Oracle® Financial Services

Profitability Analytics Cloud Service User Guide

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Oracle Financial Services Profitability Analytics Cloud Service User Guide, Release 24D

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About This Content

This guide provides information on the Oracle Financial Services Profitability Analytics Cloud Service (OFS PACS).

Audience

This guide is intended for the users of Oracle Financial Services Profitability Analytics Cloud Service (OFS PACS).

Documentation Accessibility

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

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Resources

See these Oracle resources:

- Oracle Financial Services Profitability and Balance Sheet Management Cloud Service
- Oracle Financial Services Profitability Analytics Cloud Service
- Licensing Information User Manual

Conventions

The following text conventions are used in this document.

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

2 Getting Started

This chapter covers the Oracle Cloud, followed by Profitability Management Cloud Service and the instructions to get started with the cloud service, and instructions to use the Admin Console.

Topics:

- Getting Started with Oracle Cloud: Oracle Cloud is the industry's broadest and most integrated cloud provider, with deployment options ranging from the public cloud to your data center. Oracle Cloud offers best-in-class services across Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS).
- Profitability Analytics Cloud Service: The Financial Services Profitability Analytics Cloud Service enables Banks and other Financial Services institutions to identify profitable and potentially profitable portfolios, accounts, and customer relationships and understand its enablers. Top Down Reporting from Management Ledger and Bottom Up reporting from instrument tables for different user roles is supported. Key elements of BI content include Strategic Insights around Org Unit, Product, and Customer including account and segment level profitability.
- Introduction to Admin Console: Use the Admin Console to perform System Configuration and Identity Management. It is a single point of access to manage identity functions and view administrative features such as Metering, Audit Trail Report and other miscellaneous configuration details in the Profitability and Balance Sheet Management Cloud Service (PBSMCS).

2.1 Welcome to Oracle Cloud

Oracle Cloud is the industry's broadest and most integrated cloud provider, with deployment options ranging from the public cloud to your data center.

Oracle Cloud offers best-in-class services across Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS).

2.1.1 About Oracle Cloud

Oracle Cloud is one of the few cloud providers that can offer a complete set of cloud services to meet all your enterprise computing needs.

Use Oracle Infrastructure as a Service (IaaS) offering to quickly set up the virtual machines, storage, and networking capabilities you need to run just about any kind of workload. Your infrastructure is managed, hosted, and supported by Oracle.

Use Oracle Platform as a Service offerings to provision ready-to-use environments for your enterprise IT and development teams, so they can build and deploy applications, based on proven Oracle databases and application servers.

Use Oracle Software as a Service (SaaS) offerings to run your business from the Cloud. Oracle offers cloud-based solutions for Human Capital Management, Enterprise Resource Planning, Supply Chain Management, and many other applications, all managed, hosted, and supported by Oracle.

2.1.2 Supported Web Browsers

Oracle Financial Services Cloud Services support the latest version of the following major browsers:

- Google Chrome
- Microsoft Edge
- Mozilla Firefox

For more details, see Oracle Software Web Browser Support Policy.

When sharing a link to a document or folder, users of Microsoft Edge need to use the Show Link button and copy the link shown in the dialog.

2.1.3 Order Oracle Cloud Applications

You can order Oracle Cloud Applications (Software as a Service) offerings by contacting Oracle Sales. After your order is processed, you can then activate your services.

To order a subscription to Oracle Cloud Applications:

1. Go to the Oracle Financial Services Risk and Finance solutions page.
2. Scroll down and select **Profitability Analytics**.
3. Review the features and capabilities of the service and read the Datasheet.
4. When you are ready to order, scroll up and click **Request a Demo**.
5. You can either write an email or click **Request Now** to receive a call from Sales.
6. Enter your **Business email**, select the confirmation check box, and click **Continue**.
7. Provide a description of your need and click **Request Now**.

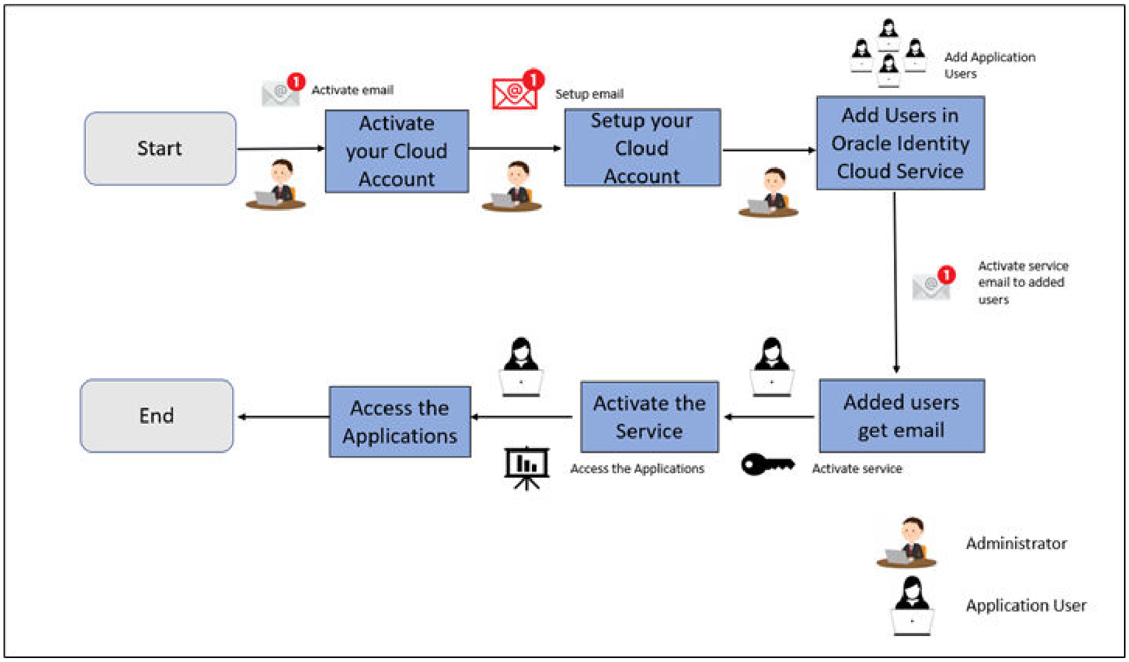
Later, after you have worked with Oracle Sales to order the Oracle Cloud Application best suited to your requirements, you will receive an email, which contains a link you can use to activate the service you have ordered.

To know how to activate, see Create and Activate New Cloud Account.

2.2 Getting Started with Profitability Analytics Cloud Service

To get started, you must activate the Profitability Analytics Cloud Service (PACS). After activating the Cloud Service, you can onboard Application Users to use the subscribed Cloud Services.

Figure 2-1 Illustration of the Cloud Subscription Workflow



This topic describes the set of actions that can be performed by:

- An Administrator to activate the Cloud Account and onboard Applications Users for the subscribed Cloud Services.
  - Create and Activate New Cloud Account
  - Access the Cloud Account
  - Access the Oracle Identity Cloud Service Console
- The Application Users to activate and use the Cloud Services that are provisioned by the Administrator.
  - Activate your Account as Application Users

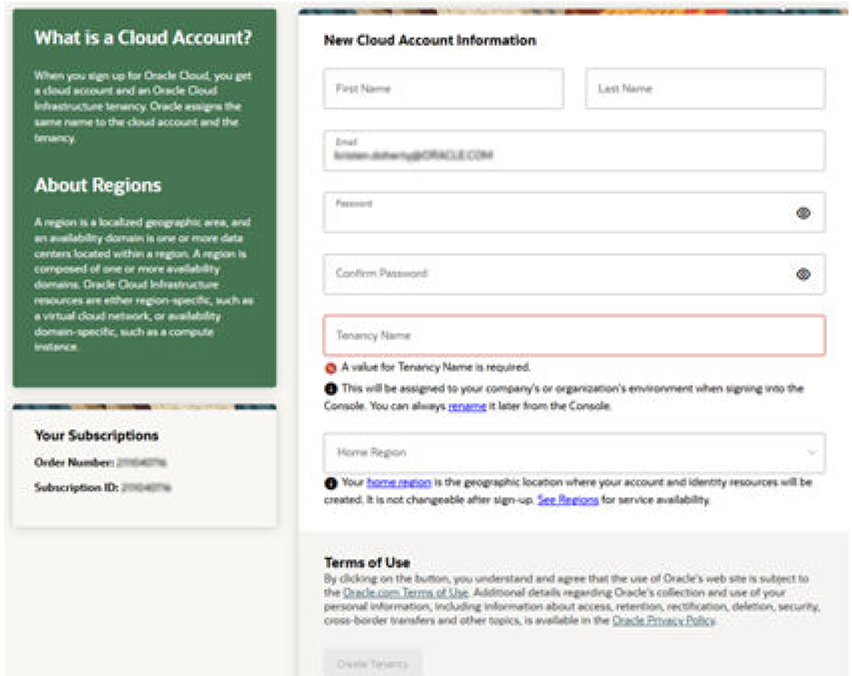
2.2.1 Create and Activate New Cloud Account

After you subscribe to the cloud service, you will receive a **Welcome to Oracle Cloud** email with details to create and activate your cloud account.

To create and activate a new cloud account:

1. Click **Create New Cloud Account** in the email.
2. Complete the **New Cloud Account Information** to sign up.

Figure 2-2 New Cloud Account Information page



3. Enter the following details:
   - **First Name** and the **Last Name** of the person who will be the cloud administrator.
   - **Email** address of the person who will be the cloud administrator. Instructions to log into the new Oracle Cloud Account will be sent to this email address.
   - **Password** to access the new cloud account.
   - **Tenancy Name**: New **Tenancy Name** to be associated with the cloud account.

     > **Note:**
     >
     > You cannot modify the tenancy name after it is created. Hence, ensure to provide a valid tenancy name, based on your organization's requirements and naming conventions.

   - **Home Region**: Select the **Home Region**, where the account is located. Check the service availability before selecting the home region.
     For assistance regarding home region selection, contact Oracle support. Existing customers have to ensure that the identity resources are located in the home region.

     > **Note:**
     >
     > You can subscribe to additional regions but you cannot modify the home region, after provisioning your tenancy.

4. Click **Create Tenancy** to access the **New Cloud Creation Confirmation** page.

   After successful activation, the cloud account administrator will receive a **Get Started Now with Oracle Cloud** email.

2.2.1.1 Add to an Existing Oracle Cloud Account

If you already have a cloud account associated with your administrator user name, you can add the newly subscribed cloud service to that account.

To add an existing Cloud account:

1. In the welcome email, click **Add** to add an existing cloud account.
2. Perform the steps as mentioned in the Access the Oracle Cloud Infrastructure Identity and Access Management (IAM) console.

2.2.2 Accessing the Cloud Account

An Administrator can access the Cloud Account activated and associated with their email address.

After your new cloud account is created and activated, you will receive a **Get Started Now with Oracle Cloud** email, to the email address provided while creating the account.

To access your Cloud account:

1. In the **Get Started Now with Oracle Cloud** email, click **Sign In**.
2. Enter the **Tenancy** name and click **Continue**.
3. Enter the **Username** and **Password** to log in to the **OCI Console** .

   Use the same **Username** and the **Password** that you provided during activation setup.
4. After successful login, proceed with the multi-factor authentication. Select the configured authentication mode and enter the OTP generated using the Oracle Mobile Authenticator application.

   Once the MFA is successfully completed, you can access the **Environment Page**.

2.2.3 Create an Environment

After logging into the Oracle Cloud Infrastructure Console, an Administrator can create one or multiple environments/instances for different user groups.

To create an environment/instance:

1. Log in to **Oracle Cloud Infrastructure Console** (OCI).

   You can view the list of all the environments (instances) provisioned for the one or multiple cloud applications, with the following details:

   - **Name**: The cloud application's instance name.
   - **Type**: The instance type.
   - **Life cycle status**: The instance status.
   - **Region**: The region from where the specific instance is active.
   - **Application URL**: The URL to access the instance.
2. From **My Applications**, click the application in which you want to create an environment. Example: Oracle Financial Services Crime and Compliance Management Anti Money Laundering.
3. On the **Overview** page, click **Environments**.

4. From the **Compartments** drop-down list, select the compartment in which you want to create an environment.
5. Click **Create**, to access the list of cloud services to which the customer has subscribed and the region from where these services are operated.
6. (Optional). Select the **Region** to host the OCI environment/instance, from the drop-down list.

   If you are not sure about the region, contact My Oracle Support (MoS).

   > **Note:**
   >
   > You can select the region only for the first environment/subscription and for the additionally added instances, the region cannot be modified.

7. Enter the following **Environment Details**, and click **Create**.
   - **Name**: The name of the new environment or instance.

     > **Note:**
     >
     > You cannot modify the environment name after the environment is created. Hence, ensure to provide a valid environment name, based on your organization's requirements and naming conventions.

   - **Instance type**: Select one of the following instances:
     – **Production**: If the environment is used for Production activities.
     – **Non-production**: If the environment is used for testing and development purposes. For example, a sandbox environment.
   - **Admin email**: The administrator email ID used to log in to the Cloud Console. You can also enter a different email ID that needs to be part of the cloud tenancy. For more details, see Managing Users.
   - **Admin first name** and **Admin last name**: The first and last names of the Administrator.

   The environment details are added to the Oracle Cloud Infrastructure Classic Console under the **Environments** tab (LHS menu). It may take a few hours for the status to change to Active. If there are any issues, you can raise a service ticket with My Oracle Support (MoS).

After the environment is set to **Active**, click the environment name to view the **Environment details**. Click the Service console URL under **Environment Information** to create users and groups.

2.2.4 Access Oracle Identity and Access Management

Oracle Cloud Infrastructure Identity and Access Management (IAM) provides identity and access management features such as authentication, single sign-on (SSO), and identity life cycle management for Oracle Cloud as well as Oracle and non-Oracle applications, whether

SaaS, cloud-hosted, or on-premises. Employees, business partners, and customers can access applications at any time, from anywhere, and on any device in a secure manner.

IAM integrates with existing identity stores, external identity providers, and applications across cloud and on-premises to facilitate easy access for end users. It provides the security platform for Oracle Cloud, which allows users to securely and easily access, develop, and deploy business applications such as Oracle Human Capital Management (HCM) and Oracle Sales Cloud, and platform services such as Oracle Java Cloud Service, Oracle Business Intelligence (BI) Cloud Service, and others.
Administrators and users can use IAM to help them effectively and securely create, manage, and use a cloud-based identity management environment without worrying about setting up any infrastructure or platform details.

To add users to your Cloud Services, navigate to the **Oracle Identity and Access Management (IAM)** Console.

To access the **IAM** Console:

1. Log in to Cloud.Oracle.com, to view all the details pertaining to your cloud order.

   Access the service link from the console to start using your subscriber cloud service.
2. Enter the **Cloud Account Name** and click **Next** to access the **IAM Console**.
3. Click **Change tenancy** option if you want to use a different tenancy.
4. Ensure that the displayed identity domain matches the expected value.

   > **Note:**
   >
   > Cloud environments are created under the **Default** identity domain. If you need to assign your environment to a different identity domain, raise a Service Request.
5. Log in with your **Username** and **Password**.

As an Administrator, you can create and manage users with different access rights to the Cloud Service.
For example, the IAM Administrator has superuser privileges for an Oracle Identity and Access Management Domain. This administrator can create users, groups, group memberships, and so on.

2.2.5 Activate Application User Account

A user provisioned by their administrator can use the specific cloud services they have subscribed to.

When an administrator completes provisioning an application user, the user receives an account activation email from Oracle.

To log in and activate your application user account:

1. Open the email received from Oracle and review the information about your service in the email.
2. Click **Activate Your Account**. You will be prompted to change your password on the initial log in.
3. Enter your new credentials in the **Reset Password** window to activate your account. After the password is successfully reset, a **Congratulations** message is displayed.

4. Access the Application URL shared by the administrator.
5. Enter your credentials to sign in to your account and access the **Welcome Page**.

2.2.6 Configuring Session Timeout

Session timeout automatically signs you out of a logged in session after a set time period, for various reasons such as inactive session for a specific time frame.

After you complete your tasks, you can sign out of your application. However, sometimes you might get automatically signed out due to session timeouts.

When you sign in using your credentials, you are authenticated to use the application, and a session is established. But, for security purposes, your session is configured to be active for a predefined duration, which is called the session timeout period. Your sessions can expire due to various reasons, such as an inactive session for a specific time period. In such cases, you are automatically signed out of the application. Your timeout periods may vary on certain pages. For example, you may observe a longer timeout period on pages that automatically refresh or user portal/tabs that open in separate windows or tabs.

The various session timeouts and the configuration details are as follows:

Timeout Type	Description	Configurable	Timeout Duration
Session Lifetime Timeout	After authenticating to the application, your current session remains active for a predefined duration, referred to as the session lifetime timeout period. Your session ends after this period, even if you're using the application.	Yes	8 Hours (Default value)
Inactive Session Timeout	After authenticating to the application, if your session is idle or inactive for a specific time, the System automatically terminates the session, and you are signed out of the session.	No	60 Minutes

Timeout Type	Description	Configurable	Timeout Duration
Browser Inactivity Timeout	After authenticating to the application, if your browser session is idle or inactive for a specific time, the System automatically terminates the session, and you are signed out of the session.	No	60 Minutes

2.2.6.1 How to configure Session Lifetime Timeout?

You can configure the Session Lifetime Timeout using your Identity Domain Settings in OCI Console.

Ensure that you have the Security Administrator Role mapped to access and modify the settings.

To configure the session timeout:

1. Log in with your **Security Administrator Account**.
2. Navigate to the Domain page. Click **Settings** and select **Session Settings**.
3. Specify the **Session Duration** under **Session Limits**. Enter the required value. By default, this is set to 480 Minutes.

Figure 2-3 Session Settings

2.3 Introduction to Admin Console

Use the Admin Console to perform System Configuration and Identity Management.

Admin Console is the single point of access to manage identity functions and view administrative features such as Metering, Audit Trail Report and other miscellaneous configuration details in the Cloud Service.

2.3.1 Accessing Admin Console

Access Admin Console from the home page of Financial Services Analytical Applications.

To access the Admin Console, ensure that the cloud administrator grants you administrative privileges by mapping your user account to the Identity Administrator and Identity Authorizer user groups. These user groups are seeded in Oracle Identity and Access Managment (IAM).

Before logging into the Admin Console, ensure that:

> **Note:**
>
> - The Cloud Administrator who creates your account has granted you administrative privileges to access the Admin Console. For more information on the privileges available, see OFS AML Users and User Privileges.
> - If the Cloud Administrator has granted only Identity Management privileges and no other cloud application privilege, you will be automatically redirected to the Admin Console specific to subscribed cloud service, after a successful login.
> - After a user signs in to the Cloud Service, the user to user-group Mapping created in the IAM Console will onboard into the Master and Mapping Tables. If you unmap a user from a group in the Admin Console, go to the IAM Console and open the **Assign User to Groups**. Unselect the user corresponding to the user group and click **Finish**. This step is mandatory to unmap the user.

To access the Admin Console:

1. Enter the application URL in the browser's address bar to access the Oracle Cloud Account Sign In page.
2. Enter the username and password on the Login page to log in to the **Financial Services Analytical Applications**.

   After successfully logging in, you can view the **Financial Services Analytical Applications** homepage and the list of subscribed cloud applications. Click **Navigation** to hide the Applications Navigation List.
3. Click **Admin Console** at the top of the Financial Services Analytical Applications home page.

   In the Admin Console, you can view the **System Configuration** and **Identity Management** tabs. Use these tabs to perform the following tasks:

   - **Administrator Tasks**:
     - View the **Metering Report**, **Audit Trial Report**, **Object Storage**, and **Object Authentication (OAUTH)** credential details in the **System Configuration** tab.
     - Perform the Identity and Access Management operations in the **Identity Management** tab.
   - **Authorizer Tasks**:
     - Authorize the Identity and Access Management Operations in the **Identity Management** tab.

2.4 System Configuration

Administrators can monitor the usage of service units and user activities through the System Configuration.

With System Configuration, administrators can view the consumption of service units. You can also view the following:

- The Audit Report to see what actions the users have performed in the application and when they have performed them
- The provisioned object storage details and the OAuth authentication details
- The production instance URL and the email ID of the login user

The components are as follows:

- **Metering**: Click **Metering** to view the usage of services using the Metering Report.
- **Audit Trail Report**: Click **Audit Trail Report** to view details such as the user's login and logout information, the action they performed, the status of the actions, and the date and time of each action.
- **Component Details**: Click **Component Details** to view details such as the Object Storage, Pre-Authenticated Request (PAR) URL, and OAuth authentication details.
- **Configurations**: Click **Configurations** to specify the instance name and the user(s) who receive emails related to operations tasks.

2.4.1 Metering

View annual usage of transactions and report types.

Use the **Metering** page to view the annual unit usage of the number of transactions and the number of report types within your cloud service.

The following table shows the methodology employed to measure the usage of each of the products.

Table 2-1 Metering Methodology

Product	Metering Methodology
Transaction Monitoring Cloud Service	Number of transactions per month.
Regulatory Reporting Cloud Service	Number of templates configured of a country or jurisdiction for filing to a regulator.
Know Your Customer (KYC) Cloud Service	Count of Risk Assessments created for both KYC Onboarding and KYC Continuous Monitoring in the production environment. Metering excludes the deployment initiation batch (first time risk assessment of all existing customers for a client).
Customer Screening Cloud Service	Sum of customers screened via batch per day and via real time for a duration of one month.
Transaction Filtering Cloud Service	Sum of transaction messages screened via real time for a duration of one month.
Compliance Agent Cloud Service	Number of experiments run.

Table 2-1 (Cont.) Metering Methodology

Product	Metering Methodology
Investigation Hub Cloud Service	Pooled Named User (Defined as an individual authorized by you to access the hosted service, regardless of whether the individual is actively accessing the hosted service at any given time during one calendar month).
iHub Real-time Customer Screening	Pooled Named User (Defined as an individual authorized by you to access the hosted service, regardless of whether the individual is actively accessing the hosted service at any given time during one calendar month).
Studio Cloud Service	Number of Transactions
Monitor Cloud Service	Pooled Named User (Defined as an individual authorized by you to access the hosted service, regardless of whether the individual is actively accessing the hosted service at any given time during one calendar month).

2.4.2 Component Details

Use Component Details to view the object storage standard and archive details, and OAUTH authentication details.

Object storage is used for data to which you require fast, immediate, and frequent access. Archive storage is used for data which you do not access regularly but must be retained and preserved for long periods of time.

With every instance of the application provisioned, two buckets are provisioned: a standard storage bucket and an archive storage bucket. The data files that you want to load into the application for processing must be uploaded to the standard storage bucket. The files are automatically moved to the archive storage bucket after a period of 7 days.

To access Component Details:

1. Login to the Admin Console.
2. Go to the **System Configuration** tab and click **Component Details**.

   You can access the following tabs from the Component Details tab:

   - **OCI Console** : Access the **OCI Console URL** from the **OCI Console** tab.
   - **Object Storage Standard** : When you provision an instance of the application, two buckets, a standard storage bucket and an archive storage bucket are automatically provisioned. The objects data that you want to load into the application for processing must be uploaded to the standard storage bucket.
     Access and copy the following details related to the objects which are currently in use and require fast, immediate, and frequent access.
     – **Object Store Bucket Name**: The logical container in which objects are stored
     – **Pre-Authenticated URL (PAR URL)**: Request that enables you to access a bucket without providing any credentials
   - **Object Storage Archive** : Archive storage is used for storing objects that are not actively in use but need to be retained and preserved for extended periods. Objects are automatically moved from standard to archive storage after 7 days.

Access and copy the following details related to the archived objects.

  - **Object Store Bucket Name**: The logical container in which objects are stored
  - **Pre-Authenticated URL (PAR URL)**: Request that enables you to access a bucket without providing any credentials

- **OAUTH Creds** : Use OAUTH credentials (Client ID and Client secret) are used for implementing authentication in cloud services.
  Access and copy the following OAUTH credentials:
  - **OAUTH Client ID**: ID of the OAuth client used for OAuth authentication performed by IAM during any API calls.
  - **OAUTH Client Secret**: Password of the OAuth client secret used for OAuth authentication performed by IAM during any API calls

2.4.3 Audit Trail Report

Use the Audit Trail Report to check user activities, including logins, added actions, their status, and associated machine names.

To generate an Audit Trail Report:

1. Log in to the **Admin Console**.
2. Go to **System Configuration** and click **Audit Trail Report** to access the **Audit Trail Report** page.
3. Enter the following values and click **Search** to generate the **Audit Trail Report** for all users or a specific user, to view a specific audit trail report.

Table 2-2 Audit Trail Report Filters

Field	Description
User Name	Enter or Search for a user name to view the report for the selected user.
Action	Select the Action from the list of actions to generate a report for a specific action.
From Date	Select the start date for the report.
To Date	Select the end date for the report.
Action Detail	Enter the string to search and filter the audit trail report for a specific action.

You can get the following details from an **Audit Trail Report**.

Table 2-3 Audit Trail Report Details

Field	Description
User Name	The user name selected in the **User Name** filter field.
Action Details	The action selected in the **Action Detail** filter field.
Action Code	The type of action performed by the user.
Status	The status of the action performed. The values are **Successful** or **Failure**.

Table 2-3 (Cont.) Audit Trail Report Details

Field	Description
Action Subtype	The sub type of the action.
Operation Time	The date and time of the action performed.

4. Click **Reset** to clear all values from the filter fields and enter new search criteria.

2.4.4 Configurations

Use the Configurations page to update the user preferences, master encryption key and the notification preferences.

You can set the user preferences such as time zone and locale, master encryption key and the notification configuration details using the **Configurations** page.

To update the configuration details from the **System Configuration** tab:

1. Click the **Configurations** tile, to view and edit the user preferences, master encryption key and the notification details.
2. Click the required tab and modify the details.

- Preferences
- Master Encryption Key
- Notification Configuration

Preferences

Select the following details in the **Preferences** tab and click **Save** to update the details.

– **Time Zone** - The time zone displayed in the application.

– **Locale** - The language to access the application. The default value is **en - US English**.

– **Date Format** - The format in which the date is displayed.

Master Encryption Key

Enter the **Master Encryption key** and click **Save** to update the key value.

Notification Configuration

Enter the number of days after which the notification will be deleted automatically, and click **Save**.

2.4.5 Reports For Download

The Reports for Download tile in the Admin Console consists of a set of pre-defined and pre-configured reports that are available for download. You can use the functions in the interface such as filter and sort to segregate the data and drill down to the details of the reports. You can then investigate the information, analyze, and export the data in CSV format.

In the Admin Console, you can download reports from Reports for Download in the System Configuration tab.

2.4.5.1 Prerequisites

To use Reports for Download from the Admin Console, your user profile must be mapped to the Data Maintenance Admin group to access the Reports for Download menu.

2.4.5.2 Access Reports for Download

To access the Data View window, click **Reports for Download** in the **System Configuration** tab. The **Data Reporting - Data View Page** is displayed.

2.4.5.3 Data Reporting - Data View

You can view the list of reports available for download, from the Data Entry window. Use one of the following criteria to view various reports.

- To search reports, click the Search field to display the search criteria pop-up. Enter search terms in the Name, Description, or Created By fields, or use a combination of the fields, and click Search.
  The search result displays reports that match the criteria.
- To sort reports, click the Sort By drop-down and select from the options: Name, Description, or Created By.
  The reports are displayed in ascending order for the selected option.
- To view the report creation and modification details, click the More Options (three dots) icon of a report to display the pop-up with the details for the following:
  - **Created By** - Displays the User ID of the user who created the report.
  - **Created Date** - Displays the date and time of the creation of the report.
  - **Last Modified By** - Displays the User ID of the user who last modified the report.
  - **Last Modified Date** - Displays the date and time of the last modification of the report.
  - **Authorizer** - Displays the User ID of the authorizer who approved the report to be displayed in the window.
  - **Authorizer Comments** - Displays the comments entered by the authorizer when approving the report to be displayed in the window.
- To view a report, mouse over the record, and the hidden menu appears. Click View from the menu.
  The details for the selected report are displayed in the Data Entry window.

2.4.5.4 View the Report Details

The Data Entry window is the interface where you can apply filter conditions (optional) on the reports and export the details.

You can apply the filter conditions (optional) to the reports in the Attributes Selection tab, and the results are displayed in the Data Preview tab from where you can export the report in the CSV format.

The procedure to view report details is described as follows:

1. In the **Data View** window, click **Attributes Selection**.
   The Attributes Selection tab displays the details for the database table name in View Name and the table columns in Attribute Name. Expand View Name to display the columns in Attribute Name.
2. Click **Apply**.
   The Data Preview tab displays the report details. The number of records displayed in the Data Preview tab is pre-configured in the system. However, you can export the details in the CSV format by clicking Download CSV.

2.4.5.5 Apply a Custom Filter to the Data View

In addition to the reports that you can view, you can also use the filter provided in the Data View window to custom filter the data in the reports for analysis purposes.

To apply a custom filter to the data view, follow these steps:

1. Click **Launch Filter** Condition to display the Filter Condition window.
2. Select **AND** or **OR** from the drop-down.
3. Select the required report column from **Select a Column**.
4. Select the required condition from **Select a Condition**.
5. Click **+ Condition** to add more conditions and click **+ Group** to add more groups.

   Repeat the selection procedure to add details. To remove a condition or group, click Remove.
6. Click **Apply** in the **Filter Condition** window to save the custom filter condition.
7. Click **Apply** in the **Attributes Selection** tab.

   The Data Preview tab displays the results of the Attributes filtered in the Attributes Selection tab. The number of records displayed in the preview is pre-configured in the system. However, you can export the details in the CSV format by clicking Download CSV.

2.5 Identity Management

Using Identity Management, administrators can manage fine-grained and coarse-grained entitlements. Coarse-grained entitlements consist of fewer functions than fine-grained entitlements. Authorizers can authorize the entitlement mappings.

The various **components** of Identity Management are:

- **Users**: A user is a person who has access to **Admin Console** and can perform specific actions based on the user group or groups they are mapped to. Before you can map a user to a user group, your Administrator must have created and authorized the user. After the user is authorized, they are added in the Users Summary. Click **Users** to access the **Users Summary** page.
- **Groups**: Groups are a set of users who can perform specific activities. For example, the administrator role performs administrative activities. Any user who belongs to a specific user group can access the roles mapped to that user group.
  To add a user group, click **Add** in the **Groups** tile. Click **Groups** to view the list of user groups in Groups Summary.
- **Roles**: Roles are a set of functions grouped together and having specific privileges. Any user who belongs to a specific role can access functions mapped to that role. Click **Add** to add a role or click **Roles** to view the list of roles in **Roles Summary**.

To add a user role, click **Add** in the **Roles** tile. Click **Roles** to view the list of user groups in Roles Summary.

- **Folders**: Folders are used to control access rights on defined list of objects. They are mapped to a specific Information Domain. Click **Folders** to view the list of folders and edit the access rights in Folders Summary.
- **Functions**: Functions enable users to perform a specific activity. Any user who belongs to a specific function can access the folders mapped to the function. Click **Functions** to view the list of functions in Functions Summary.

> **Note:**
>
> Only those user groups and roles which are authorized are displayed in the **Groups Summary** page and **Roles Summary** page, respectively.

2.5.1 Users Summary Page

The Users Summary page shows the list of available users. You can view the details of a user and map the user to one or more user groups.

To access the Users Summary page:

1. Click **Identity Management** tab in the **Admin Console** page.
2. Click the **Users** tile to access the **Users Summary** page.
3. Select a specific user name in the **Users Summary** page and then click **Details** to view the associated **User ID** and **User Name**.
4. Select a user name and click **Mapped Groups** to view the list of groups that are mapped to the particular user.

   To map/unmap a user group, refer to Mapped and Unmapped Groups.

   To search for a specific user, type the first few letters of the user name that you want to search in the Search box and click **Search**. The results will show users matching your input.

   At the bottom of the page, adjust the number of entries displayed per page using the up and down arrows in the Records box. To navigate between pages in the View bar, use these buttons:

   - **First page** to go to the first page.
   - **Previous page** to go back.
   - **Next page** to move to the next page.
   - **Last page** to go to the last page.

   You can directly navigate to a specific page by entering its number in the View bar and pressing **Enter**.

2.5.1.1 User Details

In the User Details, you'll find the User ID and User Name of the selected user from the User Summary page.

- Click a specific user listed in the **User Summary** page and then click **Details** to view the **User ID** and the **User Name** of that user.

2.5.1.2 Mapped/Unmapped Groups

As an Administrator, you can map/unmap a user to/from a user group from the **Users Summary** page.

To map/unmap a user to a user group:

1. Select the user name in the **Users Summary** page.
2. Select **Mapped Groups** to access the list of groups mapped to the selected user.
3. To map a user group:
   a. Click **New Mapping**.

      The list of user groups you can map the user to appears in the **Available Groups** page.
   b. Click **Map**.

      A confirmation message is displayed after successful mapping. The mapping will be completed after authorization.
4. To unmap a user group:
   a. Select the check box corresponding to a user group or click **Select All** to choose all available user groups.
   b. Click **Unmap**.

      A confirmation message will be displayed after successful unmapping. The unmapping will be completed after authorization.
5. After mapping/unmapping a user group, ensure to authorize it accordingly. To authorize a mapping/unmapping:
   a. In **Mapped Groups**, select the user-user group mapping or unmapping that requires authorization.
   b. Click **Authorize/Reject** to approve or cancel the mapping/unmapping request.

2.5.1.3 Available Groups

Click New Mapping to view the list of user groups you can map to the user.

To select a user group, select the check box corresponding to the user group. To select all user groups, click **Select All**.

2.5.2 Groups Summary Page

The Groups Summary page shows the list of available groups. You can view the details of a group and map the group to one or more user roles.

To access the Groups Summary page:

1. Click the **Identity Management** tab in the **Admin Console** page.
2. Click the **Groups** tile, to access the **Groups Summary** page.
3. Select a specific group name in the **Groups Summary** page and then click **Details** to view the associated **Group ID**, **Group Name** and Group Description.
4. Select a group name and click **Mapped Roles** to view the list of roles that are mapped to the particular group.

To map/unmap roles, refer to mapped/unmapped roles.

To search for a specific user group, type the first few letters of the user group name that you want to search in the Search box and click **Search**. The results will show users matching your input.

At the bottom of the page, adjust the number of entries displayed per page using the up and down arrows in the Records box. Use the navigation buttons, to go to the first page, last page, previous page and next page. You can also directly navigate to a specific page by entering its number in the View bar and pressing **Enter**

2.5.2.1 Group Details

In the Group Details, you'll find the Group ID, Group Name, and Group Description of the selected user group.

- Click a specific group name listed in the **Group Summary** page and then click **Details** to view the **Group ID**, **Group Name**, and **Group Description** of that user group.

2.5.2.2 Mapped/Unmapped Roles

As an Administrator, you can map/unmap a role to/from a user group from the **Groups Summary** page.

To map/unmap roles to user groups:

1. Select the user group in the **Groups Summary** page.
2. Select **Mapped Roles** to access the list of roles mapped to the user group.
3. To map roles to user groups:
   a. Click **New Mapping**.

      The list of user roles you can map the group to is displayed in the **Available Roles** page.
   b. Select the check box corresponding to a user role or click **Select All** to select all the available user roles.
   c. Click **Map**.

      A confirmation message is displayed after successful mapping. The mapping will be completed after authorization.
4. To unmap roles from user groups:
   a. Select the check box corresponding to a user role or click **Select All** to select all the available user roles.
   b. Click **Unmap**.

      A confirmation message is displayed after successful unmapping. The unmapping will be completed after authorization.
5. After mapping/unmapping a role, ensure to authorize it accordingly. To authorize a mapping/unmapping:
   a. In **Mapped Roles**, select the role-user group mapping or unmapping that requires approval.
   b. Click **Authorize/Reject** to approve or cancel the mapping/unmapping request.

2.5.2.3 Available Roles

Click New Mapping to view the list of roles you can map to the user group.

To select a role, select the check box corresponding to the role. To select all roles, select the check box marked **Select All**.

2.5.2.4 Create custom groups

You can create custom groups to cater to specific tasks within the application.

While seeded groups support a broader range of application and scenarios, custom groups enable the precise grouping of users for targeted and specialized application usage.

Example: You can create a user group which assigns the role of uploading files. This way you have a dedicated user or a standalone user that is not accessing the application but is just ingesting data.

You can create new groups using the following:

1. PBSM Admin Console
2. IDCS

   When you create new groups in PBSM Admin Console, you can have them sync with IDCS automatically or create groups separately in PBSM Admin Console and IDCS. To automatically sync with IDCS, select the **Enable Group Sync** option on the **Configurations** page of PBSM Admin Console.

   After creating the group, assign the required permissions to it and add the roles. For information, see Creating a New User Group.

2.5.3 Roles Summary Page

The Roles Summary page shows the list of available user roles. You can view the details of a role and map the role to one or more user functions.

To access the **Roles Summary** page:

1. Click the **Identity Management** tab in the **Admin Console** page.
2. Click the **Roles** tile, to view the **Roles Summary** page.
3. Select a specific role name in the **Roles Summary** page and then click **Details** to view the associated **Role Code**, **Role Name**, and Role Details.
4. Select a role name and click **Mapped Functions** to view the list of functions that are mapped to the particular role.

   You can also unmap a role from a specific function. To map/unmap functions, refer to mapped/unmapped functions.

   To search for a specific role, type the first few letters of the role name that you want to search in the Search box and click **Search**.

   At the bottom of the page, adjust the number of entries displayed per page using the up and down arrows in the Records box. To navigate between pages in the View bar, use these buttons:

   - **First page** to go to the first page.
   - **Previous page** to go back.

- **Next page** to move to the next page.
- **Last page** to go to the last page.

You can directly navigate to a specific page by entering its number in the View bar and pressing **Enter**.

2.5.3.1 Roles Details

Access Roles Details, to view the Role Code, Role Name, and Role Description of the selected role.

- Click a specific role listed in the **Roles Summary** page and then click **Details** to view the **Role Code**, **Role Name**, and **Role Description** of that role.

2.5.3.2 Mapped/Unmapped Functions

As an Administrator, you can map/unmap a role to/from a function user group from the **Roles Summary** page.

To map/unmap roles to functions:

1. Select the role name in the **Roles Summary** page.
2. Select **Mapped Functions** to access the list of functions mapped to the specific role.
3. To map roles to functions:
   a. Click **New Mapping**.

      The list of user functions you can map the role to appears in the **Available Functions** page.
   b. Select the check box corresponding to a function or click **Select All** to select all the available functions.
   c. Click **Map**.

      A confirmation message is displayed after successful mapping. The mapping will be completed after authorization.
4. To unmap roles from functions
   a. Select the check box corresponding to a function or click **Select All** to select all the available functions.
   b. Click **Unmap**.

      A confirmation message is displayed after successful unmapping. The unmapping will be completed after authorization.
5. After mapping/unmapping a function, ensure to authorize it accordingly. To authorize a mapping/unmapping:
   a. In **Mapped Functions**, select the role-function mapping or unmapping that requires approval.
   b. Click **Authorize/Reject** to approve or cancel the mapping/unmapping request.

2.5.3.3 Available Functions

Click New Mapping to view the list of functions that you can map to a role.

To select a function, select the check box corresponding to the function. To select all functions, click **Select All**.

2.5.4 Functions Summary Page

The **Functions Summary** page shows the list of available functions. You can view the function details.

To access the **Functions Summary** page:

1. Click the **Identity Management** tab in the **Admin Console** page.
2. Click the **Functions** tile to access the **Functions Summary** page.
3. Select a specific function name in the **Functions Summary** page and then click **Details** to view the associated **Function ID**, **Function Name**, and **Function Description**.

   To search for a specific function, type the first few letters of the function name that you want to search in the search box and click **Search**.

   At the bottom of the page, adjust the number of entries displayed per page using the up and down arrows in the Records box. Use the navigation buttons, to go to the first page, last page, previous page and next page. You can also directly navigate to a specific page by entering its number in the View bar and pressing **Enter**.

2.5.4.1 Function Details

Using the Function Details options, you can view the Function ID, Function Name, and Function Description from the Functions Summary page.

- Click a specific function listed in the **Functions Summary** page and then click **Details** to view the **Function ID**, **Function Name**, and the **Function Description** of that function.

2.5.5 Folders Summary Page

Create multiple folders, store objects and assign access rights based on the security level of the user.

The **Folders Summary** page shows the list of available groups. You can view the details of a group and map the group to one or more user roles.

To access the **Folders Summary** page:

1. Click **Identity Management** tab in the **Admin Console** page.
2. Click the **Folders** tile to access the **Folders Summary** page.

   The **Folders Summary** page is displayed.

   Select a specific folder name in the **Folders Summary** page and then click **Details** to view the associated **Folder ID**, **Folder Name** and **Folder Type**. For more information refer to Folder Details

   To search for a specific folder, type the first few letters of the folder name that you want to search in the search box and click **Search.**

   At the bottom of the page, adjust the number of entries displayed per page using the up and down arrows in the Records box. Use the navigation buttons, to go to the first page, last page, previous page and next page. You can also directly navigate to a specific page by entering its number in the View bar and pressing **Enter**.

2.5.5.1 Folder Details

In the Folder Details, you'll find the Folder ID, Folder Name, and Folder Type of the selected folder from the Folders Summary page.

- Click a specific folder name listed in the **Folders Summary** page and then click **Details** to view the **Folder ID**, **Folder Name**, and **Folder Type** of that user.

2.5.5.2 Editing Folder Details

You can edit the Folder Type from the folder details page.

1. Click **Edit** on the **Folder Details** page.
2. Set the Folder Type to one of the following options:
   - **Public** - These folders are accessible to all users.
   - **Private** - These folders can be viewed only by the users associated with that folder.
   - **Shared** - These folders can be accessed by users mapped to specific user groups. These user groups are mapped to specific roles that are associated with the folder.

3 System Administration

This chapter covers the following topics:

- Users and Roles
- User Groups
- User Management
- Configuring Session Timeout

3.1 Managing Application Users

An application user can access the subscribed cloud services, based on the roles and groups assigned to them

An administrator can create application users using IAM. They can also batch import several users using a `.CSV` file.

After users are created, they are synced from IAM to the Cloud Service.

You can map the application users to existing groups based on the roles that they require and their access levels. The access level provided to an application user is based on the following:

- **Groups**: Groups are seeded (available out-of-the-box) by your cloud service. Administrators can also create new groups in IAM. After groups are created, they are synced from IAM to the cloud service. You can map the groups to roles using the subscribed cloud service.
- **Roles**: Roles are seeded by the cloud service. Administrators can also create new roles using the cloud service and assign existing functions to these new roles.
- **Functions**: Functions are seeded by the cloud Service. Administrators cannot create new functions; however, they can use the existing functions.

3.1.1 User Summary- Application Users

View the list of existing application users in the User Summary.

You can view the details of a user and map the user to one or more user groups.

- To view the **User ID** and **Username** of the selected User - Select the **Username** in the **User Summary** page and select **Details**.
- To search for a specific User, type the first few letters of the required **Username** in the **Search** box and click **Search**.
- Using the navigation buttons at the bottom of the summary page, you can browse to the different pages. Also, you can enter the number of entries to be listed on a single page in the **Records** box or use the buttons to increase or decrease the number of entries.
- Enter the page number in the **View Bar Control** and jump to the required page.

3.1.2 Creating New Application Users

After you log in to the IAM console, the first task is to create additional user accounts.

You should assign specific user groups to the user accounts that you are creating. There are seeded user groups available with the respective services, users must be mapped to one or more of the user groups, depending on the role that they perform.

For example, you can create a user for each member of your team. Each member can then sign into the account with their credentials. You can also assign each user to specific user groups and apply specific security policies or roles to each group.
You can create the users and map the users to groups for your service. After creating the users, the users will receive a Welcome email. The users must activate their accounts and enter a new password to access the services.

To create users in the IAM Console:

1. In the IAM Console, select **Domains** (Identity domain) to view the list existing domains.
2. Click the required **Domain Name**, to access the **Domain Details** page.
3. In the left pane, click **Users** and select **Create user**, to proceed with the user creation.
4. Enter the following details:
   - **First Name**, **Last Name** and a valid **Username** and the **Email ID**.

     > **Note:**
     >
     > – The username should be alphanumeric and cannot exceed 20 characters. You can enter only hyphen (-) and underscore (_) as special characters.
     >
     > – Uncheck the **Use the email address as the username** check box, as you can only set the username as the login ID and currently setting the email address as the login ID is not supported.

5. Select the user groups according to your user-specific groups or access, in the **Groups (Optional)**.

   > **Note:**
   >
   > After a user logs in to a specific cloud service, the user to user-group mapping created in the **IAM Console** will onboard into the master and mapping tables. Later, if you deselect (remove) a user from a group in **Assign User to Groups** after provisioning, ensure that you also unmap the user from the corresponding user-group in the **Admin Console**. This is a mandatory step to complete the unmapping process.

6. After entering the required information, click **Create** to create and add the new user to the User Summary.

You can also batch import several users using a `.CSV` file.

3.1.3 Creating a New User Group

Create groups to manage user access to applications and resources.

To create a user group :

1. In the IAM Console, click **Profile** and select **Identity Domain**.
2. In the Identity Domain left pane, click **Groups** and select **Create group**.
3. Enter the **Group Name** and the **Group Description**.
4. Select **User can request access**, to allow users to request access to this group.
5. Check the check box adjacent to each user to add that user to the group.
6. Click **Create** to create the new user group with the selected users.

After creating the user group, you must assign various permissions to the group, using one of the following methods:

- Write at least one policy to give group permission to either the tenancy or a compartment. While writing the policy, specify the group using the unique group name or the group's OCID.
- Assign the group to an application.

3.1.4 Assign Groups to Users

Assign a specific group to a user, based on the roles required for the user.

Ensure to create a group, before assigning users to the group.

To map a user to a group using the IAM Console :

1. In the IAM Console, select **Domains** (Identity domain) to view the list existing domains.
2. Click the required **Domain Name**, to access the **Domain Details** page.
3. Click a specific **User name** to view the user details and assign a group to that particular user.
4. In the left pane, click **Groups** to access the list of groups associated with a user.
5. In the **Groups** pane, click **Assign User to Groups** to view the list of available groups.
6. Check the check box adjacent to each group, to assign the user to that group.
7. After selecting all the required Groups, click **Assign user**.

   The user is assigned to the selected groups. You can access the list of groups associated with a user, in the respective **User Details** page.

   To dissociate an user from a group, select the group and click **Remove User from the Group**.

3.1.5 Bulk Import Application Users

As an administrator, you can batch import user accounts using a `.CSV` file.

> **Note:**
>
> Before importing the user accounts, create a `.CSV` file that is properly formatted for the import.

To import user accounts :

1. In the IAM Console left pane, click **Users** and select **More Actions** and select **Import Users**.
2. Click **Browse** to locate and select the `.CSV` file containing the user accounts to import.

   > **Note:**
   >
   > Click **Download sample file** in the dialog box to download a sample file and perform the accounts upload.

3. Verify that the path and name of the selected `.CSV` is updated in the **Select a file to import**, and click **Import**.

   > **Note:**
   >
   > Oracle IAM cannot import a user account if a mandatory value such as user's first name, last name, or username, is missing. In such cases, Oracle IAM will skip the incomplete account and proceed to the next account in the `.CSV` file.

When Oracle IAM evaluates and imports the user accounts, the imported accounts are updated in the **Jobs**. You can also get information related to the successful/incomplete imports if the import was not completed due to system errors.

3.2 Managing User Groups

User groups are seeded (available out-of-the-box) by the cloud service. Groups are mapped to roles using the cloud service by the same user that was created using IAM.

Administrators can also create new groups in IAM. After groups are created, they are synced from IAM to the cloud service. You can map the groups to roles using the subscribed cloud service.

3.2.1 Map Application with the User Groups

After creating a group, you can map the required applications with the group.

To map the application to a user group, log in to IAM and follow these steps:

1. Go to the Navigation menu in the enter the **Domains** in the Search bar to view the **Domains** list.

2. Select the **Default Domain** and then from the LHS menu, select **Oracle Cloud Services**, to view the list of Cloud Services.
3. Select the Cloud Services you are subscribed to (Syntax: **<Cloud_service_name>xxxx-prd** and **<Cloud_service_name>xxxx-nprd**, where **Description** is mentioned as your registered cloud service).
4. From the LHS menu, select **Users** and click **Assign Users**.
5. Select the user and click **Assign**.

3.2.2 Map Users to Groups

Log in to IAM as an administrator, and map users to user groups.

To map a user to a user group:

1. Select the **User Name** in the **Users Summary**.
2. Select **Mapped Groups**.
3. Select the **User Group Name**.

   > **Note:**
   >
   > To select a user group, select the check-box corresponding to the user group. To select all user groups displayed on the page, select the check-box marked **Select All**.

4. Click **New Mapping** to map the user to the selected user group.

   Or

   Click **Unmap** to remove the user group-role mapping.

   If you need to authorize an unmap request, refer to Unmap User from Group.

   > **Note:**
   >
   > User-group mapping changes from IAM will take some time to sync with your Cloud Service. If these changes are made during the active user session, then it will be reflected on the next login.
   > After a user signs into the cloud service, the user to user-group mapping created in the IAM Console will onboard into the master and mapping tables. If you unmap a user from a group in the Admin Console, navigate to the associated console and open **Assign User to Groups**. Deselect the user corresponding to the user group and click **Finish**. This is a mandatory step to complete the unmapping process.
   >
   > For more information, refer to Unmap User from Group.

   After you click **New Mapping**, the list of user groups you can map the user to appears in the **Available Groups Summary**.

5. Select a **User Group**.

> **Note:**
>
> If the logged-in user has both administration and authorization entitlements, an authorization view toggle button is available. Enable this button to complete the authorization.

6. Click **Map**.

> **Note:**
>
> If the logged-in user has both administration and authorization entitlements, an authorization view toggle button is available. Enable this button to complete the authorization.

3.2.3 Map Roles to User Group

You can map roles to a user group using Admin Console.

To map roles to the user group:

Before mapping the roles to an user group, ensure that the roles are created in the Admin console.

1. From the **Identity Management** tab, Click **Groups** to access the **Groups Management** page.
2. Search for the specific group.
3. Click the **User Group** and click **New Mapping** under the **Mapped Roles** tab.
4. Search for required role names created in **Roles Management** and click **New Mapping** to map each role.
5. Log in as a user with the authorization role and authorize the mapped roles in the **Authorization View**.

A user group is created in the IAM Portal and is mapped to a role created in the Admin Console.

3.2.4 Unmap User from Groups

Unmap a user from a specific group to revoke the associated functions.

Log in to IAM as an administrator to authorize and unmap a user from a specific user group.

To authorize the unmapping of a user from a user group:

1. Click **Unmapped Groups**.
2. Click the **User Group Name** to select the User Group.
3. Click **Authorize** or **Reject** to approve or reject an unmapping request.

3.3 User Management

During implementation, you prepare your Oracle Application's Cloud Service for the Service Users. The decisions made during this phase determine how you manage users by default. Most of these decisions can be overridden. However, for efficient User Management, Oracle recommends that you configure your environment to reflect both enterprise policy and support most or all users.

For more information, see the View List of Application Users and User Roles and Privileges.

3.3.1 Application Users

During implementation, you can use the Create User task to create Test Service Users. By default, this task creates a minimal person record and a user account. After implementation, you should use the Hire an Employee Task to create Service Users. The Create User Task is not recommended after the implementation is complete.

For more information, see Create Application Users.

3.3.2 User Roles and Privileges

Oracle Financial Services Profitability Analytics Cloud Service (PACS) Users are assigned roles through which they gain access to functions and data. Users can have any number of roles.

The following figure shows User Personas and the tasks they can perform:

Table 3-1 Top-Down Personas and Tasks

PACS BI Data Steward	PACS BI - Management /CXO/Org Head	PACS BI Application	PACS BI - Regional Manager
Create Users	Set Preferences	Manage PACS Data	View OOTB Reports for Management Reporting and Profitabilty Insights
Map Users to OOB User Groups	View OOTB Reports for Management Reporting	Create new reports if required of existing RPD	Set Preferences
Create User Groups and Roles	Create Watch Lists	Manage Dimensions	Create Watch Lists
Map Roles to User Group	Add comments on charts	Review Process Logs	Add comments on charts
Admin Privileges to all modules	Add tolerance limits for measures	Manage Set Up Configurations	Add tolerance limits for measures
Manage Runchart and Batches	Create custom charts	Review PACS data integrity	Create custom charts
		Create Mailing Lists	

Table 3-2 Bottom-Up Personas and Tasks

PACS BI Data Steward	PACS BI - Product Manager/Branch Manager	PACS BI Application Analyst	PACS BI - Regional Manager
Create Users	Set Preferences	Manage PACS Data	View OOTB Reports for Management Reporting and Profitabilty Insights
Map Users to OOB User Groups	View OOTB Reports for Management Reporting	Create new reports if required of existing RPD	Set Preferences
Create User Groups and Roles	Create Watch Lists	Manage Dimensions	Create Watch Lists

Table 3-2 (Cont.) Bottom-Up Personas and Tasks

PACS BI Data Steward	PACS BI - Product Manager/Branch Manager	PACS BI Application Analyst	PACS BI - Regional Manager
Map Roles to User Group	Add comments on charts	Review Process Logs	Add comments on charts
Admin Privileges to all modules	Add tolerance limits for measures	Manage Set Up Configurations	Add tolerance limits for measures
Manage Runchart and Batches	Create custom charts	Review PACS data integrity	Create custom charts
		Create Mailing Lists	

Note:

- User-Group mapping changes from IAM will take five minutes to sync with the application. If these changes are made during the active user session then it will be reflected on the next login.
- You can create and manage Application users as required. For example, you can map the Pipeline Admin Group and PACS Admin Group to one user.

3.3.2.1 Role Based Access Control

Role-based security in Oracle Financial Services Profitability Analytics Cloud Service Controls who can do what and to which data.

The following table provides examples of role-based access.

Table 3-3 Role Based Access Control

Role Assigned to a User	Functions which Users with this Role can Perform	Set of Data which Users with the Role can Access when performing the Function
Application Administrators	Manage RPD and Dimensions across reports along with Set Up Configurations. Manage data integrity and mailing lists.	Reports and RPD's associated with Top Down (Management Reporting) and Bottom Up (Profitability Insight and Customer Profitability reports). SetUp Configurations and SQL Query Browser
Business Users	Access to the Application to review reports. Access to Set Up Configurations UI's	Reports and RPD's associated with Top Down (Management Reporting) and Bottom Up (Profitability Insight and Customer Profitability reports).
Data Steward	Perform Application Administrator and data and dataflow Management activities	User Group with Business Tasks' Roles across all Service Features. Batch Management and Monitoring

3.3.2.2 User Roles and Activities

The following User Roles are seeded in the PBSM Cloud Service to facilitate the activities expected from the users mapped to the seeded User Groups:

- PACS BI TD - Management/CXO
- PACS BI TD - Regional Manager
- PACS BI TD - Org Head
- PACS BI TD - Application Analyst
- PACS BI TD - Data Steward
- PACS BI BU - Regional Manager
- PACS BI BU - Branch Manager
- PACS BI BU - Product Manager
- PACS BI BU - Application Analyst
- PACS BI BU - Data Steward

The user roles Profitability Analytics Application Analyst and Profitability Analytics Data Steward are required to access the main application for view, edit and other purposes, based on the User Persona accessing the same. An Analyst User Persona can view all PA Reports and edit RPD elements and create custom reports. Similarly, a Data Steward Persona can view and edit all PA Admin Screens along with screens relevant to batch scheduling monitoring and execution.

The Business User Roles like Management/ CXO/ Org Head/ Regional Manager/ Product Manager/ Branch Manager - are seeded BI Roles to be used for the users to access all the Analytics Menu, along with DV features along with all reporting in the PA Application.

Overall, these ten roles are created to facilitate Analytics access for five different types of User Persona. These roles can be mapped to any User Group to provide the Analytics access to users under the User Group.

3.3.2.3 User Groups

The following table lists the User Groups and the access privileges.

Table 3-4 Top Down Persona User Groups List

Top Down Persona	User Access Type	IAM UG CODE	Analytics Application Role
PACS BI TD – Management/CXO	R	UGPATDCXO	DV Consumer
PACS BI TD – Regional Manager	R	UGPATDRM	DV Consumer
PACS BI TD – Org Head	R	UGPATDHEAD	DV Consumer
PACS BI TD – Application Analyst	R/W	UGPATDAAN	DV Content Author
PACS BI TD – Data Steward	R/W	UGPATDADMIN	DV Content Author

Table 3-5 Bottom Up Persona User Groups List

Bottom Up Persona	User Access Type	IAM UG CODE	Analytics Application Role
PACS BI BU – Regional Manager	R	UGPABURM	DV Consumer
PACS BI BU -Branch Manager	R	UGPABUBM	DV Consumer
PACS BI BU -Product Manager	R	UGPABUPM	DV Consumer
PACS BI BU – Application Analyst	R/W	UGPABUAAN	DV Content Author
PACS BI BU – Data Steward	R/W	UGPABUADMIN	DV Content Author

3.3.2.4 Analytics Menu Access Privileges

Table 3-6 Analytics Menu Access Privileges

Level 1-Menu	Level 2-Menu	Level 3-Menu	Level 4-Menu	Management Reporting Persona	Profitability Insights Persona
Profitability Analytics Cloud Service	Analytics	BI Home Page		• PACS BI TD - Management/ CXO • PACS BI TD - Regional Manager • PACS BI TD - Org Head • PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Regional Manager • PACS BI BU - Branch Manager • PACS BI BU - Product Manager • PACS BI BU - Application Analyst • PACS BI BU - Data Steward
		SQL Query Browser		• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward

Table 3-6 (Cont.) Analytics Menu Access Privileges

Level 1-Menu	Level 2-Menu	Level 3-Menu	Level 4-Menu	Management Reporting Persona	Profitability Insights Persona
		Operational Analysis	Dimensions Registry	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
			Currency Rates	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
			Data Quality Checks	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
			Segment Registry	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
			File Uploads	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
			Groups and Roles	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward

Table 3-6 (Cont.) Analytics Menu Access Privileges

Level 1-Menu	Level 2-Menu	Level 3-Menu	Level 4-Menu	Management Reporting Persona	Profitability Insights Persona
		Management Reporting		• PACS BI TD - Management/ CXO • PACS BI TD - Regional Manager • PACS BI TD - Org Head • PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Regional Manager • PACS BI BU - Data Steward
		Profitability Insights		• PACS BI TD - Management/ CXO • PACS BI TD - Regional Manager • PACS BI TD - Data Steward	• PACS BI BU - Regional Manager • PACS BI BU - Branch Manager • PACS BI BU - Product Manager • PACS BI BU - Application Analyst • PACS BI BU - Data Steward

Table 3-6 (Cont.) Analytics Menu Access Privileges

Level 1-Menu	Level 2-Menu	Level 3-Menu	Level 4-Menu	Management Reporting Persona	Profitability Insights Persona
		Customer Profitability		• PACS BI TD - Management/ CXO • PACS BI TD - Regional Manager • PACS BI TD - Data Steward	• PACS BI BU - Regional Manager • PACS BI BU - Branch Manager • PACS BI BU - Product Manager • PACS BI BU - Application Analyst • PACS BI BU - Data Steward
		Geography Profitability		• PACS BI TD - Management/ CXO • PACS BI TD - Regional Manager • PACS BI TD - Data Steward	• PACS BI BU - Regional Manager • PACS BI BU - Branch Manager • PACS BI BU - Product Manager • PACS BI BU - Application Analyst • PACS BI BU - Data Steward

Table 3-6 (Cont.) Analytics Menu Access Privileges

Level 1-Menu	Level 2-Menu	Level 3-Menu	Level 4-Menu	Management Reporting Persona	Profitability Insights Persona
		Custom Metrics		• PACS BI TD - Management/ CXO • PACS BI TD - Regional Manager • PACS BI TD - Org Head • PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Regional Manager • PACS BI BU - Branch Manager • PACS BI BU - Product Manager • PACS BI BU - Application Analyst • PACS BI BU - Data Steward

3.3.2.5 Application Menu Access Privileges

Table 3-7 Application Menu Access Privileges

Level 1 Menu	Level 2 Menu	Level 3 Menu	Management Reporting Persona	Profitability Insights Persona
Profitability Analytics Cloud Service	Operations And Processes		• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
	Dimension Management		• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
	Setup Configurations	Application Preferences	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
		Batch Parameters	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward

Table 3-7 (Cont.) Application Menu Access Privileges

Level 1 Menu	Level 2 Menu	Level 3 Menu	Management Reporting Persona	Profitability Insights Persona
		Financial Element Mapping	NA	• PACS BI BU - Regional Manager • PACS BI BU - Branch Manager • PACS BI BU - Product Manager • PACS BI BU - Application Analyst • PACS BI BU - Data Steward
		Segmentation Mapping	NA	• PACS BI BU - Regional Manager • PACS BI BU - Branch Manager • PACS BI BU - Product Manager • PACS BI BU - Application Analyst • PACS BI BU - Data Steward
		Line Item Display Order	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
		Geography Mapping	NA	• PACS BI BU - Regional Manager • PACS BI BU - Branch Manager • PACS BI BU - Product Manager • PACS BI BU - Application Analyst • PACS BI BU - Data Steward

Table 3-7 (Cont.) Application Menu Access Privileges

Level 1 Menu	Level 2 Menu	Level 3 Menu	Management Reporting Persona	Profitability Insights Persona
		Metric Generator	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
	Data Management Tools	Balance Reconciliation	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward
		Data Verification	• PACS BI TD - Application Analyst • PACS BI TD - Data Steward	• PACS BI BU - Application Analyst • PACS BI BU - Data Steward

4

Dimension Management

Dimension Management facilitates you to categorize data into a single object as a Member; define levels and aggregate data to form the Hierarchies, and distinguish each member by defining the required Attributes.

The roles mapped to Dimension Management are as follows:

- Dimension Advanced
- Dimension Authorization
- Dimension Read Only
- Dimension Write

4.1 Object Security

Object Security helps to secure data and also to decide what each user can access. You can apply Object Security to various object definitions like Hierarchy definitions, Filters, Expressions and Migration definitions.

You can assign specific user roles and functions to user groups, to implement Object Security. To assign user roles and functions, Seeded User Groups and Seeded User Roles are mapped to the User Groups. If you are using the Seeded User Groups, the security to access objects depends on the associated User Groups.

Map your User Group to the folder in case of public or shared folder, for creating/editing/copying/removing an object in Dimension Management module. You should also be the owner of the folder in case of Private Folder. Additionally, the WRITE role should be mapped to your User Group.

To access the link and the Summary page, map your User Group to ACCESS role. You can view all objects created in Public Folders - Shared Folders to which you are mapped and Private Folders for which you are the owner.

4.2 Components of Dimension Management

You can create and manage the following Object Definitions using from Dimension Management:

- Members
- Attributes
- Hierarchy

4.3 Attributes

Attributes refers to the distinguished properties or qualifiers that describes a Dimension Member. Attributes are applicable to key dimensions only.

4.3.1 Attribute Summary Page

The list of created attribute definitions are displayed in the Attribute Summary.

To access the attribute summary page :

1. From the left menu, click **Reference Data.**
2. Select **Dimension Management** and select **Attribute**, to access the The **Attribute Summary Page** .

   The Attribute Summary Page provides the list of attribute Definitions with the following details:

   - **Code -** The Numeric Code assigned to the Attribute Definition.
   - **Name** - The unique Attribute Definition Name.
   - **Data Type -** The Data Type associated with the attribute. The Data Type is set to Date, Dimension, Number or String.
   - **Required** - Select **Yes** or **No** to make this attribute a mandatory value for the associated dimension.
   - **Seeded -** Select **Yes**, if the attribute is seeded by the service or **No** if the attribute is created by the user.
   - **Action** - Click to view, edit, copy or delete an attribute definition. You can also access the list of objects dependent on this definition.

   To filter the summary based on specific search criteria, select and add the required search criteria to the **Search** field and enter/select the specific values.

   > **Note:**
   >
   > **Dimension** is a default and mandatory search filter. Select the dimension to access the member definitions available in that dimension. By default the first dimension from the **Dimensions** list is added as the search entry.

4.3.1.1 Navigating Attribute Summary Page

To access records in a Summary page, you can search, sort and navigate to multiple pages.

4.3.2 Creating Attribute Definition

To create a new Attribute for a dimension, complete the following steps:

1. Click the **Add** in the Attribute Summary Page.

   The **Add Attribute Definition** Page is displayed.
2. Enter the following **Attribute Details** :
   - **Dimension** - Select the Dimension for which the new Attribute is getting created.
   - **Numeric Code** - The Numeric Code to be assigned to the new Attribute Definition. You can enter any number between 0 and 999,999,999, or click **Generate Code**, to auto-generate a unique code. If you enter the value manually, the system will verify if the value is unique and assigns it.

- **Name** - The unique Attribute Definition Name. You can enter up to 100 characters. All characters are allowed except " & ' and " ' ".
- **Alphanumeric Field Value -** The name of physical column name that will be used to store attribute value in the Report Dimension Table. You can enter up to 100 characters. We recommend using only Underscore (“_”) as a special character.
- **Description** - A brief description about the Attribute Definition. You can enter up to 100 characters. All characters are allowed except " & ' + @ and ~.

3. Enter the following **Attribute Properties** :
   - **Data Type** - Set the Data Type as Date, Dimension, Number, or String from the drop-down list.

     Note:

     If the data type is **Number**, enter a Scale value >= 0. If it equal to 0, only Integers are enabled. To enable decimal entries, the maximum Scale Value must be > 0 and <= the scale defined for NUMBER in the dimension's underlying attribute table. The maximum value of the NUMBER is set to 22.

   - **Dimension** - (Enabled only for Dimension data type.) Select the Dimension to be associated with the new Attribute Definition.
   - **Default Value** - The default value is set based on the selected data type. The Maximum characters allowed in Default Value field for String Data Type is 1000. The default value is mandatory if this attribute is set as a required attribute.

Table 4-1 Data Type and Default Values

Data Type	Default Value
Dimension	Select the Default Value from the drop-down list of members mapped to the selected Dimension
Number	Enter a Numeric Value based on the define Scale.
Date	Set a valid date.
String	Enter the Alphanumeric Value

   - **Required Attribute** - Select **Yes**, if this attribute is mandatory for the associated dimension members. To set it as an optional attribute, select **No**.
   - **Seeded Value** - Select **Yes**, only when the attribute is seeded out of box by the Cloud Service. For a new attribute, select **No**.
4. After entering the required information, click **Save**, to create a new attribute.

4.3.3 Managing Attribute Definitions

You can view, edit, copy and delete the existing Attribute Definitions from the Summary Page.

In the Attribute Summary Page, highlight a specific Attribute Definition and click the **Action**. The following Options are displayed.

- **View**- View the **Attribute Details** for a specific attribute definition.
- **Edit**- Edit the **Attribute Details** for a specific attribute definition.

- **Copy**- Copy the definition details and create another attribute Definition by changing the Alphanumeric Code, Numeric Code and Name.
- **Delete**- Delete the Attribute definition.
- **Check Dependency** - View the list of objects dependent on this definition.

Field	Description
View	View the **details** for a selected Attribute.
Edit	Edit theselected Attribute.
Copy	Copy the Attribute Definition Details and create another Attribute Definition by changing the unique values like Alphanumeric Field Value, Numeric Code and Name.
Delete	Delete the selected Attribute.

4.3.3.1 Viewing Attribute Definition

You can view individual Attribute Definition Details at any given point. The Read Only role should be mapped to your User Group.

To view the existing Attribute Definition details in the Attribute page:

1. Highlight the Attribute Definition and click **Action**.
2. Click **View** .

   The **Attribute Definition** Page is displayed with the details Code, Name, Data Type, Required and Seeded status.

4.3.3.2 Modifying Attribute Definition

Modify the Name, Description, or Default Value fields of an Attribute Definition. The Write role should be mapped to your User Group.

To modify an existing Attribute Definition in the Attributes summary:

1. Highlight the Attribute Definition and click **Action**.
2. Click **Edit**, to access the Attribute Definition page.

   Edit the required information and click **Save**.
   You can view the updates in the Attributes summary.

4.3.3.3 Copying Attribute Definition

The Copy Attribute Definition facilitates you to quickly create a new Attribute Definition based on the existing attributes or by updating the values of the required attributes.

To copy an existing Attribute Definition, the Write role should be mapped to your User Group.

Refer to the following steps, to copy an Attribute Definition.

1. Highlight the Attribute Definition and click **Action**.
2. Click **Copy**.

   The Attribute Definition page is displayed with the details: Code, Name, Data Type, Required and Seeded status.

   Edit the unique information such as Name, Alphanumeric Field Value, Numeric Code and click **Save**.

4.3.3.4 Deleting Attribute Definition

You can remove the Attribute Definitions which are not required in the system by deleting from the Attributes Summary.

To delete an attribute definition, the Write role should be mapped to your User Group.

1. Highlight the Attribute Definition and click the **Menu** button.
2. Click the **Delete** button.

   The Attribute Definition is deleted after confirmation.

> **Note:**
>
> You cannot delete a definition if any dependency like Attribute, Hierarchy or Filter is attached to it. Detach the dependency before deleting the definition.

4.3.4 Dimensions and Associated Attributes

Dimensions and the associated attributes.

The following tables lists the seeded attributes with the details, associated with each dimension.

Table 4-2 Dimensions and Associated Seeded Attributes

Attribute Name	Data Type	Mandatory
Dimension - **Common Chart of Accounts**		
Account Type	Dimension	Yes
Accrual Basis	Dimension	No
Rollup Signage	Dimension	Yes
Dimension - **Financial Element**		
Weighting Financial Element	Dimension	No
Account Type	Dimension	Yes
Column Property	Dimension	Yes
Rollup Signage	Dimension	Yes
Dimension - **General Ledger Account**		
Accrual Basis	Dimension	No
Common Chart of Accounts	Dimension	Yes
Rollup Signage	Dimension	Yes
Account Type	Dimension	Yes
Reconciliation Product	Dimension	Yes
Dimension - **Legal Entity**		
Rate Data Source	Dimension	Yes
Group Company Party	String	Yes
Dimension - **Organizational Unit**		
Offset Organizational Unit	Dimension	No
Dimension - **Product**		
Accrual Basis	Dimension	No

Table 4-2 (Cont.) Dimensions and Associated Seeded Attributes

Attribute Name	Data Type	Mandatory
Common Chart of Accounts	Dimension	Yes
Rollup Signage	Dimension	Yes
Account Type	Dimension	Yes
Amenability Rate	Dimension	Yes
Interest Rate Sensitivity	Dimension	Yes
Product Time Value	Number	Yes

4.4 Members

Dimension Members refer to the individual items that constitute a dimension when data is categorized into a single object such as Product, Organization, Time, and so on. Members are available within Dimension Management section.

4.4.1 Member Summary Page

The list of created member definitions are displayed in the Member Summary.

To access the member summary page:

1. From the left menu, click **Reference Data**.
2. Select **Dimension Management** and select **Members**.

   The **Member Summary page** containing the following details is displayed.

   - **Alphanumeric Code**- The alphanumeric code assigned to a member.
   - **Numeric Code**- The numeric code assigned to a member.
   - **Name**- The unique member name.
   - **Is Leaf**- The leaf node status of the member definition.
     - **Yes**- The member is set as a leaf node in any hierarchy and Child cannot be added to this node.
     - **No**- The member is a not a leaf and can have child nodes.
   - **Enabled** - The status of the member definition (Yes/No).
   - **Action**- Click to view, edit, copy or delete a member definition. You can also access the list of objects dependent on this definition.

   To filter the summary based on specific search criteria, select and add the required search criteria to the **Search** field and enter/select the specific values. Use **More Filters** to add additional search criteria.

   > **Note:**
   >
   > **Dimension** is a default and mandatory search filter. Select the dimension to access the member definitions available in that dimension. By default the first dimension from the **Dimensions** list is added as the search entry.

4.4.2 Creating Member Definitions

You can add new Member Definitions from the Member Summary page.

To create a member definition :

1. To create a member definition, click the **Add** in the **Member Summary** page, to access the **Member Details** page.
2. Enter the following **Member Details** :
   - **Dimension**- Select the dimension to be associated with the new Member.
   - **Numeric Code**- The numeric code to be assigned to the new member definition. You can enter the value between 0 and 999,999,999 manually or click **Generate Code**, to auto-generate a unique code.
     If you enter the value manually, it is assigned after validation.
   - **Alphanumeric Field Value**- The alphanumeric Code to be assigned to the new Member Definition.
     You can enter up to 100 characters and enter only Underscore (“_”) as a special character.
   - **Name**- The unique member definition name.
     You can enter up to 100 characters. All characters are allowed except " & ' and " ' ".
   - **Description**- A brief description about the member definition.
     You can enter up to 100 characters. All characters are allowed except " & ' and " ' ".
   - **Is Leaf**- Check this option if the member is a leaf of another member. By default, it is set to **Yes**.
     – **Yes**- The member can be used as a leaf node in any hierarchy and child cannot be added to this node.
     – **No**-The member is not set as a leaf and can have child nodes.

     > **Note:**
     >
     > If a member is set as a non-leaf and is associated with child nodes, it cannot be set as a leaf again.

   - **Enabled**- This field is set to **Yes** by default. You can modify the **Enabled** status, after creating the member. To edit a member, refer Editing Member Definition Details.

     > **Note:**
     >
     > You can change the option to **No** only when the particular member is not used in any hierarchy. The disabled members will not be displayed in Hierarchy Rules, or utilities which are based on Hierarchies, such as Hierarchy Filters and Hierarchical Assumption Browsers used in applications.

3. (Optional). Click **Copy**, to attach an existing attribute to this new member definition.

   You can also set the attribute values for a new member definition, manually. Enter/select the attribute values in the **Member Attributes** pane. All the attributes associated with the selected dimension are displayed in the Member Attributes pane.

4. Locate the Attribute to be copied and click **Move** and select **Copy**, located under **Actions.**
5. Click **Save**, to create the new Member definition and view it the Member Summary.

   Click **Actions** and select **Edit Member Details** to edit the member details or select **Save and Add New**, to create the new member definition and proceed with adding another definition.

4.4.3 Managing Member Definitions

You can View, Edit, Copy, and Delete the existing Member Definitions from the Member Summary page.

In the members summary page, highlight a specific Member Definition and click the **Action**. The following Options are displayed:

- **View**- View the **Member Details** for a specific Member Definition.
- **Edit**- Edit the **Member Details** for a specific Member Definition.
- **Copy**- Copy the Member Definition Details and create another Member Definition by changing Alphanumeric Code, Numeric Code and Name.
- **Delete**- Delete the member definition.
- **Check Dependency** - View the list of objects dependent on this definition.

4.4.3.1 Viewing Member Definition Details

You can view the details of an individual Member Definition, from Member Summary page.

To view a Member Definition, the Read Only Role should be mapped to your User Group.

You can view the details of an individual Member Definition, using the following procedure:

1. Highlight the Member Definition and click the **Action**.
2. Click the **View** button.

   The Member Definition page is displayed with the details Dimension, Alphanumeric Code, Numeric Code, Name, Is Leaf and Enabled status.

4.4.3.2 Editing Member Definition Details

To edit the existing Member Definition details, the Write role should be mapped to your User Group.

You can edit individual Member Definition Details, using the following procedure:

1. Highlight the Member Definition and click the **Action**.
2. Click the **Edit** button.

   The Member Definition page is displayed with the details Dimension, Alphanumeric Code, Numeric Code, Name, Is Leaf and Enabled status.

   Edit the required information and click **Save**.

4.4.3.3 Copying Member Definition Details

To copy the Member Definition Details, the Write role should be mapped to your User Group.

You can copy individual Member Definition Details, to recreate another new Member Definition, using the following procedure:

1. Highlight the Member Definition and click the **Action**.
2. Click the **Copy** button.

   The **Member Definition Page** is displayed with the details Dimension, Alphanumeric Code, Numeric Code, Name, Is Leaf and Enabled status.

   Edit the unique information such as Name, Alphanumeric Code, Numeric Code and click **Save**.

4.4.3.4 Deleting Member Definition Details

To delete a Member Definition, the Write role should be mapped to your User Group.

You can delete individual Member Definition Details, using the following procedure:

1. Highlight the Member Definition and click the **Action**.
2. Click the **Delete** button.

   The Member Definition is deleted after confirmation.

4.5 Hierarchy

Hierarchies refer to Dimension Members that are arranged in levels, with each level representing the aggregated total of the data from the level below. One dimension type can have multiple hierarchies associated with it. Hierarchies are available within the Dimension Management section.

A Default Hierarchy definition is required to support BI Users to perform multidimensional analysis, in the BI reporting. The hierarchy name of a default hierarchy definitions are suffixed with the term **System Hierarchy**. You can only view the details of the default hierarchy, from the Hierarchy Summary page. All orphan members under their corresponding default hierarchy, are automatically updated, when they are added/deleted to/from the system.

4.5.1 Hierarchies Summary Page

The list of existing hierarchy definitions is displayed in the Hierarchies Summary page.

To access the hierarchies summary page:

1. From the left menu, click **Reference Data**.
2. Click **Dimension Management** and select **Hierarchies**, to access the Hierarchies Summary page containing a list of existing hierarchies with the following details:
   - **Name** - The unique Hierarchy Name.

     > **Note:**
     >
     > The name of a default hierarchy is always suffixed with the term **System Hierarchy**.

   - **Folder** - Folder in which the hierarchy is stored.
   - **Dimension** - Dimension associated with the hierarchy.
   - **Tags -** Labels to simplify the data search and locate the required details.

- **Action** - Click to view, edit, copy or delete a hierarchy definition. You can also access the list of objects dependent on this definition.

4.5.1.1 Navigating Hierarchy Summary Page

To access records in a Summary page, you can search, sort and navigate to multiple pages.

4.5.2 Creating Hierarchy Definitions

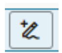
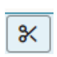
To create a Hierarchy Definition in the Hierarchy Summary page, complete the following steps:

1. Click **Add** in the **Hierarchy Summary** page. The **Hierarchy Details** page is displayed.
2. Enter the **Hierarchy Details** as described in the following table:

Table 4-3 Field Description

Field	Description
Name	The unique Hierarchy Definition Name. **Note:** You can enter up to 100 characters. All characters are allowed except " & ' and " ' ".
Description	A brief description about the Hierarchy Definition. **Note:** You can enter up to 100 characters. All characters are allowed except " & ' + @ and ~.
Folder	Select the Folder in which the Hierarchy is to be stored.
Dimensions	Select the Dimension to be associated with the new Hierarchy Definition.
Click **Apply**.	
Hierarchy View	The Members associated with the selected Dimension are displayed. You can sort this list in Ascending/Descending order, expand or collapse the list to view in details and search for a specific Member. You can focus on a Member to view the Member Properties. You can add a Child or add a Sibling to an existing Member in the data grid.
Search View	The search results based on the specific keyword entered to search a Member is populated.

Table 4-4 Viewing interactive options for a Member

Icon	Description
Mouse-over a Member to see the following options. Select the required option to take action such as adding a child, deleting a node, paste as child, paste as sibling	
Figure 4-1 Add child, sibling, and leaf 	Add a child, sibling and/or leaf.
Figure 4-2 Create and add 	Create and a child, sibling and/or leaf to the Member.
Figure 4-3 Delete/undo delete 	Delete a node or undo deletion.
Figure 4-4 Cut and paste child/siblings 	Move child/siblings up or down as required.

To Add a Child to the Hierarchy:

a. In the **Hierarchy View** tab, click the hierarchy to which you want to add a child.

b. Select **Add Child** option. The **Add Members** page is displayed.

c. Select the required Member and click **Move Right**, to move the Member to the Selected Members panel. To select multiple members, press CTRL and select the members.
The selected members are added to the **Selected Members** pane.

   - Click **Move All Right** to move all members listed in the Available Members pane, to the Selected Members pane. Click **Fetch from DB** to select all nodes/ members in the server.
   - Select a member and click **Move Left** to deselect a Member. To remove multiple members, press CTRL and select the members.
   - To remove all the members from the **Selected Members** pane, click **Move All Left**.

    - You can click **Search** button for the required member using Alphanumeric Code, Numeric Code, Name, Description, Attribute Name, or Attribute Value. Enter the search criteria and Click **Search**, in the Search Panel.
    - You can also click **Search** button to toggle the display of Numeric Code left, right, or name and click button to display Alphanumeric Code left, right, or name.

   d. Click **Add**. The selected member is displayed as child under data grid panel in the **Hierarchy View** tab.

3. **To add a Sibling to the Child in the Hierarchy Definition:**
   a. Right-click on the Child and select the option **Add Sibling**.
      The **Add Sibling** Page is displayed.
   b. Select the required Members and **Move Right**, to move the Member to the Selected Members panel.
      The Member is displayed in the **Selected Members** panel.
   c. Click **Add**. The selected Member is added as **Sibling** below the **Parent** under data grid Panel in the **Hierarchy View** tab.

4. **To add a Leaf under a Parent/Child or Sibling**:
   a. Right-click the Parent or Child and select **Add Leaf**.
      The Add Member Page is displayed.
   b. Select the required Members and click **Move Right**, to move the Member to the Selected Members panel.
      The Member is displayed in the **Selected Members** panel.
   c. Click **Add**. The selected Member is displayed as Leaf below the Parent or Sibling under **Show Hierarchy** Panel in the **Hierarchy View** tab.

5. **To cut and paste Child or Sibling:**
   a. Right-click on any node and select **Cut**.
   b. Right-click on any node and **Paste as Child** or **Paste as Sibling**.

6. **To Delete/Undelete**
   a. Right-click on the node to be deleted and select **Delete Node**.
      The node deleted is struck out.
   b. Right-click and select **UnDelete** to cancel deletion of the node.

7. To view the Member Properties and Member Attributes of a node in the **Hierarchy View** Panel:
   a. Click on a Member.
      The properties such as Alphanumeric Code, Numeric Code, Name, Description, Enabled, Is Leaf, Created By, Creation Date, Last Modified By, Last Modification Date, Attribute, and Value of the selected Member are displayed in the Member Properties and Member Attributes Grids.

      In the Hierarchies page you can also:
      - Click **Collapse** or Expand, to collapse or expand a branch .
      - Click **Focus** or **Unfocus**, to focus or unfocus a selected node except the Root Node.
      - Click **Sort** to sort the list in ascending or descending order.

8. Click **Save**.
   The new Hierarchy Definition is created successfully.

4.5.2.1 Audit Info

The Audit Info section provides details such as Created By and Modified By Users, Creation and Modification Date, and Authorized By user Details. You can add additional information as comments and tags. Tags are labels that help to simplify the data search and locate the required details.

4.5.3 Managing Hierarchy Definitions

You can View, Edit, Copy, and Delete the existing Hierarchy Definitions from the Hierarchy Summary page.

In the Hierarchy Summary page, highlight a specific Hierarchy Definition and click **Action**. The following options are displayed:

- **View** - View the hierarchy details for a specific definition.
- **Edit** - Edit the hierarchy details for a specific definition.
- **Copy** - Copy the hierarchy details and create another definition by changing the unique values like name, description and so on.
- **Delete** - Delete the hierarchy definition.
- **Check Dependency** - View the list of objects dependent on this definition.

4.5.3.1 Viewing Hierarchy Definition Details

You can view the details of an individual Hierarchy Definition, using the following procedure:

1. Highlight the Hierarchy Definition and click **Action (three dots)**.
2. Click **View**.

   The Hierarchy Definition page is displayed with the details Name, Description, Folder, Dimension, Start Date and Hierarchy View details.

4.5.3.2 Editing Hierarchy Definition Details

You can edit individual Hierarchy Definition Details at any given point.

To edit the existing Hierarchy Definition Details:

1. Highlight the Hierarchy Definition and click the **Action (three dots)**.
2. Click **Edit**.

   The Hierarchy Definition Page is displayed with the details Name, Description, Folder, Dimension, Start Date and Hierarchy View details.

   Edit the required information and click **Save**.

4.5.3.3 Copying Hierarchy Definition Details

You can copy individual Hierarchy Definition Details, to recreate another new Member Definition. To copy the Member Definition Details:

1. Highlight the Hierarchy Definition and click **Action**.
2. Click **Copy**.

The Hierarchy Definition page is displayed with the details Name, Description, Folder, Dimension, Start Date and Hierarchy View details.

Edit the unique information such as Name, Description, Folder, Dimension, Start Date and Hierarchy View details and click **Save**.

4.5.3.4 Deleting Hierarchy Definition Details

To delete a Hierarchy Definition:

1. Highlight the Hierarchy Definition and click **Action**.
2. Click **Delete**.

   The Hierarchy Definition is deleted after confirmation.

> **Note:**
>
> You cannot delete a definition if any dependency like Attribute, Hierarchy or Filter is attached to it. Detach the dependency before deleting the definition.

4.6 Viewing Data in a Summary Page

A Summary page will contain a list of definitions associated with a specific Dimension Data, Filters, Batch or Schedules.

You can search, filter and customize the view to access the required data faster.

