window is displayed.
2. Alternatively, you can navigate to the component using the Tab key and use keyboard shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.

   NOTE:
   The input and output for the Mapping Component must be connected before specifying the mappings.
3. The mapping window displays the EDDs and ADIs and their respective data / derived data elements.
4. Click a Data Element under Source, Attribute under Target, and then click **Map**  . On the RHS, the column mapping is displayed.
5. The following validations are done for the mapping:
   a. Data Type Validation
   b. Data Length Validation
   c. Data Precision Validation
6. If validation is successful, it displays Successful next to the mapping.
7. If any of the validations fail, it displays Warning next to the mapping.

8. At any given time, you can select **Unmap** to unmap the Source and Target.
9. Click **Auto-Map**  to auto map a source and target.

   > **NOTE:**
   > Auto-mapping is done by matching the logical/physical column name of both the Source or Target.

10. In the Source column, click Filter icon. Enable it to view the unmapped items.

    > **NOTE:**
    > The mapped columns are displayed in red.

11. In the Target column, click Filter icon. Enable it to view the unmapped, mandatory, and valid for applications.
12. Under the Target column, you can hover over each item to see the details. It provides the description, length, and scale information.
13. Click **Search** icon to search for a column name under the Source or Target Column List.
14. Click **Delete** icon to delete all the mappings. You can also delete individual mappings by selecting the cross symbol next to the column mapping.
15. Click **Import Mapping** icon to import a mapping Excel. Choose mapping Excel from the File Browser.
16. Click **Export Mapping** icon to export the mapping information.
    This downloads an Excel file.
17. Click **Search** icon to search for a Column Mapping. You can search for an item based on the Source Column Name, Target Column Name, Source or Target Entity, or a Remark.

Using the Flatten Table to PC Hierarchy Transformation for an EDD

To use the Flatten table to PC Hierarchy Transformation, follow these steps:

1. Drag and drop the **PC Hierarchy**  component on the canvas.
2. Alternatively, you can navigate to the component using the Tab key and use keyboard shortcut Ctrl C (Copy) and Ctrl V (Paste) to copy and paste the component on the canvas. To position the component, select the component and use arrow keys on the keyboard to reorder.
3. Connect the Derived Column to the mapping.

   > **NOTE:**
   > The output must be connected to the mapping.

4. At any given time, right-click the expression component to either delink or remove outlinks or delete an Expression Component.

5. To define the expression, double-click the Flatten table to the PC hierarchy. The Flattened Table to Hierarchy Window is displayed.
6. Choose the Hierarchy Type. The types of hierarchy supported are Balanced, Ragged, and Skipped. Click to view the details and understand how the hierarchies are defined.
7. Specify the Number of levels in the hierarchy. This field accepts only numbers.
8. Specify the Parent Node Column name and Child Node Column Name which are used in the mapping.
9. Select the **Key Elements** from the drop-down list.
10. Select all nodes. You can change the date and or other details from the drop-down list.
11. Click **Review** to view the transformation changes.
12. Click **Ok**.

Specifying Alias in Connector

Alias refers to an assumed name or pseudonym assigned to an EDD or an ADI as you define Connectors, much like table aliases used in SQL Statements. Aliases allow an EDD or an ADI to be referred in multiple joins, lookups, or both, within the same Connector definition, each in a distinct context.

Aliases are automatically initiated by DIH as and when required while defining Connectors.
The following scenario explains the mechanism:

1. Drag and drop an ADI or EDD more than once, for use in separate joins or looks-up, on the New Connector canvas.
   DIH initiates the specification of an alias by displaying the **Specify Alias** dialog box.
2. Enter a name of your choice under Alias Name and click Ok.
   Note that the Alias Names must be unique within a Connector.

Modifying and Viewing a Connector

To edit or view a connector, follow these steps:

1. To edit or view a connector, you can select the required connector from the Connector Summary.
2. The connectors are created open in their respective view mode.
3. The details of the selected connector are displayed. You can modify or view the details.
4. The Connector Name cannot be edited. Update the other required details.
5. Click **Save** to save the changes made.
6. To make changes to a published connector, click 'Unpublish'. The 'Unpublish' option clears the ODI metadata that has been created during publishing. Update the required changes and then click Publish. The updated changes are synced in ODI.

Copying a Connector

To copy an existing Connector, follow these steps:

1. Click **Copy** for the required connector.
   A **Save As** dialog box is displayed.

   Depending on the view in which the original connector is created, the copied connector will have the same view.
2. Enter the name and description.
3. Click **Save**. The Connector details are saved with a new specified connector name. The existing connector remains unmodified.

Deleting a Connector

To delete an existing Connector, perform the following steps:

1. Click **Delete** for the required connector.
   A confirmation dialog box is displayed.
2. Click **Yes** to delete a connector. The Connector is deleted. If you do not wish to delete, click No.

Search and Filter

The Search and Filter options in the UI helps you to find the required information. You can enter the nearest matching keyword to search, and filter the results by entering information on the search box. You can search for a connector with either the name, description, or status of the connector.

For example, enter the keyword as 'CON_DRM_GL' in the search box. All the connector names with 'CON_DRM_GL' are listed.

You can sort the list by connector name or modified date (ascending or descending order).

Parameters in Connector

Parameters are used while defining the mapping, between EDD to ADI. While mapping the ADI to EDD, the fields or columns within the ADI needs to be mapped to the fields in EDD. If there are no corresponding extracts in EDD, parameters can be used to identify the default values for certain ADI Elements. Also, parameters can be used while defining derived columns during mapping.

For example, if you want to use the Runtime MIS Date as the parameter, then it must be converted to date first. The following is the expression:

To_char(to_date(#DIHDEV.MIS_DATE,'dd-MON-YYYY'),'MM')

> **NOTE:**
> Runtime batch MIS date is in string format. It must be converted to DATE. The date format used here must be a valid SQLDate Format.

Executing Connectors

A published DIH Connector can be executed using the following method:

- Process Modelling Framework

Executing Connector using Process Modelling Framework

Process Modelling Framework (PMF) is a design and execution framework that enables Process Pipeline Developers to implement various Pipelines modeled by Business Analysts. Process Pipeline Developers use the framework to orchestrate the Business Pipelines and Run Pipelines within AFCS, and also to design the artifacts that participate in the Pipelines, to complete their implementation. For more details, see the Managing Process Section.

To add a connector task in PMF Pipeline, perform the following steps:

1. Open a process pipeline in which you want to add a connector task.
2. Click to expand the left menu. You can see DIH Connector under Widget
3. Select DIHConnector and drag and drop it on the canvas.
4. Double-click DIHConnector to select the connector to be executed.
5. Specify the Activity Name and Activity Description.
6. Under the Dynamic Parameters for DIHConnector:
    a. Select the required Connector.
    b. Enter the Runtime Variables.
    If the connector contains any Runtime Parameter, see section Specifying Runtime Parameters for more details.
    c. Select the Agent.
7. Enter all the details and click to Save the details. You can also click Save icon to save the details. A confirmation message is displayed as Successfully Saved.

Specifying Runtime Parameters

The following are the Runtime Parameters:

- If the connector contains any Runtime parameters, they can be set in the Variables input field of the Connector definition window.

  Example: FILE_DATE=31-Jan-2022

- In this example, the date format appended to MISDATE has to conform to the Simple Date Format. If no date format is specified, the default date format used is yyyyMMdd.
- If variables are used as part of connector mappings or filter expressions, they must be passed as follows:

  Exampe: FILE_DATE=$MISDATE:dd-MMM-yyyy

Quality

For information about the Data Quality Checks and the out-of-the-box Pipeline, see the *Data Quality Checks* Section in the OFS AFCS Data Catalog Release 22A.

Dimensions

For information about the Slowly Changing Dimensions (SCDs) and executing the out-of-the-box SCDs in AFCS, see the *Slowly Changing Dimensions* Section in the OFS AFCS Data Catalog Release 22A.

Hierarchy

Business Hierarchy refers to Organizing Data into logical tree structure to represent the groups and relations among various levels at which measure can be viewed. A measure can be viewed at different levels depending upon the hierarchy breakdown of the Dimension Category.

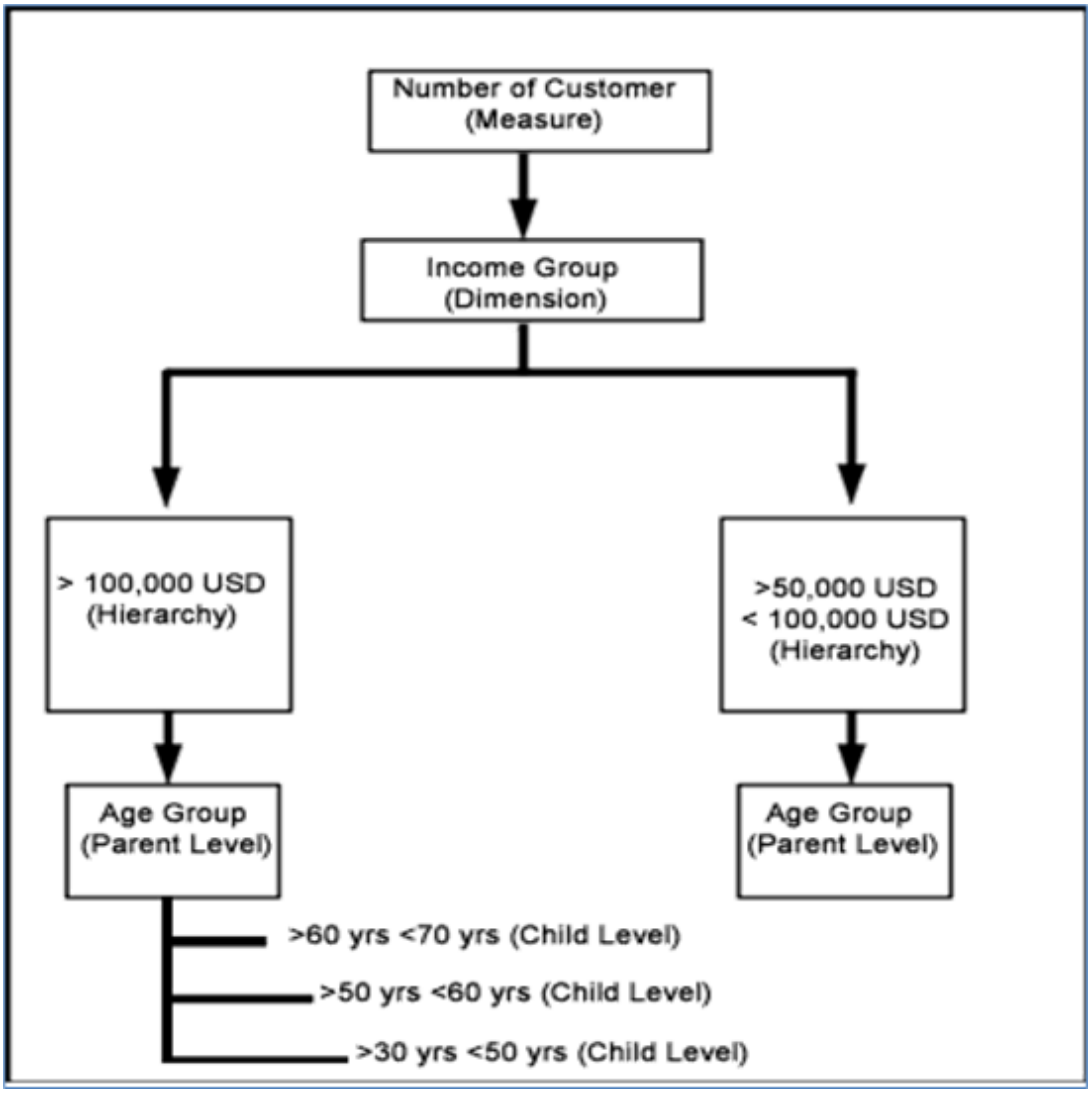
> **NOTE:**
> For information about the Hierarchy Data Loading, see the *Hierarchy Data Loading* and *Use and Execute the Dimension Population Process* Sections in the OFS AFCS Data Catalog Release 22A.

Based on the role that you are mapped to, you can access read, modify or authorize Build Hierarchy. For all the roles and descriptions, see Appendix A User Privileges Management. The roles mapped to Business Hierarchy are as follows:

- BMM Hierarchy Access
- BMM Hierarchy Advanced
- BMM Hierarchy Authorize
- BMM Hierarchy Phantom
- BMM Hierarchy Read Only
- BMM Hierarchy Write

For example, consider the following structure.

Business Hierarchy



You can view the Number of Customers (Measure) across Income Group (Dimension), which is further broken down by different age groups (Hierarchy). While number of customers is a metric, it is useful when viewed based on some categorization such as customer income profile or customers having an annual income of over USD 100,000 per annum, to provide better quality of information.

Business Hierarchy Summary Window

The *Business Hierarchy Summary* Window displays the list of pre-defined Business Hierarchies with their Code, Name (Short Description), Description, Hierarchy Type, Entity, Associated Tags, and the Actions Menu (View, Edit, Copy, or Delete). You can create Business Hierarchies for measure(s), and view, edit, copy, or delete (select from the List View Menu Icon) the required Business Hierarchies from this Window.

For more information on the Business Hierarchy Types and Sub-types, see Business Hierarchy Types.

> **NOTE:**
> When an AMHM Hierarchy is created, implicitly a UAM Business Hierarchy also gets created and will be listed in the *Summary* Window of Business Hierarchy. The Code of Implicitly populated UAM Hierarchy is system generated with length of 11 characters and prefixed with AMHM.

You can search for a specific Business Hierarchy based on the Code, Name, Hierarchy Type, Tag, Authorization Status (Pending for Approval), and Folders. After selecting click the **Search** Button.

At anytime, click the **Reset** Button next to the Search Box to clear the search selections and start afresh.

> **NOTE:**
> The **Pending for Approval** Authorization Status is available to you if you are mapped to the **BMM Hierarchy Authorize** Role.

Create Business Hierarchy

You can create a Business Hierarchy by specifying the Hierarchy Definition details and defining the required Hierarchies. You need to be mapped to the role BMM Hierarchy Write to add or create a Business Hierarchy.

To create a Business Hierarchy in the *Business Hierarchy Summary* Window:

1. Click the **Add** Button from the Business Hierarchy Toolbar.

   The *Hierarchy Definition* Window is displayed.

2. Enter the details in Business Hierarchy Details Section as tabulated.

   The following table describes the fields in the *Hierarchy Definition* Window.

Table: Fields in the Business Hierarchy Window and Descriptions

Field	Description
Basic Details	
Code	Enter a distinct code to identify the Hierarchy. Ensure that the code is alphanumeric with a maximum of 8 characters in length and there are no special characters except underscore "_". Note the following: The code can be indicative of the type of Hierarchy being created. A pre-defined Code and Short Description cannot be changed. Same Code or Short Description cannot be used for Essbase installation: "$$$UNIVERSE$$$", "#MISSING", "#MI", "CALC", "DIM", "ALL", "FIX", "ENDFIX", "HISTORY", "YEAR", "SEASON", "PERIOD", "QUARTER", "MONTH", "WEEK", "DAY". In Unauthorized state, the users having Authorize Rights can view all the unauthorized Metadata.

Field	Description
Name	Enter a Short Description based on the defined code. Ensure that the description is of a maximum of 8 characters in length and does not contain any special characters except underscore "_".
Long Description	Enter the Long Description if you are creating subject-oriented Hierarchy to help users for whom the Hierarchy is being created or other details about the type/subject. Ensure that description is of a maximum of 100 characters in length.

3. Further in the **Basic Details** Section, select the **Hierarchy Type** from the drop-down list.

> **NOTE:**
> **Hierarchy Type** is the basic differentiator and based on your selection, the other options to define the Business Hierarchy are available.

You can select the following Hierarchy Type or SubType. Click on the links to navigate to the respective sections and define the required Hierarchy.

For detailed information on all the Hierarchy Types, see Types of Business Hierarchy.

Table: Hierarchy Types

Hierarchy Type	Description / Hierarchy Sub Type
Regular	In a Regular Hierarchy Type, you can define the following Hierarchy Sub Types:
	Member Based In a Member Based Hierarchy, you need to manually add the required levels. The levels defined will form the Hierarchy.

Hierarchy Type	Description / Hierarchy Sub Type
	Business Intelligence Enabled You can Enable Business Intelligence hierarchy when you are not sure of the Hierarchy structure leaf values or the information is volatile and also when the Hierarchy structure can be directly selected from RDBMS columns. The system will automatically detect the values based on the actual data. In a BI enabled Hierarchy, you will be prompted to specify if a Total node is required (not mandatory) and system auto-detects the values based on actual data. For example, you can define three levels in BI Enabled hierarchies like, Region (1), State (2), and Place (3). The auto generated Hierarchies are: **Region (1) State (2) Place (3)** ---------- ---------- ---------- South | State 1 City 1 ---------- | State 2 City 2 ---------- | State 3 City 3 ---------- ---------- North | State 4 City 4 ----------
	Parent Child This option can be selected to define a Parent Child Type Hierarchy.

> **NOTE:**
> When the defined Hierarchy consists of more than 100 Leaf levels, the system treats it as a Large Hierarchy in order to provide efficient and optimized hierarchy handling.
> For more information on modify the default value, see Large Hierarchy.

After you have populated the required details in Business Hierarchy Definition and Hierarchy Details Section, save the details.

4. Click **Save** in the *Hierarchy Definition* Window and save the details.

View Business Hierarchy

You can view individual Business Hierarchy at any given point. To view the existing Business Hierarchy definition details in the *Business Hierarchy Summary* Window: You need to be mapped with the role BMM Hierarchy Read Only to view Business Hierarchy.

1. Select the **List View Menu** Icon (Three Vertical Dots) from the **Actions** Columns for the required Business Hierarchy Code.
2. Click **View** from the list.

   The *View Business Hierarchy Definition* Window displays the details of the selected Business Hierarchy definition. The User Info grid at the bottom of the window displays metadata information about Business Hierarchy created along with the option to add comments.

Modify Business Hierarchy

You can update the existing Business Hierarchy definition details except for the Code, Hierarchy Type/SubType, and Entity. You need to be mapped with the role BMM Hierarchy Write to modify Business Hierarchy.

> **NOTE:**
> You cannot modify the implicitly created Business Hierarchies for AMHM Hierarchies.

To update the required Business Hierarchy details in the *Business Hierarchy Summary* Window:

1. Select the **List View Menu Icon** (Three Vertical Dots) from the **Actions** Columns for the required Business Hierarchy Code.
2. Click **Edit** from the list.

   The *Edit Business Hierarchy* Window is displayed.
3. Update the required details.

   For more information, see Create Business Hierarchy.
4. Click **Save** to update the changes.

Copy Business Hierarchy

You can copy the existing Business Hierarchy details to quickly create a new Business Hierarchy. You need to be mapped to the role BMM Hierarchy Write to copy Business Hierarchy.

To copy an existing Business Hierarchy definition in the *Business Hierarchy Summary* Window:

1. Select the **List View Menu Icon** (Three Vertical Dots) from the **Actions** Columns for the required Business Hierarchy Code.
2. Click **Copy** from the list.

   The Business Hierarchy definition details are copied and a confirmation message is displayed.

Delete Business Hierarchy

You can remove the Business Hierarchy Definition(s) which are created by you and which are no longer required in the system by deleting from the *Business Hierarchy* window. Delete function permanently removes the Business Hierarchy details from the database. You need to be mapped with the role BMM Hierarchy Write to delete Business Hierarchy. Ensure that you have verified the following details as indicated:

- A Business Hierarchy definition marked for deletion is not accessible for other users.
- Every delete action has to be **Authorized/Rejected** by the authorizer.
  - On Authorization, the Business Hierarchy details are removed.
  - On Rejection, the Business Hierarchy details are reverted back to authorized state.
- An unauthorized Business Hierarchy definition can be deleted.

You can delete an implicitly created Business Hierarchy for an AMHM Hierarchy, if it is not used in any higher objects. After the Business Hierarchy is deleted, it will not be re-created if you resave AMHM Hierarchy.

To delete an existing Business Hierarchy definition in the *Business Hierarchy Summary* Window:

1. Select the **List View Menu Icon** (Three Vertical Dots) from the **Actions** Columns for the required Business Hierarchy Code.
2. Click **Delete** from the list.
3. Click Ok in the Confirmation Popup to delete.

Protection

This Section explains the General Data Protection Regulation (GDPR) related data protection methods implemented in Accounting Foundation Cloud Service (AFCS).

Topic:

- Data Redaction

Data Redaction

Data Redaction is one of the Data Security Features that protects sensitive data against unauthorized access and data theft.

The Data Redaction is an in-built process in AFCS. The Data Redaction is applied automatically on all the Business Terms containing the Personally Identifiable Information (PII).

To implement the Data Redaction on a Business Term, on the **New Business Term** Page, enable the **Personally Identifiable Information** Button for that Business Term. For information about the Business Term creation, see the *Manage Business Terms* Section in the OFS AFCS Data Catalog User Guide Release 22A.

Managing Processes

Process Orchestration is a design and execution service that enables Process Pipeline developers to implement various Pipelines modeled by business analysts. Process Pipeline Developers use the framework to orchestrate the Business Pipelines and Run Pipelines within AFCS, and also to design the artifacts that participate in the Pipelines, to complete their implementation.

The Process Modeller consists of Process Modeling Components for modeling Pipelines and Process Monitor Components for monitoring instantiated Pipelines of AFCS.

See Process Flow for more information on how these tools fit into the Pipeline Design and Implementation.

Process Modeller aids in representing the various artifacts required for modeling and provides implementation details of the AFCS Process Artifacts.

- AFCS Process Pipeline or Run Pipeline
- Reusable process components like Sub Pipeline
- Process data (Data Fields)
- Implementation of various types of Human Tasks / Service Tasks
- Business Rules (Application Rules)
- Various External Services Implementations and Other Artifacts needed for Complex Implementations
- Configuring Notifications

Topics:

The various widgets in the Process Orchestration Canvas display depending on the type of pipeline selected, which are described as follows:

1. **Run Pipeline:** If any orchestrated pipeline consists of AFCS tasks and service calls that run within the AFCS context, it is categorized as Run Pipeline and it allows to stitch or orchestrate other processes of the type "subrunprocess". The Sub-run Process is further explained, or the Run can be mapped within a Run, which allows you to configure an array of tasks and orchestrate them based on the decisions attached.
2. **Workflow:** This represents a state-machine pipeline that allows you to orchestrate manual and automated system tasks, which helps you to stitch a state-change machine by performing manual or system tasks. If there is a Sub-pipeline, then you can stitch a Workflow Pipeline. This process also allows you to have service tasks that make REST calls to systems outside of AFCS.

3. **Subrunprocess:** This is a process similar to the Run process where a Subrun Process Pipeline allows you to orchestrate the tasks in AFCS as well as the services and API that run within the AFCS context. You can also map other processes of the type "subrunprocess" within a Sub-run Process.