4.6.1 Searching Summary

Search for a specific Definition based on the following criteria. Select/Enter one or more unique values/tag or Leaf and Enabled status associated with the definition and click **Search**.

4.6.2 Sorting a Summary Page

Sort the list of definitions, to view a specific definition, in a definition Summary .

To sort the various Definitions list:

- **Sort By**: Group the based on the following fields:
  - **Member Summary** - Dimension, Name, Alphanumeric Code, Numeric Code, Enabled and Is Leaf Status, Attribute Name (if the selected Dimension has Dimension Type Attribute) and Attribute Value.
  - **Attribute Summary** - Branch, Name, Code and Data Type.
  - **Hierarchy Summary -** Dimension, Name, Tag and Folders.
  - **Filter Summary** - Name, Folder and Filter Type.
- **Sort Order**: Sort the Complete list in Ascending/Descending order.

4.6.3 Setting Number of Records per Page

Customize the number of records per page, to access the required record easily.

At the bottom of the page, you can enter the number of entries that are available on a single page in the **Records** box. By default, this value is set to 8. You can increase or decrease the number of entries that are displayed using the up and down arrows.

To access a particular page, enter that page number in the Page Box located at the bottom of the page.

To navigate between pages:

- Use **First page** to view the entries in the first page.
- Use the **Previous page**, to view the entries in the previous page.
- Use the **Next page**,to view the entries in the next page.
- Use the **Last page**, to view the entries in the last page.

5
Data Management Tools

This chapter introduces the Balance Reconciliation and Data Verification topics.

Data Management Topics:

- Data Maintenance Interface: Data Maintenance Interface (DMI) helps to design a Data Form in a user-specified format. Further, it allows to perform maintenance activities using the Designed Form.
- Balance Reconciliation: Balance Reconciliation module helps you to Reconcile the selected processing/instrument/account balances against the Management Ledger. If any differences are found, you will have the flexibility to choose significant differences and create plug entries for those in the Ledger_Instruments table.
- Data Housekeeping: The Data Housekeeping UI helps you to delete data, drop partitions and truncate sub-partitions, and archive the data from selected tables.
- Data Level Security: This topic describes how the data administrators can restrict access to the users to instrument and management ledger tables based on specific dimensions.
- Redaction Framework: Oracle Data Redaction provides selective, on-the-fly redaction of sensitive data in database query results prior to display by applications.

5.1 Data Maintenance Interface

Data Maintenance Interface (DMI) helps to design a Data Form in a user-specified format. Further, it allows to perform maintenance activities using the Designed Form.

Topics:

- Data Maintenance Interface
- Data Entry

5.1.1 Data Maintenance Interface

Data Maintenance Interface (DMI) helps to design a Data Form in a user-specified format. Further, it allows to perform maintenance activities using the Designed Form.

Form Builder

Form Builder allows the user to build a form to maintain the underlying data.

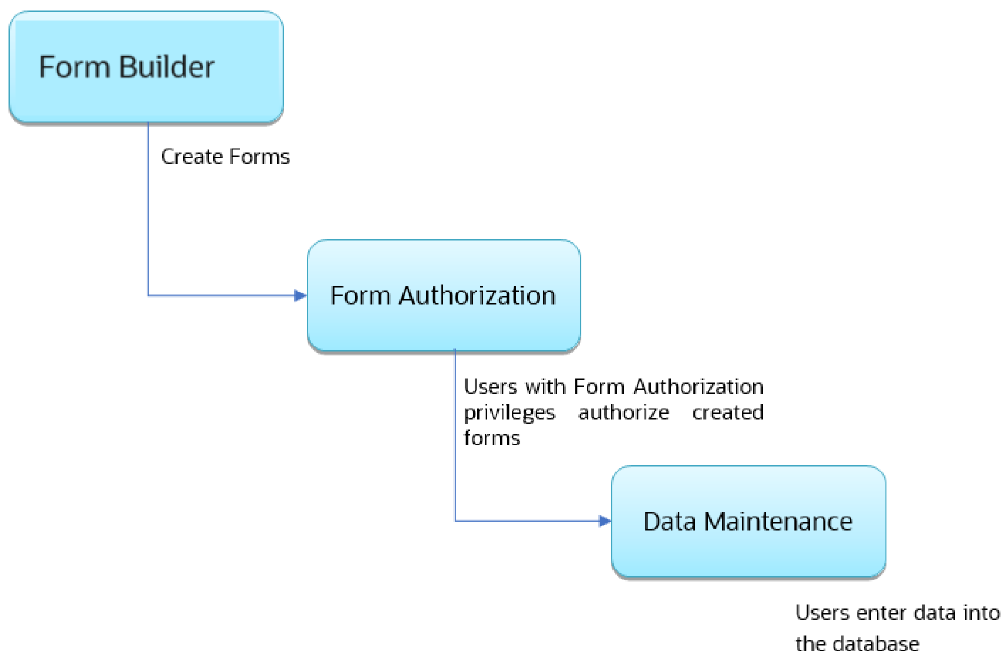
Data Entry

This allows the user to maintain the data either through the form that has been defined or do a bulk upload using the excel upload mechanism. A strong data governance process is enabled through an approval workflow of the data maintained.

5.1.1.1 Process of DMI Windows

The DMI Process starts with a user creating forms in the Form Builder. After the creation of forms, a user with Authorization Privileges authorizes the forms. The Authorized Forms are then used by users to enter data into the database.

Figure 5-1   DMI Process Flowchart



5.1.1.2 User Role Mapping and Access Rights

User access to the DMI UI and the ability to perform functions in it is dependent on the mapping of the user profile to the roles and the access rights assigned.

To access the DMI features and edit forms, you must be mapped to the following roles:

Table 5-1   User Role Mapping for Data Maintainence Interface

Role Code	Role Name	Functionality
DMIDSGNREAD	Data Designer Read	Assign this role to the user to access the Configure View menu from Navigation Tree. NOTE: The mapping of this role does not allow view, edit, and add actions.
DMIDSGNAUTH	Data Designer Auth	Assign this role to the user to Authorize, Excel Upload, and Designer Summary.

Table 5-1 (Cont.) User Role Mapping for Data Maintainence Interface

Role Code	Role Name	Functionality
DMIDSGNREJ	Data Designer Reject	Assign this role to the user to Reject, Excel Upload, and Designer Summary.
DMIDGNFORM	Data Designer Form	Assign this role to the user to Create Designer Form Definition.
DMIDGNTEMPLATE	Data Designer Template	Assign this role to the user to Create Excel upload Definition.
DMIDSGNDEL	Data Designer Delete	Assign this role to the user to Delete, Excel upload, and Designer Summary.
DMIDGNVIEW	Data Designer View	Assign this role to the user to Create View Definition.
DMIDSGNWRITE	Data Designer Write	Assign this role to the user to Add, Edit and Copy all kinds of definitions in Designer screen.
DMIDATAREAD	Data Entry Read	Assign this role to the user to access the Data View menu from the Navigation Tree. NOTE: The mapping of this role does not allow view, edit, and add actions.
DMIDATAALL	Data All Summary	Assign this role to view the list of all Component Records in Data Entry Screen.
DMIDATAWRTE	Data Entry Write	Assign this role to the user to Add, Edit Records in Data Entry Screen.
DMIDATADEL	Data Entry Delete	Assign this role to the user to Delete a Record Summary Data Entry Screen
DMIDATAAUTH	Data Entry Auth	Assign this role to Authorize a Record Summary in Data Entry Screen.
DMIDATAREJ	Data Entry Reject	Assign this role to Reject a Record Summary in Data Entry Screen.
DMIDGNAUTO	Enable Auto Approve	The user mapped to this function will have access to create Auto Approved Forms
DMIDGNAMND	Enable editing of approved forms	User with this role can edit/ amend approved forms.

Note:

All the DMI roles are mapped to a single group, Data Maintenance admin group. If a user is mapped to this group all the DMI roles are automatically assigned to the user.

5.1.1.3 Access the Data Maintenance Interface

To access the Data Maintenance Interface (DMI):

1. Login to your Oracle Cloud account, with the required credentials to access DMI.
2. Select an application, to access the DMI for that application.

   For example, to access DMI for CFECS, select **Cash Flow Engine Cloud Service (CFECS)**.

   > **Note:**
   >
   > The navigation steps vary for different applications. Refer to the respective application documentation for accessing Data Maintenance Interface.

3. Click **Data Management Tools** and click **Data Management Interface**, to access DMI menu.
4. Click one of the following menu items to access the respective pages:
   - Form Builder - Access form definition summary and also create various types of form definitions.
   - Data Entry
5. Click **Data Entry**, to access the Forms Definition summary.

5.1.1.4 Form Definition Summary Page

Access the list of Form definitions already created in the environment.

The Form Definitions Summary lists all the existing Form Definitions in the application.

You can create forms from the Form Designer View. The forms in the application are created with details configured for data maintenance and require authorization for use after creation. You can also edit, view, and delete forms, from the Forms Definitions Summary, based on the assigned roles and privileges. For more information, refer User Role Mapping and Access Rights.

To view the Form Definitions Summary:

1. Click **Data Maintenance Interface**.
2. Click **Form Builder** in the DMI navigation list to access the **Form Definitions Summary**.

   The following details are included the Summary page.

   - **Name** - The unique name of the Form Definition
   - **Description** - The Form Definition description.
   - Type - The form definition type:
     – **Excel Upload** – creates form based on uploaded Excel Sheet.

       > **Note:**
       >
       > Microsoft Office 2016 Standard version as well as Office 365 version are supported.

  - **Data Exporter** – creates form based on an entity table.
  - **Data Entry** – creates the form based on the entities, attributes and rulesets provided by the user.
- **Status** - The processing status of the form definition. The various processing statuses are:
  - **Draft** – when the form is under development and is yet to be submitted for approval.
  - **Pending Approval** – When the approval is pending.
  - **Approved** – When the form definition is approved.
- **Created By** - The Username of the logged in User who created the form.
- **Actions** - View, copy or edit or amend a form definition.
- **Info** - The form definition details including:
  - Created Date
  - Last Modified By
  - Authorizer
  - Authorizer comments

Use **Search** to quickly access the required forms or check the Forms tile to view a list of existing forms. To search for a specific Form Definition, input search terms in the **Form Name** or **Description** field, or use a combination of both, and click **Search**. Click **Cancel** to clear the search criteria and view all form records.

Sort the Form Definition based on **Name**, **Description**, and **Created By** fields. You can also sort the page in ascending/descending order.

To filter and view Form definitions with a specific processing status, click the respective status name at the top of the page.

5.1.1.5 Creating New Forms in Form Builder

Form creation involves selecting entities, displaying columns with attributes on the form, and if required, selecting authorization of data. Security settings provide for the creation of specific-user access for the forms and authorization.

To add a form :

1. In the **DMI Summary** page, click **Add**, to access the **Designer - Configure page**.
2. Select the form definition type as follows:
   - **Excel Upload** – creates form based on uploaded Excel sheet.
   - **Data Exporter** – creates form based on an entity table.
   - **Data Entry** – creates the form based on the entities, attributes and rulesets provided by the user.

   For more information about creating various form definitions:
   - Creating Forms Using Excel Upload
   - Creating forms using Data Exporter
   - Creating Forms Using Data Entry

5.1.1.5.1 Creating Forms Using Excel Upload

Excel Upload Definition Type creates new forms based on the uploaded Excel file that has column names as per the table in the application data source.

While creating forms using Excel Upload, you can also modify the mapping for the attributes. After the new form is approved from the Forms Definition Summary Page, users with the necessary role and permission can perform Data Entry for the records updated by the Excel file.

> **Note:**
>
> Microsoft Office 2016 Standard version as well as Office 365 version are supported.

To create forms using Excel Upload:

1. Select Excel Upload in the Create Form Definition page and add the following details.
   - **Code** - The unique Form code. This value is auto-generated.
   - **Name** - The Form Name. You can enter between 3 to 100 characters. Only alphabets, numbers, spaces, and underscores are allowed.
   - **Description** - The Form Definition description. You can enter between 3 to 100 characters. Only alphabets, numbers, spaces, and underscores are allowed
   - **Auto Map Entities** - Enable this option to to auto map the attributes in the Excel file with the attributes in the Entity Table.

   At any point of time during the form creation, click **Save** to add the new form to the Form Summary. The form is saved in the **Draft** format. Click **Actions** and select **Edit**, to update the form definition.
2. Click **Continue** to access the **File Upload** tab.
3. In the **File Upload** tab, enter the following details:
   - **Template Name** and **Description** for the excel template.
   - Click **Drag and Drop** and select the excel file to update the required table.

     > **Note:**
     >
     > You can also drag and drop the required excel file to the **Drag and Drop** area.

     The excel file is uploaded and a confirmation box is displayed, and the **Mapped Entities Tab** is displayed.
4. After entering the **File Upload** information, click **Continue** to access the **Mapped Entities** tab.
5. In the **Mapped Entities** tab, select the **Primary Entity** name of the table that needs to be modified.

   If the table has Child tables, the Child tables are displayed in the **Mapped Entities** tab. You can select the required child tables for which data should be input during data entry.

6. Select **Enable Bulk Authorization** if you want to enable the bulk authorization of all the records when you edit an approved Form from Data Entry.
7. Enable **Auto Approve** if you want the Forms Definition to be automatically approved from Forms Definition Summary page and is enabled for data entry.

   Alternatively, you can also get the form approved manually. For manual approval, disable the auto approve option.

   A user with the required role can then perform the data entry without the need for an approval process. For more information, see User Role Mapping and Access Rights.
8. Click **Continue**, to proceed with the **Mapped Attributes** tab.
9. Click the drop-down arrow corresponding to the table in the Entity Name.

   The source attributes from the table and the mapped attributes from the Excel file are displayed. If the selected table has Child tables, the Child tables that you select from the Mapped Entities tab are also displayed in the **Mapped Attributes** tab. You can configure the attributes for the master table and its child tables here.
10. Click the required mapping in the **Override Mapping Column** and enter the required attribute name if you want to change the default mapping.
11. To activate data security, Select the check box next to the **Attribute Name**, in the **Mapped Attributes** Column.
12. Click the **Lock** icon adjacent to a specific attribute name, to configure a specific data security condition.

    The condition that you configure is applicable when a user performs the data entry for the table records for each approved Forms Definition from the Data Entry Page. For more information, refer Enabling Data Security for New Form Definitions.
13. Click **Continue** to proceed to the **User Security** tab.
14. Select the user or user groups who can perform data entry to maintain the data in the table.

    For more information about adding user security, refer to Enabling User Security for New Form Definitions.
15. Click **Data Preview** to preview the form data.
16. Click **Save** if you want to save the forms definition in draft format. The form is added to the **Form Summary** with **Draft** status.
17. Click **Submit** if you want to submit the Forms Definition for manual/auto approval.

    For more information refer to Approving and Rejecting New Form Definitions. After approval/auto approval, the form is added to the **Form Definition Summary**.

5.1.1.5.2 Creating Forms Using Data Entry Option

Use the Data Entry option to create a Forms Definition and select the table and attributes that you want to modify.

You can enter the values for the table records in the approved Forms Definition from Data Entry, after the new Forms Definition is approved from the Forms Definition Summary Page.

To create a forms definition:

1. Select **Data Entry** in Create New Form Definition page and enter the required details.
2. Enter the following details:
   - **Code** - Unique form code. This value is auto-generated.

- **Name** - The form name. You can enter between 3 to 100 characters. Only alphabets, numbers, spaces, and underscores are allowed.
- **Description -** The form definition description. You can enter between 3 to 100 characters. Only alphabets, numbers, spaces, and underscores are allowed.
- **Threshold -** The maximum number edits allowed per row.

3. Click **Continue** to access the **Entities tab**.
4. Select the table that you want to modify in the **Primary Entity** Field.

   If the selected table have child tables, the child tables is also displayed. You can select the required Child tables for which you wish to input the data during data entry.

   > **Note:**
   >
   > You can select up to four child tables only for each master table.

5. Select **Enable Bulk Authorization**, if you want to enable the bulk authorization of records while performing data entry.
6. Enable **Auto Approve** if you want the Forms Definition to be automatically approved from Forms Definition Summary page and is enabled for data entry.

   Alternatively, you can also get the form approved manually. For manual approval, disable the auto approve option.

   A user with the required role can then perform the data entry without the need for an approval process. For more information, see User Role Mapping and Access Rights.
7. Click **Continue**, to proceed with the **Attributes** tab.
8. Select the **Filter** from the existing filters in the drop-down list or click **Filter** to apply a new attribute filter to the form definition.
9. Click the drop-down arrow corresponding to the table in the **Entity Name**, to view the attributes in the entity table.

   If your table has child tables, the Child tables that you select from the Entities tab also gets displayed in the Attributes tab.
10. Select the attributes for which you want to modify the data from the **Attribute Name**.
11. Select **Participate in Data Security** if you want to configure a specific condition.
12. Click the **Lock** icon adjacent to a specific attribute name, to configure a specific data security condition.

    The configured condition is applicable when a user enters data in table for each approved Forms Definition from the Data Entry Page. For more information, refer Enabling Data Security for New Form Definitions.
13. Enter **Select Columns** to search and select specific columns.
14. Click **Continue** to access the **Ruleset** tab.

    The list of attributes associated with the parent and the Child tables are displayed in the Ruleset tab.
15. Assign permission to add data during data entry for those attributes that are set to Editable/Read-only mode. You cannot modify the key fields set in read-only mode.
16. Click Continue and proceed to the **User Security** tab.

17. Click **User Security** to select the user or user groups who can perform data entry to maintain the data in the table.

    For more information about adding user security, refer to Enabling User Security for New Form Definitions.

18. Click **Submit** if you want to submit the Forms Definition for manual/auto approval.

    For more information refer to Approving and Rejecting New Form Definitions. After approval/auto approval, the form is added to the **Form Definition Summary**.

5.1.1.5.3 Creating Forms Using Data Exporter

Forms created using Data Exporter are used to export table data to `CSV` or `JSON` format.

While creating forms using Data exporter, you can also include filters and dynamic placeholders to view and export specific set of data.

To create forms using Data Exporter:

1. Select **Data Exporter** in Create New Form Definition page.
2. Enter the following details:
    - **Source** - Select the input source as table/view.
    - **Code** - Unique Form Code. This is auto-generated.
    - **Name** - The name of the form in Form Name. You can enter between 3 to 100 characters. Only alphabets, numbers, spaces, and underscores are allowed.
    - **Description** - The Form Definition description. You can enter between 3 to 100 characters. Only alphabets, numbers, spaces, and underscores are allowed.
    - **Row Limit Per File -** The number of maximum table rows allowed per file. The minimum number of rows is 100 and the maximum limit is 100000.

      For example, if you have 500 rows in a table and the row limit is set to 100, then the table is split into 5 files.
3. Click **Continue** to proceed with the **Entity and Attributes Details** tab.
4. **Compress File**: Keep this option selected to automatically compress files into a .zip archive when downloading. Example: If you have 500 rows in a table and the row limit is set to 100, then the table is split into 5 files. With the **Compress File** option enabled, the user can download these 5 files compressed into a single .zip file.
5. Select the table that you want to modify in the **Entity** Field.

   If the selected table have child tables, the child tables is also displayed. You can select the required Child tables for which you wish to input the data during data entry.

   > **Note:**
   >
   > You can select up to four Child tables only for each Master table.

6. Select the **Filter** from the existing filters in the drop-down list or click **Filter** to apply a new attribute filter to the form definition.
7. Click **Select columns** to view only specific columns.
8. Enable **Auto Approve** if you want the Forms Definition to be automatically approved from Forms Definition Summary page and is enabled for data entry.

Alternatively, you can also get the form approved manually. For manual approval, disable the auto approve option.

A user with the required role can then perform the data entry without the need for an approval process. For more information, see User Role Mapping and Access Rights.

9. Click the drop-down arrow corresponding to the table in the **Entity Name**, to view the source attributes from the table and the mapped attributes from the Excel file.

   If the selected table has Child tables, the Child tables that you select from the Mapped Entities tab are also displayed in the **Attributes** tab. You can configure the attributes for the master table and its child tables.

10. Click **Continue** to access the **Data Preview** tab preview the form data.

11. Click **Submit** if you want to submit the Forms Definition for manual/auto approval.

    For more information refer to Approving and Rejecting New Form Definitions. After approval/auto approval, the form is added to the **Form Definition Summary**.

5.1.1.5.4 Creating Data Filters for New Form Definitions

Filters help to view and export specific set of data from data exporter forms.

Complete the following steps if you want to add filters to the Forms Definition:

1. Click **Filter**, to access the **Filter Condition** pane.
2. Enter/ select the following details.
   - **Column** - Select the column from the applying the filter.
   - **Condition** - Select one of the following filter conditions, to filter the column data.
     – **Comparison** - '=', '!=', '< >', '>', '<', >=, <=,'IN', 'NOT IN', 'ANY', 'BETWEEN', 'LIKE', 'IS NULL', and 'IS NOT NULL'.
   - **Type** - Select one of the following filter types.
     – **Static** - Select Static, to enter a value and execute the filter using only one value. You cannot change the value at a later point.
     – **Dynamic** - Select Dynamic, to change the filter value when needed.
     After setting the filter type to Dynamic, select the **Placeholder** and set one of the default seeded values, to process the filter.

     > **Note:**
     >
     > Only values that are already seeded in the Database table, are displayed in the Placeholder drop-down list.

   - **Filter Value** - Select/enter the filter value.

     > **Note:**
     >
     > For Language Placeholder the default locale language is displayed and cannot be modified.

3. Click **Add** to add a new Filter expression. You can add multiple Filter expressions to the same filter.

The filter is added to the list of filters.

Mouse-over the place holder filter, to view more details about the filter.

4. Click **Validate** to verify the filter condition is valid.

   A confirmation is message is displayed, if the filter is valid.

5. Click **Apply**, to add the new filter to the filter condition.
6. Click **Reset**, to clear all the filter expressions and create a new expression.
7. Click **Delete** to delete an existing filter expression.
8. Click **Edit** to modify a filter expression. After editing the expression, click **Validate**, to verify if the condition is valid.
9. Click **Apply** to add the filter expression to the form definition.

5.1.1.5.5 Enabling Data Security for New Form Definitions

Data security conditions allows you to apply certain filters when a user performs the data entry for the table records for each approved Forms Definition from the Data Entry page.

Consider that you configure the condition `COUNTRY_NAME = 'INDIA'` for the reference table **DIM_COUNTRY**. When a user performs the data entry for this Forms Definition from the Forms Definition - Summary Page and enters a country name other than 'INDIA', the record gets rejected by the application when another user approves this record.

Complete the following steps to configure Data Security for the Forms Definition:

1. Select the check box next to the **Attribute Name**, in the **Mapped Attributes** Column.

   > **Note:**
   >
   > Data Security information must be configured for each attribute name, separately.

2. Click the **Lock** icon, to access the **Data Security page**.
3. Select the **Reference Table** based on which you want to build your condition from the Reference Table drop-down list.
4. Select the required column, condition, and filter value, and build the required expression.
5. Click **Apply**, to enable the data security for the new form definitions.

5.1.1.5.6 Enabling User Security for New Form Definitions

The User Security option helps you to select the users/user groups who can add, edit, delete and/or authorize data entry.

To enable user security:

- Select the required user group or user to assign permissions from the **Map Users / Groups**, to complete the user security configuration.

  When you select the user group or user, the permissions for each approved Forms Definition are displayed. These permissions are the actions that the selected user group or user can perform while performing Data Entry.

Table 5-2 Permissions in the Map Users / Groups Pane

Option	Description
Add /Edit	Add or modify records in an approved Forms Definition
Delete	Delete records in an approved Forms Definition
Authorize	Authorize the records in an approved Forms Definition
Duration From	Optional. Select the start date for which the permissions are available to the user or user group.
Duration To	Optional. Select the end date for which the permissions are available to the user or user group.

> **Note:**
>
> If you select a user group for User Security, you can view the users mapped to that group by clicking the **Users** icon.

5.1.1.6 Approving and Rejecting New Form Definitions

You can validate and approve the new Forms Definition if you have the required role assigned to you.

If the configuration in the Forms Definition is incorrect, you can reject the Forms Definition. The rejected Forms Definition changes into Draft status. You can then request the required user to edit the Forms Definition and submit it for approval again.

You can also view, copy, and edit each Forms Definition from the Forms Definition – Summary page by clicking Menu. These actions are available based on the roles assigned to you. For more information, refer User Role Mapping and Access Rights.

5.1.1.6.1 Approving a Forms Definition

You can approve new forms based on the assigned roles.

To check about the assigned roles, refer User Role Mapping and Access Rights.

To approve a Forms Definition:

1. In the Form Builder, click **Menu** in the Forms Definition that is in **Pending Approval** status, and then click **Approve**, to access the **Configure page**.
2. Click **Approve** and then enter the required description for the approval in the Comments field.
3. Click **Submit**, to approve the form definition and view it in the **Data Entry page**.

   Once the form is approved, you can edit/amend the approved forms if you have **DMIDGNAMND** role assigned.

5.1.1.6.2 Rejecting a Forms Definition

You can reject new forms based on the assigned roles.

To check about the assigned roles, refer User Role Mapping and Access Rights.

To reject a Forms Definition:

1. In the Form Builder, click **Menu** in the Forms Definition that is in **Pending Approval** status, and then click **Reject**, to access the **Configure page**.
2. Click **Reject** and then enter the required description for the approval in the Comments field.
3. Click **Submit**.

   The Forms Definition is rejected, moved to **draft** status. The form definition is displayed in Forms Definition Summary page. You can then edit the Forms Definition in draft status and submit it for approval again.

   For more information on editing a Forms Definition, see Editing Form Definitions.

5.1.1.7 Managing Form Definitions

You can view, edit, copy, and delete the existing Form Definitions from the Form Definition Summary Page, based on the assigned roles.

To check about the assigned roles, refer to User Role Mapping and Access Rights.

In the Summary Page, highlight a specific Definition and click **Action**. The following options are displayed:

Table 5-3 Action Details

Action	Description
View	View the **Member details** for a specific Member Definition.
Edit/Amend	Edit/amend the **Member details** of a form definition.
Copy	Copy the Member Definition Details and create another Member Definition by changing Alphanumeric Code, Numeric Code and Name.
Re-Upload	Upload a new Excel sheet for an Excel upload form definition. You need to delete the attached excel sheet before uploading the new data.
Delete	
Approve	If you have the required role, you can approve a new Form that is in Awaiting Approval status. For more information, refer to Approving a Forms Definition.
Reject	If you have the required role, you can approve a new Form that is in Awaiting Approval status. For more information, refer to Rejecting a Forms Definition.

5.1.1.8 Viewing Form Definitions

You can view the form definition details using the View option, based on the assigned roles.

To check about the assigned roles, refer User Role Mapping and Access Rights.

You can view the details of an individual Form Definition:

1. Highlight the Form Definition and click **Action**.
2. Click **View**, to access the **Form Definition page** with the selected Form definition details.

5.1.1.9 Editing/Amending Form Definitions

You can modify both approved and rejected form definitions, based on the assigned roles.

To check about the assigned roles, refer User Role Mapping and Access Rights. Forms that are already approved cannot be edited. You can amend the approved forms if you have **DMIDGNAMND** role assigned.

> **Note:**
>
> You cannot amend an approved form, if the form has any pending data entry activity.

To edit individual form details:

1. Highlight the form definition and click the **Action**.
2. Click **Edit**, to access the **Form Definition page** with the details.

   To modify an approved form, click **Amend**.
3. Update the required information and click **Submit**.

   You can also **auto-approve** the form during submission.

   The modified form definition is updated in the form design summary.

5.1.1.10 Copying Form Definitions

You can copy individual Definition Details, to recreate another new Definition, if you have assigned roles.

To check about the assigned roles, refer User Role Mapping and Access Rights.

To copy an existing form definition:

1. Highlight the Definition and click **Action**.
2. Click **Copy**, to view the **Form Definition Page**.
3. Edit the unique information and modify details like entity table, attribute filters, user and data security details and click **Save**, to create a new form definition.

5.1.1.11 Re-Uploading Form Definitions

You can attach a new Excel Sheet to an Excel upload form definition and re-upload the form definition, based on the assigned roles.

To check about the assigned roles, refer to User Role Mapping and Access Rights..

To re-upload an Excel upload form definition:

1. Highlight the Definition and click **Action**.
2. Click **Re-Upload**, to access the **Form Definition page**.
3. In the **File Upload** tab, click **Remove**, to delete the existing Excel sheet.
4. Click **Drag and Drop** and select the new Excel sheet to be uploaded.

5.1.1.12 Deleting Form Definitions

You can delete the form definitions that are in Draft status, based on the assigned roles.

To check about the assigned roles, refer User Role Mapping and Access Rights.

To delete a form definition :

1. Highlight the form definition and click the **Action**
2. click **Delete**.

   The selected form definition is deleted after confirmation.

5.1.2 Data Entry

The Data Entry feature of Data Maintenance Interface (DMI) enables you to maintain or modify the table data by using the Forms Definition that is created and approved from Forms Definition Summary page. For more information on Forms Definitions, see Creating Forms Definition.

If the approved Forms Definition is created by using the designer option, a user with the necessary role can add or modify the records in the table as per the configuration in the Forms Definition. These records are then sent to another user with the necessary permission for final approval.

If the approved Forms Definition is created by using an Excel file, a user with the necessary permission can verify and approve the records that are modified with the values from the Excel file. If the records modified by the Excel file are incorrect, the user can reject the records. The rejected record can be modified by a different user with the necessary role and can be sent for the final approval again. The Forms Definitions that are created by using an Excel file are labeled with an Excel icon in Data Entry.

5.1.2.1 Viewing Data Entry

You can view records based on the assigned roles. For more information about the roles, refer to User Role Mapping and Access Rights.

Complete the following steps to view Data entry:

1. Login to your Oracle Cloud account, with the required credentials to access DMI.
2. Select an application, to access the DMI for that application.

   For example, to access DMI for CFECS, select **Cash Flow Engine Cloud Service (CFECS)**.

   > **Note:**
   >
   > The navigation steps vary for different applications. Refer to the respective application documentation for accessing Data Maintenance Interface.

3. Click **Data Management Tools** and click **Data Management Interface**.

   The **Navigation List** is displayed.
4. Click **Data Entry**.

The **Data Entry page** is displayed. All the approved forms are displayed in the Data Entry page. Forms in Draft and Awaiting Approval status can be accessed from the Form Builder page.

5.1.2.2 Adding Data to Table – Forms Created Using Data Entry

If the Forms Definition is created using the designer option, the user with the necessary role can add or delete records and also update the values for the table records as per the configuration in the Forms Definition.

These records are then submitted for approval to another user with the necessary role. For more information, refer to User Role Mapping and Access Rights.

To update/delete data in the table records:

1. Highlight the record and click the **Action**.
2. Click **Edit**, to update the records.

   The records are classified based on the following Status:

   - **Draft** – Records that are created but not submitted. In Draft state, you can add new rows or delete/edit an existing row submitted for auto-approval.
   - **Ready** – Records that are approved. You can only edit the records.

   For adding/deleting records and editing existing draft or Ready records, refer to the following sections:

Related Topics

- Adding/Editing a Draft Record
  You can add a record to the table or edit a record set in the Draft status. The added record is set to Draft status.
- Deleting Draft Records

5.1.2.2.1 Adding/Editing a Draft Record

You can add a record to the table or edit a record set in the Draft status. The added record is set to Draft status.

To add or edit a draft record:

1. Select **Draft** from the **Status** drop-down list, to view all the entity records set to **Draft** status.
2. To add a new record, click **Add**.

   A new entry set to **Draft** status is added to Entity details page. This entry is empty. Edit the record to add the attribute details.
3. To edit a record, click **Edit** next to the record.
4. In the **Edit** page, enter the values in the attributes that you want to modify and click **OK**.

   You can repeat the steps for all the records for which the data needs to be entered.
5. To modify all the entries in a specific column, click **Bulk Update**.
   a. Select the column to modify the data.
   b. Enter the new value and click **OK**.
6. Click the modified record in draft status, and then click **Submit for Approval** or **Submit with Auto Approval**.

If the record is submitted with auto approval, it is approved instantaneously.

If the record is submitted for approval, is sent for approval, and is changed to **Awaiting status**. A user with the necessary role can approve these records. For more information, see Approving and Rejecting Records after Data Entry.

After approval, the status is changed from **Draft** to **Ready** status. Refer Editing Approved Records, to edit the records in **Ready** status.

> **Note:**
>
> If the user has configured the **Participate In Data Security** option while creating a Forms Definition, you must enter the value as per the configured condition. If you enter a value that does not meet the condition, then the record is rejected by the application and the approval gets failed. You can view the details of the rejection by using the Audit trail option for each record. For information on the Participate In Data Security option, see Enabling Data Security for New Form Definitions.

5.1.2.2.2 Deleting Draft Records

You can delete the records in Draft status. If the record is approved and moved to Ready status, it cannot be deleted.

1. Select **Draft** from the Status drop-down list.

   The entity records with Draft status are displayed for entering data are displayed.

2. Select a record and click **Delete**.

   To delete multiple records, select all the required records and click **Delete**.

   To bulk delete all the records, select the Check box on the Header. All the records are selected. Then, click **Delete**.

5.1.2.2.3 Editing Approved Records

The approved records are set to Ready Status.

When you edit the record, it is moved to Draft Status.

1. Select **Ready** from the Status drop-down list, to view the entity records with Ready status are displayed.
2. To edit a record, click **Edit** next to the record.
3. Update the values for the attributes that you want to modify and click **OK**.

   You can repeat the steps for all the records for which the data needs to be entered.

4. To modify all the entries in a specific column, click **Bulk Update**.
   a. Select the column to modify the data.
   b. Enter the new value and click **OK**.
5. Click the modified record in draft status, and then click **Submit for Approval** or **Submit with Auto Approval**.

   To submit multiple records, select all the required records and click **Submit**.

   To bulk submit all the records, select the check-box on the header. All the records are selected. Then, click **Submit**.

If the record is submitted with auto approval, it is approved instantaneously. The record is sent for approval and is changed to Awaiting status. A user with the necessary role can approve these records. For more information, see Approving and Rejecting Records after Data Entry.

> **Note:**
>
> If the user has configured the Participate In Data Security option while creating a Forms Definition, you must enter the value as per the configured condition. If you enter a value that does not meet the condition, then the record is rejected by the application and the approval gets failed. You can view the details of the rejection by using the Audit trail option for each record. For information on the Participate In Data Security option, see Enabling Data Security for New Form Definitions.

5.1.2.3 Forms Created Using Excel Upload

When a Forms Definition created using an Excel file is approved from Forms Definition Summary Page, the table records in the selected table are updated using the data in the Excel file.

The records are set to **Awaiting** status for the approved forms definition in data entry page. You can verify the records modified by the Excel file records and approve them if you are assigned to the necessary role. If the records modified by the Excel file are incorrect, you can reject the records. The status of the rejected records is changed to Draft. A user with the necessary role can edit the records in draft status and submit them for approval again.

- To approve records, see Approving a Draft Record.
- To reject records, see Rejecting a Record.
- To edit a record in draft status, see Editing a Rejected Record.

5.1.2.4 Approving and Rejecting Records

A user with the necessary role can approve or reject the edited records.

For more information related to user roles, refer to User Role Mapping and Access Rights.

5.1.2.4.1 Approving Draft Records

You can approve the records set to Draft status.

To approve records :

1. In the **Data Entry** page, select **Draft** from the **Status** drop-down list.

   The entity records with Draft status are displayed.

2. Select the required record.

   You can select multiple records, to perform bulk Approval. Bulk Approval is enabled only if Bulk Authorization is activated during Form Creation.

3. Enter the required comment in the Comments Field, and then click **Approve**.

   The record is approved successfully with the values from the Excel file.

5.1.2.4.2 Rejecting a Record

You can reject an record set to Awaiting status.

To reject a record :

1. Click **Menu** in the required Forms Definition from the Data Entry page.
2. Click **Edit**.

   The Entity Details page is displayed. The records that are waiting for the final approval are displayed here.

   Select the required record, and then click **Reject**.

   You can select multiple records to perform bulk rejection. Bulk rejection is enabled only if Bulk Authorization is activated during Form Creation.
3. Enter the required comment in the Comments field, and then click **Reject**.

   The record is rejected, and the status is changed to **Draft**. A user with the necessary role can now edit the record.

5.1.2.4.3 Editing a Rejected Record

You can edit the records that are in draft status and send them approval to the user with the necessary role.

To edit a record:

1. Select **Draft** from the **Status** drop-down list.
2. Click **Edit** in the record that you want to edit.
3. Modify the required attributes, and click **OK**.
4. Select the record and then click **Send for Approval**.

   The modified record is now moved to **Awaiting** status. A user with the necessary role can approve the record.

> **Note:**
>
> If the user has configured the **Participate In Data Security** option while creating a Forms Definition, you must enter the value as per the configured condition. If an incorrect value is entered, the record gets rejected by the application and the approval is failed. You can view the details of the rejection by using the Audit Trail option for each record. For information on the Participate In Data Security option, see Enabling Data Security for New Form Definitions.

5.1.2.5 Exporting Data Exporter Form Definitions

After creating data exporter form definitions, you can export or download the reports to CSV or JSON format.

To export or download a report:

- In the Data Entry summary page, click **Action** next to the data exporter form to be exported and select one of the following options

- Custom Export - export the report only for selected attributes. You can also create and apply filter conditions to specific columns to generate customized reports.
- Export - export the report for all the attributes. A complete report including all the records and attributes is generated.

5.1.2.5.1 Custom Exporting Data Exporter Forms

When you create forms using Data Exporter option, you can export the report to .CSV format.

To custom export data exporter forms :

1. Click **Action** next to the form to be exported and click **Custom Export**, to view the **Data Exporter - Configure** page.
2. Click **Start**, to access the **Entity and Attributes** tab.
3. Select the attributes to be added to the custom report.
4. Click **Continue**, to view the **Filters** tab.
5. Set the filter conditions for specific columns and click Continue to view the **Data Preview** tab.
6. Select the report file format (.CSV or JSON) and also the number of records per page.
7. View the list of records to validate the data.
8. Click **Export** to export the report in CSV format.

   The Data export request will be submitted.
9. Proceed to the Data entry page to view the status of the form and download the report.

5.1.2.5.2 Exporting Data Exporter Forms

Forms created using Data Export option can be exported as a .CSV file or a JSON file.

Export Data Exporter forms:

1. Click **Action** next to the form to be exported and click **Export**.

   The Data export request is submitted.
2. Proceed to the Data entry page to view the status of the form and download the report.

5.1.2.5.3 Viewing Data Exporter Report Status

View the status of all the reports generated based on a Data Exporter form.

To view report status:

- Click **Action** next to the form to be exported and click **Status/Download**, to view the status of all the reports generated for a specific data exporter form.

5.1.2.5.4 Downloading Reports

You can download the reports exported as .CSV file.

To download a report :

1. Click **Data View**.

   The **Data Entry page** is displayed.

2. Click **Action** next to the form to be exported and click **Status/Download**, to access the **Data exporter Report Status** page.
3. Click the **Download** icon adjacent to a report to download the report to the local directory in `.CSV` format.

   You can also copy the link to download the report. Enter the link in a Web browser, to access the report.

5.1.3 Adding DMI Tasks in Scheduler Service

The Data maintenance Interface is now integrated with the Scheduler services and you can use Scheduler services, to process form definitions created using Data Exporter.

By using Scheduler Services for DMI automation, you can automate and streamline the data processing for form definitions created using the Data Exporter options.

Ensure that you have the assigned roles to perform automated data exporter form download.

To schedule a DMI task for form definitions created using Data Exporter:

1. Log in to your **Cloud services** and access **Scheduler Services**.
2. Select **Define Batch**, to view the list of existing batches.
3. In the Define Batch page, click **Create**, to access the **Create Batch** page.
4. Enter the generic Batch information (**Code, Batch Name, Batch Description, and Batch Parameters**), and click **Save** to create a new Batch and proceed with creating a new Task.
5. In the **Left Navigation list**, select **Define Tasks**, to access the list of existing tasks.
6. In the Define Task page, select the **DMI Batch** to associate the new task
7. Click **Add**, to **Create a new task**.
8. Enter the generic Task details (**Task Code, Task Name and Task Description**), and the following DMI specific details:
   - **Component** - Select Data Maintenance Interface, to assign this as a DMI specific task.
   - **Report Template** - Select **Pre-defined template**, to access the following DMI specific template parameters.
     – **App ID** - The unique application ID of the application utilizing the Scheduler services for task automation.
     – **Module Name** - Select the module required for the DMI tasks, from the list of Seeded modules.
     – **Report Code** - Select the Report code to be added to the generated report.
     – **Report Type** - Set the report type to `CSV/JSON`.
     – **Available Place holders** - (Optional). Select the placeholder required for the report.
     – **Placeholder Values** - (Optional). Enter the placeholder values to be included in the generated report.
     – **Additional Filters** - (Optional). Enter the filters to be applied to the data, to generate reports with specific information.
     – **Report Name Prefix** - (Optional). Enter the unique prefix to be added to the report name for easy identification of the report.
     – **Report Name** - (Optional). Provide a name for the report to be generated.

9. Click **Save** to create a new DMI specific task, and proceed with scheduling the batch.
10. In the Left Navigation list, select **Schedule Batch**, to access the list of batches.
11. Select the DMI batch for execution and click **Execute**.
12. During batch execution, click **Monitor Batch**, to check the progress.
13. Select the **Batch** and the **Run ID** to access the required task, and click **Start Monitor** to view the task execution progress in the **Visualizations** tab.
14. Click **List View** to view the task execution details of all the executed tasks.

    After the task execution is complete, the generated report is saved to the object store.
15. Click **View Execution Logs** corresponding to the DMI task, to view the execution log information.
16. Scroll to the required **Batch Run Id** and **copy the log details to clipboard**.
17. Paste the copied log information to a notepad, to get the PAR URL for downloading the report.
18. Paste the PAR URL in a Web browser, to download the report to the local directory.

5.2 PBSM Balance Reconciliation

The Profitability and Balance Sheet Management Cloud Service's Balance Reconciliation module helps you to Reconcile the selected processing/instrument/account balances against the Management Ledger. If any differences are found, you will have the flexibility to choose significant differences and create plug entries for those in the Ledger_Instruments table.

> **Note:**
>
> All General Ledger Accounts must mandatorily have a Reconciliation product mapped to them.

You can define the dummy attributes for the Product-Currency combinations, whichever General Ledger Account is used for Reconciliation. Default dummy attributes are auto populated based on the linked product ID and currency selected in Reconciliation dimensions.

Reconciliation is a three-step process.

- Reconciliation Definition and Default Attributes setup
- Reconciliation Report verification
- Plug entry creation and writing the Reconciliation differences back to Ledger Instruments table

To access the Balance Reconciliation module, from the LHS Menu, navigate to **Data Management Tools**, and select **Balance Reconciliation**.

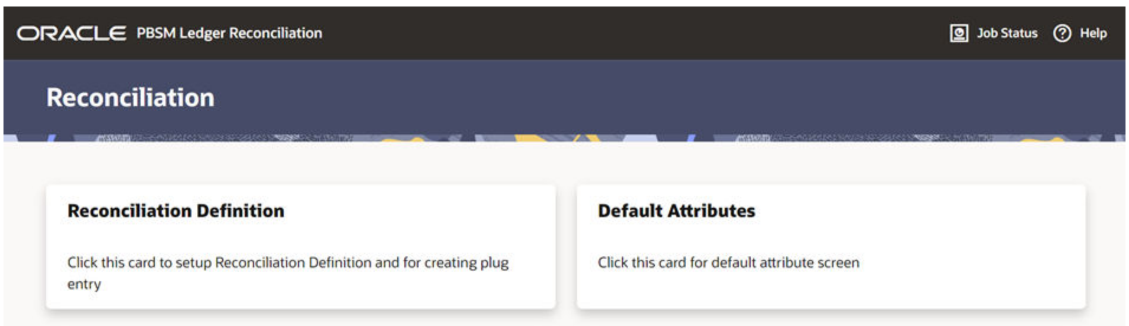
The Balance Reconciliation landing screen displays the following two cards:

- Reconciliation Definition
- Default Attributes

Note:

1. Ledger Balances with Balance Type CD as only 0, will be considered for reconciliation.
2. Balance Sheet category will be derived based on Common COA linked as attribute with selected GL account, which subsequently has Account Type defined as attribute of the concerned Common COA.
3. Reconciliation Product must be defined as attribute of GL accounts which participate in reconciliation, so system can pick account attributes for the plug entry creation.

Figure 5-2 Reconciliation Landing Screen

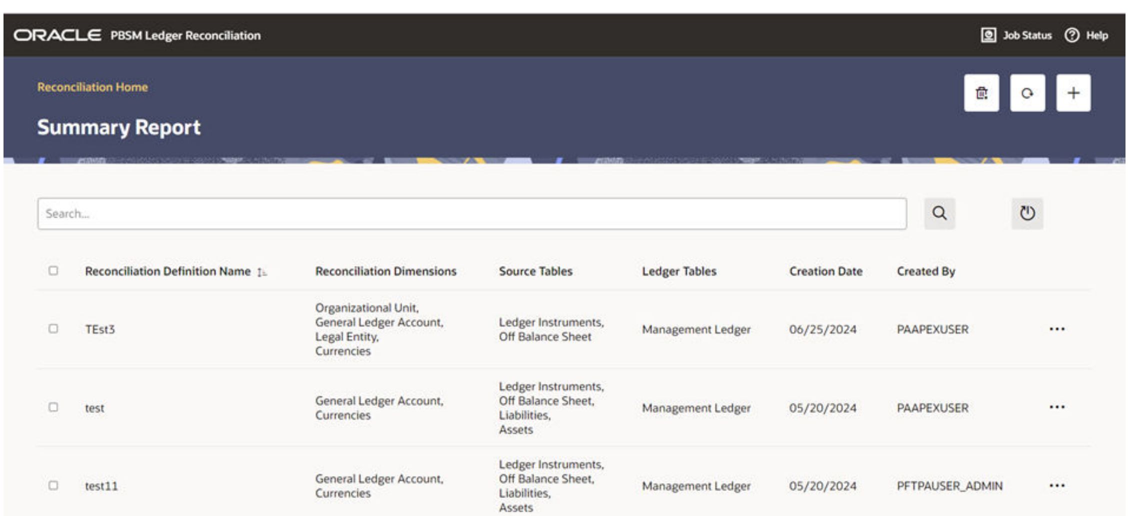


5.2.1 Reconciliation Definition

The Reconciliation Definition summary screen allows you to search for any definitions from the displayed list.

The Reconciliation Definition summary screen is as follows:

Figure 5-3 Reconciliation Definition Summary Screen



This screen displays the following definition attributes for easy identification:

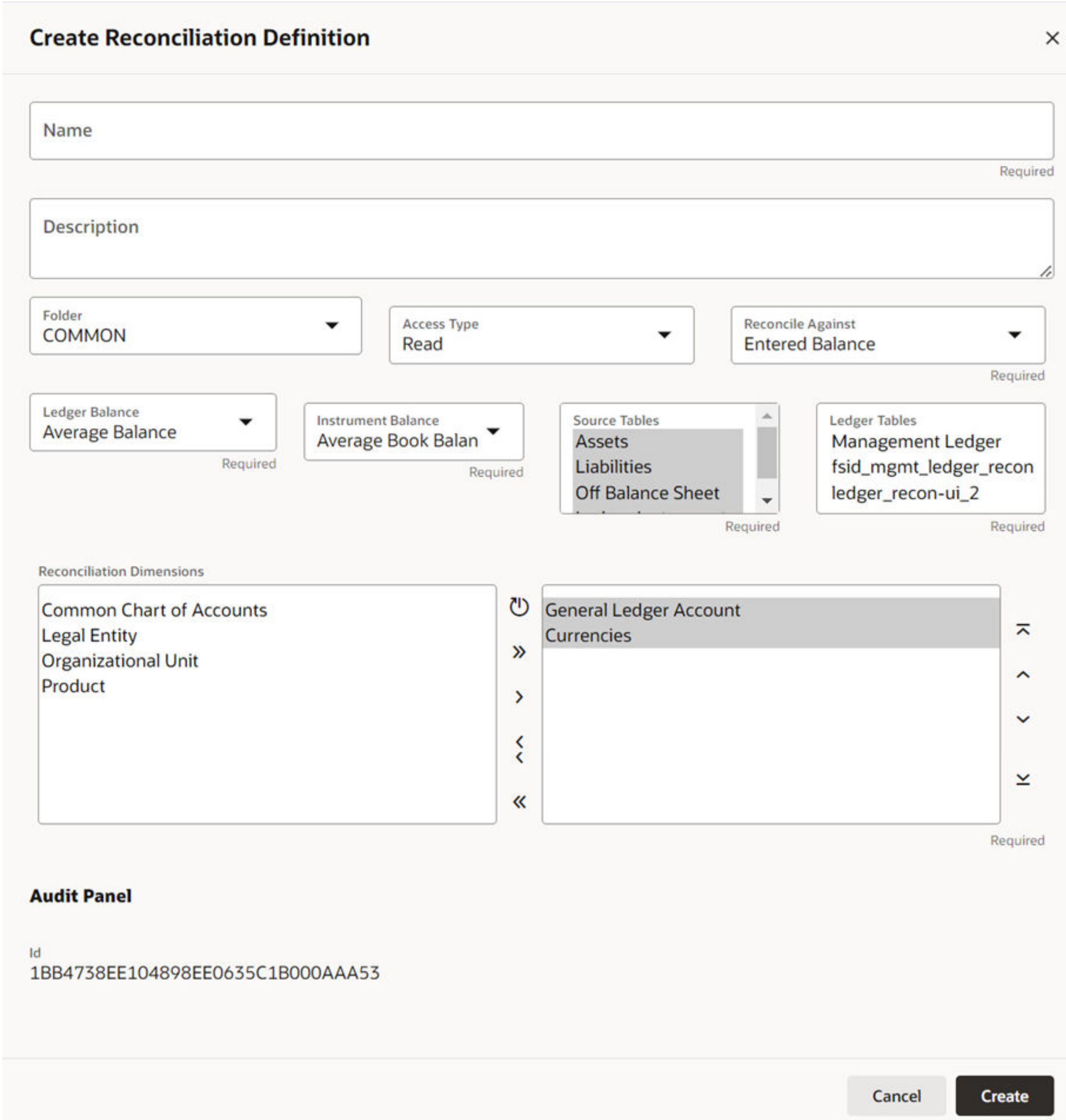
- Reconciliation Definition Name
- Reconciliation Dimensions across which reconciliation is performed
- Source Tables against which reconciliation is performed
- Ledger Tables
- Creation Date
- Created By
- Actions icon

5.2.1.1 Adding a New Reconciliation Definition

The Create Reconciliation screen allows you to define a new Reconciliation Definition.

To add a new Reconciliation Definition, click the **Add** button on the summary screen.

Figure 5-4 Create Reconciliation Definition Screen



Reconciliation Definition set up allows you to choose for which Instrument Table, across which Dimensions and on which Balance Type (Cur Book Bal or Cur Par Bal); you would like to perform reconciliation. For example, you can choose to reconcile against just GL Account ID and Currency or do reconciliation at much granular level by selecting the Org Unit, Legal Entity along with GL Account ID and Currency.

While selecting reconciliation key dimensions, you have the option to choose from activated placeholder dimensions as well along with seeded key dimensions.

Similarly, there is a seeded FSI_D_MANAGEMENT_LEDGER table, which will be used by default for balance reconciliation against selected portfolio of accounts. In case, there are any activated placeholder management ledgers as well, those will also be available for selection and subsequently for balance reconciliation.

5.2.1.2 Reconciliation Balance

Management Ledger stores balance using Financial Elements, while corresponding Cur/Avg Balance can be picked directly from the dedicated columns in the Instrument Tables. So, you have an option to choose if you want to reconcile against 100 (ending balance)/140 (average balance). In the Management Ledger for FE 100, you can further select between CUR_BOOK_BAL/CUR_PAR_BAL from Instrument table. By Default, CUR_PAR_BAL would remain selected. You are allowed to create plug entries only when comparison is done against ending balance. For Average balance, you can only see the difference report but would not be allowed to create plug entries.

You can choose to reconcile in functional or local currency as per the selection made under ‘Reconcile Against’; Functional or Entered Currency.

You can do the comparison only for Asset, Liability, or can include Ledger Instrument table also. At run time, the As-of-Date can be passed for which Balance Reconciliation will be performed.

5.2.1.3 Actions Performed on Reconciliation Definition

To delete one or multiple Reconciliation Definitions, you can select the checkboxes against each one of them and press the **Delete** button.

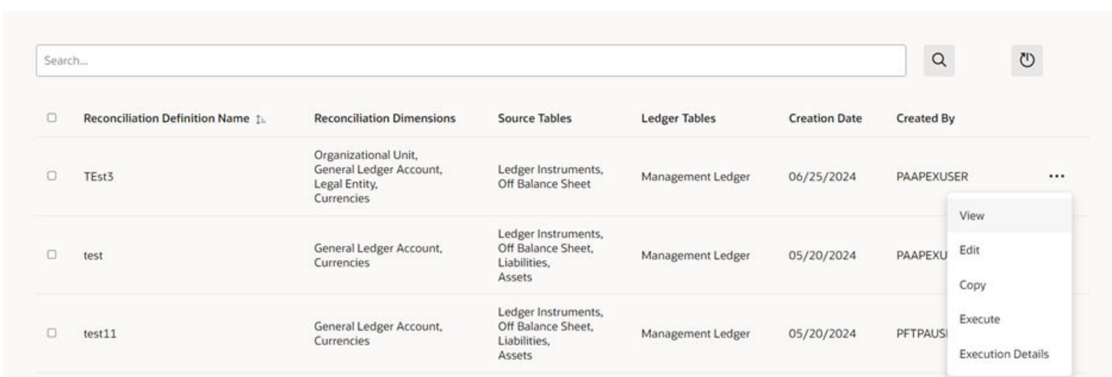
A confirmation message will let you confirm and delete selected definitions.

You can also perform search based on following fields:

- Name
- Reconciliation Dimensions
- Source tables against which reconciliation is performed
- Folder where the reconciliation definition is stored

The following screen display the **Actions** menu from which the different actions that you can perform on existing Reconciliation Definitions.

Figure 5-5   Actions Icon and Different Actions

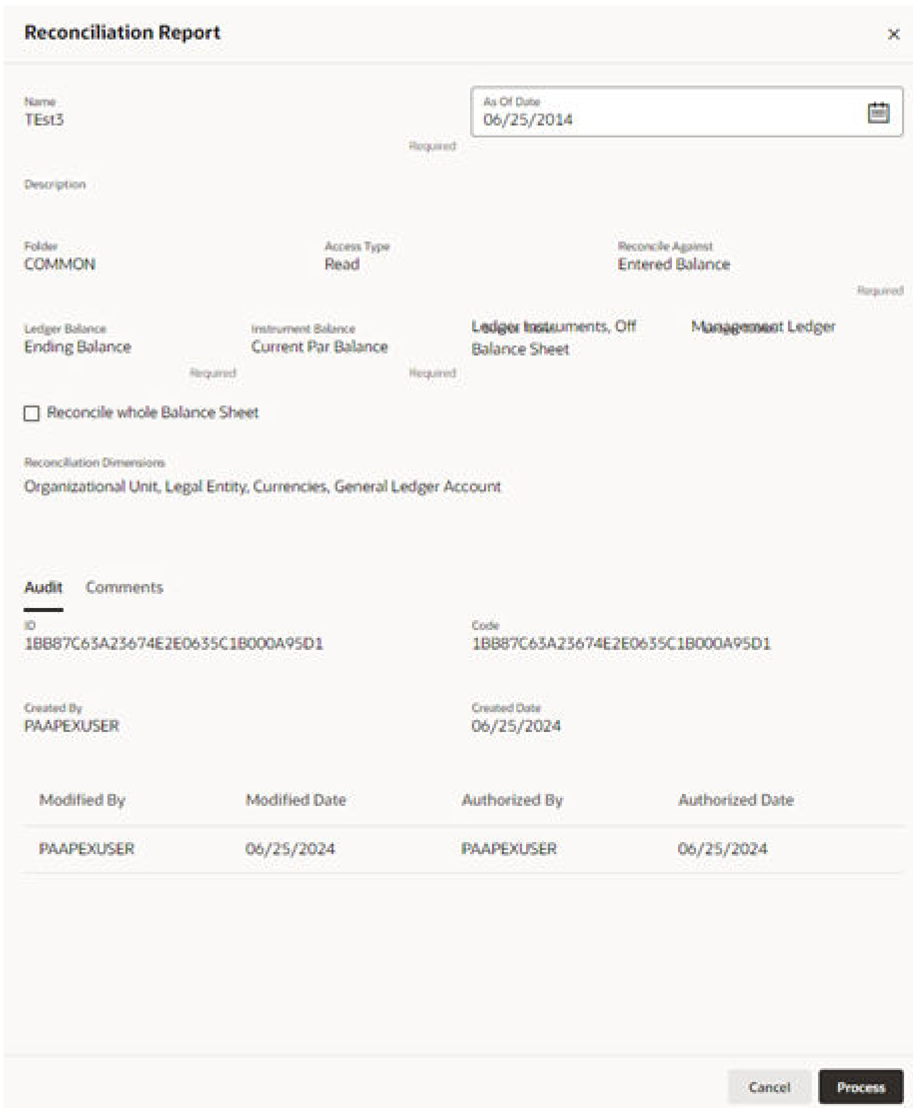


The following are the actions:

- **View**: Click this action button and view the definition in read only format.

- **Edit**: Click this action button and edit the definition.
- **Copy**: Click this action button and copy the definition to create another definition with similar parameters.
- **Execute**: Click this action button and perform the reconciliation as per the selected parameters.
  As-of-Date is a run time parameter, you can choose for which date reconciliation needs to be performed. After clicking **Process**, the Reconciliation Difference Report will be generated as follows:

Figure 5-6 Reconciliation Report



Report starts with the summary across Balance Sheet categories and difference buckets pie charts, which can help you to get an idea about the reconciliation difference in a quick glimpse.

Figure 5-7 Reconciliation Difference Report

The detailed report is displayed as follows, where you can filter out insignificant difference using 'Threshold Percentage', also threshold can be applied at each row level or for whole Balance Sheet category level. If threshold is applied at Balance Sheet category level, all the rows that belong to the Balance Sheet category which is less than given percentage will be hidden from the Reconciliation Difference Report. A download button allows you to download the Reconciliation Report.

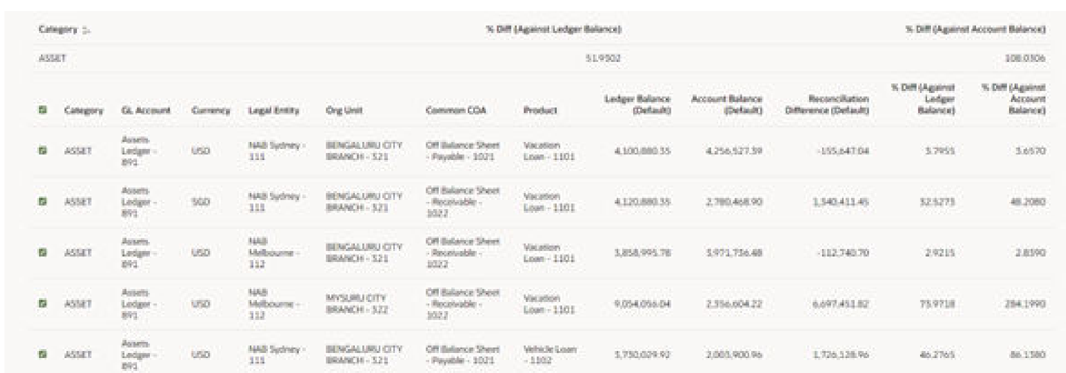
You can select **Filter at Category Level** toggle switch to apply threshold at 'consolidated difference reports', which is at balance sheet category level OR can directly apply the threshold to each difference row, which is available at the unique combination of selected key dimensions.

You can select the **ID / Code** toggle switch to see the CD data. By default, the toggle switch displays the ID data.

You can also change the unit of balance to thousands or millions.

You can see difference in both percentage and absolute format.

Figure 5-8 Differences in Percentage and Absolute Formats



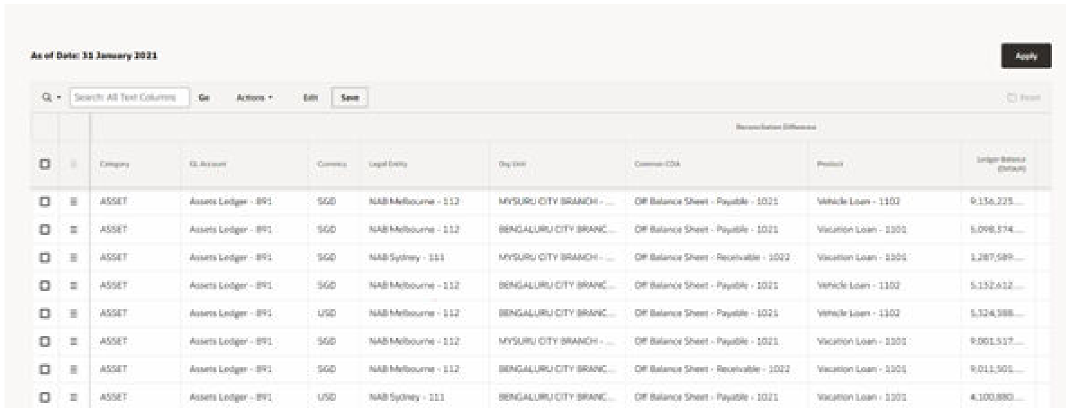
Category	% Diff (Against Ledger Balance)	% Diff (Against Account Balance)
ASSET	51.9502	108.0306

Category	GL Account	Currency	Legal Entity	Org Unit	Common COA	Product	Ledger Balance (Default)	Account Balance (Default)	Reconciliation Difference (Default)	% Diff (Against Ledger Balance)	% Diff (Against Account Balance)
ASSET	Assets Ledger - 891	USD	NAB Sydney - 111	BENGALURU CITY BRANCH - 321	Off Balance Sheet - Payable - 1021	Vacation Loan - 1101	4,100,880.35	4,256,527.39	-155,647.04	3.7955	3.6570
ASSET	Assets Ledger - 891	SGD	NAB Sydney - 111	BENGALURU CITY BRANCH - 321	Off Balance Sheet - Receivable - 1022	Vacation Loan - 1101	4,120,880.35	2,780,468.90	1,340,411.45	32.5273	48.2080
ASSET	Assets Ledger - 891	USD	NAB Melbourne - 112	BENGALURU CITY BRANCH - 321	Off Balance Sheet - Receivable - 1022	Vacation Loan - 1101	3,858,995.78	3,971,736.48	-112,740.70	2.9215	2.8390
ASSET	Assets Ledger - 891	USD	NAB Melbourne - 112	MYSURU CITY BRANCH - 322	Off Balance Sheet - Receivable - 1022	Vacation Loan - 1101	9,054,056.04	2,356,604.22	6,697,451.82	73.9718	284.1990
ASSET	Assets Ledger - 891	USD	NAB Sydney - 111	BENGALURU CITY BRANCH - 321	Off Balance Sheet - Payable - 1021	Vehicle Loan - 1102	3,730,029.92	2,003,900.96	1,726,128.96	46.2765	86.1380

As a next step to create the plug entries for filtered rows, you can click the **Apply** button in extreme right corner. Following a grid appears, along with default attributes fetched from default product attributes: if you like, you can update any of these attributes before plug entries are created for the selected difference records. You can use the **Edit** and **Save** button to edit the default product attributes like Amortization Type, Interest Rate Code, and so on. You cannot edit any Code (CD) or VARCHAR attributes. Only attributes like Number, Rates, Dates, Term can be edited. All types of balances like Org balance, Current/Average balance are same as the reconciliation difference.

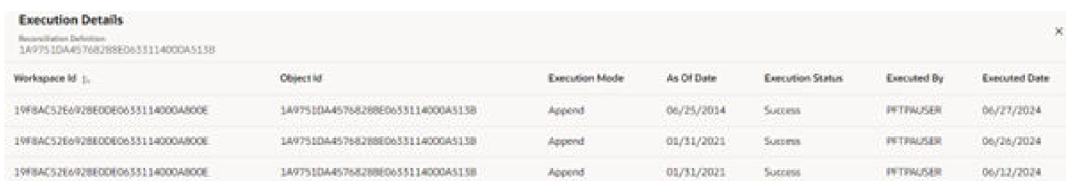
After you are convinced with the entered values for all the account attributes, you can click Apply. A job will be submitted and plug entries will be created in the FSI D Ledger Instruments table. To differentiate the plug entries from the customer real accounts, Data source CD will be used, with value 3, which signifies the ‘Difference balance entries due to reconciliation performed between account and ledger’.

Figure 5-9 Differences in Percentage and Absolute Formats



- **Execution Details**: You can click this action button and view all the runs for a selected definition, along with the user information who has triggered the execution.

Figure 5-10 Excution Details



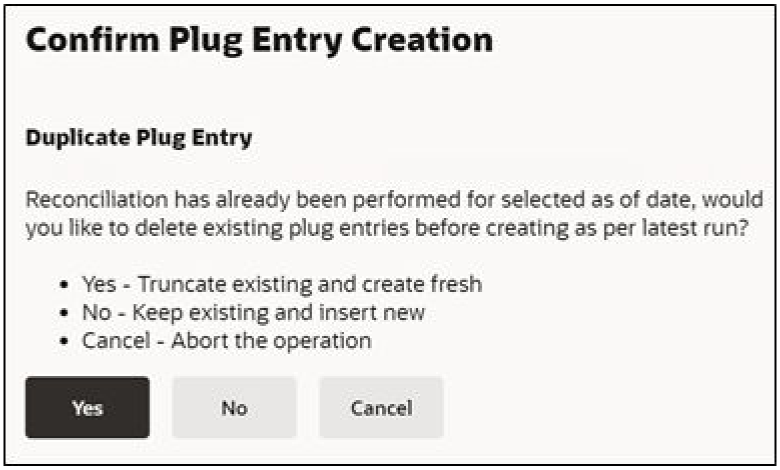
5.2.2 Duplicate Runs for Same As-of-Date

If for a particular As-of-Date plug entries are already created, you have an option to cancel the latest run and exit without creating any plug entries.

You can append to existing entries for same As-of-Date. This case is possible if different reconciliation definitions are being executed for different instrument tables.

You can delete all the existing plug entries for concerned As-of-Date and create all fresh entries. This case is possible if the intermediate day runs took place locally and finally at night a global run took place.

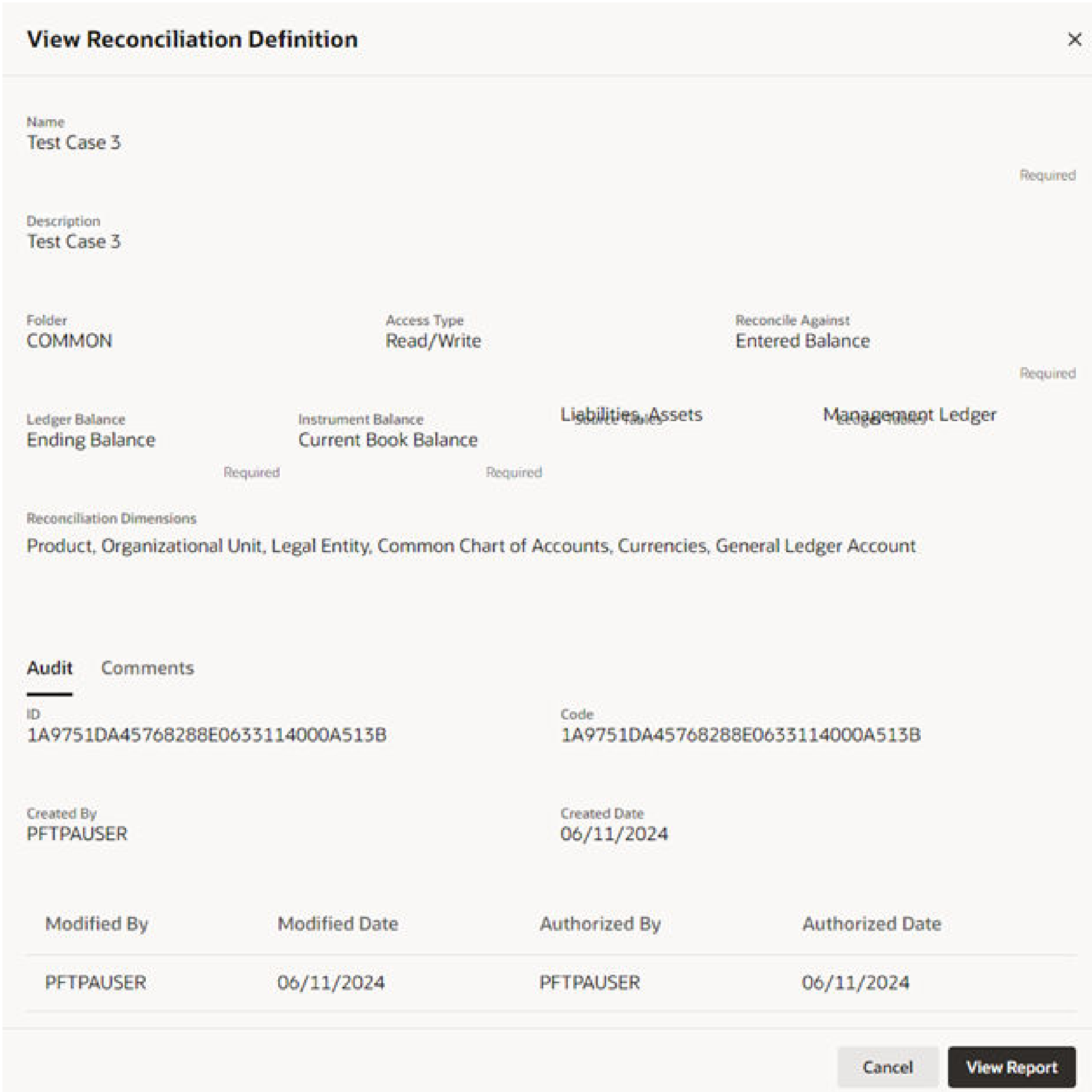
Figure 5-11 Confirm Plug Entry Creation



5.2.3 Historical Difference Report

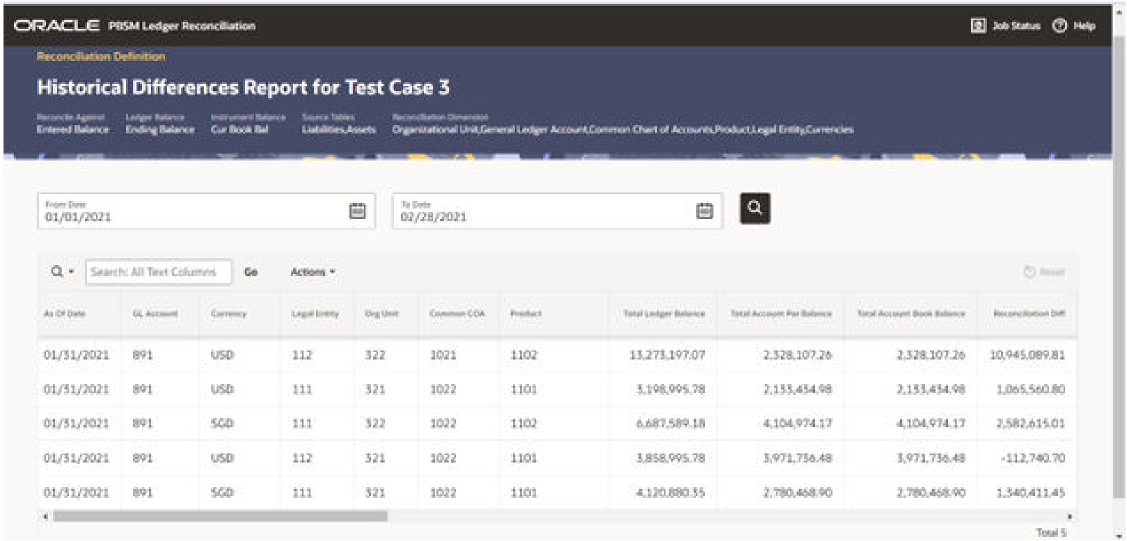
You can open the Reconciliation Definition in **View** mode and get the Historical Difference Report using the **View Report** button.

Figure 5-12 View Reconciliation Report



Here you can give a historical period by selecting the **From Date**, **To Date** and fetch all the reconciliation difference records along with the user comments to get the justification for plug entries creation.

Figure 5-13 Historical Differences Report for FUNCT

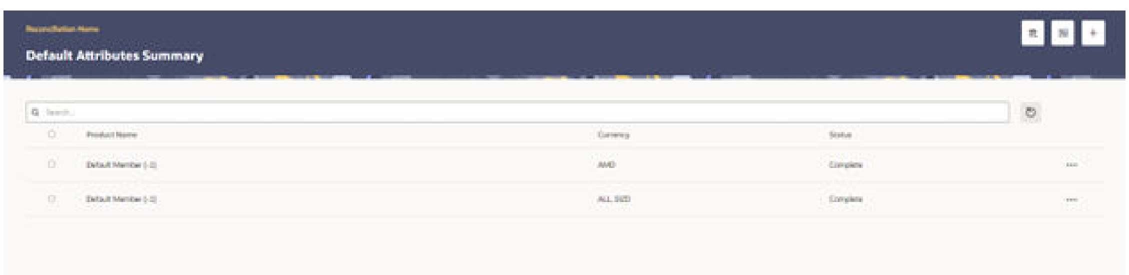


5.2.4 Default Attributes

The following is the Default Attribute Summary screen, where you can find all the default attributes defined for various Product-Currency combinations.

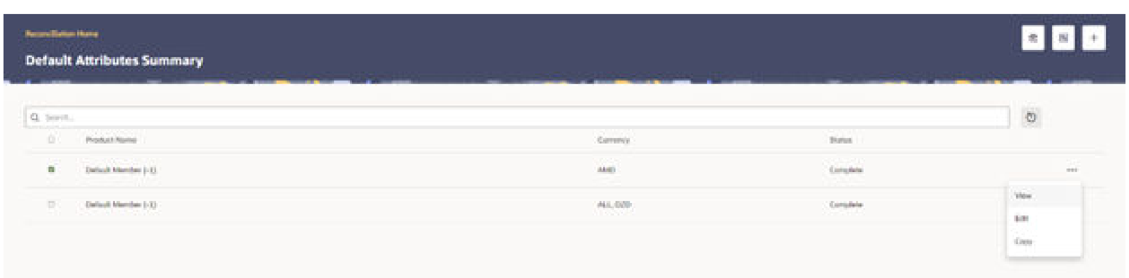
You can select one or multiple Product-Currency combinations and delete at once, by clicking the **Delete** button.

Figure 5-14 Default Attributes Summary



You can view/edit/copy an existing default attribute using respective button inn the Actions icon as follows.

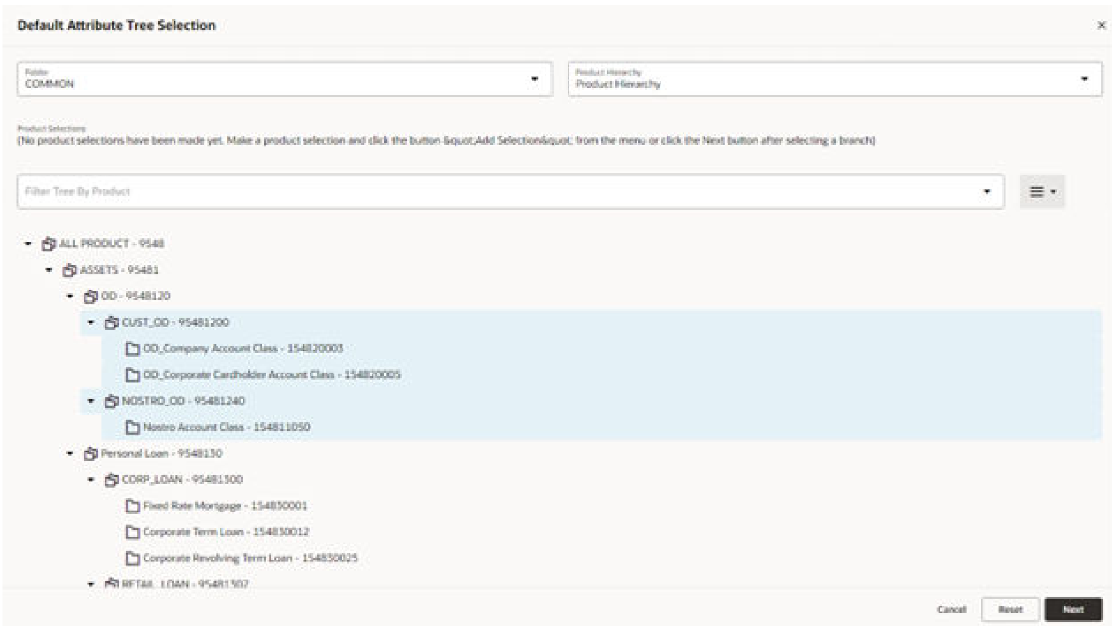
Figure 5-15 Default Attributes Summary – Actions Column



5.2.4.1 Creating a New Product-Currency Combination and Default Attributes

To create a new Product-Currency combination and default attributes for that. You can click the **Add** button, and a slide in pop-up will appear with three tabs:

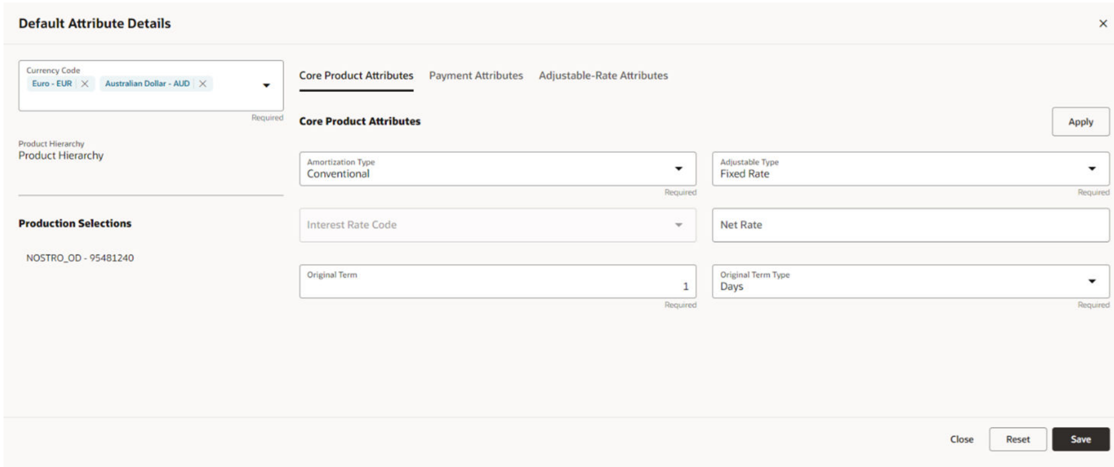
Figure 5-16 Default Attribute Tree Selection



Core Product Attributes Tab: Here you can select one or multiple products and one or multiple currencies and start defining core product attributes as follows:

- Amortization Type
- Adjustable Type
- Interest Rate Code
- Net Interest Rate
- Original Term
- Original Term Type

Figure 5-17 Core Product Attributes

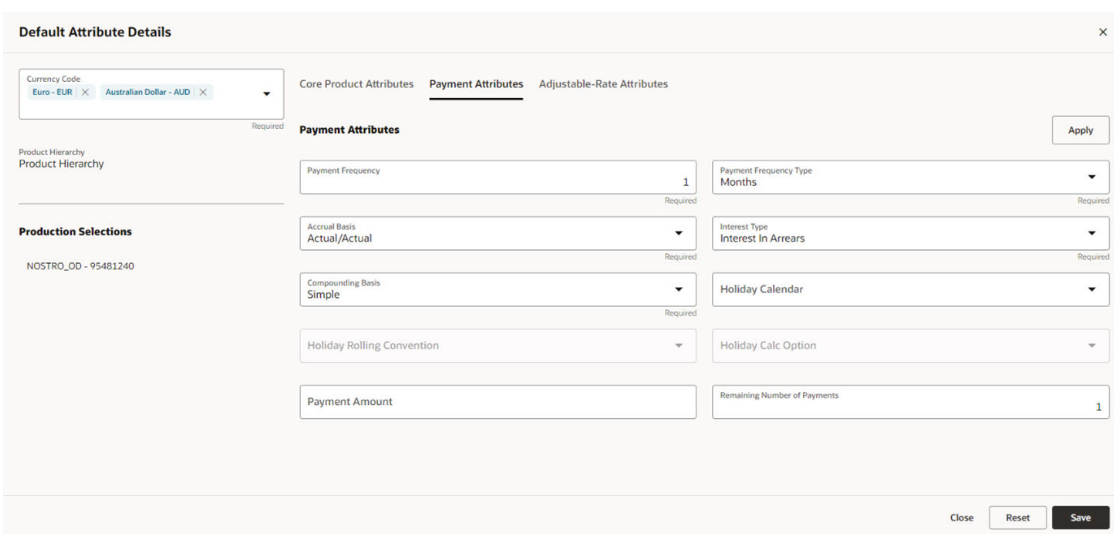


Click **Apply** and move to the Payment Attributes tab.

Payment Attributes Tab: To Define payment attributes, you can select this tab and start filling the following details:

- Payment Frequency
- Payment Frequency Type
- Accrual Basis
- Interest Type
- Compounding Basis
- Payment Amount
- Remaining Number of Payments

Figure 5-18 Payment Attributes



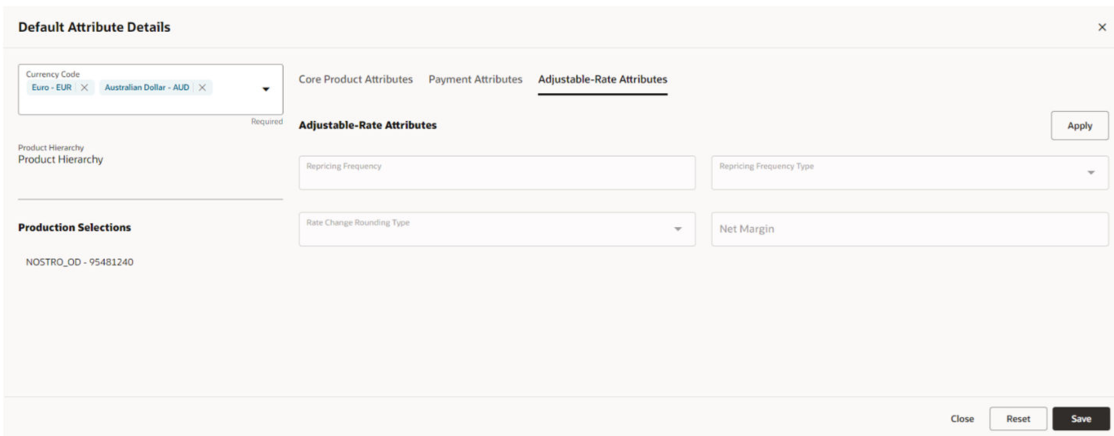
Click **Apply** and move to the Adjustable-Rate Attributes tab, which is applicable only for adjustable rate instruments:

Adjustable-Rate Attributes Tab: Here you can define following attributes:

- Repricing Frequency
- Repricing Frequency Type
- Rate Change Rounding Type
- Net Margin

Click **Apply** and then click **Save**. The Default Product Attribute for the selected Product-Currency combination is saved.

Figure 5-19   Adjustable-Rate Attributes



5.2.5 Reconciliation using Batch Process

You can do Reconciliation using the Scheduler Services.

To run the Reconciliation using Batch Process, follow these steps:

1. With the Define Batch feature, it is possible to create new batches and review existing ones.
2. Click **+** to create a new batch.
3. In the **Create Batch** screen, enter the following values:
   a. Code (spaces are not allowed in the code section).
   b. Batch Name
   c. Select the Service URL name as **RUN_CMD_SERVICE**.
   d. Click **Save**.
4. In the **Define Task** screen, you can define the tasks related to a specific batch.
   a. Navigate to Define Task.
   b. Select the name of the batch that has been created for this task.
5. Click **+** to create a new task.

6. In the **Create Task** screen, enter the following values:
    a. Task Code (Spaces are not allowed in the code section). b.
    b. Task Name.
    c. Select the task type as **REST**.
    d. Select the component as **RUNCMD**.
    e. Select Batch Service URL as **RUN_CMD_SERVICE**.
    f. Click **Save**.
7. In the **Task Parameter** section, enter the following values:
    a. Select the Code as **RUN CMD RECONCILIATION**.
    b. Select the Execution Venue as **NATIVE**.
    c. Select the Optional Parameter as **THRESHOLD_OBJECTCODE_OPTION** format.
    d. Select the IP as **localhost**.

    The allowed values for the Option are either 0 or 1.

    - **0**: Truncate all existing data for concerned AS_OF_DATE/MIS_DATE for which reconciliation batch is getting executed and insert new data.
    - **1**: Append data on top of existing data for concerned AS_OF_DATE/MIS_DATE to ledger instrument and reconciliation difference Audit table (Table to retain comments for each plug entry).

    Threshold values must be greater than or equal to zero (0), negative values are not supported. Threshold values should be expressed as “threshold >= 0” The threshold will accommodate null values, allowing all data to be inserted into the ledger instrument and reconciliation difference audit tables.

    When a threshold is applied, plug entries will be created only for filtered data into the ledger instrument and reconciliation difference audit tables.

    > **Note:**
    >
    > Select the appropriate object code/reconciliation definition to avoid errors in the batch process.

    The optional values should be passed in the following format: “THRESHOLD_OBJECTCODE_OPTION”

    Example 1: ‘’_F405734331FD795BE053D71A000AD329_0

    (Threshold is null, and object code is: F405734331FD795BE053D71A000AD329, option value is 0)

    Example1: 12_F405734331FD795BE053D71A000AD329_1

    (Threshold is 12, and object code is: F405734331FD795BE053D71A000AD329, option value is 1)
8. Schedule the batch using the **Schedule Batch** screen.
    Select the **Name** of the batch that has been created.

    You can use the **Edit Parameters** option to review the batch parameters and make any necessary changes to initializing the batch process.

9. The following tasks should be performed in a manner similar to what was outlined in point number 7.
    a. The **MIS Date** is used as the **As of Date** in the Reconciliation UI. Select the appropriate **MIS Date**.
    b. The values in point 6 are the default values for a specific environment.
    c. After completing the changes, click **Execute** or **Save**.
        i. By clicking **Save**, the definition of the batch will be saved, however, the batch will not be executed.
        ii. By clicking **Execute**, the batch will be executed.

    After the batch is executed, an **Execute Status** dialog is displayed, providing information about the executed batch.

    After the batch is executed, the information about the executed batch will be available in the **Monitor Batch** screen. Select the following options and check the Batch Status.

Sometimes, a batch may fail. The reason for the batch failure could be as follows:

- Entering an incorrect object code.
- Entering an incorrect option value. Only values of 0 or 1 are supported.
- Entering an incorrect threshold value. Only null or a value >= 0 are supported.

> **Note:**
>
> Following roles mapping to the SKU User group should be present to enable RUNCMD listing and execution.
>
> - RCMDREAD
> - RCMDADVND

For detailed instructions for defining, executing, and monitoring a Batch, see the Scheduler Service documentation.

5.3 Data Housekeeping

The Data Housekeeping UI helps you to perform the followings tasks based on user defined criteria:

- Delete data from selected tables
- Drop partitions and truncate subpartitions from selected tables
- Archive the data from selected tables

You can use this as data retention in PBSM cloud services.

To open the Data Housekeeping screen, from the LHS menu, select **Data Management Tool**, and then select **Data Housekeeping**.

Users and Roles

The following roles and functions are required to use the Data Housekeeping UI.

Table 5-4 Roles and Role Names

Role Code	Role Name	Function Code	Function Name
RLDHKANALYST	Data Housekeeping Analyst Role	DHKADD	Create Data Housekeeping Policy
		DHKRUN	Run Data Housekeeping Policy
		DHKDEL	Delete Data Housekeeping Policy
		DHKEDIT	Edit Data Housekeeping Policy
		DHKVIEW	View Data Housekeeping Policy
		DHKLOG	View Data Housekeeping Policy execution log
RLDHKAUTH	Data Housekeeping Authorizer Role	DHKAUTH	Authorize Data Housekeeping Policy
		DHKADD	Create Data Housekeeping Policy
		DHKRUN	Run Data Housekeeping Policy
		DHK	Delete Data Housekeeping Policy
		DHKEDIT	Edit Data Housekeeping Policy
		DHKVIEW	View Data Housekeeping Policy
		DHKLOG	View Data Housekeeping Policy execution log
RLDHKAUDIT	Data Housekeeping Auditor Role	DHKVIEW	View Data Housekeeping Policy
		DHKLOG	View Data Housekeeping Policy execution log

Data Housekeeping Summary

Search Policy

Prerequisites: Predefined Policy

To search for a Policy:

1. You can search a policy is through the **Search** drop-down option. Select **Policy Name**, **Policy Type**, **Seeded Policy Flag**, **Last Execution Status**, and **Created By** from **Search** drop-down.
2. Enter the **Policy Name**, **Policy Type**, **Seeded Policy Flag**, **Last Execution Status**, and **Created By** in Search Criteria and click **Go**.

Rows that contain the string you are searching for are fetched and displayed in the Data Housekeeping Summary.

The Data Housekeeping Summary displays the following information:

New Policy: Click the New Policy icon on the page header to build a new policy.

- **Name**: The policy name.
- **Schedule**: Shows the time when the policy is scheduled.
- **Type**: The Type (Archive, Drop Partition, Delete) of the policy.
- **Seeded Policy Flag:** Shows the type of policy as **Yes** if the policy is seeded.
- **Last Run Date:** The Date and Time when the policy was last modified.
- **Created Date:** the date when policy was created.
- **Last Execution Status:** The status of policy after execution.
- **Actions:** Click this icon to view a list of actions that you can perform on the Policy.
  - **View:** View existing policy.
  - **Edit:** Edit existing policy. To edit a rule, you must have Read/Write privilege.
  - **Authorize:** Select Authorize to approve the policy for execution.
  - **Withdraw Jobs:** Select Withdraw Jobs to cancel the Job execution.
  - **View Log:** Select View Log to view the audit information of the policy. This information includes pending and running jobs.
  - **Delete:** You can delete policies that you no longer require. Note that only policy owners and those with Read/Write privileges can delete Policies. A policy that has a dependency cannot be deleted. A policy cannot be retrieved after deletion.

5.3.1 Create Data Housekeeping Policy

To create a new Data Housekeeping policy, follow these steps:

1. Navigate to the **Data Housekeeping Summary** Page.
2. Click the **New Policy** icon. The **Create Data Housekeeping** Page is displayed.
3. Click **Start** to create a new policy.
4. Enter the required details and Submit.

   Below are the supported Policy Types:
   - Create Drop-Partition Policy
   - Create Archive Policy
   - Create Delete Policy

5.3.1.1 Create Drop Partition Policy

This section provides the details on dropping the partition data from selected tables based on user defined criteria.

To create Drop Partition Policy, follow these steps:

1. Navigate to **New Policy** page.
2. Follow the steps mentioned in below sections:
   a. **Step 1:** Policy Definition
   b. **Step 2:** Selection
   c. **Step 3:** Condition

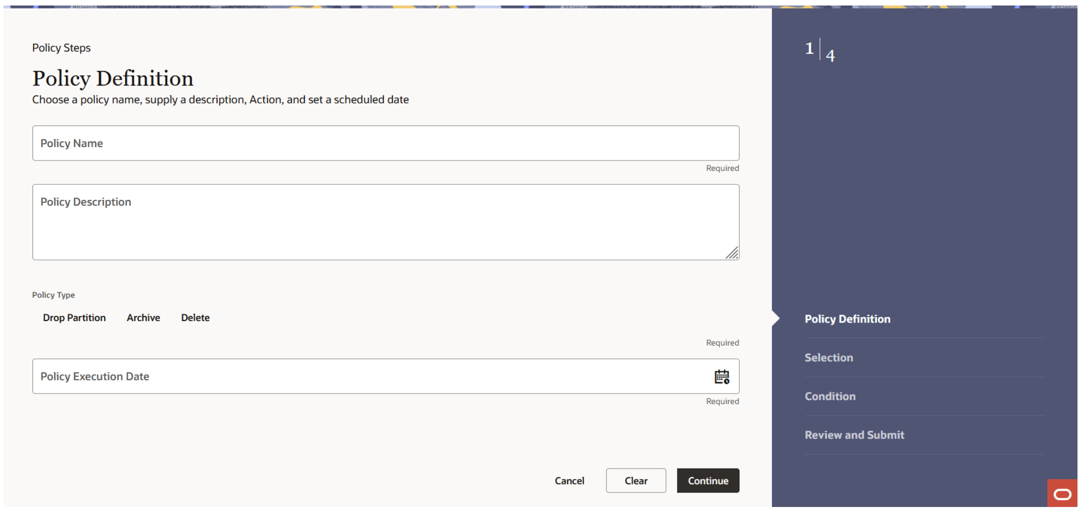
> **Note:**
>
> This section is not applicable to **Drop Partition** policy type.

d. **Step 4:** Preview and Submit

Step 1: Policy Definition section

1. From **Policy Details** tab, click **Start**. The **Policy Definition** page is displayed.

Figure 5-20 Policy Definition section

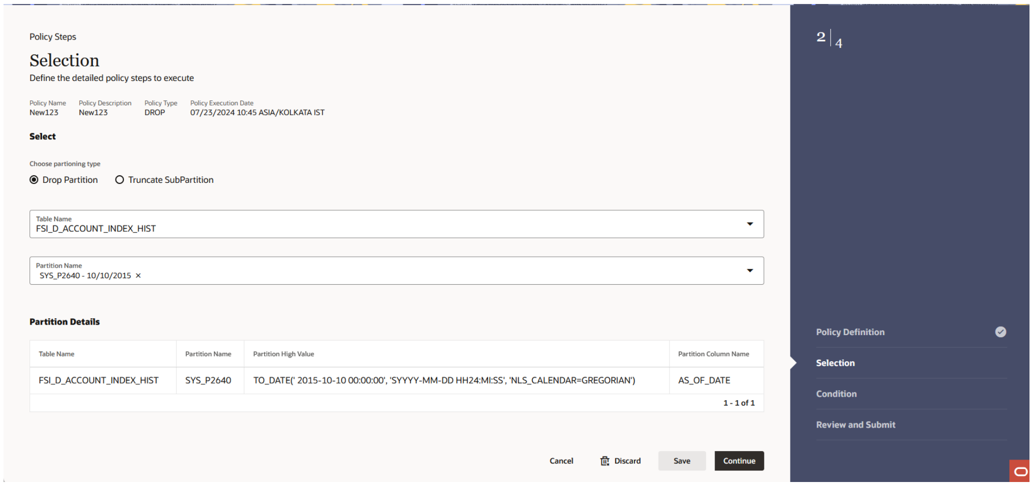


2. Enter the following details:
   - **Name:** Name of Policy
   - **Description:** Description of Policy
   - **Type:** Type of Policy as Drop Partition
   - **Policy Execution Date:** Select the execution date and time of policy using calendar
3. Click **Continue**.

Step 2: Selection section

1. Navigate to the **Selection** section. The **Selection** window is displayed to define the partitions.
2. Select the **Partition type** as **Drop Partition** or **Truncate Subpartition**.
   a. If **Partition type** is selected as **Drop Partition**, then following window is displayed:

Figure 5-21 Partition type as Drop Partition



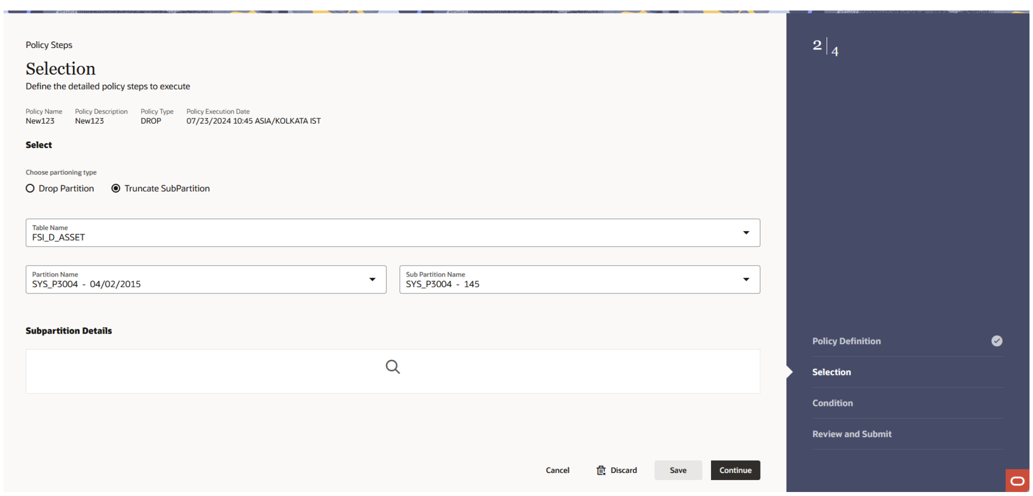
b. Select the table(s) for which you want to do the partitions. The list of available partitions is displayed that contain data.

c. Select the Partition Name. Partition Name shows the partition of the selected table from the database.
The Partition details will be displayed in Partition Details section. This shows the Table Name, Partition Name, column name and metdata on which partition is created. This doesn't show empty partitions.

d. Click **Continue**.

a. If **Partition type** is selected as **Truncate Subpartition**, then following window is displayed:

Figure 5-22 Partition type as Truncate Subpartition



b. Select the table(s) for which you want to do the sub partitions. The list of available sub partitions is displayed that contain data.

c. Select the Sub Partition Name. Sub Partition Name shows the columns and metadata on which sub-partition has been created.
The Sub Partition details will be displayed in Subpartition Details section. This shows the Table Name, Subpartition Name, column name and metdata on which partition is created. This doesn't show empty partitions.

d. Click **Continue**.

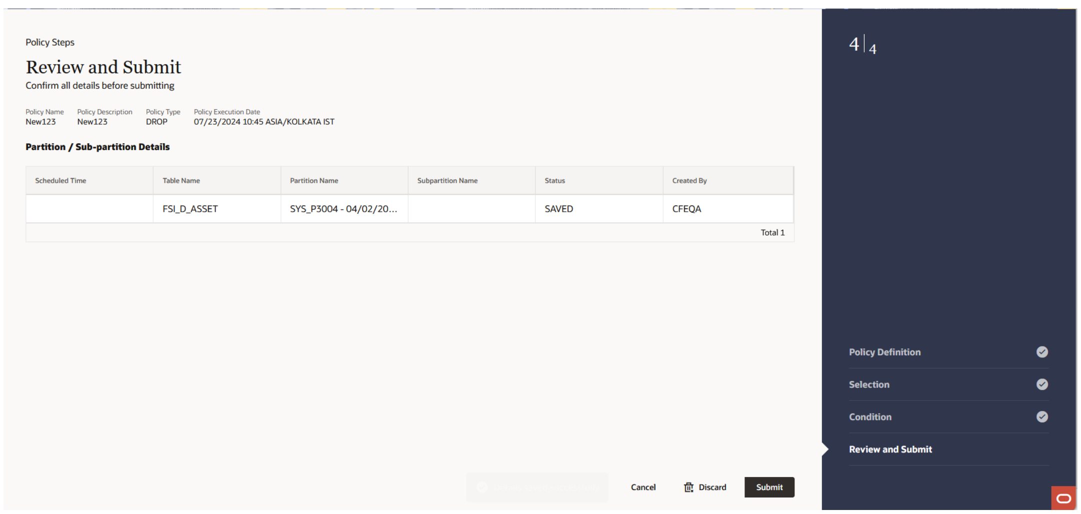
> **Note:**
>
> If only sub-partition is selected to remove then only data from it will deleted. Sub-partition is not dropped to enable customer re-load data in it, if needed. Sub-partitions in PBSM data model is created with a pre-defined list.

3. Click **Continue**.

Step 3: Preview and Submit section

1. Navigate to **Preview and Submit** section. Review the policy details.

Figure 5-23 Preview and Submit section



2. Click **Submit** to create the policy. The created policy will be displayed on **Data Housekeeping Summary** page.

5.3.1.2 Create Archive Policy

This section provides the details on archiving the data from selected tables based on user defined criteria.

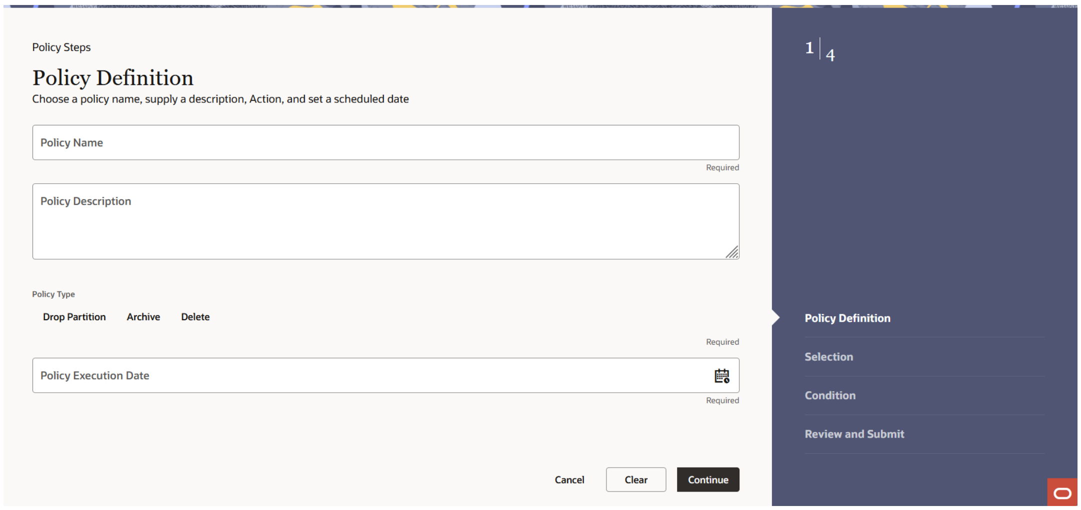
To create Archive Policy, follow these steps:

1. Navigate to **New Policy** page.
2. Follow the steps mentioned in below sections:
   a. **Step 1:** Policy Definition
   b. **Step 2:** Selection
   c. **Step 3:** Condition
   d. **Step 4:** Preview and Submit

Step 1: Policy Definition section

1. From **Policy Details** tab, click **Start**. The **Policy Definition** page is displayed.

Figure 5-24 Policy Definition section

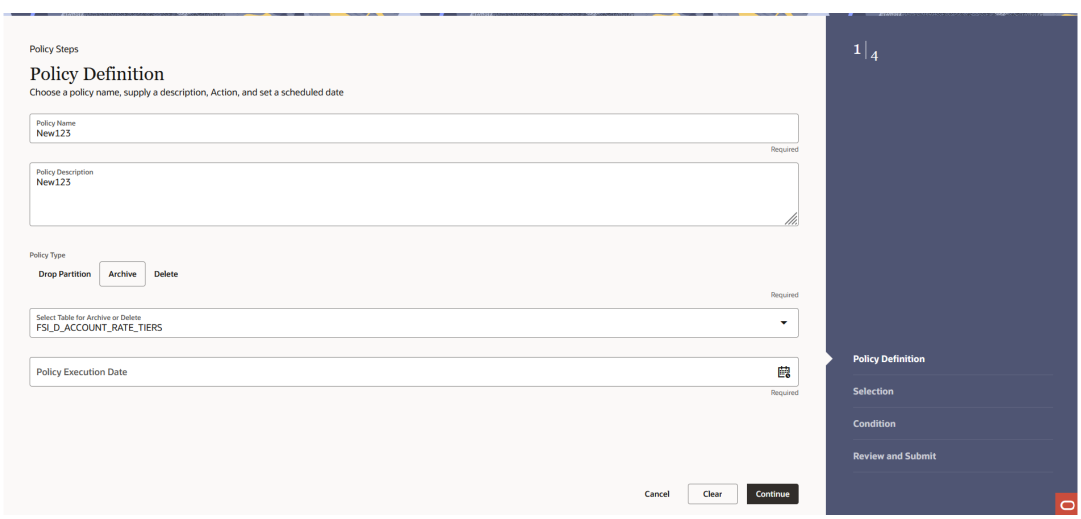


2. Enter the following details:
   - **Name:** Name of Policy
   - **Description:** Description of Policy
   - **Type:** Type of Policy as Archive

Step 2: Selection section

1. Navigate to the **Selection** section.

Figure 5-25 Selection section



2. Select Table which you want to archive from **Select Table for Archive or Delete** drop-down.

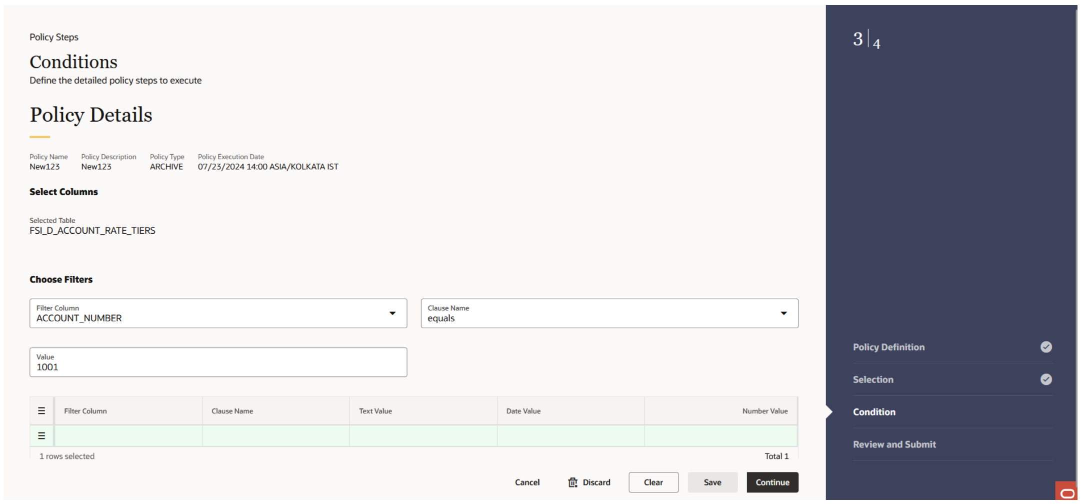
3. Select the policy execution date and time of policy using **Policy Execution Date** calendar
4. Click **Continue**.

Step 3: Conditions

This section allows you to define the conditions(s) to archive the table.

1. Navigate to the **Conditions** section.

Figure 5-26 Conditions section



2. Select the column(s) using filter.
3. Select operator from **Clause Name** drop-down. The list of operators displays based on the selected Column Name.

> **Note:**
>
> You must select at least one condition to avoid the full table archive. Use AND if you want to use multiple columns. You can select columns from pre-defined list. Don't use wild card characters. Supported operators are: >, <, <=, and =>.

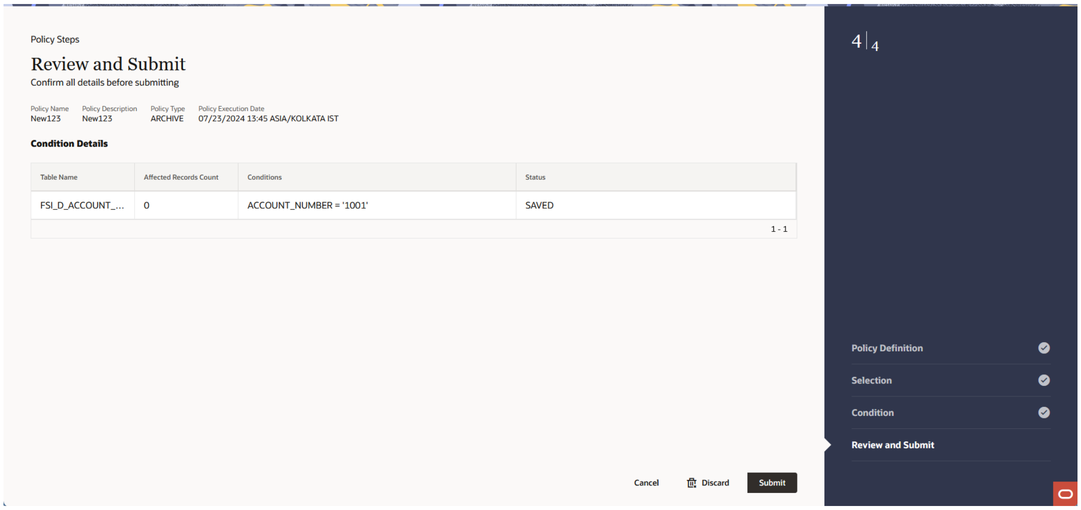
4. Enter condition value for selected column.
   For example, If you have selected **Column** as **Account Number**, then select **Equals** operator from **Clause Name** drop-down, and enter alphanumeric value in **Value** field.

   To add more conditions, define the condition and click **Save**.
5. Click **Continue**.

Step 4: Preview and Submit section

1. Navigate to **Preview and Submit** section. Review the policy details.

Figure 5-27 Preview and Submit section



2. Click **Submit** to create the policy. The created policy will be displayed on **Data Housekeeping Summary** page.

> **Note:**
>
> Data that is archived remains in the same table but is invisible to user. Thus, they cannot be inserted back as it will violate unique constraint of concerned table.

5.3.1.3 Create Delete Policy

This section provides the details on deleting the data from selected tables based on user defined criteria.

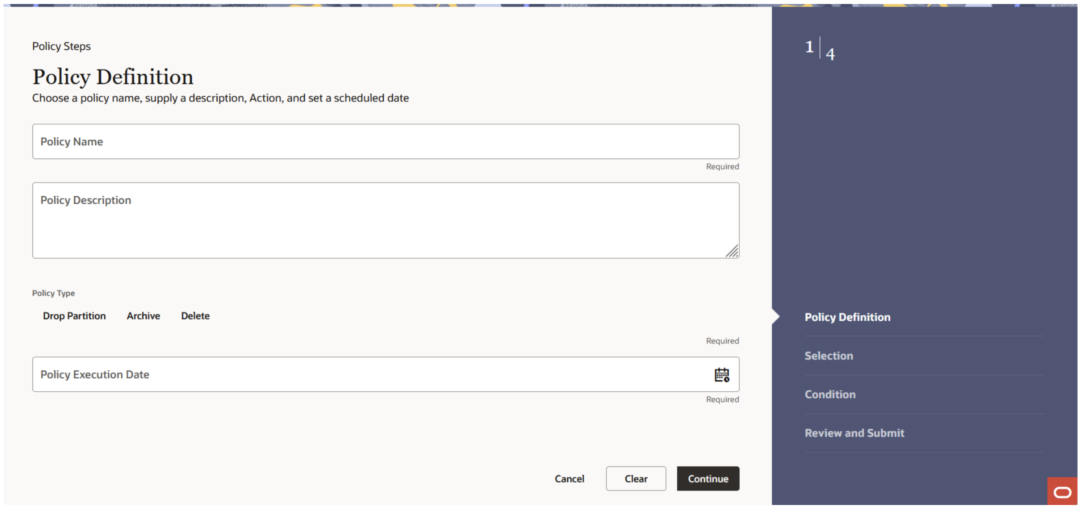
To create Delete Policy, follow these steps:

1. Navigate to **New Policy** page.
2. Follow the steps mentioned in below sections:
   a. **Step 1:** Policy Definition
   b. **Step 2:** Selection
   c. **Step 3:** Condition
   d. **Step 4:** Preview and Submit

Step 1: Policy Definition section

1. From **Policy Details** tab, click **Start**. The **Policy Definition** page is displayed.

Figure 5-28 Policy Definition section

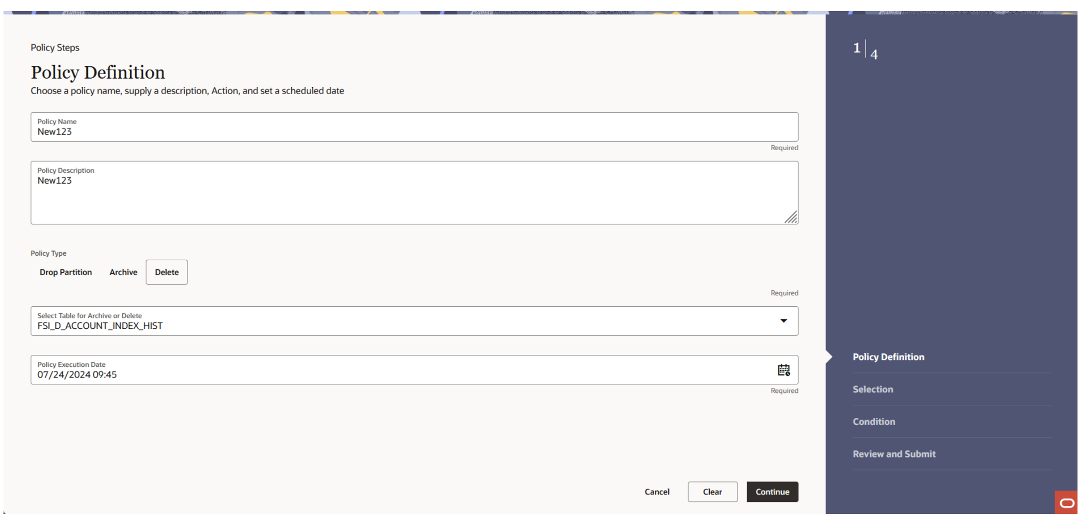


2. Enter the following details:
   - **Name:** Name of Policy
   - **Description:** Description of Policy
   - **Type:** Type of Policy as **Delete**

Step 2: Selection section

1. Navigate to the **Selection** section.

Figure 5-29 Selection section



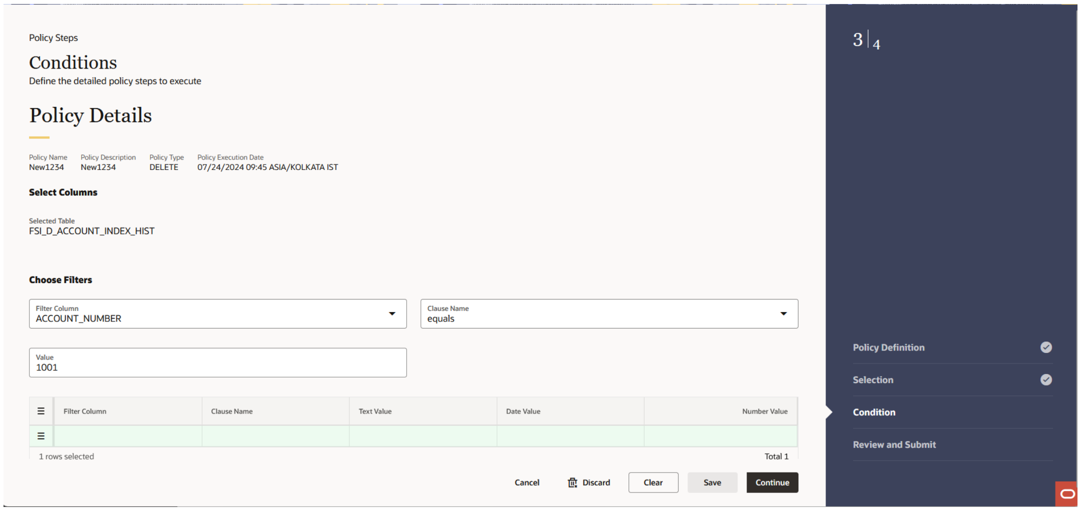
2. Select Table which you want to Delete from **Select Table for Archive or Delete** drop-down.
3. Select the policy execution date and time of policy using **Policy Execution Date** calendar
4. Click **Continue**.

Step 3: Conditions

This section allows you to define the conditions(s) to Delete the table.

1. Navigate to the **Conditions** section.

Figure 5-30   Conditions section



2. Select the column(s) using filter.
3. Select operator from **Clause Name** drop-down. The list of operators displays based on the selected Column Name.

> **Note:**
>
> You must select at least one condition to avoid the full table Delete. Use AND if you want to use multiple columns. You can select columns from pre-defined list. Don't use wlid card characters. Supported operators are: >, <, <=, and =>.

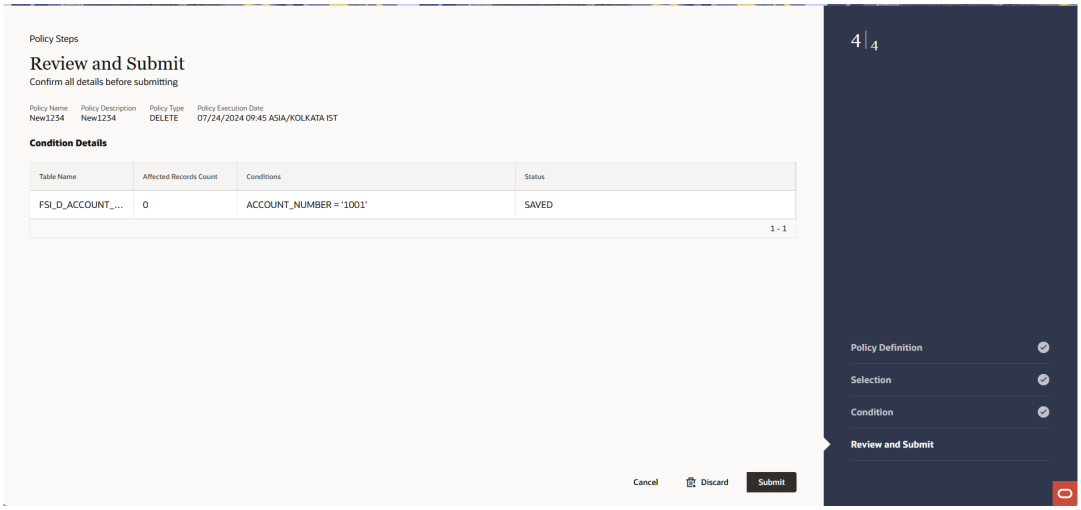
4. Enter condition value for selected column.
   For example, If you have selected **Column** as **Account Number**, then select **Equals** operator from **Clause Name** drop-down, and enter alphanumeric value in **Value** field.

   To add more conditions, define the condition and click **Save**.
5. Click **Continue**.

Step 4: Preview and Submit section

1. Navigate to **Preview and Submit** section. Review the policy details.

Figure 5-31 Preview and Submit section



2. Click **Submit** to create the policy. The created policy will be displayed on **Data Housekeeping Summary** page.

5.3.2 Authorize a Policy

To authorize a policy, follow these steps:

Predefined Data Housekeeping Policy

1. Navigate to the **Data Housekeeping Summary** page
2. Search for a policy that you want to authorize. For further information, see the Data Housekeeping Summary section
3. Click on the **Action** icon against the policy name and select **Authorize**.

   Data Housekeeping policy gets executed on scheduled date and time after authorization. It runs automatically at the defined date and time which was set during the policy creation.

5.4 Data Level Security

This topic describes how the data administrators can restrict access to the users to instrument and management ledger tables based on specific dimensions.

A user-friendly UI helps you to enforce this security at the row level.

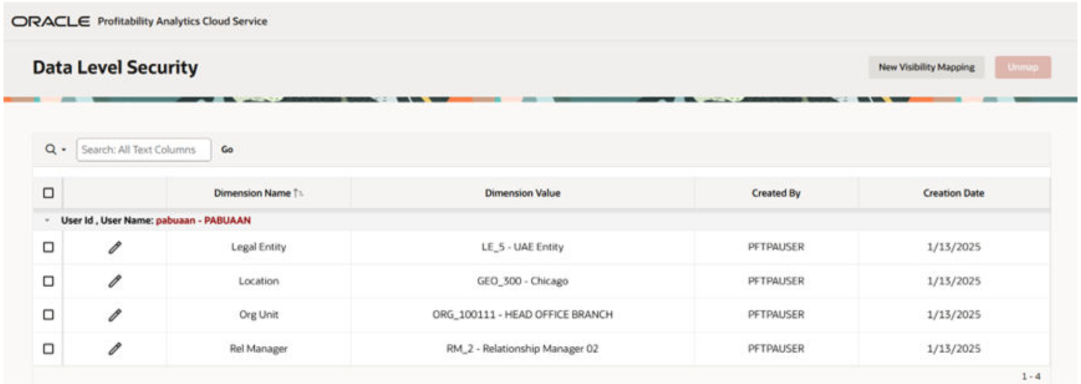
Data Level Security enables administrators to control access to records by segmenting them based on specific dimensions. By default, users who are not included in the data level security mapping can view all available records in corresponding instrument and management ledger tables. However, once a visibility mapping is applied, users are limited to records that match their assigned values.

This feature ensures that users can only access data relevant to their assigned dimensions, enhancing both security and data management.

To implement Data Level Security:

1. From the LHS menu, select **Data Management Tools**, and then select **Data Level Security**.

Figure 5-32 Data Level Security

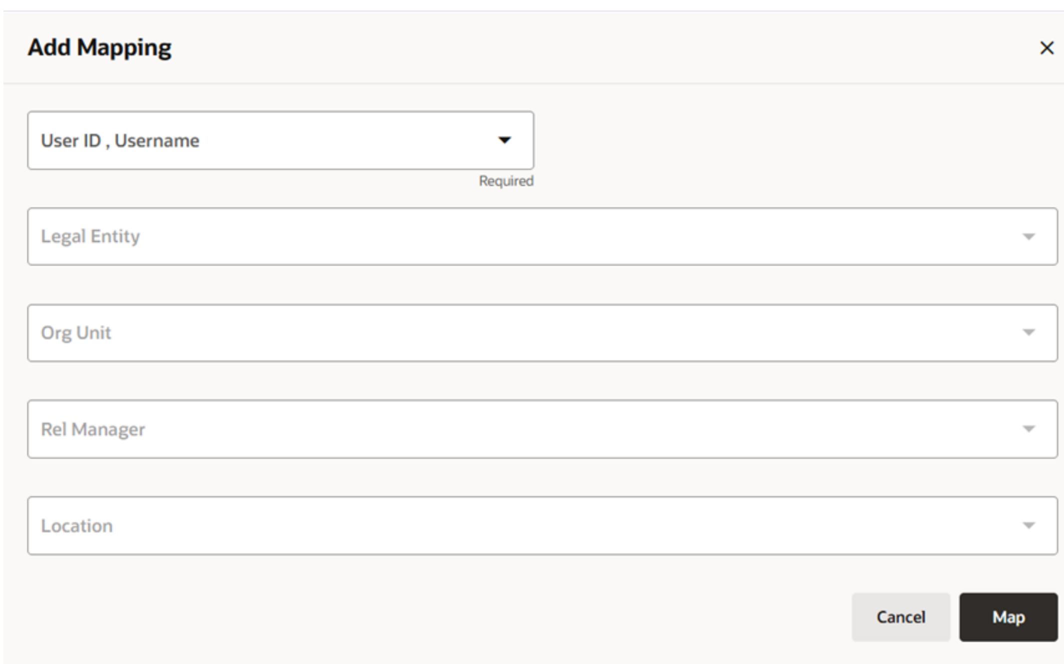


The Data Level Security window opens in another tab and displays the following existing details:

- Dimension Name: The Dimension Name selected by the user for restriction.
- Dimension Value: The Dimension Value.
- Created By: The user who create the rule.
- Creation Date: The day on which the rule is created.

2. You can select a row from the summary screen and click **Unmap** to remove the assigned restrictions.
3. Click **New Visibility Mapping** if you want to create a new mapping rule. The Add Mapping window is displayed.

Figure 5-33 Add Mapping

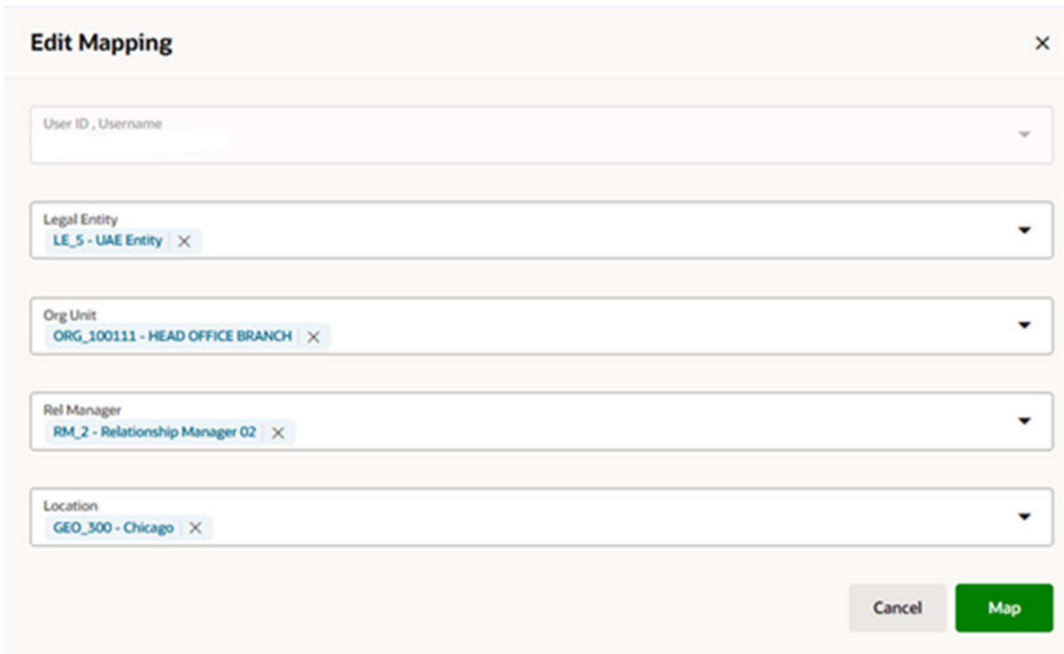


4. Select the following details:

- User ID, Username: The user for which you want to add the restructions.
- Select the relevant values for the following:
  - Legal Entity
  - Org Unit
  - Rel Manager
  - Location

5. Click **Map**. The new mapping details will be saved and displayed on the summary screen. Once the user logs out and logs in, he/she can only the records containing the assigned values.
6. You can select the **Edit** icon for a particular row to change the existing restrictions. An Edit Mapping screen is displayed.

Figure 5-34 Edit Mapping



7. Change the relevant details and click **Map**. You can change the dimensions Legal Entity, Organization Unit, Relationship Manager, and Location. The changed mapping details will be saved and displayed on the summary screen.
Once the user logs out and logs in, he/she can only the records containing the assigned values.

5.5 Data Redaction

OFSAAI is enhanced to enable masking of sensitive data and Personal Identification Information (PII) to adhere to Regulations and Privacy Policies.

Oracle Data Redaction provides selective, on-the-fly redaction of sensitive data in database query results prior to display by applications so that unauthorized users cannot view the sensitive data.

The stored data remains unaltered, while displayed data is transformed to a pattern that does not contain any identifiable information.

> **Note:**
>
> Redaction is supported only on Oracle database.

5.5.1 Redaction Functions

Use functions to define the type of redaction to be applied.

To define a redaction function:

1. Click **Data Management Tools** > **Redaction Framework** and select **Redaction Functions**. The **Redaction Functions Summary** screen appears.
2. Click **Add** and provide the following details:
3. **Redact Function Name**: Specify a name for the function. Example: Email_ID.
4. **Description**: Provide a description for the function. Example: Function to redact email IDs.
5. **Redact Type**: Select the redaction type to be applied.
   - **Full**: You can redact all of the contents of the column data. The redacted value returned to the querying application user depends on the data type of the column. For example, columns of the NUMBER data type are redacted with a zero (0), and character data types are redacted with a single space.
   - **Partial Trailing**: You can hide or obscure a part of the data at the end of a column value. For example, you can redact a Social Security number with asterisks (*), except for the initial 4 digits.

     > **Note:**
     >
     > Only VARCHAR and VARCHAR2 are supported.

   - **Partial Leading**: You can hide or obscure a part of the data at the beginning of a column value. For example, you can redact a Social Security number with asterisks (*), except for the last 4 digits.

     > **Note:**
     >
     > Only VARCHAR and VARCHAR2 are supported.

     – **No of characters**: (Available only if partial redaction is applied). Specify the number of characters to be redacted.

     > **Note:**
     >
     > You can't apply partial redaction to date type columns. Only full redaction is applicable to date type columns.

6. Click **Apply**.

5.5.2 Redaction Policies

You can use policies to map redaction functions to classification codes.

A classification code is a logical abstraction for a table column. Example: Social Security Number. These codes are pre-seeded.

By mapping classification codes to redaction functions, you can redact the underlying table column.

5.5.2.1 View redaction policies

You can view the defined redaction policies using the Redaction Policies Summary screen.

To view the redaction policies:

1. Click **Data Management Tools** > **Redaction Framework** and select **Redaction Policies**.

   The **Redaction Policies Summary** screen appears.
2. Enter the text of the second step here.

   See the table below for fields and their description.

   Table 5-5 Redaction Policies Summary

Field	Description
Classification Name	Pre-seeded classification code name.
Redact Functions	Redact function name
Version	The latest version of the classification.
Request Type	Types of request: • Refresh: Map redaction as per latest addition of table columns. • Unmap: Remove redaction. • Map: Apply redaction
Status	Policy status
Policy Applied On	Date on which the policy was applied.
Created By	The user who created the policy.
Created Date	Date of creation of the policy.
Actions	You can perform the following actions: a. Edit b. Drop c. Refresh d. View

3. Click the **Actions** menu corresponding to the policy you want to view and select **View**.

The Redaction Policies Preview screen appears containing details of the policy.

5.5.2.2 Create redaction policies

Perform the following steps to create a redaction policy:

1. Click **Data Management Tools** > **Redaction Framework** and select **Redaction Policies**.

   The **Redaction Policies Summary** screen appears.
2. Click **Add**.
3. Select the classification from the **Classification Name** drop-down list.
4. Select the function to be mapped to the classification name, from the **Redact Function Name** drop-down list.
5. Click **Map**.

   The affected table and columns are displayed as a result of this mapping.
6. Click **Submit for Approval** or click **Reject** to cancel the mapping.

5.5.2.3 Modify a redaction policy

Perform the following steps to modify a redaction policy.

1. Click **Data Management Tools** > **Redaction Framework** and select **Redaction Policies**.

   The **Redaction Policies Summary** screen appears.
2. Click the **Actions** menu corresponding to the policy you want to modify and select **Edit**.
3. Select the required function from the **Redact Function Name** drop-down list.
4. Click **Update Map**.

   The screen displays the affected table and columns as a result of this modification.
5. Verify the details and click **Submit for Approval**.

5.5.2.4 Drop a redaction policy

Perform the following steps to drop a redaction policy.

1. Click **Data Management Tools** > **Redaction Framework** and select **Redaction Policies**.

   The **Redaction Policies Summary** screen appears.
2. Click the **Actions** menu corresponding to the policy you want to drop and select **Drop**.

   The screen displays the affected table and columns as a result of this drop action.
3. Verify the details and click **Submit for Approval**.

5.5.2.5 Refresh a redaction policy

Use the Refresh feature to extend redaction to newly added columns within an existing policy, preserving previous redactions.

To refresh a redaction policy:

1. Click **Data Management Tools** > **Redaction Framework** and select **Redaction Policies**.

   The **Redaction Policies Summary** screen appears.
2. Click the **Actions** menu corresponding to the policy you want to refresh and select **Refresh**.

   The **Refresh Dialog** appears.
3. Click **Run Refresh**.

5.5.3 Redaction Approval

You can approve or reject the redaction policies, using the Redaction Policies Authorization screen.

You must have the REDACT_AUTH role to approve/reject the policies.

Perform the following steps:

1. Click **Data Management Tools** > **Redaction Framework** and select **Redaction Approval**. The **Redaction Policies Authorization Summary** screen appears listing the policies awaiting approval/rejection.
2. Click the **Actions** menu corresponding to the policy you want to approve/reject. The screen displays the affected tables and columns as a result of approving/rejecting this policy.
3. Verify the details and click **Approve & Execute** to approve the policy. Or, click **Reject** to cancel the policy.
4. Depending on the selection, provide the Approver Comments/Rejected Comments and click the **Approve & Execute**/**Reject** button once again to complete the action.

6
Setup Configurations

The Set Up Configurations section of the PACS menu allows the user to check Batch Parameters to execute batches, define the mappings from Financial Elements to Instrument Line Items and define Segmentation Schemes for multiple Segment Types.

Topics:

- Preferences
- Batch Parameters
- Financial Element Mapping
- Segmentation Mapping
- Line Item Display Order
- Geography Mapping
- Custom Metrics Generator

6.1 Preferences

This section discusses the procedure to set the Global and Application preference setings.

To configure the Preferences, perform the following steps:

1. From the LHS Menu, navigate to **Setup Configurations**, and select **Preferences** to display the Application Preference Screen.
2. Select the user from **Show Preferences for** the drop-down list. This has the following options:
   - **All User**: If you have Administrator Privileges, you can define preferences for the All User Group and their individual account, which may be the same or different from the All User Settings. The Administrator can also designate the All User Preferences as Editable or Non-Editable on a row-by-row basis. If the individual preference is selected, as is Editable, then End Users can update or override the Administrator's default value for their own individual account. If the Is Editable box is deselected, then End Users cannot change the default for their individual account.
   - **End-User**: If you do not have Administrator Privileges, then certain preference items are pre-set by the Administrator and you may not be allowed to change the value. All Application Preference Settings are displayed, regardless of the access privilege.

   > **Note:**
   >
   > **Is Editable** status is disabled since individual users are not expected to modify the following parameters.

6.1.1 Global Preferences

To set the Global Preferences, perform the following steps:

1. From the LHS Menu, navigate to **Setup Configurations**and select **Preferences**.
2. Under Global Preferences, enter the values as described in the following table.

Table 6-1 Global Preferences

Parameter	Description
Date Format	Select one value from the following list: • dd-MMM-yy • yyyy/MM/dd • MM/dd/yyyy • dd.MM.yyyy • MM-dd-yyyy • yyyy.MM.dd • yyyy/MMM/dd • dd-MMM-yyyy • dd/MMM/yyyy • yyyy.MMM.dd • dd/MM/yyyy • MM.dd.yyyy • dd-MM-yyyy • yyyy-MM-dd • dd.MMM.yyyy • yyyy-MMM-dd
Pagination Count	Pagination Records determine how many rows are displayed on summary and other screens. If you select Pagination Records to be 25 records, then any screen displaying results in a tabular format displays a maximum of 25 records.
Group Company Legal Hierarchy	This displays list of Legal Entity hierarchies that are configured in Dimension Management. Select one hierarchy that you want to use as the default legal entity.
Currency Rate Provider	This displays list of providers of Currency Exchange Rate. Value “Default” is seeded and selected as default. If you load Exchange Rates from more than one source like Reuters and Bloomberg then select one which you want the engine to use during processing. Members of dimension Rate Data Source are displayed in the drop-down list.
Functional Currency	A common functional currency is required which can be set here. This is required to consolidate the accounts' balances or charges at multiple hierarchy levels.

3. Click **Save** to confirm the changes or click **Reset to Default** to reset the Custom Configuration.

6.1.2 Application Preferences

Application Preferences Parameters are used to configure the Settings at the application level.

To update the Application Preferences, perform the following steps:

1. From the LHS Menu, navigate to **Setup Configurations** and select **Preferences**.
2. Click the **Application** tab and enter following values:

Table 6-2 Application Preferences Preferences

Parameter	Description
Parameters General	
Income Statement Hierarchy Selection	This displays list of Financial Element hierarchies that are configured in Dimension Management. Select one hierarchy that you want to use as the default income statement.
Balance Sheet Hierarchy Selection	This displays list of Financial Element hierarchies that are configured in Dimension Management. Select one hierarchy that you want to use as the default balance sheet.
Default Organizational Unit Hierarchy	This displays list of org unit hierarchies that are configured in Dimension Management. Select one hierarchy that you want to use as the default org unit.
Default Product Hierarchy	This displays list of product hierarchies that are configured in Dimension Management. Select one hierarchy that you want to use as the default product.
Default Region Hierarchy	This displays list of geographic location hierarchies that are configured in Dimension Management. Select one hierarchy that you want to use as the default geographic location.
Default Begin Financial Year	The default month that marks the beginning of the financial year for the bank.
Default End Financial Year	The default month that marks the ending of the financial year for the bank.
Processing - Application Specific	
Maximum Number of Segmentation Definition	The maximum number of segmentation definitions allowed. This is an integer value with maximum value allowed as 7.
Discount Factor for CLTV Processing (%)	Discount Factor for CLTV processing - this is a value from 0 to 100 (where 0 is 0% and 100 is 100%). The value allows upto 2 decimal places.
Assumption Management Defaults	
Default Folder	This parameter allows you to define the default folder selection. The folder selection for all rule types will be defaulted to this selection within the summary page Search screen and when creating a new rule. This selection acts as the starting value for convenience only and users can change to any other available value at their discretion.

Table 6-2 (Cont.) Application Preferences Preferences

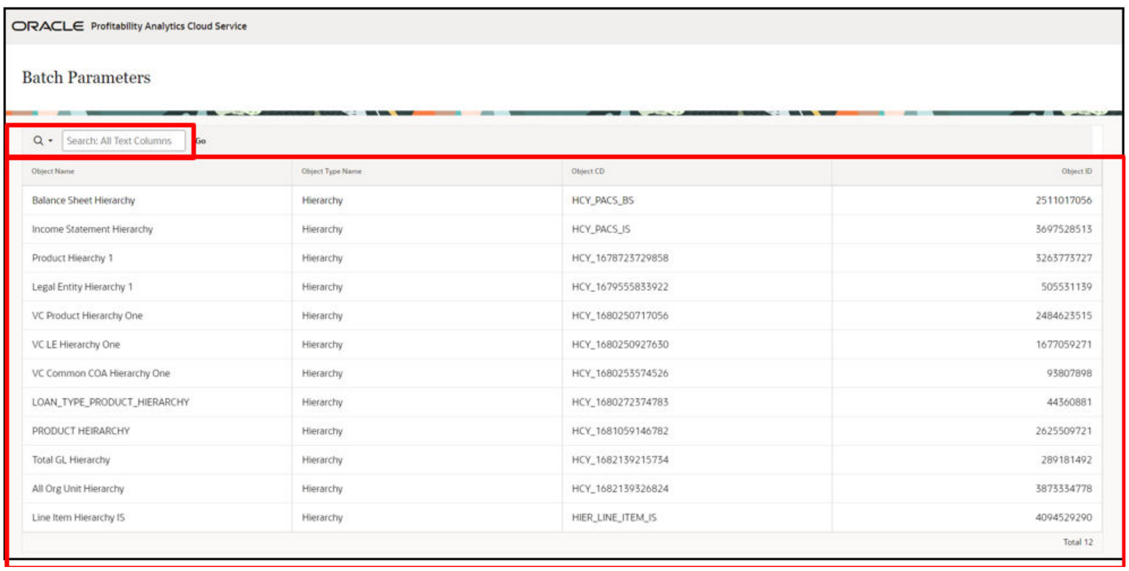
Parameter	Description
Access Type	This parameter allows you to set the default access typesetting. Selections include Read/ Write and Read Only. This selection acts as the starting value for convenience only and users can change at their discretion.

3. Click **Save** to confirm the changes or click **Reset to Default** to reset the Custom Configuration.

6.2 Batch Parameters

The Batch Parameters UI allows the user to check for the identifier to be utilized to correctly configure, schedule, and execute batches relevant to Profitability Analytics.

Figure 6-1 Batch Parameters - Summary



To check for the Batch Parameters, follow these steps:

1. To open the Batch Parameters screen, navigate to **Profitability Analytics Cloud**, select **Setup Configurations**, and then select **Batch Parameter**.
   The Batch Parameters screen displays a list of parameters that are already configured in the system or that will be configured by user interaction with the application. This screen displays the following details related to element/s, such as Hierarchy/Hierarchies and Segment/Segments that will be utilized by the batch execution as a parameter:
   - Object Name
   - Object Type
   - Object CD
   - Object ID
2. You can use the **Search** function to search for the out-of-the-box element objects.

3. You can use the **Object ID** from this screen to schedule your Batch.

6.3 Financial Element Mapping

The Financial Element Mapping user interface allows you to map the Financial Elements with the Portfolio Instrument columns.

> **Note:**
>
> - For Income Statement and Balance Sheet Hierarchies, or any other Hierarchy created out of Financial Element dimension, a Financial Element carrying a percentage value cannot be added as a child, Sibling to a child or Leaf under Parent/ Child/ Sibling in the Hierarchy. Users are expected to be mindful not to map a portfolio column to a FE denoting a rate or apply an expression, where a divisor is used in a way that the column value effectively becomes a rate, thus preventing a meaningful roll-up to the node of the hierarchy.
> - Please note that a given Financial Element can be added only once for defining a mapping to a Portfolio column.

6.3.1 Navigation in the Summary Screen

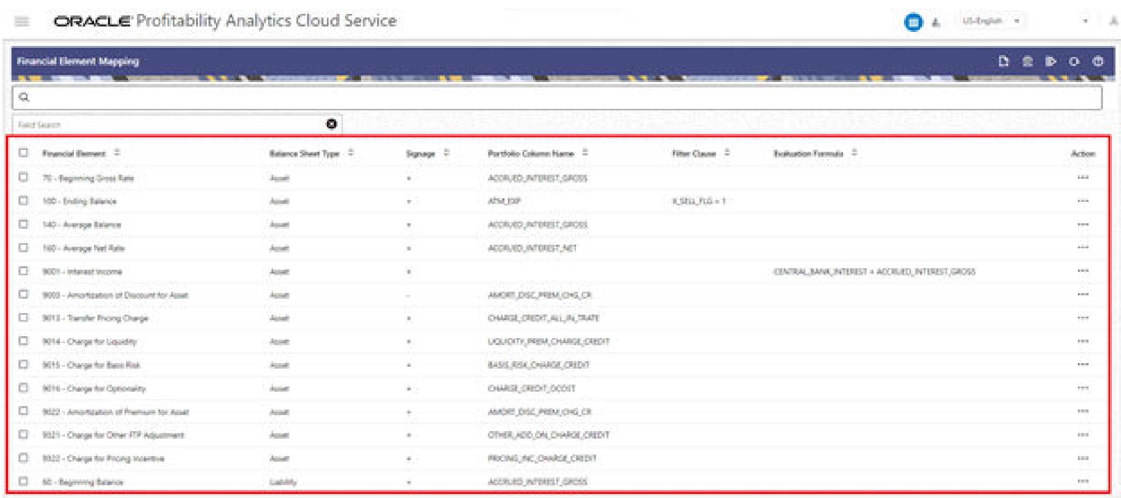
To open the Financial Element Mapping screen, from the LHS Menu, select Setup Configurations, and then select Financial Element Mapping.

The Financial Element Mapping summary screen is displayed with the following details:

- Financial Element Member (enables to map the Financial Element members with the portfolio instrument columns)
- Balance Sheet Type (Asset or Liability)
- Signage (plus or minus)
- Portfolio Column Name (enables to map portfolio instrument columns calculated via Profitability Management)
- Filter Clause (allows to select one or more values out of all the portfolio columns and apply filtering to the underlying accounts for this mapping)
- Evaluation Formula (allows to select one or more portfolio columns to be used to compute a calculation, leveraging math operators as "+", "-", "*", "/" and "%", and apply the resulting formula to the underlying accounts for this mapping)
- Action menu (edit and delete options are available only for user created mapping entries)

The Financial Element Mapping summary screen displays the Seeded Financial Elements as well as the new user defined entries.

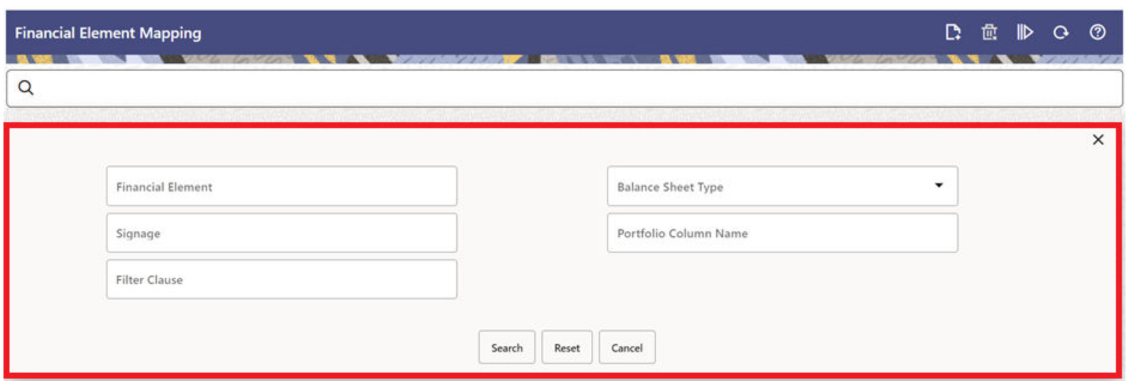
Figure 6-2 Financial Elements Summary Screen



6.3.1.1 Search

There are two Search options provided to search the Financial Element Mapping on the summary page.

Figure 6-3 Search Option Collapsed



To search the Financial Element Mapping, follow these steps:

1. Click the **Search** icon on the Search pane to collapse (display) the Criteria window.
2. Enter the **Financial Element Name**, and/or **Signage**, and/or **Filter Clause**, and/or **Balance Sheet Type**, and/or **Portfolio Column Name**, and then click **Search** to display the Financial Element Mapping that matches the criteria.
   The search results are displayed in a table containing all the Financial Element Mappings that meet the search criteria.
3. Click **Reset** to remove the criteria on the Search window and start with new criteria definition.
4. Click **Cancel** to exit from search pane and refresh the window.
5. The other method to search a Financial Element Mapping is using the **Field Search** option. The Field Search is an inline wildcard search that allows you to enter value partially

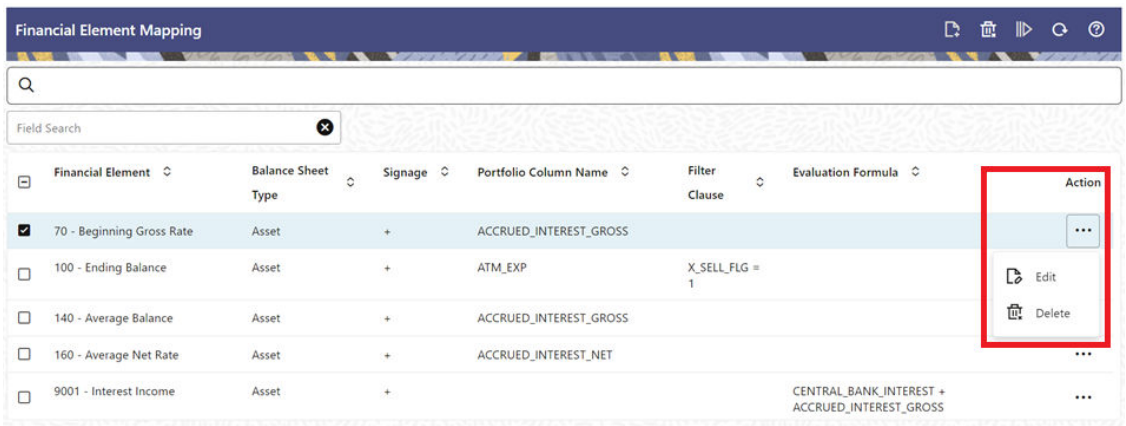
or fully and the row that match the entered string in any of the columns is fetched in the Summary table.

Figure 6-4   Field Search

6.3.1.2 Financial Element Mapping Summary Table

This section of the screen presents a table containing the already created Financial Element Mappings.

Figure 6-5   Financial Element Mapping Summary Table – Action Column



The Financial Element Mapping summary table displays the following details:

- Financial Element
- Balance Sheet Type
- Signage
- Portfolio Column Name
- Filter Clause
- Evaluation Formula
- Action

The Action column on the Financial Element Mapping Summary screen allows you to perform different functions:

- **Edit**: Click the Edit icon to modify a previously saved Financial Element Mapping as the user is launched into the Financial Element Mapping Detail screen in edit mode.
- **Delete**: Click Delete to delete the Financial Element Mapping you have selected.

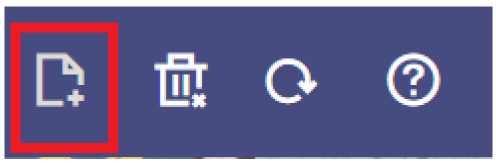
6.3.2 Adding a Financial Element Mapping

This procedure describes the steps to create Financial Elements, and then map the segments to the segment types as a part of the profitability insight analysis.

To do the segmentation mapping, follow these steps:

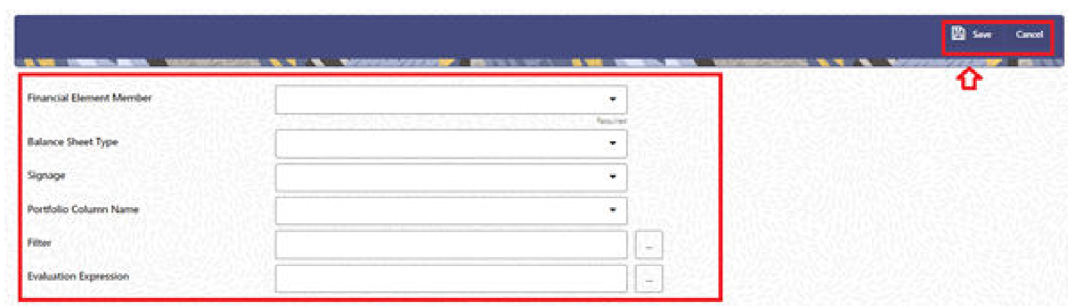
1. To open the Financial Element Mapping screen, navigate to **Profitability Analytics Cloud**, select **Setup Configurations**, and then select **Financial Element Mapping**.

Figure 6-6 Financial Element Mapping - Add



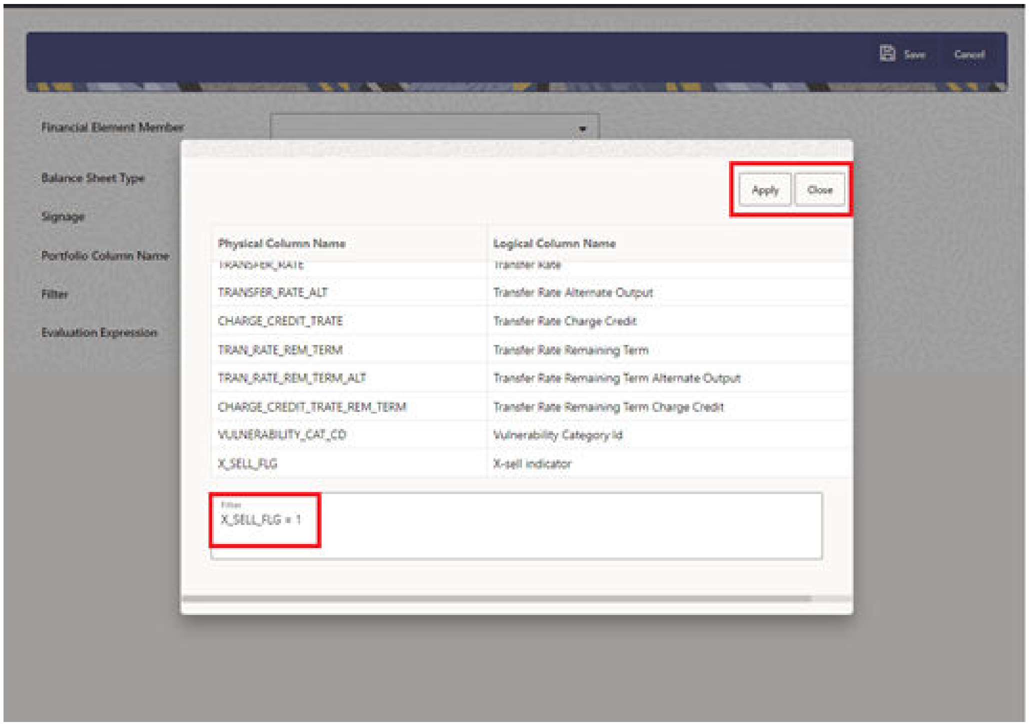
2. Click **Add** to open the Financial Element Mapping Definition screen.

Figure 6-7 Financial Element Mapping – Definition Screen



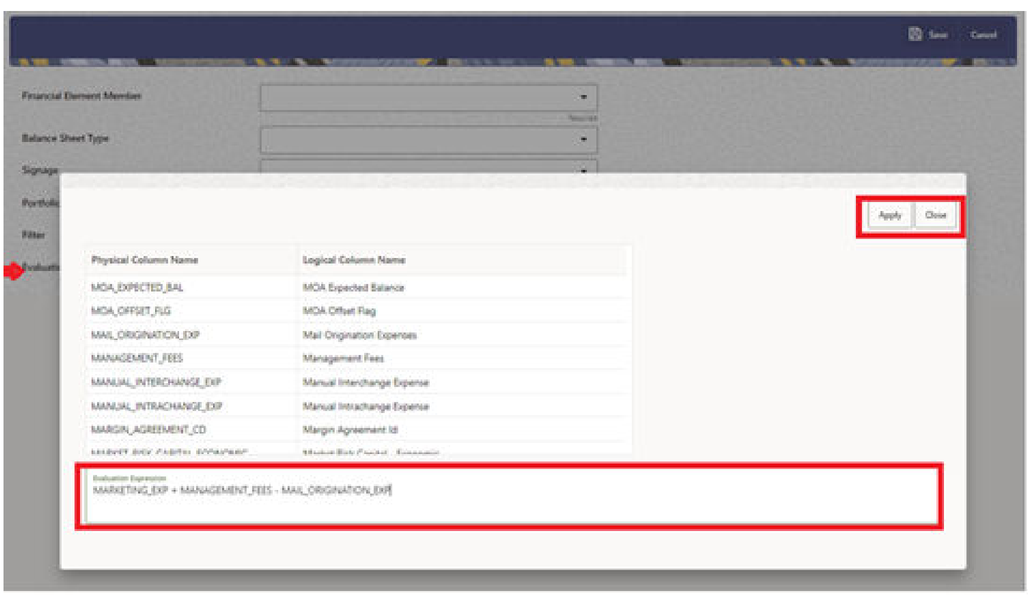
3. In the **Financial Element Details** section of the screen, the following elements are displayed for the user selection:
   - **Financial Element Member**: This is the drop-down list for Financial Element Member selection.
   - **Balance Sheet Type**: The user can define this mapping either for Asset or Liability or simply not assign a value to apply the mapping to both.
   - **Signage**: The user can assign either a negative or a positive signage to the portfolio column to be used for the mapping definition.
   - **Portfolio Column Name**: The user can pick up the corresponding Portfolio column to be used for the mapping definition and attaching it to the previously selected Financial Element Member.
   - **Filter**: By clicking on the three right hand side dots, the user can select one or more values out of all the portfolio columns and apply filtering to the underlying accounts for this mapping. For example, **X_SELL_FLG = 1**.

Figure 6-8 Financial Element Mapping – Filter Formula



- **Evaluation Expression**: By clicking on the three right hand side dots, the user can select one or more portfolio columns to be used to compute a calculation, leveraging math operators as "+", "-", "*", "/" and "%", and apply the resulting formula to the underlying accounts for this mapping. For example, **MARKETING_EXP + MANAGEMENT_FEES - MAIL_ORIGINATION_EXP**.

Figure 6-9 Financial Element Mapping – Evaluation Expression



4. Click **Apply**.

6.4 Segmentation Mapping

Segmentation involves the grouping of customer accounts based on different account level dimensions and the specified criteria on them.

Users can select from a set of dimensions to create segments for different Segment types in the Segmentation Mapping UI. Accounts grouped together in a particular segment, are expected to behave, and perform similarly. The objective of segmentation is to achieve easier cross sell and upsell and enhance value the customer drives for the bank.

6.4.1 Navigation in the Summary Screen

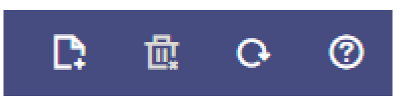
When you navigate to the Segmentation Mapping Summary screen, the Segments stored within your current Default Folder are displayed in this screen.

The Segmentation Mapping screen is divided under two sections: the Search section and the Summary table. The title bar of the summary page provides the following actions for the user:

Figure 6-10   Segmentation Mapping Summary Screen - Title Bar

The Action icons are as follows:

Figure 6-11   Segmentation Mapping Summary Screen - Action Icons

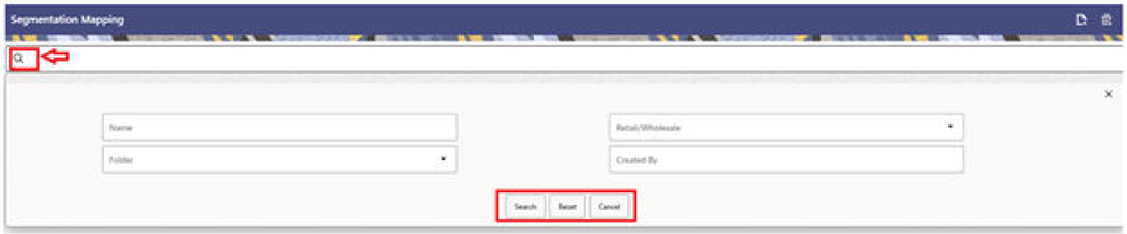


- **Add**: Click the Add icon to create a new Segment. The Add icon is disabled if any of the rows in the summary table are selected.
- **Multiple Delete**: Select one or more Segments in the summary table and click the Delete icon to delete the selected Segments.
- **Refresh**: Click this icon to refresh the summary page.
- **Help**: Click this icon to view the Segmentation Mapping help page.

6.4.1.1 Search

There are two Search options provided to search the Segmentation Mapping on the summary page.

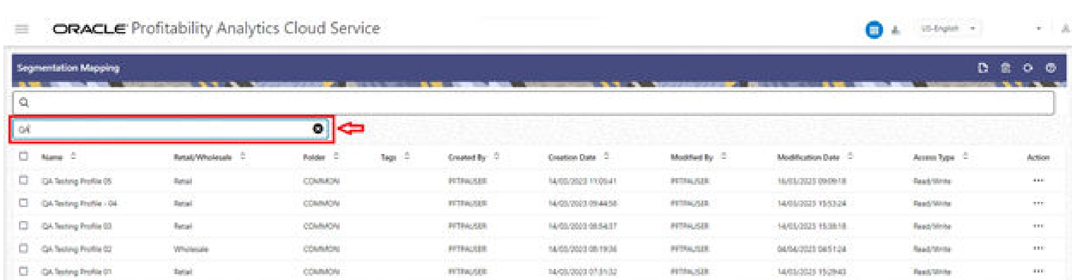
Figure 6-12 Summary Screen Search Option Collapsed



To search the Segmentation Mapping, follow these steps:

1. Click the **Search** icon on the Search pane to collapse (display) the Criteria window.
2. Enter the **Segmentation Mapping Name** and/or **Retail/Wholesale flag** and/or **Folder** and/or **Created By** and click **Search** to display the Segmentation Mapping that matches the criteria.
   The search results are displayed in a table containing all the Segmentation Mappings that meet the search criteria.
3. Click **Reset** to remove the criteria on the Search window and start with new criteria definition.
4. Click **Cancel** to exit from the Search pane and refresh the window.
5. The other method to search a Segmentation Mapping is using the **Field Search** option. The Field Search is an inline wildcard search that allows you to enter value partially or fully and the row that match the entered string in any of the columns is fetched in the Summary table.

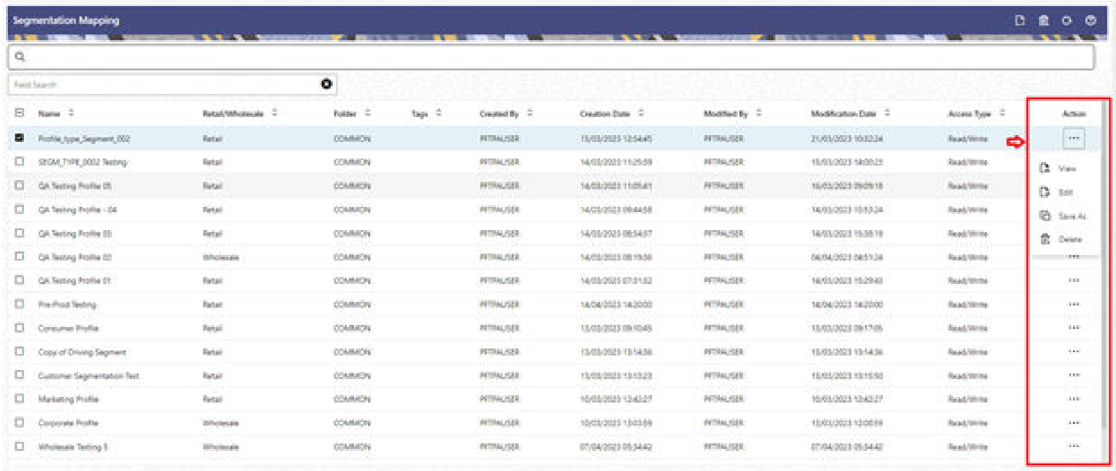
Figure 6-13 Segmentation Mapping- Field Search



6.4.1.2 Segmentation Mapping Summary Table

This section of the screen presents a table containing the already created Segmentation Mappings.

Figure 6-14 Segmentation Summary Table – Action Column



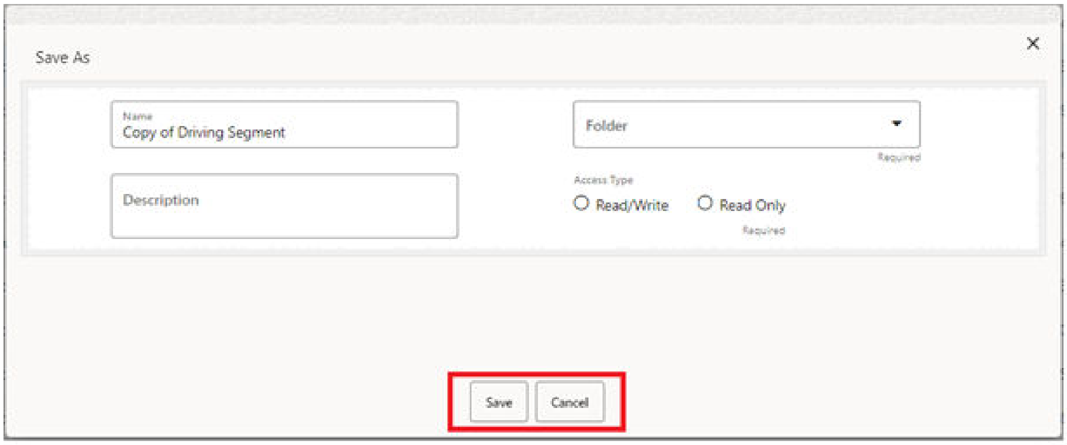
The Segmentation Mapping summary table displays the following details:

- Name
- Retail/Wholesale
- Folder
- Tags
- Created By
- Creation Date
- Modified By
- Modification Date
- Access Type
- Action

The Action column on the Segmentation Mapping summary screen allows you to perform different functions:

- **View**: Click the View icon to view the contents of a Segmentation Mapping on a Read-only basis as the user is launched into the Segmentation Mapping summary screen in view mode.
- **Edit**: Click the Edit icon to modify a previously saved Segmentation Mapping as the user is launched into the Segmentation Mapping Detail screen in edit mode.
- **Save As**: Click on this option to create a copy of an existing Segmentation Mapping. The Save As pop-up window allows you to enter the Name, Description, Folder, and Access Type Details for the copy model.

Figure 6-15 Save As Dialog Box



- **Delete**: Click Delete to delete the Segmentation Mapping you have selected.

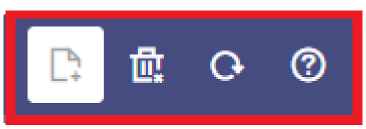
6.4.2 Creating a Segmentation Mapping

This procedure describes the steps to create segments, and then map the segments to the segment types as a part of the profitability insight analysis.

To do the Segmentation Mapping, follow these steps:

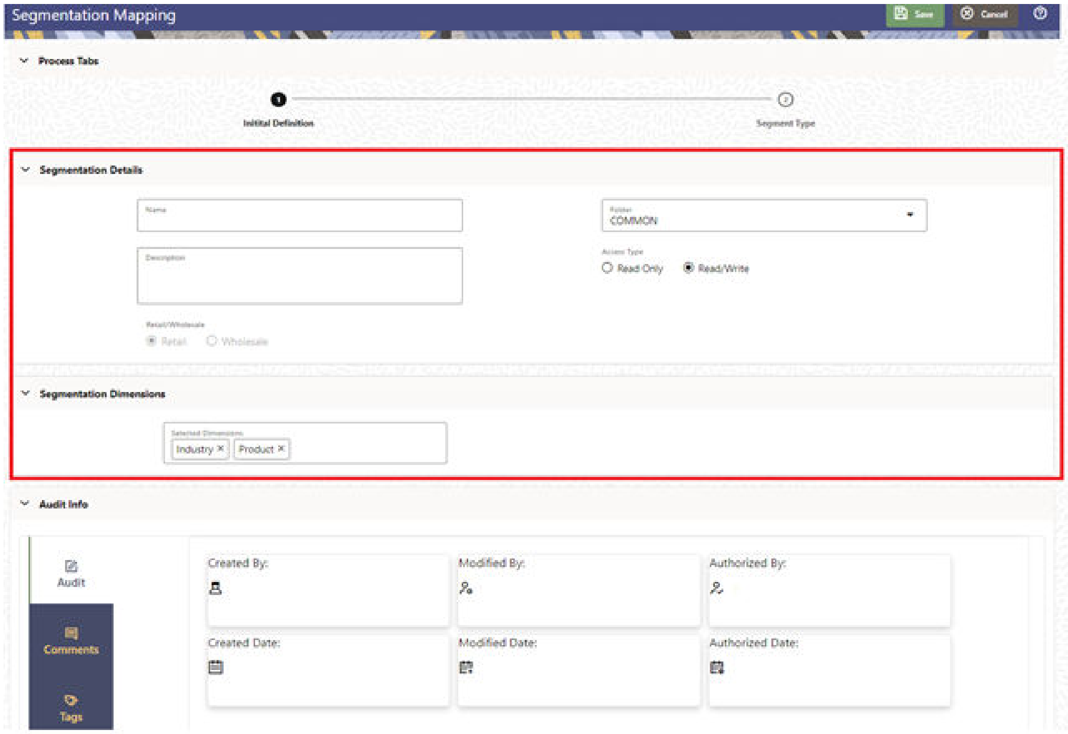
1. To open the Segmentation screen, navigate to **Profitability Analytics Cloud**, select **Setup Configurations**, and then select **Segmentation Mapping**.

Figure 6-16 Segmentation Mapping – Add



2. Click **Add** to open the Segmentation Mapping Definition screen.

Figure 6-17 Segmentation Mapping - Add



3. In the **Segmentation Details** section of the screen, enter the following details:
   - **Name**: Name of the segment.
   - **Description**: A description for the segment.

   You can create segments for Retail or Wholesale Customer types. The various details you enter for these customer types may differ.

   > **Note:**
   >
   > If you do not specify the segment Retail or Wholesale, the service will default it to Retail.

4. In the **Segmentation Dimensions** section of the screen, select the relevant **Segmentation Dimension**. The drop-down list displays a list of segments based on which you create different segments within your segment type.
   - **Retail Customer Dimensions**:
     - Age
     - Profession
     - Customer Income
     - Product
     - Net Income Before Taxes
     - Asset Balance
     - Credit Score
     - No. of Transactions

  - Average Transaction Amount
  - Number of Accounts
- **Wholesale Customer Dimensions**:
  - Age of Corporate
  - Industry
  - Customer Income
  - Product
  - Net Income Before Taxes
  - Asset Balance
  - Credit Rating
  - No. of Transactions
  - Average Transaction Amount
  - Number of Accounts

> **Note:**
>
> This is the seeded list as of now and will be open to amendments in the future to accommodate requests from banks to add more dimensions to support relevant use cases.