Process Orchestration

To effect this actual transition of data from the offset to the extract file, the Process Orchestration for Process Management Pipeline is used. The Batch Execution or executing it through Process Orchestration. Various components can be dragged and dropped into Process Orchestration UI for ensuring that execution can happen for each of these components. Wherever there are out-of-the-box SLAs and Connectors in the lifecycle of the SLA, these pipelines get generated automatically as a part of the metadata generation. After the execution is triggered, there is an option called monitor in the same UI to see whether the process is successful or not.

Related Topics:

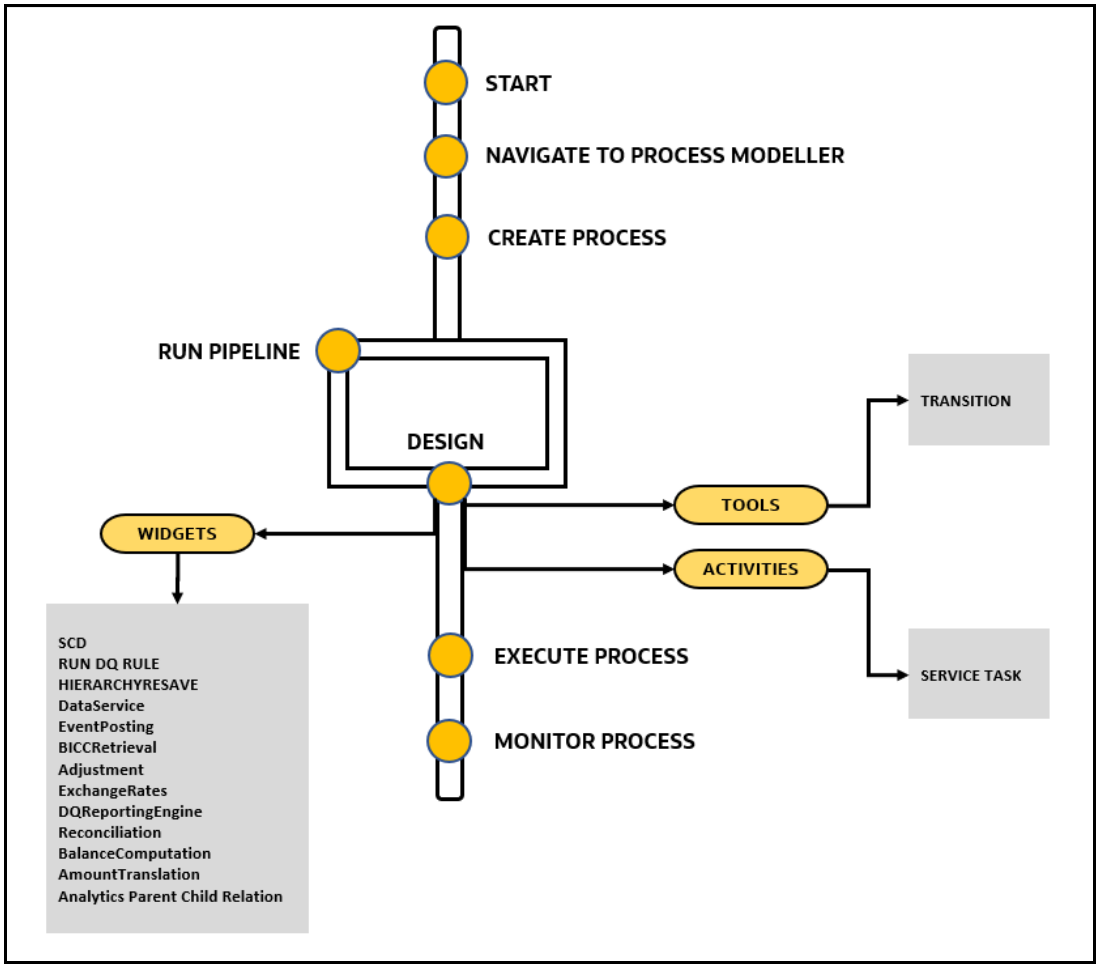
- Data Fields
- Datasets
- Slowly Changing Dimensions (SCD)
- Hierarchy Maintenance
- Expression Builder
- Designing and Executing Pipelines

Key Features of Process Orchestration

- Support for Visual Modeling of the pipelines.
- Support for registration of Process /Activity/Transition Logic Implementation, separated from the modeling itself.
- Built-in Orchestration Engine for Task Execution (interactive model as opposed to the Batch Model supported through Rule Run Framework).
- Published interface for the abstraction of task implementation.
- Stitching of AFCS Components within the Process Pipeline
- Process Monitoring Admin Tool to view the Execution Process Instances.

Process Pipeline Flow

Figure: Process Pipeline Flow



> **TIP:**
> After you click the links in the Process Pipeline Flow, press ALT+ Left Arrow to come back to this page.

Access Process Orchestration

The following are the steps to access Process Orchestration:

1. From the **AFCS Welcome** Window, click the **Process Orchestration**.

   The **Process Modeller Summary** Window is displayed.

2. Select any existing Process Flow to open it in the **Process Flow Canvas** or Click the **Add** Icon from the Header Bar to create a new process flow in the Process Flow Canvas.

For more details, see the Designing and Executing Pipelines Section.

To monitor any executed or currently running process, click the **Process Monitor** Icon from the Header Bar.

The **Process Monitor Summary** Window is displayed.

See the Process Monitor Section for more information.

Designing and Executing Pipelines

The designing and execution of pipelines is performed through the Process Modeller Window.

See the following topics for more information:

- Process Modeller
- Executing Parallel Tasks

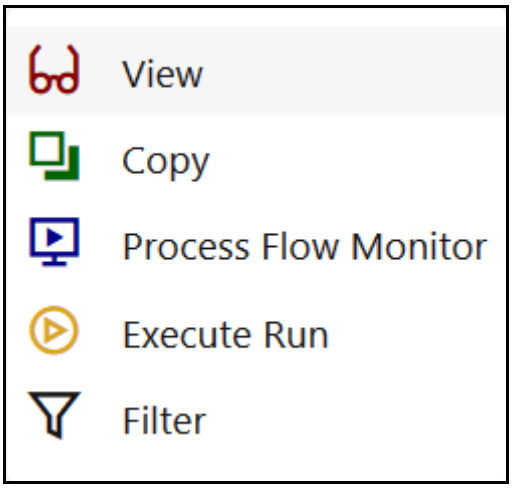
Process Modeller

The **Process Modeller** Window displays the existing Pipelines with the details such as Process ID, Process Name, Process Description, Version, Instance, Application, and Last Modified Details.

You can do the following tasks from this window:

- Click  to create a new Pipeline.
- Click the Process Name link to launch and edit the Pipeline.
- Click  to delete a Pipeline.
- Click  to view the following sub-menu:

Figure: Process Modeller sub-menu



  - Click **View** to see the Process Flow.
  - Click **Copy** to copy and create a new Pipeline with the same Process Flow.

  - Click **Process Flow Monitor** to monitor the Pipeline.
  - Click **Execute Run** to execute a Run Pipeline.
  - Click **Filter** to apply a filter condition to a Run Pipeline.
- By using the **Search** grid, you can search for a specific Pipeline by providing a keyword from Process ID, Process Name, or Process Description and clicking  . Click the Reset search icon  to reset the Search Fields.
- You can sort the Pipelines based on Process ID, Process Name, or Application. Click the **Sort by** drop-down and select the attribute by which you want to sort.
- You can use the **Filter Pipeline** field to filter pipelines based on pipeline type.

  For example, if you want to view only Run Pipelines, remove **Process** from the **Filter Pipeline** Field.
- Click  to go to the Process Monitor Window.

Components to Design the Process Flow

The Process Flow Tab has a Toolbar and a Drawing Canvas. The Drawing Canvas is used to design the Process Flow with the Tools, Activities, and Widgets available in the Toolbar.

Topics:

- Transition
- Service Task
- Sub Pipeline
- Widgets

Transition

A Transition is used to control the flow between various components in the Process Flow. Transition connects two activities and the flow is configured based on Conditional Expression or Decision Rule.

Gateways

Split refers to a condition where an incoming transition is split into multiple transitions. In Merge, multiple incoming transitions are merged into a single transition. The Splitting and Merging of Activities are modeled through gateways. A gateway can be Sequential, Parallel, or Multi Choice.

- **Parallel Gateway**: A Parallel Gateway is used when you want to have multiple transitions/flows that should be executed in parallel.
- **Sequential Gateway**: A Sequential Gateway is used when you want to have multiple transitions/flows that should be run in sequence.
- **Multi Choice Gateway**: A Multi Choice Gateway is used when you want to execute multiple transitions/flows based on the Decision Rule.

> **ATTENTION:**
> If you use a Parallel or Multi Choice Gateway in your Pipeline, ensure that after all the activities added to these gateways, it is merged or closed again with a Parallel or Multi Choice Gateway. respectively. If there is no more activity to be performed after the Parallel or Multi Choice Gateway, it is mandatory to add empty service task activity. Otherwise, the status is not updated correctly and the next activity execution does not happen.

Connector

A Connector helps to connect two activities with a different path (other than the default), in case if the default path is overlapping with some existing flow.

Service Task

Service task typically invokes an application component (for example, activity to invoke a business rule to calculate a certain threshold).

For more information on stitching service tasks in your Process flow, see the Service Tasks Section.

Sub Pipeline

Sub Pipeline provides the reusability of Pipelines. Using the Sub Pipeline Component, you can call another Pipeline from your Parent Pipeline.

For more information on how to use Sub Pipeline, see Call another Pipeline from the Parent Pipeline Section.

Widgets

Widgets are used to execute AFCS such as Connectors, DataService, and EventPosting through the Process Modeller.

For more information, see Configure Tasks in the Process Flow Section.

Balance Computation

Balance Computation supports assessment and maintenance of Instrument-level Accounting Balance Information, and supports the following functions:

- Period to date (month, quarter and year to date) average values of Instrument-level Accounting Balance
- Revaluation of Instrument-level Accounting Balance
- Currency translation of Instrument-level Accounting Balance as a part of the Period Balance

Derivation of Instrument-level Balance in the Balance Computation is based on an initial GL or Subledger Balance (ledger balance) snapshot, and daily or periodic snapshots of corresponding journal entries (debits and credits). Ledger Balance and journal entries may be ingested into Balance Computation Functions from external sources.

Topics:

Currency Exchange Rates

The purpose of the Currency Exchange Rates Entity is to offer the value of one currency in relation to another currency. The Currency Exchange Rates Entity stores the list of all Exchange Rates for all Currency Types.

Topics:

About Currency Exchange Rates

Currency Exchange Rates Service consists of the following Conceptual Modules:

- Staging: In this Module, the Data is provided on a Date or a Period granularity level.
- Preparation: If the Data is provided for a Period, then that Data is exploded (split) based on the individual Date granularity.

Staging

Inputs to the Data Service can be provided using any of the following granularities:

- **Date:** Rates are provided at the Date Granularity and they can be as follows:
  - Average for the Day
  - Spot Rate
  - Start of the Period
  - End of the Period
- **Period:** Rates are provided for a Period (Effective Start Date and Effective End Date). This is typically used for internal computations to avoid Currency Rate fluctuations that affect incentive, pricing, estimates, budgets, and so on.

Supporting the Currency Exchange Rates at the Time Granularity

The Time Granularity Level in the Currency Exchange Rates is supported as follows:

- Time Granularity may include the following:
  - Beginning of the Day
  - Mid-day
  - End of the Day
  - Any time (Running Variable), for example, 11 A.M. Rates and 4 P.M. Rates.
- For each Time Granularity that needs to be captured, a Data Version needs to be created in the Data Version Dimension Entity.
- Currency Exchange Rates are provided in the Staging along with the Data Version information. For example, this enables the User to stamp the Currency Exchange Rates given for three days at 08:00, 08:01, 07:59 as the 'Beginning of the day'.

Currency Rate Type with Seeded List of Values

The Rate Type and its description are as follows:

- EOP and SOP (Start of the Period for the day and End of the Period for the day): Rate is provided with the Time Stamp.
- Average for the Day: Average for the Day is provided by the Source.

Currency Rate Nature with Seeded List of Values

The Rate Type and its description are as follows:

- Floating (FLTG): This is the Floating Rate prevailing in the market.
- Fixed (FIXED): This is the Rate fixed by the Bank or Regulator (for Reporting) for a particular purpose. For example, Pricing.
- Forecast: These are the Rates forecast and provided by a Cloud Service.

Preparation

The Preparation Stage details are as follows:

- Currency Exchange Rates provided at the Date Granularity are loaded directly into the Processing Entity.
- Currency Exchange Rates provided for a Period are exploded to a Date Granularity and loaded at the Date Granularity Level.
- Post data population as stated above, for currencies which are active in the Currency Dimension Entity, if there are missing data points between all possible currency pairs, then the data is populated using the following methods:
  - Inverse
  - Triangulation
- At the end of the data population routine or module, the Exchange Rate is available in time and date, and date granularity.
- If the data is arrived at using inverse or triangulation, then the Data is flagged. Therefore, you can understand whether the Rate in use is traceable to a Source.

Currency Exchange Rates Workflow

Exchange Rates are loaded for a version, As of Date, which holds the information related to the Legal Entity, Time Zone, Start Time and End Time, and Organization Unit.

The Stage Currency Exchange Rates is the Input Table in the Currency Exchange Rates Process. The types of Data accepted in the Input Table are as follows:

- As of Date
- Effective Start Date
- Effective End Date
- Source Currency
- Target Currency
- Currency Rate Type (Seeded List of Values are Spot Rate, Average for the Day, Start of the Period, and End of the Period)
- Currency Rate Nature (Seeded List of Values are Floating, Fixed, Forecast)
- Currency Rate Version
- Exchange Rate
- Data Source

To use the Currency Exchange Rates Data Services, do the following:

1. Create an Exchange Rates Pipeline using the following procedure:
   a. Navigate to the Process Modeller Page. On the Home page, click **Process Orchestration**. The **Process Modeller** Page is displayed.

b. Click the **Add** Button. A **Process Flow** Page with the Process Details Page is displayed.

i. Enter **Process Name** and **Process Description**.

ii. On the **App Package ID** list, select **Data Foundation**.

iii. Select the **Type** as **Run Pipeline**.

iv. Select **Oracle Financial Services Data Service for Analytics_WS001** for the **Service ID_Workspace**.

v. To save the changes, click the **Apply** Button.

c. On the **Process Flow** Page, to design the Process Flow on the Drawing Canvas, use a Widget Component available in the floating tool bar.

d. To load all the Exchange Rates into the Stage Currency Exchange Rates Entity, add a **Connector** to the START. For information about creating a Connector, see the Ingesting Data into AFCS Section.

e. To connect the START Node with the Connector, right-click on the **START** Node and select **Start Link**, then right-click on the **Connector** and select **End Link**.

f. Drag an **ExchangeRates** Widget to the Canvas.

g. To connect the Connector Node with ExchangeRates, right-click on the **Connector** and select **Start Link**, then right-click on the **ExchangeRates** Widget and select **End Link**.

h. Click the **Save** Button.
A Confirmation Acknowledgment Message is displayed: *Successfully saved*.

2. Execute the Exchange Rates Pipeline using the following procedure:

a. On the **Process Modeller** Page, click the **Menu** corresponding to the Exchange Rates Pipeline. Click **Execute Run**.
The **Process Flow** Page with **Execution** is displayed.

b. Select the **Execution Type** as **With Parameters**. Select the required **As of Date** for which the Exchange Rates needs to be processed. Click the **Apply** Button to initiate the Run Pipeline Execution.

c. The Exchange Rates Pipeline loads the Preparation Currency Exchange Rates Entity.

d. To verify the Execution Status, on the **Process Modeller** Page, for the Exchange Rates Pipeline, click the **Menu** and select the **Process Flow Monitor**.
The **Process Monitor** Page is displayed with the list of Exchange Rates Process ID. Select the Process ID. The **Process Flow** Page is displayed with the Execution status of the Exchange Rates Pipeline.

> **NOTE:**
> If the Effective Start Date and Effective End Date are mentioned in the Stage Currency Exchange Rates Entity, then the Rate is considered for a Period. Otherwise the Effective Start Date will be same as the Effective End Date.

NOTE:
Execution of the Exchange Rates Pipeline Processes the Input Data from the Stage Currency Exchange Rates Element using the Triangulation or the Inverse Methods, and populates the Processing Entity. The Period Rates will be exploded for the complete Date Range.

1. If the Exchange Rates for a Period is present, then the Direct Rates are loaded for individual Rates for each Date.
2. If the Inverse for all the above Dates are not present in the Stage Currency Exchange Rates Entity, then the Inverse is calculated and loaded to Preparation Currency Exchange Rates Entity.
3. Triangulation for the Rates is done only if any Date intersection is present.

Currency Conversion

You can set up the Currency Conversion Settings to assign the Rate Type to a General Ledger (GL) Type Entity. For a computation, you can convert any transaction into different Currencies, which is called a Translation.

For each GL Type Entity, you can assign one of the following Rate Types:

- **Spot:** Use this to perform the Translation for an immediate instance.
- **Start of the Period:** Use this to perform the Translation for the Start of the Period.
- **End** o**f the Period:** Use this to perform the Translation for the End of the Period.
- **Average:** Use this to perform the Translation on an Average Period.

You require these settings to use the Execution Process in the Managing Processes.

To set up the Currency Conversion Settings, do the following:

1. To navigate to the Currency Conversion Settings, on the Home Page, click **Administration**, and click **Currency Conversion**. The Currency Conversion Settings Page is displayed. During the Deployment Process, User with the Admin Privileges can set up Currency Conversion Settings using the same procedure.
2. Select either the **End of Period**, **Daily**, **Average**, or **Spot** Rate Type Value for the following GL Type Entities:
   - Asset
   - Expense
   - Loss
   - Gains
   - Contra Asset
   - Contra Liability
   - Liability
   - Owners Equity

- Revenue

3. Click **Save**.

The Currency Conversion Settings are saved.

Period to Date Balance

Period to Date Balance is computed and stored based on prior-period balance and cumulative effect of journals obtained from ERP Financials Cloud Service. Balance figures against General Ledger Accounts of type Balance Sheet are maintained as a running tally, whereas the balance figures against the GL Accounts of type P and L are reset every month based on the defined Fiscal Periods defined.

Period to Date Balance is a part of the Balance Computation Management Ledger Pipeline. For information about re-saving the BCE Hierarchies, and then using and executing the Pipeline, see the Sections Resave Hierarchies and Use and Execute the Balance Computation Management Ledger Process respectively.

Period to Date Average

Statistical Amounts (Average, Month-to-Date, Quarter-to-Date, and Year-to-Date) are derived off of the Instrument Level Accounting Balance information. Balance Computation uses Instrument Accounting Balance figures across multiple MIS Dates, Calendar Information, and Fiscal or Accounting Period Definition to assess the Average Accounting Balance, Month-to-Date Accounting Balance, and Year-to-Date Accounting Balance as the Statistical Management Ledger Amounts.

> **NOTE:**
> For the Backdated Journal Processing, ensure that the Period to which you are posting the Journals to is an Open Period as set in the Legal Entity Settings Section.
> Additionally, when the Backdated Journals are processed, the System recomputes the Daily Movements, Period-to-Date, and Period-to-Date Average Balances for the Range between the Journal Posting Date and the As of Date. Based on the preceding method, the larger the Range between the two Dates, the greater is the duration for Execution.

Topic:

- Resave Hierarchies
- Use and Execute the Balance Computation Management Ledger Process

Resave Hierarchies

Re-save the following Hierarchies and then proceed with the Run Pipeline execution.

- BCE001 (DIM_CURRENCY)
- BCE002 (DIM_DATA_SOURCE)
- BCE003 (DIM_LEGAL_ENTITY)

To re-save the BCE Hierarchies in the Process Orchestration, do the following:

1. To access the BCE001, BCE002, and BCE003 related Pipelines, on the Home Page, select the **Process Orchestration**. The **Process Modeller** Page is displayed.
2. Create a pipeline **BCE Hierarchy Resave** and enter information in the **Process Details** window such as **Process Name**, **Process Description**, **App Package ID** as **Balance Computation Engine**, **Type** as **Run Pipeline**, **Spark DB** as **No** and the **Service ID Workspace** as **Oracle Financial Services Data Service for Analytics WS001** and click the **OK** Button to save the details in the **Process Orchestration** page before re-saving them.
3. On the **Process Modeller** Page, search for the created pipeline. The **Process Flow** Page is displayed. This Process Flow is designed on the Drawing Canvas using the Transition, Activity, and Widgets Components available in the floating toolbar. A HIERARCHYRESAVE Widget is added to the START for the purpose of resaving the Hierarchy.
4. Once the HIERARCHYRESAVE Widget is added in the Drawing Canvas, double-click the **HIERACHYRESAVE** Node, the **HIERARCHYRESAVE** window is displayed. Enter information in the **Activity Desc** field and select **No** as the option for the **Exclude Task** field. Under **Dynamic Parameters for HIERARCHYRESAVE** fields**,** enter the **Hierarchy Codes** as BCE001, BCE002 or BCE003 and enter the **Load Type** as Resave and click the **OK** Button to save the details.
5. To execute the Run, you can select the Run Parameter Values using the **Execution** Button on the Process Flow Page or on the Process Modeller Page.
6. Go to the **Process Modeller** Page to execute the Run. Click the **Menu** Button corresponding to the pipeline. Click **Execute Run**. The **Execution** Page is displayed.
7. On the **Execution** Page, select the **Execution Type** as **Without Parameters**. Enter a unique value for the **Object ID**.
8. To save the details and execute the Run, click the **Apply** Button. The resaving process begins.

   NOTE:
   See the Managing Processes Section for more details about the Processes.

9. To verify the Run Execution (BCE Hierarchy Resave), do the following:
   a. To open the **Process Monitor** Page, on the **Process Modeller** Page, click the **Process Monitor** Button or select **Process Flow Monitor** on the Process Modeller Menu.
   b. The **Process Monitor** Page is displayed listing all the Run Instances corresponding to the BCE Hierarchy Resave Processes. On the **Process Monitor** Page, search by the Process ID, or by the Process Name **BCE Hierarchy Resave**, and select the Process Instance for the required Run Pipeline (BCE Hierarchy Resave) that was executed.

   The **Process Flow** Page is displayed with the Run Execution Status on each Node of the BCE Hierarchy Resave Process.
10. To verify the Run Execution Logs, do the following:
    a. On the **Process Monitor** Page, click the required Process Instance for which you need to verify the Execution Logs. The **Process Flow** Page is displayed with the Run Execution Status on each Node.

b. To see the Execution Status details of a Node, double-click on that Node. The Execution Status details Page is displayed. Click **Execution Logs**. The Log Viewer Page is displayed, which lists all the Logs related to the Process Instance. To see the details of a log entry, click the **Show More** Button. Click outside the Log Viewer Page to close it.