Figure 6-18 Segmentation Mapping - Segment Type

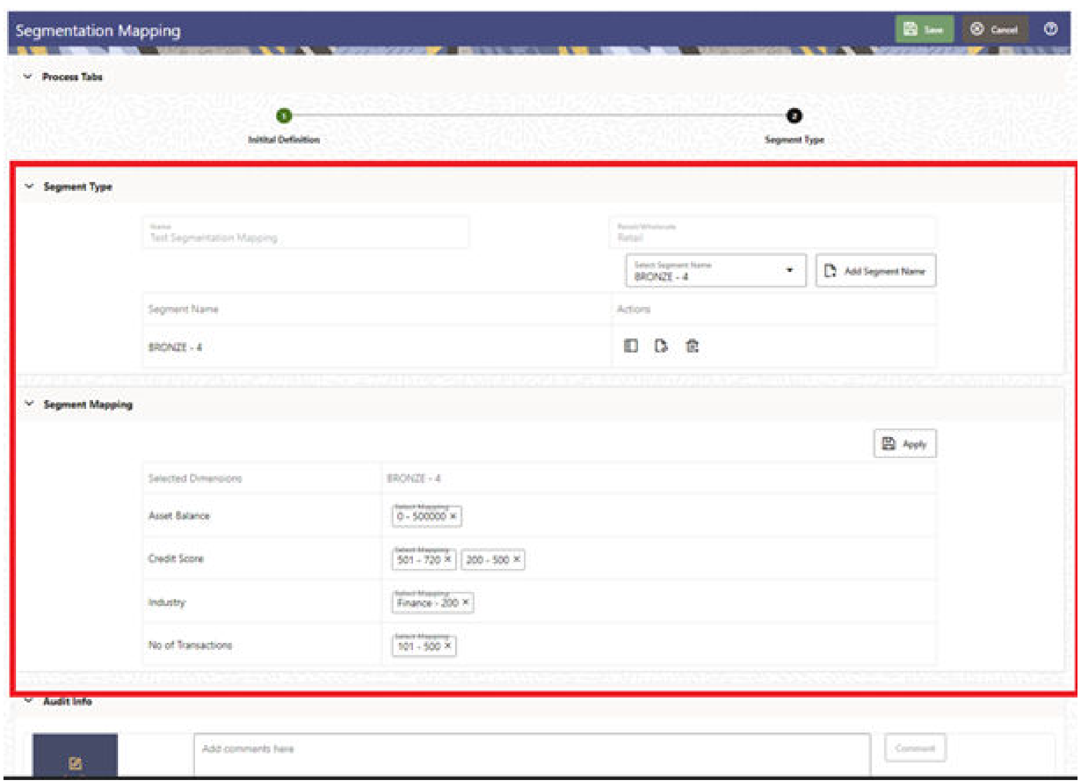
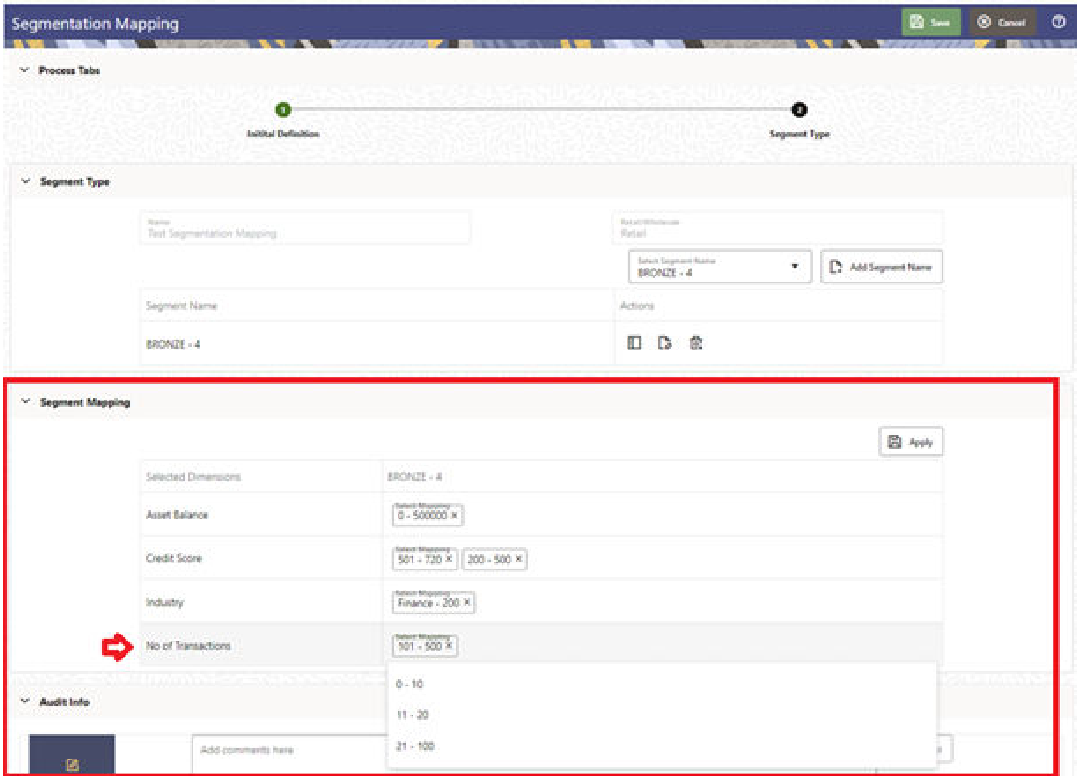
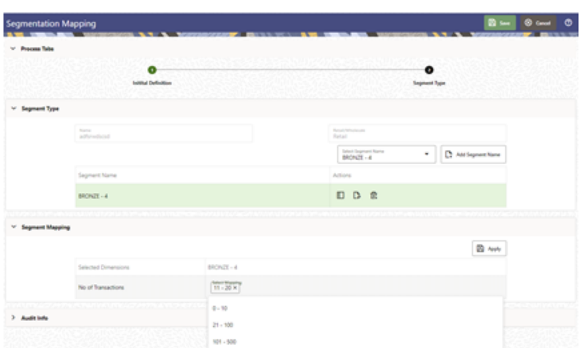


Figure 6-19 Segmentation Mapping - Segment Type



5. Click **Add Segment Name** after selecting your Segment Name. You can select multiple Segment Names and add them to your Segment Name list.
   At this point, the **Actions** menu is activated. You can select to do the following actions to the Segment Name/s you added:
   - View
   - Edit
   - Delete
6. To assign values to the Dimension/s you previously selected, a list of value bands or dimension members, you require to click **Edit** for each of the Segment Names you have added to the list.

Figure 6-20 Segmentation Mapping



7. Click **Apply**. Repeat the steps for assigning the new Dimension Name values to the other Segments available in your list.

A confirmation message *Mapping is applied* is displayed.

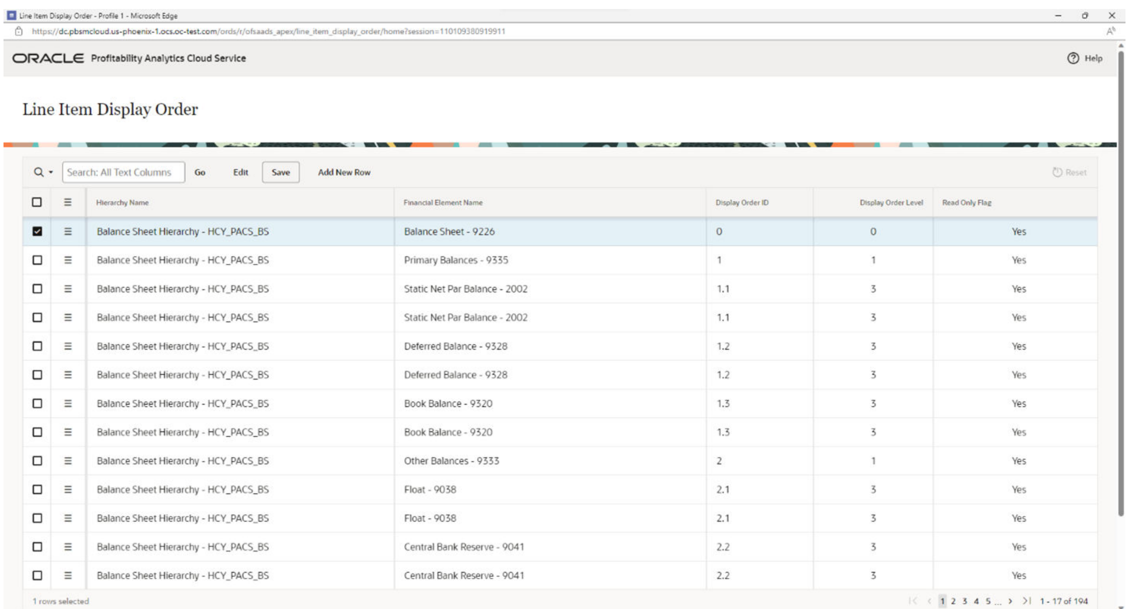
8. At any point of time, you can edit the Assignment by clicking the **Edit** button on a given Segment.
9. Click **Save**.
   This returns to the Segmentation Mapping screen and the newly added Segmentation Mapping is displayed.

6.5 Line Item Display Order

The Line Item Display Order UI allows the user to customize the display order of the Income Statement line items. This helps users to maintain the display order on the Financial Element hierarchies for both out-of-the-box hieracrchies and custom hierarchies at the BI layer required by Profitability Analytics. This display order holds good for both top-down and bottom-up reporting and enforces a a particular display order for the Income Statement and Balance sheet hierarchies.

To open the Line Item Display Order, from the LHS menu, select **Profitability Analytics Cloud**, select **Setup Configurations**, and then select **Line Item Display Order**.

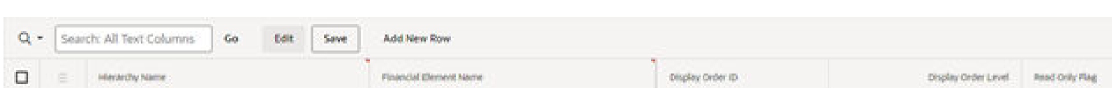
Figure 6-21 Line Item Display Order



The summary screen displays a list and order of parameters that are already available out of the box. You can search an edit the the Line Items with Hierarchy Name, Financial Element Name, Display Order ID, Display Order Level, and Read Only Flag.

You can click on each header to filter the line items and display the items based on a choise.

Figure 6-22 Header Options



For example, you can click **Hierarchy Name** to open a filter where you can select the available options. Then click any or all of the other header names, define the search criteria and then click Go to display the lines items.

You can add a new row to the summary list by clicking **Add New Row**. This inserts a new row in the summary table and allows you to select the Hierarchy Name, Financial Element Name, Display Order ID, Display Order Level, and/or Read Only Flag.

Row Actions

The summary page allows to change the view. You can select a row and click the **Row Actions** that are:

- **Single Row View**: For the rows where Read Only Flag is set to Yes, you cannot edit or revert the changes. However, you view them in Single Row View.

Figure 6-23 Single Row View

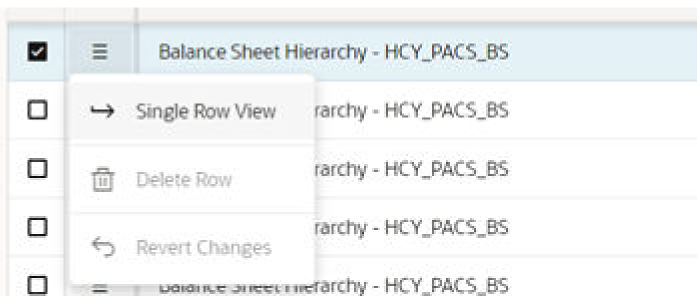
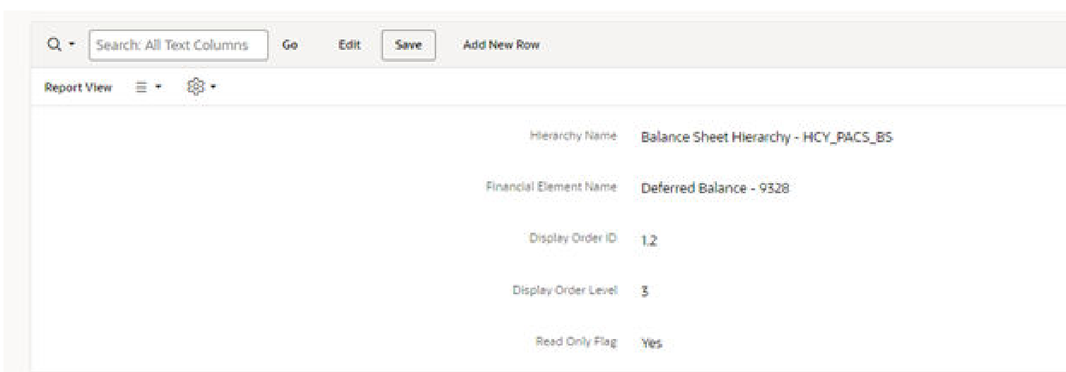


Figure 6-24 Single Row View Details



- **Delete Row**: Is possible only for user-defined line items.
- **Revert Changes**: Is possible only for user-define line items.

Report View – Change Menu

From the Report View – Change Menu, you can add a new row, create a duplicate of an exiting line item, delete a line item, refresh the view, and revert the changes of an existing line item.

Report View – Settings Menu

The Settings Menu allows you to:

- Exclude the null values from the summary page.

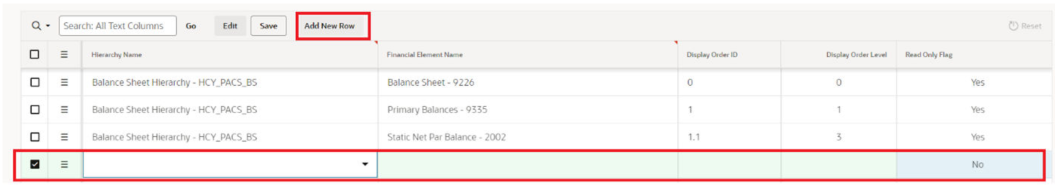
- Displayed Columns

Adding a New Row

To add a new row:

1. Click **Add a New Row** in the summary page.

   Figure 6-25 Add a New Row

2. Select of enter the following:
   - **Hierarchy Name** (mandatory): Select a Balance Sheet Hierarchy or Income Statement Hierarchy driver. You can create a Hierarchy and will be able to see on that selection.
   - **Financial Element Name** (mandatory): Enter the name for the Financial Element. You must select only a single value.
   - **Display Order ID**: Enter the Order ID for the Financial Element which you want the Balance Sheet Hierarchy or Income Statement or any other custom hierarchy to be displayed on the Summary screen. For example, refer to the Display Order ID of the seeded hierarchies.
   - **Display Order Level**: Enter the Level for the Financial Element that you want to place in the Balance Sheet and/or Income Statement or any other custom hierarchy. For example, refer to the Display Order Level of the seeded hierarchies.
   - **Read Only Flag**: This is by default Yes for all the seeded hierarchy displayed line item values. For custom line item display orders the default value is always set to No, so that you can always change the custom line items display entries at later stage.
3. Click **Save** to display the new Hierarchy Name in the Summary screen.

For Income Statement and Balance Sheet Hierarchies, or any other Hierarchy created out of Financial Element dimension, a Financial Element carrying a percentage value cannot be added as a child, Sibling to a child or Leaf under Parent/ Child/ Sibling in the Hierarchy. Users are expected to be mindful not to map a portfolio column to a FE denoting a rate or apply an expression, where a divisor is used in a way that the column value effectively becomes a rate, thus preventing a meaningful roll-up to the node of the hierarchy.

6.6 Geography Mapping

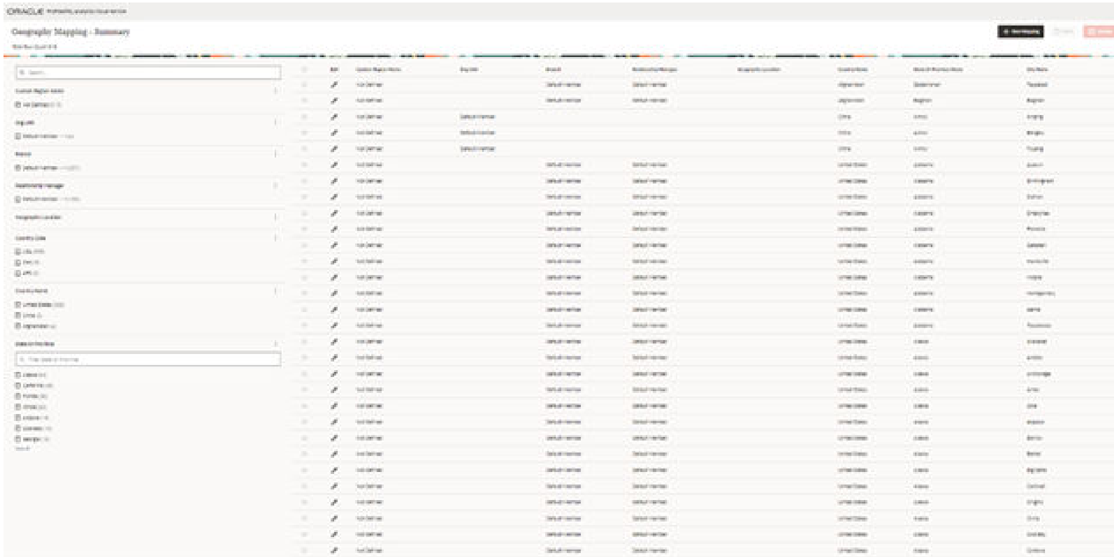
The Geography Mapping UI allows you to render the Org Unit, Branch, Relationship Manager and corresponding Geographic Locations onto the OOTB Business Analytics and account entries.

The Geography information is seeded for your consumption. You can select a geographic location and map it to the key dimensions of the Profitability Analytics Cloud Service.

This section describes the procedure to map the Geographies to key dimensions mentioned above.

To navigate to the Geography Mapping – Summary screen, from the LHS Menu, select **Setup Configurations**, and then select **Geography Mapping**.

Figure 6-26 Geography Mapping - Summary screen



The LHS of the summary screen displays the following elements to be used as selection filters to navigate end user-defined mappings:

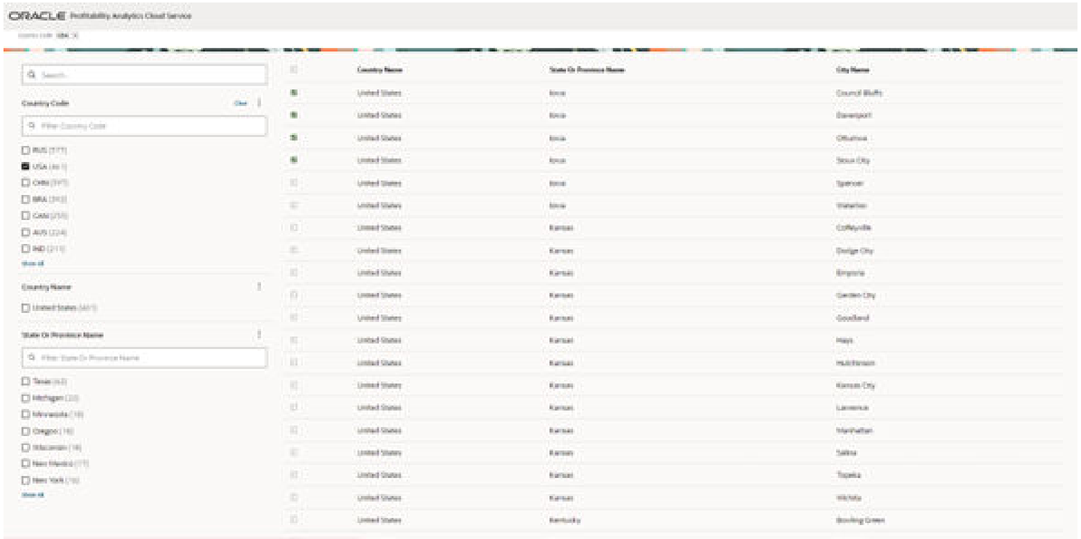
- Customer Region Name
- Org Unit
- Branch
- Relationship Manager
- Geographic Location
- Country Code
- State or Province

Creating a New Mapping

To create a new mapping:

1. Click **New Mapping** on the Summary screen.
   The World Region – New Mapping screen is displayed.

Figure 6-27 World Region - New Mapping



2. Select the relevant **Country Code**.
   The summary screen area displays all the cities with the Province and City Names.
3. Select the relevant **County Names** and for mapping.

> **Note:**
>
> You can select few or all the County Names for mapping.

4. Click the **Map** button.
   The Mapping pop-up window is displayed.

Figure 6-28 Mapping

5. Select any one or all of the following details:
   - Org Unit
   - Branch
   - Relationship Manager
   - Geographic Location
6. Select the **Customer Region Name**. You can select from the options in the available values or enter a custom Region Name.
7. Click **Map**.
   The newly create mapping details are displayed in the Summary page.

Unmapping a Geography Mapping

To unmap a previous mapped Geography:

1. Navigate to the Geography Mapping – Summary screen.
2. Select any of the following:
   - Custom Region Name
   - Org Unit
   - Branch
   - Relationship Manager
   - Geographic Location
   - Country Code
   - State of Province

   The available mappings are displayed in the screen.
3. Select the mapping that you want to unmap. You can select one or multiple or all the mappings.
4. Click the **Unmap** button.
   After confirming, the selected mapping will be unmapped and removed from the Summary screen.

6.7 Custom Metrics Generator

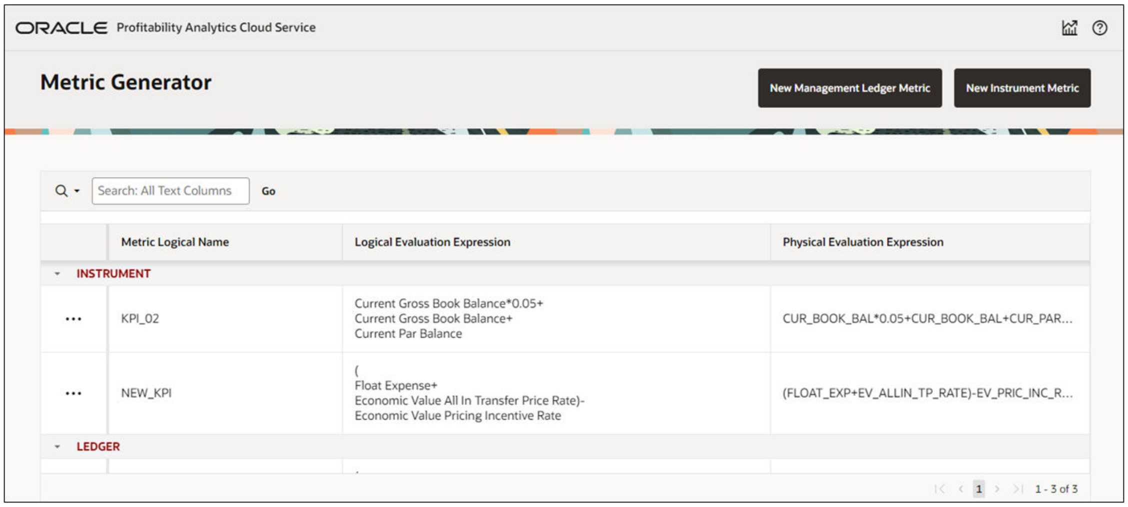
The Metric Generator UI allows you to create custom profitability or other metrics that are not available out of the box in the Profitability Analytics Cloud Service BI dashboards.

> **Note:**
>
> The Metric Generator flow helps you to define new metrics for Management Ledger and Instruments. After you execute the corresponding Runchart, you will be able to retrieve a sample report by clicking the Analytics button on the Metric Generator - Summary screen. The other option to generate the sample Report is to navigate from LHS menu. You will need to select Custom Metrics from the Analytics menu.

To navigate to the Metric Generator – Summary screen, from the LHS Menu, select **Setup Configurations**, and then select **Metrics Generator**.

The Metrics Generator summary screen is displayed.

Figure 6-29   Metrics Generator Summary Screen



This screen displays the following elements to be used as selection filters to navigate end user-defined mappings:

- Metric Logical Name
- Logical Evaluation Expression
- Physical Evaluation Expression

For this summary screen, you can do the following:

- Search
- Edit/Delete
- Access the Custom Metric Report

Search a Metric

To search for a Metric:

1. Navigate to the Metric Generator - Summary screen.
2. Click **Select Columns to Search** and select any of the following:
   - All Text Columns
   - Metric Logical Name
   - Logical Evaluation Expression
   - Physical Evaluation Expression
   - Table Source
3. Enter the search phrase in the Search text box and then click **Go**.
   The screen displays the metric that match the search criteria.

Edit/Delete a Metric

To edit or delete a metric:

1. Navigate to the Metric Generator - Summary screen.
2. Select an Instrument or Ledger that you want to edit or delete.
3. Click the Actions menu and select **Edit** or **Delete**.
   - If you select **Edit**, the selected Intrument or Ledger is opened in the definition mode. You can edit the relevant details and save the details.
   - If you select **Delete**, a confirmation message is displayed. Select **OK** to delete.

Access to Custom Metric Report

To access the Custom Metric Report, click the icon.

6.7.1 Creating a New Management Ledger Metric

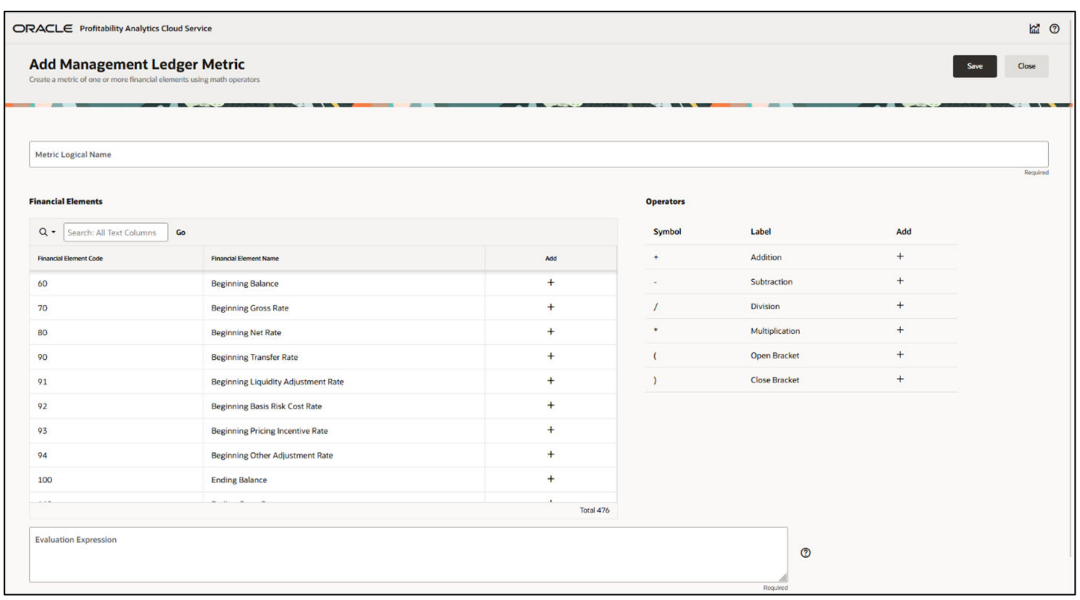
To create a new Management Ledger Metric:

1. Click Add New Management Ledger Metric on the Summary screen.

Figure 6-30 Metric Generator New Management Ledger Metric

This will take you to the next screen to define the custom metric and input the evaluation expression.

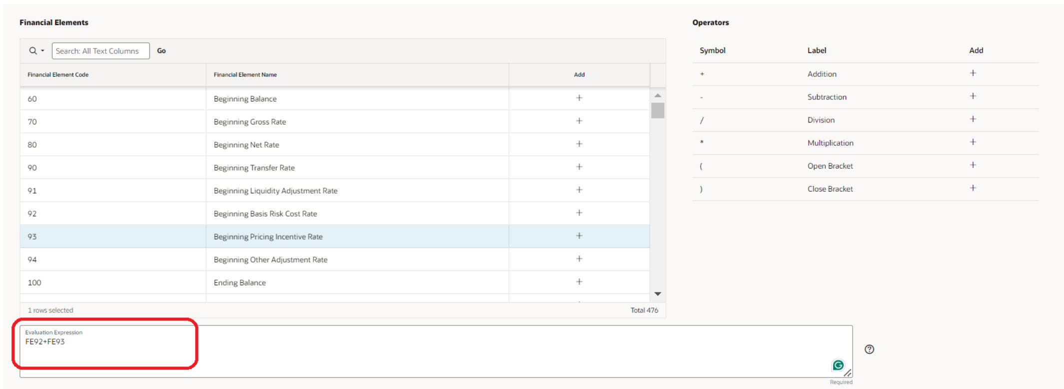
Figure 6-31 Add Management Ledger Metric



2. Enter the **Metric Logical Name** of the custom metric as it will appear in the reports.
3. Select any one of the following details:

- Financial Element Code
- Financial Element Name
- Operator

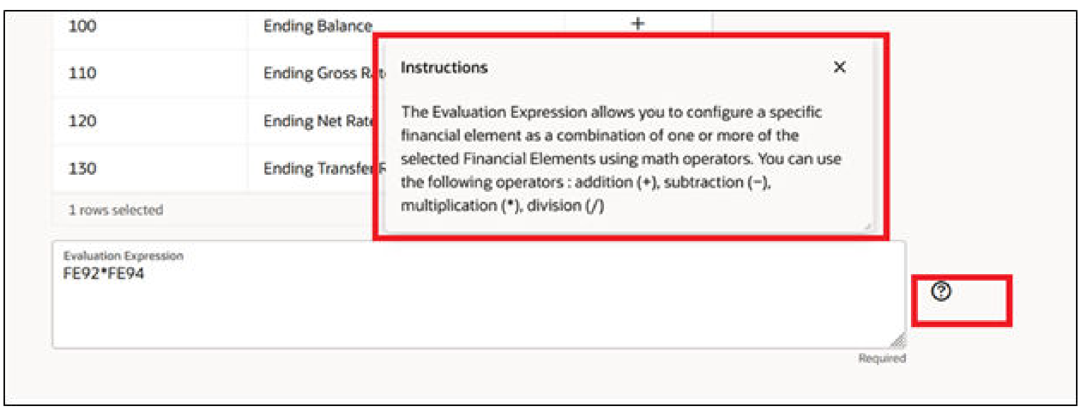
Figure 6-32 Financial Elements, Operators, and Evaluation Expression



Evaluation Expression is the box where you create the calculation using Financial Elements and mathematical operators.

You can refer to the **Help** button support with the Instructions on how to configure the metric.

Figure 6-33 Evaluation Expression Help button



4. Click **Save**.

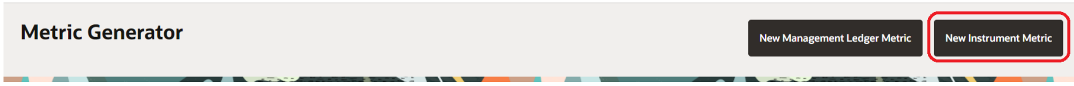
6.7.2 Creating a New Instrument Metric

The process to create a new Instrument Metric from the portfolio tables is very similar to that of creating a New Management Ledger Metric.

To create a New Instrument Metric:

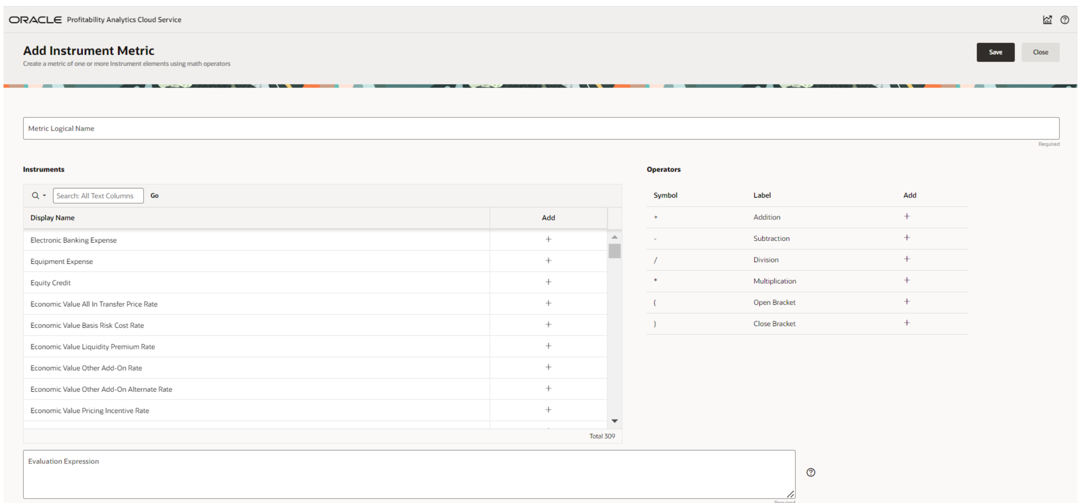
1. Click **New Instrument Metric** on the Summary screen.

Figure 6-34 New Instrument Metric



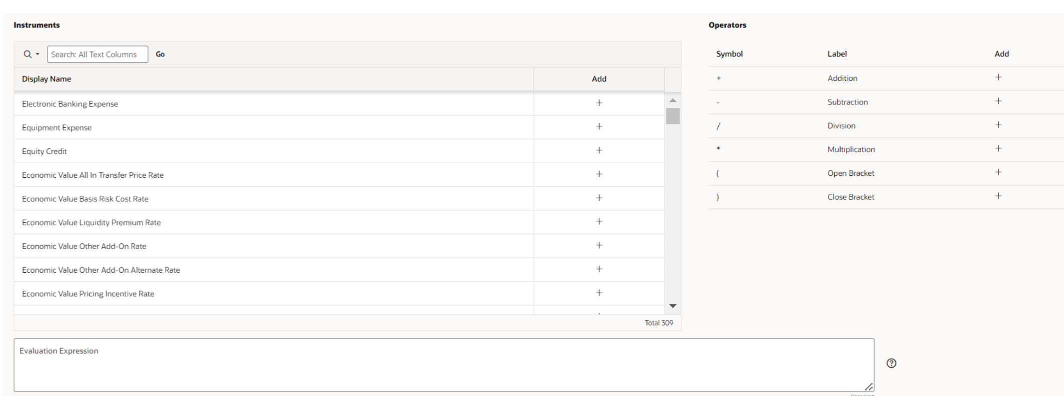
This will take you to the next screen to define the custom metric and input the evaluation expression.

Figure 6-35 Add Instrument Metric



2. Enter the **Metric Logical Name**.
3. Select any one of the following details:
   - Instruments
   - Evaluation Expression
   - Operator

Figure 6-36 Instrument Metric Selection



Evaluation Expression is the box where you create the calculation using Instruments and mathematical operators.

You can refer to the **Help** button support with the Instructions on how to configure the metric.

4. Click **Save**.

7 Operations and Processes

This chapter covers the following topics:

1. Scheduler Services: The Scheduler Service is a service that automates behind-the-scenes work that is necessary to sustain various enterprise applications and functionalities. This automation helps the applications to control unattended background jobs program execution.
2. Object Migration: Object Migration is the process of defining, exporting and importing objects across environments (prod and non-prod)/instances. This feature also facilitates to migrate within the same setup or different setups.
3. Changing Object Ownership: This topic lists the instructions to request the change of object ownership.

7.1 Scheduler Services

Scheduler Services automates behind-the-scenes work that is necessary to sustain various enterprise applications and their operations. Using Scheduler Services, applications can control unattended background jobs program execution.

> **Note:**
>
> The Scheduler Service shows the job relevant to the given workspace. For the Production workspace, the scheduler also includes jobs from the other Oracle Financial Crime and Compliance Management Cloud Services.

Scheduler Service operations:

- **Define Batch** - A Batch contains a group of background tasks that are executed together, on a specific date and time during which the resources are available for batch processing.
- **Define Task** - A batch job is a piece of a program meant to meet specific and business-critical functions. The program is a REST API used in a batch.
- **Schedule Batch** - Schedule batch jobs, to automate tasks that are processed on a regular basis but do not need to occur during the day or require human intervention. Jobs that happen on a regular basis are incorporated into batch schedules. You can also edit pre-conditions for batch group execution and pause scheduled executions.
- **Monitor Batch** - Track and access the real-time feedback on the status of the current encoding job and lists the jobs pending in the batch. You can also **Cancel** or **Restart** the service when required.
- **Scheduler Service Dashboard** - The Scheduler Service Dashboard gives the complete status of the Executed Runs, Successful Runs, Failed Runs, Ongoing Runs, Interrupted Runs, and the Upcoming Runs.

7.1.1 Accessing Scheduler Services

Using the Scheduler Services, you can create and execute batches and schedules to run various tasks and also monitor them.

To access Scheduler Services:

- Log in to the Service Console and from the left navigation pane in the Service console, click **Operations and Processes > Scheduler**.

7.1.2 User Roles and Functions

You require specific user roles and functions, to use Scheduler Services, and to create and manage batches and tasks.

The user roles and user privileges for Scheduler Service are available in the Users and User Privileges Guide.

For more information, see the User Group and Roles Mapping for Scheduler Service.

Table 7-1 User Role Codes and Function Codes

Role Codes	Function Codes
BATCH_READ	BATCH_ADD
BATCH_WRITE	BATCH_DEL
BATCH_ADV	BATCH_MOD
BATCH_AUTH	BATCH_VIEW
BATCH_OPER	BATCH_SCH
BATCH_MAINT	BATCH_SUMM
	BATCH_AUTH
	BATCH_PURGE
	BATCH_MON
	BATCH_EXEC
	BATCH_COPY
	LOGVIEW

7.1.3 Define Batch

You can use batch and batch groups to group a set of background tasks to be executed together.

A Batch contains a group of background tasks that are executed together, on a specific date and time during which the resources are available for batch processing.

Batch Groups consist of batches that need to be executed together. Batch groups help to process date and time-based background tasks based on a defined period when resources are available for batch processing.

Click **Define Batch** from the Header panel to access the Define Batch page.

To access the **Scheduler Service Summary (Define Batch)** page, from the left Navigation pane in the application console, click **Operations and Processes Batch Administration**> **Scheduler** > **Define Batch**.

To access the list of existing batches and batch groups click **Batch** or **Batch Group** tab respectively. You can also view following details related to each batch/batch group.

- **Batch ID** - The unique alphanumeric code assigned to a specific batch/batch group.
- **Name** - The unique batch/batch group name.
- **Description** - The brief description of the batch/batch group.
- **Last Modified** - The last modified By user, date and time details.

To search for a specific batch/batch group, enter the keywords in the **Search** field and click **Search**. You can search based on **Name**, **Code**, and **Description**. You can also sort the batch/batch group list based on **Code**, **Name**, **Created Date**, and **Last Modified Date**.

Perform one of the following operations, to manage batch/batch group, from the **Scheduler Service (Define Batch)** page.

- Create New Batch/Batch Group
- Edit a Batch/Batch Group
- Copy a Batch/Batch Group
- Delete a Batch/Batch Group
- Create/edit tasks

7.1.3.1 Creating a Batch/Batch Group

Create a batch/batch group, to execute a group of background tasks together, on a specific date and time, when the resources are available for batch processing.

To create a batch/batch group from the **Scheduler Service (Define Batch)**:

1. In the **Create Batch** page, enter the following **Batch Details**:
   - **Code** - Enter a unique alphanumeric code for the new batch/batch group.
     The code must start with alphabets, should not contain any spaces, and must not exceed 60 characters. Special characters are not allowed except **underscore (_)**.
   - **Name** - Enter a unique name for the new batch/batch group.
     The name should start with alphabets, should not contain any spaces, and must not exceed 60 characters. Special characters are not allowed except **underscore (_)**.
   - **Description** - The description/details for the batch/batch group.
     The description should start with an alphabet and must not exceed 250 characters.
   - Select **Batch** to create a new batch or **Batch Group** to create a new batch group.
   - For new batch groups,select the **Batches** to be added to the batch group.
   - Select the **Service URL name** from the drop-down list, if it is available.
     To add a new service URL, enter a name to identify the new Service URL Name and enter the proper Service URL. You can give partial URL here and the complete URL in the Task Service URL.
   - Enter the complete **Cleanup URL** and enable the check box, to activate the cleanup URL, before you initiate a batch/batch group restart.
     The complete Cleanup URL : `http://fccm-utility-service:8080//fccm-utility-service/cleanupExecutionWatcher`
   - Select one of the following options, to get an email notification, based on the selected batch execution status.

Based on the selected option, an email is sent to the email ID of the logged in user, mentioned in the IAM console.

   – **Every Time** : An e-mail is triggered irrespective of the batch execution status.
   – **Never** : No e-mail will be triggered.
   – **On Error only** : (Default). An e-mail is triggered only when the batch execution has failed.
   – **On Interrupt only** : An e-mail is triggered if the batch execution is successfully interrupted.

2. For new batches, after entering the Batch Details, provide the following batch parameters.

   From the **Batch Parameters** pane, click **Add** to add a new batch parameter, in the following format.

   - **Parameter Name -** A valid parameter name for the new Batch parameter.
   - **Parameter Value -** A valid parameter value required for Batch execution.

   > **Note:**
   >
   > Enclose the parameter Value for a Run time with `$` symbol. For example, `$paramName$`.

   By default, **$FICMISDATE$** and **$BATCHRUNID$** are added as batch Parameters.

   By default, **$BATCHDATE$**, **$BATCHRUNID$** and **$RUNSKEY$** are added as batch Parameters.

   > **Note:**
   >
   > **$RUNSKEY$** parameter is added only if you are creating a new batch or copying from an existing batch. It is not supported for existing batches.

   To delete a batch parameter, click **Delete** next to that parameter details.

3. Enter the following **Header Parameter** details:

   - **Parameter Name -** A valid parameter name for the new header parameter.
   - **Parameter Value -** A valid parameter value required for batch execution.

4. Click **Save**. The new batch/batch group is created and displayed in the **Scheduler Services (Define Batch)** page.

7.1.3.2 Editing a Batch/Batch Group

Edit the batch/batch group details such as **Description** and also add new **Batch Parameters** to a batch,along with adding new **batches** to the batch group.

Seeded batches cannot be edited.

To modify a batch/batch group:

1. In the **Scheduler Services (Define Batch)** page, click **Edit** corresponding to the batch/ batch group you want to modify.
2. Modify the required details, in the **Edit Batch** page.

3. Click **Save** to save the edited batch/batch group.

   The edited batch will be updated in the **Scheduler Services (Define Batch)** page.

7.1.3.3 Copying a Batch/Batch Group

Copy a batch/batch group that you want to clone to create a new batch/batch group.

To copy a batch/batch group:

1. In the **Scheduler Services (Define Batch)** page, click **Copy** corresponding to the batch that you want to copy.
2. In the **Copy Batch** page, modify the required Batch details to create a new batch/batch group.
3. Click **Save** to add the copied batch to the **Scheduler Services (Define Batch)** page.

7.1.3.4 Deleting a Batch/Batch Group

Delete a batch/batch group that is no longer required in the system from the Define Batch page.

> **Note:**
>
> You cannot delete seeded batches.

To delete a batch/batch group:

1. From the **Scheduler Services (Define Batch)** page, click **Delete** corresponding to the batch/batch group you want to delete.
2. Click **OK** to confirm deletion.

   > **Note:**
   >
   > After confirmation, any active schedules associated with the batch will also be deleted.

7.1.4 Define Tasks

The Define Tasks page lists tasks associated with a specific Batch Definition. You can create new tasks, and edit or delete existing tasks.

To access the **Define Task** page:

1. Click **Define Task** from the Header panel to access the Define Task page.
2. From the left menu, click **Operations and ProcessesBatch Administration** > **Scheduler** and select **Define Task**.
3. Select Batch/Batch Group from the drop-down list and select the particular batch/batch group to access the list of tasks associated with it.

   You can view the following details related to each task:

   - **Task ID -** The unique identifier for the task.

- **Name** - The name of the task..
- **Parent Task** - The parent task associated with the task.
- **Component** - The seeded/custom component associated with the task.
- **Created Date** - The task creation date.
- **Last Modified** - The last modification date.

  To search for a specific task, enter the keywords in the **Search** field and click **Search**. You can search based on the **Task Name**, **Code** and **Description**. You can also sort the Task list based on **Code**, **Name**, **Precedence**, **Component**, **Created Date**, and **Last Modified Date**.

Using the **Preview** option, you can view the complete task execution sequence for a specific batch/batch group.
Perform the following operations to manage a Task, from the **Scheduler Service (Define Task)** page.

- Add a task
- Modify a task
- Define a task precedence
- Delete a task

7.1.4.1 Adding a Task

Add new tasks to a selected Batch Definition.

To add new task:

1. In the **Scheduler Service (Define Task)**, select the Batch for which you want to add a new task from the drop-down list.
2. Click **Actions** on the page and then click **Add** to access the **Add Task** page.
3. Click **Add** to access the **Add Task** page.
4. Enter the following details:
   - **Task Code** - Enter a unique alphanumeric code for the new task.
     The code must begin with letters, should not include spaces, and has a maximum limit of 60 characters. Special characters except **underscore (_)** are not allowed.
   - **Task Name** - Enter a unique name for the new task.
     The name should start with letters, not contain spaces, and have a maximum limit of 60 characters. Special characters except **underscore (_)** are not allowed.
   - **Task Description** - The description/details for the task.
     The description should begin with a letter and not exceed 250 characters. Avoid using phrases like "Select From" or "Delete From" in the description.
   - **Task Type** - Select the task type from the drop-down list.
   - **Component** - Select the custom or the seeded component associated with the task.

     > **Note:**
     >
     > Refer to the respective component guide for information related to the component specific parameters.

- **Batch Service URL** - Select the required Batch Service URL from the drop-down list. Batch Service URL is not required, if you provide the complete Task Service URL.
- **Task Service URL** - Enter task service URL if it is different from Batch Service url.

5. By default, all Batch Level Parameters are added and enabled as task parameters in the **Task Parameters** pane.

   > **Note:**
   >
   > You can edit the parameters only for custom components.

   a. Enter the Parameter name in the **Param Name** field.
   b. Enter the Parameter value in the **Param Value** field.

   To delete a parameter, click on **Delete** next to the respective parameter.

6. Click **Save** to add the new task to task summary in the **Define Task** page.

   > **Note:**
   >
   > Sync task will remain active if execution time is more than 15 minutes at target service and till acknowledge status is generated from target API after the execution.

7.1.4.2 Modifying a Task

Modify details such as Task Description and Task Type in existing tasks.

You can also add a new task parameter and enable or disable existing task parameters.

To modify a task:

1. From the **Define Task** page, select the Batch to modify the task details from the drop-down list.
2. Click **Edit** corresponding to the Task you want to modify.
3. Modify the required Task Details, in the **Edit Task** page.
4. Click **Save** to update the changes.

   The modified task is added to the **Define Task** page.

7.1.4.3 Define Task Precedence

Task Precedence indicates the execution-flow of a batch. Task Precedence Value helps to determine the order in which the specific tasks of a batch are executed.

For example, consider a Batch consisting of four tasks. The first three tasks lack define precedence and hence will be executed simultaneously during batch execution. However, Task 4 has a precedence value as Task 1, indicating that Task 4 is executed only after the successful completion of Task 1.

You can set Task Precedence between Tasks or define to run a Task after a set of other tasks. While, multiple tasks can be executed simultaneously, cyclical execution is not permitted. Tasks without defined precedence execute immediately upon Batch Execution.

> **Note:**
>
> The **Task Precedence** option is disabled if a batch has only one associated task.

To define task precedence:

1. Click **Add or Remove Precedence** corresponding to the task requiring precedence, to access the **Precedence Mapping** list.
   a. Select a batch to execute before the current task, from the **Available Tasks** pane and click **Move Selected**.

      To move all the batches, click **Move All**.
   b. To remove a batch from the task precedence sequence, select the task from the **Selected Tasks** pane and click **Remove**.

      To remove all the selected batches, click **Remove All**.
2. Click **Save** to update Task Precedence in the batches.
3. Click **Preview** to view the precedence information.

7.1.4.4 Deleting a Task

Remove any tasks that that are no longer required in the system, from a Batch Definition.

To delete a task:

1. From the **Define Task** page, select the Batch from the drop-down list.
2. Click **Delete** corresponding to the Task you want to delete.
3. Click **OK** in the confirmation dialog to confirm deletion.

7.1.5 Managing Batch/Batch Group Executions

Schedule Batch enables users to manage batch/batch group executions.

To monitor a batch/batch group, click **Monitor Batch** from the Header panel.

To access **Schedule Batch** page, from the left menu, click **Operations and ProcessesOperations and Processes** and then select **Schedule Batch**.

All the batch/batch group schedules are listed. You can sort this list based on code, name, Task Precedence, Components, and dates, to access a specific schedule.

From the **Schedule Batch** page, you can perform the following operations related to the execution and scheduling of batches/batch groups

- Execute batch/batch groups instantaneously
- Edit dynamic parameters
- Automate batch/batch group executions using the various scheduling options
- Re-run a batch/batch group execution
- Re-start a batch/batch group execution

7.1.5.1 Execute Batch/Batch Group

Use the Execute Batch to run a batch/batch group instantaneously.

To execute a Batch/Batch Group:

1. In the **Schedule Batch** page, select **Batch** or **Batch Group** to execute from the drop-down list.
2. Select the **Batch /Batch Group** for execution.
3. Click **Execute** to access the **Execution Schedule** page.
4. Click **Exclude Tasks** to add/remove tasks from the execution list.
5. Click **Hold Tasks** to pause/release tasks during execution.
6. Click **Edit Dynamic Parameters** to modify the dynamic parameters.
7. Click **Execute**.

   The Batch is executed, and the associated unique Run ID is displayed in the format `<BATCH_CODE>_<MIS_DATE>_<ITERATION-COUNT>`.
   You can always click preview to view the PMF process sequence used to execute the selected batch/batchgroup.

7.1.5.2 Adding Pre-Conditions For Batch Group Execution

Pre-conditions help to execute batches associated with a batch group, on specific days, based on the set frequency and selected days.

You can set pre-conditions for a batch group, to execute specific batches on selected days based on the set frequency interval. This enables to wisely use the available resources for execution.

To set pre-conditions for batch group execution:

1. Click **Schedule** from the Header panel.
2. In the **Schedule Batch** page, select **Batch Group** and the **Batch Group Name**.
3. Click **Pre-Conditions** to set the pre-conditions for task execution.
4. Select the **Batch** to set the pre-condition.
5. Set the execution frequency to Weekly, Monthly, or specific interval and set one of the following conditions:
   - **Weekly** - Select the weekdays to execute the batch. You can select multiple days.
   - **Monthly** - Select the days of the month to execute the batch. You can select multiple days.
   - **Interval** - Select the recurrence frequency to execute the batch.
6. Click **Add** to add another pre-condition.
7. After adding all the required pre-conditions, Click **Save**.

   The pre-conditions are saved and the batch group will be executed based on the set pre-conditions.

> **Note:**
>
> The batch group is always get executed based on the pre-condition and any schedule associated with the batch group will not be considered for processing.

7.1.5.3 Edit Dynamic Parameters

Modify the dynamic parameters set for a batch/batch group.

You can modify the batch parameters, batch header parameters, task parameters, and the task header parameters associated with a batch/batch group.

To edit the dynamic parameters from the **Schedule Batch** page:

1. Select **Batch/Batch group** and then select the specific batch/batch group.
2. Click **Edit Parameters** to access the **Edit Dynamic Params** page.

   You can also edit the dynamic parameters while configuring the scheduling options.
3. Click the batch/batch group name to access all the parameters.
4. Set the **$BatchDate$** to set the batch execution date: :
   - Set the batch date to SYSDATE (system date). The batch execution date is set to SYSDATE by default.
   - Toggle and select **MISDATE** to select a particular batch execution date.
5. Enter **$BATCHRUNID$** to set the batch run ID in the format: `<BATCH_CODE>_<MIS_DATE>_<ITERATION-COUNT>`.
6. Edit the batch header parameters and the task parameters.
7. Click **Save** to update the batch/batch group parameter values.
8. After updating the changes, execute the batch/batch group or configure the scheduling settings.

7.1.5.4 Scheduling and Automating Batch/Batch Group Execution

Automate batch/batch group execution.

Using the various scheduling options, you can automate batch/batch group execution to run based on the specified scheduling parameters.

To automate batch/batch execution:

1. Click **Schedule** from the Header panel.
2. In the **Schedule Batch** page, select from the following options:
   - **Once** - Run only once.
   - **Daily** - Run daily.
   - **Weekly** - Run weekly on selected days and time.
   - **Monthly** - Run monthly on selected days and time.
   - **Quarter** -Run every quarter on selected days and time.
   - **Cron Expression** - A Cron Expression is a string comprising of six or seven fields separated by white space. Fields can contain any of the allowed values, along with various combinations of the allowed special characters for that field.

To execute a batch/batch group using a Cron expression, enter the Cron Expression for your schedule. For more information about the Cron Expression, click **Information** next to the Cron Expression field.

3. Enter the following generic information and the parameters:
   - **Batch/Batch Group -** Batch/batch group for execution.
   - **Batch/Batch Group Name** - The specific batch/batch group to be executed.
   - **Schedule Name -** The unique schedule name.
4. Provide the following scheduling parameters based on the selected schedule option.

   For Cron Expression based scheduling, enter the required Cron expression.

Table 7-2 Scheduling Options

Details	Once	Daily	Weekly	Monthly	Quarter
Start Date to begin execution.	Yes	Yes	Yes	Yes	Yes
End Date to stop the execution	No	Yes	Yes	Yes	Yes
Run Time to execute the batch/ batch group	Yes	Yes	Yes	Yes	Yes
Days of the week you want to execute the batch/batch group. You can select multiple days.			Yes	Yes	Yes
Months of the Year you want to execute the batch/batch group. You can select multiple months.				Yes	Yes
Day of the Month to execute batch/batch group				Yes	Yes
First Months of the Year to calculate the year beginning and each quarter beginning.					Yes
Select Quarters to execute batch/batch group You can select multiple quarters.					Yes
Days of Quarter - Select the days to execute the batch/batch group. You can select first day, mid day, last day, First N days, or last N days					Yes
No. of Days - If you select first N days or last N days, select the number of days to execute the batch/batch group at the beginning or end of the selected quarter					Yes

5. **Exclude Tasks** to add/remove tasks from the execution list.
6. **Hold Tasks** to pause/release tasks during execution.
7. Click **Edit Dynamic Parameters** to modify the dynamic parameters.
8. Use the following filters to dynamically export only the relevant records:
   - Additional Filter
   - Placeholder Filter

Set the filters in the following format:

DATA_TABLE.AS_OF_DATE = $FICMISDATE$ AND DATA_TABLE.EXECUTION_ID = $BATCHRUNID$

Where:

- DATA_TABLE: Data table from which to export relevant record
- AS_OF_DATE: MIS Date
- EXECUTION_ID: Execution ID

Example: FSI_ALM_CASHFLOW_OUTPUT_HIST.AS_OF_DATE = $FICMISDATE$ AND FSI_ALM_CASHFLOW_OUTPUT_HIST.EXECUTION_ID = $BATCHRUNID$

9. Click **Schedule** to add the new schedule for execution.

   You can set pre-conditions to process batch groups. When a batch group has an associated pre-condition, the execution schedule will not be considered for processing.

10. To manage schedules associated with a specific batch:
    a. In the **Select Batch** page, select **Batch** and select the **Batch Name** to view the associated schedules.
    b. Click **View Schedule** to access the list of all the schedules associated with the batch.

       You can perform the following tasks:

       - Click **Edit** to modify the schedule.
       - Click **Pause** and enter the **Start Date** and **End Date** to pause the schedule from execution. Click **Add** to apply the pause.
         To remove the pause, click **Delete** next to the specific pause.

7.1.5.5 Re-run Batch/Batch Group

Re-running a batch/batch group facilitates you to run the batch/batch group irrespective of the previous execution state.

When you re-run a batch/batch group that has been previously executed, a new Run ID is generated, and the batch/batch group is executed as if it were a new run.

To re-run a batch::

1. Click **Schedule Batch** from the Header panel.
2. In the **Schedule Batch** page, select the **Re-run** tab.
3. Select **Batch/Batch Group**.
4. Select the **Batch or Batch group Name** you want to re-run.
5. Select the **Batch Run ID**.
6. Click **Re-run**.

7.1.5.6 Re-start Batch/Batch Group

Re-start a batch/batch group that has not executed successfully or has been explicitly interrupted, canceled, or put on hold during the execution process.

Restarting a batch/batch group enables you to continue execution directly from the point of interruption or failure, allowing you to complete executing the remaining tasks.

> **Note:**
>
> Before restarting a batch/batch group, ensure to provide the complete cleanup URL and also to enable invoking the cleanup URL before restarting the execution.

To re-start a batch/batch group:

1. Click **Schedule Batch** from the Header panel.
2. From the **Schedule Batch** page, select the **Re-start** tab.
3. Select **Batch/Batch Group**.
4. Select the **Batch or Batch group** you want to schedule daily from the drop-down list.
5. Select the **Batch Run ID**.
6. Click **Re-start**.

7.1.6 Monitor Batch/Batch Group

Using Monitor Batch/Batch Group, you can view the status of executed batches/batch groups, along with the tasks details.

Monitoring enables users to track and identify issues at regular intervals, ensuring smoother batch execution. Both a visual representation and a tabular view of the status of each task in the batch are available.

To monitor a batch/batch group:

1. Click **Monitor Batch** from the Header panel.
2. Select the **Batch/Batch Group** and the **Batch/Batch Group Name** to monitor the execution.
3. **Set Refresh Frequency Time Interval and duration** in seconds.

   By default, the refresh interval is set to **5 seconds** and duration is set to **5 minutes**. This indicates that the monitor progress will be refreshed every 5 seconds for the next 5 minutes.

   The refresh interval ranges between 5 to 60 seconds and the duration ranges between 5 to 180 seconds.
4. Select the **MISDATE** to view the list of Batch Run IDs executed on a specific date.
5. Select the **Batch Run ID** you want to monitor.
6. Click **Start Monitor** to view the results in **Visualization** and **List View** tabs.

   The **Visualization** tab displays execution status graphically, while the **List View** tab provides the details in a tabular form, including:

   - **Status**: Task execution status **- Not-Started**, **On-going**, **Aborted**, **Successful**, **Failed**, **Interrupted**, **Excluded** and **Undefined**.

     > **Note:**
     >
     > When the task execution status is **Aborted**, the batch execution will still be **On-going**. The task status will be set to **Ongoing**, when it is triggered again.

- **Start Time**: Task execution start time.
- **End Time**: Task execution end time.
- **Task Details**: Mouse-over the task to display its status and details.

7. At any point, select **Stop Monitor**, to stop monitoring.

   You can download the task execution summary in PDF or Excel, with or without the task logs, from the **Monitor Task** page.

   > **Note:**
   >
   > You can download the task execution summary only if the **BATCH_OPER** role is mapped to the **LOGVIEW** function.

8. (Optional). To rerun, restart, or interrupt execution, click **Actions** and select the required option.

   You can also reset the search criteria using **Actions**.

9. (Optional). Click **View Execution Parameters** adjacent to a batch/batch group, to access the list of tasks and task parameters such as **Runskey ID**, **Misdate**, associated with that batch/batch group.

7.1.7 Scheduler Service Dashboard

View the task executions based on the execution status in the Scheduler Service Dashboard.

To access the **Scheduler Service Dashboard** page, from the left Navigation pane in the Service console, click **Operations and Processes** > **Scheduler** > **Dashboard**.

To access the **Scheduler Service Dashboard** page, from the left Navigation pane in the Service console, click **Batch Administration** > **Scheduler**.

On the Workspace Summary, click **Orchestration** and select **Scheduler Dashboard**. The Scheduler Service Dashboard page is displayed.

You can access the following details related to batch/batch group execution from the Dashboard:

- The batches/batch groups are categorized based on their execution status - **Executed Runs**, **Successful Runs**, **Failed Runs**, **Ongoing Runs**, **Interrupted Runs**, and **Upcoming Runs** tabs. Click the respective tab to view the details of the batches/batch groups based on their execution status. For example, click **Ongoing Runs** to view the details of the batches that are currently running.
- The run time, schedule name and the MISDATE associated with each batch/batch group.
- The batch execution summary for all the batches executed in the last 7, 30 and 120 days. The summary is displayed in the form of a color-coded bar graph with legend for the various execution statuses.
- To view the list of all task executions associated with a specific batch/batch group, select the required execution status tab, select Batch/Batch Group and select the required batch/batch group.
- To view the task executions within a specific date range, select the required execution status tab, select Batch/Batch Group and select the required batch/batch group. Specify both the start and end dates.

7.2 Object Migration

Object Migration is the process to define, export and import objects across environments (prod and non-prod)/instances. This feature also facilitates to migrate within the same setup or different setups.

Objects refer to the various metadata definitions defined for various domains. You may want to migrate objects for several reasons such as manage global deployments on multiple environments or to create multiple environments so that you can separate the development, testing, and production processes.

For example, you can use the object migration feature to define PMF process object such as balance computation on your testing environment. After successful testing, you can use this feature to export the object to production/non-production environment.

You can migrate the following object types:

- **Schedule** - Schedule provides the instruction to schedule the execution of defined processes. When a schedule is migrated, the associated batch is also migrated.
- **Batch** - Batch is a group of jobs. When a batch is migrated, the batch and the associated pipeline information are also migrated. Note that the dependent objects used in the batch are not exported. All the objects used in the batch must be present in the target environment before the batch definition is imported.
- **Batch_Group** - A set of individual batches are consolidated to form a single Batch_Group. When we migrate a Batch_Group all the batches, tasks and pipeline information associated with that Batch_Group are also migrated.
- **Pipeline** - A pipeline is an embedded data processing engine that runs inside the application to filter, transform, and migrate data on-the-fly. Pipelines are a set of data processing elements called widgets connected in series, where the output of one widget is the input to the next element.
- **Threshold** - The threshold limit associated with set variables values for scenarios in FCCM Cloud Service. These threshold values are set when scenarios are created or installed and can be changed, if required.
- **Job** - Jobs provide set of instructions to execute Workflow Pipelines, based on the set threshold values.
- **Roles** - Roles are used to map functions to a defined set of groups to ensure user access system security.
- **Groups** - Groups are used to map Roles. Specific User Groups can perform only set of functions associated with that group.
- **CM_ADMIN** - The CM_ADMIN object type refers to all the case management related admin screens. Under this object type, you can export case management related admin metadata and settings for Business Domain, Case Actions/Statuses, Case Priority, Case Rules, Case System Parameters, Case Types, Jurisdictions and Security Mapping.

Note:

System can successfully import any object if both Code/Name do not exist in the target. If either code or name of the object being migrated is already available in target, import will fail.
Even if overwrite option is selected, object will only be overwritten in target if both object code/name matches in target environment.

For example, if an interest rate curve is being migrated, and either code or name is already available in target environment, import will fail.

7.2.1 Migration Object Types

You can create Object Export and Import definitions for the following object types using Object Export/Import feature.

The Migration object types are categorized as follows:

Asset Liability Management

- Standardized_IRRBB_Shock
- Static_deterministic_process
- Time_bucket
- Dynamic_deterministic_process
- Forecast_balances
- Multi_dimensional_balance_sheet
- Pricing_margin
- Product_characteristics
- Behaviour_pattern_rule
- Discount_methods
- Forecast_rates
- Prepayment_model
- Prepayment_rules
- Transferring_Price_Rules

Cash Flow Edits

- Cash_flow_edits_rule
- Cash_flow_edits

Cash Flow Engine

- Cashflow_Process

Common Objects

- Batch

> **Note:**
>
> Ensure to have BATCH_SUMM, BATCH_VIEW and BATCH_ADD riles to view, export and import batches.

- Batch_group

> **Note:**
>
> Ensure to have BATCH_SUMM, BATCH_VIEW and BATCH_ADD riles to view, export and import batches.

- Currency
- Datamodel_extension_dimension
- Data_file_specification
- Dimensions

> **Note:**
>
> Dimension definitions should be migrated before migrating the dependent object definitions. The source and the target dimension of the dependent objects should be the same.

- Expressions
- Filters
- Folder
- Hierarchy

> **Note:**
>
> Dimension definitions should be migrated before migrating the Hierarchy associated with it. The Dimension should be the same in both source and target environments.

- Holiday_calendar
- Job
- Pipeline
- Schedule

> **Note:**
>
> Ensure to have BATCH_SUMM, BATCH_VIEW and BATCH_ADD riles to view, export and import batches.

- Slowly Changing Dimensions

Data Maintenance Interface (DMI)

- Excel Upload
- Data Entry
- Data Exporter

> **Note:**
> Ensure that the definitions are in **Approved** status before migrating.

Funds Transfer Pricing

- Add-on Rate Rule
- Alternate_Rate_Output_Mapping
- Replicating Portfolio
- Standard_Process

Identity Management

- **Groups -** For more information, refer to Groups Summary in Admin Console.
- **Roles -** For more information, refer to Roles Summary in Admin Console

Patterns

- Behaviour_pattern
- Payment_pattern
- Reprice_pattern

Profitability Management

- Allocation Model
- Lookup Table
- Allocation Specification
- Static_Table

Profitability Analytics

- Financial Element Mapping
- Segmentation Mapping
- Line Item Display Order
- Geography Mapping

Rate Management

- Interest Rates
- Economic_indicator
- Volatility_surface

7.2.2 Accessing Object Export and Object Import Features

Using the Object Export and Import features, you can create Export and Import Object definitions.

Business Objects - To access Object Export and Import feature for Business Objects: From the left navigation pane in the PBSM applications console, click **Operations and Processes > Object Administration** and:

- To access Object Export feature, click **Export Object**.
- To access Object Import feature, click **Import Object**.

Identity Management Objects - To access Object Export and Import feature for Identity Management Objects: From the Admin Console, click **Identity Management** and

- To access Object Export feature, click **Object Migration (Export)** tile.
- To access Object Import feature, click **Object Migration (Import)** tile.

7.2.3 Object Export Definitions

Object Export Definition is a collection of objects that can be exported across environments.

You can view the list of object export definitions that are already created in the **Object Export Summary**. You can also view the following details about each object definition.

- **Name** - The unique name assigned to the collection when the export definition was created.
- **Object Migration Status** - The export status of a specific object definition.
  - **Success** - Indicates that the export is completed successfully.
  - **Failed** - Indicates that the export was not successful. You can reintiate the migration of the specific object definition.
  - **Saved** - Indicates that the object definition is created successfully and is yet to be exported.
  - **In Progress** -Indicates that the export is in progress. Once the export is complete, the status will change to Success/Failed.
- **Last Modified By** - The ID of the Last Modified by user who has modified the definition. On mouse over, the Last Modified Time and Date are displayed.

To filter the list and view specific Object Definition, use one of the following search options:

- To search for a specific Export Object Definition, type the first few letters of the export definition that you want to search in the Search Box and click **Search**. The search results display the names that consist of your search string in the list of available definitions.
- Enter the number of records to be viewed in a single page, in the **Records** box, at the bottom of the page. You can increase or decrease the number of entries that are displayed using the up and down arrows.
- You can navigate between pages in the **View** bar, use the navigation buttons present at the bottom of the page.

7.2.3.1 Creating Export Definitions

You can create export Meta data objects using the System Configuration tab in Admin Console.

For more information about the supported object types, refer to Migration Object Types. Refer to the following steps, to create a migration export object.

1. Click **Add** in the **Object Export Summary** Page to view the **Migration Definition** page.
2. Enter the following details, in the **Migration Definition** page.
   - **Migration Name**: Enter the code of the export of objects to be migrated definition. This is a unique identifier.
   - **File Name**: The system auto-creates the file name of the objects that can be used to export the definition in the following format:
     - **For Business Objects**: Migration Name_BO_Time Stamp (MMDDYYY HHMMSS)
     - **For Identity Objects:** Migration Name_IDM_Time Stamp (MMDDYYY HHMMYY)
3. Click **Apply** to save the details and view the **Object Selection** Page.
4. Click **Add** to include Migration objects to the definition.
5. select the required **Object Type** from the Object Types drop-down list.
6. Select the objects to be added to the Migrate Definition and click **Save**, to create a new migration object.

   A confirmation message is displayed, when the definition is saved successfully. The new migration definition is listed in the Object Export Summary Page and the status is set to **Saved**.

   You can also click **Export**, to export the object.

7.2.3.2 Editing Export Object Definitions

You can edit the Export Object definitions that are not exported and their status is **Saved** or **Failed**.

If the definitions is already exported and the status is set to **Success**, you cannot edit that definition.

To edit an Export Object definition, follow these steps.

1. In the Object Export Summary page, highlight the definition and click **Menu**, and select **Edit**.

   The **Object Selection** page is displayed.
2. Modify the following details, if required, and click **Save** to changes.
   - Select the required **Object Type** from the Object Types drop-down list.
   - Select the objects to be added to/deleted from the definition.
3. After adding/deleting all the required objects, click **Save**.

   The Export definition is saved successfully and a confirmation message is displayed. The new definition is listed in the Object Export Summary page and the status is set to **Saved**.
4. If you want to Save and Export the Definition, click **Export**.

7.2.3.3 Exporting Object Definition

After creating the object definitions, you can export them for migrating between environments, using Object Migration (Export) feature.

You can export object definitions in **Saved** or **Failed** state from the object Summary page.Refer to the following steps, to export definitions.

1. In the Object Summary Page, highlight the migration definition and click **Menu**.
2. Select **Export** from the menu.

   After you export, the following Export status types are displayed:

   - **Success** - Indicates that the definition is exported successfully.
   - **Failed** - Indicates that the definition was not exported. Right-click and select **Export**, to reintiate the export process.
   - **In Progress** -Indicates that the export is in progress. Once the export is completed, the status will change to Success/Failed.

7.2.3.4 Viewing Export Object Details

Using the **View** option, you can view the list of objects and the dependancies added to an Object definition. You can also view the object details.

1. Highlight the Export definition and click **Menu**.
2. Select **View**. The object types, list of objects and the dependent objects added to the export definition are listed in the left pane.
3. Double-click an object to view the object attribute details.

7.2.3.5 View Object Definition Export Log Details

View log facilitates you to view the export log information of the object definition with the migration status.

> **Note:**
>
> The View Log page for an object definition with status **Saved** will be empty.

To view the log details of object with migration status **Success** or **Failed**, follow these steps.

1. In the Object Export Summary page, mouseover the object definition and click **Menu**.
2. Select **View Log** from the drop-down menu, to access the **View Log** page.

   The migration status of the objects with following details is displayed.

   - **Object Migration ID** - The migration ID associated with the definition.
   - **Object Type** - The object type of the definition.
   - **Object Code** - The object code associated with the definition.
   - **Creation Date** - The date of creation of the definition.
   - **Created By** - The User Id of the User who created the definition.

- **Status** - The migration status of the definition.
  - **Success -** Indicates that the export migration was completed successfully.
  - **Failed** - Indicates that the export migration did not complete.
  - **Export Status Message -** The complete export status message.

> **Note:**
>
> Export status message currently not supported for GL reconcilation.

3. Click **OK** to close the page, after viewing the log details.

7.2.3.6 Downloading Dump File

You can download the export dump file for exported definitions to a local directory, using Download Dump file option.

The downloaded export dump file can be used to upload objects to a different environment.

> **Note:**
>
> This option is enabled, only if the definition is exported successfully and the **Migration Status** is set to **Success**.

To download a export dump file, refer to the following procedure.

1. Mouseover a migrated object and select **Menu**.
2. Select **Download Dump File** from the drop-down menu, to download the associated dump file and store it to the local directory.

7.2.3.7 Deleting Export Object Definition

You can delete only definitions that are set to **Saved** or **Failed** status.

To delete a export object definition, follow these steps.

1. In the Object Export Summary page, mouseover the definition to be deleted and click **Delete** .
2. Click **Yes** to confirm and proceed with the deletion.

7.2.4 Object Import Definitions

Object Import Definitions is a collection of objects that can be imported across environments. .

You can view the list of Object Import Definitions that are already created in the **Object Import Summary**. You can also view the following details about each Object definition.

- **Name -** The unique name assigned to the collection when the Import definition was created.
- **Object Migration Status** - The import status of a specific Object definition.
  - **Success -** Indicates that the import is completed successfully.

  - **Failed** - Indicates that the import was not successful. You can reintiate the migration of theSpecific Object Definition.
  - **Saved** - Indicates that the Object Definition is created successfully and is yet to be imported.
  - **In Progress** -Indicates that the import is in progress. Once the import is complete, the status will change to Success/Failed.
- **Last Modified By** - The ID of the Last Modified by user who has modified the definition. On mouse over, the Last Modified Time and Date are displayed.

To filter the list and view Specific Object Definition, use one of the following search options.

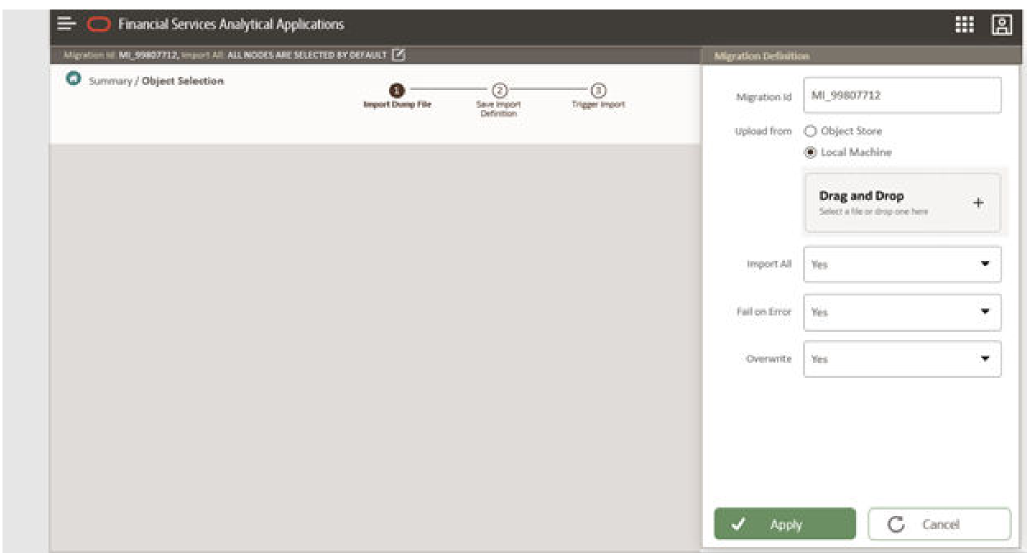
- To search for a Specific Import Object definition, type the first few letters of the Import definition that you want to search in the Search box and click **Search**. The search results display the names that consist of your search string in the list of available definitions.
- Enter the number of records to be viewed in a single page, in the **Records** box, at the bottom of the page. You can increase or decrease the number of entries that are displayed using the up and down arrows.
- You can navigate between pages in the **View** bar, use the navigation buttons present at the bottom of the page.

7.2.4.1 Creating Object Import Definitions

You can create Import definitions and add Import Objects using the Object Migration (Import) feature.

1. Click **Add** in the **Object Import Summary** page to view the **Migration Definition** page.
2. Enter the following details, in the **Migration Definition** page.
   - **ID -** The Unique Name for the New Import Object definition.
     The migration ID should not contain any space and exceed 30 characters. Underscore (_) and hyphen (-) are allowed.
   - **Dump File** -Select the .DMP file to be uploaded for creating the Import definition.

Figure 7-1 Importing Dump File



You can select the dump file using one of the following options:

– Select the option **Object Store**, to select the dump file (.DMP file) from the list of dump files available in the same environment.

– Select the option **Local Machine** and click **Drag and Drop**, to add a .DMP file, from the local directory. You can only Add Dump file that are downloaded using Download Dump file option.

> **Note:**
>
> – Uploading a dmp file either created or edited locally will generate an error.
>
> – You can rename the .DMP file, if required. Ensure to follow the naming convention. For more information, refer toFile Naming Conventions for Migrate Objects.

- **Import All** - Select an option to import the objects that are associated with the selected object type. You can edit this option if required, in the **Object Selection** page.
  - **Yes** - Imports all the objects that are included in the dump file.
  - **No** - Imports only those objects that you can select in the **Object Selection** page.
- **Fail on Error** - Select an option to proceed with the definition creation in case of an error. You can edit this option if required, in the **Object Selection** page.
  - **Yes** - Stops the creation process, if error is generated.
  - **No** - Creates the import definition even when error is generated. The object with the error is not included in the object creation.
- **Overwrite** - Select an option to overwrite the existing definition. You can edit this option if required, in the **Object Selection** page.
  - **Yes** - Replaces the existing Import definition.
  - **No** - Creates a new Import definition.

3. Click **Apply** to save the details.

   The Import definition is created and **Object Selection** page is displayed. You can add objects to this import definition.
4. Click **Add** to include objects to the definition.
5. Select the required **Object Type** from the Object Types drop-down list.

   Objects that are defined in the environment with respect to the selected object type are are listed. For example, if Schedule is selected as the Object Type, all the Objects defined with respect to Schedule, in the environment are only listed.

   You can also enter the first few letters of the object name in the Search Field, to narrow down the search.
6. Click the check box adjacent to each object, to include the objects associated with a specific object type, to the import definition.
7. Repeat steps 4, 5 and 6, to include objects associated with various object types.
8. After adding all the required objects, click **Save**.

The Import definition is saved successfully and a confirmation message is displayed. The new definition is listed in the Object Import Summary page and the status is set to **Saved**.

9. If you want to Save and Export the Definition, click **Import**.

7.2.4.2 Editing Import Definitions

You can edit the Import definitions that are not imported and their status is **Saved** or **Failed**.

If the definitions is already imported and the status is set to **Success**, you cannot edit that definition.

To edit an Import definition, follow these steps.

1. In the Object Import Summary page, highlight the definition and click **Menu**, and select **Edit**.

   The **Object Selection** page is displayed.

2. Edit the following details, if required, and click **Save** to changes.
   - Select the required **Object Type** from the Object Types drop-down list.
   - Select the objects to be added to/deleted from the definition.
3. After adding/deleting all the required objects, click **Save**.

   The import definition is saved successfully and a confirmation message is displayed. The new definition is listed in the Object Import Summary page and the status is set to **Saved**.

4. Click **Save** to update the changes.
5. If you want to Save and import the Definition, click **Import**.

7.2.4.3 Importing Object Definitions

After creating the object definitions, you can export them for migrating between environments, using Object Migration (Import) feature.

You can import object definitions in **Edited** state from the object Summary page. Refer to the following steps to import Object definitions.

> **Note:**
>
> Comments and Documents attached to an Issue/Action will not be migrated.

1. In the Object Summary Page, mouse-over the definition and click **Menu**.
2. Select **Import** from the drop-down menu.

   After you import, the following Import status types are displayed:
   - **Success** - Indicates that the definition is imported successfully.
   - **Failed** - Indicates that the definition was not imported. Right-click and select **Import**, to restart the import process.
   - **In Progress** -Indicates that the import is in progress. Once the import is completed, the status will change to Success/Failed.

   In case the migration fails, refer to Troubleshooting Object Migration.

> **Note:**
>
> - If a Change Request import fails, then it is recommended not to use the action created for it in the target (if any), otherwise subsequent re-import requests might fail.
> - Approve the Change Request and publish, after it is imported successfully.
> - After the import of segment extension
>   - Creates an Issue with same name as Export Name (Issue name – “Issue – Exportname”) captured with current start and target date with 30 days ahead.
>   - Creates an Action with same name as Export Name (Action name- “Action – Exportname”) captured with current start and target date with 30 days ahead.
>   - Select all Dimensions exported. And action will be in submitted status.
>   - After Import, Issue and action owner has to be reassigned accordingly for Approval process.

7.2.4.4 Viewing Import Object Details

Using the **View** option, you can view the list of objects and the dependancies added to an Object definition. You can also view the object details.

1. Mouseover the migration definition and click **Menu**.
2. Select **View**. The object types, list of objects and the dependent objects added to the export definition are listed in the left pane.
3. Double-click an object to view the object attribute details.

7.2.4.5 Viewing Object Import Log Details

View log facilitates you to view the log information of the object definition with the migration status.

> **Note:**
>
> The View Log page for a definition with migration status **Saved** will be empty.

To view the log details of definition with migration status **Success** or **Failed**, follow these steps.

1. In the Object Import Summary window, mouseover the migration definition and click **Menu**.
2. Select **View Log** from the drop-down menu, to access the **View Log** page.

   The migration status with following details is displayed.

   - **Object Migration ID** - The migration ID associated with the import object.
   - **Object Type** - The object type of the import object.
   - **Object Code** - The object code associated with the import object.
   - **Creation Date** - The date of creation of the import object.

- **Created By** - The User Id of the User who created the import object.
- **Status** - The import status of the specific object.
  - **Success** - Indicates that the specific object was imported successfully.
  - **Failed** - Indicates that the specific object was not imported.
- **Import Status Message** - The complete import status message.

> **Note:**
>
> Import status message currently not supported for GL reconcilation.

3. Click **OK** to close the page, after viewing the log details.

7.2.4.6 Deleting Import Definition

You can delete only definitions that are set to **Saved** or **Failed** status.

To delete an import definition, follow these steps.

1. In the Object Import Summary page, mouseover the definition to be deleted and click **Delete** .
2. Click **Yes** to confirm and proceed with the deletion.

7.3 Changing Object Ownership

Access Type for most objects can be defined as ‘Read Only’ and ‘Read/Write’. When it is defined as ‘Read Only’ the user who created owns it i.e., another user will be able to only view it. For any reason if the owner of object is not available then no one else will be able to modify it.

This functionality helps you to change the ownership of objects from one user to another user(s).

Changing the ownership of object is generally required when the users of the application move across different teams or leave the organization. In this case, the ownership of the objects created by a particular user remain on that user's name and they need to be transferred to different user to enable them to operate on them.

To change the ownership of objects, you must raise a Service Request with the Oracle Support Team with the following information. Oracle Support Team will coordinate with the Operations team to change the ownership.

- The existing username who created the object.
- The new username to which the ownership must be transferred.

8 Precursor to Analytics

Prerequisite Configuration steps to ensure that Financial Statements available at the Reporting Layer are correctly populated.

At the heart of all the reporting and analytics in PACS, lies Financial Statements – or most importantly the Income Statement. The other financial statement that is part of the Management Reporting dashboard is the Balance Sheet. At the core of Financial Statements defined within PACS are Financial Elements – in short FE's. A Financial Statement, at its core is nothing but a hierarchical representation of Financial Elements. While PACS has seeded OOTB Financial Statements (Balance Sheet Hierarchy and Income Statement Hierarchy available from Dimension Management UI), it also allows banks/ customers to create their own custom variations of those Financial Statements. It is however recommended to use one version while analyzing at the same time the Income Statement for both Top Down (Management Ledger Reporting) and Bottom Up (Instrument Reporting) purposes.

The Financial Element Hierarchy is the access point for all the Financial Statements. For the Analytics Reports to show up on the respective dashboards, there are some tasks that you need to perform at the Profitability Management Cloud Service (PFTCS) end, which is currently a prerequisite for the Profitability Analytics Cloud Service to be operational.

As soon as you have these hierarchies in place (refer to Dimension Management for more details) you need to perform profitability allocation both top-down and bottom-up so for both Management Ledger and Instruments tables. Ideally the allocation must be performed on the financial elements that are pertaining to that hierarchy - the ones you will be utilizing for the Income Statement. After the allocation has been performed on the Top-Down Income Statement, the runchart must be executed to propagate the data in the results area, for the purposes of Management Reporting.

For Bottom Up – Profitability Insights, Customer Profitability Reports and so on, you will have to execute an additional step from the set-up configuration menu **Financial Element Mapping**. This functionality allows you to map the FE's you have allocated to the Instrument Portfolio columns. Note that allocations to the instrument columns can be done during the usual course of defining and executing allocation rules at PFTCS – the Profitability Management Cloud Service. The application also allocates the instrument columns on the lines of the FE's of the Top-Down Income Statement. Additionally, you can also directly allocate Instrument columns without passing via Management Ledger, by defining those rules separately in the allocation process.

In essence, the FE to Line Item Mapping functionality allows you to define a one-to-one mapping of a FE to a portfolio column - which comes with the capability, via runchart execution, to read the instrument columns you have allocated in the previous step and propagate the data into the results area for PACS and retrieve the hierarchy of the Bottom Up Income Statement that is consistent with the Top-Down Income Statement created using the Financial Element Hierarchy.

This mapping is already available for the seeded *Income Statement Hierarchy* for the Bottom-Up scenario. However, for a custom Income Statement Hierarchy, if you create new FE's, then those FE's will also require a corresponding Instrument Portfolio column that you have allocated. Additionally, that column, which can be an existing column or placeholder, must be mapped via the **Financial Element Mapping** UI.

After the mapping and hierarchies are in place, the allocations have been run and runcharts are executed, the results area is populated, paving the way for Income Statements at Management Ledger and account levels. Subsequently, these results are consumed by the Reporting Layer, which feeds the reports for – Management Reporting, Profitability Insights, Segmentation, Income Statement at account and customer levels, CLTV Forecast, Customer Group Income Statement and so on.

9 Reports & Analytics

This chapter describes the features and functions of Profitability Analytics Cloud Service's (PACS) and is intended for the use of Administrators, Analysts, Reporting and Analysts.

Profitability and Balance Sheet Management (PBSM) Could Service utilizes the power of Oracle Analytics to generate the Business Intelligence Reports.

Oracle Analytics is a scalable and secure Oracle Cloud Service that provides a full set of capabilities to explore and perform collaborative analytics for you, your workgroup, and your enterprise.

With Oracle Analytics Cloud, you also get flexible Service Management capabilities, including fast setup, easy scaling and patching, and automated lifecycle management.

For more information, see the Oracle Analytics Cloud documentation.

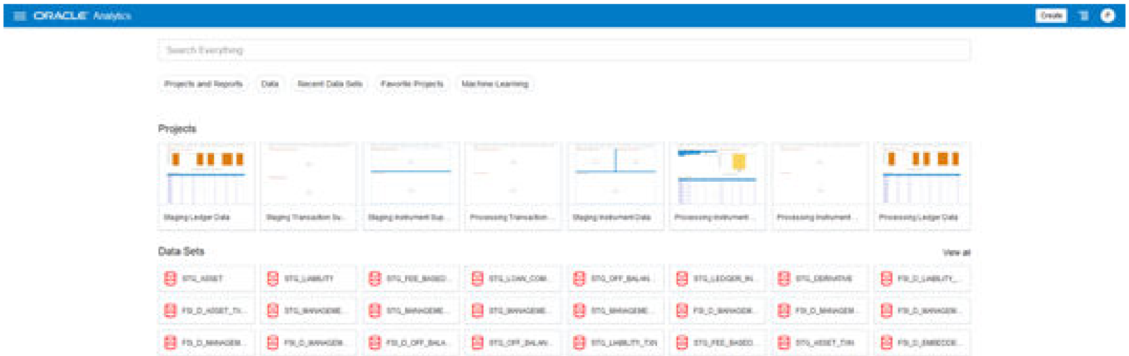
> **Note:**
>
> Please refer to the Doc ID: 2869409.1 to retrieve the Profitability and Balance Sheet Management Cloud Service Glossary of the Reporting Data Model (RPD Subject Areas).

9.1 Access Business Intelligence (BI) Reports

This section describes the steps to access the Business Intelligence (BI) Reports.

To access the Oracle Financial Services Profitability Management Cloud Service BI Reports, from the LHS Menu, select **Analytics**, and then select **Home Page**.

Figure 9-1 Analytics Home Page



9.2 Preparing Data using SQL Query Browser

Data Sets are self-service Data Models that you build specifically for your Data Visualization and Analysis requirements.

A Data Set can be based on one Table, Spreadsheet, or a File. Alternatively, a Data Set can be a self-service Data Model that contains multiple Tables with relationships defined between the Tables.

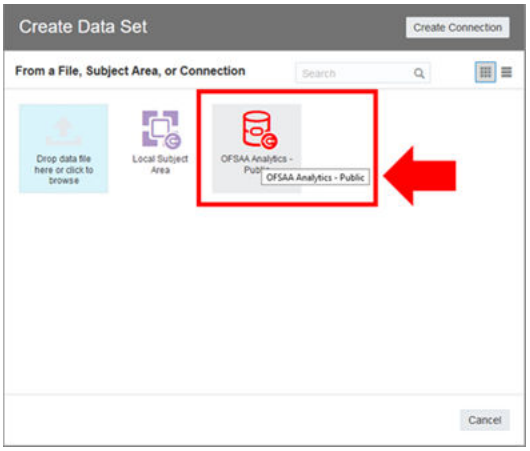
A Data Set contains Data Source Connection Information, Tables, the Columns you specify, and the Data Enrichments, and Transformations that you apply.

For more information, see Visualizing Data and Building Reports in Oracle Analytics Cloud.

To access the SQL Query Browser and prepare Data, follow these steps:

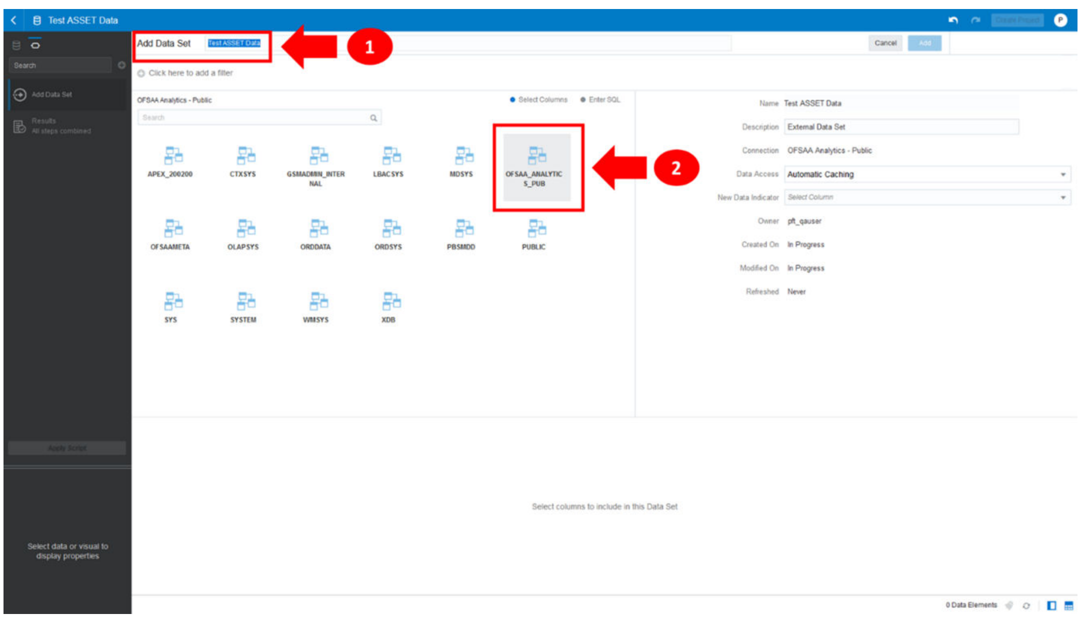
1. From the LHS Menu, select Analytics, and then select SQL Query Browser.
   The SQL Query Browser allows you to use an existing Database Connector named OFSAA Analytics – Public to interact with the underlying available Database Structures.

Figure 9-2 Create Data Set Screen



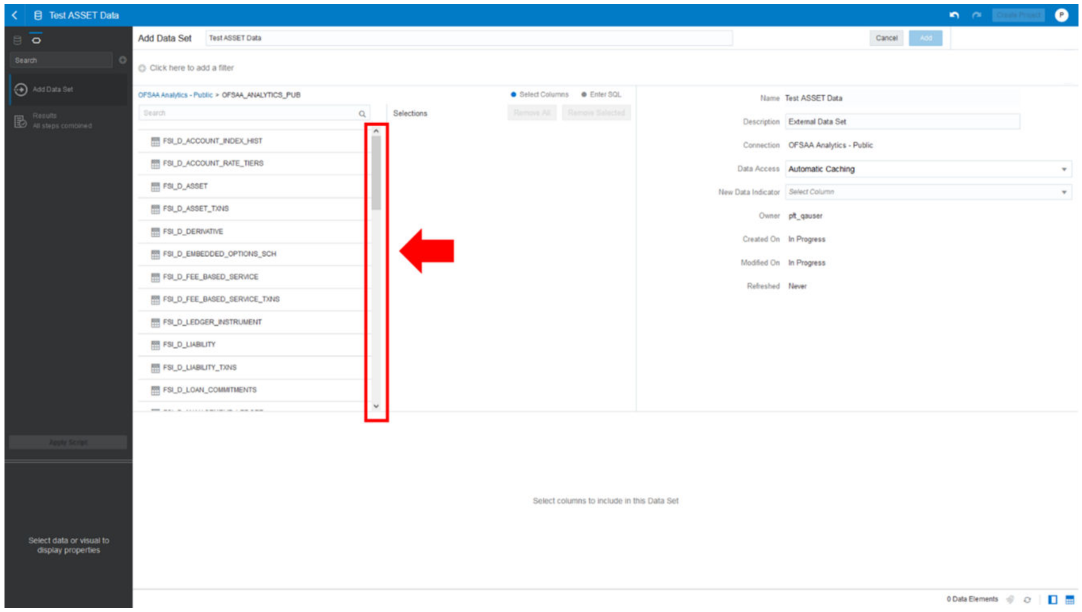
2. After selecting the Database Connector, you must select the Database Schema named OFSAA_ANALYTICS_PUB to proceed to the next step of Database Object Selection.

Figure 9-3 Add Data Set



3. Provide a meaningful name to the Data Set, which will be generated from this process and be used for the SQL Query Analysis.
4. You can search for a Database Object from the available options. You can either scroll down or search the Database Objects displayed in alphabetical order.

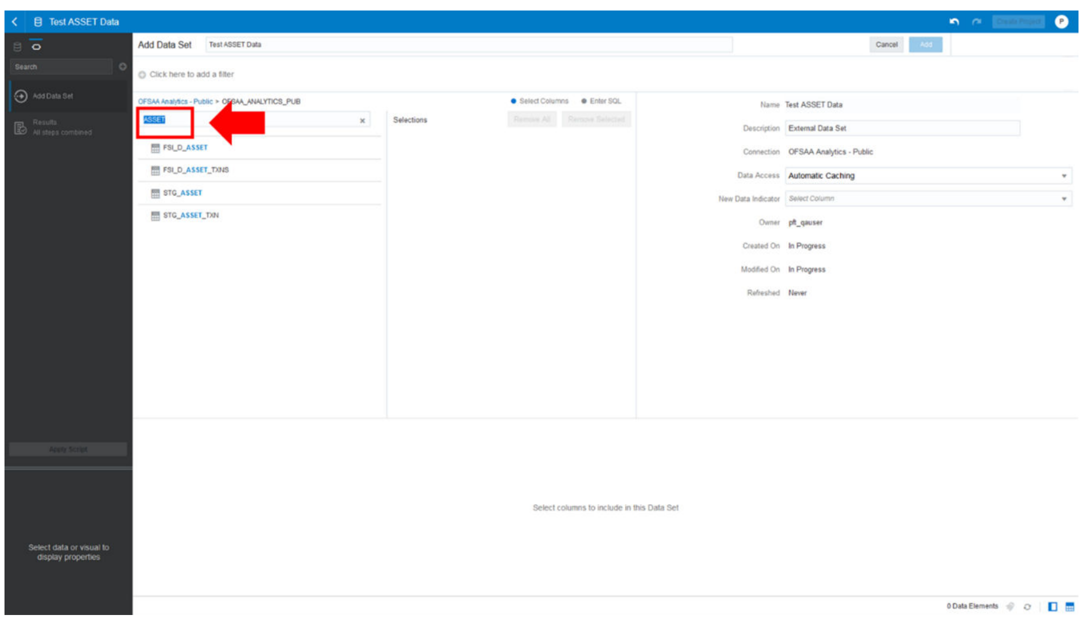
Figure 9-4 Add Data Set – Search from the List



Or

Type the Database Object Name to filter the list with Description.

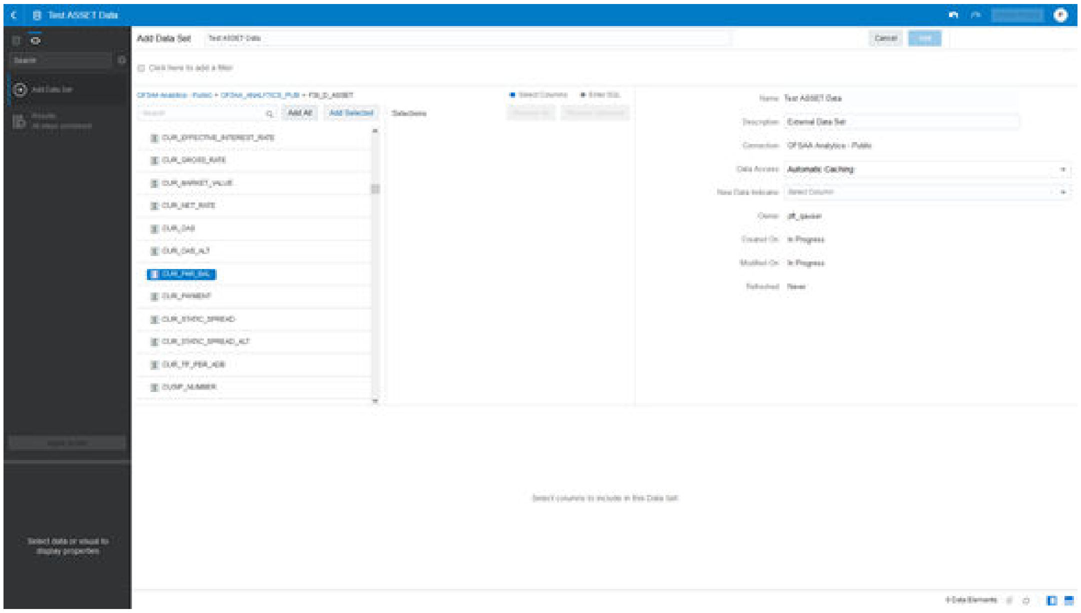
Figure 9-5 Add Data Set – Search by Name



After you select the Object that want, you can proceed to the next step.

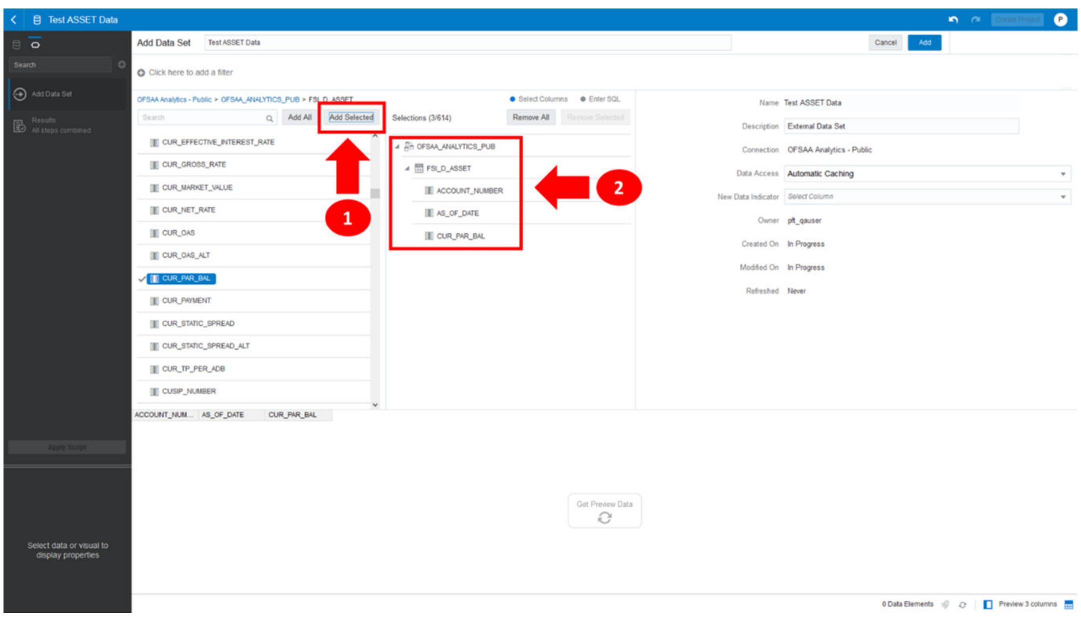
5. You search the Columns that are available for the selected Database Object by scrolling.

Figure 9-6 Add Data Set – Search Columns



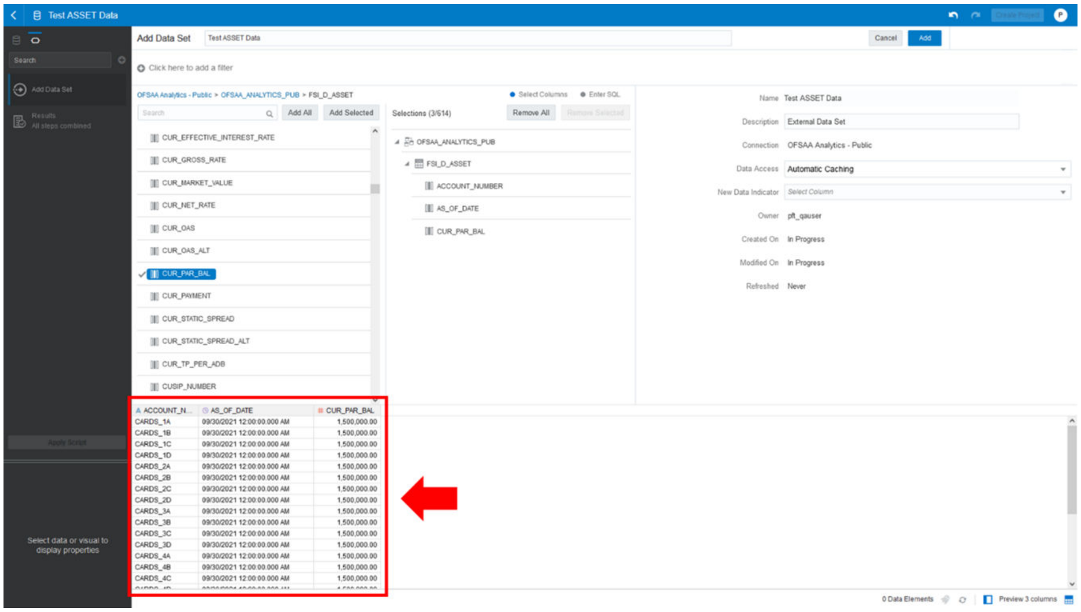
6. Add the Database Object Column as required.

Figure 9-7 Add Data Set – Adding the Database Object Column



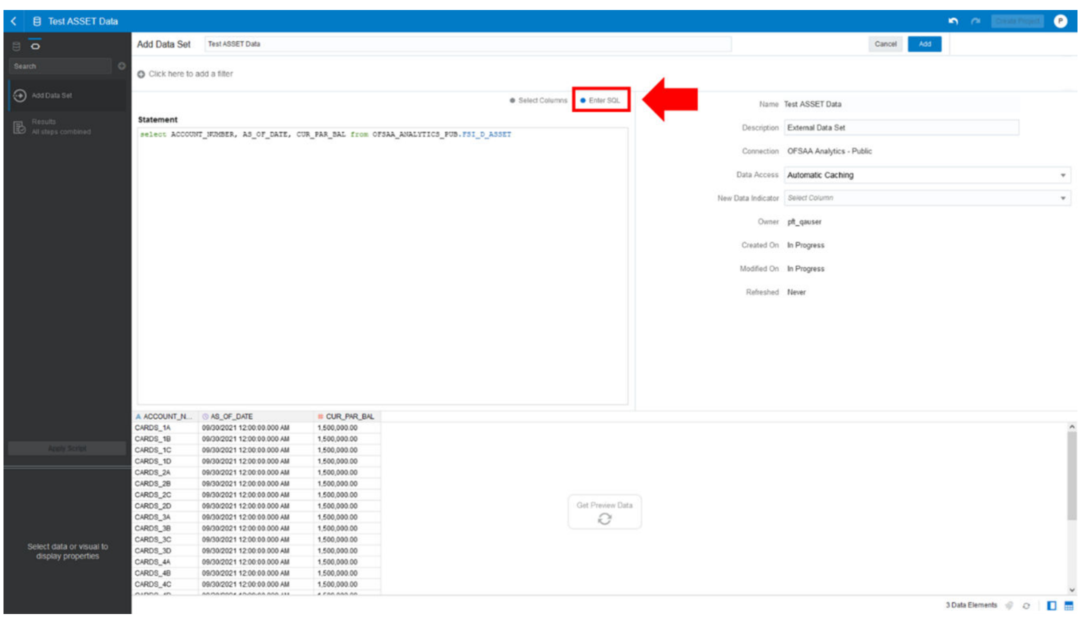
7. Click Get Preview Data to display the retrieved Data Results.

Figure 9-8 Data Results



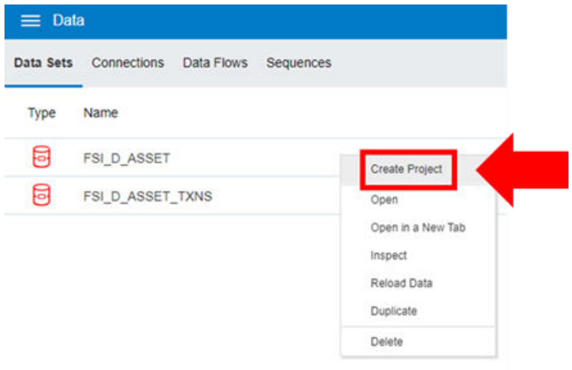
8. In addition, you can switch to the Enter SQL Pane Editor. You can change the auto-generated SQL Query at any time and click Get Preview Data to retrieve the results based on the modified SQL Query.

Figure 9-9 Data Results based on modified SQL Query



9. Click **Add** to save the SQL Data.
10. Click **Data** on the LHS Menu and click **Data Sets** to display the available Data Sets for usage.
11. Right-click on the Data Set name to display the options as shown:

Figure 9-10 Data Set Options



12. In the menu that is displayed, click **Create Project**.

9.3 Operational Analysis

This topic covers the following reports:

- Dimensions Registry
- Currency Rates
- Segment Registry
- Data Quality Checks
- File Uploads Report
- Groups and Roles Report
- Tables and Partitions Report

9.3.1 Dimensions Registry

To access the Dimensions Registry report, from the LHS menu, select **Operational Analysis**, and then select **Dimensions Registry**.

This is arranged as a set of reports catering to the analysis of the following categories:

- Financial Element
- Legal Entity
- Common COA
- GL Account
- Org Unit
- Product
- Industry
- Branch
- Geography
- IFRS9 Stage

9.3.2 Currency Rates

To access the Currency Rates report, from the LHS menu, select **Operational Analysis**, and then select **Currency Rates**.

Reporting Currency Rates is the currency in which an entity's financial statements or other financial documents are reported. Choosing one currency for reporting makes it easier to understand the financial documents across the board.

This is arranged as a set of reports catering to the analysis of the following categories:

- Floating Segment Rate
- Fixed Exchange Rate
- Exchange Rate

9.3.3 Segment Registry

To access the Segment Registry report, from the LHS menu, select **Operational Analysis**, and then select **Segment Registry**.

- This canvas shows an operational view of the segments for defined Segment Types, that were created using the segmentation UI. In particular, the reports focus on providing inputs on –.
- Segment Mapping Dimensions.
- Dimension Range Look Ups.
- Possible Intersection zones in case the same ranges for a particular dimension has been used in defining multiple Segments.

Report Filters

The following Report Filters are available:

- **Retail** or **Wholesale** Flag: You can use this filter to select customer type identification by category to retail or wholesale.
- **Segment Type**: You can use this filter to select a specific Segment Type for the Customer Profile.
- **Segment Name**: You can use this filter to select a specific Segment Type under the classification of segmentation Gold, Silver, Platinum, or Bronze.
- **Dimension Map Lookup Type**: You can use this filter to select an Exact Match or Range.
- **Segment Dimension Name**: You can choose an analysis dimension to assign to the report, they can be: ASSET Balance, Age, AVG Transaction Amount, Credit Score, Income, NIBT, No of Accounts, No of Transactions.
- **Band**: You can use this filter to select a specific range to define your band.

9.3.4 Data Quality Checks

To access the Data Quality Checks report, from the LHS menu, select **Operational Analysis**, and then select **Data Quality Checks**.

Data Quality Check Reports are divided into four canvases.

- DQ Check Platform Availability
- DQ Batch Executions
- DQ Results
- DQ Detail Results

DQ Check Platform Availability

You can use the following filters:

- **DQ Rule Name**: Rules created in the Application
- **Base Table**: Base tables used in the rules
- **Severity Values**: Error, Warning, Info

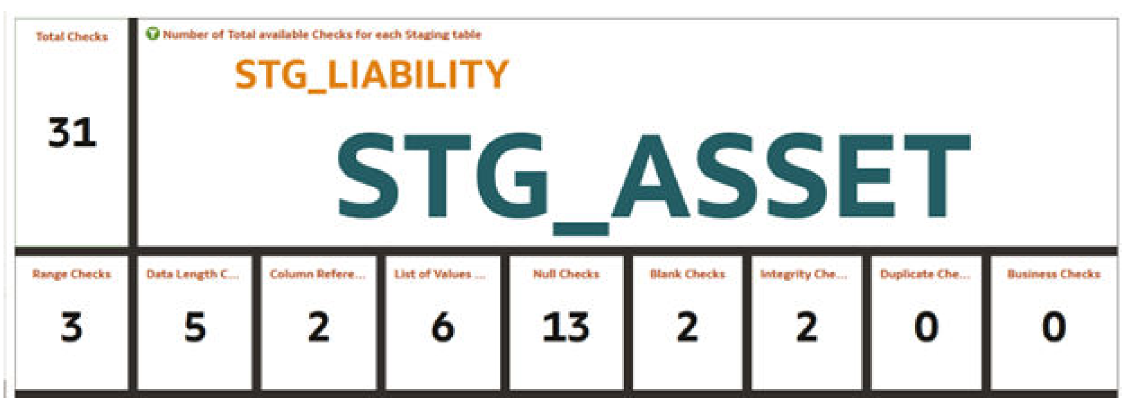
Total Checks: Number of Checks created in the OFSAA Application.

Number of Total available checks for each Staging table: Gives the information regarding number of checks based on the various staging tables.

The following reports gives the information regarding the number of various checks created.

- **Range Checks**: Total number of Range checks defined in the system.
- **Data Length Checks**: Total number of Data Length checks defined in the system.
- **Column Reference Checks**: Total number of Column Reference checks defined in the system.
- **List of Values Checks**: Total number of List of values check defined in the system.
- **Null Checks**: Total number of Null checks defined in the system.
- **Blank Checks**: Total number of Blank checks defined in the system.
- **Integrity Checks**: Total number of Integrity checks defined in the system.
- **Duplicate Checks**: Total number of Duplicate checks defined in the system.
- **Business Checks**: Total number of Business checks defined in the system.

Figure 9-11 Number of Total available Checks for each Staging table



Data Quality Checks Distribution gives the distribution of checks based on the base tables.

Detail of Available quality checks in the platform gives the percentage distribution according to severity category defined on different Staging tables.

Figure 9-12 Detail Quality Checks Distribution and Detail of Available Quality Checks in the Platform

DQ Batch Executions Canvas

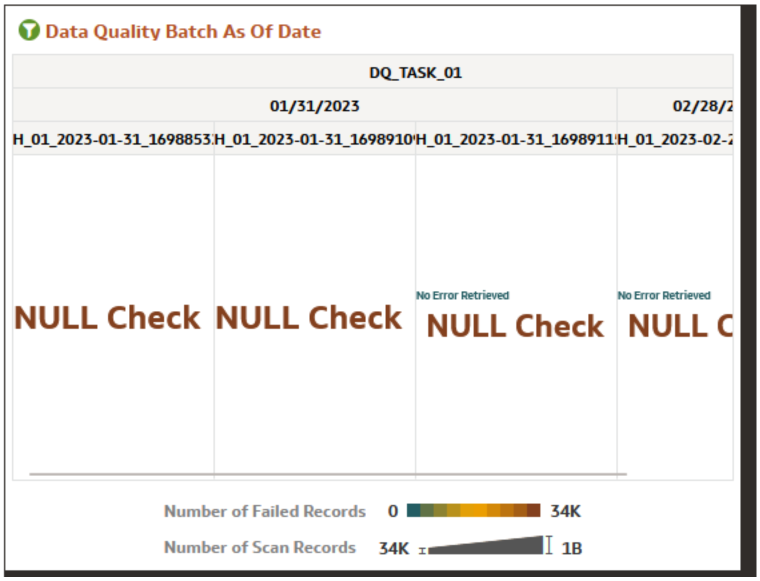
This canvas gives the information regarding the Batches executed on Data Quality Checks.

You can use the following filters:

- **Batch Identifier**: Batches executed in the system.
- **Process Identifier**: Process Name for the executed batch in the system.
- **Fic Mis Date**: Batch execution date.
- **DQ Group Identifier**: Data Quality Groups created in the system.
- **DQ Group Description**: Description of Data Quality Groups.
- **DQ Check Identifier**: Data Quality checks created in the system.
- **DQ Check Description**: Description of Data Quality checks.
- **DQ Source Table**: Base table on which Data Quality check is created.
- **DQ Category Name**: Data Quality check category.

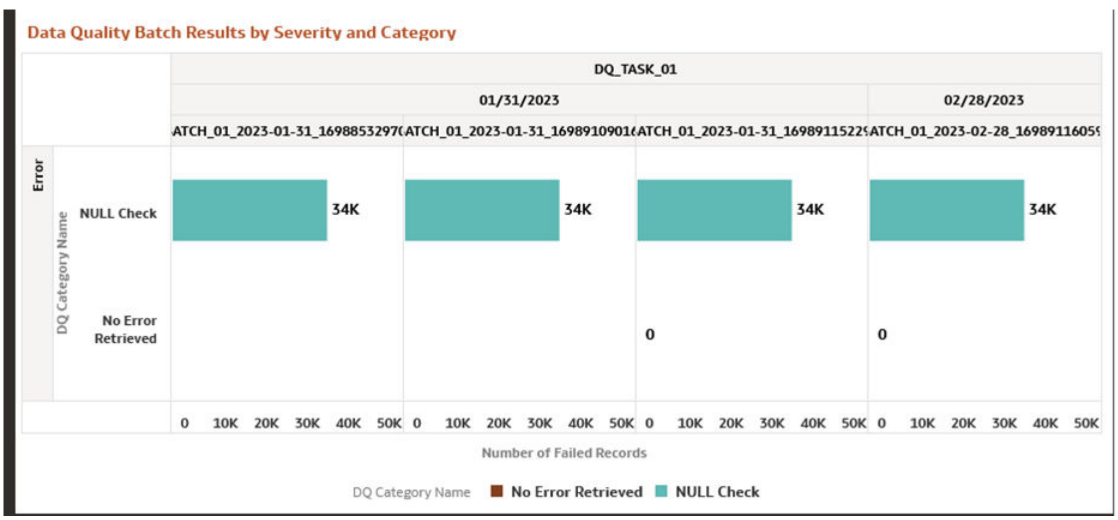
Data Quality Batch As Of Date: This report provides details on the executed checks, including the date of execution, Batch name, and the count of scanned records and failed records against each defined check and corresponding to Data Quality Category name.

Figure 9-13   Data Quality Batch As Of Date



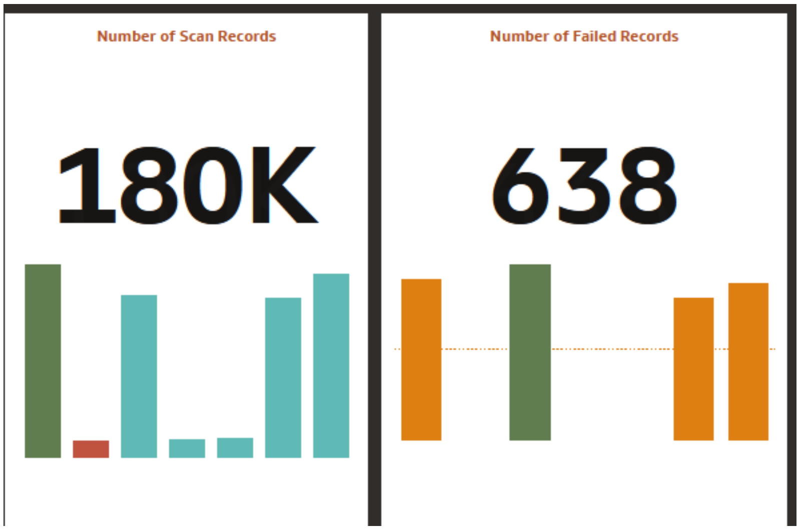
Results of Data Quality Batches by Severity and Category: This report provides details on the quantity of failed records across various batches, including the execution date and batch name according to Data Quality Category Name.

Figure 9-14   Data Quality Batch Results by Severity and Category



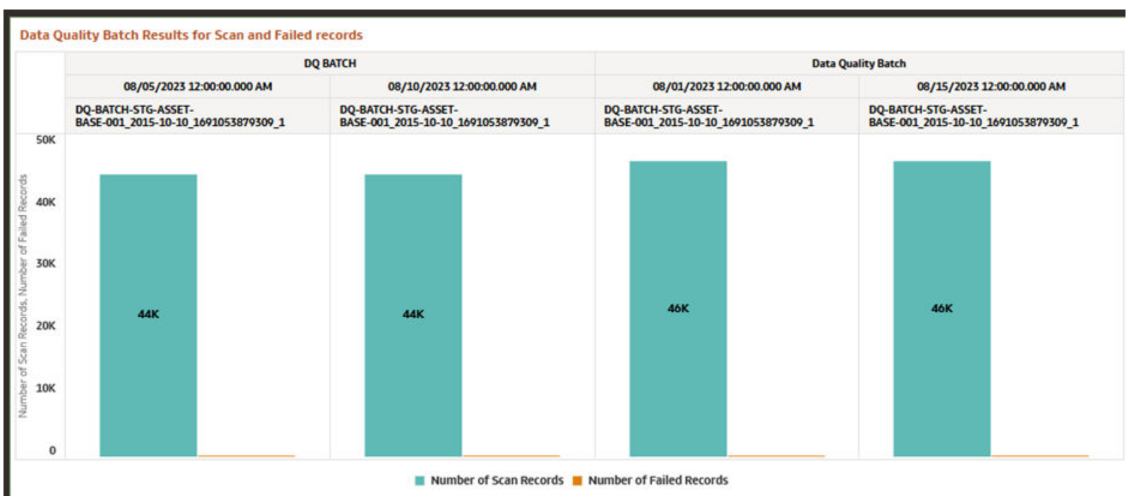
These tile reports display information about total number of scanned records and total number of failed records according to the last available Data Quality batch execution.

Figure 9-15   Number of Scan Records and Number of Failed Records



Results of Data Quality Batches for Scanned and Failed Records: This report presents a bar chart illustrating the total number of scanned records and total number of failed records, categorized by batch name and execution date.

Figure 9-16   Data Quality Batch Results for Scan and Failed Records



DQ Results

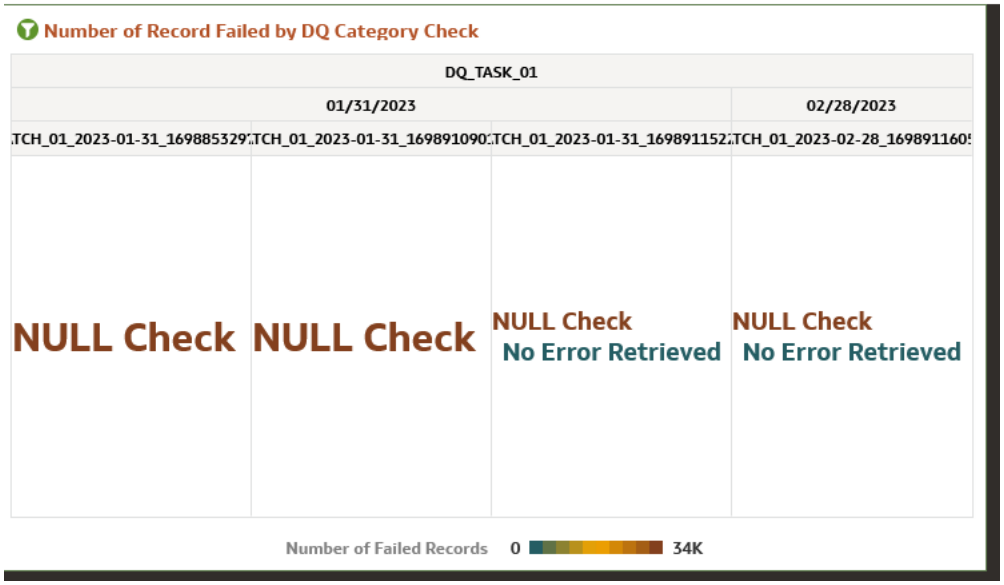
You can use the following filters:

- **Batch Identifier**: Batches executed in the system.
- **Process Identifier**: Process Name for the executed batch in the system.
- **Fic Mis Date**: Batch execution date.
- **DQ Group Identifier**: Data Quality Groups created in the system.
- **DQ Group Description**: Description of Data Quality Groups.

- **DQ Check Identifier**: Data Quality checks created in the system.
- **DQ Check Description**: Description of Data Quality checks.
- **DQ Source Table**: Base table on which Data Quality check is created.
- **DQ Category Name**: Data Quality check category.

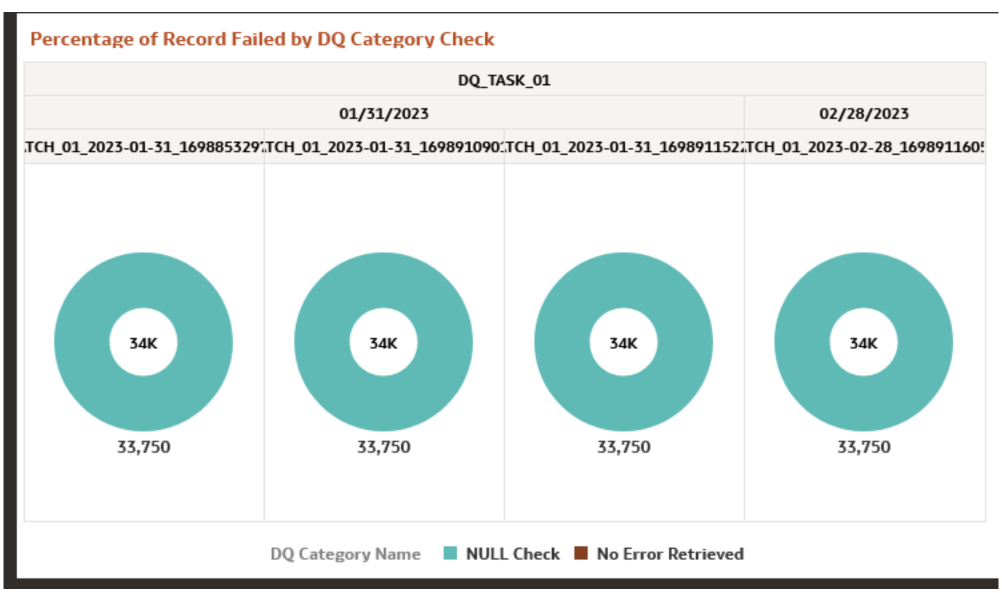
Number of Records Failed by Data Quality Category Check: This report showcases the number of failed records for each Data quality check by batch names and execution dates according to Data Quality Category Name.

Figure 9-17 Number of Record Failed by DQ Category Check



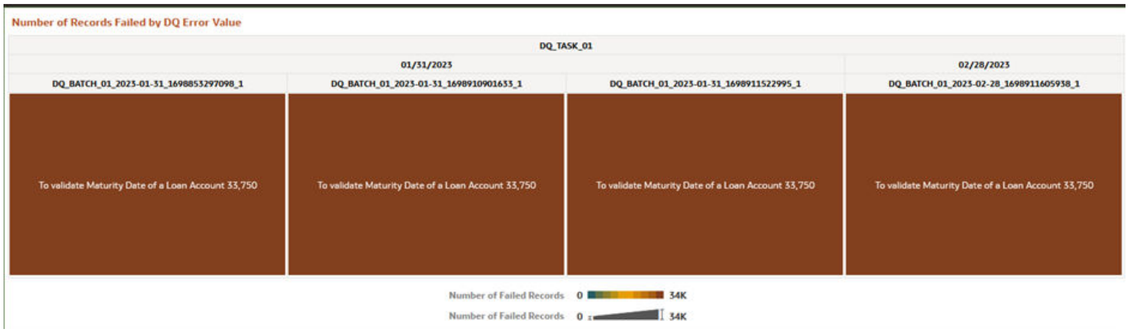
Percentage of Record Failed by DQ Category Check: This report gives the information regarding Percentage distribution and total number of checks by batch names and execution dates displayed by Data Quality Category Name.

Figure 9-18 Percentage of Record Failed by DQ Category Check



Number of Records Failed by DQ Error Value: This report shows the information regarding number of errors along with the Data Quality Check Description separated by batch names and execution dates.

Figure 9-19 Number of Records Failed by DQ Error Value



DQ Detail Results

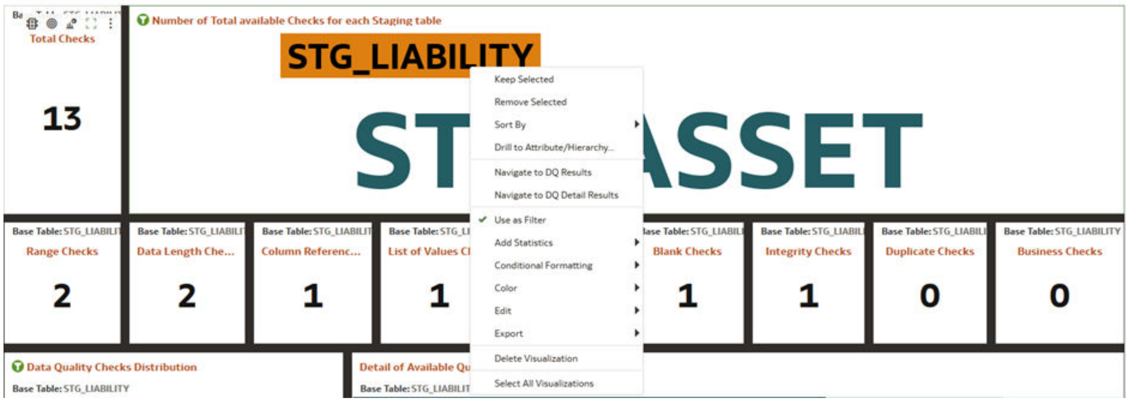
This canvas gives the detailed information regarding the Data Quality Batch information.

Figure 9-20 DQ Detail Results

DQ Detail Results

Fic Mis Date	Batch Identifier	Process Identifier	DQ Group Identifier	DQ Group Description	DQ Check Identifier	DQ Check Description	DQ Category	DQ Category Name	DQ Source Table	DQ Source Column	Severity Values	Error Value	Default Value	Owner	Number of Scan Records	Number of Failed Records	N_THRESHOLD_PERCENT	Iteration Count	Threshold Flag	Source PK Colu
10/10/2015	T001	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments _PBSMCS 001	DQRL-PBSM-BASE-0001	Account Number of the customer in Stage Assets should not have blank spaces		No Error Retrieved	STG_ASSET	ACCOUNT_NUMBER	Error			CFETEST	1,914	0	1	1	N	
10/10/2015	T001	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments _PBSMCS 001	DQRL-PBSM-BASE-0002	Transaction fees in Stage Assets must not be greater than Annual fees		No Error Retrieved	STG_ASSET	FRGN_TXN_FEES	Error			CFETEST	1,914	0	1	1	N	
10/10/2015	T001	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments _PBSMCS 001	DQRL-PBSM-BASE-0006	Amortization Term Multiplier in Stage Assets should have list of values as Y/N		No Error Retrieved	STG_ASSET	AMRT_TERM_MULT	Error			CFETEST	1,914	0	1	1	N	
10/10/2015	T001	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments _PBSMCS 001	DQRL-PBSM-BASE-0007	Common Chart Of Account Code in Stage Assets should be present	93	NULL Check	STG_ASSET	COMMON_COA_CODE	Error			CFETEST	17,226	9	9	9	N	ACCOUNT_NUMBER,A
10/10/2015	T001	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments _PBSMCS 001	DQRL-PBSM-BASE-0009	General Ledger Account Code in Stage Assets should be Not Null	93	NULL Check	STG_ASSET	GL_ACCOUNT_CODE	Warning		-1	CFETEST	17,226	9	9	9	N	ACCOUNT_NUMBER,A
08/01/2023	Data Quality Batch	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments _PBSMCS 001	DQRL-PBSM-BASE-0001	Account Number of the customer in Stage Assets should not have blank spaces		No Error Retrieved	STG_ASSET	ACCOUNT_NUMBER	Error			CFETEST	2,431	0	1	1	N	
08/01/2023	Data Quality Batch	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments _PBSMCS 001	DQRL-PBSM-BASE-0002	Transaction fees in Stage Assets must not be greater than Annual fees		No Error Retrieved	STG_ASSET	FRGN_TXN_FEES	Error			CFETEST	2,179	0	1	1	N	
08/01/2023	Data Quality Batch	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments _PBSMCS 001	DQRL-PBSM-BASE-0006	Amortization Term Multiplier in Stage Assets should have list of values as Y/N		No Error Retrieved	STG_ASSET	AMRT_TERM_MULT	Error			CFETEST	2,403	0	1	1	N	
08/01/2023	Data Quality Batch	DQ-BATCH-STG-ASSET-BASE-001_2015-10-10_1691053879309_1	DQG-PBSM-BASE-STG_ASSET_0001	Data Quality Group for Stage Asset Instruments	DQRL-PBSM-BASE-0007	Common Chart Of Account Code in Stage	93	NULL Check	STG_ASSET	COMMON_COA_CODE	Error			CFETEST	19,243	74	9	9	N	ACCOUNT_NUMBER,A

Figure 9-21 Data Action



Data Action: A Data Action link can pass context values as parameters to other canvas. In Data Quality Reports we have two data actions namely DQ Results and DQ details results.

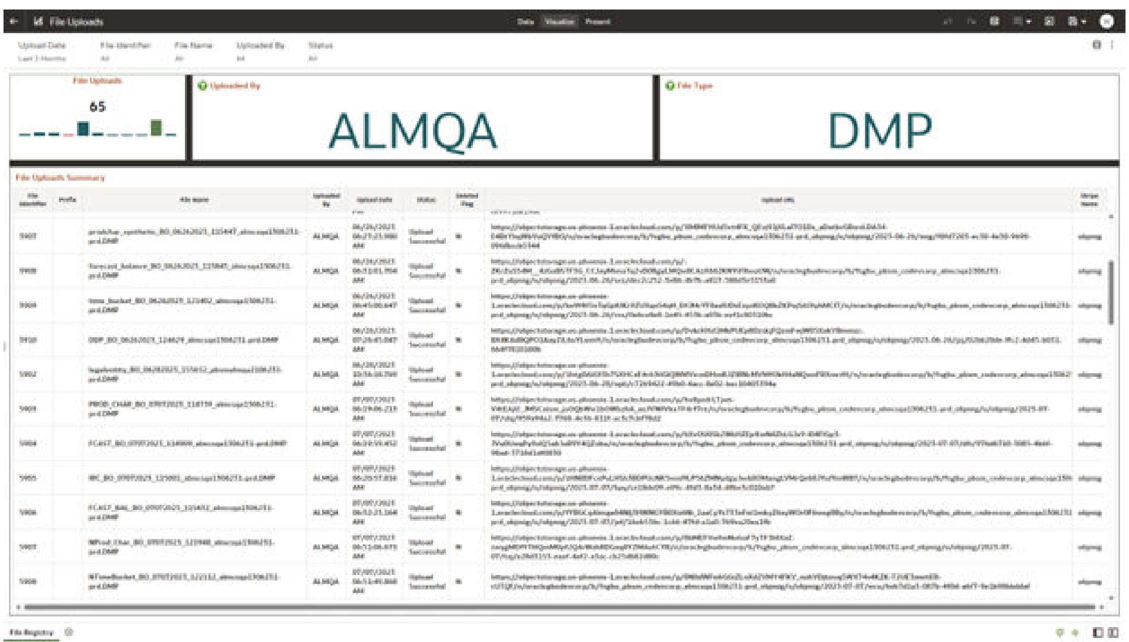
DQ Results: When user right clicks on any element and navigates to DQ Result, the selected object will get passed as a filter and pass this filter in DQ results Canvas.

DQ Result Details: When user right clicks on any element and navigates to DQ Result Details, the selected object will get passed as a filter and pass this filter in DQ Results Details Canvas.

9.3.5 File Uploads Report

To access the File Uploads report, from the LHS menu, select **Operational Analysis**, and then select **File Uploads**.

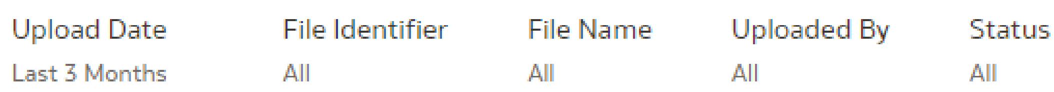
Figure 9-22 File Upload Report



Report Common Filters

You can use a series of canvas level pinned Prompts to filter the data according to Functional Key Attributes as follows:

Figure 9-23 Canvas Prompt Filters



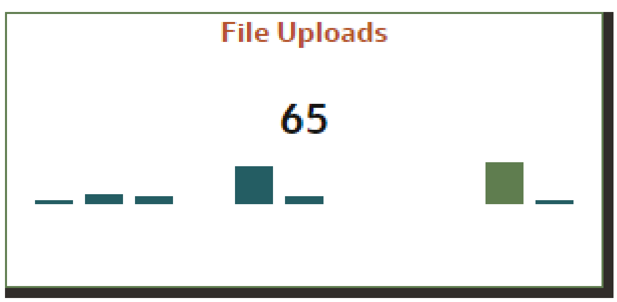
The following filters are available:

- **Update Date**: Use this filter to select the Update Date. The selection default is Last 3 Months.
- **File Identifier**: Use this filter to select a specific File Identifier.
- **File Name**: Use this filter to select a specific File Name.
- **Upload By**: Use this filter to select Upload By.

Canvas File Uploads

This chart shows the total number of files uploaded based on a reporting period.

Figure 9-24 Canvas File Uploads



Canvas Uploads by

This filter enables you to view the details of the users who have uploaded the files via the UI or batch process.

Figure 9-25 Canvas Uploads by

Canvas File Type

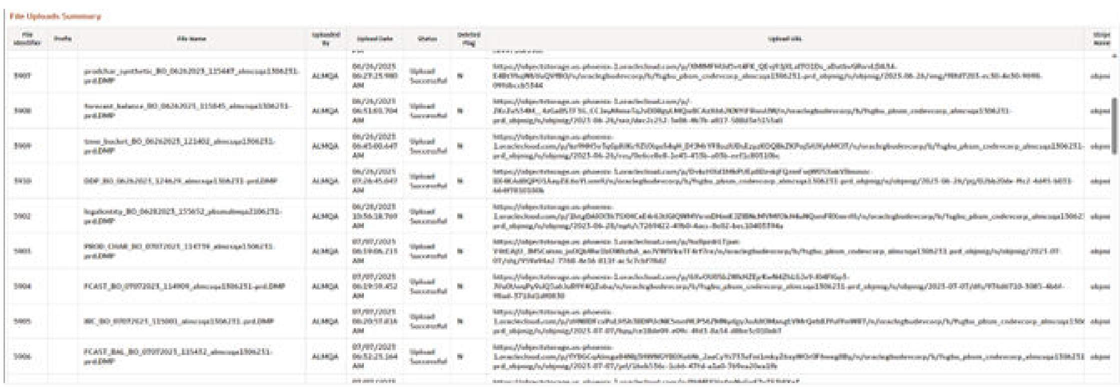
This filter the data by the file type. In this case, it's DMP, but it can be CSV, TXT, or other formats supported by the UI.

Figure 9-26   Canvas File Type

Canvas Summary

This table gives a clear view of detailed file upload information, that is displayed based on the search filters. Here, you can see the file identifier, prefix, File Name, the user who uploaded the file, Upload Data, status, Deleted Flag – which identifies if the file has been deleted, and the Upload URL.

Figure 9-27   Canvas Summary



9.3.6 Groups and Roles Report

To open the Group and Users Report, from the LHS menu, select **Operational Analysis**, and then select **Groups and Roles Report**.

The Groups and Roles Report Reporting reports section is arranged as a set of canvases, classified into the following:

- Master Registry for Groups - Roles - Functions
- User to Groups Mapping
- Group to Roles Mapping
- Roles to Functions Mapping

Report Common Filters

You can use a series of canvas-level pinned Prompts to filter the data according to Functional Key Attributes as follows:

Figure 9-28 Canvas Prompt Filters for Users, Groups and Roles

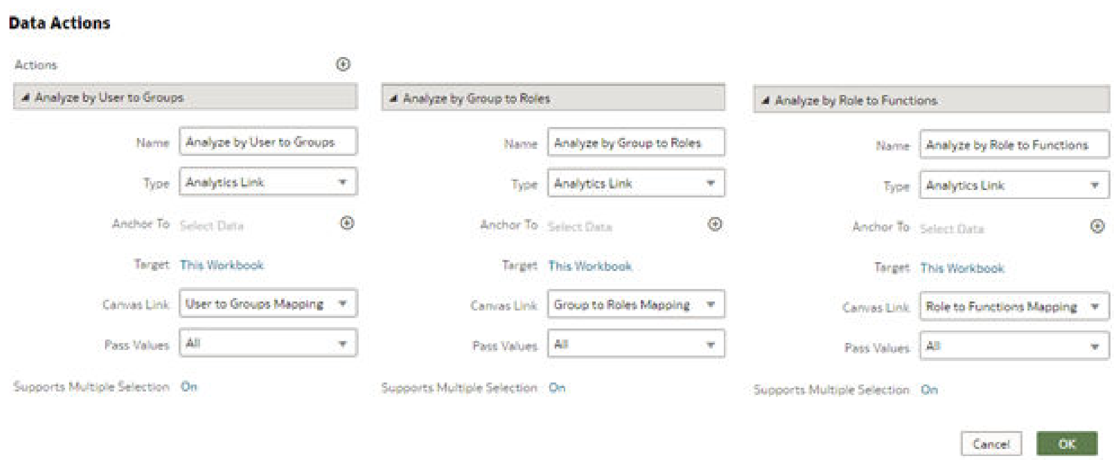
The following filters are available:

- **User ID**: To select/search for a specific user ID.
- **Group Code**: To select/search for a specific group code.
- **Group Name**: To select/search for a specific group name.
- **Role Name**: To select/search for a specific role name.
- **Role Code**: To select/search for a specific role code.
- **Function Code**: To select/search for a specific function code.
- **Function Name**: To select/search for a specific function name.

Report Data Action

The reports provide the capability to analyze data across canvases via a Data Action. The following are the Data Action Configuration details:

Figure 9-29 Data Action Configuration



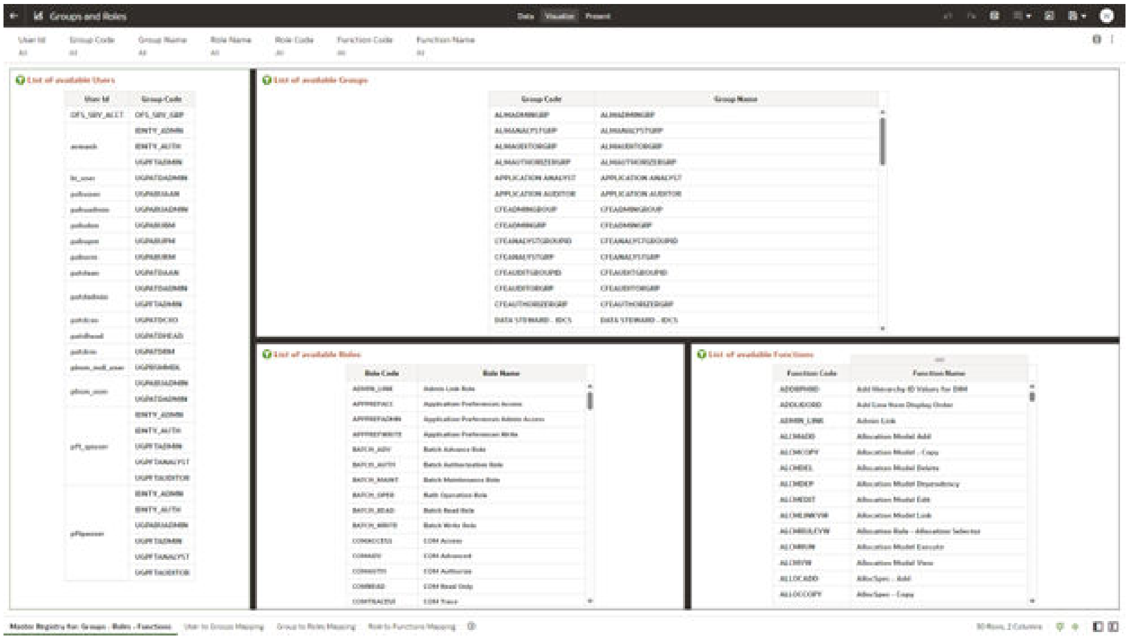
You can analyze by User to Groups, Group to Roles, or Role to Functions.

Report Master Registry For Groups, Rules, Functions

The Master Registry for Groups-Roles-Functions, displays users mapped from the IAM into PBSMCS applications based on the user ID, user group, and related roles and functions, which are assigned to off the shelf groups.

Note that, IAM enables you to set up and manage users and groups, and assigns users to different user groups. You can also use the interactive charts available in the report to analyze the groups, roles, and functions for a given user.

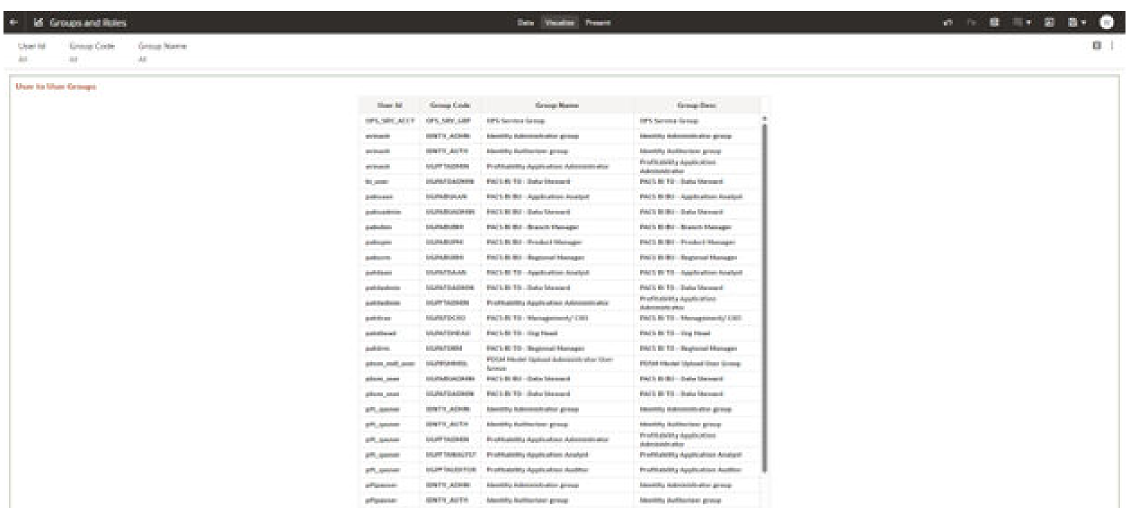
Figure 9-30 Groups and Roles



User Group Mapping

In this canvas, you can view the User ID, Group Code, Group Name, and the Group Description. By using the User ID filter at top to search for a particular user, you can see the corresponding group name and description for the selected user.

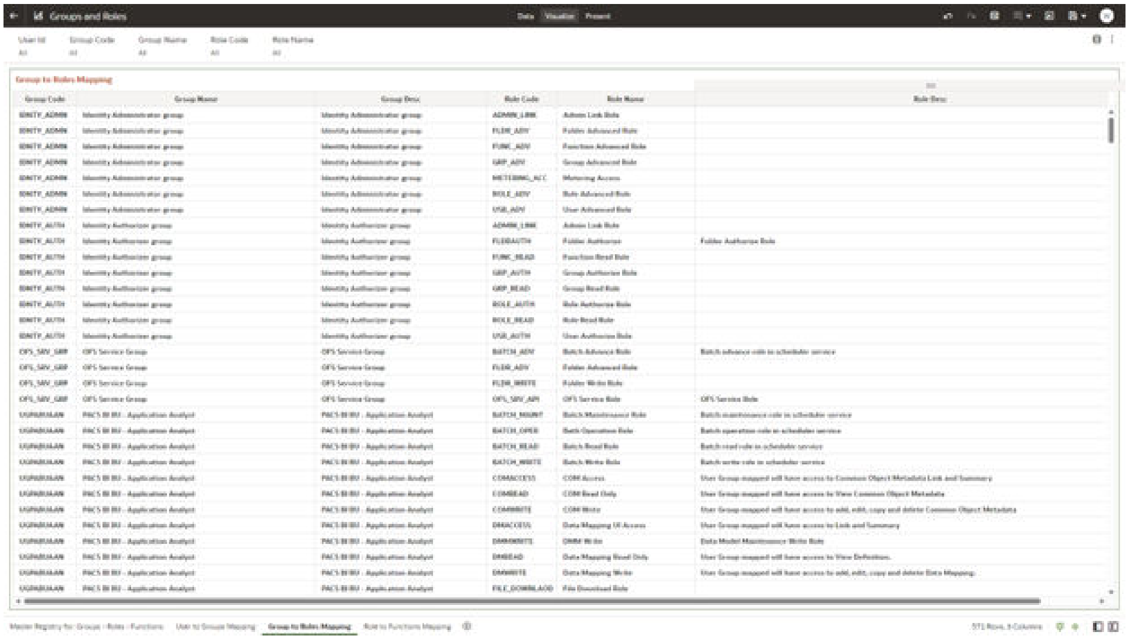
Figure 9-31 User Group Mapping



Group to Rules Mapping

In this canvas, you can filter using User ID, Group Code, Group Name, Role Code, and Role Name. For example, you can filter using a particular role name to view the groups assigned to that role.

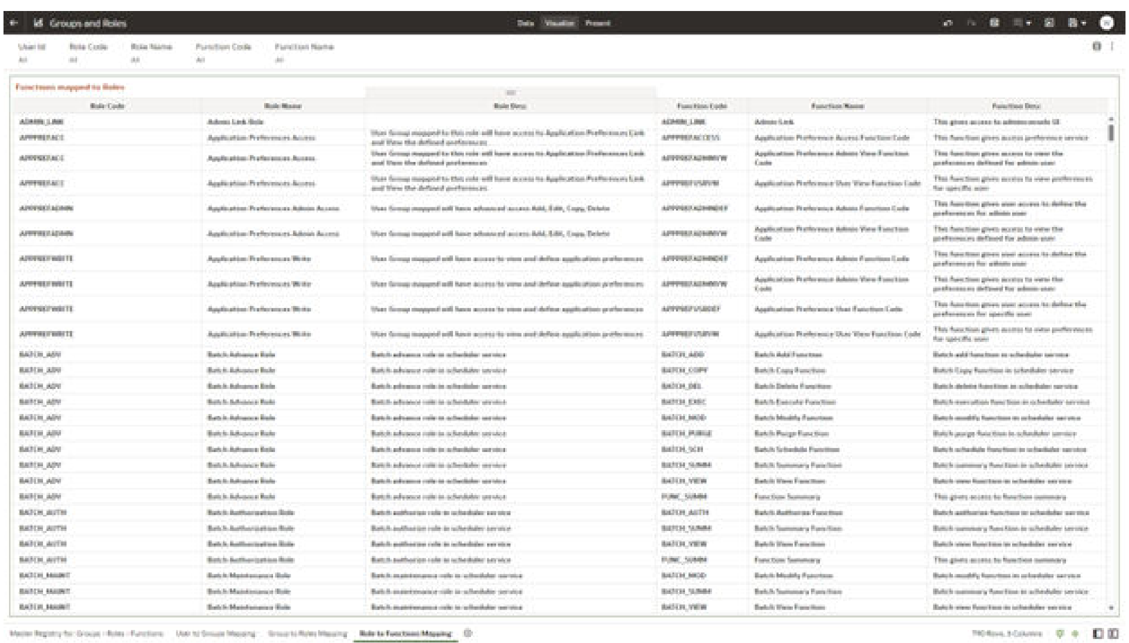
Figure 9-32 Groups to Role Mapping



Rule to Functions Mapping

This canvas displays all the functions mapped to the roles. You can filter based on User ID, Role Code, Role Name, Function Code and Function Name. For example, you can select a particular role, to view the role name, description, and the function assigned to that role.

Figure 9-33 Role to Functions Mapping



9.3.7 Tables and Partitions Report

The Tables and Partitions Report displays all the tables, partitions, and subpartitions into PACS and PBSM schema for monitoring the details in the tables.

To open the Tables and Partitions Report, from the LHS menu, select **Operational Analysis**, and then select **Tables and Partitions Report**.

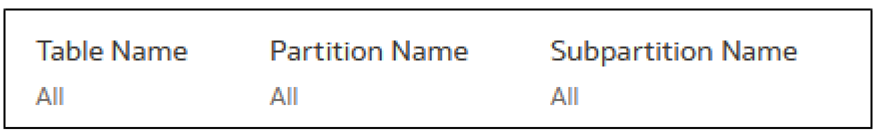
The Tables and Partitions reports section is arranged as a set of canvases, classified into the following:

- PA Tables and Partitions
- PA Tables and SubPartitions
- PBSM Tables and Partitions
- PBSM Tables and SubPartitions

Report Filters

You can use a series of canvas-level pinned Prompts to filter the data according to Functional Key Attributes as follows:

Figure 9-34 Canvas Prompt Filters



The following filters are available:

- **Table Name**: To select/search for a specific Table Name.
- **Partition Name**: To select/search for a specific Partition Name.
- **Subpartition Name**: To select/search for a specific Subpartition name.

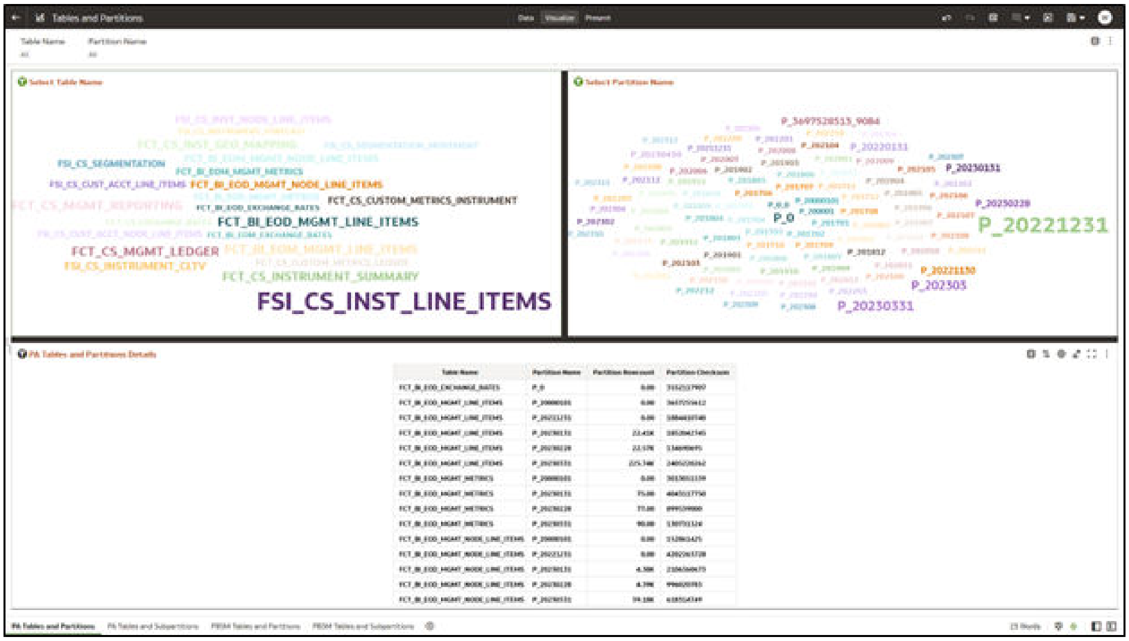
PA Tables and Partitions

The ALL views show the Partitions as the case be in the PACS Schema.

The two target cloud charts present are: Table Name, Partition Name. You can click on a specific Table or Partition name in the Target Cloud chart to get finer level details on number of rows and checksum.

The table view details present: Table Name, Partition Name, RowCount, and CheckSum.

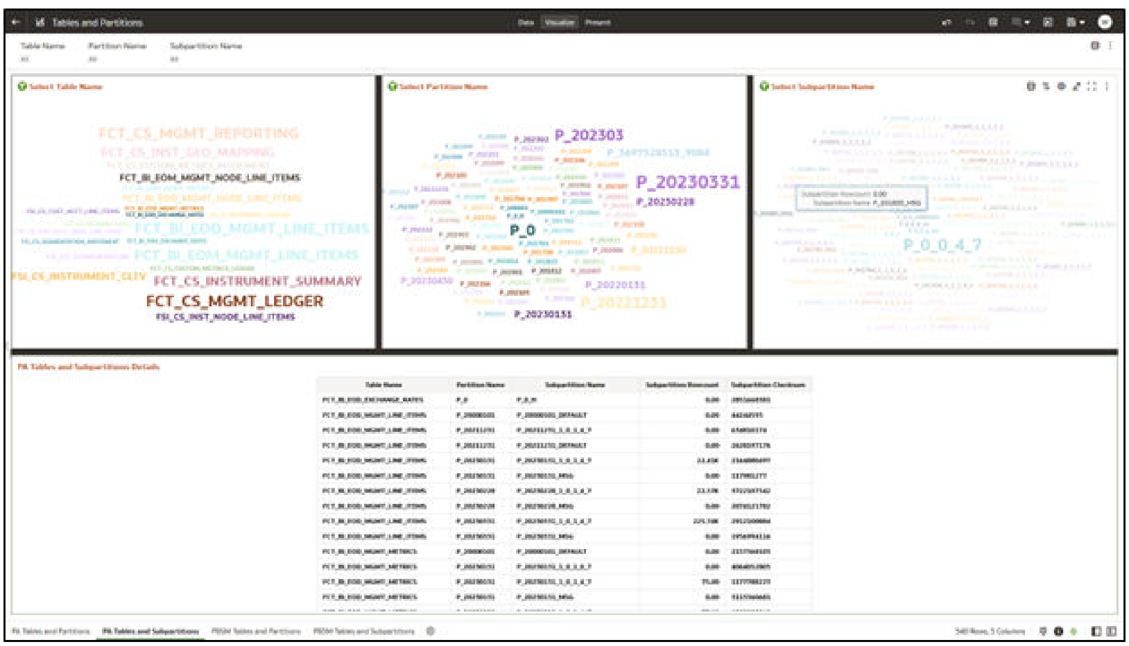
Figure 9-35   Operation Analysis - Tables and Partitions



PA Tables and SubPartitions

The ALL views show the SubPartitions as the case be in the PACS Schema.

Figure 9-36   Operation Analysis - Profitability Analytics Cloud Service Tables and Partitions



PBSM Tables and Partitions

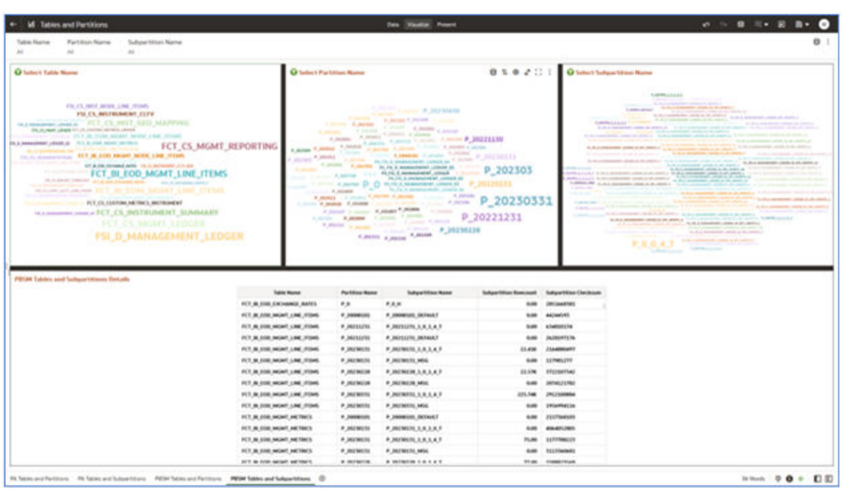
The functionality of this canvas is similar to PACS canvas of the same name. The ALL views show the Partitions as the case in the PBSM Schema.

Figure 9-37 Profitability and Balance Sheet Management Cloud Service Tables and Partitions

PBSM Tables and SubPartitions

The functionality of this canvas is similar to PACS canvas of the same name . The ALL views show the SubPartitions as the case in the PBSM Schema.

Figure 9-38 Profitability and Balance Sheet Management Cloud Service Tables and SubPartitions



9.4 Management Reporting

To access the PA Management Reporting canvas, select Analytics from the LHS Menu, and then select Management Reporting.

> **Note:**
>
> Before generating reports and analytics, it is mandatory to set the relevant currencies and currency rates. This is required for generating the reports with correct values. For more information about creating currencies and currency rates, see the following:
>
> - Currencies
> - Currency Rates

Management Reporting is designed to provide timely and actionable Management Reports across organization, line of business, products, and legal entities. In addition to standard income statement and balance sheet reporting, you also get Risk Adjusted Performance Management (RAPM) reporting and scenario comparison analysis for profitability measures.

To feed the Management Reporting, refer to the *Oracle Financial Services Profitability Analytics Cloud Service Data Flow* document available at Doc ID: 28694909.1.

For the Management Reporting, refer to the following Data Flow sub-sections:

- PACS – Management Ledger
- PACS – Management Reporting
- PACS – Management Line Items & Metrics

For Income Statement and Balance Sheet Hierarchies, or any other Hierarchy created out of Financial Element dimension, a Financial Element carrying a percentage value cannot be added as a child, Sibling to a child or Leaf under Parent/ Child/ Sibling in the Hierarchy. Users are expected to be mindful not to map a portfolio column to a FE denoting a rate or apply an expression, where a divisor is used in a way that the column value effectively becomes a rate, thus preventing a meaningful roll-up to the node of the hierarchy.

9.4.1 Management Ledger Based Reporting

You can use the Management Reporting section to perform analysis on summary Top Down numbers fed from the General Ledger.

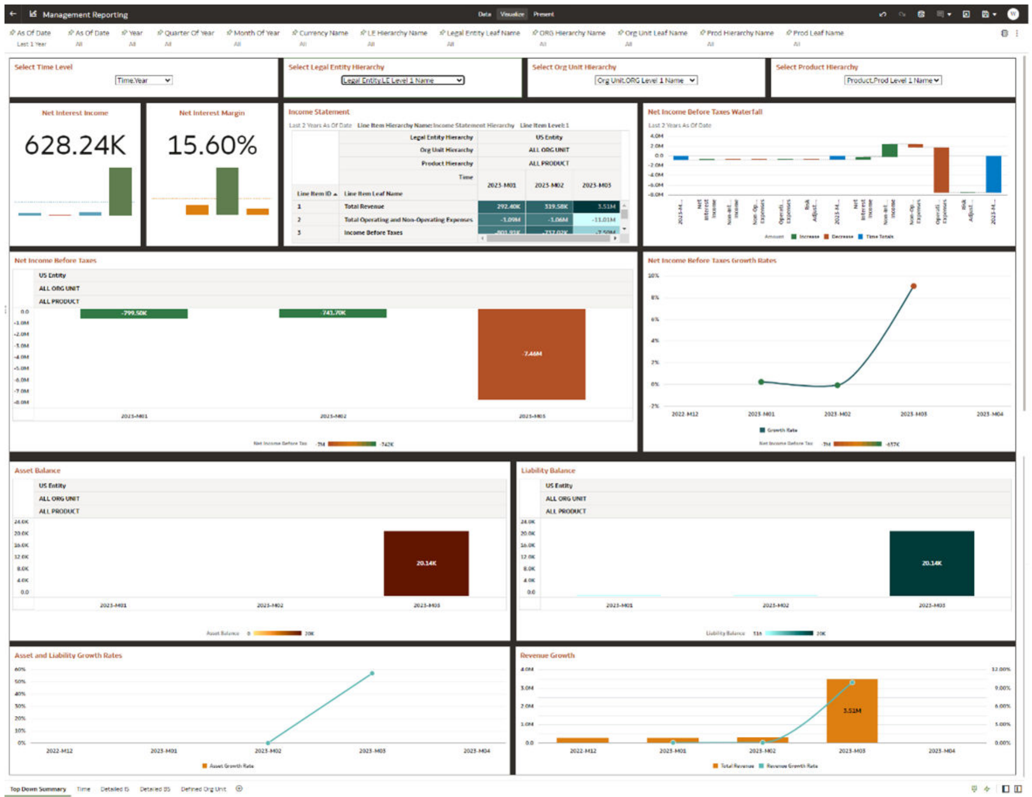
The report provides you analysis on the Income Statement, its drivers, key profitability metrics and balances. Trends are available for all of them including comparisons with Budget and Operating Plan. Analysis at the Organization Unit level including comparisons of the Top performing and bottom performing units are also provided.

The BI includes display of absolute values as well as growth rates over the previous available periods for key data elements. The Management Reporting reports section is arranged as a set of canvases, classified into the following:

- Top Down Summary
- Time
- Detailed IS

- Detailed BS
- Defined Org Unit

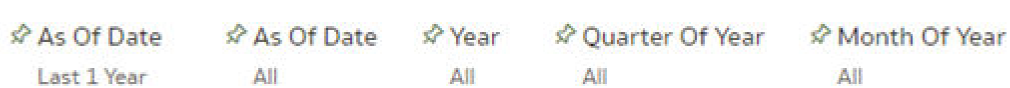
Figure 9-39 Management Ledger Based Reporting



9.4.1.1 Report Common Filters

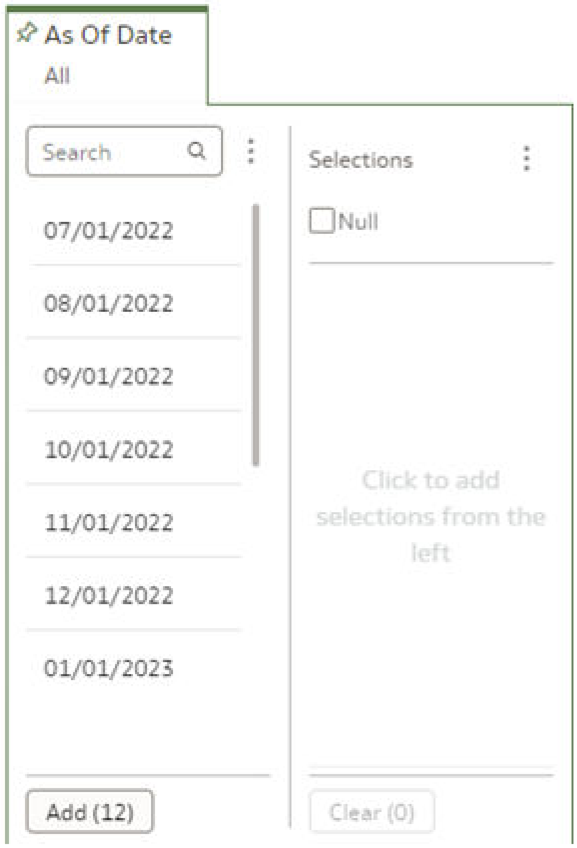
You can use a series of canvas level pinned Prompts to filter the data according to Functional Key Attributes as follows:

Figure 9-40 Canvas Prompt Filters for Time Dimension



- **As of Date:** You can use this filter to isolate a selected timeframe for the analysis. The following screenshot displays the possible options that this filter provides against the Time Dimension.

Figure 9-41 As of Date Selection



- Additional Filters for the Time Dimension as follows:
  - As of Date (Year)
  - As of Date (Day)
  - Year
  - Quarter of Year
  - Month of Year

Figure 9-42 Other Canvas Prompt Filters

- **Currency Name:** You can use this filter to select a specific Currency Code for the underlying preselected reporting currency.
- **Legal Entity Hierarchy Name:** Note that this is a mandatory filter for the group filtering on Legal Entity Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “LE Hierarchy Name” must be selected with only a single value simultaneously.

- **Legal Entity Leaf Name:** You can use this filter to select the Legal Entity Leaf Name that is related to the underlying Management Ledger data.
- **Org Unit Hierarchy Name:** This is a mandatory filter for the group filtering on Org Unit Key Processing Dimension. As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “Org Unit Hierarchy Name” must be selected with only a single value simultaneously.
- **Org Unit Leaf Name:** You can use this filter to select the Org Unit Leaf Name corresponding to the hierarchy.
- **Product Hierarchy Name:** Note that this is a mandatory filter for the group filtering on Product Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “Prod Hierarchy Name” must be selected with only a single value simultaneously.
- **Product Leaf Name:** You can use this filter to select the Product Leaf Name corresponding to the hierarchy.

9.4.1.2 In canvas Variable Prompts

Figure 9-43 In-canvas Prompt Filters for Top Down Summary and Detailed Income Statement

- **Select Time Level:** You need to select Year/ Half Year/Quarter/ Month from this prompt to display the preference of the time block for the analysis.
- **Select Legal Entity Hierarchy:** You can use this filter to select the LE Level Name pertaining to the LE Hierarchy level, for rolling up the results on the underlying Legal Entity Leaves that are part of the selected hierarchy.
- **Select Org Unit Hierarchy:** You can use this filter to select the Org Unit Level Name pertaining to the Org Unit Hierarchy level, for rolling up the results on the underlying Org Unit Leaves that are part of the selected hierarchy.
- **Select Product Hierarchy:** You can use this filter to select the Product Level Name pertaining to the Product Hierarchy level, for rolling up the results on the underlying Product Leaves that are part of the selected hierarchy.

Figure 9-44 In-canvas Filters for Time and Defined Org Unit canvas

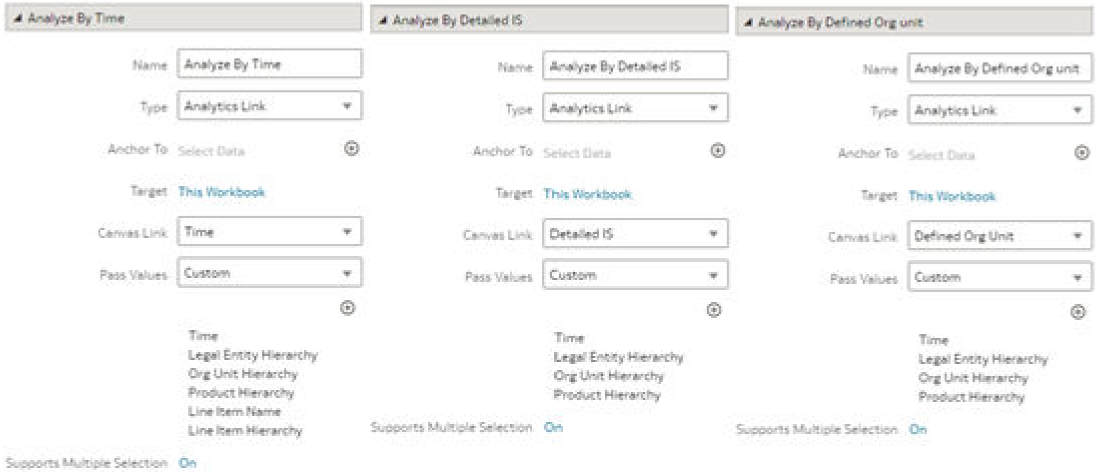
- **Select Income Statement Reporting Line:** This is a mandatory filter for the group filtering on the Income Statement reporting line dimension. The following filter values are available for selection:
  - **Net Income Before Tax:** Net income before tax is the amount of profit made by the financial institution before income tax is paid. This figure is found by subtracting total expenses from total revenue.

  - **Operating Expense:** Operating Expenses are expenses incurred by the bank or financial institution to carry out normal business operations.
  - **Non Operating Expense:** A non-operating expenses are costs that are not directly related to core business operations of the bank. Typical examples of non-operating expenses for a bank are credit losses, recoveries, restructuring costs, write-offs and so on.
  - **Total Revenue:** Total revenue is the total amount of income earned by the bank by selling products and services. It determines how well a company is bringing in money from its core operations of interest arbitrage and other income like fees and commissions.
  - **Net Interest Income:** Net Interest Income (NII) is the difference between the revenue generated from a bank's interest-bearing assets and expenses incurred while paying its interest-bearing liabilities. A bank's assets consist of personal and commercial loans, mortgages, securities etc. A bank's liabilities typically consist of customer deposits.
  - **Non Interest Income:** The non-interest income is the revenue generated by the banks and financial institutions, usually from the non-core activities (loan processing fee, late payment fees, credit card charges, service charges, penalties, etc. net off waivers).
  - **Total Expense:** Total Expenses means the sum of cost of sales and operating expenses (general, administrative, sales and marketing expenses) and non-operating expenses.
  - **Credit Loss Provision:** The provision for credit losses is an estimation of potential losses that a bank might experience due to credit risk. The provision for credit losses is treated as a non-operating expense on the company's financial statements.
- **Select Time Level:** You need to select Year/ Half Year/ Quarter/ Month from this prompt to display the preference of the time block for the analysis.
- **Select Legal Entity Hierarchy:** You can use this filter to select the LE Level Name pertaining to the LE Hierarchy level, for rolling up the results on the underlying Legal Entity Leaves that are part of the selected hierarchy.
- **Select Org Unit Hierarchy:** You can use this filter to select the Org Unit Level Name pertaining to the Org Unit Hierarchy level, for rolling up the results on the underlying Org Unit Leaves that are part of the selected hierarchy.
- **Select Product Hierarchy:** You can use this filter to select the Product Level Name pertaining to the Product Hierarchy level, for rolling up the results on the underlying Product Leaves that are part of the selected hierarchy.

9.4.1.3 Report Data Action

These reports provide the capability to analyze data across canvases via a data action. The following are the data action configuration details:

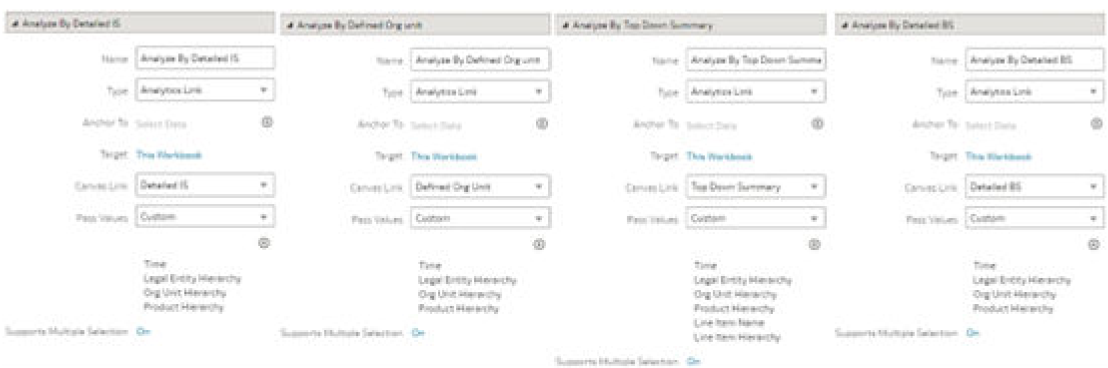
Figure 9-45 Data Action configuration in Top Down Summary canvas



From every chart available in “Top Down Summary”, except for “Net Interest Income” and “Net Interest Margin” charts, you can select a value, and then navigate to the Time, Detailed Income Statement and Defined Org Unit canvas.