Use and Execute the Balance Computation Management Ledger Process

Use this Run Pipeline (Process) to compute the daily movements, Period-to-Date, backdated, and Translation Process Execution of average balances in Balance Computation.

Ensure that you complete the following procedures and then proceed with the use and execution of the Balance Computation Management Ledger Process:

- Resave Hierarchies
- Dimensions

To use and execute the Balance Computation Management Ledger Process in the Process Orchestration, do the following:

1. To access the Balance Computation Management Ledger Process Pipeline, on the Home Page, select the **Process Orchestration**. The **Process Modeller** Page is displayed.
2. On the **Process Modeller** Page, search and select the Balance Computation Management Ledger Process. The **Process Flow** Page is displayed. This Process Flow is designed on the Drawing Canvas using the Transition, Activity, and Widgets Components available in the floating toolbar. A Data Service Widget is added at the beginning meant for sourcing the Data for Accounting Entries. Then the BalanceComputation Widget is used for each GL Type Activity such as Assets, Liabilities, Expenses, Revenue, Gains, Losses, Contra Asset, Contra Liability, and Owner's Equity. The Activities are sequenced in the order of the Backdated Process, Daily Balances Process, and Average Balances Process. The Activities are repeated in the Run for each General Ledger Type and are executed in parallel. The Balance Translation Node is added in the end.
3. To view the details of any Activity, double-click on the Activity and the details related to its Activity, Transition, and Notification are displayed. On the drawing canvas, you can select and see the Definition, Data Fields, and Application Rule details.
4. To execute the Run, you can select the Run Parameter Values using the **Execution** Button on the Process Flow Page or on the Process Modeller Page.
5. Go to the **Process Modeller** Page to execute the Run. Click the **Menu** Button corresponding to the Balance Computation Management Ledger Run Process that needs to be executed. Click **Execute Run**. The **Execution** Page is displayed.
6. On the **Execution** Page, to execute the Run with parameters, select With Parameters in the Execution Type List. Select or enter the required values for each field as follows.

Table: Balance Computation Management Ledger process - Execution Page Field Names and Description

Field Name	Description or Instruction
Extraction Date	Use the Calendar Button to select the Extraction Date or Run Date for the Pipeline.
Data Source	Use the Link Button to select the required data source from the Available Values List, move it to the Selected Values List, and click **OK**.
Legal Entity	Use the Link Button to select the required Legal Entity from the Available Values List, move it to the Selected Values List, and click **OK**.
Run Execution Description	Enter a description for the Run Pipeline.

7. To save the details and execute the Run, click the **Apply** Button. The Run Execution begins.

> **NOTE:**
> The execution of the Run Pipeline is triggered using the selected Extraction Date.
> See the Managing Processes Section for more details about the Processes.

8. To verify the Run Execution of the Balance Computation Management Ledger Process, do the following:
    a. To open the **Process Monitor** Page, on the **Process Modeller** Page, click the **Process Monitor** Button or select **Process Flow Monitor** on the Process Modeller Menu.
    b. The **Process Monitor** Page is displayed listing all the Run Instances corresponding to the Balance Computation Management Ledger Process. On the **Process Monitor** Page, search by the Process ID, or by the Process Name **Balance Computation Management Ledger**, and select the Process Instance for the required Run Pipeline (Process) that was executed.

    The **Process Flow** Page is displayed with the Run Execution Status on each Node of the Balance Computation Management Ledger Process.
9. To verify the Run Execution Logs, do the following:
    a. On the **Process Monitor** Page, click the required Process Instance for which you need to verify the Execution Logs. The **Process Flow** Page is displayed with the Run Execution Status on each Node.
    b. To see the Execution Status details of a Node, double-click on that Node. The Execution Status details Page is displayed. Click **Execution Logs**. The Log Viewer Page is displayed, which lists all the Logs related to the Process Instance. To see the details of a log entry, click the **Show More** Button. Click outside the Log Viewer Page to close it.

Revaluation

The Balance Revaluation Process is used to adjust the Account Balance Figures of the Denominated Currencies other than the Accounting Currency. The Balance Revaluation Adjustments represent the difference in the Balance Value due to changes in the Currency Conversion Rates between the Date of the Original Journal Entry and the Revaluation Date.

The Balance Revaluation Process begins with the Data present in the Management Ledger Period Balances. In the Revaluation Adjustments Stage, the Revaluation Adjustments are performed against each Period Balance Amount to calculate the Adjustment Amount. As a result, during the Revalued Management Ledger Period Balances Stage, in the Period Balance Table, the adjusted balances are recomputed and inserted in a new Row with an Incremental Version.

Topic:

- Revaluation Process

Revaluation Process

This Section provides information about the Revaluation Process.

Topics:

- Balance Revaluation Settings
- Revaluation Adjustments
- Use and Execute Revaluation Process

The main phases in the Revaluation Process are as follows:

- Management Ledger Period Balances
- Inputs from the Currency Exchange Rates Service
- Revaluation Adjustments
- Revalued Management Ledger Period Balances

The Revaluation Process begins with the Data present in the Management Ledger Period Balances. In the Revaluation Adjustments Stage, the Revaluation Adjustments are performed against each Period Balance Amount to calculate the Adjustment Amount. As a result, during the Revalued Management Ledger Period Balances Stage, in the Period Balance Table, the adjusted balances are recomputed and inserted in a new Row with an Incremental Version.

Balance Revaluation Settings

This Section provides information about the Settings for the Balance Revaluation Process.

Settings

The Revaluation Process reads the following Settings information during the Execution Process in the Managing Processes. These Settings affect the design and execution of the Revaluation Process in the Process Orchestration.

1. To navigate to the Balance Revaluation, on the Home Page, click **Administration**, and click **Balance Revaluation**. The **Balance Revaluation** Settings Page is displayed.
2. Set the following Values.

Table: Revaluation Settings Entities and Description

Entity	Description of Action
GL Types	Review and select these General Ledger Type of Journal Entries, which are required for the Revaluation Process. Select from the following GL Types list: • Asset • Expense • Loss • Gains • Contra Asset • Contra Liability • Liability • Owners Equity • Revenue
Offset	Enable if you need to generate the Offset Balances against the Revaluation Adjustments for Equivalents.
Offset COA Values	Arrange the Offset Chart of Account Values either by the **System** Value or the **Default** Value. **System**: Instrument Gain is a part of the Offset Entries Output. Every calculation is done at the Management Ledger Gain level including the Instrument Account. Then in the Revaluation Process Execution Stage, for each Account in the Management Ledger Period Balances, the Offset Balance is generated. **Default**: When the Offset COA Values are set to Default, the System generates the Offset Balances at the Legal Entity Level.
Reversal	Enable if you need to revise the Revaluation for Period Balances by reversing the Prior Period Adjustments and adding the Current Period Adjustments.

3. Click **Save**.

Dimensions

Revaluation creates an automatically reversing entry for the difference between the original functional currency equivalent balance and the revalued functional currency equivalent balance in each Fiscal Period you revalue. As the transactions automatically reverse, the effect of revaluation is completely withdrawn in the Fiscal Period that follows the last Fiscal Period you specify for revaluation. Therefore, use the Unrealized Gain or Unrealized Loss to record the account transactions for the Unrealized Gains and Unrealized Losses in each Fiscal Period you revalue.

To record the account transactions for the Unrealized Gains and Unrealized Losses for a Legal Entity required during the Revaluation Process, do the following:

1. Navigate to the Dimensions Tab. To navigate to the Dimensions Tab, on the Home Page, click **Administration**, and click **Balance Revaluation**.
   The Balance Revaluation **Settings** Page is displayed. Click the **Dimensions** Tab.

2. On the Dimensions Tab, all the available Legal Entities are listed on the Left Hand Side. For a Legal Entity, to set up the Unrealized Gain and Unrealized Loss, select the required Legal Entity, and do the following:
    a. Click the **Unrealized Gain Account** and select the required value from the list.
    b. Click the **Unrealized Loss Account** and select the required value from the list.
    c. Click **Save** to save the changes. An Acknowledgement Message is displayed: *Saved successfully*. Close the Acknowledgement.

Revaluation Adjustments

In the Revaluation Adjustments Stage, to arrive at the Revalued Amount (Revalued Amount Values in the Management Ledger Revaluation Balances Entity) before initiating the Revaluation Execution Process, complete the following tasks:

1. For any Balance you arrive at from the Period Balance perspective, compare the current Exchange Rate Value in the Preparation Currency Exchange Rates Entity against the Period Balance corresponding to the Exchange Rate in the Management Ledger Revaluation Balances Entity .
2. Apply the following Formula:
    - For AST/LIAB (Assets or Liabilities) Type, calculate the Adjustment Amount using the following Formula:

      Current Period YTD Balance x Revaluation Rate – Currency Period YTD Balance LCY
    - For REV/EXP (Revenue or Expenses) Type, calculate the Adjustment Amount using the following Formula:

      (Current Period YTD Balance – Prior Period YTD Balance) x Revaluation Rate –

      (Currency Period YTD Balance LCY – Prior Period YTD Balance LCY)

> **NOTE:**
> Revaluation is processed only for the Open Fiscal Periods.

Use and Execute the Revaluation Process

Ensure that you Resave Hierarchies and then proceed with the use and execution of the Balance Computation Management Ledger Process.

To create and execute the Revaluation Process (Balance Revaluation Management Ledger Process) in the Process Orchestration, do the following:

1. To access the Balance Revaluation (Balance Revaluation Management Ledger Process) Pipeline, on the Home Page, select the **Process Orchestration**.
   The **Process Modeller** Page is displayed.
2. On the **Process Modeller** Page, search and select the Balance Revaluation Management Ledger Process.
   The **Process Flow** Page is displayed. This Process Flow is designed on the Drawing Canvas using the Transition, Activity, and Widgets Components available in the floating tool bar. The

BalanceComputation Widget is used for each GL Type Activity such as Assets, Liabilities, Expenses, Revenue, Gains, Losses, Contra Asset, Contra Liability, and Owner's Equity set in the Balance Revaluation SettingsSection. The Activities are repeated in the Run for each General Ledger Type and are executed in parallel.

3. To view the details of any Activity, double-click on the Activity and the details related to its Activity, Transition, and Notification are displayed. GL Type for the GenerateOffsets Task need to be NULL or blank. On the drawing canvas, you can select and see the Definition, Data Fields, and Application Rule details.
4. To execute the Run, you can select the Run Parameter Values using the Execution Button on the Process Page or on the Process Modeller Page.
5. Go to the Process Modeller Page to execute the Run. Click the Menu Button corresponding to the Balance Revaluation Management Ledger Run process that needs to be executed. Click Execute Run.
   The **Execution** Page is displayed.
6. On the **Execution** Page, to execute the Run with parameters, select With Parameters in the Execution Type List. Select or enter the required values for each field as follows:

Table: Balance Revaluation Management Ledger Process - Execution Page Field Names and Description

Field Name	Description or Instruction
Rate Data Origin	This is the source of Exchange Rates Value.
Extraction Date	Use the Calendar Button to select the Extraction Date or Run Date for the Pipeline.
Currency	Use the Link Button to select the Currency Code used to calculate the amount during the data population in the target table.
Data Source	Use the Link Button to select the required data source from the Available Values List, move it to the Selected Values List, and click **OK**.
Rate Version	Select the required Rate Version.
Rate Type	Select the Rate Type from the drop-down list. The options are as follows: • Average • Spot • Start of the Period • End of the Period

7. To save the details and execute the Run, click the **Apply** Button. The Run Execution begins.

> **NOTE:**
> The execution of the Run Pipeline is triggered using the selected Extraction Date.
> See the Managing Processes Section for more details about the Processes.

8. To verify the Run Execution of the Balance Revaluation Management Ledger Process, do the following:

a. To open the **Process Monitor** Page, on the **Process Modeller** Page, click the **Process Monitor** Button or select **Process Flow Monitor** on the Process Menu on the **Process Modeller** Page.

b. The **Process Monitor** Page is displayed listing all the Run Instances corresponding to the Balance Revaluation Management Ledger Process. On the **Process Monitor** Page, search by the Process ID, or by the Process Name **Balance Revaluation Management Ledger**, and select the Process Instance for the required Run Pipeline (Process) that was executed.

9. The **Process Flow** Page is displayed with the Run Execution Status on each Node of the Balance Computation Management Ledger Process.

10. To verify the Run Execution Logs, do the following:

a. On the **Process Monitor** Page, click the required Process Instance for which you need to verify the Execution Logs.
The **Process Flow** Page is displayed with the Run Execution Status on each Node.

b. To see the Execution Status details of a Node, double-click on that Node. The Execution Status details Page is displayed. Click **Execution Logs**.

The Log Viewer Page is displayed, which lists all the Logs related to the Process Instance. To see an elaborated information of a log entry, click the **Show More** Button. Click outside the Log Viewer Page to close it.

Translation

Reporting Currency Ledgers are representations of a Primary or Secondary Ledger in another Currency for the Reporting purposes. The Reporting Currencies share the same Chart of Accounts, Accounting Calendar, and Accounting Method as their related Ledger. You can use the Reporting Currencies for Online Inquires, Reporting, and Consolidation.

Balance Translation is a part of the Balance Computation Management Ledger Process.

Support for Restatement

This Section provides information about the Support for Restatement (Backdated Run Execution) in the AFCS explicitly for the Start Date or End Date Attributes.

Overview

When a Regulatory Body asks a Bank or a Financial Institution to revise, make a correction, and re file the Report for a prior Reporting Period, the Restatement Support Feature can be used to correct and re file the Report. In the Restatement Support Feature, using the Data Version Property, the Bank or a Financial Institution can make the required modifications or add a few more data records to the Existing Report or delete the records from an Existing Report. The Start Date and End Date Attributes of Dimensions support the Backdated Run Execution. Out-of-the-box Run Pipelines are configured to use the Latest Record Indicator to select the appropriate Dimension Attributes irrespective of an Execution Date (Extraction Date). Therefore, the Start Date or End Date Attributes need to be used while rerunning the Report for a prior Date. A Backdated Run Execution for the Restatement Support is similar to a regular Run Execution.

Data Identification Criteria

When the user executes a Balance Computation Process for a given As of Date, all the journal entries in the system for the said As of Date and the Posting Date less than the As of Date are considered for processing during the Restatement Process.

Process Details

The Restatement Process works similar to the Daily Movement and Period Balance Computation on the basis of the Legal Entity, As of Date, Data Origin and GL Type. The process runs for each posting date which lies between the earliest posting date for all journals of the specific GL Type. The process re-computes the Daily Movement and (or) the Period Balances for each journal entry identified as backdated for each date lying in the above specified range. The difference in treatment between GL Types is as follows:

- Balance Sheet GL Types

  The balances are added on the basis of Credit or Debit Vector of the journal entries and the process impacts the Daily Movements and Period Balances for all the dates lying within the above specified range.

- Profit and Loss GL Types

  The balances are summed up on the basis of the Credit or Debit Vector of the journal entries and the process impacts the Daily Movements for the specific dates for which backdated journals are identified. The process re-computes the period balances for all dates which lie within the above specified range.

The preceding process adds a new version of the existing record with the re-computed balances. This record also shows a difference in terms of the As of Date versus Posting Date (Effective Date) in the processing entities.

Table: Details of the Date Fields in the Stage Accounting Entries Table

Logical Column Name	Column Description
Extraction Date	This column stores the date as on which the snapshot of source data extracted for processing.
Transaction Date	This is the date of the transaction, which will always be the system date along with timestamp
Value Date	This column stores the value date of the contract. Value date is the date on which the contract becomes effective.
Transaction Posting Date	The date on which this transaction was posted against the associated account for monetary instruments and checks.
Processing Date	This is the process date of the transaction, which will be populated with current date of ACCT_BRANCH_CODE
Transaction Reversal Date	This column stores date of the transaction which is a reversal entry that made to cancel out a specific entry. These reversal entries are the entries that can be passed as a result of a cancelled transaction.

For an institution that does daily processing of the instrument-level balance, for illustration, a current-dated journal entry extracted and provided to OFSAA 15-August-2020 to be processed as of the same date, bears the following date values, as supplied into the Accounting Entries Entity:

Table: Current Dated Entries

Column Name	Column Values or Description
FIC_MIS_DATE	15-Aug-20
D_TXN_DATE	As assigned by Systems of Record (Data Origin)
D_VALUE_DATE	As assigned by Accounting System
D_POSTING_DATE	15-Aug-20
D_PROCESS_DATE	15-Aug-20
D_REVERSAL_DATE	NULL

Balance Computation Management Ledger Process identifies prior-dated journal entries from the comparative combination of As of Date and Posting Date. When Posting Date is prior to As of Date, Balance Computation Management Ledger Pipeline Processes Balance Sheet and Income Statement Ledger Account-types as follows:

- The Restatement Process works similar to the Daily Movement and Period Balance Computation Processes, by Legal Entity, As of Date, Data Origin and GL Type. Restatement is performed for each Posting Date between the earliest one for any journal entry of a specific GL Type and the present As of Date. The process re-computes the Daily Movement and (or) the Period Balances based on journal entries thus identified as back-dated for each As of Date in the aforementioned date-range. The treatment of Balance Sheet and P&L:
  - **Balance Sheet Ledger Accounts**: The balances are summed up on the basis of Credit/Debit Vector of the journal entries and the process impacts the daily movements as well as period balances for all the dates lying within the above specified horizon.
  - **Profit & Loss Ledger Accounts**: The balances are summed up on the basis of the Credit/Debit Vector of the journal entries and the process impacts the daily movements for the specific dates for which backdated journals are identified. The process re-computes the period balances for all dates which lie within the above specified horizon.

Balance Reconciliation

The Balance Reconciliation reconciles the balances from the operational systems of a bank with the balances as maintained in General Ledger (hereinafter referred to as GL) of the bank. With this application, banks can also reconcile between General Ledgers maintained in the bank. The balances in the GL of a bank are the ones that are audited and duly certified by the internal and external auditors. Hence considered to be the final version of the truth in a bank. Therefore, all data extracted from any other operating systems of a bank must be reconciled with the balances maintained in the GL to ensure that they are complete, accurate, and comprehensive. It then acts as an authentic and reliable base for any further decision-making.

The bank's operational data are sourced into standard product processor entities/tables. GL Reconciliation application has pre-configured GL/PP table GL code and corresponding balances in the application, for which the reconciliation definition process must be executed. See Balance Reconciliation for more information.

Option is available to reconcile GL data with other operational data used by the bank, which does not flow into the standard Product Processors configured in the application. For more information on adding operational data tables to the data.

The list of Product Processors supported by this application is as follows.

Table: Product Processor supported by this application

Product Processor	Table Name
BILLS	Stage Bill Contracts
BORROWINGS	Stage Borrowings
CARDS	Stage Cards
CASA	Stage Casa
EQUITY	Stage Equity Exposures Contracts
FUTURES	Stage Futures Contracts
FX_CONTRACTS	Stage Foreign Exchange Contracts
INVESTMENTS	Stage Investments
LC	Stage Letter Of Credit Contracts
LEASES_CONTRACTS	Stage Leases Contracts
LOANS	Stage Loan Contracts
OD	Stage Over Draft Accounts
OPTIONS	Stage Option Contracts

REPO_CONTRACTS	Stage Repo Contracts
TD_CONTRACTS	Stage Term Deposit Contracts

Measures List

The following table provides the list of entity names and their corresponding measures.

Table: Entity name and its measures list

Table	Measure	GL code
Stage General Ledger Data	Amount In Accounting Currency Amount In Local Currency Amount Mtd In Accounting Currency Movement Mtd in Accounting Currency Movement Ytd in Accounting Currency	
Stage Annuity Contracts	Undrawn Amount End of Period Balance Provision Amount	• Undrawn GL Code • General Ledger Account Code • Provision GL Code
Stage Repo Contracts	End Of Period Balance Provision Amount Undrawn Amount Current Write Off Amount	• General Ledger Account Code • Provision GL Code • Undrawn GL Code • Write-Off Gl Code
Stage Option Contracts	End Of Period Balance Provision Amount Total Fees And Charges Undrawn Amount Current Write Off Amount	General Ledger Account Code • Provision GL Code Fee GL Code • Undrawn GL Code Write-Off Gl Code
Stage Investments	End Of Period Balance Provision Amount Undrawn Amount Current Write Off Amount	• General Ledger Account Code • Provision GL Code • Undrawn GL Code Write-Off Gl Code
Stage Loan Contracts	Commission Amount End Of Period Balance Total Fes And Charges Current Write Off Amount	Commission Gl Code General Ledger Account Code Fee GL Code Write-Off Gl Code
Stage Casa	Commission Amount End Of Period Balance Provision Amount Total Fees And Charges Current Write Off Amount	Commission Gl Code General Ledger Account Code • Provision GL Code Fee GL Code Write-Off Gl Code

Stage Cards	Commission Amount End Of Period Balance Provision Amount Total Fees And Charges Undrawn Amount Current Write Off Amount	Commission Gl Code General Ledger Account Code • Provision GL Code • Fee GL Code • Undrawn GL Code Write-Off Gl Code
Stage Term Deposit Contracts	Commission Amount End Of Period Balance Interest Accrued Amount Month Till Date Total Fees And Charges	• Commission Gl Code • General Ledger Account Code • Accr Int GL Code • Fee GL Code
Stage Futures Contracts	End Of Period Balance Provision Amount Undrawn Amount Current Write Off Amount	• General Ledger Account Code • Provision GL Code • Undrawn GL Code • Write-Off Gl Code
Stage Leases Contracts	End Of Period Balance Total Fees And Charges Undrawn Amount Current Write Off Amount	• General Ledger Account Code • Fee GL Code • Undrawn GL Code • Write-Off Gl Code
Stage Bill Contracts	Commission Amount End Of Period Balance Provision Amount Total Fees And Charges Undrawn Amount	• Commission Gl Code • General Ledger Account Code • Provision GL Code • Fee GL Code • Undrawn GL Code
Stage Letter Of Credit Contracts	Commission Amount End Of Period Balance Provision Amount Total Fees And Charges Undrawn Amount	• Commission Gl Code • General Ledger Account Code • Provision GL Code • Fee GL Code • Undrawn GL Code
Stage Borrowings	Commission Amount End Of Period Balance Provision Amount Undrawn Amount	• Commission Gl Code • General Ledger Account Code • Provision GL Code • Undrawn GL Code
Stage Foreign Exchange Contracts	End Of Period Balance Provision Amount Total Fees And Charges Current Write Off Amount	• General Ledger Account Code • Provision GL Code • Fee GL Code • Write-Off Gl Code

Stage Over Draft Accounts	Commission Amount End Of Period Balance Interest Accrued Amount Month Till Date Provision Amount Undrawn Amount Total fee and Charges Current Write off Amount	• Commission GI Code • General Ledger Account Code • Accr Int GL Code • Provision GL Code • Undrawn GL Code • Fee GL Code • Write-Off GI Code

Before you Begin

- Select the Domain and Deploy the selected Domain

Related Links:

- User Roles and Privileges
- Key Terms and Concepts Used in Balance Reconciliation

Access Balance Reconciliation UI

To access the Balance Reconciliation, follow these steps:

1. From the Oracle Financial Services Accounting Foundation Cloud Page, select Subledger Applications.
   The Subledger Application Window is displayed.
2. Select Balance Reconciliation.
   The Type Window of Balance Reconciliation is displayed.
3. You can navigate to following UIs:
   - Type
   - Entity
   - Reconciliation Rule
   - Reconciliation Summary
   - Adjustments

Configure Type of Reconciliation

The Type Configuration allows you to perform the functions:

- Currently, GL to PP reconciliation is supported, Source GL is mapped to target PP tables. Mandatory Dimension are preselected and you can define additional dimensions.

- The mandatory dimensions, optional dimensions, and MEMBRES OF THE DIMENSION participating in the GL Reconciliation Process.

The Type Configuration page lists the predefined Reconciliation Definition types that can be used during a Reconciliation Definition. These configurations are:

- General Ledger to Product Processor

Type Configuration

The Type Configuration UI allows you to define the type of reconciliation. You can perform various activities on the selected Type in the **Type Configuration** Window.

View  **:** Click the **View** icon, to view the **Settings** and **Dimensions** of the reconciliation type on a read-only basis.

The view displays two panes:

- Settings
- Dimensions

Edit  **:** Click the **Edit** icon, to modify the **Settings** and **Dimensions** of the reconciliation type. It allows you to modify an existing reconciliation definition except for the Name.

Edit displays two panes:

- Settings
- Dimensions

Delete  **:** Click the **Delete** icon, to delete the **Settings** and **Dimensions** of the reconciliation type that you wish to delete. A dialog box is displayed if the selected Reconciliation type is used in any rule, with the following message *"This Recon Type is used by some Rules, unable to delete the Recon Type"*.

> **NOTE:**
> You should **NOT** delete the seeded Reconciliation Type (General Ledger to Product Processor).

Topics:

- General Ledger to Product Processor

General Ledger to Product Processor

General Ledger to Product Processor Reconciliation is to identify the difference between the GL system and the Product Processor data. It nullifies the difference by posting the adjustment entries up to the amount of difference.

- If the reconciliation difference is greater than the threshold value, then the difference is reported.

- A threshold is a specified Product Processor level and these values are specified in the terms of percentage or an absolute amount. The Percentage value represents the difference in percent to the General Ledger side amount.
- If the threshold is specified in the terms of the amount, then it must be read in connection with a currency of the threshold amount. The reconciliation difference is reported in the base currency. If the currency specified here is different than that of the reconciliation dimension, then the difference amount must be converted in the threshold currency using the exchange rate of execution date or the latest available rate of the five preceding days.
- While reconciling General Ledger and Product Processor, differences can arise in two ways:

either when the General Ledger Amount is greater than the Product Processor Amount

or

when the General Ledger amount is less than the Product Processor amount.

- Hence, there are two threshold values to address differences arising out of this condition.

For more information, see Target Parameters.

Topics:

- Settings
- Dimensions

Settings Section

It consists of two tabs:

- Settings
- Dimensions

The **Settings** tab displays the name and the description of the reconciliation type that you want to view (General Ledger to Product Processor Configuration for this section).

It is further divided into two panes:

- **Source**: This pane displays the **Source Grain** and the **Source Entity** for General Ledger to Product Processor type. The Stage General Ledger data is the default source entity used for reconciliation definition.
- **Target**: This pane displays the **Target Grain** and **Target Entity** for General Ledger to Product Processor type. The Target entities refer to the Stage instrument tables (Product Processors) of the Oracle Financial Services Data Foundation.

When you click the **View** icon from main page, you can only view the selected reconciliation type, on the Settings page. All the panes in the Settings page are disabled for modifying the Reconciliation type in the Read-only mode.

Click the **Edit** icon to edit the selected reconciliation type. All the panes in the **Settings** Tab are enabled for editing except the Name.

Dimensions Section

The **Dimensions** tab consists of two panes as **Dimension Mapping**, and **Dimension Attribute Selection**. The dimensions such as Legal Entity, Currency, and GAAP Code are mandatory dimensions and must be selected to proceed with GL Reconciliation executions.

> **NOTE:**
> It is assumed that mandatory reconciliation dimensions are present in all the bank's GL Source Systems.

- **Dimension Mapping**: This pane displays the **Legal Entity**, **Currency**, and **GAAP Code** for the selected dimension. The dimensions **Legal Entity**, **Currency**, and **GAAP Code** must be selected to proceed with the GL Reconciliation executions. You can configure additional optional dimensions based on the requirement.
- **Dimension Attribute Selection**: This pane allows you to map the respective dimension attribute to each of the entities selected in the Settings view. As an example, the **Stage Cards**, **Stage General Ledger Data**, and **Stage Loan Contracts** have been configured for dimensions.

When you click the **View** icon in main page, the corresponding mappings of the entities present in the Dimension mapping pane are displayed with the selected dimension attributes in a Read-Only mode.

> **NOTE:**
> The Dimensions tab functionalities remain the same for all three types of configurations.

Topics:

Editing Dimension

When you select the **Dimension** from the drop-down list in this pane, the mapping of the respective dimension is done for all the entities defined in the **Settings** Tab.

By default, these mandatory dimensions **Legal Entity**, **Currency**, and **GAAP Code** are available in the reconciliation type.

For example, only a Legal Entity dimension must be selected against the Legal Entity and any other dimension cannot be selected. You are expected to select a valid Legal Entity, GAAP, and Currency hierarchy while configuring the mandatory dimensions.

You can select the optional dimensions such as **Product**, **Organization Unit**, and so on and map these dimensions to the Reconciliation type, so for each dimension respective attributes of the entities must be selected.
You can select one or more entities to map the attributes for the respective dimension.

1. Select any of the entities within the **Dimension Attributes Selection** Pane to enable the **Attribute** icon. Click **Attributes** to add optional Dimension Attributes.

   The **Attributes list** displays the list of the attributes that can be associated with the selected Dimension Attributes. The attribute list shows the combined attributes for all the Stage Tables selected.

2. Select the attributes and click the **OK** button.

Configure Entity

This section allows the setting and maintenance of metadata related to the Reconciliation Rules. This is a one-time activity and defines the boundaries of GL Reconciliation. The Entity Configuration includes the Reconciliation of Entities in the GL Reconciliation Process.

> **NOTE:**
> The Reconciliation Entities Window consists of predefined data. You can **View**, **Edit**, or **Delete** the Reconciliation Entities using these predefined data.
> Entity list is pre-seeded. Here, You can change the dataset/measure mapped.

Entity Configuration

When you navigate to the **Reconciliation Entities** Summary Screen, the settings are presented as a list. This page displays the following information about the entity:

- **Entity Name**: The name of the Reconciliation Entity.
- **Grain**: The Granularity of data within the entity, for example, Ledger, and Account.
- **Dataset**: Add the Dataset from the drop-down list for the selected Entity.

You can perform various activities on the selected entity in the **Reconciliation Entities** Window.

- **View** **:** Click the **View** icon, to view the **Settings** and **Dimensions** of the Reconciliation Type on a Read-Only basis.
- **Edit** **:** Click the **Edit** icon, to modify the **Settings** and **Dimensions** of the Reconciliation Type. It allows you to modify an existing Reconciliation Definition except for the Name.
- **Delete** **:** Click the **Delete** icon, to delete the **Settings** and **Dimensions** of the Reconciliation Type that you wish to delete. A dialog box is displayed if the selected Reconciliation Type is used in any rule, with the following message *"This Recon Type is used by some Rules, unable to delete the Recon Type"*.

> **NOTE:**
> For more information, see the list of Measures.

Reconciliation Rules

Topics

- Define Reconciliation Rules
- Executing the Rule
- Reconciliation Summary

Define Reconciliation Rules

Reconciliation management is the designated level at which the account balances are reconciled in the system. It stores information that specifies the granular level at which account balances are reconciled across one or many entities.

- GL to PP Reconciliation is performed at the following levels:
  - GL Level Reconciliation: In the GL Level Reconciliation, the difference between the GL System and the Product Processors systems at each reconciliation dimension node level within a GL Code, is identified.
  - Map Level Reconciliation: In the map level reconciliation, the difference between the GL Data and the Product Processor Data at each reconciliation Dimension Node Level across all the Product Processors, are identified.
- GL to PP Reconciliation can be defined using Manual Reconciliation Definition

For a detailed explanation of GL Level Recon and Map Level Recon, see the *Key Terms and Concepts* Section.

Topics:

- Reconciliation Page
- Search Reconciliation Rule
- Add a Reconciliation Definition

Reconciliation Rule

Select a method and by using search criteria, you can control the set of reconciliations definition that is displayed.
When you **Add**, **Edit,** or **View** the reconciliations, the corresponding details page is displayed.

The Reconciliation Definition page consists of five tabs:

- Settings
- GL Parameters
- Target Parameters
- Dimensions
- Allocations

The Reconciliation Rules Summary Page offers five icons that allow you to perform different functions when a defined reconciliation is selected.

- **Add** 

: Click the **Add** icon, this begins the process of building new reconciliation rules.

- **View**  **:** Select a single reconciliation definition, this enables the **View** icon. Click the **View** icon to view the detailed definition of reconciliation in the Read-Only Mode.

- **Edit**  **:** Select a single reconciliation definition, this enables the **Edit** icon. Click the **Edit** icon to modify an existing reconciliation definition with some restrictions. The Legal Entity and Consolidation Type fields are disabled during an edit.

- **Copy**  : Select a single reconciliation definition, this enables the **Copy** icon. Click the **Copy** icon to copy the detailed definition in a new Definition Screen. You can change any field and save it as a new definition. The Name and the Description fields are enabled on the new definition screen and you can give a unique name and a description.

- **Delete**  **:** Select one reconciliation definition, this enables the **Delete** icon. Click the **Delete** icon to delete the selected reconciliations definition.

Search Reconciliation Rule

You can search for any reconciliation rule in the Search Pane.

Prerequisites

Predefined Reconciliation Rule

Procedure

To search a reconciliation rule, follow these steps:

1. Navigate to **Reconciliation** Summary Window.
2. Enter the search criteria and click **GL Level Recon** or **Map Level Recon**.
3. The search results are displayed in a tabular format containing all of the entities that meet to search criteria. The **Reconciliation** Summary Pane offers several icons to perform different functions when a **Reconciliation** Rule is selected.

Definition List

The Definition List displays a list of all the definitions that match your Search Criteria in two views.

- Thumb Menu
- List Menu

The following options are displayed:

- **Measures**: The number of measures defined in the Reconciliation Rule.
- **GL Accounts**: The number of GL Codes users have selected in the Reconciliation Definition.

- **Consolidation**: The Consolidation Type displays as Solo or Consolidated.
- **Adjustment**: The status is displayed either Yes or No if the Adjustment Allocation has been applied to the selected reconciliation definition or not.

Add a Reconciliation Definition

To add the reconciliation definition, follow these steps:

From the menu bar, click the **Add** icon, the **Reconciliation Definition** Window with the following tabs is displayed:

- Settings
- GL Parameters (Source Ledger Parameters)
- Target Parameters
- Dimensions
- Allocation

Settings

To create the Reconciliation definition enter and select the displayed details in the **Settings** Tab.

1. Enter and select the following details in the Settings Tab:
   - **Rule Name: Enter the Rule Name** to add the Reconciliation Definition.
   - **Rule Description:** Enter the **Rule Description** for the defined rule.
   - **Reconciliation Type:** The Reconciliation Type can be selected as General Ledger to Product Processor.
   - **Definition Type:** The Reconciliation Definition Type is by default selected as **Manual** for General Ledger to Product Processor.
   - **Legal Entity**: Click **Hierarchy** to select the Legal Entity from the drop-down list.
   - **Consolidation Type**: Select the Consolidation Type from the drop-down list as **Solo** or **Consolidated**. If Consolidated is selected, then only one Parent Legal Entity must be part of the definition.
   - **Inherit to Child**: Select the **Inherit to Child** toggle button, consolidation type is disabled if you select this option. If you select this option and the value defaults to **Solo**.
     For more information on Inherit to Child, see the Key Terms and Concepts Section.
   - **Balance Type:** For General Ledger to Product Processor Reconciliation type, the available Balance Types are:
     - End of Period Balance
     - Monthly Average
     - Yearly Average

- **Reconciliation Definition:** Select the level at which the balances must be reconciled, that is, the **GL Level Recon** or the **Map Level Recon**.
- **Adjustment Allocation:** Select **Yes** in this field if you want the application to pass an automated adjustment entry for any reconciliation difference found, else select **No**. If the value is No, then the reconciliation differences are calculated but adjustment entry will not be passed.

2. Click the **Next** button, the next tab **GL Parameter** is displayed.

GL Parameters (Source Ledger Parameters)

Select the displayed details in the **GL Parameters** Tab.

1. In the **GL Parameters** tab, update the following:
   - **GL Hierarchy**: Click the **Hierarchy** icon, to launch the GL Hierarchy Window.
     You can select the values for the **GL Hierarchy** pane from the available list of values.

     You can move the Available Values using the Move, Move All, Remove, Remove All, Move to Top, Move Up, Move Down, and Move to Bottom buttons.
   - **Add Filters**: You can **Add Filters** (for example, product, business unit, and so on) defined in the **Settings** tab. A comparison between the GL system and PPs is based on the filters set on these dimensions.
2. Click the **Next** icon, the next tab **Target Parameters** is displayed.

Target Parameters

This is a configuration page required to configure the target side entities and measures.

Topics:

- GL Level Reconciliation (If GL Level is selected in the Settings Tab)
- Map Level Reconciliation (If Map Level is selected in the Settings Tab)

GL Level Reconciliation (If GL Level is selected in the Settings Tab)

This section explains the GL Level Reconciliation in the **Target Parameters** Tab if the GL Level is selected in the **Settings** Tab.

1. Select the following details:

   Target Entity

   - **Target Entity Name**: Select the name of the entity that contains the Data from the drop-down list.
   - **GL Reconciliation Column**: Select the reconciliation column from the drop-down list.
   - **Threshold Currency**: Select the Threshold Amount of currency from the drop-down list.
2. Click the **Target Parameters** icon, the Target Parameters pane is displayed.
3. Select the following details:

   Target Parameters

- **Threshold specification**: Specify the threshold from this drop-down list. If the value is specified in terms of percentage, then the **Threshold Amount Currency** Field is disabled.

  Specify the threshold from the drop-down list. The threshold value can be in both absolute terms and percentage terms at a PP level. If the selection in all the PP's is a percentage, then the threshold amount currency field is disabled.

- **Negative Threshold**: Specify the Negative Threshold value. These values are used to identify the breach types, categorized as
  - Negative Percentage Threshold (NPT)
  - Positive Percentage Threshold (PPT)
  - Negative Absolute Threshold (NAT)
  - Positive Absolute Threshold (PAT) and
  - Not Breached (NB)

  The Breach Type is identified at runtime during the reconciliation process and Audit Trail entries are posted with this information. For GL Level reconciliation, values can be updated at different PP levels. For Map Level reconciliation, you have to manually enter only one value for all the PPs.

- **Adjustment Entry Floor**: Specify the value required to pass an adjustment entry. If the (GL-PP) difference is less than the Adjustment entry floor specified in the definition, then the calculated difference is not eligible for the adjustment and the entry is not logged in the Adjustment Entry table.

- **Positive Threshold**: Specify the Positive Threshold value. These values are used to identify the breach types, categorized as:
  - Negative Percentage Threshold (NPT)
  - Positive Percentage Threshold (PPT)
  - Negative Absolute Threshold (NAT)
  - Positive Absolute Threshold (PAT) and
  - Not Breached (NB)

  The Breach Type is identified at runtime during the reconciliation process and Audit Trail entries are posted with this information. For GL Level reconciliation, values can be updated at different PP levels.

- **Filter**: Select the currency to specify the Threshold Amount. Additionally, click the **Filter** pane to add more details to the additional dimensions selected.

You can also add filters to the optional dimensions (product, business unit, and so on) defined in the **Settings** tab. A comparison between the GL source system and PPs is based on the filters set on these dimensions. See the following steps to add filters:

a. Click the **Filters from the drop-down list**.

b. Select the relevant dimension from the **Filters** pane.

c. Click the selected dimension, which enables a second drop-down list to select the relevant members for the dimension under consideration.

Click the **Next** icon, the next tab **Dimensions** are displayed.

Map Level Reconciliation (If Map Level is selected in the Settings Tab)

This section explains the Map Level Reconciliation in the **Target Parameters** tab if the Map Level is selected in the **Settings** tab.

In this window, the **GL Reconciliation Column** is disabled when the Map Level Reconciliation is selected, click **Add** to update the PP entity or Target entity details.

For more information to update the Target entity details, see the GL Level Reconciliation (If GL Level is selected in the Settings Tab) Section.

Dimensions

In this tab, the **Mandatory Dimensions** are displayed**.** Click the **Reconciliation Dimensions** drop-down list to add the dimension to the map definition. Click **Save** to save the changes made, else click **Cancel**.

The **Legal Entity**, **Currency**, and **GAAP Code** are the mandatory dimensions. These dimensions which are defined in the Settings window appear in the Dimensions window as well, which indicates that a comparison between the GL system and the PP system and any reconciliation difference is populated based on these Dimensions. The **Reconciliation Dimensions** are optional dimensions that are also populated in this window as defined in the Type Configuration Page.

Click the **Next** icon, the next tab **Allocation** is displayed.

Allocation

In the **Allocation** tab, select the following fields:

- **Adjustment Allocation**: Select the **Automatic** option if you want the application to pass automated adjustment entries or select **Manual**.
- **Adjustment Posted to**: Select the Target table where the adjustments are to be posted that is, select the Product Processor option if the adjustment entry must be posted to the Product Processor selected in the **Product Processor Parameter** window, or select **Other**.
- **Target Entity**: As per the selections made in the preceding two fields, the fields in the **Target Entity** is disabled or enabled accordingly.
- **Adjustment Rule**: Select the Adjustment Rule φρομ τηε δροπ–δοων λιστ.
- **Allocation Amount column**: Balance Attribute.
- **Allocation Ratio**: If adjustment entry is to be passed to more than one PP Entity, then the ratio at which this entry is to be passed is updated in the Allocation Ratio Field.
- **Adjustment Attributes**: You can use this field to split the adjustments further based on the non-dimension columns of the Target Table. The Reconciliation definition differences that arise from the definition execution can be adjusted back to the target table, based on the values of non-dimension columns. This can be done apart from the dimension columns.

For post adjustments with more granularity, perform the following steps:

a. Click on the Selector  under **Adjustment Attributes**.
A right pane is displayed.

b. Select the **Attributes** from the Attribute List and click the **Done** icon.

c. Click the **Save** icon to save the selected attributes.

The following types of Attributes should not be selected in the field list of Adjustment Attributes:

a. Reconciliation Dimensions

b. Number Data Type Columns

c. Date Data Type Columns

> **NOTE:**
> Reconciliation differences are created based on reconciliation dimensions alone but not on **Adjustment Attributes** selected.

Adjustment attributes play their role when creating adjustments with the differences that are observed. The applications read the values in the selected adjustment attributes of the participating columns of aggregation and based on the unique combination of values in these attribute columns, the number of adjustments is created and the same values default in the respective adjustments. The reconciliation definition differences are split among the adjustments based on the weighted average ratio of the participating target balance values.

For more information about Adjustment Attributes and Defaulting Account Level with an example, see Adjustment Attributes and Defaulting Account Level.

Topics:

- Map Level Reconciliation (if Map Level Reconciliation is selected in the Settings tab)
- GL Level Reconciliation (if GL Level Reconciliation is selected in the Settings tab)

GL Level Reconciliation (if GL Level Reconciliation is selected in the Settings window)

This section explains the GL Level Reconciliation in the **Allocation** tab if the GL Level is selected in the **Settings** Tab.

In the **Allocation** pane, the following fields must be selected:

- **Adjustment Allocation**: If the GL Level Reconciliation is selected, then the Adjustment Allocation is by default considered as Automatic.
- **Adjustment Posted to** Select the Target table where the adjustments are to be posted that is if the adjustment entry is to be posted to PP selected in the **Product Processor Parameter** Window then select Product Processor or else select **Others**.
- **Target Entity Details**: As per the selections made in the preceding two fields, the fields in the **Target Entity** is disabled or enabled accordingly. See the following cases for more details:

Case 1: If the Target table is the Product Processor

The **Default Values** is the only column that is updated. This is the mandatory column to be updated for populating the Target Entity results.

Case 2: If the Target table is Other

The **Target Entity**, the **Default Values**, the **Allocation GL Column**, and the **Allocation Ratio** are updated. If the adjustment entry is to be passed to more than one Product Processor entity, then the ratio at which the entry is passed is updated in the **Allocation Ratio** field.

Map Level Reconciliation (if Map Level Reconciliation is selected in the Setting Pane)

This section explains the Map Level Reconciliation in the **Allocation** tab if the Map Level is selected in the **Settings** tab.

In the **Allocation** pane, the following fields must be selected:

- **Adjustment Allocation**: If you want the application to pass automated adjustment entries, then select Automatic, or select Manual.
- **Adjustment Posted to**: Select the Target table where the adjustments are to be posted that is, if the adjustment entry is to be posted to PP selected in the **Product Processor Parameter** window, then select Product Processor or select **Other**.
- **Target Entity**: As per the selections made in the preceding two fields, the fields in the **Target Entity** is disabled or enabled accordingly. See the following cases for more details:
  - **Case 1**: If the Adjustment Allocation is Automatic and the Target table is the Product Processor

    The **Default Values** is the only column that is updated. This is the mandatory column to be updated for populating the Target Entity results.
  - **Case 2**: If the Adjustment Allocation is Manual and the Target table is the Product Processor

    The **Default Values** and the **Allocation Ratio** are the only two columns to be updated. If the adjustment entry is to be passed to more than one Product Processor entity, then the ratio at which the entry is to be passed is updated in the **Allocation Ratio** field.
  - **Case 3**: If the Adjustment Allocation is Automatic and the Target Table is Other

    If the **Other option** is selected as the Target table, then the corresponding Target Entity, Default Values have to be updated.
  - **Case 4**: If the Adjustment Allocation is Manual and the Target table is Other

    The Target Entity, the Default Values, and the Allocation Ratio columns must be updated.

Adjustment Attributes

The following is an example that briefly explains the ADJUSTMENT ATTRIBUTES functionality.

Sample data has dimensions lv code, ccy code, and gaap code. The ownership type attribute is used as an Adjustment Attribute.