In order to do so, with a right click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

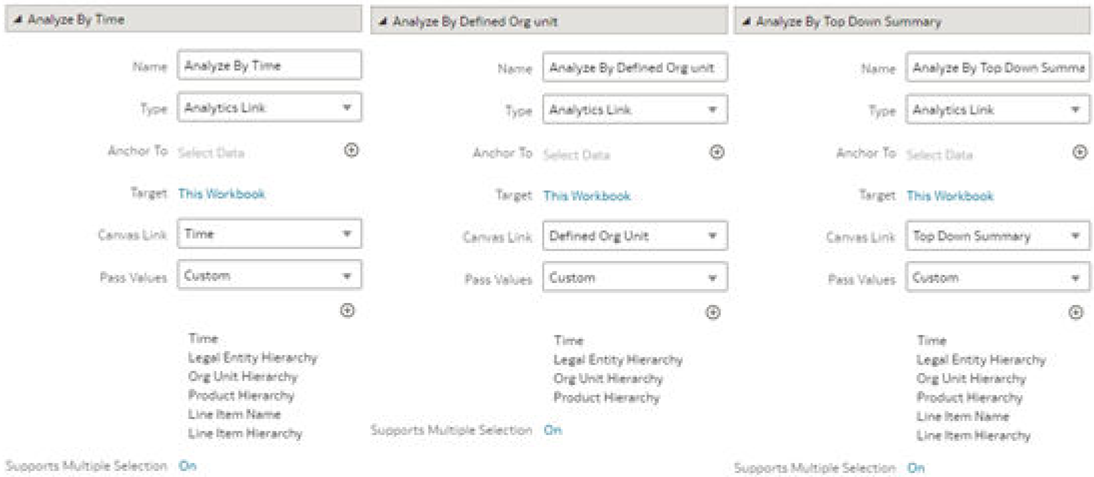
Figure 9-46 Data Action configuration in Time canvas



From every chart available in the Time canvas, you can select a value, and then navigate to the Detailed Income Statement, Defined Org Unit canvas,Top Down Summary and Detailed BS.

In order to do so, with a right-click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

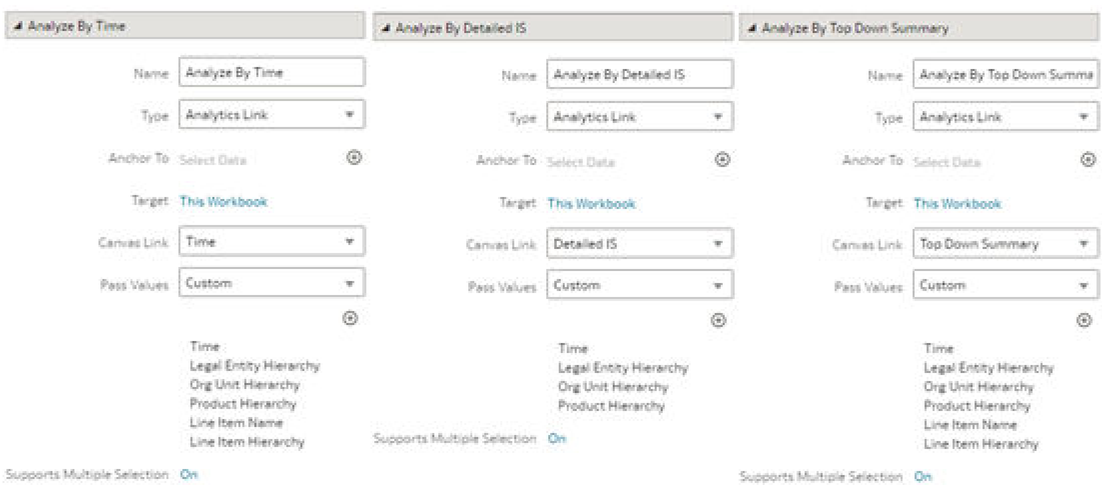
Figure 9-47   Data Action configuration in Detailed Income Statement canvas



Note that although Line Item Name and Hierarchy appear as a pass value, tool limitation currently limits passing these values to the other canvases.

In order to invoke Data Action within Detailed Income Statement report, with a right click on the reporting line selection, the data action option will appear for you to be able to navigate further to the canvas that you select.

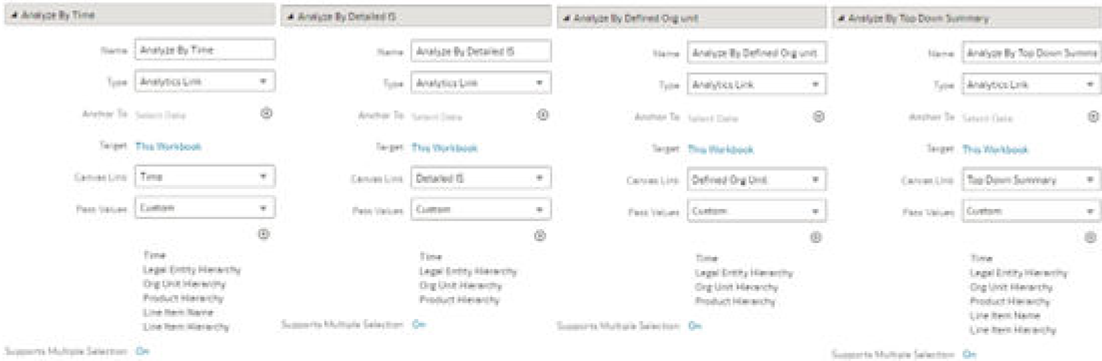
Figure 9-48   Data Action configuration in Defined Org Unit canvas



From every chart available in the Defined Org Unit canvas, you can select a value, and then navigate to the Time, Detailed Income Statement or Top Down Summary canvas.

In order to do so, with a right click on the chart selection, the data action option will appear for you to be able to navigate to the canvas you selected.

Figure 9-49 Data Action configuration in Detailed BS



From every chart available in the Detailed BS canvas, you can select a value, and then navigate to the Time, Detailed Income Statement Defined Org Unit, or Top Down Summary canvas.

In order to do so, with a right-click on the chart selection, the data action option will appear for you to be able to navigate to the canvas you selected.

9.4.1.3.1 Using a Sample Data Action

The following two screenshots are showing the procedure you have to follow; the first one shows how to perform the data action on a specific selection, and the second one the result of this Data Action Navigation.

Figure 9-50 Use Data Action to Navigate to Defined Org Unit from Top Down Summary

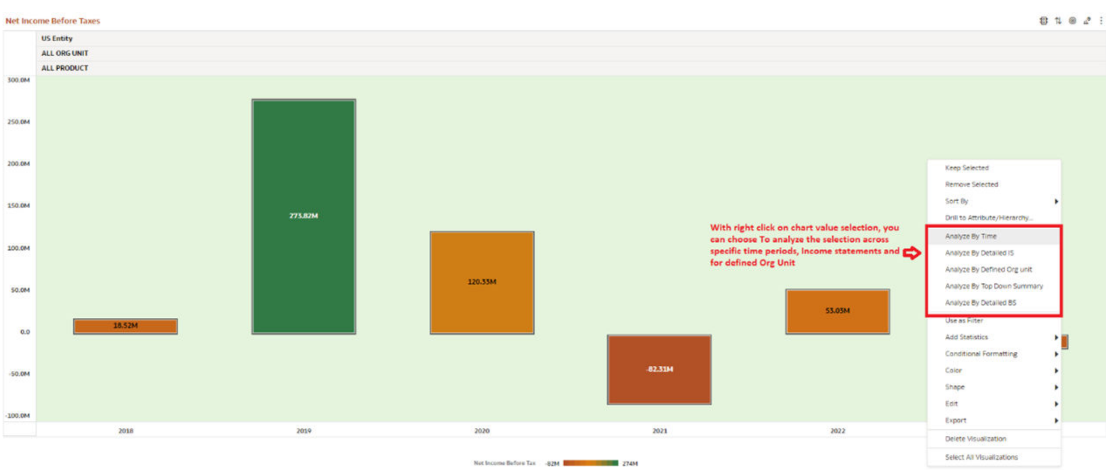
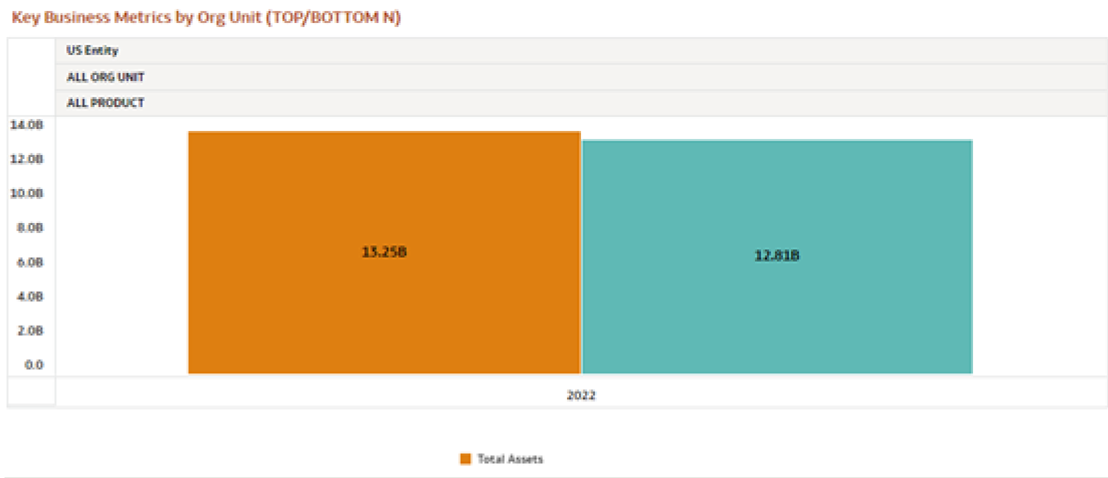


Figure 9-51 Result of Data Action Navigation



9.4.1.4 Top Down Summary

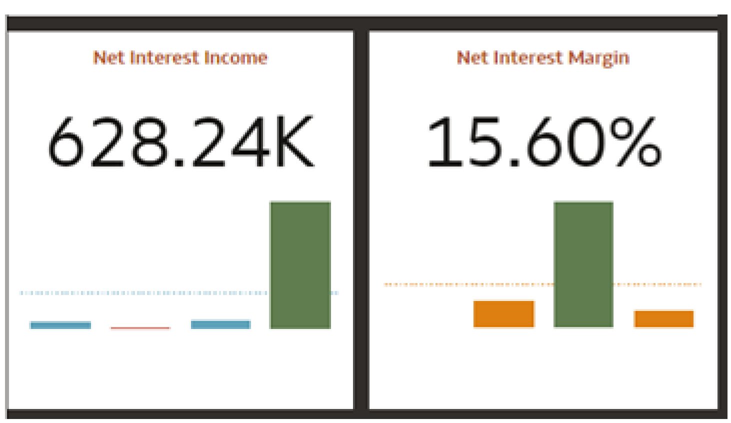
The Top Down Summary Report provides a view of the descriptive analytics related to the heads of Income and Expenses.

You can use a series of Report Prompts, as previously described, to filter the data according to key attributes pertaining to the underlying Management Ledger tables. The canvas provides a summary view to key management reports for better performance tracking and profitability management. Distribution of Assets and Liabilities at enterprise and Income statement Analysis at enterprise/ Legal entity, Org Unit, and Product level along with Impact of on NII and NIM.

The report displays the underlying data according to the following Charts' logic:

- **Net Interest Income and Net Interest Margin:** The chart displays the absolute value for the Net Interest Income and the Net Interest Margin as a percentage for the selected time level. NIM is usually Net Interest Income expressed as a percentage that is, it is the net interest income a bank or financial institution earns in percentage terms on the average interest-earning assets in a specified period.

Figure 9-52 Net Interest Income and Net Interest Margin

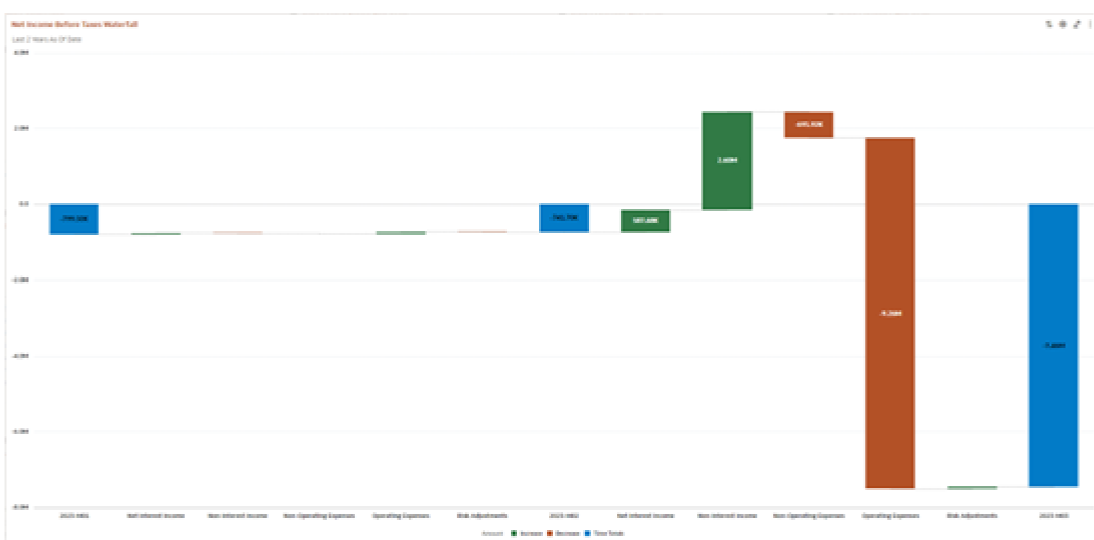


Income Statement: The income statement is a financial statement that shows you the bank's income and expenditures. It also shows whether the bank is making profit or loss for the given period. The Top Down Summary canvas displays a summary Income statement showing selected reporting lines with a dedicated canvas for the detailed statement showing reporting lines at multiple levels. Using the filter prompt in the chart you can select the 2 periods you want to compare.

Figure 9-53   Income Statement

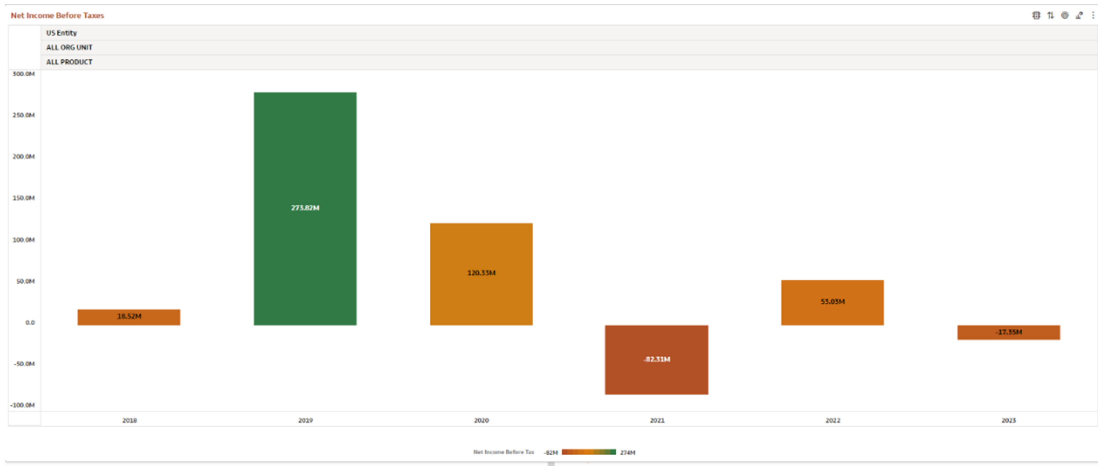
Net Income Before Taxes Waterfall: The NIBT waterfall shows the incremental contribution of the displayed reporting lines over the base period that has been selected as the comparison point. For this report, the default view is of the last two time periods.

Figure 9-54   Net Income Before Taxes Waterfall



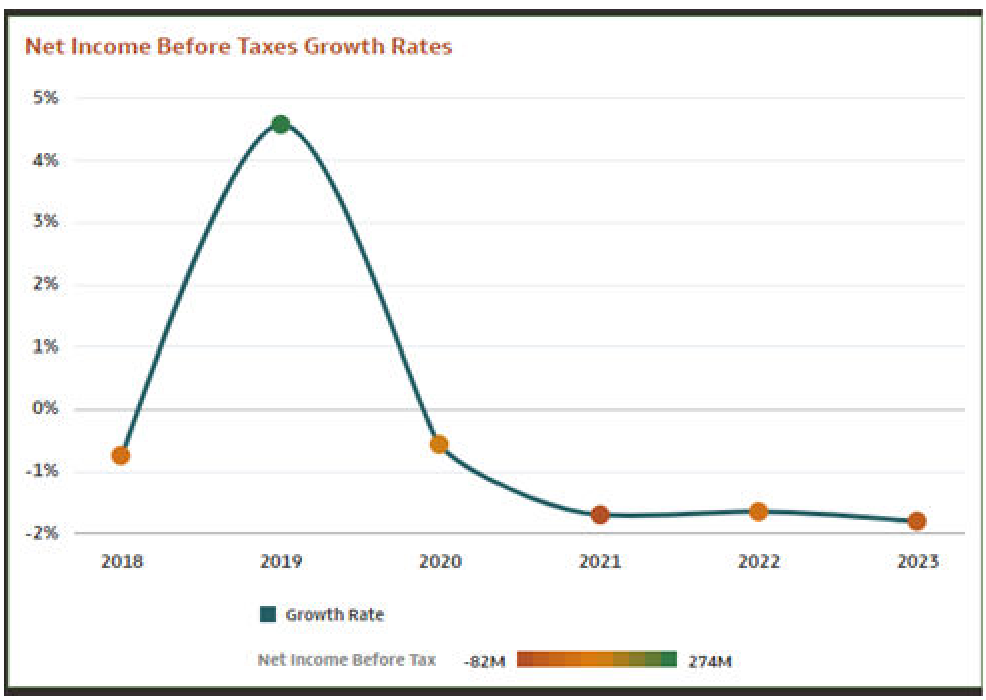
Net Income Before Taxes: The chart displays the absolute value for the Net Income Before Taxes for the selected time period/s. The default view of this chart is for the last 5 years from the current As-of-Date.

Figure 9-55   Net Income Before Taxes



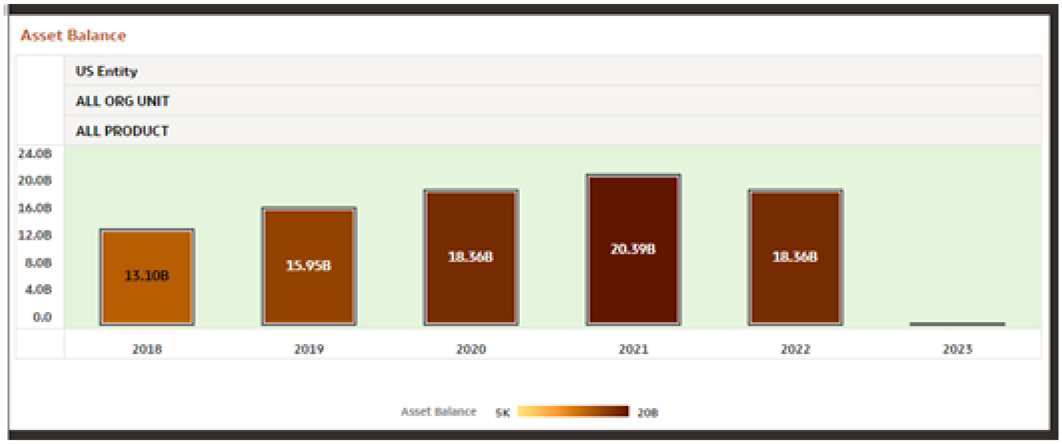
Net Income Before Taxes Growth Rates: The chart displays the relative percentage variation of NIBT that is calculated over the previous period available as per the selection.

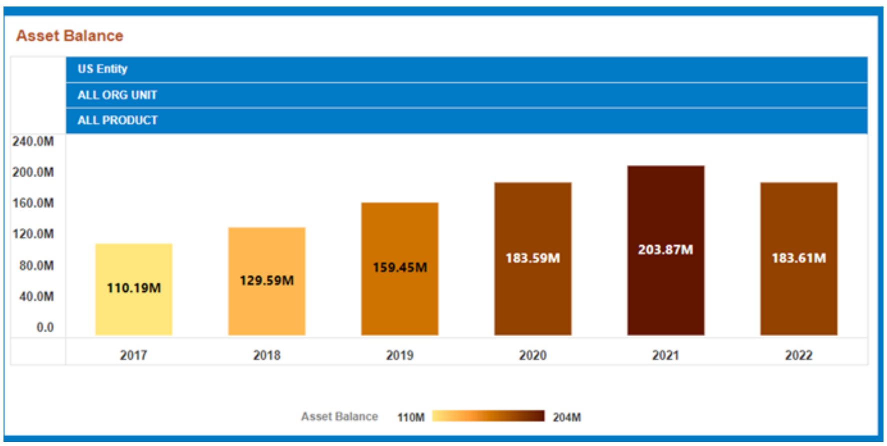
Figure 9-56   Net Income Before Taxes Growth Rates



Asset Balance: The chart displays the absolute value for Asset Balances for the selected time period/s. The default view of this chart is for the last 5 years from the current As-of-Date.

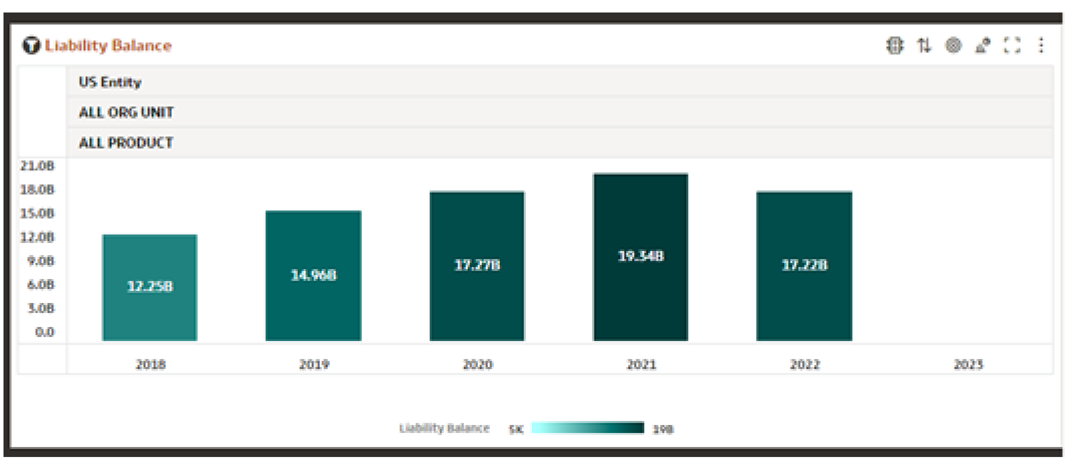
Figure 9-57 Asset Balance





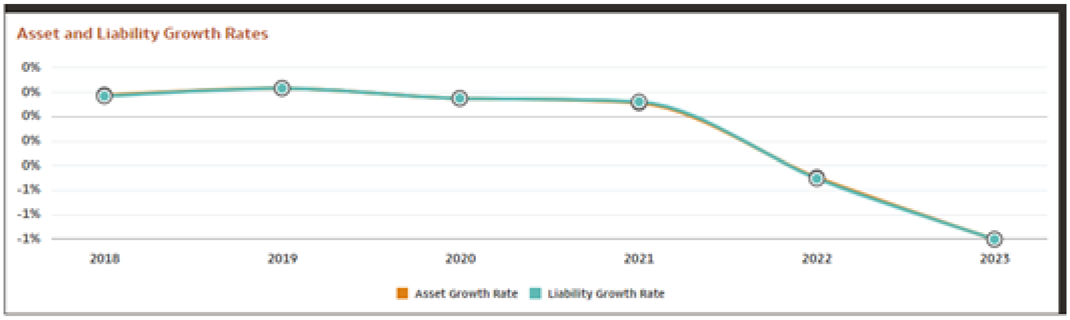
Liability Balance: The chart displays the absolute value for Liability Balances for the selected time period/s. The default view of this chart is for the last 5 years from the current As-of-Date.

Figure 9-58 Liability Balance



Asset and Liability Balance Growth Rates: The chart displays the relative percentage variation of Asset and Liability balance values that is calculated over the previous period available as per the selection. The default view of this chart is a comparison over the past 5 years.

Figure 9-59 Asset and Liability Balance Growth Rates



9.4.1.5 Time

The Time Report allows you to track profitability trends and reporting line trends based on key dimensions, conduct scenario analysis at an aggregated level to gauge profitability variations with Budget and Operating plan. In addition, you can compare actual performance with budgeted/forecasted report.

KPIs are reported across time along with the comparison with plan report users are able to monitor performance, analyze specific metrics, and compare them to budgets or specific benchmarks. They can spot deviations and take corrective action. Opportunities to improve performance can also be identified. The DV tool provides visual representations focusing on the variations observed.

Figure 9-60 Management Reporting

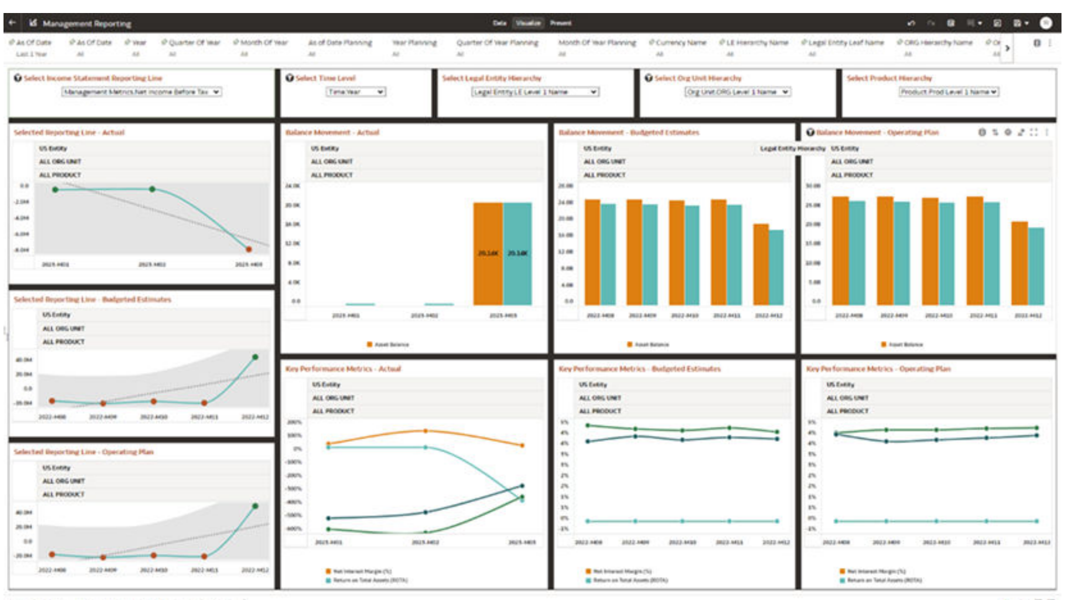


Figure 9-61 Selected Income Statement Reporting Lines

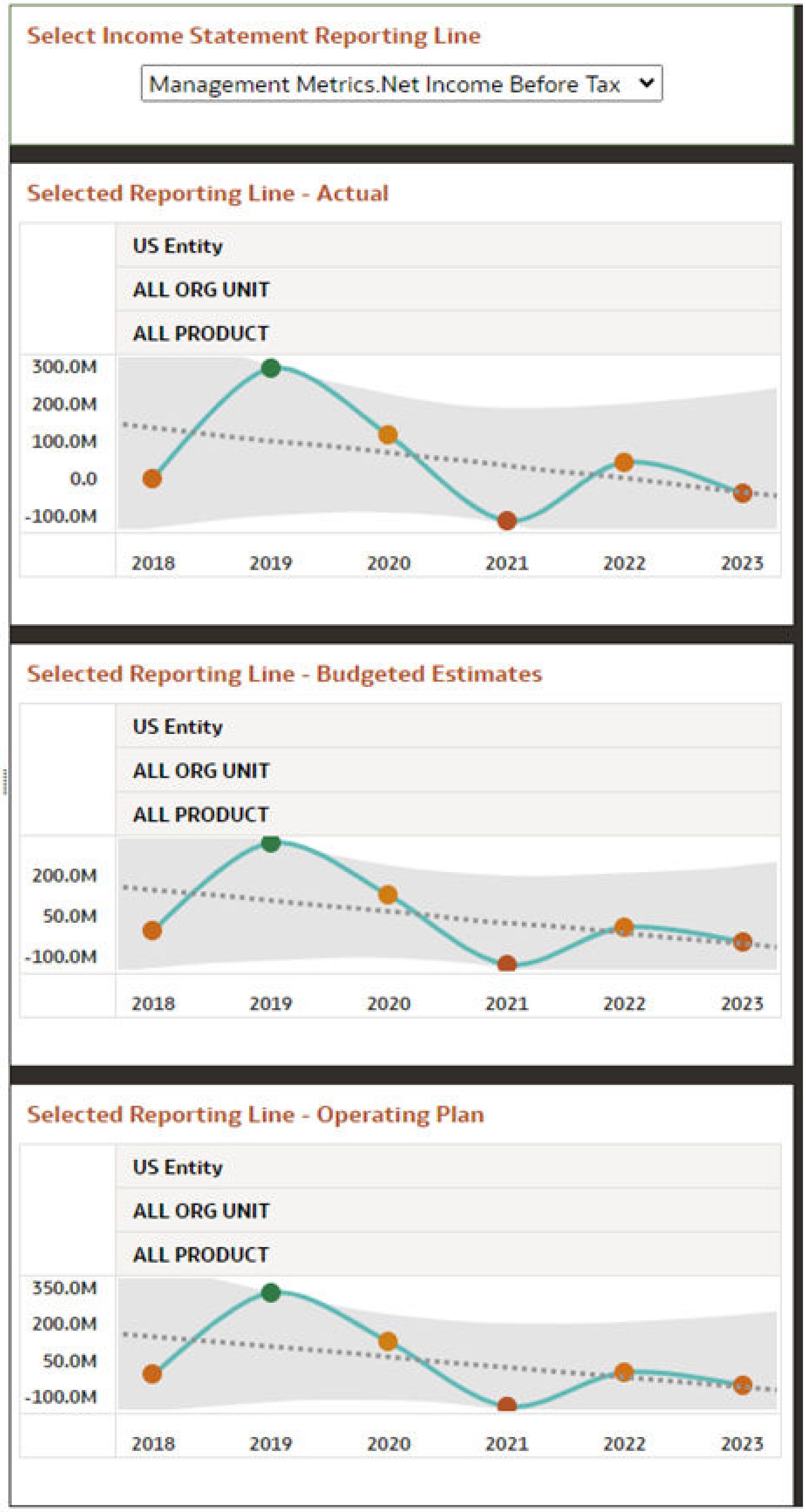
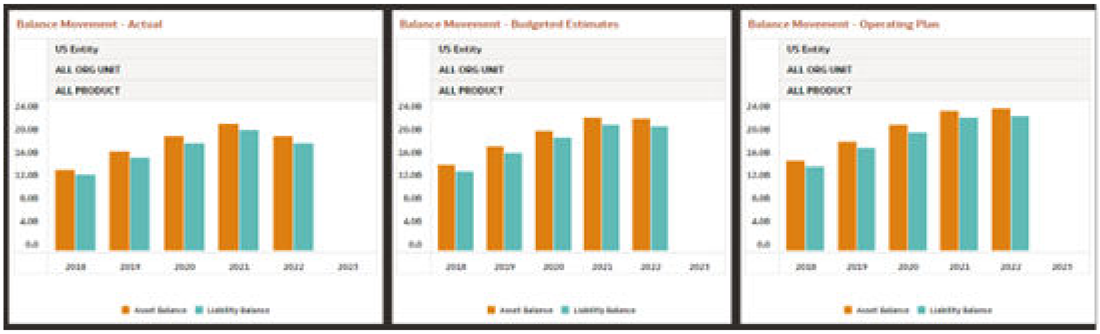
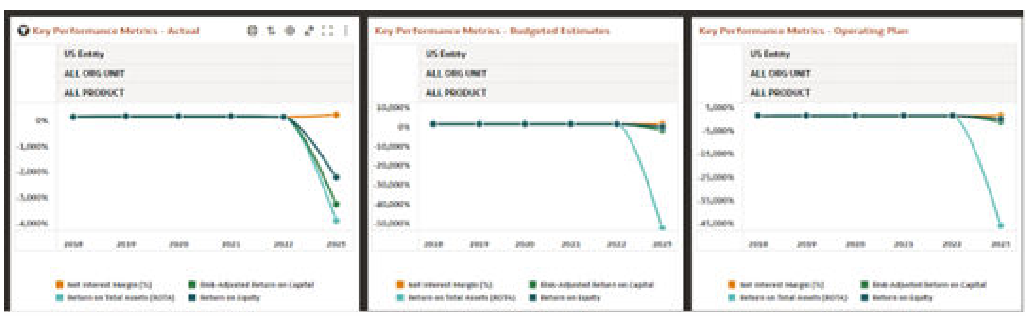


Figure 9-62 Overall Balances



- **Key Performance Metrics**: The following Key Performance Metrics can be observed from these set of charts.ul
  - **Net Interest Margin**: NIM is usually Net Interest Income expressed as a percentage that is, it is the net interest income a bank or financial institution earns in percentage terms on the average interest-earning assets in a specified period.
  - **Return on Total Assets**: Return on Total Assets (ROTA) is a ratio that measures a company's earnings before taxes (NIBT) relative to its total Assets. It is expressed as a percentage.

  Figure 9-63 Key Performance Metrics

  The canvas displays the comparisons of the following scenarios:
  - **Actual:** These are actual metric and performance numbers as reported by the bank in their financial statements. These numbers are the outcomes of operations and business strategy that have been executed in the past.
  - **Budget:** A budget's primary goal is to determine how many resources to allocate to each Business Unit. A fallout of the budgeting exercise are specific expectations around revenue and expected reporting lines as well as financial metrics. Budget numbers thus make business units at different levels responsible for the variances with actual numbers.
  - **Operating Plan:** An operating plan is a financial snapshot of the business in future, as it is best understood today. The result is a forecast of how the business is trending taking into account the latest performance drivers. The banks operating plan is updated regularly. In this way, executives can make changes in real time, adjusting their product strategy, market position, marketing approach, and staffing to minimize variance with budget numbers.

9.4.1.6 Detailed IS

The Detailed Income Statement Report as it implies details the granular level reporting lines of the P&L of a bank. Time-series reporting of the income statement, with respect to the last five time periods selected are provided at the granularity of month.

Details of the revenue and expenses lines makes it possible to identify the inconsistencies in these values over time. You can use a series of Report Prompts, as previously described, to filter the data.

The report displays the underlying data according to selection of Levels 2 through 8 that can be done in the chart selection. The default view of the report has the levels 2-5 pre-selected, which has the same view as in the Income Statement Summary on the Top Down canvas.

- **Levels 2-5**
  - Total Revenue
  - Net Interest Income
  - Non-Interest Income
  - Total Operating and Non-Operating Expenses
  - Operating Expenses
  - Non-Operating Expenses
  - Income before Taxes
  - Provisions for Credit Losses
  - Net Income Before Taxes
  - Tax Expense
- **Level 6**
  - Total Interest Income
  - Total Interest Expense
  - Non-Interest Revenue
  - Indirect Non-interest Income
  - Other Revenue
  - Advertising and Marketing
  - Processing Expenses
  - Sales and Marketing Expenses
  - Product Management Expenses
  - Business Management Expenses
  - Indirect Processing Expense
  - Indirect Distribution Expense
  - Deposit Insurance
  - Other Allocated Costs
  - Net Credit Losses
- **Level 7**

- Agency Fees
- Print and Production Expenses
- Sales Commissions
- Product Development Expenses
- Miscellaneous Product Management Expenses
- Brand Management Expenses
- Miscellaneous Business Management Expenses
- Technology and Infrastructure Expenses
- Staff Costs
- Depreciation
- Amortization
- Income from Discontinued Operations, Net of Taxes
- Other Expense
- Allocated Indirect Expenses
- Allocated Non-cash Expenses
- Credit Losses
- Recoveries of amounts previously written-off

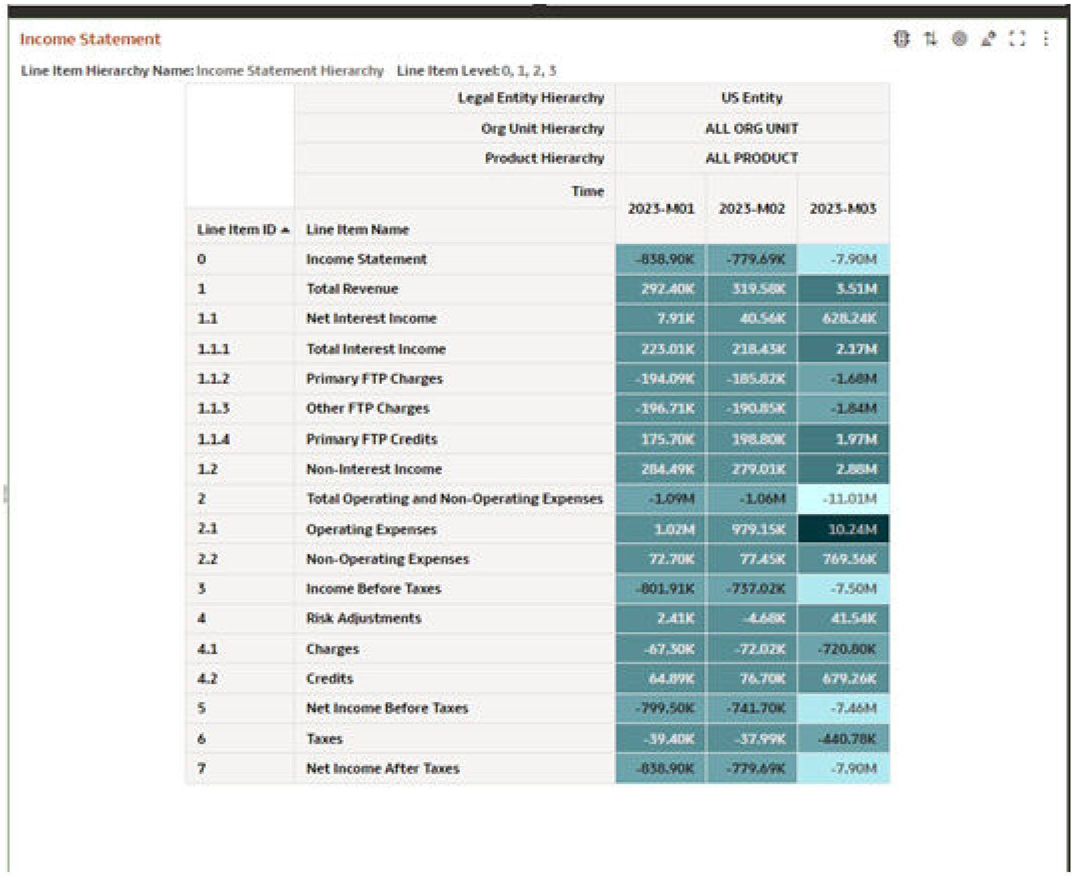
* **Level 8**
  - Other Income - Non-Customers
  - Allocated Other Income - Non-Customers
  - Total Brand Management Expenses
  - Business Promotion Expenses
  - Origination Expenses
  - Servicing Expenses
  - Collection Expenses
  - Direct Sales Expenses
  - Other Campaign Expenses
  - Miscellaneous Sales Expenses
  - Advertising Expenses
  - Credit for Other Allocated Liabilities
  - Credit for Liquidity
  - Amortization of Discount for Liability
  - Central Bank Int. Income
  - Credit for Float
  - Transfer Pricing Credit
  - Customer Break Funding Fees
  - Amortization of Premium for Asset
  - Amortization of Premium for Liability

- Amortization of Discount for Asset
- Transfer Pricing Charge
- Pricing Incentive
- Charge for Basis Risk
- Charge for Central Bank Reserves
- Charge for Liquidity
- Charge for Optionality
- Charge for Other Allocated Assets
- Commission
- Fees
- Penalties
- Other Income - Customers
- Waived Fees
- Early Redemption Fee
- Investment Income
- Branch Origination Expenses
- Mail Origination Expenses
- Phone Origination Expenses
- Loan Center Origination Expenses
- Origination Expenses, Other Channels
- Branch Platform Expenses
- Branch Teller Expenses
- In Network ATM Expenses
- Out of Network ATM Expenses
- Call Center Expenses
- E-Banking Expenses
- Statement Processing Expenses
- Loan Processing Expenses
- Compliance Expenses
- Commission on Collections
- Other Collection Expenses
- Amortization of Restructuring Expenses
- Gain or Loss on Sale of Assets from Discontinued Operations
- Income from Discontinued Operations

* **Level 9**
  - Credit for Equity
  - Economic Provision
  - Executive and Other Overhead Expenses

– Other Processing Expenses

Figure 9-64 Detailed IS Report Default



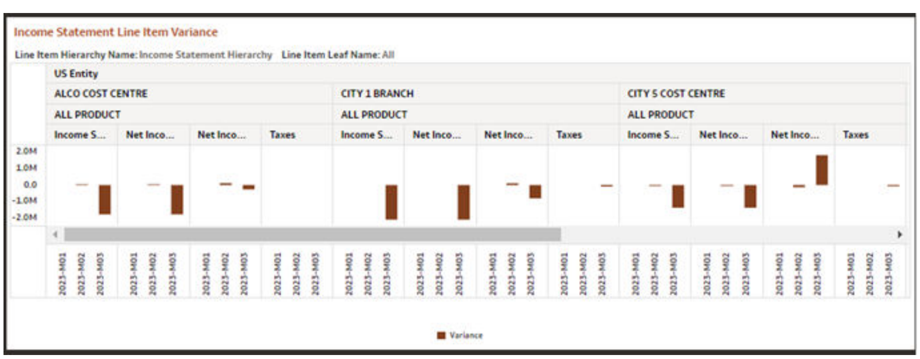
Income Statement

Line Item Hierarchy Name: Income Statement Hierarchy   Line Item Level: 0, 1, 2, 3

	Legal Entity Hierarchy	US Entity		
	Org Unit Hierarchy	ALL ORG UNIT		
	Product Hierarchy	ALL PRODUCT		
	Time	2023-M01	2023-M02	2023-M03
Line Item ID	Line Item Name			
0	Income Statement	-838.90K	-779.69K	-7.90M
1	Total Revenue	292.40K	319.58K	3.51M
1.1	Net Interest Income	7.91K	40.56K	628.24K
1.1.1	Total Interest Income	223.01K	218.43K	2.17M
1.1.2	Primary FTP Charges	-194.09K	-185.82K	-1.68M
1.1.3	Other FTP Charges	-196.71K	-190.85K	-1.84M
1.1.4	Primary FTP Credits	175.70K	198.80K	1.97M
1.2	Non-Interest Income	284.49K	279.01K	2.88M
2	Total Operating and Non-Operating Expenses	-1.09M	-1.06M	-11.01M
2.1	Operating Expenses	1.02M	979.15K	10.24M
2.2	Non-Operating Expenses	72.70K	77.45K	769.56K
3	Income Before Taxes	-801.91K	-737.02K	-7.50M
4	Risk Adjustments	2.41K	-4.68K	41.54K
4.1	Charges	-67.50K	-72.02K	-720.80K
4.2	Credits	64.89K	76.70K	679.26K
5	Net Income Before Taxes	-799.50K	-741.70K	-7.46M
6	Taxes	-39.40K	-37.99K	-440.78K
7	Net Income After Taxes	-838.90K	-779.69K	-7.90M

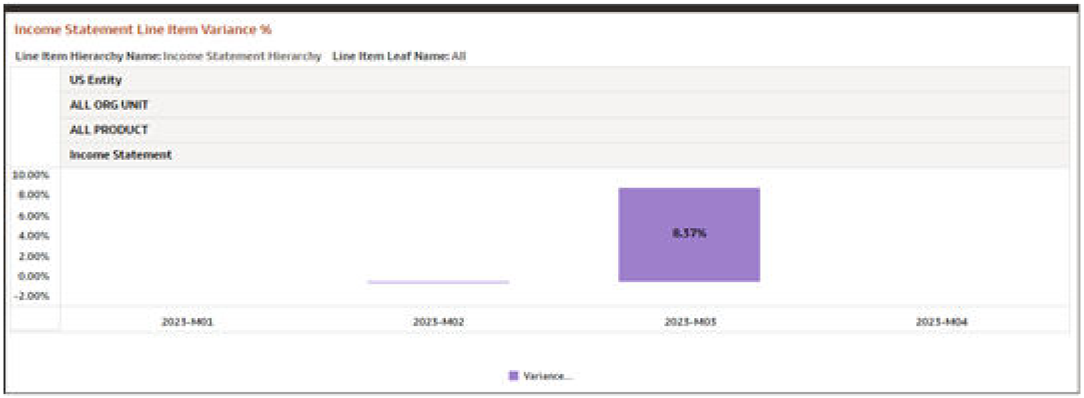
In this chart, you can look at how each Income Statement line item varies with respect to the absolute value during the previous time period.

Figure 9-65 Income Statement Line Item Variance Report



In this chart, you can look at how each Income Statement line item varies with respect to the percentage variation in absolute value when compared with the previous time period.

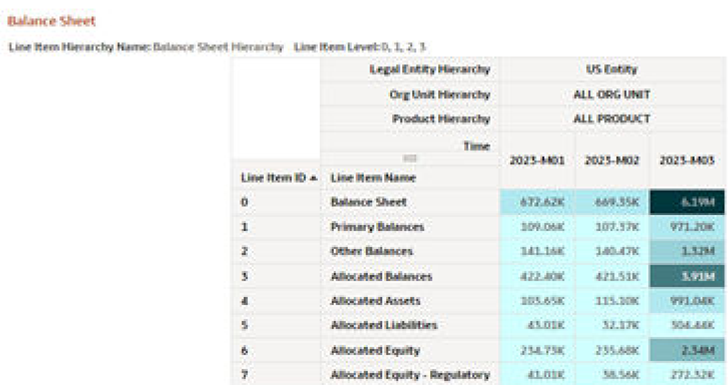
Figure 9-66   Income Statement Line Item Variance % Report



9.4.1.7 Detailed BS

The Detailed Balance Sheet Report as the name implies provides a view of the balance sheet which captures details around all the line items. The user can use the level selection filter to expand or contract the balance sheet.

Figure 9-67   Detailed BS Report Default



Balance Sheet

Line Item Hierarchy Name: Balance Sheet Hierarchy   Line Item Level: 0, 1, 2, 3

	Legal Entity Hierarchy	US Entity		
	Org Unit Hierarchy	ALL ORG UNIT		
	Product Hierarchy	ALL PRODUCT		
	Time	2023-M01	2023-M02	2023-M03
Line Item ID ▲	Line Item Name			
0	Balance Sheet	672.62K	669.35K	6.19M
1	Primary Balances	109.06K	107.37K	971.20K
2	Other Balances	141.16K	140.47K	1.32M
3	Allocated Balances	422.40K	421.51K	3.91M
4	Allocated Assets	105.65K	115.30K	991.04K
5	Allocated Liabilities	43.01K	32.17K	504.44K
6	Allocated Equity	234.73K	235.68K	2.34M
7	Allocated Equity - Regulatory	41.01K	38.56K	272.32K

The Balance Sheet line item variance and variance % reports work in the same way as in the case of the Detailed Income Statement canvas.

Figure 9-68   Balance Sheet Line Items Variance and Line Item Variance %

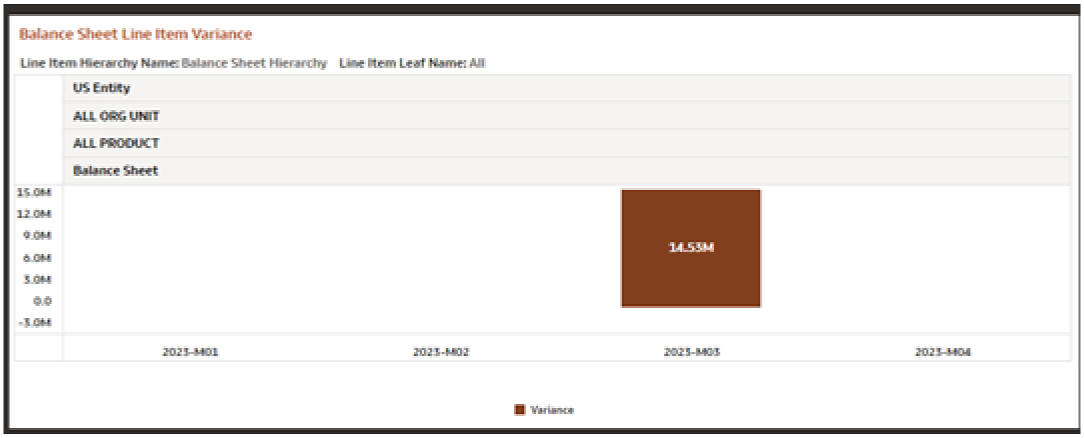
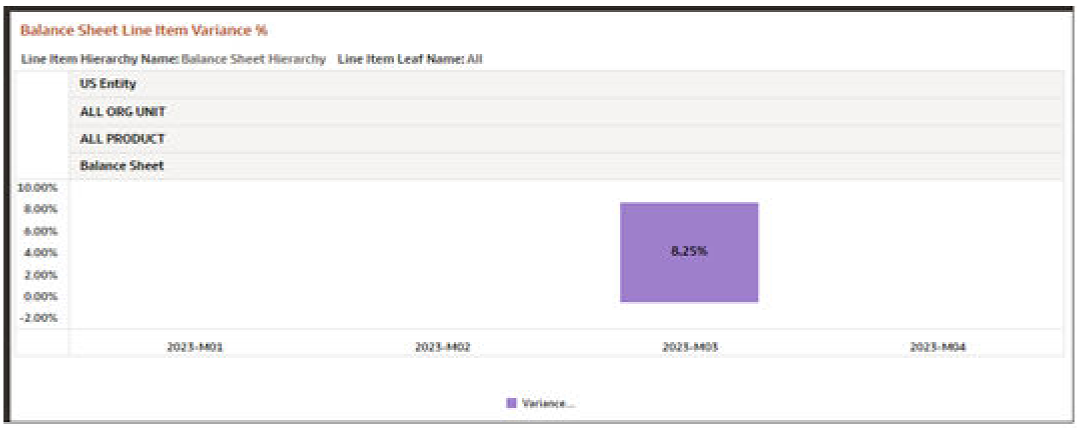


Figure 9-69   Balance Sheet Item Variance % Report



9.4.1.8 Defined Org Unit

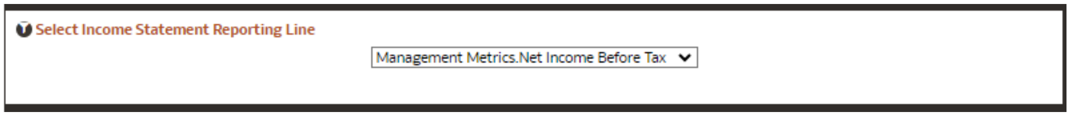
The Defined Org Unit report provides a view of the Top Down Ledger Data for different Organizational Units. The canvas empowers all org owners to access actionable profitability insight directly. The users can then assess risk-adjusted metrics such as return on assets (ROTA), return on Net Interest Margin (NIM), risk-adjusted return on capital (RAROC) or key performance indicators such as top 10 products by balance growth.

You can use a series of Report Prompts, as previously described, to filter the data. In addition, there are In-Report prompt selections to select the Top/ Bottom N org units that you are interested in, and the corresponding data will be displayed.

The report displays the underlying data according to the following Charts:

- **Org Unit wise contribution for Reporting Line (TOP N); the same is available for bottom view**
  In this chart, for the selected reporting line, the Top N (N selected from the chart prompt) and bottom N organization units are displayed in descending order of value of the reporting line.

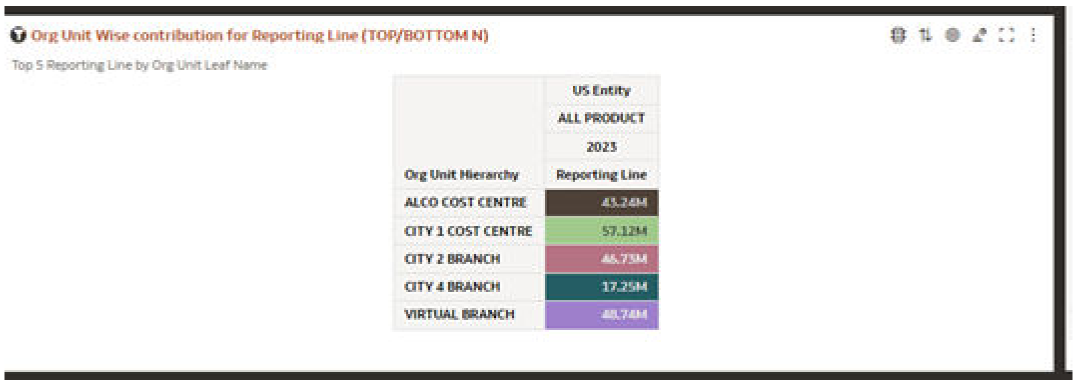
Figure 9-70 Income Statement Reporting Line



The report displays the underlying data according to the following Charts:

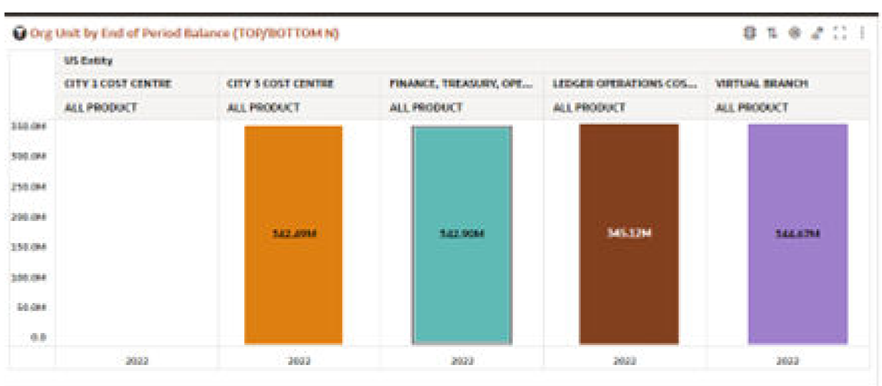
- **Org Unit wise contribution for Reporting Line (TOP/ BOTTOM N)**: The same is available for bottom view In this chart, for the selected reporting line, the Top N (N selected from the chart prompt) and bottom N organization units are displayed in descending order of value of the reporting line.

Figure 9-71 Org Unit wise contribution for Reporting Line (TOP/BOTTOM N)



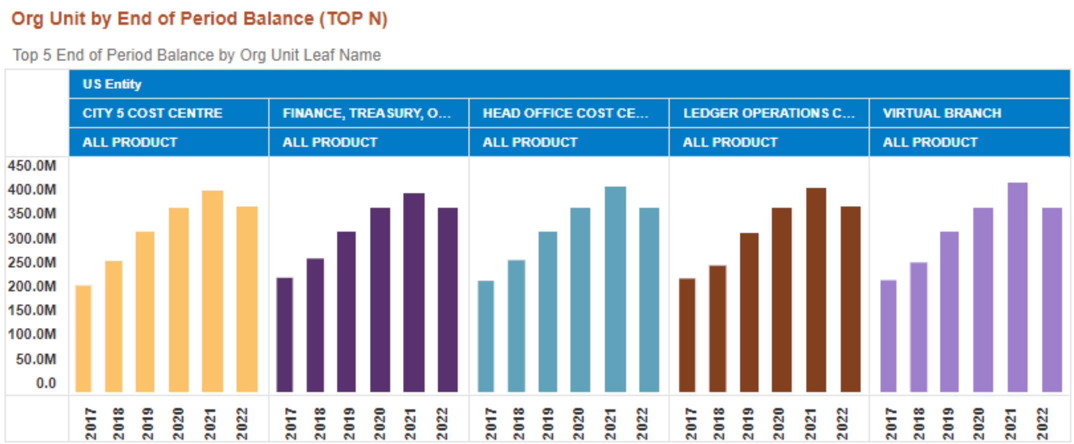
- **Org Unit by End of Period Balance (TOP/ BOTTOM N)**: the same is available for bottom view The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances.

Figure 9-72 Org Unit by End of Period Balance (TOP/BOTTOM N)



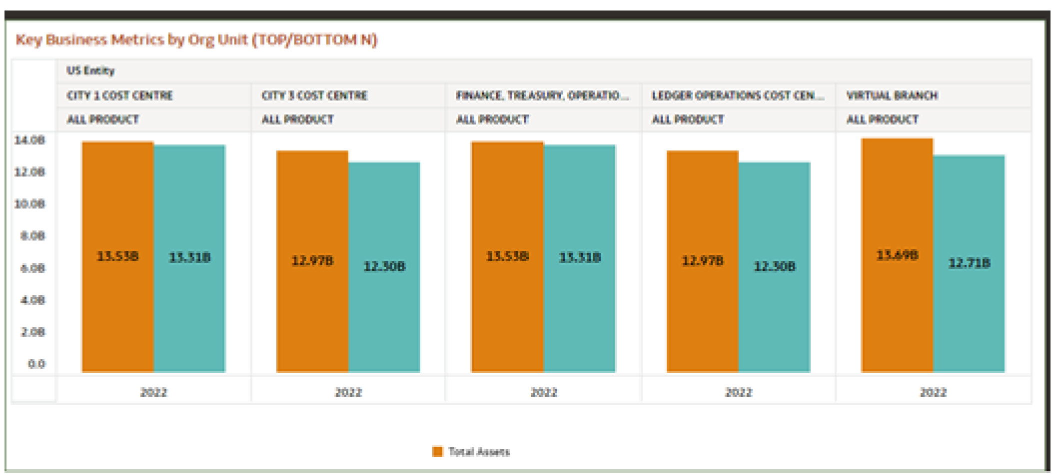
- **Org Unit by End of Period Balance (TOP N); the same is available for bottom view** The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances.

Figure 9-73 Org Unit by End of Period Balance (TOP N)



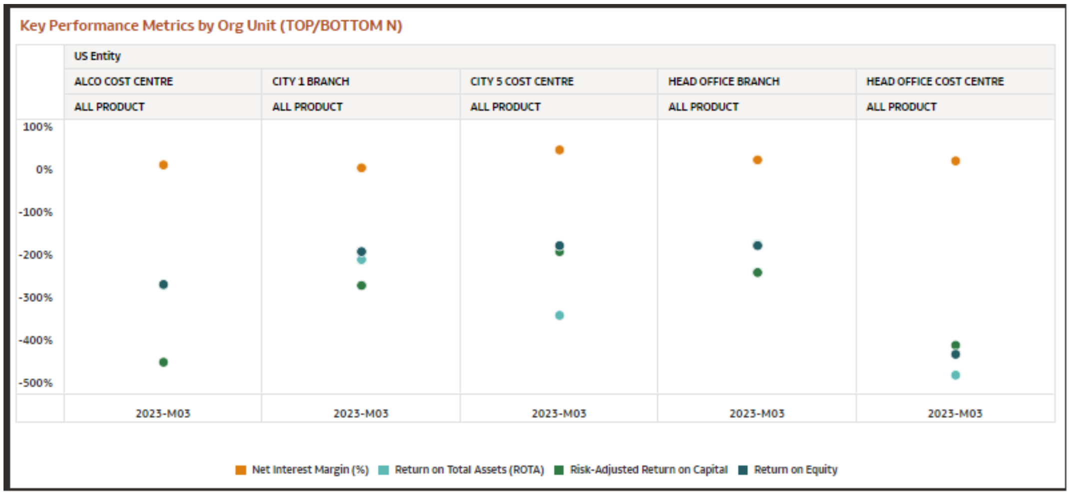
- **Key Business Metrics by Org Unit (TOP/ BOTTOM N)**: the same is available for bottom view The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides the breakup between Asset and Liability Balances.

Figure 9-74 Key Business Metrics by Org Unit (TOP/BOTTOM N)



- **Key Performance Metrics by Org Unit (TOP/ BOTTOM N)**: the same is available for bottom view The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides selected KPI's like NIM and ROTA of these Org Units.

Figure 9-75 Key Performance Metrics by Org Unit (TOP/ BOTTOM N)



9.5 Profitability Insights

To access the Processing Analytics report, select **Analytics** from the LHS Menu, and then select **Profitability Insights**.

Profitability Insights provides strategic e a comprehensive view of financial performance around the Institutional and Retail customer of the bank across multiple dimensions, including Organization Unit, Product, Line of Business, Region, Channel, and Customer Performance, all aggregated up from the Instrument level.

> **Note:**
>
> Before generating reports and analytics, it is mandatory to set the relevant currencies and currency rates. This is required for generating the reports with correct values. For more information about creating currencies and currency rates, see the following:
>
> - Currencies
> - Currency Rates

To feed the Profitability Insights Report, refer to the *Oracle Financial Services Profitability Analytics Cloud Service Data Flow* document available at Doc ID: 2869409.1.

For the Profitability Insights Report refer to the following Data Flow sub-sections:

- PACS - Instrument Summary
- PACS - Instrument Income Statement

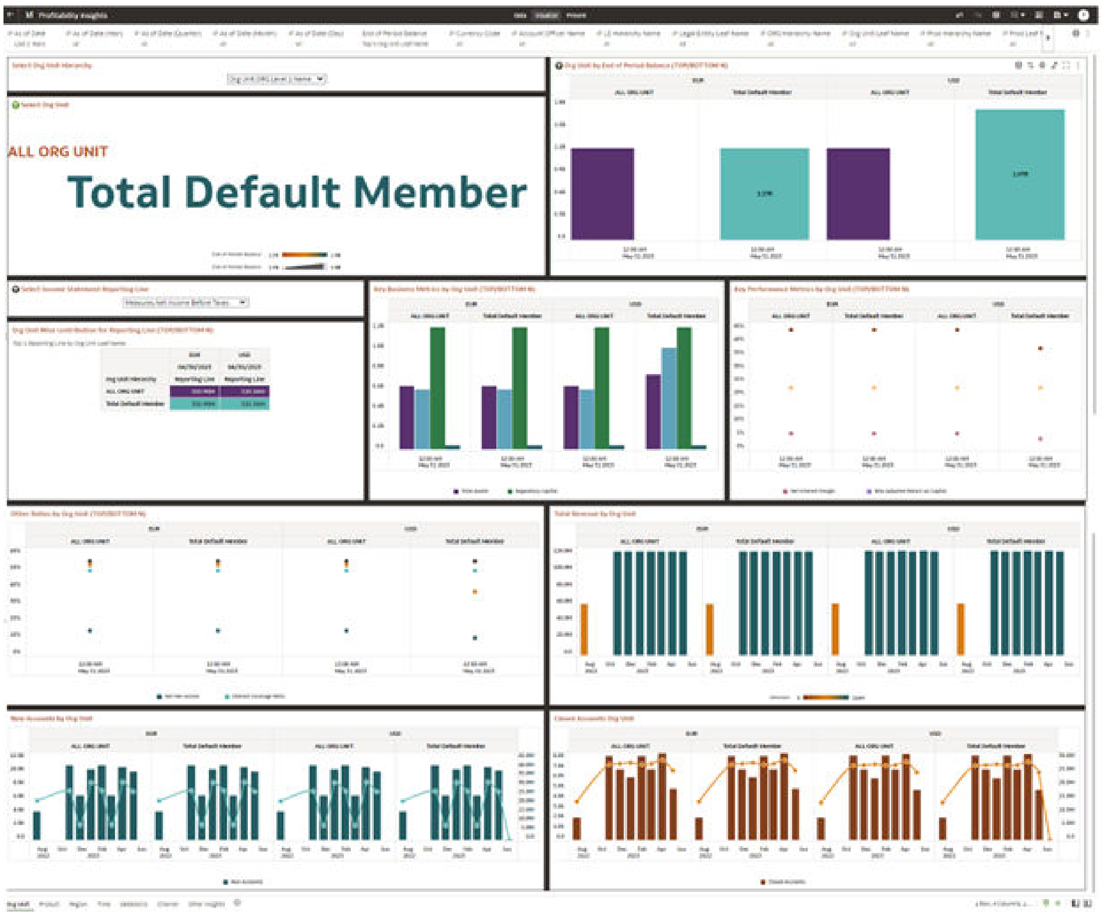
For Income Statement and Balance Sheet Hierarchies, or any other Hierarchy created out of Financial Element dimension, a Financial Element carrying a percentage value cannot be added as a child, Sibling to a child or Leaf under Parent/ Child/ Sibling in the Hierarchy. Users are expected to be mindful not to map a portfolio column to a FE denoting a rate or apply an expression, where a divisor is used in a way that the column value effectively becomes a rate, thus preventing a meaningful roll-up to the node of the hierarchy.

9.5.1 Instrument Level Aggregation and Insights

The Profitability Insights report is arranged as a set of reports, classified into the following:

- Org Unit
- Product
- Region
- Time
- Detailed IS
- Channel
- Other Insights

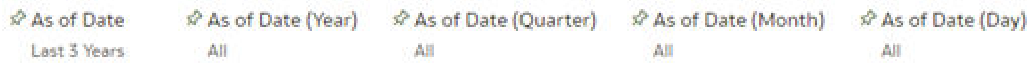
Figure 9-76 Profitability Insights



9.5.1.1 Report Common Filters

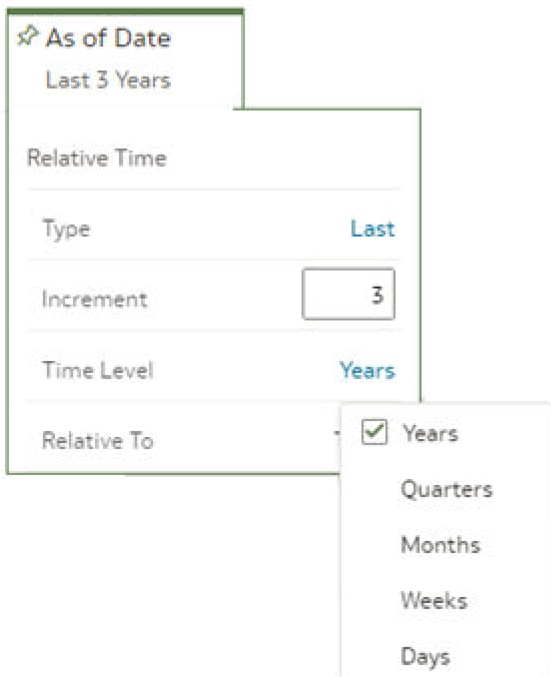
You can use a series of canvas level pinned Prompts to filter the data according to Functional Key Attributes as follows:

Figure 9-77 Canvas Prompt Filters for Time Dimension



- **As of Date:** You can use this filter to isolate a selected timeframe for the analysis. The following screenshot displays the possible options that this filter provides against the Time Dimension.

Figure 9-78 As of Date Selection



- Additional Filters for the Time Dimension as follows:
  - **As of Date**
  - **As of Date (Year)**
  - **As of Date (Quarter)**
  - **As of Date (Month)**
  - **As of Date (Day)**

Figure 9-79 Key Processing Dimensions Prompt Filters

- **Legal Entity Hierarchy Name:** Note that this is a mandatory filter for the group filtering on Legal Entity Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same

time, a mandatory driver to select “LE Hierarchy Name” must be selected with only a single value simultaneously.

- **Legal Entity Leaf Name:** You can use this filter to select the Legal Entity Leaf Name that is related to the underlying Management Ledger data.
- **Org Unit Hierarchy Name:** This filter is for the group filtering on Organization Unit key processing dimension. As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, you must select the “Org Unit Hierarchy Name” with only a single value simultaneously.
- **Org Unit Leaf Name:** You can use this filter to select the Org Unit Leaf Name corresponding to the hierarchy.
- **Product Hierarchy Name:** Note that this is a mandatory filter for the group filtering on Product Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “Prod Hierarchy Name” must be selected with only a single value simultaneously.
- **Product Leaf Name:** You can use this filter to select the Prod Leaf Name that is related to the underlying Management Ledger data.
- **Geography Hierarchy Name**: This is a mandatory filter for the group filtering on the Geography Hierarchy.
  As the application supports the creation of multiple hierarchies for the same dimension of analysis, to avoid displaying results from multiple hierarchies at the same time, a mandatory driver to select "Geography Hierarchy Name" must be selected.
- **Geography Leaf Name:** You can use this filter to select the Geography Leaf Name corresponding to the hierarchy.

Figure 9-80   Simple Dimensions Prompt Filters

- **Currency Code:** You can use this filter to select a specific Currency Code to be applied to the underlying management ledger data.
- **Account Officer Name:** You can use this filter to select the Account Officer or Account Manager for the underlying instrument tables accounts.
- **Customer Type Name:** You can use this filter to select the Customer Type for the underlying instrument tables accounts.

Figure 9-81   Standard Dimensions Prompt Filters

- **Geography Leaf Name:** You can use this filter to select a specific Geography value at leaf level related to the underlying instrument tables accounts.

- **Branch Leaf Name:** You can use this filter to select a specific Branch value at leaf level related to the underlying instrument tables accounts.
- **Industry Leaf Name:** You can use this filter to select a specific Industry value at leaf level related to the underlying instrument tables accounts.
- **Channel Name**:

9.5.1.2 In canvas Variable Prompts

Figure 9-82 In-canvas Prompt Filters for Org Unit

Figure 9-83 In-canvas Prompt Filters for Product

Figure 9-84 In-canvas Prompt Filters for Region

Figure 9-85 In-canvas Prompt Filters for Other Insights

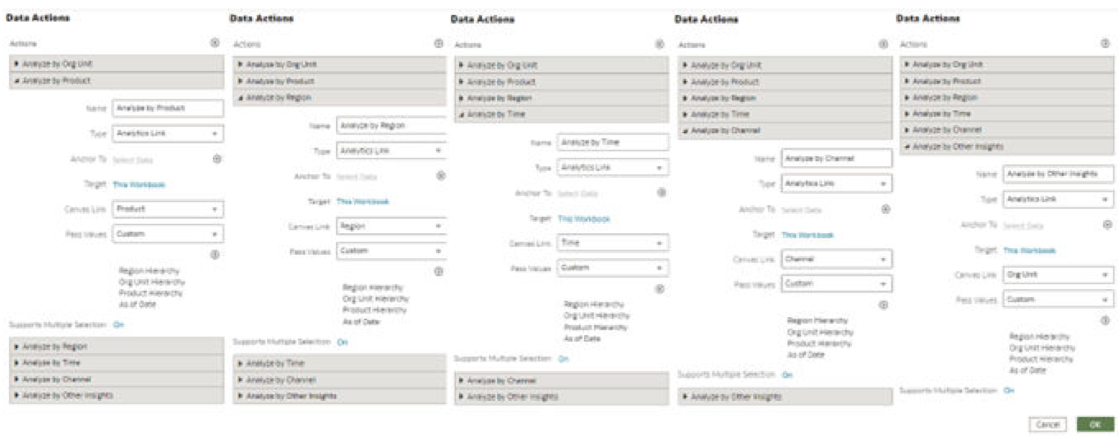
- **Select Org Unit Hierarchy:** You can use this filter to select the Org Unit Level Name pertaining to the Org Unit Hierarchy level, for rolling up the results on the underlying Org Unit Leaves that are part of the selected hierarchy.
- **Select Product Hierarchy:** You can use this filter to select the Product Level Name pertaining to the Product Hierarchy level, for rolling up the results on the underlying Product Leaves that are part of the selected hierarchy.
- **Select Region Hierarchy:** You can use this filter to select the Region Level Name pertaining to the Region Hierarchy level, for rolling up the results on the underlying Region Leaves that are part of the selected hierarchy.
- **Select Income Statement Reporting Line:** This is a mandatory filter for the group filtering on the Income Statement reporting line dimension. The following filter values are available for selection:
  - **Net Income Before Tax:** Net income before tax is the amount of profit made by the financial institution before income tax is paid. This figure is found by subtracting total expenses from total revenue.
  - **Net Interest Income:** Net Interest Income (NII) is the difference between the revenue generated from a bank's interest-bearing assets and expenses incurred while paying its interest-bearing liabilities. A bank's assets consist of personal and commercial loans, mortgages, securities etc. A bank's liabilities typically consist of customer deposits.

- **Non Interest Income:** The non-interest income is the revenue generated by the banks and financial institutions, usually from the non-core activities (loan processing fee, late payment fees, credit card charges, service charges, penalties, and so on, net off waivers).
- **Operating Expenses:** Operating Expenses are expenses incurred by the bank or financial institution to carry out normal business operations.
- **Provision for Credit Losses:** The provision for credit losses is an estimation of potential losses that a bank might experience due to credit risk. The provision for credit losses is treated as a non-operating expense on the company's financial statements.

9.5.1.3 Report Data Action

The reports provide the capability to analyze data across canvases via a Data Action. The following are the Data Action Configuration details:

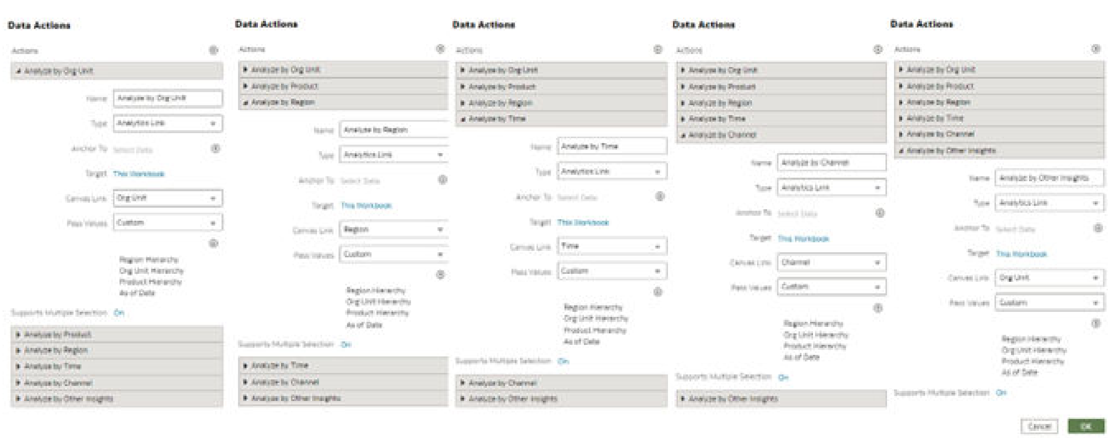
Figure 9-86 Data Action Configuration in Org Unit canvas



From every chart available in Org Unit you can select a value, and then navigate to the Product, Region and Other Insights canvas.

To do so, with a right click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

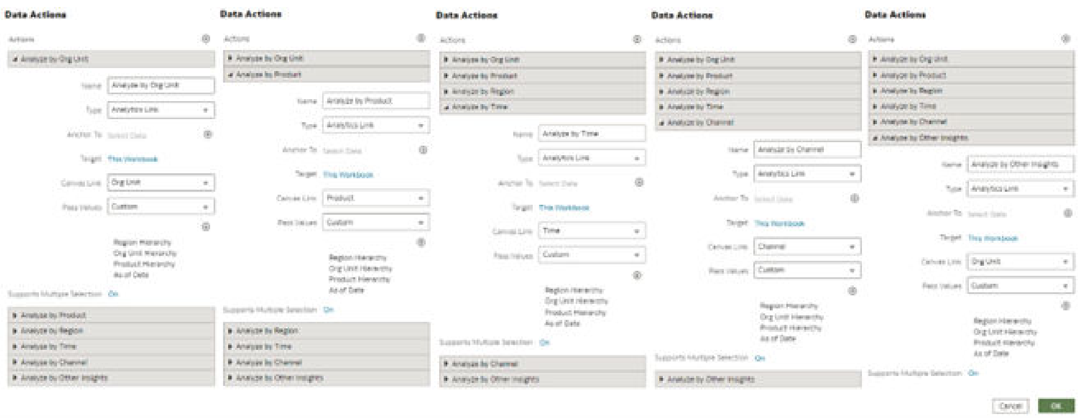
Figure 9-87 Data Action Configuration in Product canvas



From every chart available in Product you can select a value, and then navigate to the Org Unit, Region and Other Insights canvas.

To do so, with a right click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

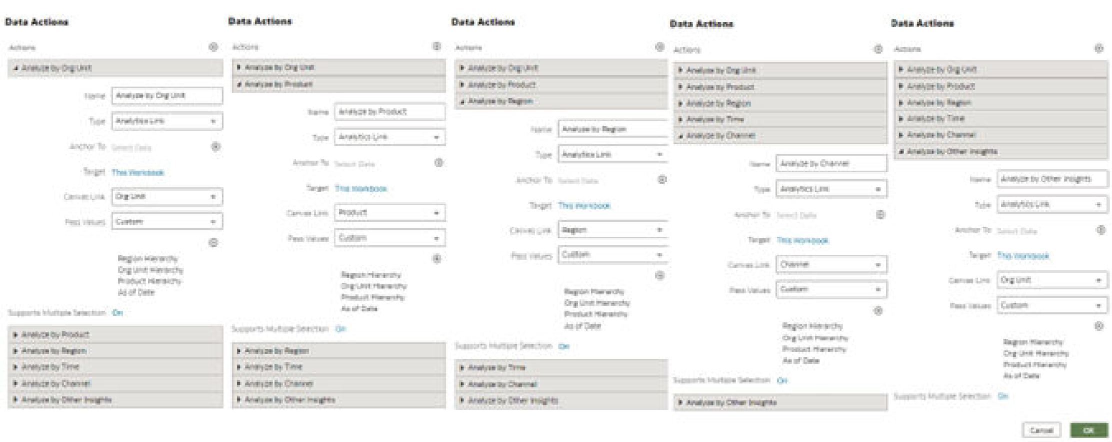
Figure 9-88   Data Action Configuration in Region canvas



From every chart available in Region, you can select a value, and then navigate to the Org Unit, Product and Other Insights canvas.

In order to do so, with a right click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

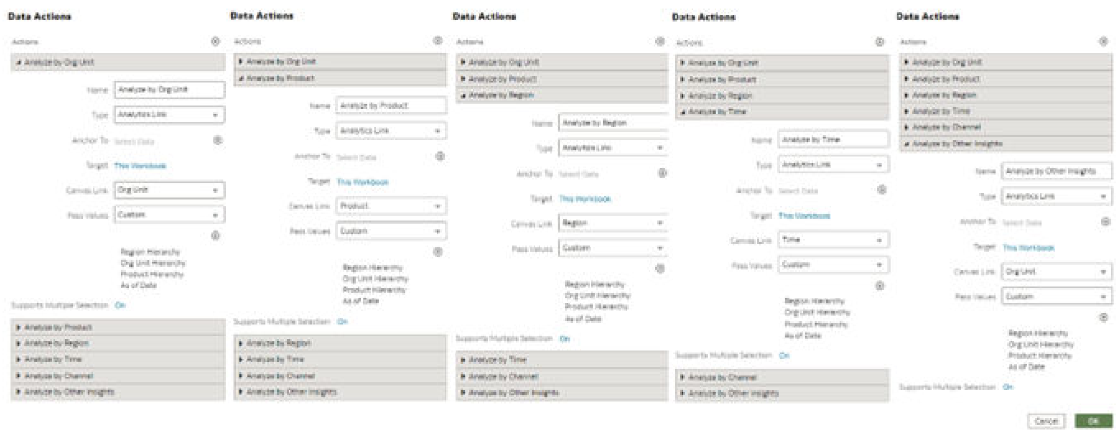
Figure 9-89   Data Action Configuration in Time canvas



From every chart available in Other Insights, you can select a value, and then navigate to the Org Unit, Product and Region canvas.

In order to do so, with a right click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

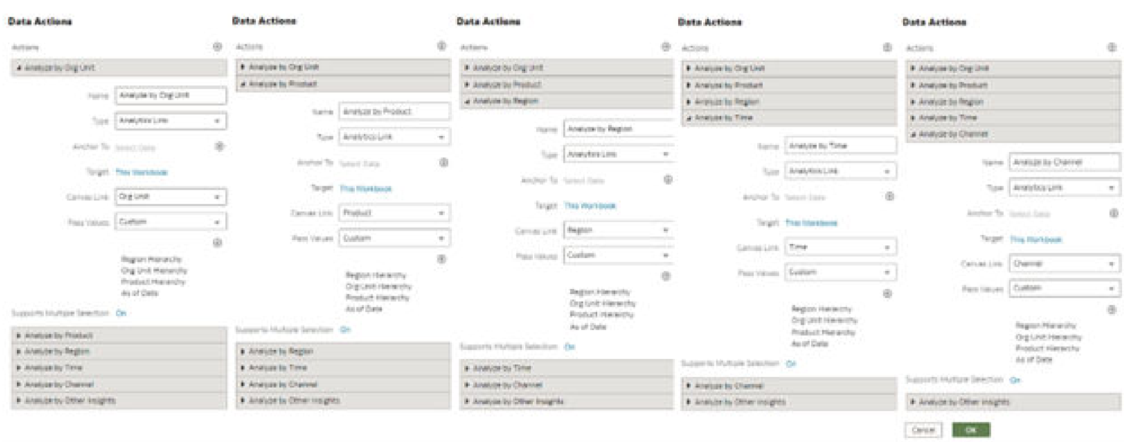
Figure 9-90 Data Action Configuration in Channel canvas



From every chart available in Region, you can select a value, and then navigate to the Org Unit, Product, Region, Time and Other Insights canvas.

In order to do so, with a right-click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

Figure 9-91 Data Action Configuration in Other Insights canvas



From every chart available in Other Insights, you can select a value, and then navigate to the Org Unit, Product and Region canvas.

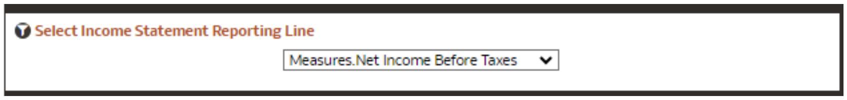
In order to do so, with a right click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

9.5.1.4 Org Unit

Understanding Org Unit performance is of strategic importance to financial services institutions. The “Org Unit” report here is similar to the one we have in the Management Ledger Reporting section except for the fact that the reports are populated on the back off Instrument Summary data with additional reporting.

You can use a series of Report Prompts, as previously described, to filter the data. In addition, there are In-Report prompt selections to select the Top/ Bottom N org units that you are interested in, and the corresponding data will be displayed.

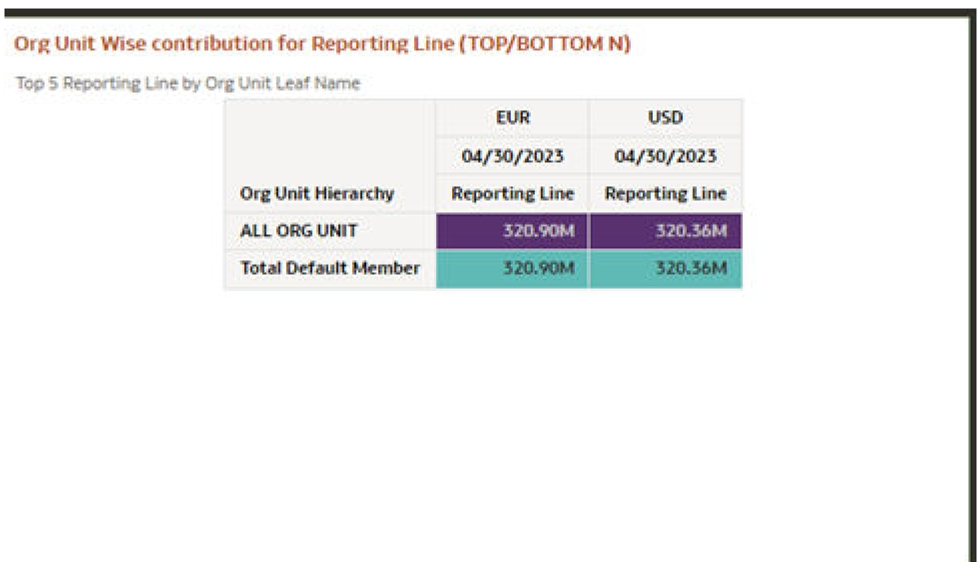
Figure 9-92   Select Income Statement Reporting Line



The report displays the underlying data according to the following Charts:

- **Org Unit Wise contribution for Reporting Line (TOP N); the same is available for bottom view**
  In this chart, for the selected reporting line, the Top N (N selected from the chart prompt) and bottom N organization units are displayed in descending order of value of the reporting line.