Table: STG_CASA

v_account_number	v_lv_code	v_ccy_code	v_gaap_code	n_eop_bal	v_ownership_type	v_default_1
Acc01	LE1	USD	USGAAP	4000	IND	A
Acc02	LE1	USD	USGAAP	2000	JOINT	B
Acc03	LE1	USD	USGAAP	3000	JOINT	C

Assuming the source balance is 9300, the following are the differences that are created.

Table: DIFFERENCE TABLE

Source Balance	Target Balance	Difference
9300	9000	300

The following are the adjustments that are posted considering the ownership type column into the granularity.

Two unique values, IND and JOINT are used to split the differences and create adjustments.

Adjustment 1 has the value IND for ownership type and the balance is (4000/9000)*300.

Adjustment 2 has the value JOINT for ownership type and the balance will be ((2000+3000)/9000)*300.

Table: ADJUSTMENTS

v_account_number	v_lv_code	v_ccy_code	_gaap_code	n_eop_bal (diff)	v_ownership_type	v_default_1
GL_01	LE1	USD	USGAAP	133.33	IND	A
GL_02	LE1	USD	USGAAP	166.66	JOINT	A

Execution of Rule

After defining the parameters on both the GL side and the Product Processor side, defined reconciliation rules must be executed, and thereby the differences between the GL data and PP Data must be computed. The Processing Modelling task is used for executing the reconciliation rules. The Processing Modelling

Framework is feature which enables a business user *without assistance from a technical analyst* - to easily define and execute a Run. This feature allows you to define a Run by selecting a combination of different GL reconciliation parameters.

Prerequisite

Pre-defined Reconciliation Rule

For more information on defining a Reconciliation Rule, see the Reconciliation Rules section.

Configured Adjustment template in Reconciliation Rule. For more information, see the Adjustments section.

Topics:

- Process Modeller
- Process Monitor

Process Modeller

To execute the process run, perform the following steps:

1. From the Oracle Financial Services Accounting Foundation Cloud Page, select Subledger Applications.
   The Subledger Application Window is displayed.
2. Click Process Orchestration.
   The Process Orchestration Window is displayed.

   The Process Modeller Framework Window displays the list of runs. Here, you can execute an existing Balance Reconciliation run or create a new Balance Reconciliation Run.
   For more information on creating a run, see the Manage Process section.

   When you click on Balance Reconciliation run, the Balance Reconciliation Rule is displayed for execution. On the Process Run Window, the Balance Reconciliation Run is displayed in Pipeline form with Reconciliation Rule and Adjustment Rule. The Pipeline Execution contains two execution level tasks. First task is a reconciliation task and second task is an adjustment task.

   Note: Here, You can run only Reconciliation Rule.
   The Adjustment template is already configured in Reconciliation Rule.
3. Double click the Reconciliation rule, the Execution Window is displayed.

   Note: You can click Menu Button on Process Modeller Summary Window and select Execute Run.

   As of now, only one user is allowed to select one Reconciliation Rule for every execution.
4. Select the Execution Type as With Parameters.
   Note: You cannot execute the Reconciliation Rule Without Parameters.
5. Enter the following details in the Execution Window:

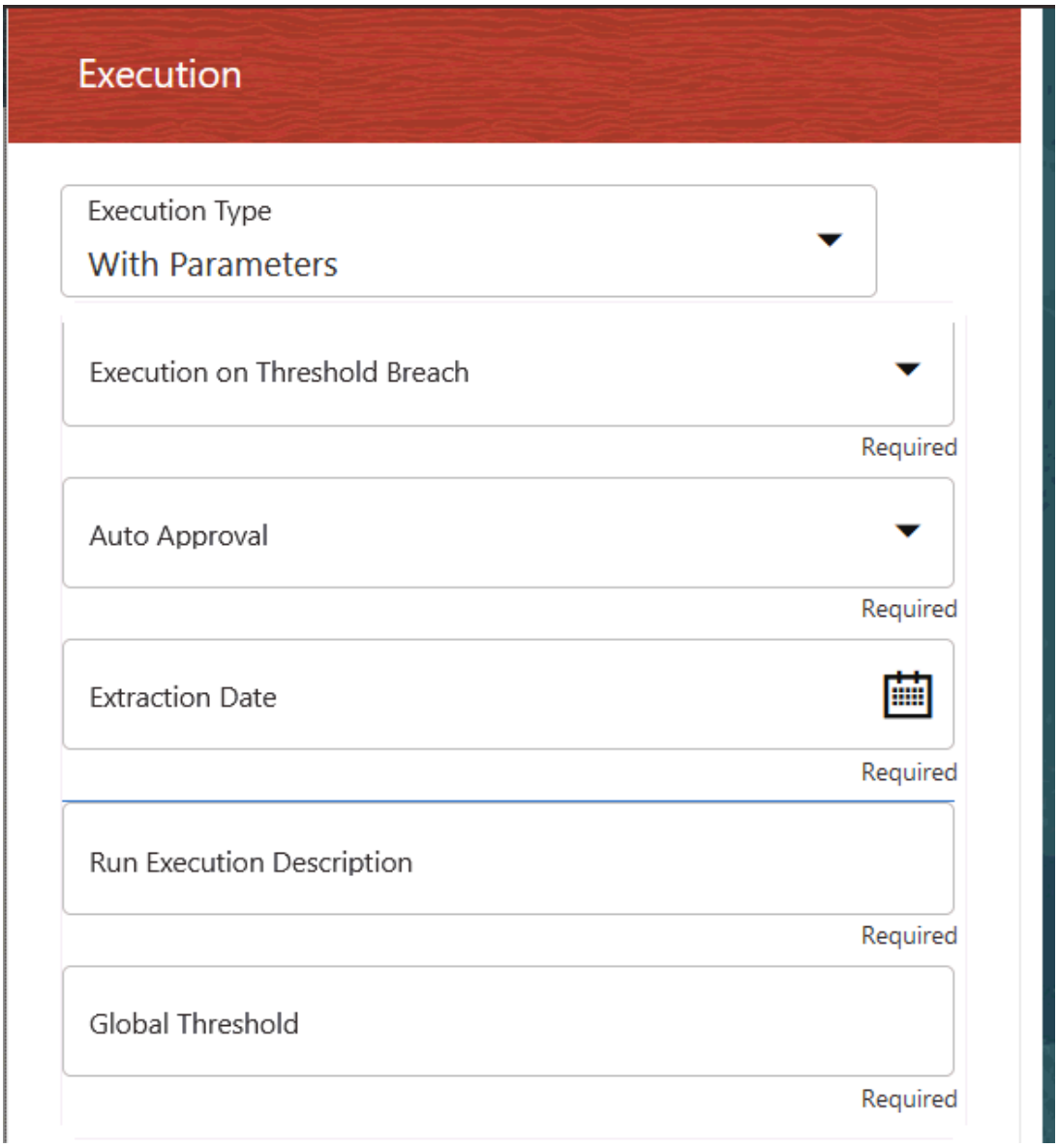


Table: List of Parameters

Field	Description
Execution on Threshold Breach	Specify unique global threshold value between zero and 100. Execute threshold breach as yes or no. It basically tells the reconciliation engine whether there is a threshold breach or not. It has two options: Stop: If Stop is selected and if the GL reconciliation breaches the global threshold level, then execution task stops. Continue: If Continue is selected and if the GL reconciliation breaches the global threshold level, then the execution continues, else the execution is discontinued.

Auto Approval flag	This flag has two options: Yes No If Auto approval is selected as Yes, then the adjustments that are created on top of the Recon output will be posted in the instrument tables. The adjustments will be posted the balances will be adjusted if the auto approval equal is set to yes in flow. If Auto approval equal to No, then it is called as manual adjustment in the system. In this case, if user selects auto approval equal to no, then it goes to a completely different channel and user can review and publish the adjustments on the Reconciliation Summary UI. If user selects the rule and triggers the execution saying auto approval, the adjustments or balances are not posted to the tables directly. If user wants to see, review and publish the adjustments or balances and doesn't want to post all the system generated adjustments into the tables, then the manual adjustment workflow is followed. The manual workflow is basically exporting all the adjustments from the from the execution updating the values for each and every adjustment, importing it and then doing a publish in the in the reconciliation summary UI.
Extraction Date	It is basically the date on which execution is happening.
Run Execution Description	This field talks about the unique description that user has to provide for this execution. When user clicks this or rather triggers this execution, the execution or the run ASCII that is created, will be stamped with this description and picked up from this text. Actually, you can tag the execution with this field description. It does appear on the Reconciliation Summary UI.
Global Threshold	A Global Threshold is applied over and above the mapping level threshold. If this threshold is breached during the execution, then you have the choice to select continue or you can stop the execution process. A Global Threshold is compared with the cumulative percentage difference across all the reconciliation definitions that are executed in a Run. If the adjustments are coming into the system and there are multiple rules, which are executed, then you can put together for all the rules if there is a global breach of threshold at a certain level, for example 10% or 20%. The typical range for this is from zero to 100 .

One is that the individual rule level global special is only at a global level for the entire execution. After executing the run execution with parameters, the rules are displayed in Pipeline with green tick mark about execute confirmation.

Process Monitor

To view the Execution ID status of the Reconciliation Run in the Process Flow Monitor perform the following steps:

1. From the Oracle Financial Services Accounting Foundation Cloud Page, select the Subledger Applications.
   The Subledger Application Window is displayed.
2. Click Process Orchestration.
   The Process Orchestration Window is displayed.
3. Click Process Modeller.
4. Each ID displays the following information:
   - Entity Name: The description of the Reconciliation Framework Run is provided.
   - Process Name: The Reconciliation Framework Run appears as the process name when the user executes the GL Reconciliation Run.
   - Process Description: The Reconciliation Framework Run appears as the process description when the user executes the GL Reconciliation Run.
   - Execution Start Time: The Execution Date and Execution Time when the Execution Run starts.
   - Last Execution Time: The Last Execution Date and Last Execution Time.
   - Last updated by: The name of the User who defined the Run. ♣ Status: The status of the Execution as Completed, Failed, or Ongoing.

   For more information on Process Monitor, see Process Monitor section of Process Orchestration.

You can also view the execution details in Execution Log. For more information on Execution Log, see Execution Log Section of Process Orchestration.

Reconciliation Summary

The Reconciliation Summary page provides a visual representation of the list of executions that are completed successfully along with its details.

1. Navigate to **Balance Reconciliation Summary Page** and select **Reconciliation Summary**.

   When you navigate to the **Reconciliation Summary** Page, the **Reconciliation History** Page appears.

   - **Execution Date**: The date on which the Reconciliation has been executed. Users can select the execution date by clicking on the calendar icon.
   - **Search Run Description**: This drop-down list shows different runs for a given execution date selected in the execution date field. Users can select a particular run description and see the execution details on the right panel of the screen.

2. This screen provides a list of all the successful executions complete for the previous period, by default. You can zoom in to a particular day of a month and check the list of executions.
3. Click one execution, it gives a high-level summary of that particular execution. Once the execution is selected, Two panels appear on the right side. The first panel provides the details about the number of definitions executed in that execution and the second panel provides the time taken for that execution in seconds along with the Start and End
4. Click  . The details of the execution entity name along with the balance type are displayed. You can open the report details using the additional icons.

   For executions that have been executed with Auto Approval Flag as Yes, the Adjustments are directly posted in the target tables. For other Executions that are executed with Auto Approval Flag as No, the user has the choice to review the adjustments, modify the default values, and then approve the adjustments.

Exporting Adjustments

The Export option allows you to export the adjustments to an excel sheet and save it

To export the adjustments, follow these steps:

1. Click **Export icon**.
   The Export Window is displayed.
2. Click **Copy**.
   This action copies the Excel file name.
3. Click **Download**.
   The Save As dialog-box is displayed. Paste the file name. This file name should be same as copied.

Importing Adjustments

The Import option allows you to upload the excel workbook with modified adjustment values.

Partial Adjustments: The user has the flexibility to tag one or more adjustments while importing the adjustment into the application. Users can enter the keywords **Publish** or **P** in the **PUBLISH_STATUS** column of the excel workbook. Only the adjustments that are marked for publish will be posted to the Product Processor.

Sometimes, the Exported excel sheet has a column called **PUBLISH_STATUS** with no values initially. **You** can either enter **Publish** or **P** against the records they want to post to the Product Processor table.

To Import the Excel file, follow these steps

1. Navigate to Administration UI and select **File Operations** option. For more information, see the File Operation Section.
2. Click **Upload File**. Click Add. Enter the following details:
   - Select the File Name.
   - Select the File Type as XLSX.
   - Enter the size of file.

3. Click **Generate**.
4. Copy Pre-Authenticated Request URL and execute it using Postman or Swagger as Service Type= PUT.
5. Click **Import icon**. Select the recent file from the pop up after clicking on the upload. It upload the file back to the server.
6. Click **Approve** icon.
   Only the approved records get published in the target table.
7. Refresh the UI using **Refresh** icon.

Publishing

You must Approve the adjustment in case to upload the Excel file back to the server or approve the adjustments.

To Publish the adjustments, follow these steps:

Click **Publish icon** to display the total amount approved by the Authorizer.
The user needs to exercise caution while clicking Publish icon. Adjustments once published will be posted in the Target Table

Configure Adjustments

The Data Adjustment Module provides capabilities to define templates that can be used for Adjustments. The entities on templates that can be defined refer to the Stage instrument tables of OFS Data Foundation Applications. The templates are used by a Balance Reconciliation to define default values for various attributes for the Instrument Tables. While posting adjustments, Data Adjustment Modules apply the defaults for the adjustments created by the Balance Reconciliation.

Topic:

Adjustments Summary Page

The Adjustments Summary Window displays all the Adjustment Templates defined for various entities. When you first navigate to the page, the Adjustment entries associated with the first dimension are presented in a Summary List. This page is the gateway to all **Adjustment** Rules and related functionality. You can navigate to other pages relating to **Adjustment** Rule from this page. You can use search criteria to search for an **Adjustment Entry**.

1. The **Adjustment Summary** presents a list containing all of the Adjustment Entries that meet your search criteria. This list also offers several icons that allow you to perform different functions when an Adjustment Entry is selected. The following icons are:

- **Add** 

: Click the **Add** icon, to add the Adjustment Entry and its parameters that are further displayed on the **Adjustment Entry Summary** Window.
- **Delete**  **:** Click the **Delete** icon, to delete the Adjustment Entry from the list.

Search Adjustment Rule

Prerequisites

Predefined Adjustment Rule

Procedure

To search the Adjustment rule, follow these steps:

1. Navigate to the **Adjustment** Summary Page.
2. Enter the Search criteria. Among other properties, each Adjustment Entry consists of a **Run Execution ID**, a **GL Date**, and a **Definition**. You may search on any of these properties in the Search Pane.

Add Adjustment Rule

To add an Adjustment Rule, follow these steps:

1. Navigate to the **Adjustment** Summary Page.
2. Click **Add**. The **Adjustment Add** Page is displayed.
3. Enter Adjustment Rule and Description.
4. Select the **Entity Attribute** that you want to define for the selected Adjustment Entity. You can also search the Entity Attributes from the search filter.
5. Add the **Expression** for the selected attribute.

   For example:

   - **VARCHAR**: 'NAME'
   - **NUMBER**: '12345'
   - **DATE**: to_date('12/31/2020','mm/dd/yyyy')

6. Click the **Save Expression** button.

Update Adjustment Rule

To update the Adjustment Rule, follow these steps:

1. Navigate to the **Adjustment** Summary Page.
2. Click the **Adjustment Rule link**.

3. Edit the details and click **Update**.

Resave Hierarchies

Re-save the following Hierarchies and then proceed with the Run Pipeline execution.

- HGL001
- HGL003
- HGL004
- HGL005
- HGL006
- HGL008
- HGL009
- HGL012

To re-save the GL Hierarchies in the Process Orchestration, do the following:

1. To access the HGL001, HGL003, HGL004, HGL005, HGL006, HGL008, HGL009, and HGL012 related Pipelines, on the Home Page, select the **Process Orchestration**. The **Process Modeller** Page is displayed.
2. Create a pipeline **GL Hierarchy Resave** and select any one or more of the above mentioned HGL001, HGL003, HGL004, HGL005, HGL006, HGL008, HGL009, and HGL012 Hierarchy Codes in the **Process Orchestration** before re-saving them. To create a pipeline, follow these steps:
    a. On the **Process Modeller** Page, search for the created pipeline. The **Process Flow** Page is displayed. This Process Flow is designed on the Drawing Canvas using the Transition, Activity, and Widgets Components available in the floating toolbar. A **HIERARCHYRESAV**E Widget is added to the **START** for the purpose of resaving the Hierarchy.
    b. Once the HIERARCHYRESAVE Widget is added in the Drawing Canvas, double-click the **HIERACHYRESAVE** Node, the **HIERARCHYRESAVE** window is displayed. Enter information in the **Activity Desc** field and select **No** option for the **Exclude Task** field. Under **Dynamic Parameters for HIERARCHYRESAVE** fields, enter the **Hierarchy Codes** as HGL001, HGL003, HGL004, HGL005, HGL006, HGL008, HGL009, or HGL012, enter **Entity**, and enter the **Load Type** as Resave. Click **OK** button to save the details.
3. To execute the Run, you can select the Run Parameter Values using the Execution Button on the Process Flow Page or on the Process Modeller Page.
4. Go to the **Process Modeller** Page to execute the Run. Click the **Menu** Button corresponding to the pipeline that needs to be executed. Click **Execute Run**. The Execution Page is displayed.
5. On the **Execution** Page, select the **Execution Type** as **Without Parameters**. Enter a unique value for the **Object ID**.
6. To save the details and execute the Run, click the **Apply** Button. The resaving process begins.

> **NOTE**
> See the Process Orchestration Section for more details about the Processes.

7. To verify the Run Execution (GL Hierarchy Resave), do the following:
    a. To open the **Process Monitor** Page, on the **Process Modeller** Page, click the **Process Monitor** Button or select **Process Flow Monitor** on the Process Modeller Menu.
    b. The Process Monitor Page is displayed listing all the Run Instances corresponding to the GL Hierarchy Resave Processes. On the **Process Monitor** Page, search by the Process ID, or by the Process Name GL Hierarchy Resave, and select the Process Instance for the required Run Pipeline (GL Hierarchy Resave) that was executed.

    The **Process Flow** Page is displayed with the Run Execution Status on each Node of the GL Hierarchy Resave Process.
8. To verify the Run Execution Logs, do the following:
    a. On the **Process Monitor** Page, click the required Process Instance for which you need to verify the Execution Logs. The **Process Flow** Page is displayed with the Run Execution Status on each Node.
    b. To see the Execution Status details of a Node, double-click on that Node. The Execution Status details Page is displayed. Click **Execution Logs**. The Log Viewer Page is displayed, which lists all the Logs related to the Process Instance. To see the details of a log entry, click the **Show More** Button. Click outside the Log Viewer Page to close it.

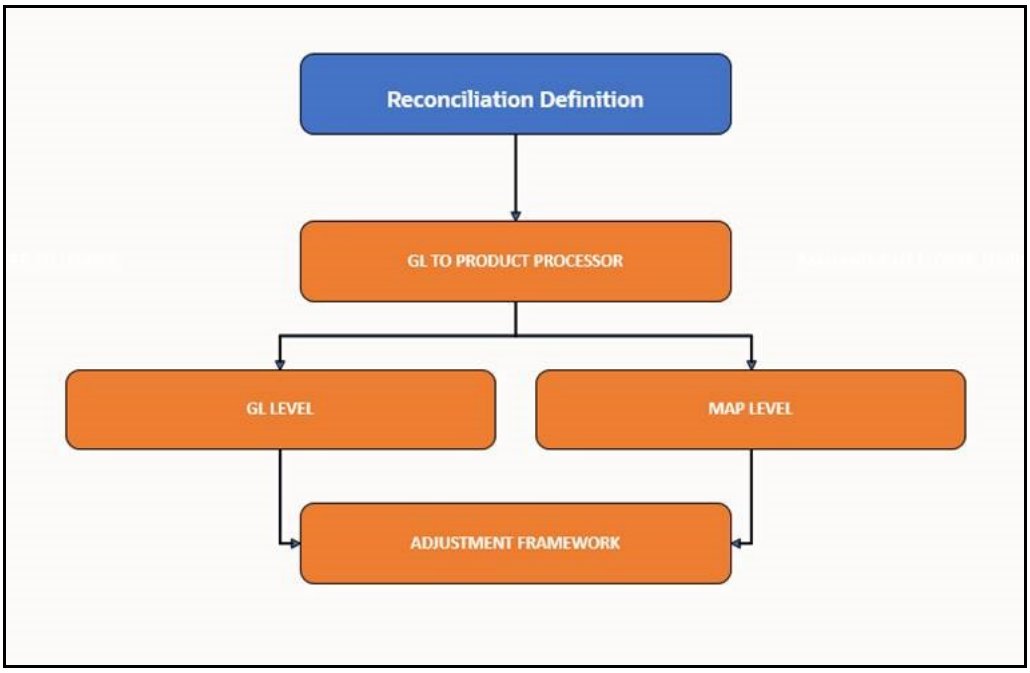
Workflow of Balance Reconciliation

The Balance Reconciliation structure is designed in such a way that, it facilitates verification of the differences which arise by comparing the GL Source Systems with the Bank's Operational Systems. At a global level, you must input GL and Product Processor setting details which form a base at a reconciliation level. The input provided in the Type and Configuration Windows is reflected at a global level.

The General Ledger to Product Processor is the predefined reconciliation definition type that can be used during a Reconciliation Definition.

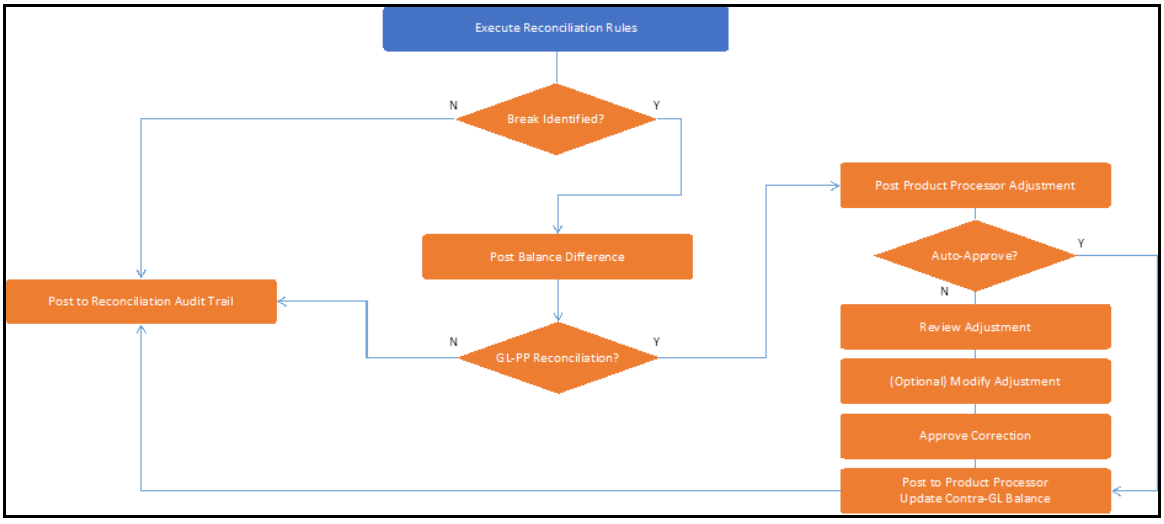
The reconciliations are defined, which forms a part of execution and data verification. This can be defined as Manual Reconciliation Definition, as shown in below Figure. This reconciliation type is defined in the Reconciliation Rule UI. Product Processor is an entity in the AFCS System used to store data that are received from the Operational System of the Bank.

Figure 2: Balance Reconciliation Workflow



This workflow explains about the execution of a Balance Reconciliation rule for General Ledger to Product Processor.

Figure 3: Balance Reconciliation rule for General Ledger to Product Processor Workflow



1. First define and consider the Balance Reconciliation rule.
2. Define the Operational System data, which needs to be used for reconciliation.
3. Configure threshold and Adjustment Entry floor before passing the Adjustments. This is applicable for Manual Reconciliation. For more information on Adjustments, see the Adjustment section. A different allocation ratio can be fixed for passing the adjustment entry into the different Product Processors (PP) that participate in the mapping.

4. Execute the Reconciliation rule using the Process Modelling Framework.

When reconciliation differences arise, then the adjustment entries are passed (manually).

- If there are Reconciliation differences reported after execution, the differences are populated in FACT reconciliation difference table and then these entries are posted as Adjustments. There are two types of reconciliation processes:
  - In Manual Reconciliation process, you can review the adjustments in Reconciliation Summary UI and post the reconciliation entries to product process tables. In manual reconciliation definition, your input is sought on the GL side and PP side to determine the course of reconciliation. This is applicable for both GL Level and Map Level Reconciliation. In GL level reconciliation, unique GL codes are identified from the GL code mapping. At the map level, GL codes do not form a part of the reconciliation definition. A manual reconciliation definition can be used for a Solo or Consolidated Legal Entity. The reconciliation definition for a consolidated GL, having an intra-group GL structure, is computed from GL data and not from PP data. Therefore, any account present in the PP but unavailable in GL is not captured in the reconciliation definition.
  - In Automatic Reconciliation Process, reconciliation entries are posted to the process tables.
- If there are no Reconciliation differences reported after execution, then no audit entry is made in terms of reconciliation to process table. Further no action is required.

Issues and Actions

Any data issues identified in the Cloud Framework can be resolved on the **Inbox** Page of AFCS by creating Issues and appropriate Actions. Data Issues such as Data Quality failures or Variance breaches or even known issues can be fixed using the Adjustment Framework option in Action. The adjustment entries posted are audit trailed and data traceability enabled.

Issues

Issues and Actions are Operational Configuration in OFS AFCS.

On the **Inbox** Page, you can log an Issue and create a set of Actions for that Issue. In an Action, you can create a Business Term. For the instructions to log or manage an Issue, see the Manage an Issue Section in the Tracking and Workflow Section.

Actions

On the **Inbox** Page, after logging an Issue, you can create a set of Actions for that Issue. In an Action, you can create a Business Term. For the instructions to log or manage an Action, see the Manage an Action Section in the Tracking and Workflow Section.

Tracking and Workflow

The **Inbox** Page lists all the Tasks such as Issues and Actions for a User. You can log Issues or the Issue can be logged by a Governance Process or Reassigned Tasks from another User. You can create Actions, which are remedy tasks to resolve an Issue. An Action can involve an Adjustment Process to close the Action or Issue. The **Notification** Tab lists the latest tasks for the User.

Topics:

Manage an Issue

This section provides information about how to create, update, close, reopen, or delete an Issue.

Topics:

Create or Log an Issue

To create an Issue, do the following:

1. Go to the **Inbox**. To navigate to the Inbox, on the Home Page, click the **Inbox** Button.

   The **Inbox** Page is displayed.

2. On the **Inbox** Page, click the **Log Issue** Button.

   The **Create Issue** Page is displayed.

3. Set the following values.

Table: Issues Field Names and Description

Field Name	Description
Name	Type a unique name for the Issue.
Description	Type a description for the Issue.
Category	Select the required Category: • Data Authorization • Data Privacy • Data Security • Data Accuracy • Data Availability • Timeliness • Catalog Extension: To extend the out-of-the-box Data Structure, you can use this option.
Criticality	Set one of the following criticality level for the Issue: • Low • Medium • High
Target Date	Select the Date till when you need this Issue to be active.
Execution Date	Select the Date for executing this Issue.
Source	Select a source for the Issue: • Controls: It defines the operational and quality controls on every data element and monitors the effectiveness of the control. • Key Indicators: It monitors all the key metric, trends of the metric, variances, and so on for the data elements. • Catalog: To create the Business Term that comprises of elements supporting the business needs of the Financial Industry.
Owner	Select the required Owner for the Issue.
Comments	Add comments for the Issue, if required.
Attach Documents	Use this field to upload the elaborated Issue details.

4. To save the details, click **Save**.

   A Confirmation Acknowledgment is displayed: *Issue logged successfully*.

5. Close the Acknowledgment. The new Issue is listed on the **Inbox** Page with the Status as New along with the other details of the Issue.

Update an Issue

To update an existing Issue, do the following:

1. Go to the **Inbox**. To navigate to the Inbox, on the Home Page, click the **Inbox** Button.

   The **Inbox** Page is displayed.

2. On the **Inbox** Page, click the required Issue.

   The Issue Details Page is displayed.

3. You can edit the **Description**, **Category**, **Criticality**, **Target Date**, **Owner**, **Comments**, and **Attach Documents** Fields.

4. To save the changes, click **Update**.

   A Confirmation Acknowledgment is displayed: *Issue logged successfully*.

5. Close the Acknowledgment.

Close an Issue

To close an existing Issue, do the following:

1. On the **Inbox** Page, click the required Issue.

   The Issue Details Page is displayed.

2. Click **Close**.

   A Confirmation Acknowledgment is displayed: *Do you want to close issue?* with **Yes** and **No**.

3. To close the Issue, click **Yes**.

4. Close the Acknowledgment.

   A Confirmation Acknowledgment is displayed: *Issue has been closed successfully*.

5. Close the Acknowledgment.

Reopen an Issue

To reopen a closed Issue, do the following:

1. On the **Inbox** Page, click the closed Issue that needs to be reopened.

   The Issue Details Page is displayed.

2. Click **Re-open**.

   A Confirmation Acknowledgment is displayed: *Do you want to re-open issue?* with **Yes** and **No**.

3. To reopen the Issue, click **Yes**.

A Confirmation Acknowledgment is displayed: *Issue has been re-opened successfully*.

4. Close the Acknowledgment.

Delete an Issue

To delete an Issue, do the following:

1. On the **Inbox** Page, select the required Issue.
2. Click the **Delete** Button.

   A Confirmation Acknowledgment is displayed: *Do you want to delete tasks issue?* with **Yes** and **No**.

   > **NOTE:**
   > Ensure that you close all the Actions associated with the Issue and then close the Issue.

3. To delete the Issue, click **Yes**.

   A Confirmation Acknowledgment is displayed: *Items has been deleted Successfully*.

4. Close the Acknowledgment.

Alternatively, to re-open, close, delete an Issue, on the **Inbox** Page, select the required Issue, click the Menu associated with the Issue, and select **Re-open** or **Close** or **Delete** respectively, and follow further instructions as mentioned in the preceding sections.

Manage an Action

This section provides information about how to create, update, close, reopen, or delete an Action.

Topics:

Create an Action

To create an Action, do the following:

1. Go to the **Inbox**. To navigate to the Inbox, on the Home Page, click the **Inbox** Button.

   The **Inbox** Page is displayed.

2. On the **Inbox** Page, select the required Issue for which you need to create an Action.

   The Issue Details Page is displayed.

3. On the **Actions** Tab, click **Create**.
4. Set the following values.

Table: Actions Field Names and Description

Field Name	Description
Name	Type a unique name for the Action related to its Issue.
Description	Type a description for the Action related to its Issue.
Action Type	Select the required Action Type: • Data Adjustments - DQ Errors: • Data Adjustments - Others: • Data Adjustments - Regulatory Reporting: • Reconciliation Adjustments: • Others: • Catalog Extension: To extend the out-of-the-box Data Structure, you can use this option. **NOTE:** If you select the Adjustment based Action Type, then on the Action Details Page, Adjustments Tab is displayed, where you can create an Adjustment for the Action. If you select the Catalog Extension Action Type, then on the Action Details Page, Extension Tab is displayed, where you can create a Business Term for the Action.
Criticality	Set one of the following criticality level for the Action: • Low • Medium • High
Start Date	Select the beginning date in the range on which you need this Action to be executed.
Target Date	Select the last date in the range within which you need this Action to be executed.
Owner	Assign the required Owner for the Action.
Comments	Add comments for the Action, if required.
Attach Documents	Use this field to upload the elaborated Issue details.

5. Click **Save**.

   A Confirmation Acknowledgment is displayed: *Action logged successfully*.

6. Close the Acknowledgment.
7. Click outside the Action Details Page to close it. The new Action is listed on the **Inbox** Page with the Status as New along with the other Action details.

Update an Action

To update an existing Action, do the following:

1. On the **Inbox** Page, click the required Action.

   The **Action Details** Page is displayed.

2. You can edit the **Description**, **Action Type**, **Criticality**, **Start Date**, **Target Date**, **Owner**, **Comments**, and **Attach Documents** Fields.
3. To save the changes, click **Update**.

   A Confirmation Acknowledgment is displayed: *Issue logged successfully*.
4. Close the Acknowledgment.
5. Click outside the Action Details Page to close it.

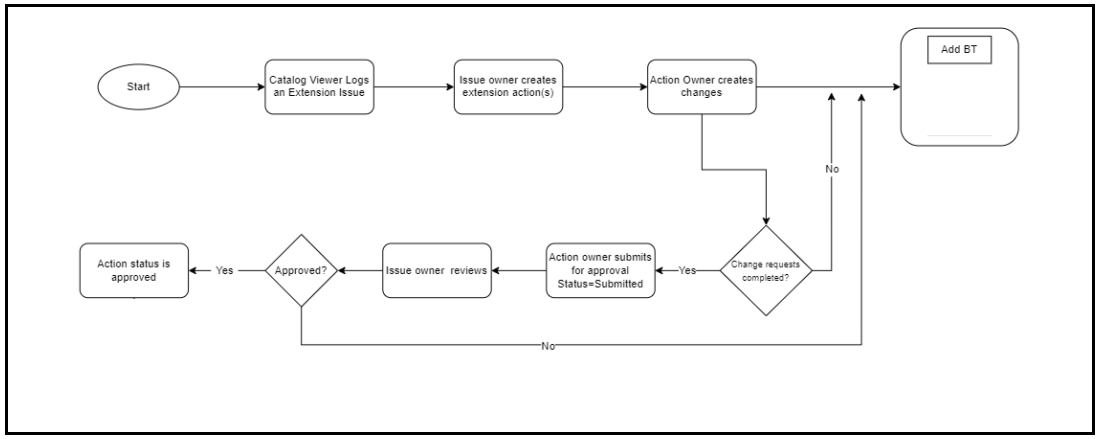
Approval Workflow for Issues and Actions

This section provides information on the approval workflow for the created issue and the submitted action in the AFCS Application.

Catalog Extension

The Issue Owner has the privilege to view and Approve the Actions submitted by the Action Owner. The Actions once approved cannot be edited further and will disable all the extensions for any modifications.

Figure 1: Approval Workflow for Issues and Actions



Approve an Action

To approve an existing Action, do the following:

1. On the **Inbox** Page, click the required Action with the status as **Submitted**.

   The **Action Details** Page is displayed.
2. You can view the submitted action and the corresponding Business Term details.
3. To Approve the Action, click **Approve**.

   A Confirmation Acknowledgment is displayed: *<Action Name>- Add comment*.
4. Enter the reason for approving the submitted action and click **Save**.
5. Close the Acknowledgment.

   A Confirmation Acknowledgment is displayed: *All BT/Entities has been approved successfully*.

6. Close the Acknowledgment.
7. Click outside the Action Details Page to close it.

Return an Action

To return an existing Action, do the following:

1. On the **Inbox Page**, click the required Action.

   The **Action Details** Page is displayed.
2. You can view the submitted action and the corresponding Business Term details.
3. To Return the Action, click **Return**.

   A Confirmation Acknowledgment is displayed: *<Action Name>- Add comment*.
4. Enter the reason for rejecting the submitted action and click **Save**.

   A Confirmation Acknowledgment is displayed: *BT/Entities has been rejected successfully*.

   NOTE:
   You can modify the Action details and re-submit it for approval.
5. Close the Acknowledgment.
6. Click outside the Action Details Page to close it.

Close an Action

To close an existing Action, do the following:

1. On the **Inbox** Page, click the required Action.

   The **Action Details** Page is displayed.
2. Click **Close**.

   A Confirmation Acknowledgment is displayed: *Do you want to close action?* with **Yes** and **No**.
3. To close the Action, click **Yes**.
4. Close the Acknowledgment.

   A Confirmation Acknowledgment is displayed: *Action has been closed successfully*.
5. Close the Acknowledgment.
6. Click outside the Action Details Page to close it.

Reopen an Action

To reopen a closed Action, do the following:

1. On the **Inbox** Page, click the closed Action that needs to be opened.

   The **Action Details** Page is displayed.
2. Click **Re-open**.

   A Confirmation Acknowledgment is displayed: *Do you want to re-open action?* with **Yes** and **No**.

3. To reopen the Action, click **Yes**.

   A Confirmation Acknowledgment is displayed: *Action has been re-opened successfully*.

4. Close the Acknowledgment.
5. Click outside the Action Details Page to close it.

Delete an Action

To delete an Action, do the following:

1. On the **Inbox** Page, select the required Action.
2. Click the **Delete** Button.

   A Confirmation Acknowledgment is displayed: *Do you want to delete tasks action?* with **Yes** and **No**.

3. To delete the Action, click **Yes**.

   A Confirmation Acknowledgment is displayed: *Items has been deleted Successfully*.

4. Close the Acknowledgment.
5. Click outside the Action Details Page to close it.

Alternatively, to re-open, close, delete an Action, on the **Inbox** Page, select the required Action, click the Menu associated with the Action, and select **Re-open** or **Close** or **Delete** respectively, and follow further instructions as mentioned in the preceding sections.

Create or Update a Business Term

To create or update a Business Term for an Action, see the *Manage Business Terms* Section in the OFS AFCS Data Catalog Release 22A.

Dashboards and Reports

This section provides an overview on the Reports that can be generated to view the details relevant to computation and other aspects of the Balance Reconciliation and Balance Computation.

Topics:

Overview of Balance Reconciliation Reports and Dashboards

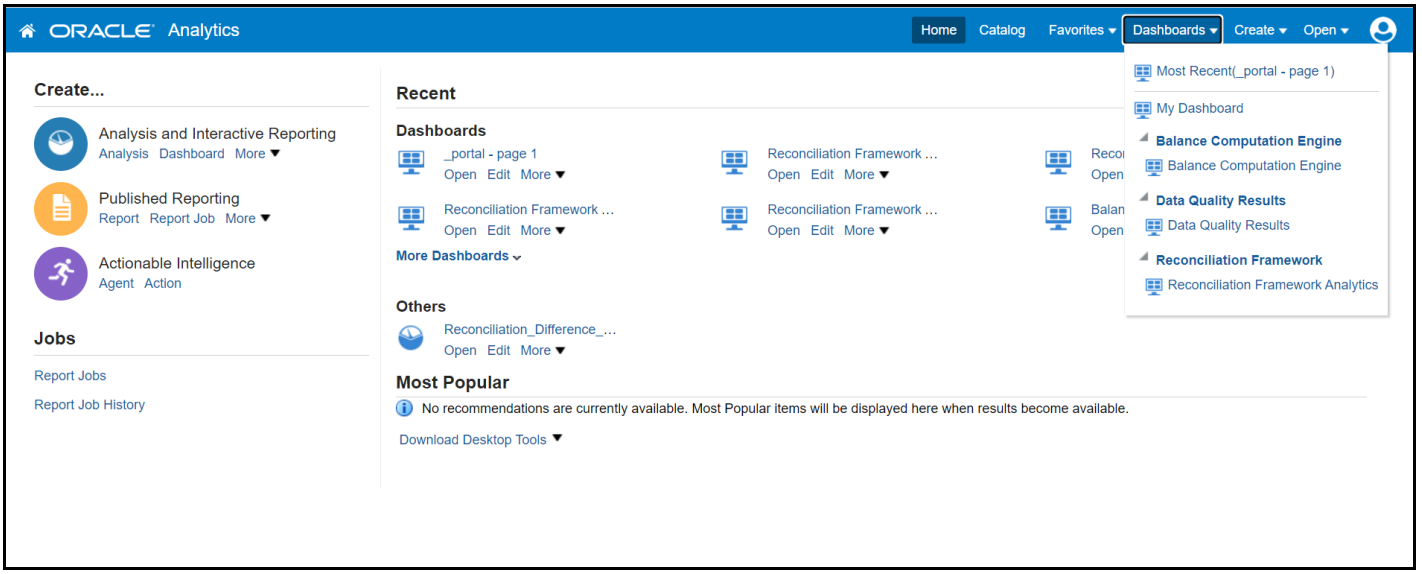
Balance Reconciliation provides you with a reporting-cum-information framework that can be used for generating reports and viewing information relevant to computations and other aspects of the Balance Reconciliation. It serves as a single regulatory and management reporting solution and leverages the capabilities to provide out-of-the-box reporting of your Balance Reconciliation results. The key elements are listed as follows:

- Tabular and pivot table reporting
- Drill across capability
- Export options, such as Excel, PowerPoint, and PDF

Accessing the Standard Reports and Dashboards

You can access the standard dashboards and reports by accessing the AFCS User Interface. When you sign on to the application, you are directed to the Home Page. On the Left Hand Side menu, click Dashboards, which will show basic summary reports. At the top right-hand corner of the window, click the dashboard drop-down menu containing the listing of all of the seeded dashboards that you can select for navigating to the desired location.

Figure 111: Analytics page- Seeded Dashboards



Balance Reconciliation Analytics consists of the following dashboards:

- Home
- Threshold Breach
- Reconciliation Execution Audit Trail
- Drill Down
- Map Filter Report

Each seeded dashboard contains a set of prompts at the top of the page, which require selections for the reports to produce results. Make the appropriate selections for each prompt to correctly filter the query for your results. The **Home, Threshold Breach** and **Drill Down** dashboard consists of the following page level prompts:

- **As of Date**: Select the As of date and click the Calendar icon.
- **Execution ID**: All successful Run executions with the status as complete in the Run Execution Summary window are populated here. Select the appropriate Run Execution ID from the drop-down.

After updating the prompts click the **Apply** button. To refresh the data in the fields click **Reset**.

The **Reconciliation Execution Audit Trail** Dashboard consists of the following page level prompts:

- **User ID**: Data is displayed based on the User ID selected from the drop-down list.
- **Information Type**: Select the information type from the drop-down list as Null, Error, or Info.
- **Execution Date**: Select the date on which the Run is executed.

The **Map Filter Report** Dashboard consists of the following page level prompts:

- **Execution ID**: All successful Run executions with the status as complete in the Run Execution Summary window are populated here. Select the appropriate Run Execution ID from the drop-down.
- **GL Map ID**: The General Ledger Map identification number are populated here. Select the appropriate GL Map ID from the drop-down.
- **Map Version Number**: The map version number are populated here. Select the appropriate Map Version Number from the drop-down.

A few reports also have filters at each reporting level which are detailed in the section Report Descriptions. Select the appropriate report filters so that data is displayed accordingly. Each report within a dashboard contains the following features:

- **Refresh**: Click this button to update the values displayed in the report.
- **Print**: Click this button to print a particular report.
- **Export**: Click this button to export data into multiple formats such as PDF, Excel, PowerPoint, and so on.
- **Return**: To navigate back to the previous window click **Return**.
- **Create Bookmark Link**: To share or save a browsed page click **Create Bookmark Link.** Sort icons also appear on each tabular report to sort the data in ascending or descending order. A few reports also consist of a drill-through capability wherein you can navigate to the most granular level of data.

Report Descriptions

Topics:

Dashboard: Home

This section provides information about the Dashboard Home page used in the Reconciliation Framework application.

Table : **Reconciliation Execution Summary information**

Report Name	Reconciliation Execution Summary
Report Level Filters	Not Applicable
Report Description	This tabular report displays, in a nutshell, the following parameters of the selected Run Execution ID: • Map Name: This is the name of the reconciliation as defined in the Reconciliation Management window. • Map-Version Number: This is the version number of the defined reconciliation. The version number indicates the number of times the reconciliation is edited at the reconciliation definition stage. • Legal Entity: The Legal Entity is defined for this particular map and the version number is displayed here. • Consolidation Type: The consolidation type as Solo, Consolidation, or Aggregate is displayed here. • Reconciliation Type: The reconciliation type, that is, a Ledger to Ledger Reconciliation, General Ledger to Product Processor (Manual Reconciliation), or General Ledger to Product Processor (Auto Reconciliation) is displayed here. • Reconciliation Level: Displays the level at which the reconciliation is performed, that is, GL Level or Map Level. • Adjustment Allocation: Adjustment Allocation is displayed here as 'Yes' or 'No' as defined in the Reconciliation Management windows. • Balance Type: The Reconciliation period as defined in the Reconciliation Management window is displayed here. • Reconciliation Dimensions: The Mandatory Dimensions and as well as Optional Reconciliation Dimensions (if any) are displayed here.
Drill-through On	Not Applicable

Table : Reconciliation Difference Report information

Report Name	Reconciliation Difference Report
Report Level Filters	Map Name: This is the name of the reconciliation as defined in the Reconciliation Management window. Map Version: This is the version number of the defined reconciliation. The version number indicates the number of times the reconciliation is edited at the reconciliation definition stage. Reconciliation Difference Value Display: If the Reconciliation Difference is to be displayed in actual format, select Actual, or else select Percentage.
Report Description	This tabular report displays, in a nutshell, the identified Reconciliation Differences for a particular Map. The following parameters are displayed • GL Name: The name of the specific GL entity code of the selected Map name is displayed • Currency: Displays the currency in which the actual reconciliation difference is displayed • Source Balance: The account balance at the source GL entity level is displayed here ▪ Target Balance: The account balance at the target GL entity level (for Ledger to Ledger reconciliation) or Product Processor is displayed here. ▪ Positive Reconciliation Difference: Any positive reconciliation difference based on the source entity balance is displayed here. ▪ Negative Reconciliation Difference: Any negative reconciliation difference based on the target entity balance is displayed here. **Note**: If the percentage is selected in the Reconciliation Difference Value Display field, then the positive reconciliation difference and negative reconciliation difference are compared and the relevant percentage value is populated. For example: If the Actual Positive Reconciliation Difference is 5000 and the Actual Negative Reconciliation Difference is 0, then the percentage is displayed as 100 for positive reconciliation difference. Absolute Reconciliation Difference: This is calculated as the total difference by ignoring the signs between the negative and positive reconciliation differences. For example: if Positive Reconciliation Difference is 19,500 and the Negative Reconciliation Difference is 23,000, then the absolute difference is 42,500. Net Reconciliation Difference: This is the net difference between negative and positive reconciliation differences. For example: if Positive Reconciliation Difference is 19,500 and the Negative Reconciliation Difference is 23,000, then the net difference is 3,500.
Drill-through On	GL Name
Drill-through	Report Name: Reconciliation Difference Detailed Report
Description	Navigation Path: Click GL Name in the Reconciliation Difference Report to view the detailed report. This detailed report is displayed for the particular Map Name and Version number selected in the Report Level Filters. This tabular report provides a detailed view of the identified reconciliation

	differences and the following parameters are reported: • GL Name: The name of the specific GL entity code of the selected Map Name is displayed. • Legal Entity: The Legal Entity as defined for the particular map and version number is displayed here. • Accounting Standard Code: The Accounting Standard Code defined in the reconciliation is displayed here. • Currency: Displays the currency in which the actual reconciliation difference is displayed. • Other optional dimensions: Values against respective optional dimensions (if any) are reported here. • Source Balance: The account balance at the source GL entity level is displayed here. • Target Balance: The account balance at the target GL entity level (for Ledger to Ledger reconciliation) or Product Processor is displayed here. • Reconciliation Difference: The net reconciliation difference is displayed here.