  Figure 9-93   Org Unit Wise contribution for Reporting Line (TOP N)

  Org Unit Wise contribution for Reporting Line (TOP/BOTTOM N)

  Top 5 Reporting Line by Org Unit Leaf Name

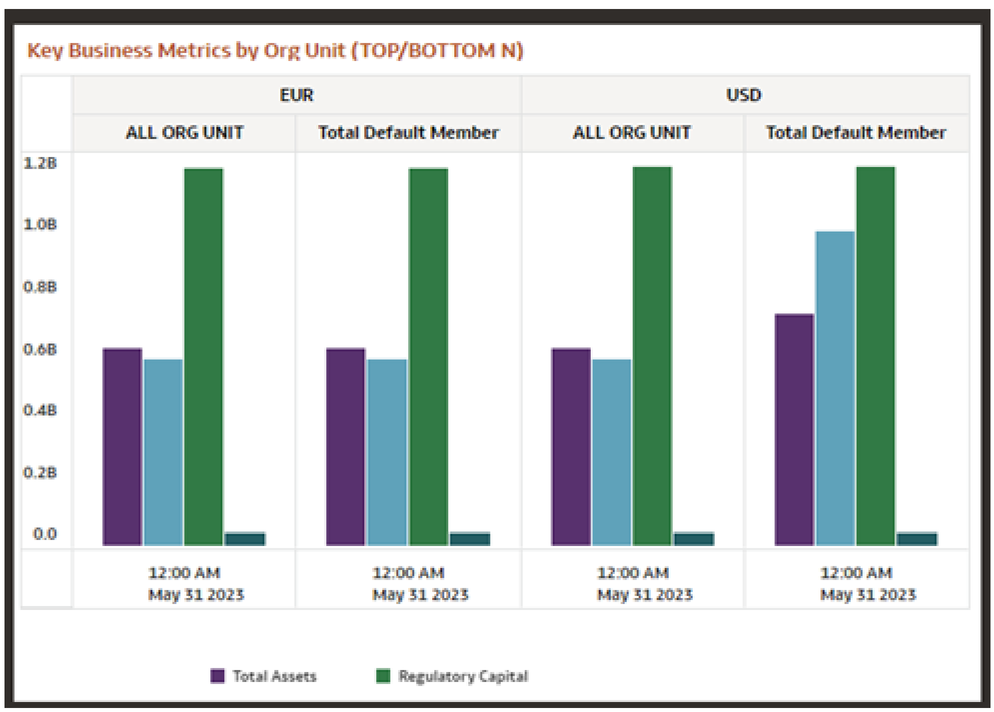
	EUR	USD
	04/30/2023	04/30/2023
Org Unit Hierarchy	Reporting Line	Reporting Line
ALL ORG UNIT	320.90M	320.36M
Total Default Member	320.90M	320.36M

- **Org Unit by End of Period Balance (TOP N); the same is available for bottom view:**
  The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances.

Figure 9-94 Org Unit by End of Period Balance (TOP N)

- **Key Business Metrics by Org Unit (TOP N); the same is available for bottom view:** The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides the breakup between Asset and Liability Balances along with Regulatory and Economic Capital.

Figure 9-95 Key Business Metrics by Org Unit (TOP/ BOTTOM N)

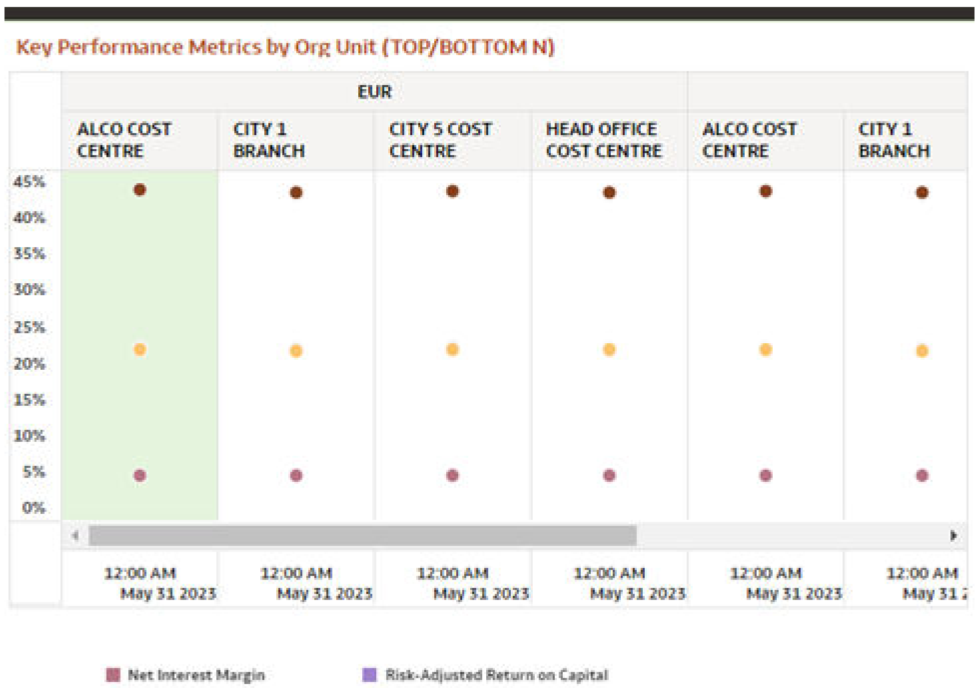


   – **Total Assets and Total Liabilities:** Total Asset and Total Liability Balances.
   – **Regulatory Capital:** Regulatory Capital is by definition similar to that of Economic capital except for the fact that unlike economic capital, regulatory capital is calculated as per regulations laid down by banking regulators in a country.
   – **Economic Capital:** Economic Capital is the amount of risk capital, which a firm requires to cover the risks that it is running on books and collecting as a risk taking

enterprise. These risks are typically market risk, credit risk, legal risk, and operational risk. It is the amount of capital that is needed by the bank to stay solvent.

- **Key Performance Metrics by Org Unit (TOP N); the same is available for bottom view:** The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides selected KPI's like NIM, RAROC, ROE and ROTA of these Org Units.

Figure 9-96 Key Performance Metrics by Org Unit (TOP/ BOTTOM N)



  - **Net Interest Margin:** NIM is usually Net Interest Income expressed as a percentage that is, it is the net interest income a bank or financial institution earns in percentage terms on the average interest-earning assets in a specified period.
  - **Return on Total Assets:** Return on Total Assets (ROTA) is a ratio that measures a company's earnings before taxes (NIBT) relative to its total Assets. It is expressed as a percentage.
  - **Risk Adjusted Return on Capital:** Risk Adjusted Return on Capital is a ration that measures the financial health of the financial institution. Here NIBT is divided by Unexpected Losses and expressed as a percentage.
  - **Return on Equity:** Return on equity (ROE) is the measure of a bank's net income divided by its shareholders' equity. ROE is a gauge of a corporation's profitability and how efficiently it generates those profits. The higher the ROE, the better a company is at converting its equity financing into profits.
- **Other Ratios by Org Unit (TOP N); the same is available for bottom view:** The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides selected business metrics like Net Fee Income, Gross Interest Income, Interest Coverage Ratio and Debt coverage ratio, all expressed as percentages.

Figure 9-97 Other Ratios by Org Unit (TOP/ BOTTOM N)

- **Net Fee Income:** Net Fee Income is the revenue generated by the bank from fees and commissions less the waivers expressed as a percentage of Total End of Period Balances.
- **Gross Interest Income:** Gross Interest Income is the total interest paid by the borrower to the bank relative to its total outstanding balances. It does not account for any interest expenses incurred by the bank or any kind of fees or charges. It is expressed as a percentage.
- **Interest Coverage Ratio:** The Interest Coverage Ratio measures a bank's ability to meet required interest expense payments related to its outstanding obligations. It is expressed as a ratio of NIBT with Total Interest Expenses expressed as a percentage.
- **Operating Expense Ratio:** Operating Expense ratio compares operating expenses to Total Revenue. It is a common metric financial institutions use to determine how efficient their management is at keeping operating costs low while also earning revenue.

9.5.1.5 Product

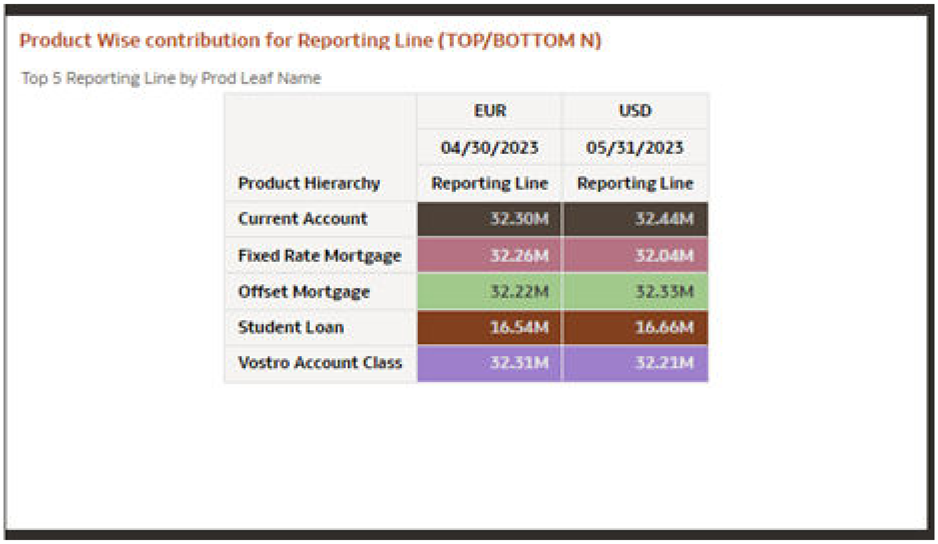
This report provides monthly trended results using that you can monitor product line performance, track earnings trend and other key factors at the product levels.

You can use a series of Report Prompts, as previously described, to filter the data. In addition, there are In-Report prompt selections to select the Top/ Bottom N products that you are interested in, and the corresponding data will be displayed.

The report displays the underlying data according to the following Charts:

- **Product wise contribution for Reporting Line (TOP N); the same is available for bottom view:** In this chart, for the selected reporting line, the Top N (N selected from the chart prompt) and bottom N products are displayed in descending order of value of the reporting line.

Figure 9-98   Product wise contribution for Reporting Line (TOP/ BOTTOM N)



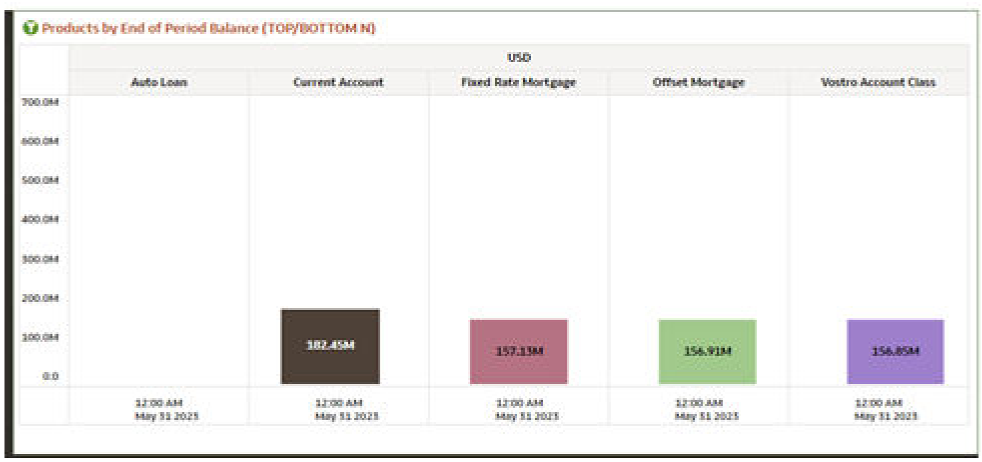
Product Wise contribution for Reporting Line (TOP/BOTTOM N)

Top 5 Reporting Line by Prod Leaf Name

	EUR	USD
	04/30/2023	05/31/2023
Product Hierarchy	Reporting Line	Reporting Line
Current Account	32.30M	32.44M
Fixed Rate Mortgage	32.26M	32.04M
Offset Mortgage	32.22M	32.33M
Student Loan	16.54M	16.66M
Vostro Account Class	32.31M	32.21M

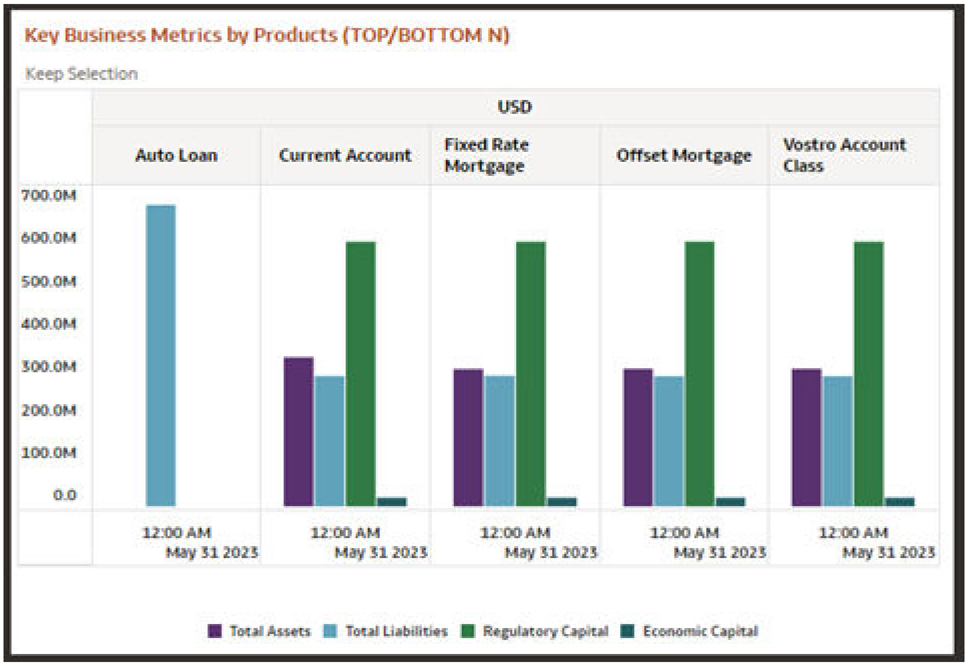
- **Product by End of Period Balance (TOP N); the same is available for bottom view:** The chart displays the Top N (N selected from the chart prompt) and bottom N products sorted in a descending order by End of Period Balances.

Figure 9-99   Product by End of Period Balance (TOP/ BOTTOM N)



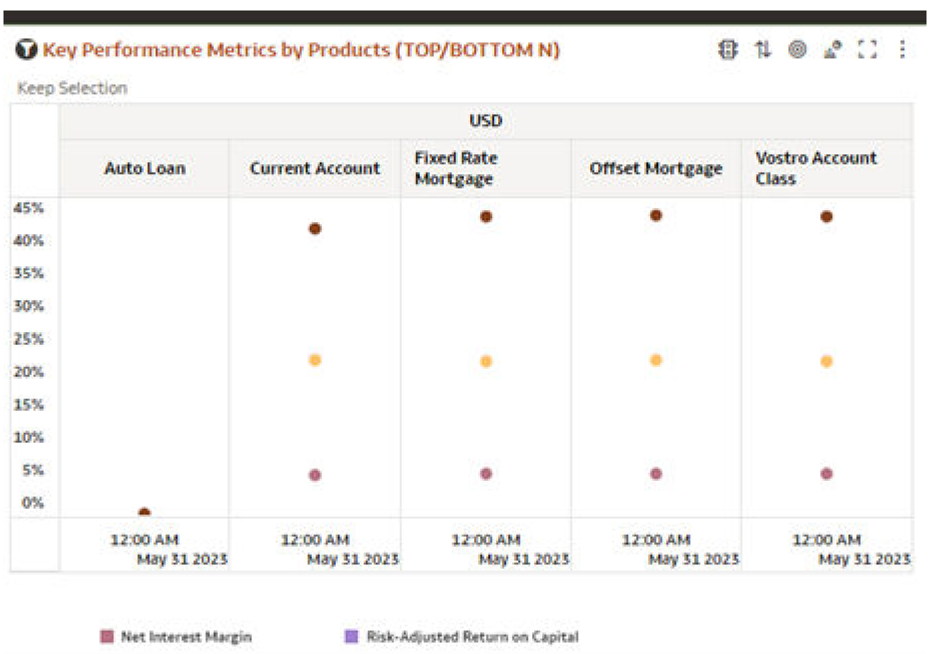
- **Key Business Metrics by Products (TOP N); the same is available for bottom view:** The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides the breakup between Asset and Liability Balances along with Regulatory and Economic Capital.

Figure 9-100 Key Business Metrics by Products (TOP/ BOTTOM N)



- **Key Performance Metrics by Products (TOP N); the same is available for bottom view:** The chart displays the Top N (N selected from the chart prompt) and bottom N products sorted in a descending order by End of Period Balances and provides selected KPI's like NIM, RAROC, ROE and ROTA of these Products.

Figure 9-101 Key Performance Metrics by Products (TOP/ BOTTOM N)



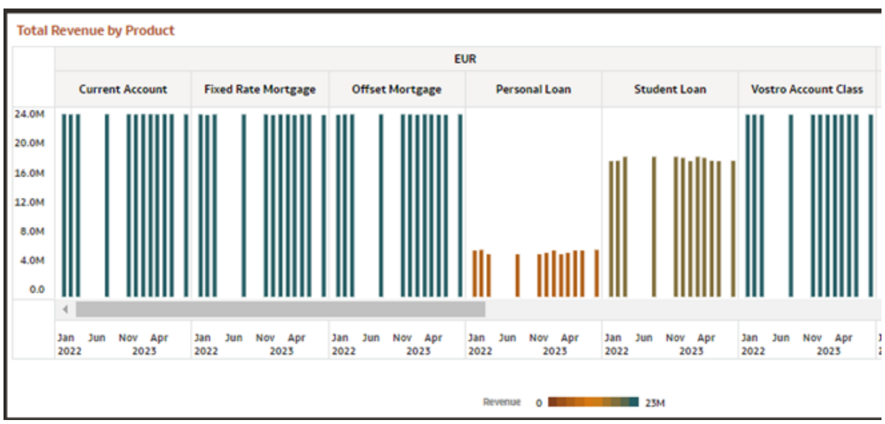
- **Other Ratios by Products (TOP N); the same is available for bottom view:** The chart displays the Top N (N selected from the chart prompt) and bottom N products sorted in a descending order by End of Period Balances and provides selected business metrics like

Net Fee Income, Gross Interest Income, Interest Coverage Ratio and Debt coverage ratio, all expressed as percentages.

Figure 9-102 Other Ratios by Products (TOP/ BOTTOM N)

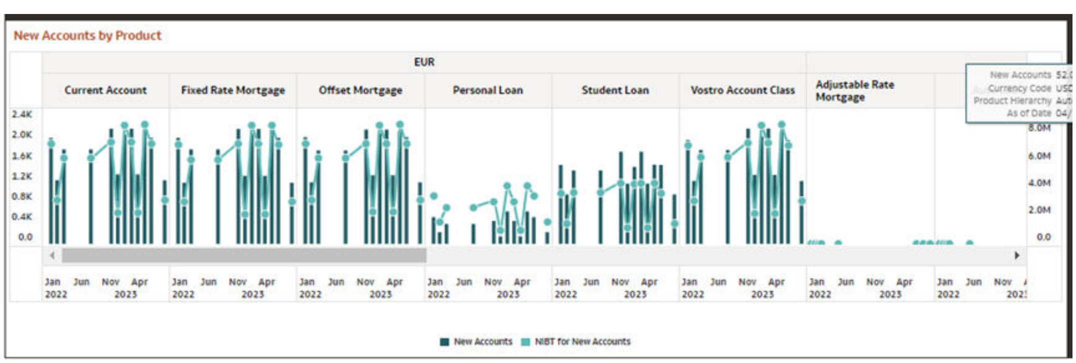
- **Total Revenue by product**: This chart displays the revenues generated by the products.

Figure 9-103 Total Revenue by product



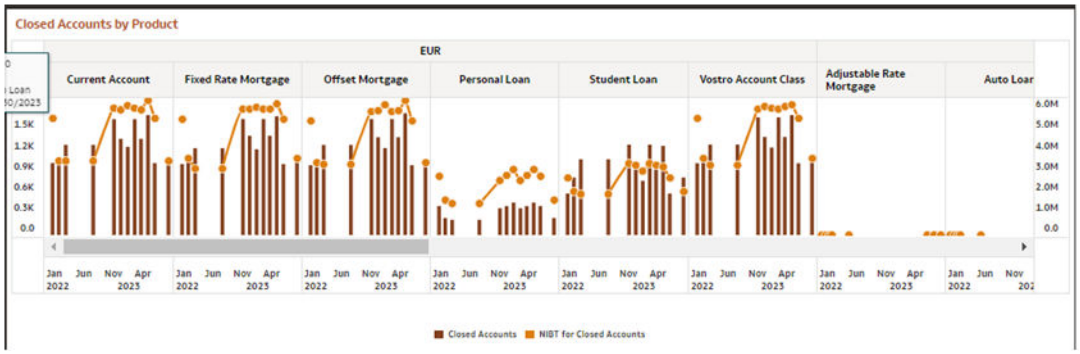
- **New Accounts by product**: This chart displays a time series view of the new accounts opened with the products displayed in trellis columns and the income generated from new accounts as lines.

Figure 9-104 New Accounts by product



- **Closed Accounts by product**: This chart displays a time series view of the closed accounts opened with the products displayed in trellis columns and the income generated from the closed accounts as lines.

Figure 9-105 Closed Accounts by product

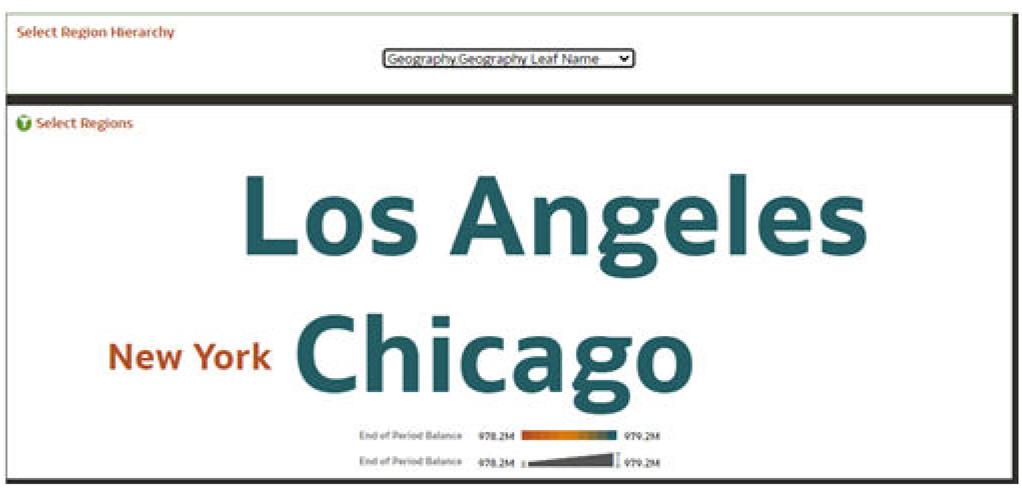


9.5.1.6 Region

This report enables tracking of Balances, reporting lines, business and performance metrics including comparison with selected regions and regional hierarchy at different levels.

You can use the following report filters to further slice and dice the available report charts:

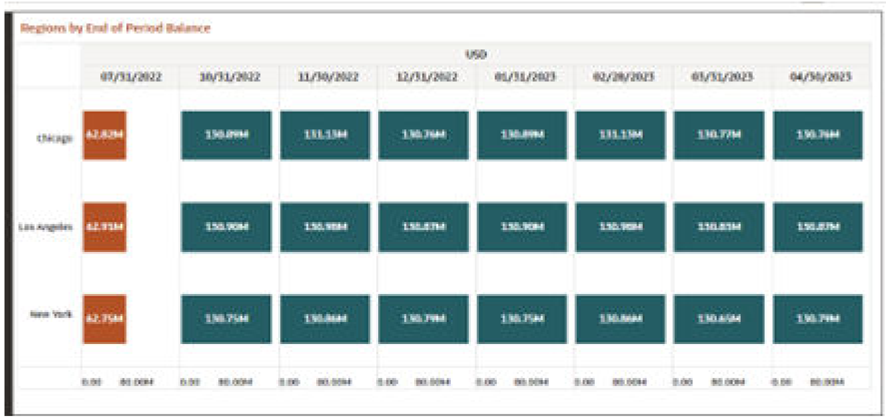
Figure 9-106 Canvas Prompt Filters



In addition, you can use a series of Report Prompts, as previously described, to filter the data. The report displays the underlying data according to the following Charts:

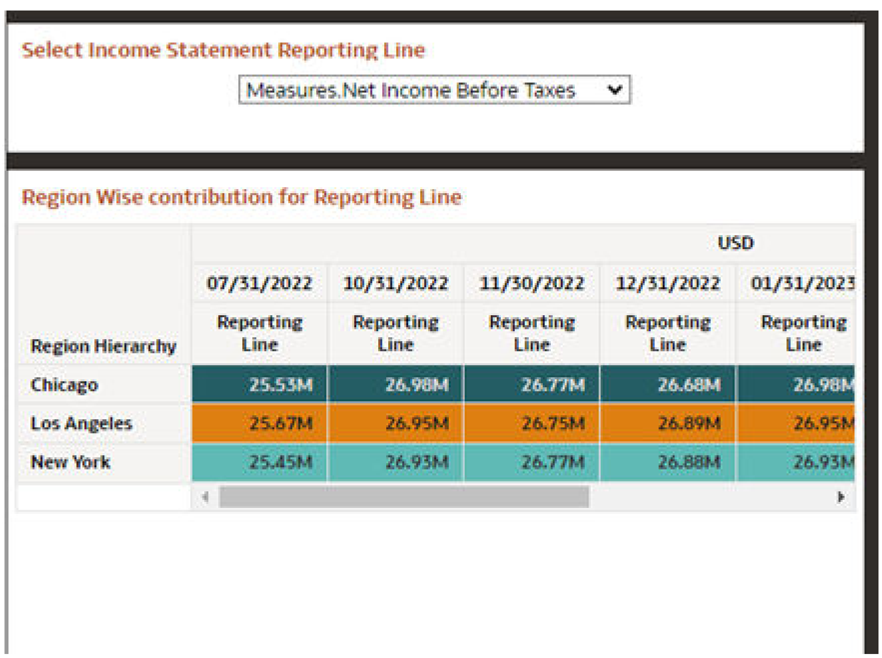
- **Regions by End of Period Balance:** The chart displays the End of Period Balances for the region hierarchy or leaf level as selected by the user.

Figure 9-107 Regions by End of Period Balance



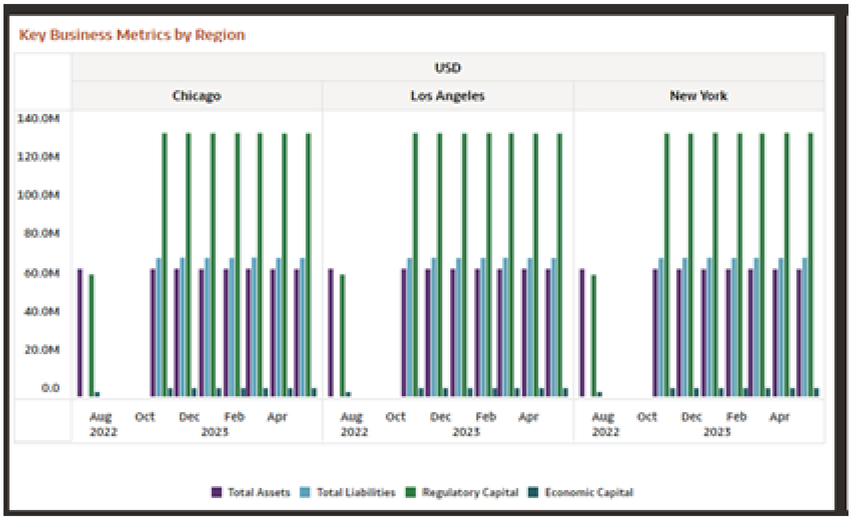
- **Region Wise Contribution for Reporting Line:** The chart displays the value of the reporting line for the selected combination of reporting line, leveraging the Select Income Statement Reporting Line variable prompt, and region hierarchy, as described earlier in how to leverage Select Region hierarchy.

Figure 9-108 Region Wise Contribution for Reporting Line



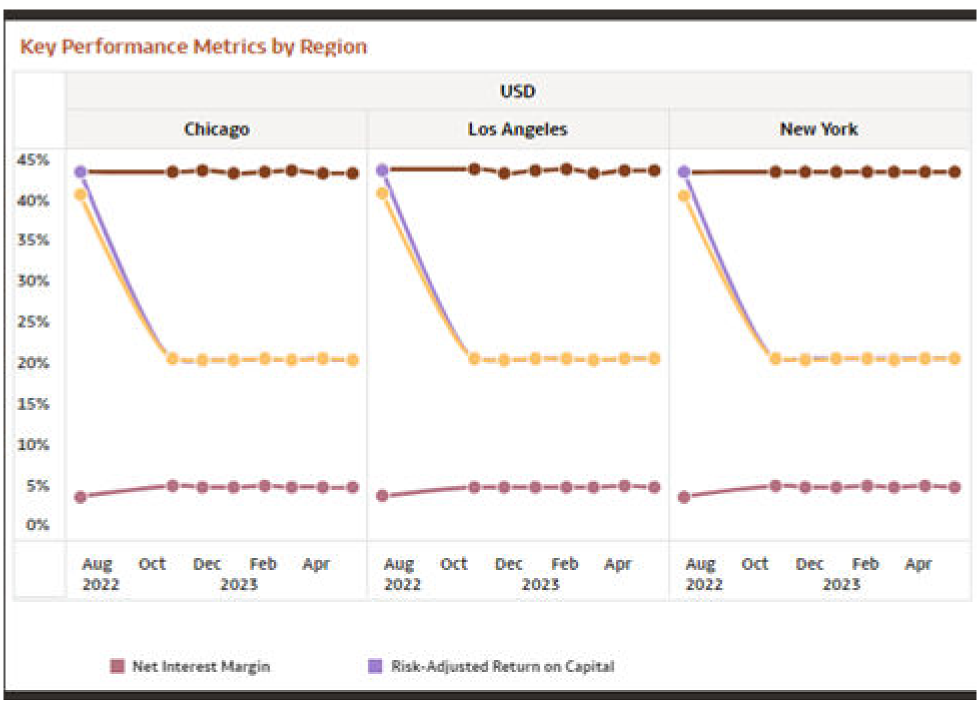
- **Key Business Metrics by Region:**The chart displays the key Business Metrics – Total Assets, Total Liabilities, Economic Capital, and Regulatory Capital for the selected Region hierarchy.

Figure 9-109 Key Business Metrics by Region



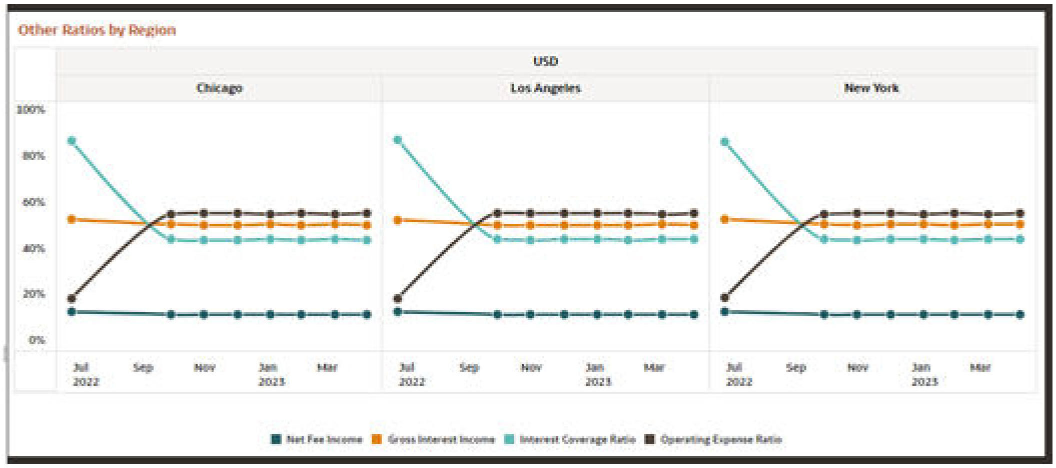
- **Key Performance Metrics by Region:** The chart displays the key Business Metrics – Net Interest Margin, Return on Total Assets, Risk Adjusted Return on Capital, and Return on Equity for the selected Region hierarchy.

Figure 9-110 Key Performance Metrics by Region



- **Other Ratios by Region:** The chart displays business metrics like Net Fee Income, Gross Interest Income, Interest Coverage Ratio and Debt coverage ratio, all expressed as percentages for the selected region hierarchy.

Figure 9-111 Other Ratios by Region



- **Total Revenue by Region**: The chart displays Total Revenue for the selected region hierarchy.

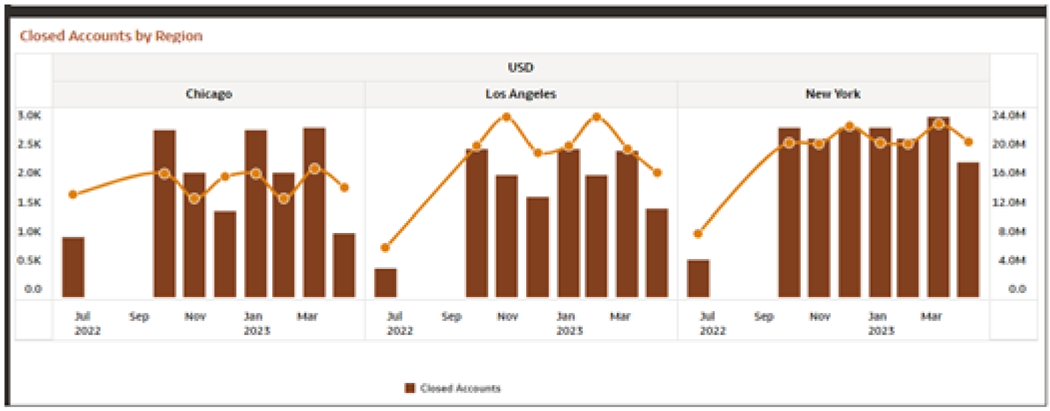
Figure 9-112 Total Revenue by Region

- **New Accounts and Closed Accounts by Region**: The chart displays business metrics NIBT, number of New Accounts and Closed Accounts over time.

Figure 9-113 New Accounts by Region

- **Closed Accounts byRegion**

Figure 9-114 Closed Accounts byRegion



9.5.1.7 Time

This report provides a view-by-line Time tracking of reporting lines, business, and performance metrics including comparison with time dimension levels.

You can use the following report filters to further slice and dice the available report charts:

Figure 9-115 Canvas Prompt Filters – Time Dimension

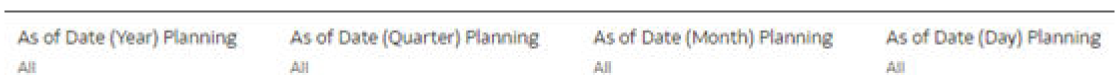
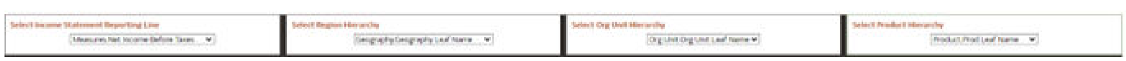


Figure 9-116 Variable Prompt Filters



- Select Income Statement Reporting Line: This is a mandatory filter for the group filtering on the Income Statement reporting line dimension. The following filter values are available for selection:
  - **Net Income Before Tax**: Net income before tax is the amount of profit made by the financial institution before income tax is paid. This figure is found by subtracting total expenses from total revenue.
  - **Net Interest Income**: Reflects the difference between the revenue generated from a bank's interest-bearing assets and the expenses associated with paying its interest-bearing liabilities.
  - **Non Interest Income**: Income derived primarily from fees including deposit and transaction fees, insufficient funds (NSF) fees, annual fees, monthly account service charges, inactivity fees, check and deposit slip fees, and so on.
  - **Operating Expenses**: Expenses that a business incurs through its normal business operations.

- **Provisions for Credit Loss**: Estimation of potential losses that a company might experience due to credit risk. The provision for credit losses is treated as an expense on the company's financial statements.

The view is segmented into three different perspectives. Actual, Budget Estimates, Operating Plan to enable comparison in these by dimensions Currency Code, Region, Organization Unit, and Product Hierarchy.

Figure 9-117 Selected Reporting Line

Figure 9-118 Key Business Metrics

Figure 9-119 Key Performance Metrics

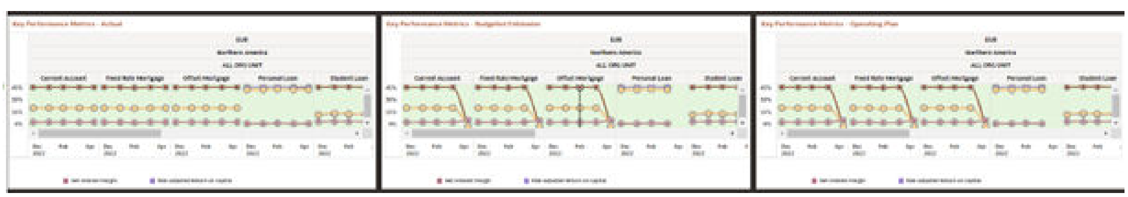
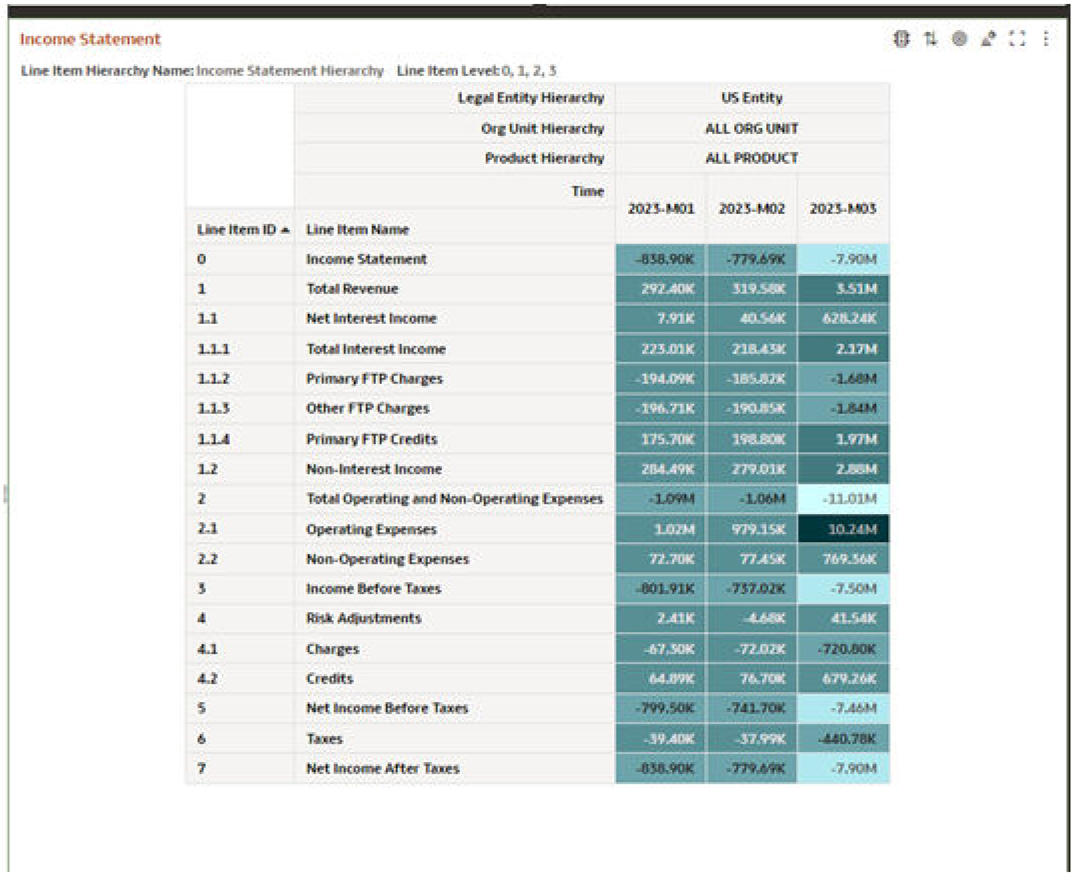


Figure 9-120 Other Ratios -Actual

9.5.1.8 Detailed Income Statement

The Detailed IS Report as it implies details the granular level reporting lines of the P&L of a bank. Time-series reporting of the income statement, with respect to the last five time periods selected and are provided at the granularity of As of Date.

Figure 9-121 Detailed IS Report Default



Income Statement

Line Item Hierarchy Name: Income Statement Hierarchy Line Item Level: 0, 1, 2, 3

	Legal Entity Hierarchy	US Entity		
	Org Unit Hierarchy	ALL ORG UNIT		
	Product Hierarchy	ALL PRODUCT		
	Time	2023-M01	2023-M02	2023-M03
Line Item ID	Line Item Name			
0	Income Statement	-838.90K	-779.69K	-7.90M
1	Total Revenue	292.40K	319.58K	3.51M
1.1	Net Interest Income	7.91K	40.56K	628.24K
1.1.1	Total Interest Income	223.01K	218.43K	2.17M
1.1.2	Primary FTP Charges	-194.09K	-185.82K	-1.68M
1.1.3	Other FTP Charges	-196.71K	-190.85K	-1.84M
1.1.4	Primary FTP Credits	175.70K	198.80K	1.97M
1.2	Non-Interest Income	284.49K	279.01K	2.88M
2	Total Operating and Non-Operating Expenses	-1.09M	-1.06M	-11.01M
2.1	Operating Expenses	1.02M	979.15K	10.24M
2.2	Non-Operating Expenses	72.70K	77.45K	769.56K
3	Income Before Taxes	-801.91K	-737.02K	-7.50M
4	Risk Adjustments	2.41K	-4.68K	41.54K
4.1	Charges	-67.50K	-72.02K	-720.80K
4.2	Credits	64.89K	76.70K	679.26K
5	Net Income Before Taxes	-799.50K	-741.70K	-7.46M
6	Taxes	-39.40K	-37.99K	-440.78K
7	Net Income After Taxes	-838.90K	-779.69K	-7.90M

Income Statement Line Items Variance and Line Item Variance %:The Income Statement line item variance and variance % reports work in the same way as in the case of the Detailed Income Statement canvas in Management Reporting.

9.5.1.9 Channel Canvas

This report enables tracking by Organization Channel performance metrics including comparison with selected regions, organizations, and product hierarchies at different levels.

You can use the following report filters to further slice and dice the available report charts:

- **New business by Origination Channel** report shows the new balances that have been added to the books across the various origination channels during the selected time period.

Figure 9-122 New Business by Origination Channel Report

- **New accounts by Origination Channel** report shows the new accounts that have been added to the books across the various origination channels during the selected time period.

Figure 9-123   New Accounts by Origination Channel Report

- **Closed accounts by Origination Channel** report shows the accounts that have been closed with a view of the origination channels of those accounts during the selected time period.

Figure 9-124   Closed Accounts by Origination Channel

9.5.1.10 Other Insights

The Other Insights report provides granular information on account and customer distribution. This data help banks manage their investments efficiently and invest in areas that are of strategic and financial importance to the bank. You can use a series of Report Prompts, as previously described, to filter the data.

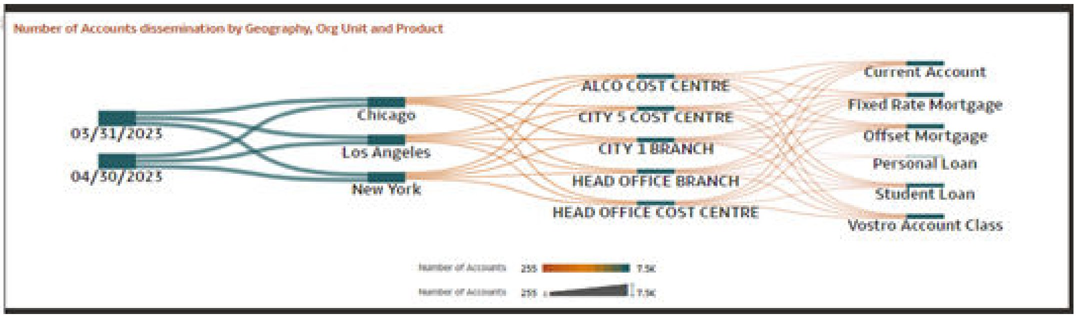
The report displays the underlying data according to the following Charts:

- **Number of Accounts and Customers Distribution**: The chart displays business metrics like Number of Accounts and Number of Customers for the selected Region, Org Unit and Product hierarchy.

Figure 9-125   Number of Accounts and Customers Distribution

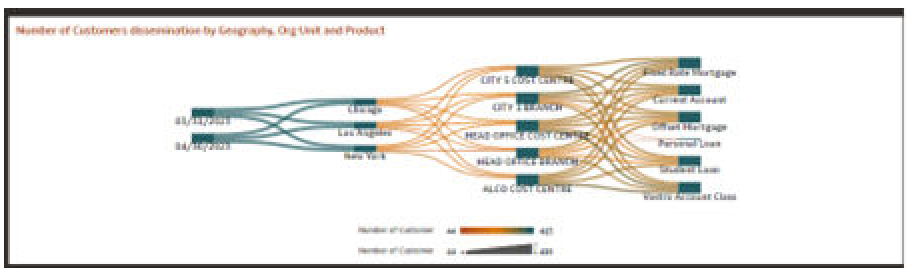
- **Number of Accounts dissemination by Geography, Org Unit, and Product**: As the name implies, this chart provides a breakup of the number of accounts by Region, Org Unit and Product.

Figure 9-126 Number of Accounts dissemination by Geography, Org Unit and Product



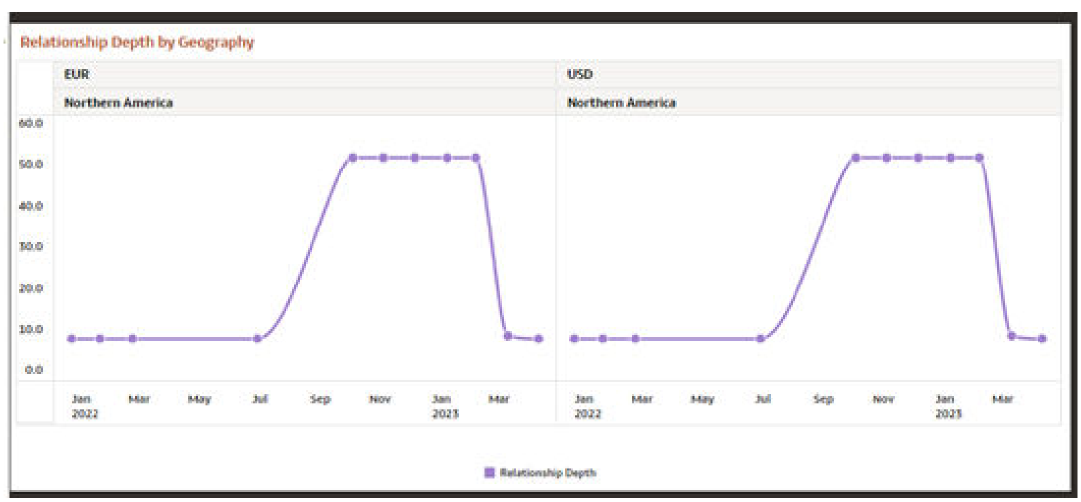
- **Number of Customers dissemination by Geography, Org Unit, and Product**: As the name implies, this chart provides a breakup of the number of customers by Region, Org Unit and Product.

Figure 9-127 Number of Customers dissemination by Geography, Org Unit and Product



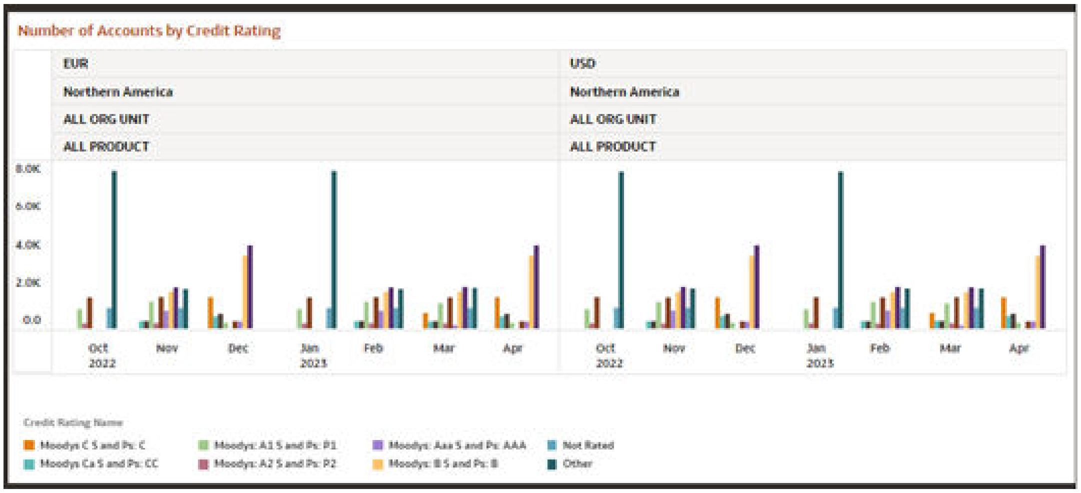
- **Relationship Depth by Geography**: Relationship depth indicates the number of accounts per customer. In this report, this is reported as per Geography.

Figure 9-128 Relationship Depth by Geography



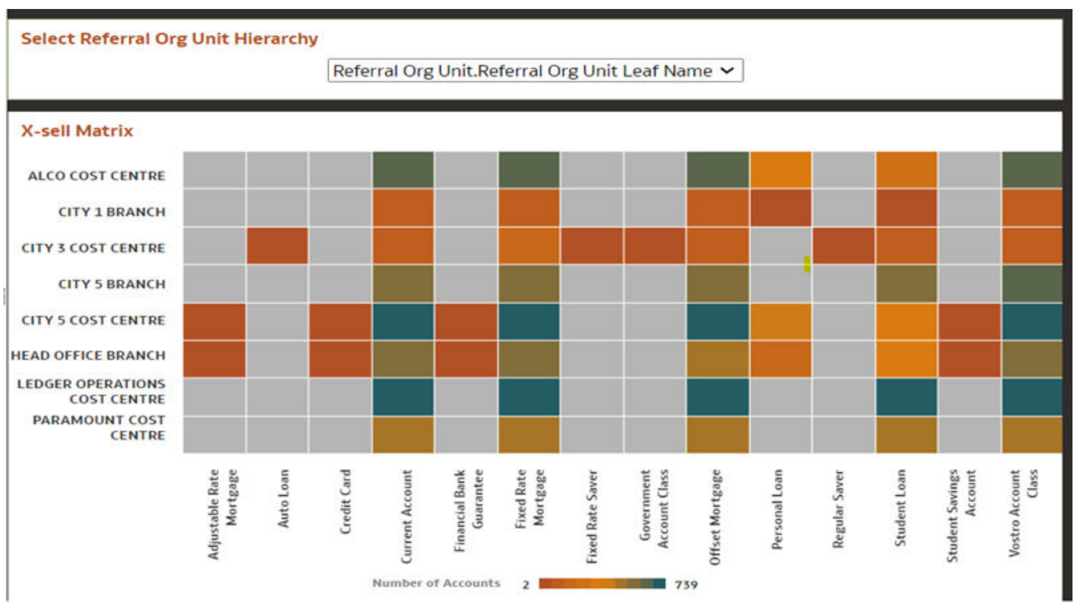
- **Number of Accounts by Credit Rating Report**: This report shows the credit rating distribution for the accounts in the portfolio, thus giving an indication of the health of the portfolio in terms of risk.

Figure 9-129   Number of Accounts by Credit Rating Report



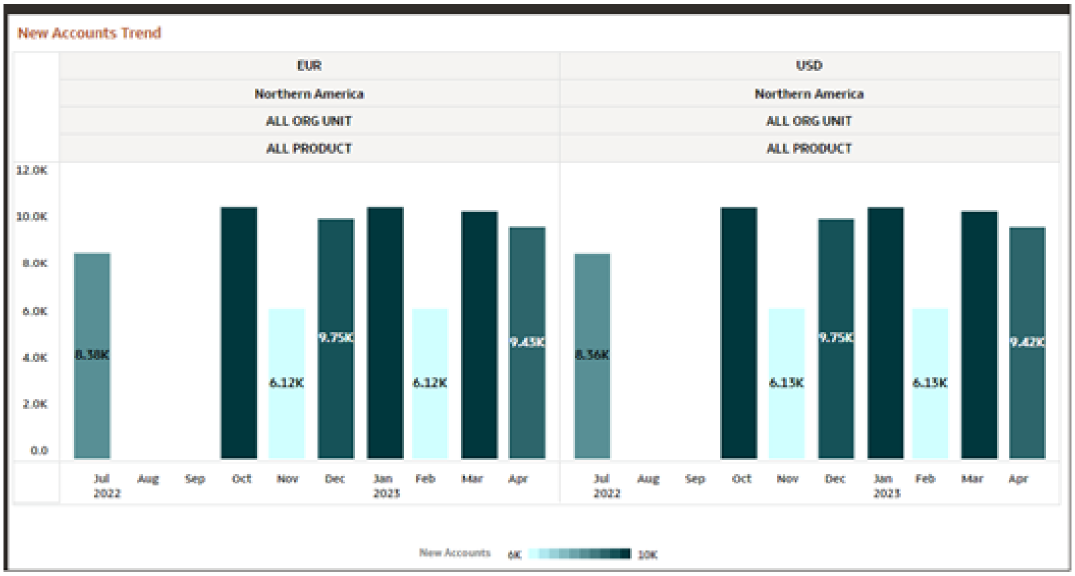
- **X-sell Matrix (Number of Accounts) Report**: This report shows a product wise distribution of the number of accounts that have been X-sold from a specific org unit that is selected from the dropdown, Selecting the leaf level option will display the X-sell Matrix.

Figure 9-130   X-sell Matrix (Number of Accounts) Report



- **New Accounts Trend Report**: This report shows a product wise view of the new account openings during the selected time period. This can also ve viewed as per the org unit or region.

Figure 9-131 New Accounts Trend Report



9.6 Customer Profitability

To access the Processing Analytics report, from the LHS Menu, select **Analytics**, and then select **Customer Profitability**.

Customer Profitability provides you with the roll-up and drill-down capability on the Instrument level the available levels into for product, region, or channel. This comprehensive view explores various insights around customer details and customer comparison with segments into customer relationships.

> **Note:**
>
> Before generating reports and analytics, it is mandatory to set the relevant currencies and currency rates. This is required for generating the reports with correct values. For more information about creating currencies and currency rates, see the following:
>
> - Currencies
> - Currency Rates

To feed the Customer Profitability Report, refer to the *Oracle Financial Services Profitability Analytics Cloud Service Data Flow* document available at Doc ID: 2869409.1.

For the Customer Profitability Report, refer to the following Data Flow sub-sections:

- PACS - Instrument Summary
- PACS – Instrument Income Statement
- PACS – Instrument Segmentation
- PACS - Customer and Account
- PACS – Instrument Life Time Value
- PACS – Customer Group Income Statement

- PACS – Instrument Segmentation Movements

For Income Statement and Balance Sheet Hierarchies, or any other Hierarchy created out of Financial Element dimension, a Financial Element carrying a percentage value cannot be added as a child, Sibling to a child or Leaf under Parent/ Child/ Sibling in the Hierarchy. Users are expected to be mindful not to map a portfolio column to a FE denoting a rate or apply an expression, where a divisor is used in a way that the column value effectively becomes a rate, thus preventing a meaningful roll-up to the node of the hierarchy.

9.6.1 Instrument Level Aggregation and Insights

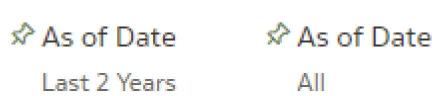
The Customer Profitability report is arranged as a set of reports, classified into the following:

- Customer Details
- Customer IS
- Customer Life Time Value
- Customer vs Segment
- Segment Comparator
- Segment Analysis
- Segment Income Statement
- Relationship Manager Profitability
- Inter-Segment Movement
- Customer Group Details

9.6.1.1 Report Common Filters

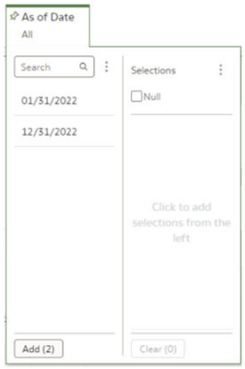
You can use a series of canvas level pinned Prompts to filter the data according to Functional Key Attributes as follows:

Figure 9-132 Canvas Prompt Filters for Time Dimension



As of Date: You can use this filter to isolate a selected timeframe for the analysis. The following screenshot displays this filter's possible options against the Time Dimension.

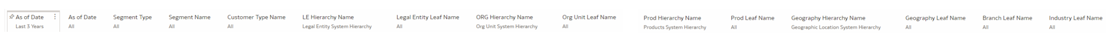
Figure 9-133 As of Date Selection



Additional Filters for the Time Dimension are as follows:

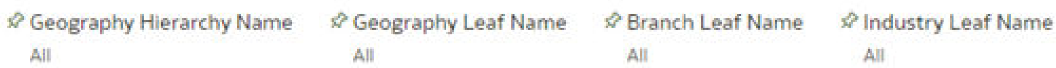
- As of Date (Year)
- As of Date (Day)

Figure 9-134 Other Canvas Prompt Filters



- **Customer Type Name**: You can use this filter to select the Customer Type for the underlying Instrument Tables Accounts.
- **LE Hierarchy Name**: Note that this is a mandatory filter for the group filtering on Legal Entity Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “LE Hierarchy Name” must be selected with only a single value simultaneously.
- **Legal Entity Leaf Name**: You can use this filter to select the Legal Entity Leaf Name that is related to the underlying Management Ledger data.
- **Org Hierarchy Name**: This is a mandatory filter for the group filtering on Org Unit Key Processing Dimension. As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “Org Hierarchy Name” must be selected with only a single value simultaneously.
- **Org Unit Leaf Name**: You can use this filter to select the Org Unit Leaf Name corresponding to the hierarchy.
- **Product Hierarchy Name**: Note that this is a mandatory filter for the group filtering on Product Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “Prod Hierarchy Name” must be selected with only a single value simultaneously.
- **Product Leaf Name**: You can use this filter to select the Product Leaf Name corresponding to the hierarchy.

Figure 9-135 Standard Dimensions Prompt Filters



- **Geography Hierarchy Name**: This is a mandatory filter for the group filtering on the Geography Hierarchy.
  As the application supports the creation of multiple hierarchies for the same dimension of analysis, to avoid displaying results from multiple hierarchies at the same time, a mandatory driver to select "Geography Hierarchy Name" must be selected.
- **Geography Leaf Name**: You can use this filter to select a specific Geography value at leaf level related to the underlying instrument tables accounts.
- **Branch Leaf Name**: You can use this filter to select a specific Branch value at leaf level related to the underlying instrument tables accounts.
- **Industry Leaf Name**: You can use this filter to select a specific Industry value at leaf level related to the underlying instrument tables accounts.
- **Currency Code**: You can use this filter to select a specific Currency Code for the underlying Instrument Tables Accounts.
- **Segment Type**: You can use this filter to select a specific Segment Type for the Customer Profile.
- **Segment Name**: You can use this filter to select a specific Segment Type under the classification of segmentation Gold, Silver, Platinum, or Bronze.

9.6.1.2 In-canvas Variable Prompts

Figure 9-136 In-canvas Prompt Filters for Canvas

- **Select Customer Name**: You can use this filter to isolate a selected Customer Name for the analysis.
- **Select Customer Number**: You can use this filter to isolate a selected Customer Number for the analysis.
- **Select Account Number**: You can use this filter to isolate a selected Account Number for the analysis.

The following screenshot displays this filter’s possible options against the Customer Dimension.

9.6.1.3 Customer Details Canvas

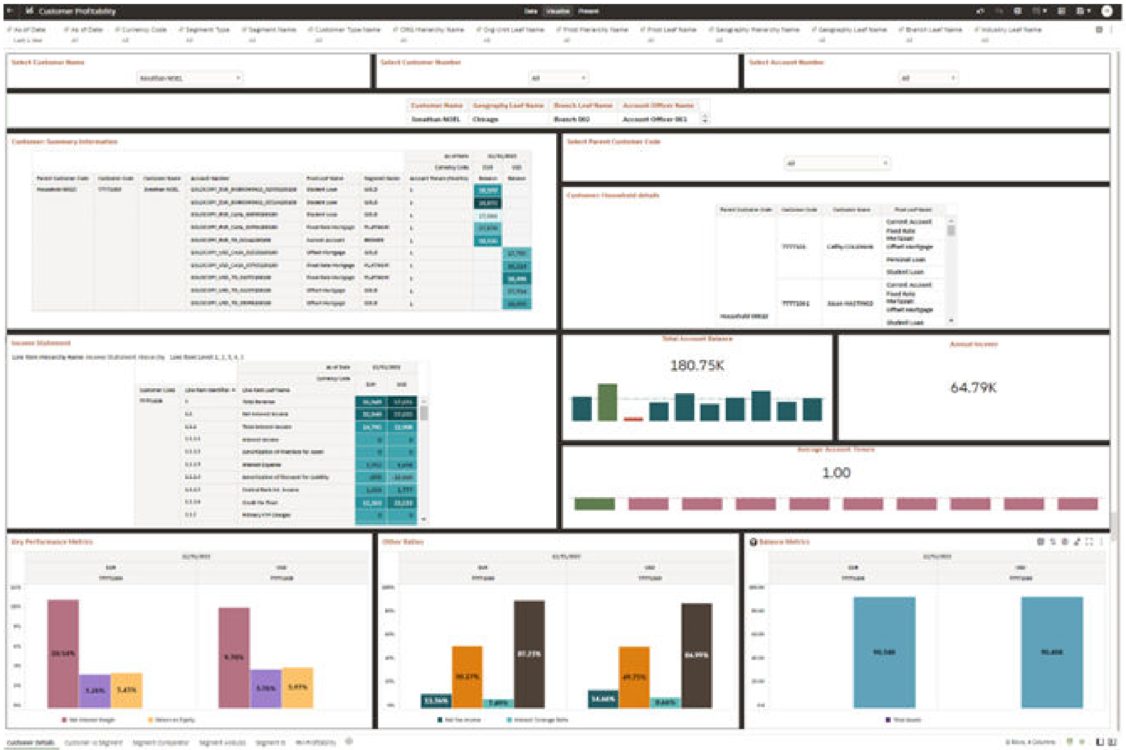
The customer profitability analysis detailed summary displays differents perspectives of customer and household data.

You can select, a customer name, customer number, or account number. This helps in navigating to the profile belonging to the customer.

For example, Select a specific customer as Jonathan Noel.

This displays data available in detail around the accounts of the selected customer.

Figure 9-137 Canvas Customer Detail

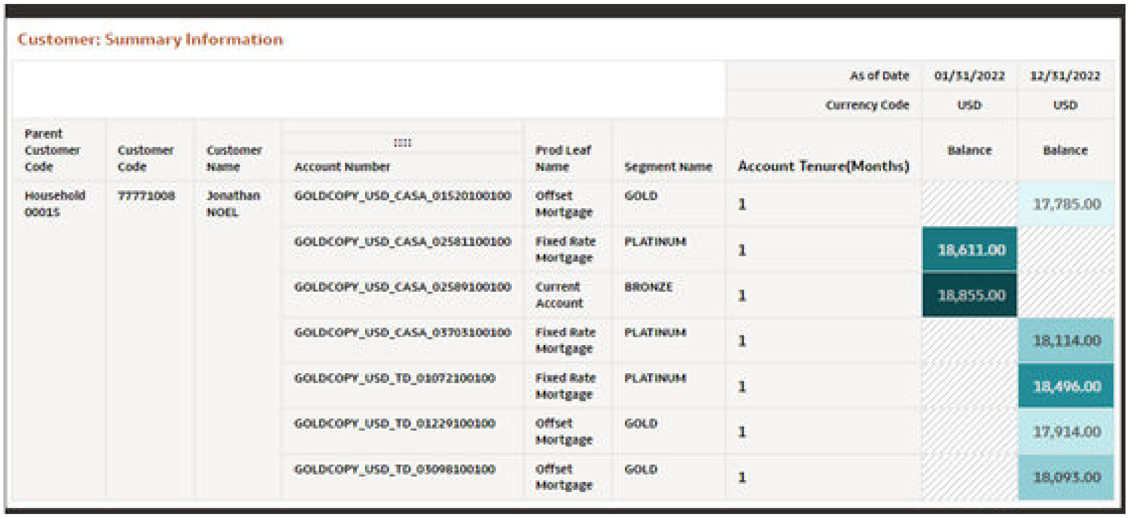


The customer summary information report shows the following details that are of interest to a front office persona:

- Product Holding
- Tenure of the products
- Account Balance
- Segment Information

As per selected dates:

Figure 9-138   Report - Customer : Summary Information

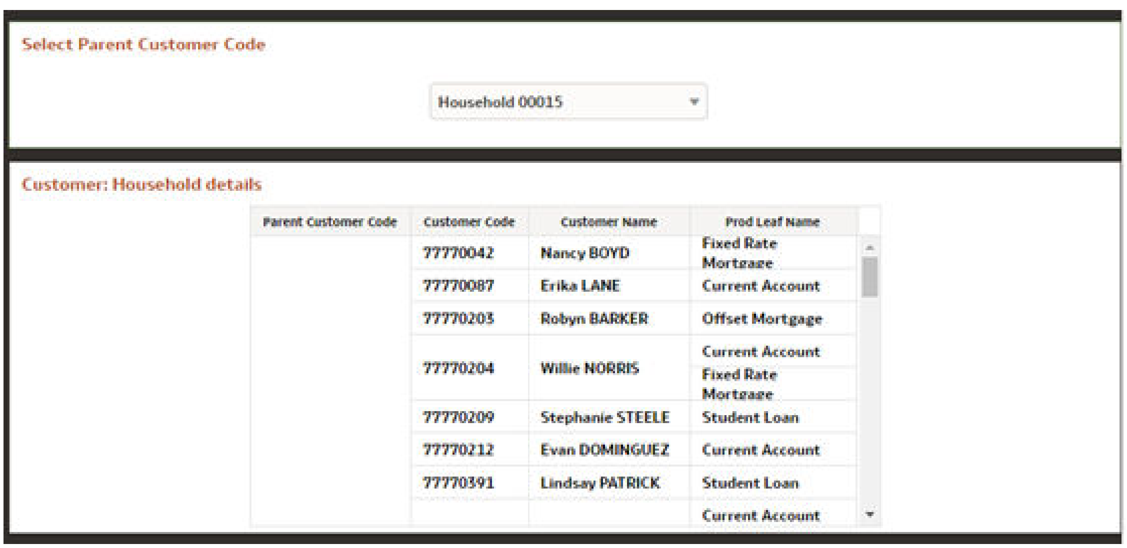


Customer: Summary Information

Parent Customer Code	Customer Code	Customer Name	Account Number	Prod Leaf Name	Segment Name	Account Tenure(Months)	Balance (As of Date 01/31/2022, Currency Code USD)	Balance (As of Date 12/31/2022, Currency Code USD)
Household 00015	77771008	Jonathan NOEL	GOLDCOPY_USD_CASA_01520100100	Offset Mortgage	GOLD	1		17,785.00
			GOLDCOPY_USD_CASA_02581100100	Fixed Rate Mortgage	PLATINUM	1	18,611.00	
			GOLDCOPY_USD_CASA_02589100100	Current Account	BRONZE	1	18,855.00	
			GOLDCOPY_USD_CASA_03703100100	Fixed Rate Mortgage	PLATINUM	1		18,114.00
			GOLDCOPY_USD_TD_01072100100	Fixed Rate Mortgage	PLATINUM	1		18,496.00
			GOLDCOPY_USD_TD_01229100100	Offset Mortgage	GOLD	1		17,914.00
			GOLDCOPY_USD_TD_03098100100	Offset Mortgage	GOLD	1		18,093.00

This report shows details of the banks customers who belong to the same household as that of the selected customer. The customer names are displayed along with the product holdings. In a wholesale context, this shows the subsidiaries of the selected customer.

Figure 9-139   Report - Customer: Household Details



Select Parent Customer Code

Household 00015

Customer: Household details

Parent Customer Code	Customer Code	Customer Name	Prod Leaf Name
	77770042	Nancy BOYD	Fixed Rate Mortgage
	77770087	Erika LANE	Current Account
	77770203	Robyn BARKER	Offset Mortgage
	77770204	Willie NORRIS	Current Account
			Fixed Rate Mortgage
	77770209	Stephanie STEELE	Student Loan
	77770212	Evan DOMINGUEZ	Current Account
	77770391	Lindsay PATRICK	Student Loan
			Current Account

This report shows the P&L statement for the selected customer. The view is very detailed with all line item leaves. The view can however be compressed by selecting the appropriate level filter.

Figure 9-140 Report Income Statement Details

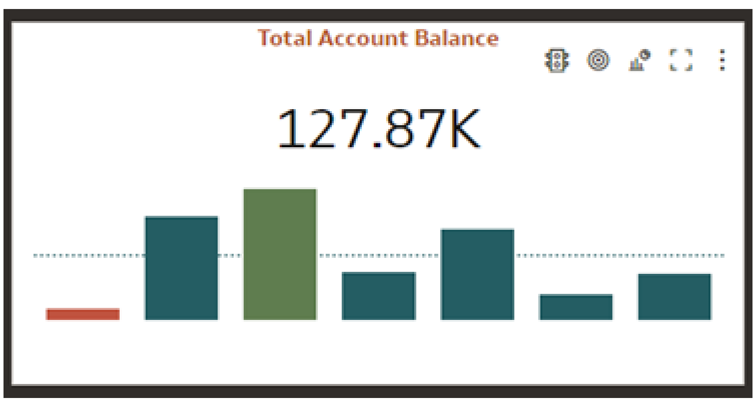
Income Statement

Line Item Hierarchy Name: Income Statement Hierarchy Line Item Level: All

		As of Date	12/31/2022
		Currency Code	USD
Customer Code	Line Item Identifier	Line Item Leaf Name	Amount
77771008	0	Income Statement	-412,170
	1	Total Revenue	685,764
	1.1	Net Interest Income	685,764
	1.1.1	Total Interest Income	121,635
	1.1.1.1	Interest Income	0
	1.1.1.2	Amortization of Premium for Asset	0
	1.1.1.3	Interest Expense	28,014
	1.1.1.4	Amortization of Discount for Liability	-219,903
	1.1.1.5	Central Bank Int. Income	25,491
	1.1.1.6	Credit for Float	288,033

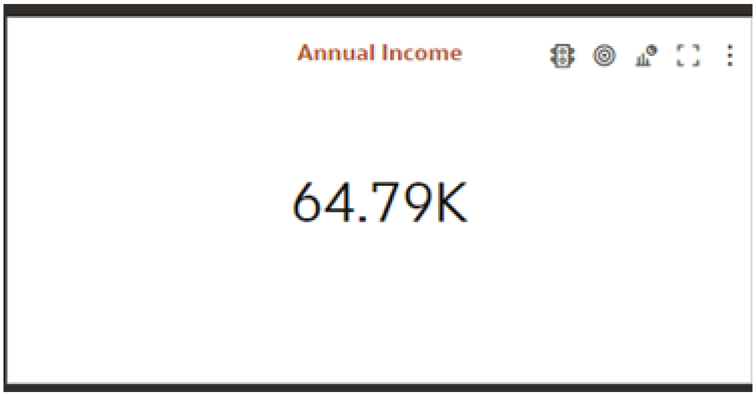
This tile shows a the total balances held by the customer at the bank across asset and liability products. The bars show the amounts for the individual products that are held by the customer, details of which can be viewed via mouseover.

Figure 9-141 Tile - Total Account Balance



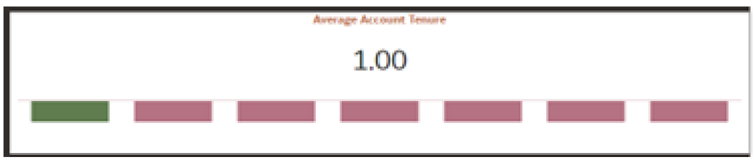
This tile shows the customer income in terms of his salary or compensation. For a wholesale customer, this would be the net profits of the enterprise.

Figure 9-142 Tile - Annual Income



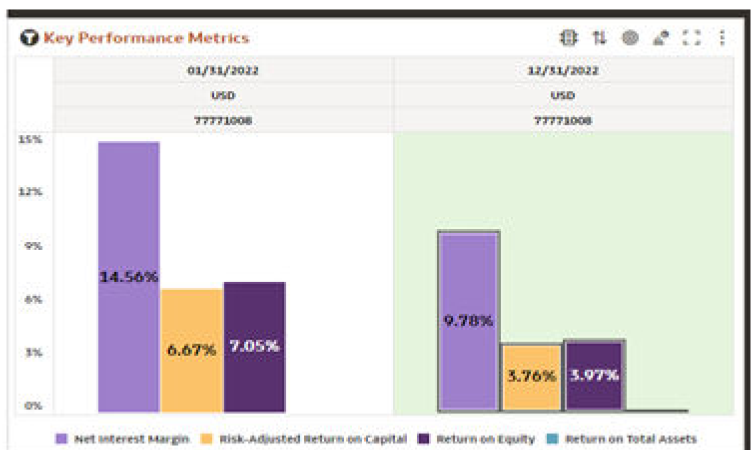
This tile shows the average account tenure of the customer at the bank across all his accounts. The bars show the tenures for the individual products/ accounts that are held by the customer, details of which can be viewed via mouseover.

Figure 9-143 Tile - Average Account Tenure



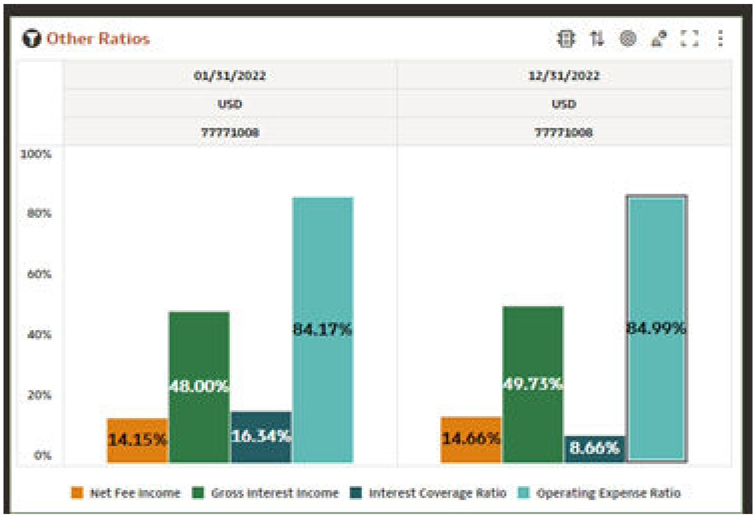
This report displays the NIM, RAROC, ROTA and ROE for the selected customer, aggregated from the customer accounts.

Figure 9-144 Report Key Performance Metrics



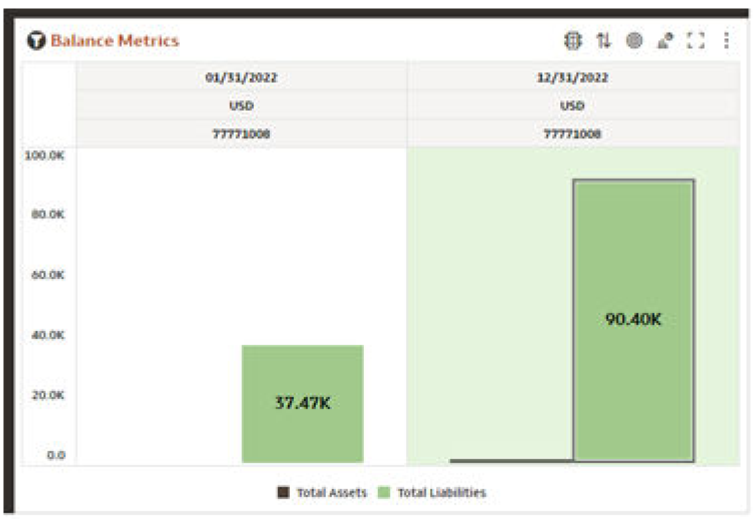
This report displays the NFI, GII, Interest Coverage and OpEx for the selected customer, aggregated from the customer accounts.

Figure 9-145 Report - Other Ratios



This report gives a view of the asset and liability balances of the customer as held at the bank across time periods.

Figure 9-146 Report - Balance Metrics



9.6.1.4 Customer Life Time Value

To access the Customer Life Time Value report, from the LHS Menu, select **Analytics**, select **Customer Profitability**, and then select **Customer Life Time Value**.

Refer to the Runchart available at Doc ID: 2869409.1, then select and execute the **Instrument Life Time Value** with corresponding prerequisites mentioned in the **Index** tab of the Runchart.

To feed the Customer Life Time Value Report, refer to the *Oracle Financial Services Profitability Analytics Cloud Service Data Flow* document available at Doc ID: 2869409.1.

For the Customer Life Time Value Report, refer to the following Data Flow sub-section:

- **PACS – Instrument Life Time Value**

CLTV – Customer Life time Value Calculation Method

We are looking at MTD account level NIBT values and then projecting into the future, the same using the Holt Winters algorithm available in the Oracle database. For arriving at CLTV, the first 30 months get forecasted and forecasts for the subsequent months are capped at the value of the 30th forecast obtained. In essence, we have the total account level NIBT contribution generated till date along with the forecasted contribution for 12, 36 and 60 months into the future. The future contributions for 1, 3 and 5 years are discounted using a discount factor to convert into a present value of future Cash Flows. The combined NIBT contribution generated till date and present value of future discounted Cash Flows give us the account level Lifetime value.

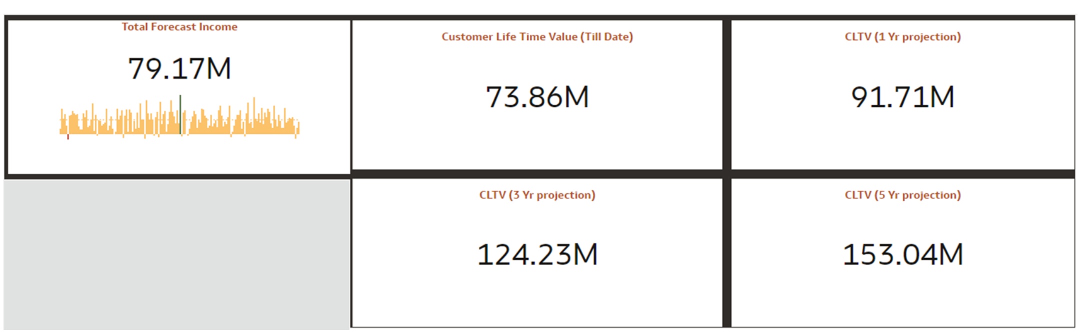
All the designated accounts of the customer are aggregated to arrive at the Customer Lifetime Value.

Sample of a hypothetical calculation method: Customer A has fairly constant NIBT at 100K USD every month (a bit variance here and there) whereas Customer B has an increasing NIBT (start with 80K USD and reaching 120K USD). Both have same CLTV Till Date, but Customer B will have higher forecasted CLTV (5 year) since monthly YTD NIBT shows increasing trend for customer B.

Customer Life time Value Analytics Metrics

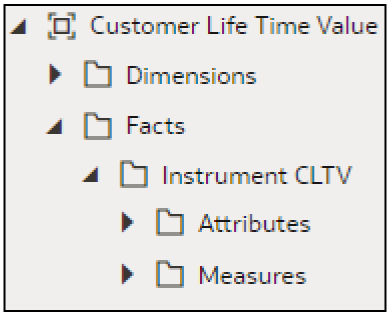
- **Total Forecast Income**: calculated as **Total Forecast Net Income Before Taxes** (discounted for present value using the discount factor that has been set up from Preferences UI), the chart shows value for customer accounts as bar including min/max and average value via mouse over the tile chart
- **Customer Life Time Value (Till Date)**: calculated as the aggregated value of monthly **Net Income Before Taxes** for latest 36 months.
- The value of **Customer Life Time Value** with n year projection (where n = 1,3,5 with each year having 12 monthly forecasts) is arrived at by adding the discounted forecasts for Net Income Before Taxes to the **Customer Life Time Value (Till Date)** over next n years. Two customers with same **Customer Life Time Value (Till Date)** may have different **CLTV (5 Yr projection)** if they exhibit different trends. The customer showing growth in his portfolio (Net Income Before Taxes) will be expected to have a higher **CLTV (5 Yr projection)**.
  - CLTV (1 Yr projection)
  - CLTV (3 Yr projection)
  - CLTV (5 Yr projection)

Figure 9-147 Customer Life Time Value - 5 years



The aforementioned CLTV – Customer Life time Value Analytics metrics are available in the out-of-the-box Customer Profitability Report as well as in the following subject area (the available granularity for these metrics is at account contract level):

Figure 9-148   Customer Life Time Value



9.6.1.5 Customer vs Segment

This dashboard presents the customer as a comparison with the segment that he belongs to or any other segment of interest to the analyst.

For example, Select a specific customer as Jonathan Noel.

Exploring metrics around the customer's annual income, the net income before taxes, the number of accounts belonging to the customer, credit score, and others.

Next, you can view the number of transactions across the different channels. And track the dimensional analysis for the average transaction amount.

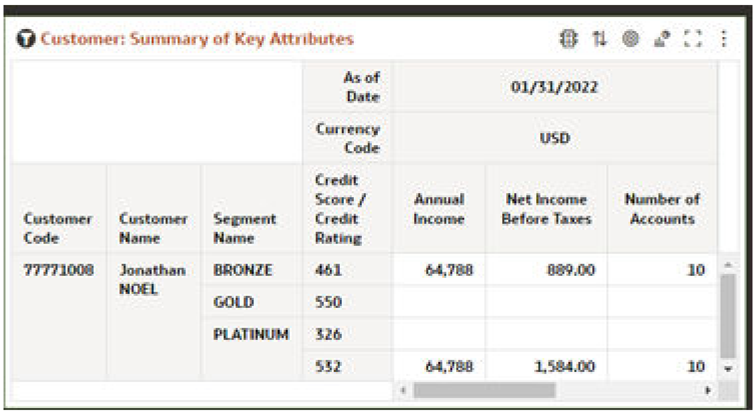
Figure 9-149   Canvas Customer vs Segment

Report – Customer : Summary Key Attributes: This report displays the following customer attributes:

- Credit Score/ Credit Rating as is the case for a Retail or Wholesale customer
- Segment
- Annual Income
- NIBT
- # Accounts

This report gives a view across selected time periods.

Figure 9-150 Report – Customer : Summary Key Attributes

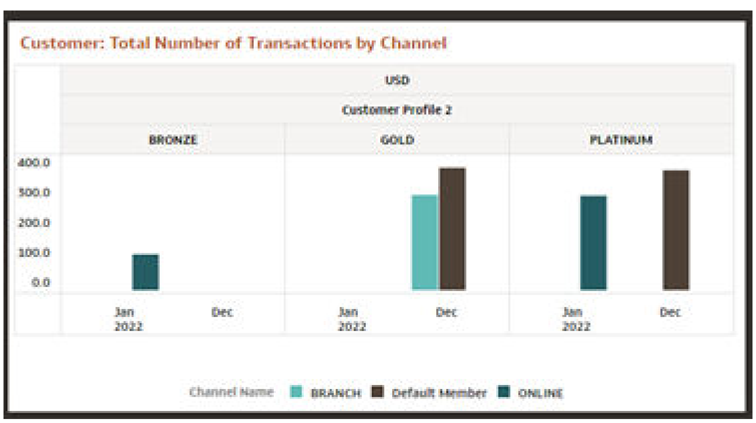


Customer: Summary of Key Attributes

			As of Date	01/31/2022		
			Currency Code	USD		
Customer Code	Customer Name	Segment Name	Credit Score / Credit Rating	Annual Income	Net Income Before Taxes	Number of Accounts
77771008	Jonathan NOEL	BRONZE	461	64,788	889.00	10
		GOLD	550			
		PLATINUM	326			
			532	64,788	1,584.00	10

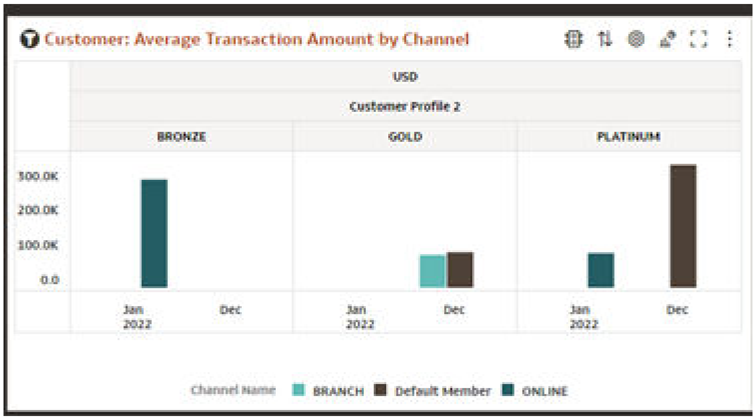
Report Total Number of Transactions by Channel: This report gives a view of the total number of transactions in different channels across time periods.