Table 13: Reconciliation Adjustment Report information

Report Name	Reconciliation Adjustment Report
Report Level Filters	• Map Name: This is the name of the reconciliation as defined in the Reconciliation Management window. • Map Version: This is the version number of the defined reconciliation. The version number indicates the number of times the reconciliation is edited at the reconciliation definition stage. • Reconciliation Difference Value Display: If the Reconciliation Difference is to be displayed in Actual format select Actual, or else select Percentage.
Report Description	This tabular report is displayed if Adjustment Allocation is selected as 'Yes' while defining reconciliation. This report displays in a nutshell, the adjustment amount pass The following parameters are displayed: • GL Name: The name of the specific GL entity code of the selected Map Name is displayed. • Currency: Displays the currency in which the Adjustment Entry is processed. • Reconciliation Difference: The net reconciliation difference is displayed here. • Legal Entity: The Legal Entity is defined for this particular map and the version number is displayed here. • Approved Adjustment Amount: The adjustment amount authorized by the approver is displayed here. • Pending Adjustment Amount: The adjustment amount pending to be submitted from the Adjustment Entry window is displayed here. • Submitted Adjustment Amount: The adjustment amount

	submitted from the Adjustment Entry window, however waiting to be approved by the authorizer is displayed here. • Rejected Adjustment Amount: The adjustment amount rejected by the authorizer from the Adjustment Entry Approval window is displayed here
Drill-through On	GL Name
Drill-through	Report Name: Reconciliation Adjustment Detailed Report Navigation Path: Click GL Name in the Reconciliation Adjustment Report to view the detailed report. This detailed report is displayed for the particular Map Name and Version number selected in the Report Level Filters. This tabular report provides a detailed view of the adjustment entries passed and the following parameters are reported: • GL Name: The name of the specific GL entity code of the selected Map Name is displayed. • Legal Entity: The Legal Entity is defined for this particular map and the version number is displayed here. • Currency: Displays the currency in which the actual reconciliation difference is displayed. • Accounting Standard Code: The Accounting Standard Code defined in the reconciliation is displayed here. • Other optional dimensions: Values against respective optional dimensions (if any) are reported here. • Exposure Amount: The Adjustment Entry amount is displayed here. • Authorization Status: If the Adjustment Entry is approved, pending to be submitted, or submitted but pending to be approved, then the relevant status is displayed here. • Product Processor: The PP to which the Adjustment Entry is passed is displayed here. • Product Processor Balance Column: The specific column in the PP to which the Adjustment Entry is passed is displayed here

Dashboard: Threshold Breach

Table : Threshold Breach Summary information

Report Name	Threshold Breach Summary
Report Level Filters	Not Applicable
Report Description	This report displays in a nutshell, the threshold parameters of the selected Run Execution ID. The following parameters are reported: Global Threshold: Global Threshold displayed here indicates the point of reconciliation difference greater than which execution process may stop or continue at the time of execution. Global Threshold is compared with cumulative

	percentage difference across all reconciliation definitions getting executed in a Run. • Execution on Threshold Breach: Depending upon your selection in the Run Execution Parameters window, Continue or Stop is displayed here. • Auto Approval: The value as selected in the Run Execution Parameter window that is, Yes or No, is displayed here. • Global Threshold: If the Global Threshold Level is breached or not breached, then the relevant information is displayed here. In a tabular form the following parameters are reported: • Map Name: This is the name of the reconciliation as defined in the Reconciliation Management window. • Map-Version Number: This is the version number of the defined reconciliation. The version number indicates the number of times the reconciliation is edited at the reconciliation definition stage. • Number of Observations: The number of times the same map and version is executed is displayed here. • Number of Breaches: The number of breaches reported based on the threshold value specified in the Reconciliation Management window is displayed here.
Drill-through On	Map Name
Drill-through Description	Report Name: Threshold Breach Detailed Report Navigation Path: Click Map Name in the Threshold Breach Summary to view the detailed report. Map Level Filters: Map Name, Map Version This tabular report provides a detailed view of the threshold value breaches and the following parameters are reported: • GL Name: The name of the specific GL entity code of the selected Map Name is displayed. • Legal Entity: The Legal Entity is defined for this particular map and the version number is displayed here. • Currency: Displays the currency in which the actual reconciliation difference is displayed. • Accounting Standard Code: The Accounting Standard code defined in the reconciliation is displayed here. • Other optional dimensions: Values against respective optional dimensions (if any) are reported here • Source Balance: The account balance at the source GL entity is displayed here. • Target Balance: The account balance at the target GL entity (for Ledger to Ledger reconciliation) or Product Processor is displayed here. • Reconciliation Difference: The net reconciliation difference amount is displayed here. • Threshold Breach Type: The threshold breach type is displayed here as a negative or positive breach. This is based on positive and negative reconciliation differences. • Threshold Value: The value as per the breach type is displayed here.

	• Threshold Currency: The Threshold currency is displayed if the Threshold value is in Absolute format. • Threshold Breached by The value or percentage by which the threshold value is breached based on the reconciliation difference is reported here.

Table : Global Threshold Breach Summary information

Report Name	Global Threshold Breach Summary
Report Level Filters	Not Applicable
Report Description	This report displays in a nutshell, the global threshold parameters of the selected Run Execution ID. The following parameters are reported: • Global Threshold Percentage: Global Threshold displayed here indicates the point at which the execution process may stop or continue at the time of execution if the reconciliation difference surpasses the defined Global Threshold level. Global Threshold is compared with the cumulative percentage difference across all reconciliation definitions getting executed in a Run. • Difference Percentage: The absolute percentage difference is displayed here. • Breach Percentage: The percentage by which the Global Threshold is breached based on the reconciliation difference is displayed here.
Drill-through On	Not Applicable

Table : Threshold Definition information

Report Name	Threshold Definition
Report Level Filters	GL Map Name: The name of the specific GL entity map name must be selected here. Map Version: This is the version number of the selected map name. The version number indicates the number of times the reconciliation is edited at the reconciliation definition stage.
Report Description	This tabular report displays the following parameters: • Target Entity: The name of the Product Processor is displayed here in case of a GL to PP reconciliation or the name of the Target GL entity is displayed here. • Target Balance Column: The specific column in the Product Processor (for GL – PP reconciliation) or target GL entity (for GL-GL reconciliation) is displayed here. • The threshold In: Displays the type of threshold that is absolute or percentage.

	• Threshold Currency: The currency, in which the threshold value is defined, displayed here. Currency is not displayed when the Percentage is selected. • Positive Correction Threshold: The positive correction threshold value as defined in the Reconciliation Management window is displayed here. • Negative Correction Threshold: The negative correction threshold value as defined in the Reconciliation Management window is displayed here.
Drill-through On	Not Applicable

Dashboard: Reconciliation Execution Audit Trail

This dashboard provides evidence on the sequence of activities performed by a User ID on a particular execution date. This audit trail is useful for the following reasons:

- It provides a record of the history of a defined Reconciliation for the benefit of senior management.
- It is useful for maintaining the security of the system. Errors can be easily detected.

Dashboard: Drill Down

- **As of Date**: Select the As of date and click the Calendar icon.
- **Execution ID**: All successful Run executions with the status as complete in the Run Execution Summary window are populated here. Select the appropriate Run Execution ID from the drop-down.

This report is used to view the sum of 'Source Balance', 'Target Balance' and 'Reconciliation Difference' across 'Legal Entity', 'Accounting Standard Code', 'Currency', 'Product Name', 'Organization Unit', 'Customer Class', 'Business Unit', 'Geography' along with 'GL Account Name'.

Dashboard: Map Filter Report

This dashboard displays the map level definition of Source configuration of Reconciliation definition in the Balance Reconciliation.

Table : **Map Filter Report Information**

Report Name	Reconciliation Source Filters
Report Level Filters	Not Applicable
Report Description	This tabular report displays, in a nutshell, the following parameters of the selected Run Execution ID: • GL Map ID: This is the map identification number of the reconciliation as defined in the Reconciliation Management window. • Map-Version Number: This is the version number of the defined reconciliation. The version number indicates the number of times the reconciliation is edited at the reconciliation definition stage. • Dimension Table Name: This the name of the Dimension table of the reconciliation as defined in the Reconciliation Management window. • Filter Values Selected: This displays the list of filter values of the reconciliation.
Drill-through On	Not Applicable

Table : **Map Filter Report -Reconciliation Target Filters**

Report Name	Reconciliation Target Filters
Report Level Filters	Not Applicable
Report Description	This tabular report displays, in a nutshell, the following parameters of the selected Run Execution ID: • GL Map ID: This is the map identification number of the reconciliation as defined in the Reconciliation Management window. • Map-Version Number: This is the version number of the defined reconciliation. The version number indicates the number of times the reconciliation is edited at the reconciliation definition stage. • Target Table Name: This is the name of the target table or Product Processor is displayed here. • Dimension Table Name: This the name of the Dimension table of the reconciliation as defined in the Reconciliation Management window. • Filter Values Selected: This displays the list of filter values of the reconciliation.
Drill-through On	Not Applicable

Table : **Map Filter Report -Reconciliation Dimensions**

Report Name	Reconciliation Dimensions
Report Level Filters	Not Applicable
Report Description	This tabular report displays, in a nutshell, the following parameters of the selected Run Execution ID: • GL Map ID: This is the map identification number of the reconciliation as defined in the Reconciliation Management window. • Map-Version Number: This is the version number of the defined reconciliation. The version number indicates the number of times the reconciliation is edited at the reconciliation definition stage. • Dimension Table Name: This the name of the Dimension table of the reconciliation as defined in the Reconciliation Management window.
Drill-through On	Not Applicable

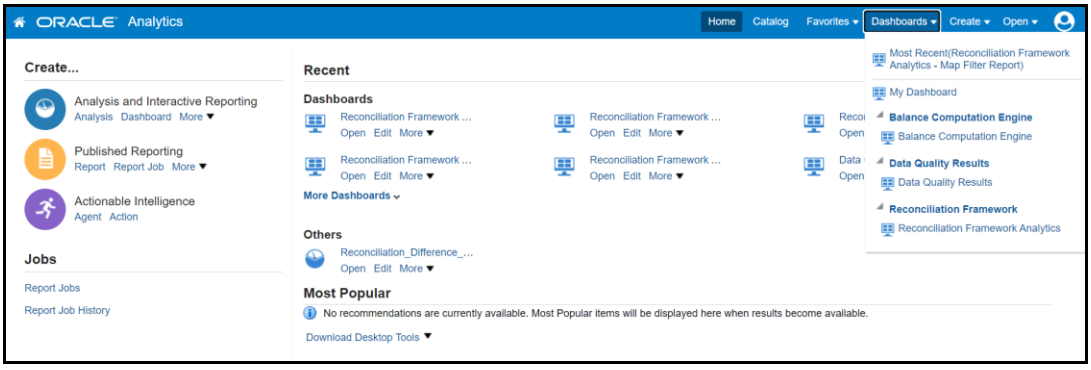
Balance Computation Engine Reports

This section provides information about generating and viewing the reports in the Balance Computation.

Accessing the Standard Reports and Dashboards

You can access the standard dashboards and reports by accessing the AFCS User Interface. When you sign on to the application, you are directed to the Home Page. On the Left Hand Side menu, click Dashboards which will show basic summary reports. At the top right-hand corner of the window, click the dashboard drop-down menu containing the listing of all of the seeded dashboards that you can select for navigating to the desired location.

Figure 111: Analytics page- Seeded Dashboards



Balance Computation Engine Analytics consists of three dashboards:

- Translated

- Day and PTD
- Revalued

Each seeded dashboard contains a set of prompts at the top of the page, which require selections for the reports to produce results. Make the appropriate selections for each prompt to correctly filter the query for your results. The **Translated**, **Day and PTD** and **Revalued** dashboard consists of the following page level prompts:

- **As of Date**: Select the As of date and click the Calendar icon.
- **Entity**: Select the Entity from the dropdown list.
- **Functional Currency**: Select the Functional Currency from the dropdown list.
- **Accounting Standard**: Select the Accounting Standard from the dropdown list.
- **Reporting Currency**: Select the Reporting Currency associated with the Entity from the dropdown list.

After updating the prompts click the **Apply** button. To refresh the data in the fields click **Reset**.

The **Day and PTD** Dashboard consists of the following page level prompts:

- **As of Date**: Select the As of date and click the Calendar icon.
- **Entity**: Select the Entity from the dropdown list.
- **Fiscal Period**: Select the Fiscal Period associated with the Entity from the dropdown list.
- **Accounting Standard**: Select the Accounting Standard from the dropdown list.
- **Functional Currency**: Select the Functional Currency from the dropdown list.

The **Revalued** Dashboard consists of the following page level prompts:

- **As of Date**: Select the As of date and click the Calendar icon.
- **Entity**: Select the Entity from the dropdown list.
- **Fiscal Period**: Select the Fiscal Period associated with the Entity from the dropdown list.
- **Functional Currency**: Select the Functional Currency from the dropdown list.
- **Accounting Standard**: Select the Accounting Standard from the dropdown list.
- **Reporting Currency**: Select the Reporting Currency associated with the Entity from the dropdown list.

A few reports also have filters at each reporting level which are detailed in the section Report Descriptions. Select the appropriate report filters so that data is displayed accordingly. Each report within a dashboard contains the following features:

- **Analyze**: Click this button to analyze the values displayed in the report.
- **Refresh**: Click this button to update the values displayed in the report.

- **Export**: Click this button to export data into multiple formats such as PDF, Excel, PowerPoint, and so on.

Report Descriptions

Topics:

Dashboard: Translated

This section provides information about the Dashboard Translated page used in the Balance Computation Engine.

Figure 115: Translated Report page

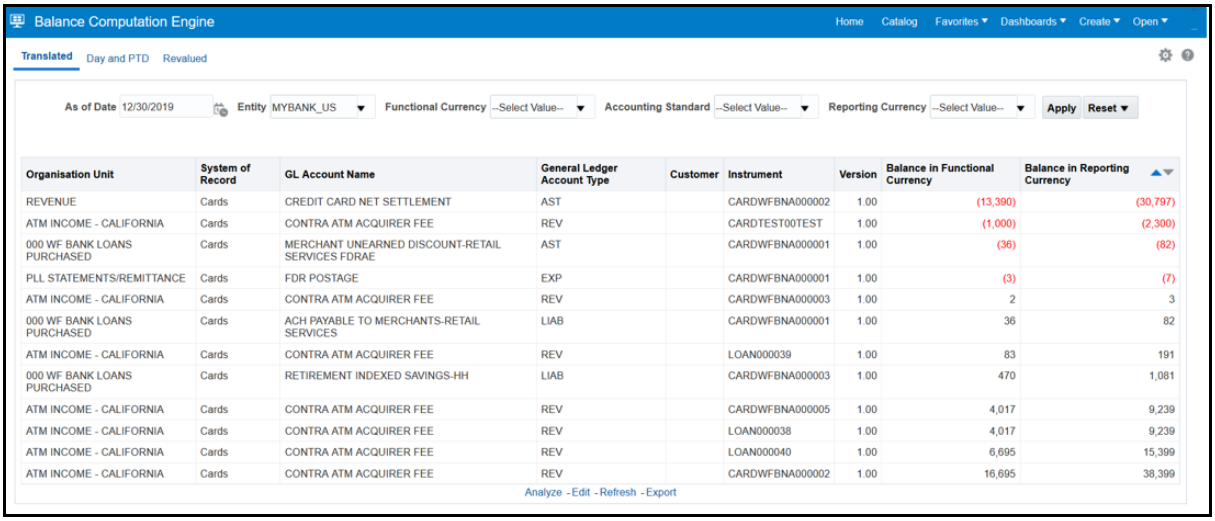


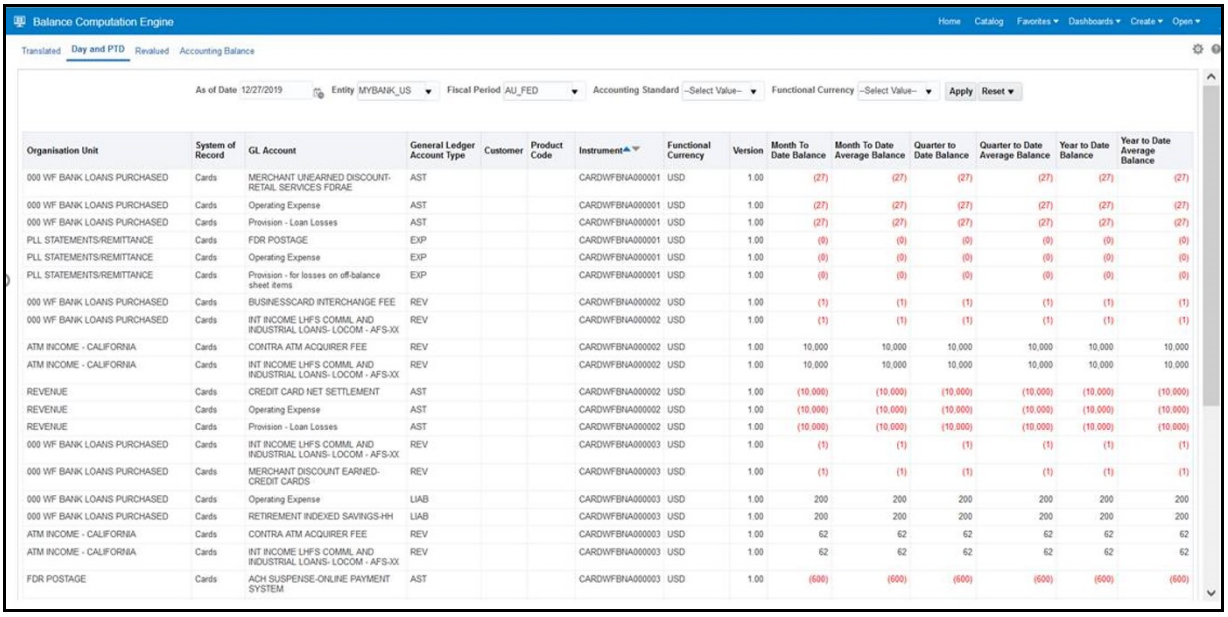
Table : **Translated Report Information**

Report Name	Translated
Report Description	This tabular report displays, in a nutshell, the following parameters of the selected Entity: • Organization Unit: The Organization Unit is displayed here. • System of Record: This is the system of record for data source code. • GL Account Name: The General Ledger Account Name is displayed here. • General Ledger Account Type: The General Ledger Account Type is displayed here. • Instrument: The Instrument identifier is displayed here. • Version: This is the latest value corresponding to the instrument . • Balance in Functional Currency: This is the balance in the functional currency. • Balance in Reporting Currency: This is the balance in the reporting currency.

Dashboard: Day and PTD

This section provides information about the Dashboard Pay and PTD page used in the Balance Computation Engine.

Figure 115: Pay and PTD Report page



Organisation Unit	System of Record	GL Account	General Ledger Account Type	Customer	Product Code	Instrument	Functional Currency	Version	Month To Date Balance	Month To Date Average Balance	Quarter to Date Balance	Quarter to Date Average Balance	Year to Date Balance	Year to Date Average Balance
000 WF BANK LOANS PURCHASED	Cards	MERCHANT UNEARNED DISCOUNT-RETAIL SERVICES FDRAE	AST			CARDWFBNA000001	USD	1.00	(27)	(27)	(27)	(27)	(27)	(27)
000 WF BANK LOANS PURCHASED	Cards	Operating Expense	AST			CARDWFBNA000001	USD	1.00	(27)	(27)	(27)	(27)	(27)	(27)
000 WF BANK LOANS PURCHASED	Cards	Provision - Loan Losses	AST			CARDWFBNA000001	USD	1.00	(27)	(27)	(27)	(27)	(27)	(27)
PLL STATEMENTS/REMITTANCE	Cards	FDR POSTAGE	EXP			CARDWFBNA000001	USD	1.00	(0)	(0)	(0)	(0)	(0)	(0)
PLL STATEMENTS/REMITTANCE	Cards	Operating Expense	EXP			CARDWFBNA000001	USD	1.00	(0)	(0)	(0)	(0)	(0)	(0)
PLL STATEMENTS/REMITTANCE	Cards	Provision - for losses on off-balance sheet items	EXP			CARDWFBNA000001	USD	1.00	(0)	(0)	(0)	(0)	(0)	(0)
000 WF BANK LOANS PURCHASED	Cards	BUSINESSCARD INTERCHANGE FEE	REV			CARDWFBNA000002	USD	1.00	(1)	(1)	(1)	(1)	(1)	(1)
000 WF BANK LOANS PURCHASED	Cards	INT INCOME LHFS COMML AND INDUSTRIAL LOANS- LOCOM - AFS-XX	REV			CARDWFBNA000002	USD	1.00	(1)	(1)	(1)	(1)	(1)	(1)
ATM INCOME - CALIFORNIA	Cards	CONTRA ATM ACQUIRER FEE	REV			CARDWFBNA000002	USD	1.00	10,000	10,000	10,000	10,000	10,000	10,000
ATM INCOME - CALIFORNIA	Cards	INT INCOME LHFS COMML AND INDUSTRIAL LOANS- LOCOM - AFS-XX	REV			CARDWFBNA000002	USD	1.00	10,000	10,000	10,000	10,000	10,000	10,000
REVENUE	Cards	CREDIT CARD NET SETTLEMENT	AST			CARDWFBNA000002	USD	1.00	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
REVENUE	Cards	Operating Expense	AST			CARDWFBNA000002	USD	1.00	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
REVENUE	Cards	Provision - Loan Losses	AST			CARDWFBNA000002	USD	1.00	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
000 WF BANK LOANS PURCHASED	Cards	INT INCOME LHFS COMML AND INDUSTRIAL LOANS- LOCOM - AFS-XX	REV			CARDWFBNA000003	USD	1.00	(1)	(1)	(1)	(1)	(1)	(1)
000 WF BANK LOANS PURCHASED	Cards	MERCHANT DISCOUNT EARNED-CREDIT CARDS	REV			CARDWFBNA000003	USD	1.00	(1)	(1)	(1)	(1)	(1)	(1)
000 WF BANK LOANS PURCHASED	Cards	Operating Expense	LIAB			CARDWFBNA000003	USD	1.00	200	200	200	200	200	200
000 WF BANK LOANS PURCHASED	Cards	RETIREMENT INDEXED SAVINGS-HH	LIAB			CARDWFBNA000003	USD	1.00	200	200	200	200	200	200
ATM INCOME - CALIFORNIA	Cards	CONTRA ATM ACQUIRER FEE	REV			CARDWFBNA000003	USD	1.00	62	62	62	62	62	62
ATM INCOME - CALIFORNIA	Cards	INT INCOME LHFS COMML AND INDUSTRIAL LOANS- LOCOM - AFS-XX	REV			CARDWFBNA000003	USD	1.00	62	62	62	62	62	62
FDR POSTAGE	Cards	ACH SUSPENSE-ONLINE PAYMENT SYSTEM	AST			CARDWFBNA000003	USD	1.00	(600)	(600)	(600)	(600)	(600)	(600)

Table : **Day and PTD Report Information**

Report Name	Day and PTD
Report Description	This tabular report displays, in a nutshell, the following parameters of the selected Entity: • Organization Unit: The Organization Unit is displayed here. • System of Record: This is the system of record for data source code. • GL Account: The General ledger Account Name is displayed here. • General Ledger Account Type: The General ledger Account Type is displayed here. • Instrument: The Instrument identifier is displayed here. • Functional Currency: This is the functional currency of the account. • Version: This is the latest value corresponding to the instrument. • Month to Date Balance: The month to date balance of the account is displayed here. • Month to Date average balance: The month to date average balance of the account is displayed here. • Quarter to Date average balance: The quarter to date average balance of the account is displayed here. • Year to Date Balance: The year to date balance of the account is displayed here. • Year to Date Average Balance: The year to date average balance of the account is displayed here.

Dashboard: Revalued

This section provides information about the Dashboard Revalued page used in the Balance Computation Engine.

Figure 115: Revalued Report page

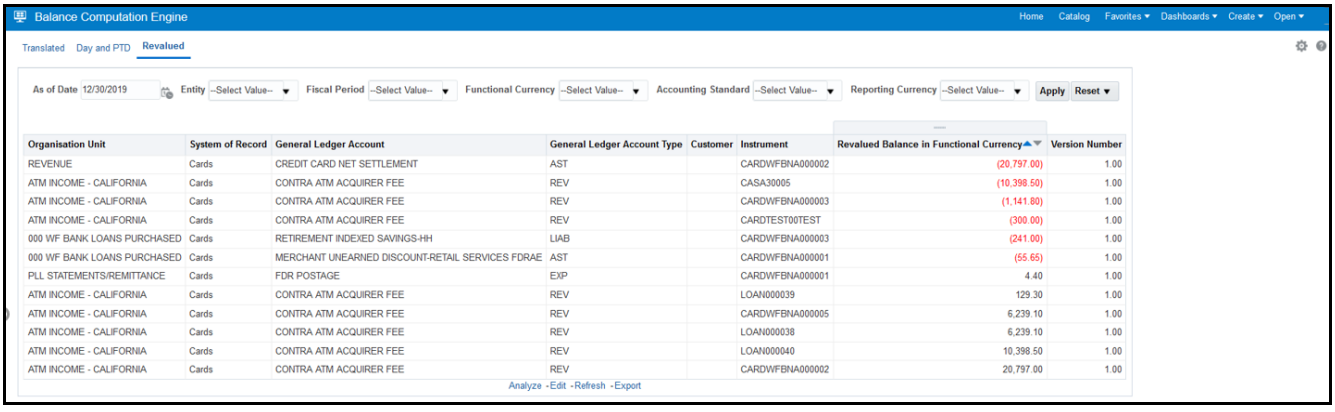


Table : **Revalued Report Information**

Report Name	Revalued
Report Description	This tabular report displays, in a nutshell, the following parameters of the selected Entity: • Organization Unit: The Organization Unit is displayed here. • System of Record: This is the system of record for data source code. • General Ledger Account: The General Ledger Account is displayed here. • General Ledger Account Type: The General Ledger Account Type is displayed here. • Instrument: The Instrument identifier is displayed here. • Revalued Balance in Functional Currency: This is the revalued balance in the functional currency. • Version Number: This is the latest value corresponding to the instrument.

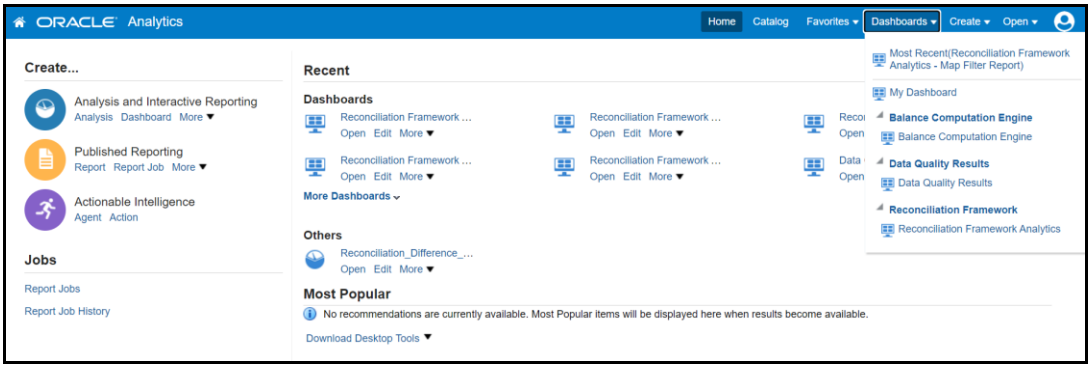
Data Quality Results Reports

This section provides information about generating and viewing the reports in the Data Quality Results.

Accessing the Standard Reports and Dashboards

You can access the standard dashboards and reports by accessing the AFCS User Interface. When you sign on to the application, you are directed to the Home Page. On the Left Hand Side menu, click Dashboards which will show basic summary reports. At the top right-hand corner of the window, click the dashboard drop-down menu containing the listing of all of the seeded dashboards that you can select for navigating to the desired location.

Figure 6: Analytics page- Seeded Dashboards



Each seeded dashboard contains a set of prompts at the top of the page, which require selections for the reports to produce results. Make the appropriate selections for each prompt to correctly filter the query for your results. The Data Quality dashboard consists of the following page level prompts:

- **As of Date**: Select the As of date and click the Calendar icon.
- **Execution ID**: Select the run execution identifier from the dropdown list.
- **DQ Group Name**: Select the Group Name from the dropdown list.
- **DQ Type**: Select the DQ Type from the dropdown list.

After updating the prompts click the **Apply** button. To refresh the data in the fields click **Reset**.

A few reports also have filters at each reporting level which are detailed in the section Report Descriptions. Select the appropriate report filters so that data is displayed accordingly. Each report within a dashboard contains the following features:

- **Refresh**: Click this button to update the values displayed in the report.
- **Export**: Click this button to export data into multiple formats such as PDF, Excel, PowerPoint, and so on.

Report Descriptions

Topics:

Data Quality Results

This section provides information about the Data Quality Dashboard Results page.

Figure 7: Data Quality Results page

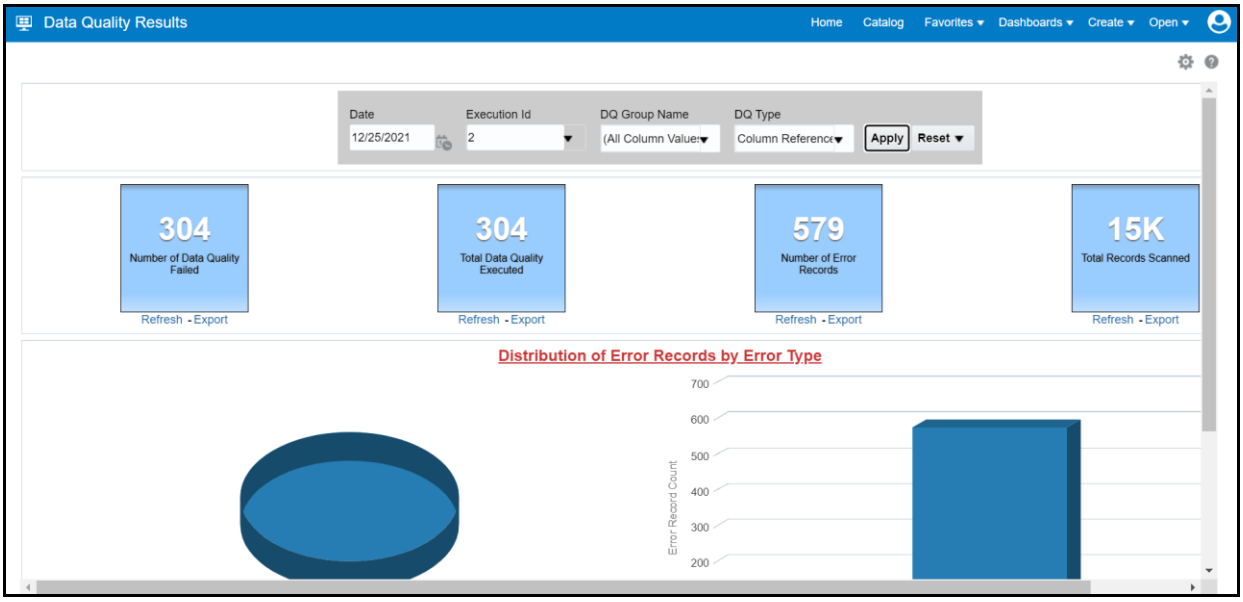


Table : Data Quality Results information

Report Name	Data Quality Results
Report Level Filters	Not Applicable
Report Description	This report displays in a nutshell, the data quality results along with the distribution of error records by error type. In a tile form the following parameters are reported: • Number of Data Quality Failed: The number of Data Quality records failed is displayed here. • Total Data Quality Executed: The total number of Data Quality checks executed is displayed here. • Number of Error Records: The number of error records in the check is displayed here. • Total Records Scanned: The total number of records scanned is displayed here.
Drill-through On	Error Records by Error Type
Drill-through Description	Report Name: Distribution of Error Records by Error Type Report Navigation Path: Click the pie chart or bar chart in the Data Quality Results to view the detailed report. This tabular report provides a detailed view of the Data Quality check by error type and the following parameters are reported: • Entity: The name of the entity is displayed. • Attributes: The attribute associated with the Entity is displayed here. • DQ Check Type Name: Displays the DQ Check Type name. • Data Quality Check Code: The Data Quality Check code is displayed here. • Record Scan Count: The record scan count is displayed here. • Number of Rejected Records: The number of rejected records is displayed here. • Percentage of Rejected Records Count: The percentage of the rejected records is displayed here.

Table : Data Quality Error Record Details information

Report Name	Data Quality Error Record Details Summary
Report Level Filters	Not Applicable
Report Description	Report Name: Distribution of Error Records by Error Type Report Navigation Path: Click the Data Quality Check Code in the Distribution of Error Records by Error Type Report to view the detailed report. This tabular report provides a detailed view of the Data Quality Error Record

	Details and the following parameters are reported: • Error Record Identifier: This will display Error record identified such as As of Date, Load Identifier and Account Number for DQ Code. • Error Column Value: This will display Error column values for given DQ.

Key Terms and Concepts

This section aims to explain the key terms and concepts.

Adjustment Entry

An entry passed in the Product Processor (PP) to reconcile it with the associated GL for the amount equivalent to the difference and an entry in the Contra GL Account with the opposite sign for the same amount is an adjustment entry.

Adjustment Entry Floor

If the difference of Source and Target is less than the Adjustment Entry Floor specified in the definition, then the calculated difference is not eligible for adjustment and entry will not be logged in the Adjustment Entry Table.

Attributed Dimension

A dimension whose members can have other properties or qualifiers known as Dimension Attributes.

Data set

A dimension used for segregating data into different sets according to its use or its source, for example, to separate actuals data, budget data, and encumbrances data. Other uses include separating test data from production data and creating separate data sets for What-if Analysis

Dimension

A structure that can be used to categorize business data. A dimension contains members. A dimension can be hierarchical in that you can organize the members into one or more hierarchies, or non-hierarchical.

Dimension Attributes

A property or qualifier that further describes a dimension member. An attribute can be anything such as a date, a number, or a character string. For example, the Geography dimension can have an attribute Population that designates how many people live in that area. Each member of the Geography dimension therefore has an associated population.

Hierarchy

A structure of dimension members organized by parent-child relationships

Global Threshold

Global Threshold is applied at an execution level where all the reconciliation differences for execution are added and checked across the absolute sum of source balance.

Inherit to Child

This feature is used to find child legal entities under the hierarchy node of a Legal Entity that is selected at the definition level. If this feature is used while defining the GL Reconciliation rule, then all child nodes will participate in the reconciliation process.

Reconciliation

The process of comparing information from one data source to another. An Account Reconciliation for a specific Period. Reconciliations consist of account balances (obtained from the Source System for the Period) and account properties.

Reconciliation Difference

Reconciliation difference refers to the difference in the balance between the Source and Target .

Threshold

A tolerance level to be set by the user in terms of either the maximum difference allowed in any single Product Processor and its corresponding GL or the maximum number of Product Processors having differences in the GL Reconciliation.

Positive Threshold

These values are used to identify the breach types, categorized as Negative Percentage Threshold (NPT), Positive Percentage Threshold (PPT), Negative Absolute Threshold (NAT), Positive Absolute Threshold (PAT), and Not Breached (NB). The Breach Type is identified at runtime during the reconciliation process and Audit Trail entries are posted with this information.

Negative Threshold

These values are used to identify the breach types, categorized as Negative Percentage Threshold (NPT), Positive Percentage Threshold (PPT), Negative Absolute Threshold (NAT), Positive Absolute Threshold (PAT), and Not Breached (NB). The Breach Type is identified at runtime during the reconciliation process and Audit Trail entries are posted with this information.

Threshold Breached Type

The different types of threshold breaches are listed as follows:

- PAT - Positive Absolute Threshold

- NAT -Negative Absolute Threshold
- PPT - Positive Percentage Threshold
- NPT - Negative Percentage Threshold
- G- Global
- NB: Not breached

General Ledger to Product Processor

Consolidation Type

There are two consolidation types supported by the application:

- Solo
- Consolidated

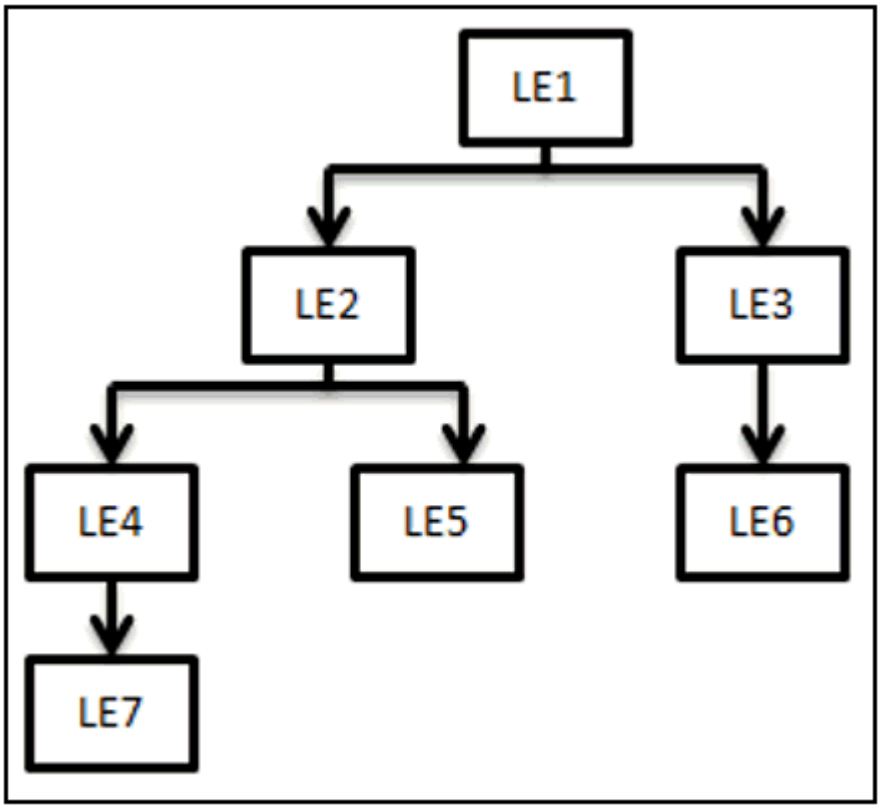
Solo

When a legal entity is selected with consolidation type as *Solo*, then all the exposures of that particular legal entity are selected for processing. Manual reconciliation definition can process solo legal entity data.

Consolidated

When a parent legal entity is selected as *Consolidated*, then all the exposures of that legal entity and exposure of each level (or levels) of descendant child legal entities (without intra-group exposures) are selected for processing. In intra-group exposures, the counterparty is a child descendant of any level. For an intra-group scenario (where GL Structure has specific intra-group GL Code in addition to regular GL Codes), intra GL Codes are considered only from the GL side for processing. Non-Intra is a scenario where no GL Codes are present for reconciliation definition.

Figure 4: Consolidated Process Flow



In this case, LE 1 is the parent legal entity, and LE2 and LE3 are the immediate child legal entities of LE1. Similarly, LE4 and LE5 are immediate child legal entities of LE2, but second-level descendant legal entities of LE1.

If you select LE2 (parent) for consolidated treatment, then exposure to LE 4, LE 5, and LE7 are considered as intra-group exposures.

> **NOTE:**
> The application only aggregates data on the PP side for a *consolidation* reconciliation type; such aggregation is only to reconcile data and does not consider minority or majority holdings.

Intra-group exposures are identified by the customer reference ID in the Product Processor. For LE2, if the customer reference ID is LE4, LE5, and LE7, then these are considered as intra-group exposures. Exposures to LE3 or LE6 are not considered as intra-group exposures as they are not the child descendant of LE 2. If you select LE7 for consolidated treatment, then no exposures are considered as intra-group exposure since LE7 has no child legal entity.

> **NOTE:**
> Intra-group exposures are identified by the customer reference ID in the PP Table.

Inherit to Child

This feature is used to find child legal entities under the hierarchy node of a Legal Entity that is selected at the definition level. If this feature is used when defining the GL Reconciliation rule, then all child nodes will participate in the Reconciliation Process.

Manual Reconciliation Definition

In manual reconciliation definition, user input is sought on the GL side and PP side to determine the course of reconciliation. This is applicable for both GL level and map level reconciliation. In GL level reconciliation, unique GL codes are identified from the GL code mapping. At the map level, GL codes do not form a part of the reconciliation definition. A manual reconciliation definition can be used for a solo or consolidated legal entity. The reconciliation definition for a consolidated GL, having an intra-group GL structure, is computed from GL Data and not from PP Data. Therefore, any account present in the PP but unavailable in GL is not captured in the reconciliation definition.

GL Level Reconciliation

In GL level reconciliation the difference between GL system and Product Processors Systems at each reconciliation dimension node level within a GL Code is identified. For manual reconciliation definition, unique GL codes are identified from the GL side. If it is at the solo level, then exposures originating in the legal entity are selected. If it is at the consolidated level, then exposures originating in the selected legal entity and its Child Entities (with or without intra-group exposures depending on GL Structure) are selected.

The adjustment entry allocation depends on the reconciliation type selected. In GL level reconciliation after a definition is executed, the differences that emerge as a part of the reconciliation definition (GL–PP level reconciliation) are reported in the adjustment entry table. This table shows all the entries of an executed map that requires adjustment. In GL level reconciliation, the difference in amount can either be posted to Product Processors or an external table. For more information on the external table, see the Data Requirement.

> **NOTE:**
> In GL level reconciliation the adjustment allocation is always automatic, that is, you do not have the option of editing the allocation ratio.

Map Level Reconciliation

In map level reconciliation the difference between GL Data and PP Data at each reconciliation dimension node level across all PPs is identified. Unlike GL level reconciliation, map level reconciliation is computed at an aggregate level of the reconciliation definition; by ignoring the GL code and by considering reconciliation dimensions. Map level reconciliation is applied at the legal entity level - either solo or consolidated. If it is at the solo level, then exposures originating in a particular legal entity are selected. If it is at the consolidated level, then exposures originating in the selected legal entity and its child entities (excluding intra-group exposure depending on GL structure) are selected.

> **NOTE:**
> In a map level reconciliation, adequate filters for the PP data must be selected to ensure that the actual data selected on both sides are the same.
>
> You need to create GL hierarchy data with one additional node value as 'DEFAULT'. You can provide this Child code as 'DEFAULT' and name of the node can be set to 'Default'.

The adjustment entry allocation depends on the reconciliation type selected. In map level reconciliation, once a definition has been executed the differences that emerge as a part of the reconciliation (General Ledger–Product Processor Level Reconciliation) are reported in the Adjustment Entry Table. This table shows all the entries of an executed map that requires adjustment. In map level reconciliation, the difference in amount can either be posted to Product Processors or an external table. In map level reconciliation, the adjustment allocation can either be automatic or manual.

OFSAA Support

Raise a Service Request (SR) in My Oracle Support (MOS) for queries related to AFCS Applications.

Send Us Your Comments

Oracle welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information used for revision.

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- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual?

If you find any errors or have any other suggestions for improvement, indicate the title and part number of the documentation along with the chapter/section/page number (if available) and contact the Oracle Support.

Before sending us your comments, you might like to ensure that you have the latest version of the document wherein any of your concerns have already been addressed. You can access My Oracle Support site that has all the revised/recently released documents.

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