Figure 9-151 Report Total Number of Transactions by Channel



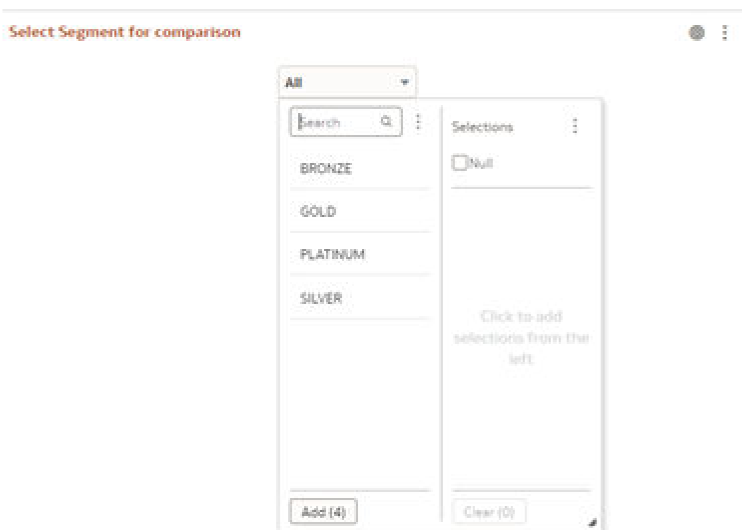
Report : Average Transaction Amount by Channel: This report gives a view of the average transaction amounts in different channels across time periods.

Figure 9-152 Report : Average Transaction Amount by Channel



In-canvas Prompt Filter to select Segment for comparison

Figure 9-153 In-canvas Prompt Filter to select Segment for comparison

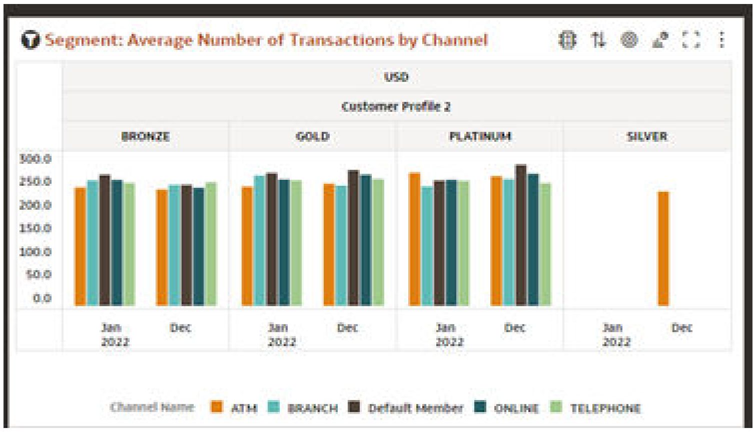


Report : Segment Summary Key Attributes

Figure 9-154 Report : Segment Summary Key Attributes

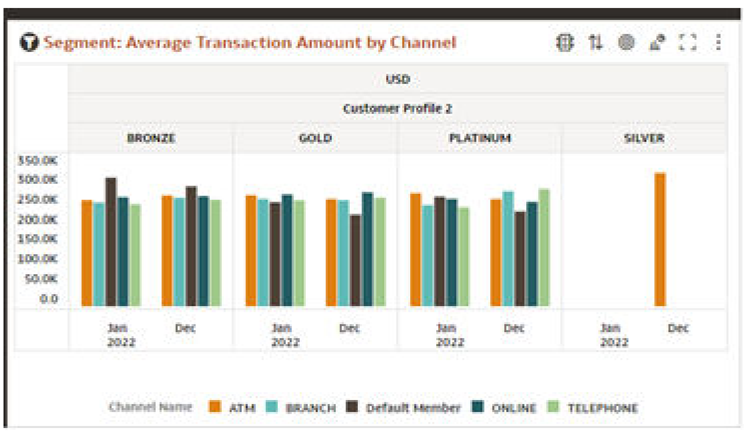
Report : Average Number of Transactions by Channel for selected Segment

Figure 9-155 Report : Average Number of Transactions by Channel for selected Segment



Report : Average Transaction Amount by Channel for selected segment

Figure 9-156 Report : Average Transaction Amount by Channel for selected segment



9.6.1.6 Segment Comparator

In this dashboard, the dimensions and attributes are compared across Segments.

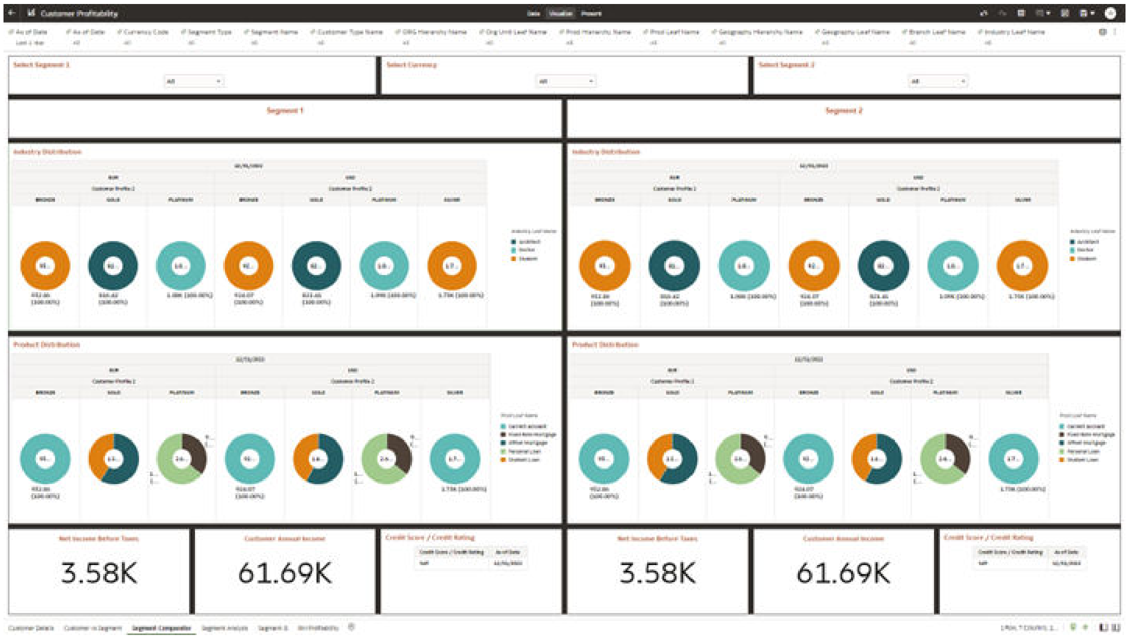
For instance, segment 1 versus segment 2.

Currently, the comparison exists for Industry, Product Distribution, Net Income Before Taxes, Customer Annual Income, and Credit Score. This comparison can be analysed across time periods.

Note that if it's a retail customer rather than a wholesale one, you can move from the actual industry to the profession. The same logic is applicable for Credit Score and Credit Rating.

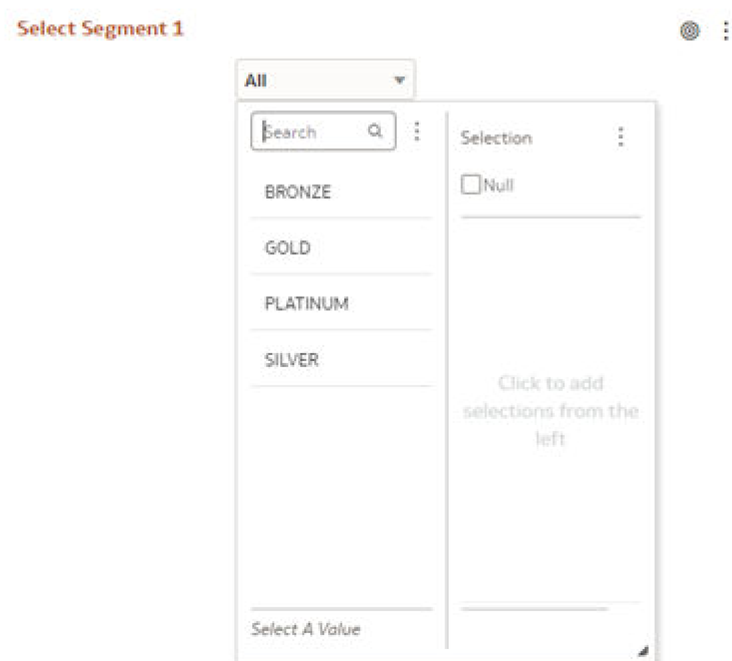
Note that The segment Type for the purposes of the illustration is Demographic (for retail use case).

Figure 9-157 Canvas Segment Comparator



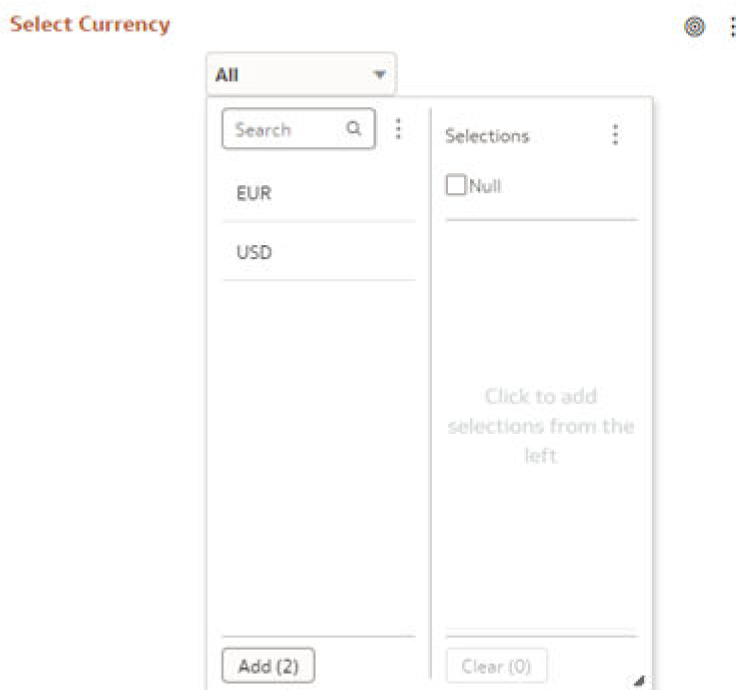
- **Segment 1**: You can use this filter to select, for a specific Segment Type the specific segmentation scheme - Gold, Silver, Platinum, or Bronze.

Figure 9-158 In-canvas Prompt Filters for Segment 1



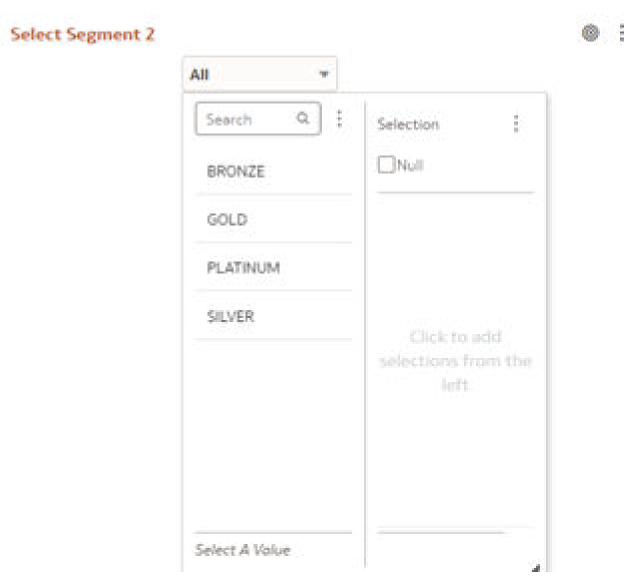
- **Currency Code**: You can use this filter to select a specific Currency Code for the underlying Instrument Tables Accounts.

Figure 9-159   In-canvas Prompt Filters for Currency



- **Segment 2**: You can use this filter to select, for the Segment Type corresponding to Segment 1, the specific segmentation scheme against which you want to compare Segment 1 selection with.

Figure 9-160   In-canvas Prompt Filters for Segment 2

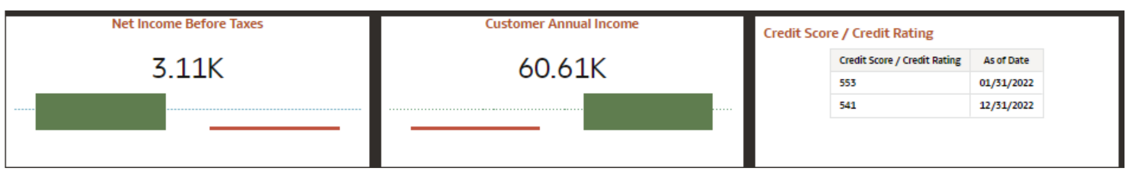


Report Segment 1 - Industry and Product Distribution: This report gives a view of the Industry/ Profession and Product Distribution of Segmentation scheme selected as Segment 1 across time periods.

Figure 9-161 Report Segment 1 - Industry and Product Distribution

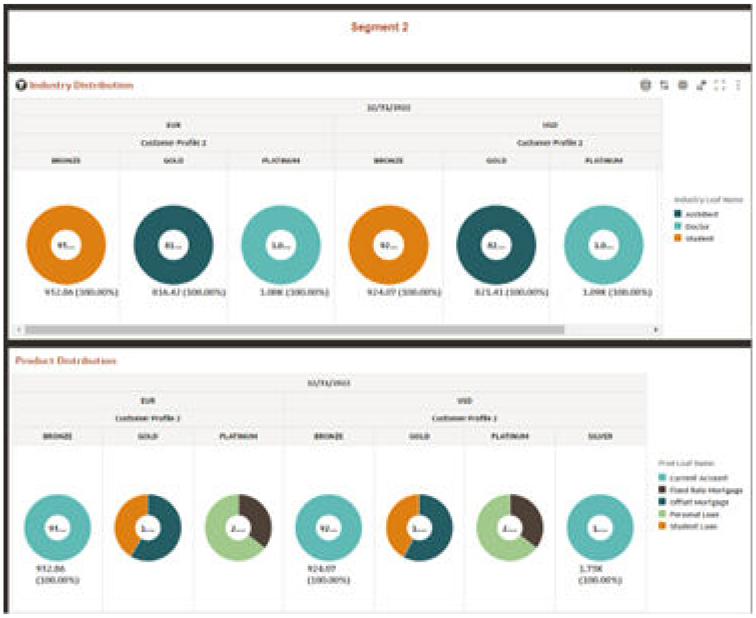
This report gives a view of the Average NIBT, average customer income and average credit score/distribution of credit ratings of Segmentation scheme selected as Segment 1 across time periods.

Figure 9-162 Report Segment 1 Details



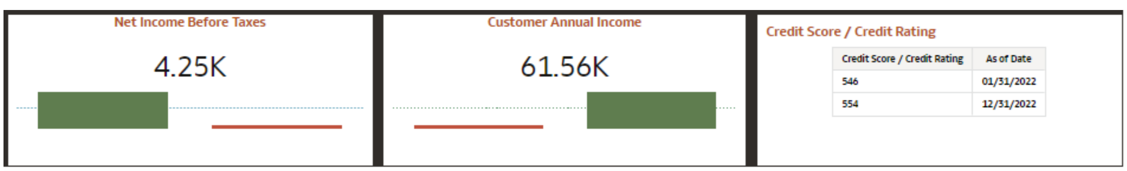
Report Segment 2 - Industry and Product Distribution: This report gives a view of the Industry/ Profession and Product Distribution of the comparator Segmentation scheme selected as Segment 2 across time periods.

Figure 9-163 Report Segment 2 - Industry and Product Distribution



This report gives a view of the Average NIBT, average customer income and average credit score/ distribution ofcredit ratings of the comparator Segmentation scheme selected as Segment 2 across time periods.

Figure 9-164 Report Segment 2 Details



9.6.1.7 Segment Analysis

This canvas provides Detailed Analysis at the Segment Level (for all Segments and Segment Types as defined by the user).

You can use a series of Report Prompts, as previously described, to filter the data. In addition, there are In-Report prompt selections to select the Top/ Bottom N org units that you are interested in and the corresponding data will be displayed.

Figure 9-165   Canvas Segment Analysis

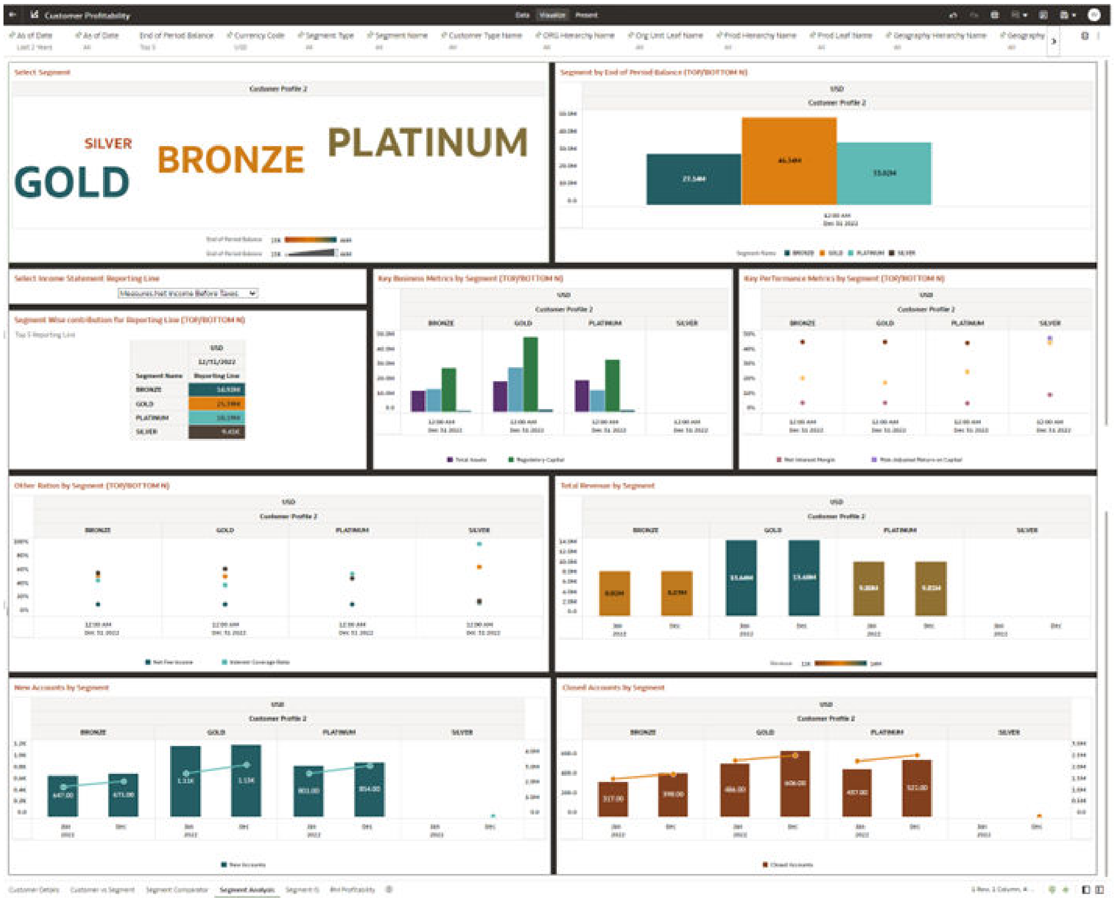
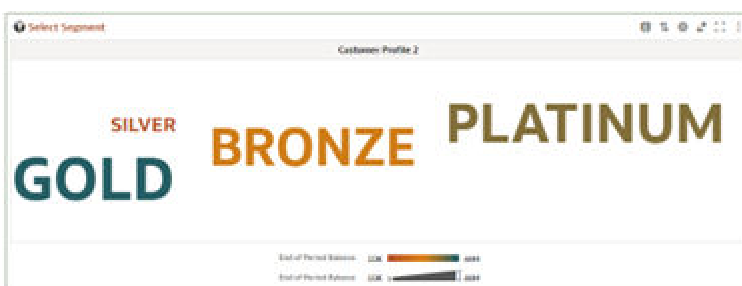


Figure 9-166   Target Cloud for Segment Type - Customer Profile 2



Report - Segment by End of Period Balance (Top/Bottom N): The chart displays the Top N (N selected from the chart prompt) and bottom N Segments sorted in a descending order by End of Period Balances.

Figure 9-167   Report - Segment by End of Period Balance (Top/Bottom N)

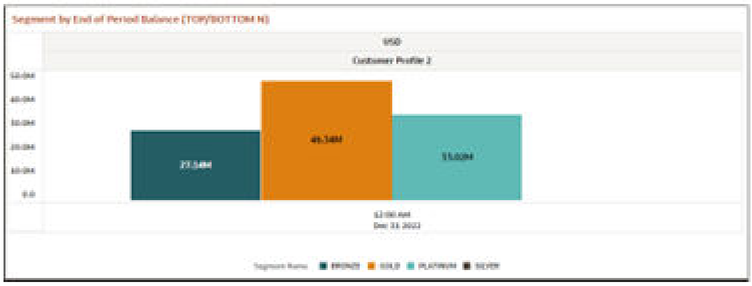
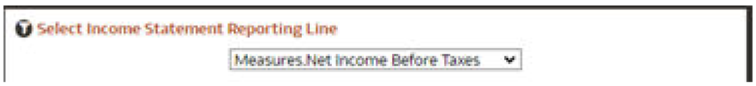
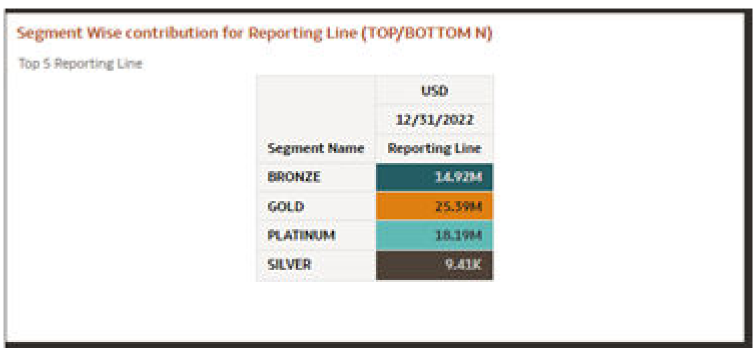


Figure 9-168   In-canvas Prompt Filter Income Statement Report Line



Report - Segment Wise contribution for Report Line (Top/ Bottom N): In this chart, for the selected reporting line, the Top N (N selected from the chart prompt) and bottom N Segments are displayed in descending order of value of the reporting line.

Figure 9-169   Report - Segment Wise contribution for Report Line (Top/ Bottom N)



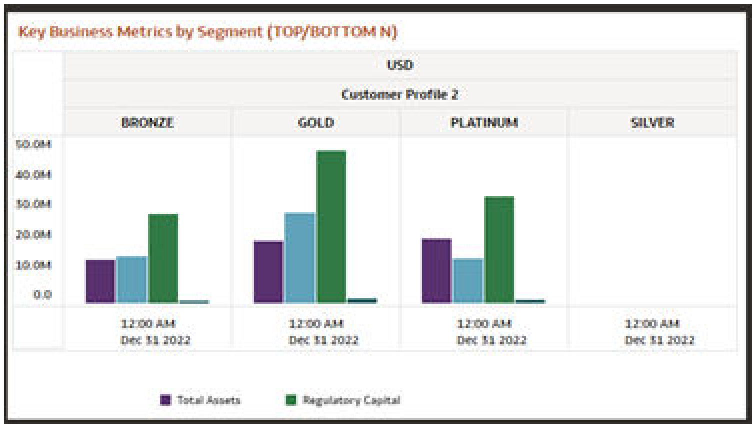
Segment Wise contribution for Reporting Line (TOP/BOTTOM N)

Top 5 Reporting Line

	USD
	12/31/2022
Segment Name	Reporting Line
BRONZE	14.92M
GOLD	25.39M
PLATINUM	18.19M
SILVER	9.41K

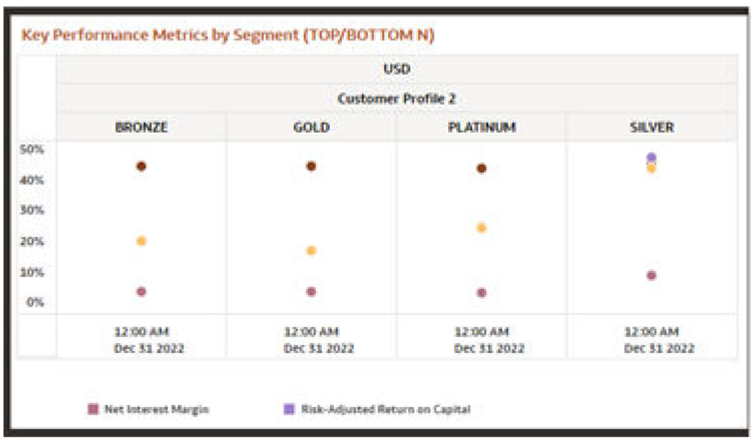
Report - Key Business Metrics by Segment (Top/ Bottom N): The chart displays the Top N (N selected from the chart prompt) and bottom N Segments sorted in a descending order by End of Period Balances and provides the break up between Asset and Liability Balances along with Regulatory and Economic Capital.

Figure 9-170 Report - Key Business Metrics by Segment (Top/ Bottom N)



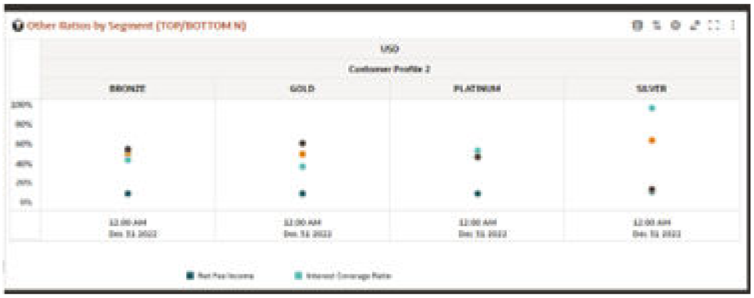
Report - Key Performance Metrics by Segment (Top/ Bottom N): The chart displays the Top N (N selected from the chart prompt) and bottom N Segments sorted in a descending order by End of Period Balances and provides selected KPI's like NIM, RAROC, ROE and ROTA of these Segments.

Figure 9-171 Report - Key Performance Metrics by Segment (Top/ Bottom N)



Report - Other Ratios by Segment (Top/ Bottom N): The chart displays the Top N (N selected from the chart prompt) and bottom N segments sorted in a descending order by End of Period Balances and provides selected business metrics like Net Fee Income, Gross Interest Income, Interest Coverage Ratio and Debt coverage ratio, all expressed as percentages.

Figure 9-172 Report - Other Ratios by Segment (Top/ Bottom N)



Report - Total Revenue by Segment (Top/ Bottom N): The chart displays the Top N (N selected from the chart prompt) and bottom N Segments sorted in a descending order of Revenues of these Segments.

Figure 9-173 Report - Total Revenue by Segment (Top/ Bottom N)

Report - New Accounts by Segment: The chart displays the Top N (N selected from the chart prompt) and bottom N Segments sorted in a descending order of number of new accounts of these Segments across time periods.

Figure 9-174 Report - New Accounts by Segment

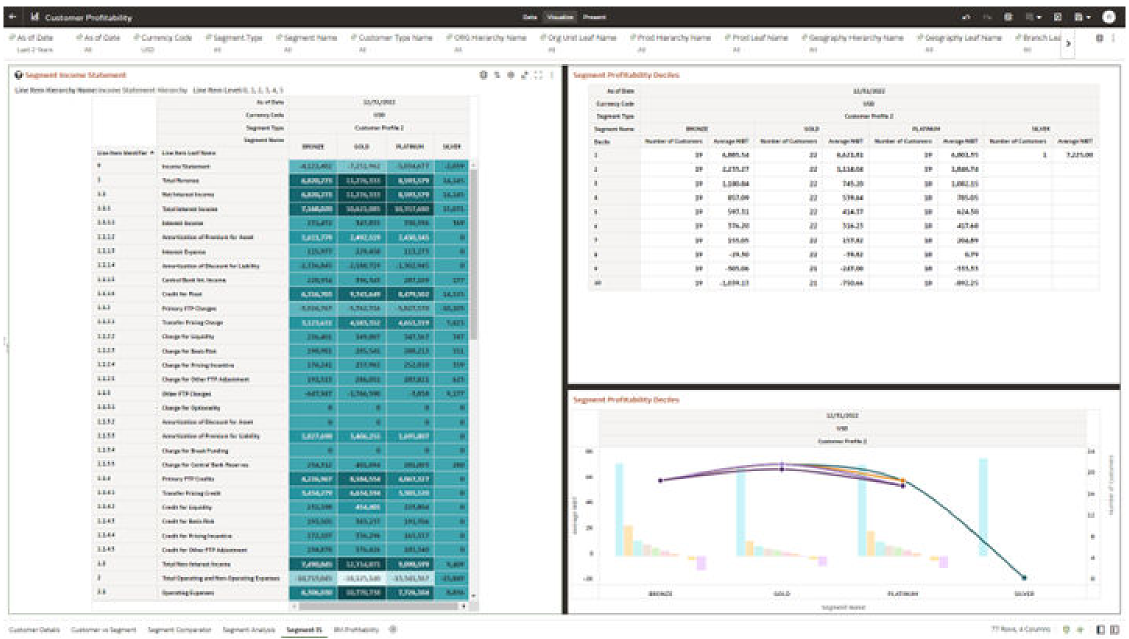
Report - Closed Accounts by Segment: The chart displays the Top N (N selected from the chart prompt) and bottom N Segments sorted in a descending order of number of closed accounts of these Segments across time periods.

Figure 9-175   Report - Closed Accounts by Segment

9.6.1.8 Segment Income Statement

In this dashboard, Detailed Income Statement at Segment Level (for all Segments within selected Segment Type, as defined by the user) can be viewed.

Figure 9-176   Canvas Segment Income Statement

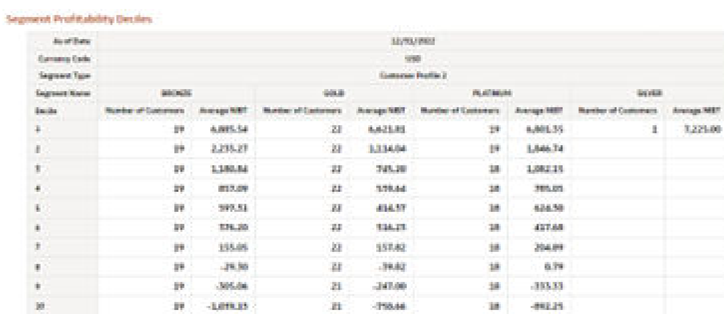


Report : Segment Income Statement: This view provides Detailed Segment level Income Statement in same format, as can be seen in other detailed income statements.

Figure 9-177   Report : Segment Income Statement

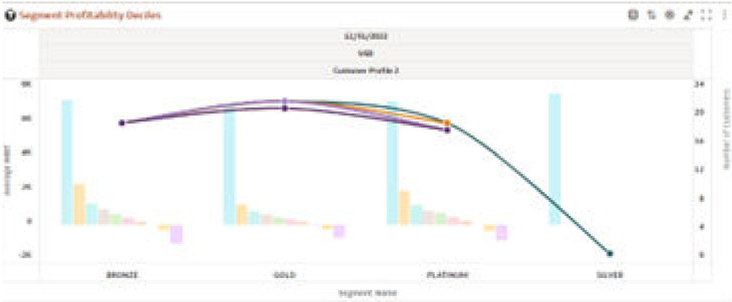
Table Segment Profitability Deciles: For a selected Segment type, the profitability deciles table show the customer distribution across the different segments and shows income generated by customers of these segments in a decile view, the top decile showing the most profitable customers of the segment. This # customers and average NIBT can be compared across segments for the selected segment type.

Figure 9-178   Table Segment Profitability Deciles



Canvas Segment Profitability Deciles: For a selected Segment type, the profitability deciles chart, visually shows the customer distribution across the different segments and shows income generated by customers of these segments in a decile, the top decile showing the most profitable customers of the segment. This # customers is shown by the line chart and average NIBT shown by the bars in this double axis chart.

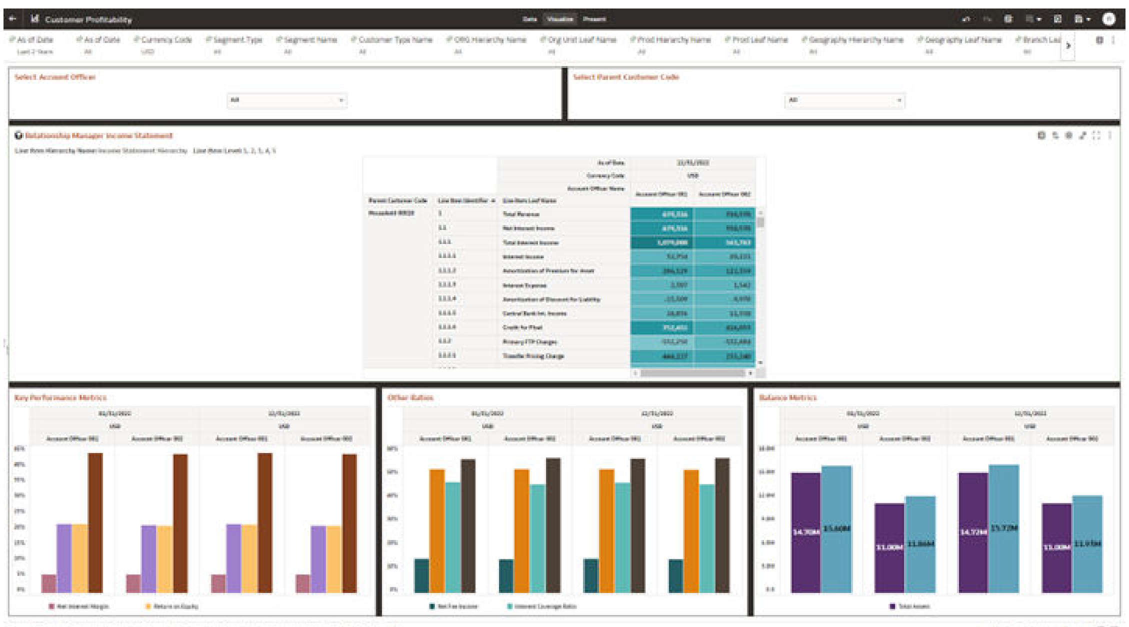
Figure 9-179 Canvas Segment Profitability Deciles



9.6.1.9 RM Profitability

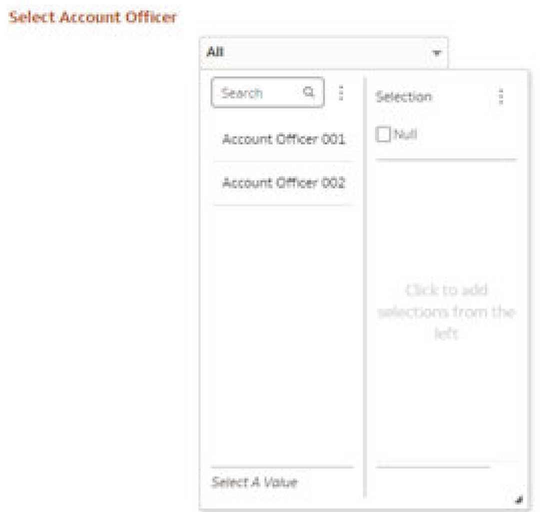
In this canvas, Relationship manager performance can be monitored at multiple dimensions – You can choose Choose Relationship manager (Account Officer) hierarchy in the dropdown and understand profitability at individual and org level.

Figure 9-180 Canvas RM Profitability



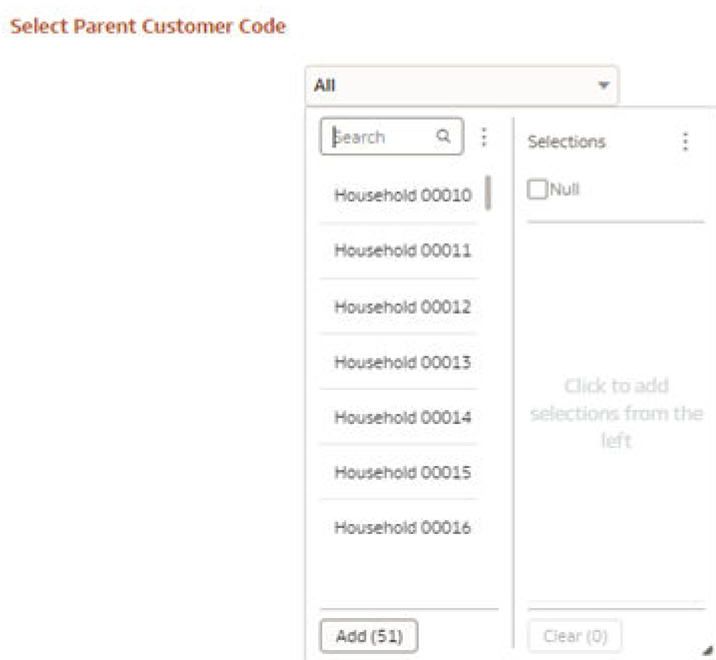
Account Officer: You can use this filter to select all or specific Account Officer.

Figure 9-181 In-canvas Prompt Filter Account Officer



Parent Customer Code: You can use this filter to select all or specific Parent Customer Code, which specifically supports wholesale use cases for customer Group structures.

Figure 9-182 Parent Customer Code

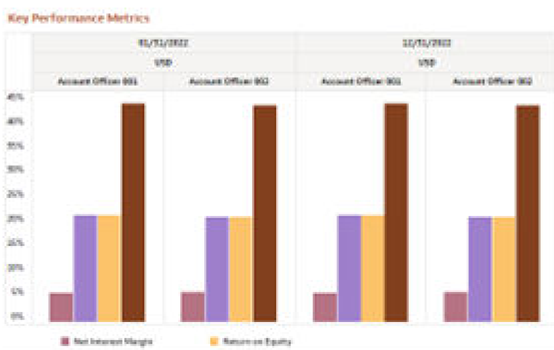


Report - Relationship Manager Income Statement: The report shows a detailed Income statement at the level of the relationship manager for selected customer group for accurate Expense Analysis & Revenue breakdowns with a view of overall income generated to the bank.

Figure 9-183 Report - Relationship Manager Income Statement

Report - Key Performance Metrics: The report shows the following KPI's – NIM, RAROC, ROE and ROTA at the level of the relationship manager for selected customer group.

Figure 9-184 Report - Key Performance Metrics



Report - Other Ratios: The report shows the following selected business metrics like Net Fee Income, Gross Interest Income, Interest Coverage Ratio and Debt coverage ratio, all expressed as percentages, at the level of the relationship manager for selected customer group.

Figure 9-185 Report - Other Ratios

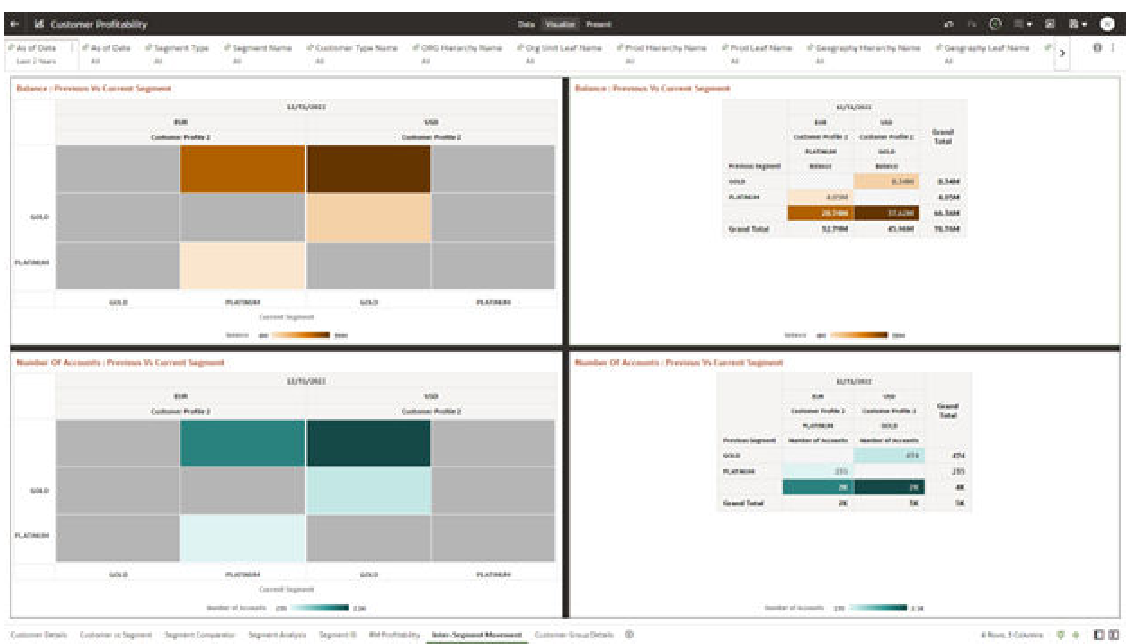
Report - Balance Metrics: The report shows Asset and Liability Balances at the level of the relationship manager for selected customer group.

Figure 9-186   Report - Balance Metrics

9.6.1.10 Inter-Segment Movement

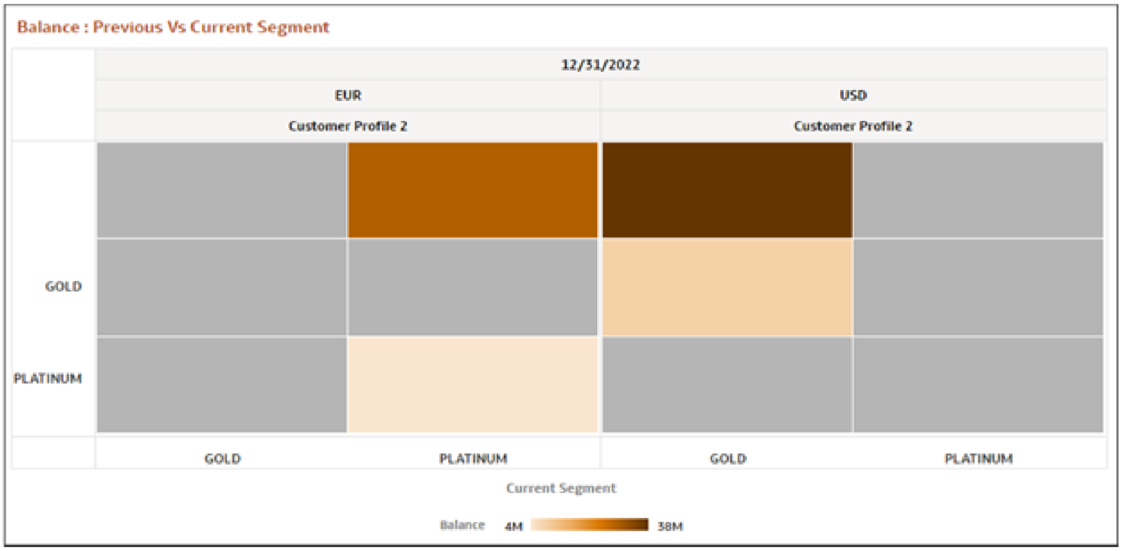
In this canvas, comparative analysis is done of account and balance movement with respect to the previous time period (for all defined segments and segment types as detailed by customer profile.

Figure 9-187   Inter-Segment Movement Canvas



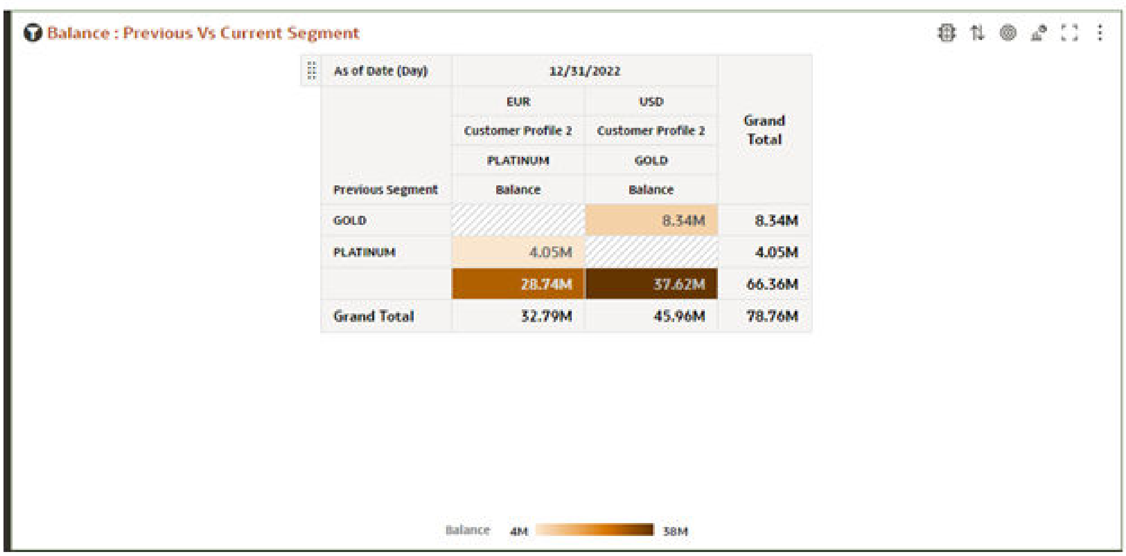
Report – Balance: Previous Vs Current Segment: The following report shows the following the Heat Map of Balance movement at the level of the segment and currency.

Figure 9-188 Report – Balance: Previous Vs Current Segment



Balance: Previous Vs Current Segment: The report shows the same information as above by Segment dimension showing amount details.

Figure 9-189 Report – Balance: Previous Vs Current Segment



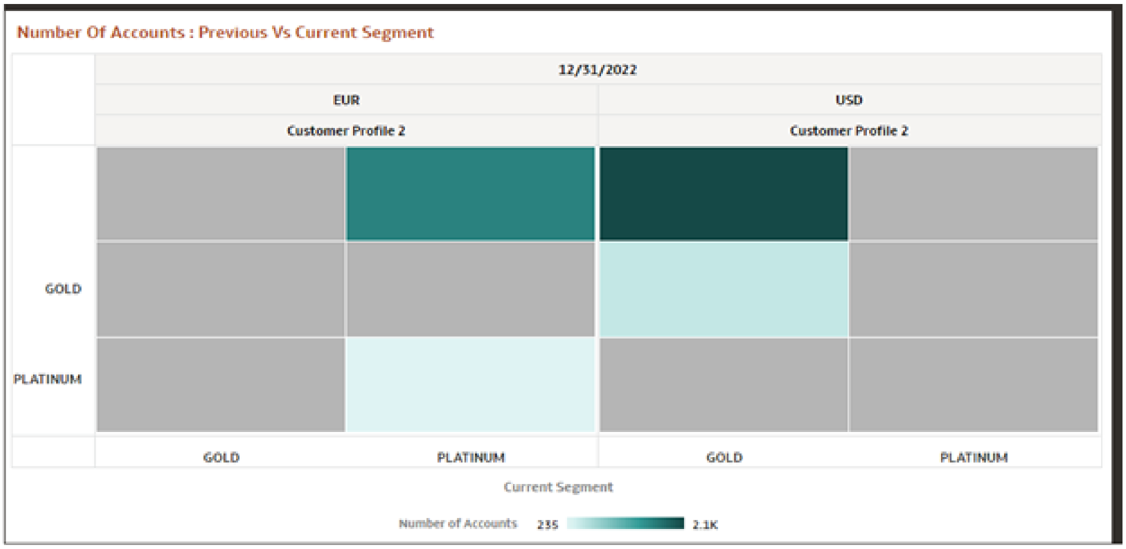
Balance : Previous Vs Current Segment

As of Date (Day)	12/31/2022		Grand Total
	EUR	USD	
	Customer Profile 2	Customer Profile 2	
	PLATINUM	GOLD	
Previous Segment	Balance	Balance	
GOLD		8.34M	8.34M
PLATINUM	4.05M		4.05M
	28.74M	37.62M	66.36M
Grand Total	32.79M	45.96M	78.76M

Balance 4M 38M

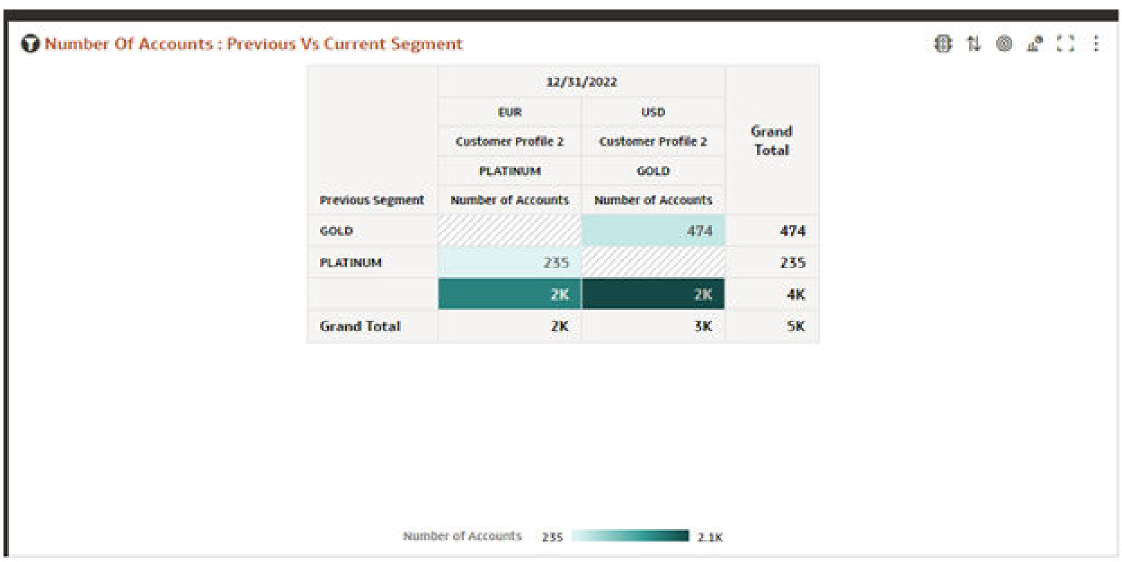
Report – Number of Accounts: Previous Vs Current Segment - The following report shows the following the Heat Map of movement of the number of accounts at the level of the segment and currency.

Figure 9-190 Report – Number of Accounts: Previous vs Current Segment



Report – Number of Accounts: Previous Vs Current Segment - This report shows the same information as above by showing detailed number of accounts.

Figure 9-191 Report – Number of Accounts: Previous vs Current Segment



Number Of Accounts : Previous Vs Current Segment

	12/31/2022		Grand Total
	EUR	USD	
	Customer Profile 2	Customer Profile 2	
	PLATINUM	GOLD	
Previous Segment	Number of Accounts	Number of Accounts	
GOLD		474	474
PLATINUM	235		235
	2K	2K	4K
Grand Total	2K	3K	5K

9.6.1.11 Customer Group Details

This canvas depicts the detailed Income Statement and profitability information of a hierarchical Customer structure at the group level.

Figure 9-192 Customer Group Details Canvas

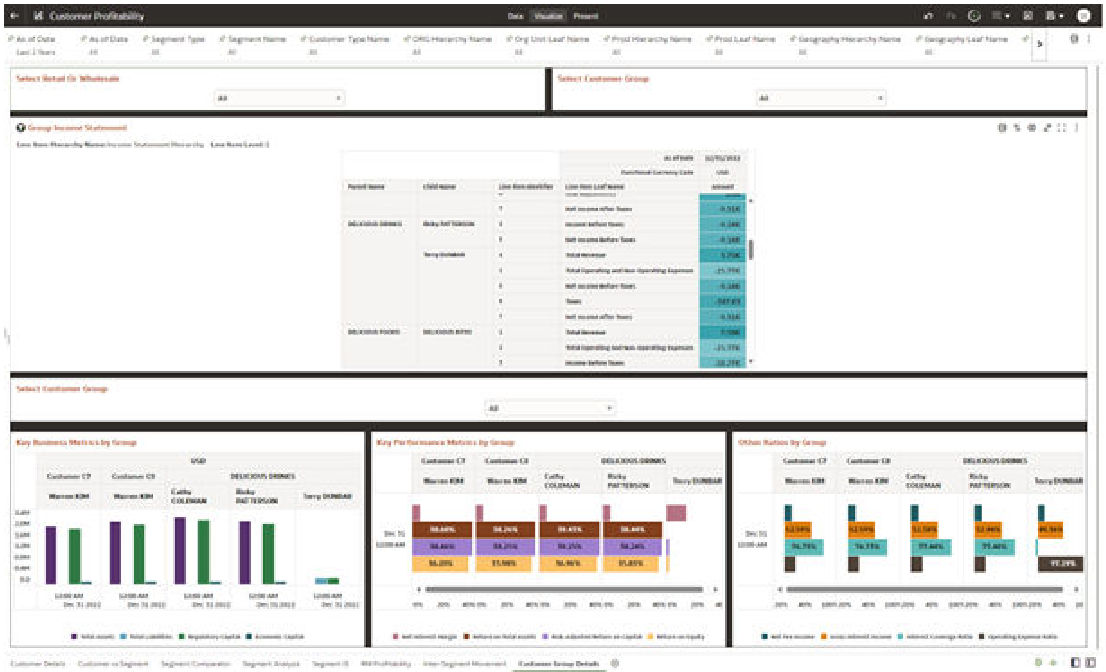
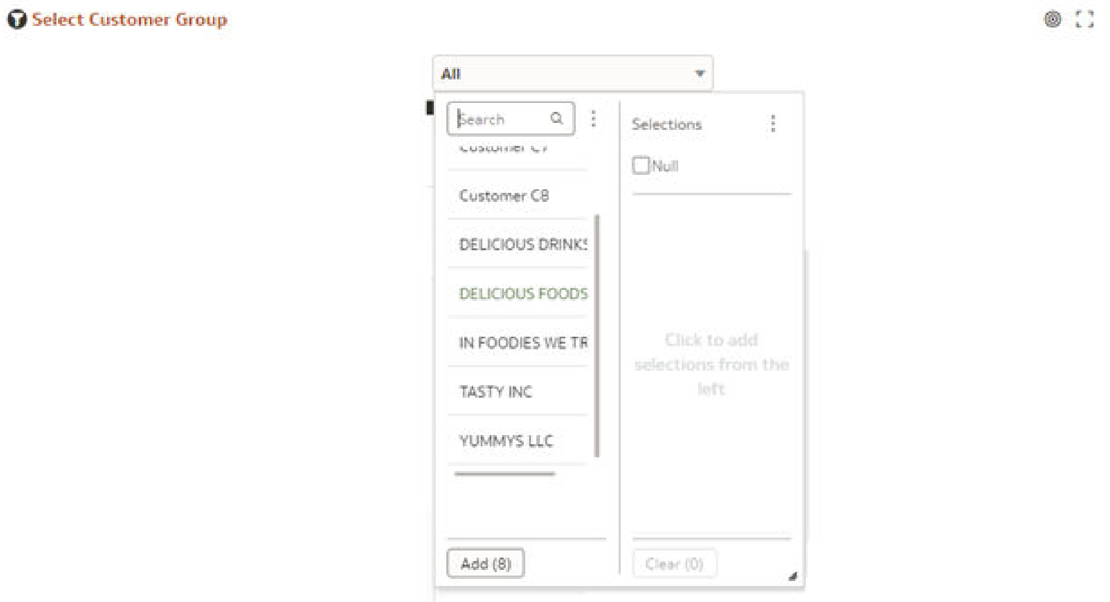


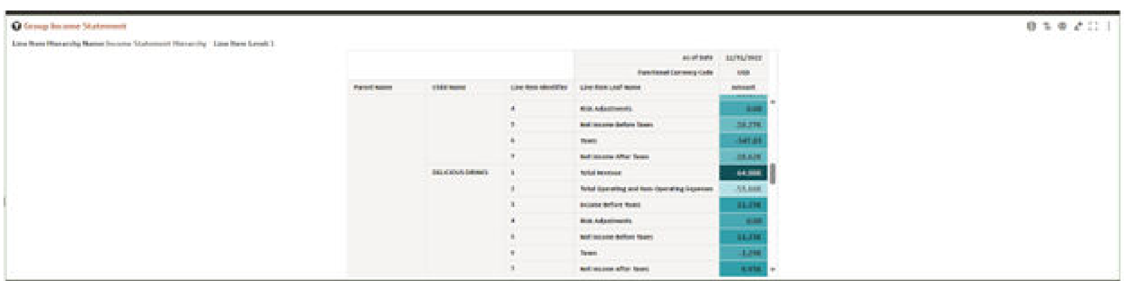
Figure 9-193 Filter Retail or Wholesale

Figure 9-194   Filter Customer Group



Report – Group Income Statements: The report shows the detailed income statement of the selected customer at a group level, including those of the child customers.

Figure 9-195   Group Income Statement Canvas



Report – Key Business Metrics: The report shows the Key Business Metrics for the selected customer group including the child customers.

Figure 9-196 Key Business Metrics by Group Canvas

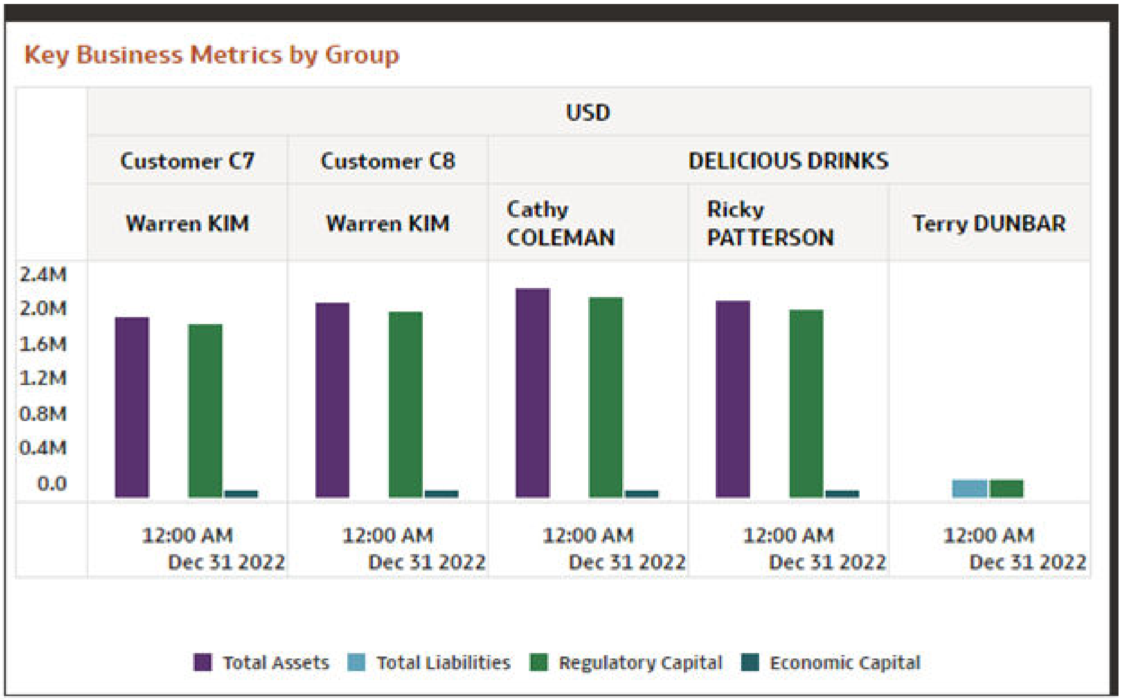
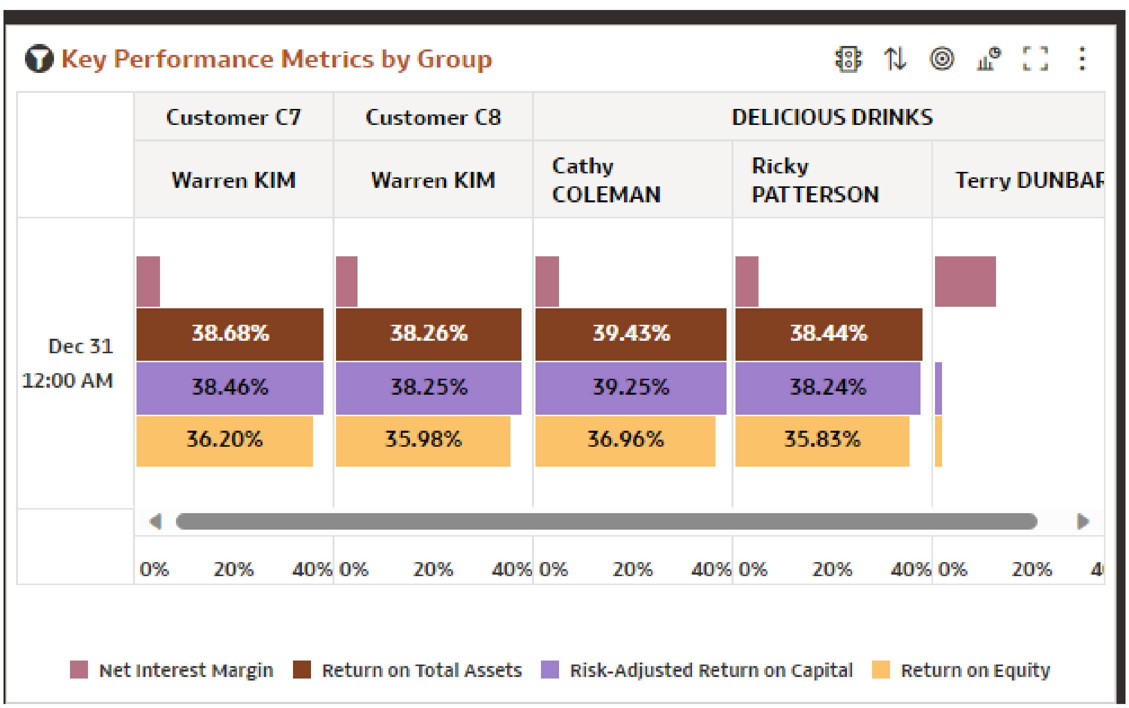


Figure 9-197 Key Business Metrics by Group Canvas

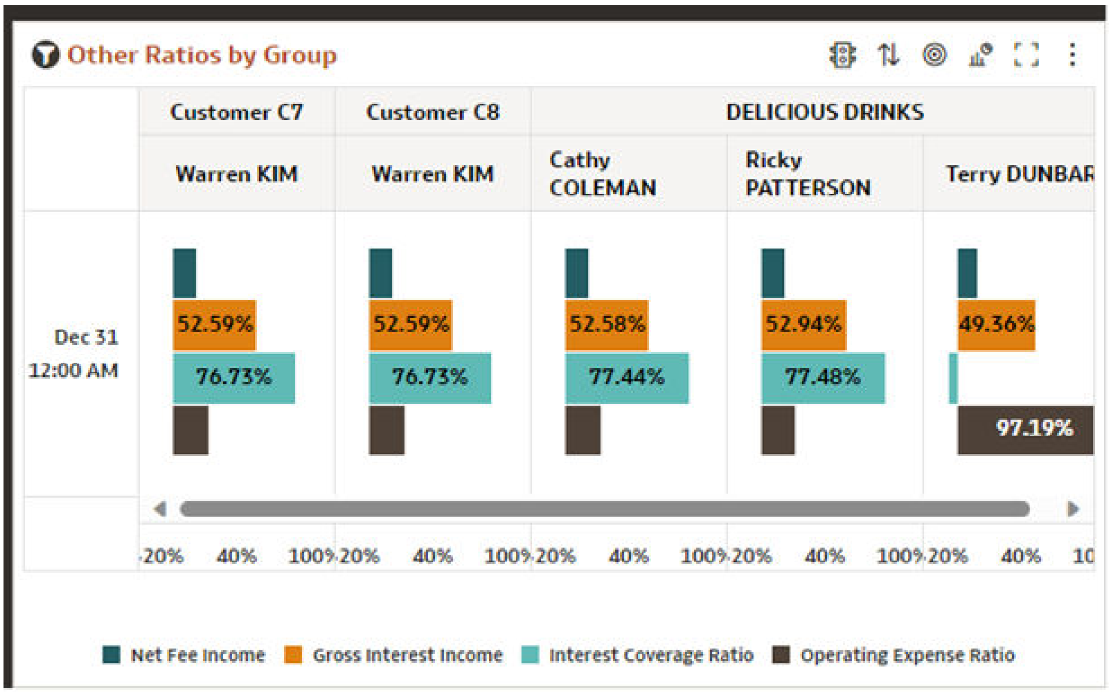


Report – Other Ratios: The report shows the following ratios for the selected customer group including the child customers, expressed as percentage.

- Net Fee Income

- Gross Interest Income
- Interest Coverage Ratio
- Operating Expense Ratio

Figure 9-198 Other Ratios by Group Canvas



9.7 Geography Profitability

When you select the Geographic location and map it to the key dimensions of Profitability Analytics, the Profitability Insights Geography Profitability report which displays all the summary measures of profitability, KPI's and Business metrics. These are revenue, end of period balance, total assets, total liabilities, regulatory capital, economic capital, net interest margin, return on total assets, risk-adjusted return on capital, return on equity, net fee income, gross interest income, interest coverage ratio and operating expense ratio.

To feed the Geography Profitability Report, refer to the *Oracle Financial Services Profitability Analytics Cloud Service Dataflow* document available at Doc ID: 2869409.1.

For the Geography Profitability Report refer to the following Data Flow sub-sections:

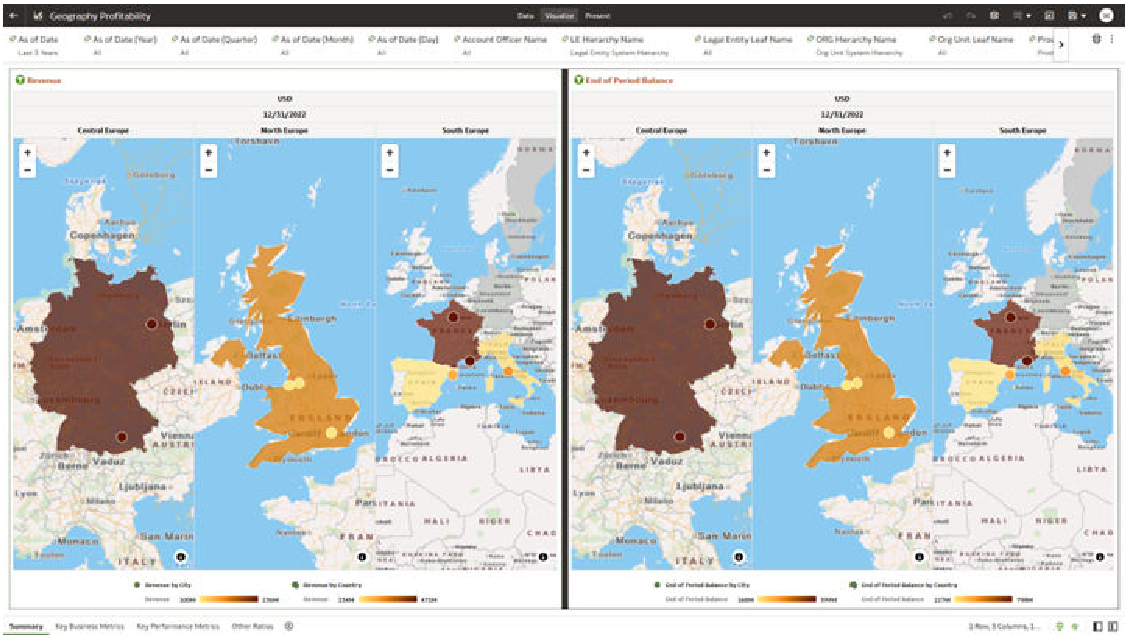
- PACS - Instrument Summary
- PACS - Instrument Geography

Overall Layout of Geography Canvas

All reports in the Geography Canvas have two layers: one for the city and another for the country. The color gradation is self explanatory and varies as per the value of the metric or measure depicted. Because of the presence of two layers, the overall map is colored as the average value of the measure. This color can be disabled by clicking on the polygon corresponding to the overall map.

The Summary canvas in Geography Profitability provides a map based depiction of profitability measures as follows:

Figure 9-199 Geography Profitability Summary



9.7.1 Report Common Filters

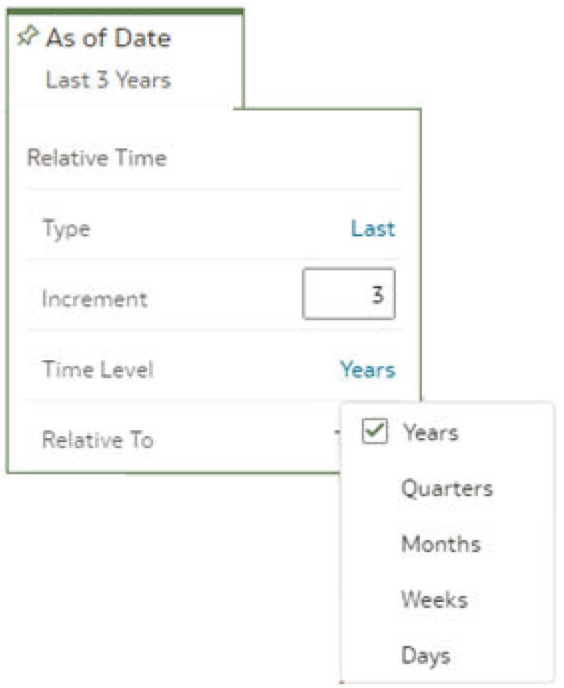
You can use a series of canvas level pinned Prompts to filter the data according to Functional Key Attributes as follows:

Figure 9-200 Canvas Prompt Filters for Time Dimension

As Of Date	As Of Date (Year)	As Of Date (Quarter)	As Of Date (Month)	As Of Date (Day)
Last 3 Quarters	All	All	All	Full Range

As of Date: You can use this filter to isolate a selected timeframe for the analysis. The following screenshot displays this filter's possible options against the Time Dimension.

Figure 9-201 Filter Date



Additional Filters for the Time Dimension are as follows:

- As of Date
- As of Date (Year)
- As of Date (Quarter)
- As of Date (Month)
- As of Date (Day)

Figure 9-202 Key Processing Dimensions Prompt Filters

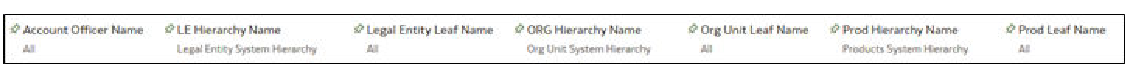
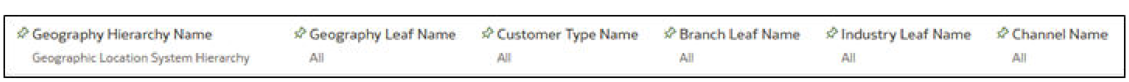


Figure 9-203 Key Processing Dimensions Prompt Filters



- **Account Officer Name**: You can use this filter to select the Account Officer or Account Manager for the underlying Instrument Tables Accounts.
- **LE Hierarchy Name**: Note that this is a mandatory filter for the group filtering on Legal Entity Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same

time, a mandatory driver to select “LE Hierarchy Name” must be selected with only a single value simultaneously.

- **Legal Entity Leaf Name**: You can use this filter to select the Legal Entity Leaf Name that is related to the underlying Management Ledger data.
- **Org Unit Hierarchy Name**: This is a mandatory filter for the group filtering on Org Unit Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “Org Unit Hierarchy Name” must be selected with only a single value simultaneously.
- **Org Unit Leaf Name**: You can use this filter to select the Org Unit Leaf Name corresponding to the hierarchy.
- **Prod Hierarchy Name**: Note that this is a mandatory filter for the group filtering on Product Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “Prod Hierarchy Name” must be selected with only a single value simultaneously.
- **Prod Leaf Name**: You can use this filter to select the Product Leaf Name corresponding to the hierarchy.
- **Geography Hierarchy Name**: This is a mandatory filter for the group filtering on the Geography Hierarchy.
  As the application supports the creation of multiple hierarchies for the same dimension of analysis, to avoid displaying results from multiple hierarchies at the same time, a mandatory driver to select "Geography Hierarchy Name" must be selected.
- **Geography Leaf Name**: You can use this filter to select a specific Geography value at leaf level related to the underlying instrument tables accounts.
- **Customer Type**: You can use this filter to select the Customer Type for the underlying Instrument Tables Accounts.
- **Branch Leaf Name**: You can use this filter to select the Branch Leaf Name that is related to the underlying Branch.
- **Industry Leaf Name**: You can use this filter to select the Industry Leaf Name that is related to the underlying Industry.
- **Channel Name**: You can use this filter to select the Channel Name for the underlying channels.

9.7.2 Summary Tab

Figure 9-204 Revenue

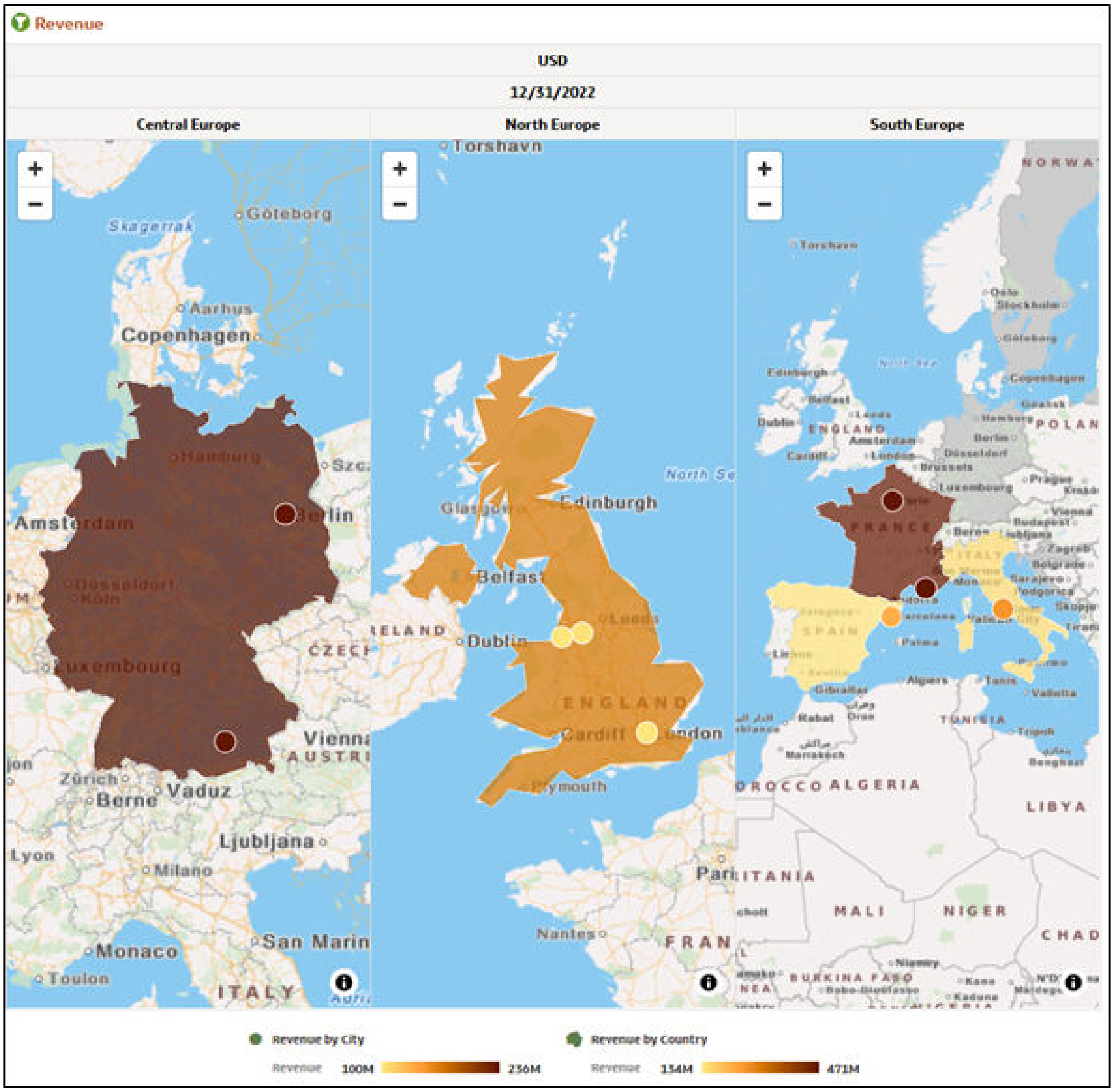
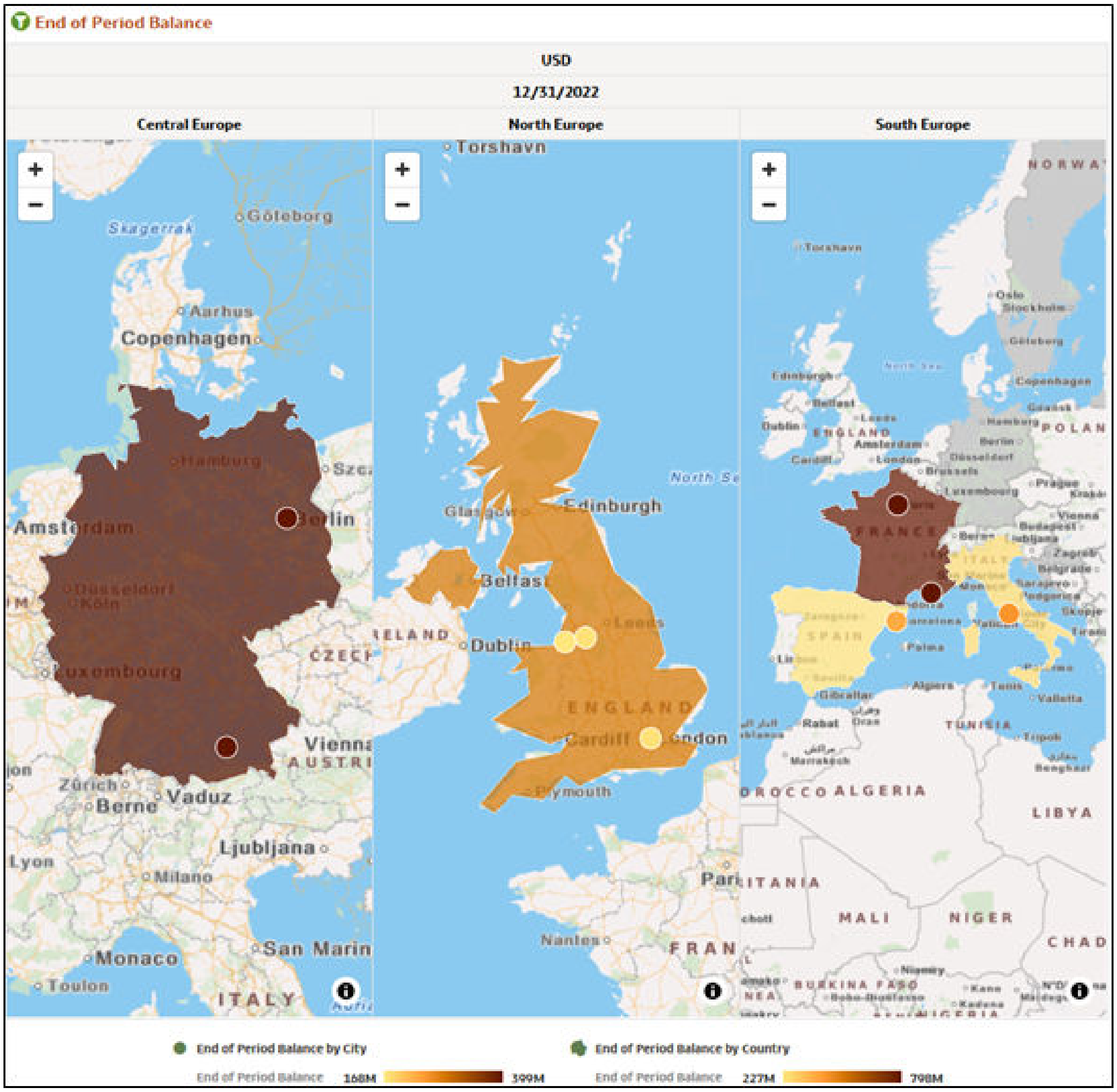


Figure 9-205 End of Period Balance



9.7.3 Key Business Metrics Tab

The Key Business Metrics canvas within Geography Profitability provides a map based depiction of profitability measures as follows:

Figure 9-206   Total Assets

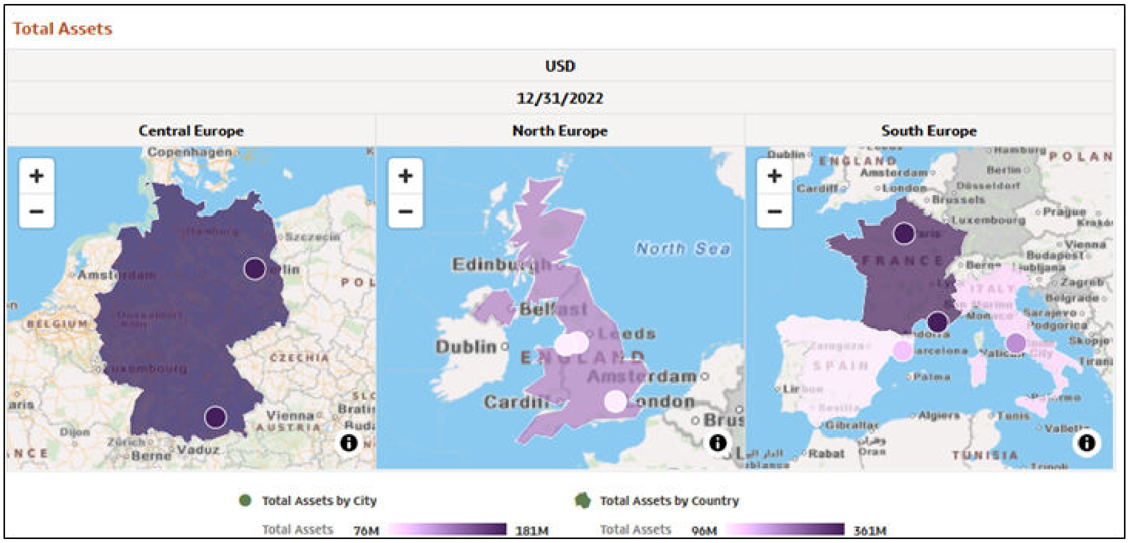


Figure 9-207   Total Liabilities

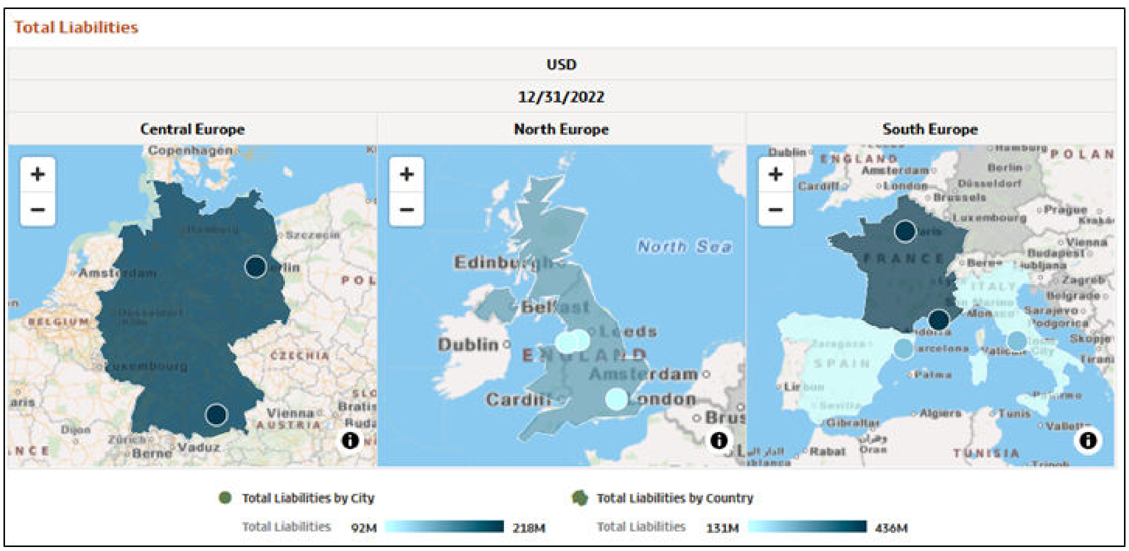


Figure 9-208   Regulatory Capital

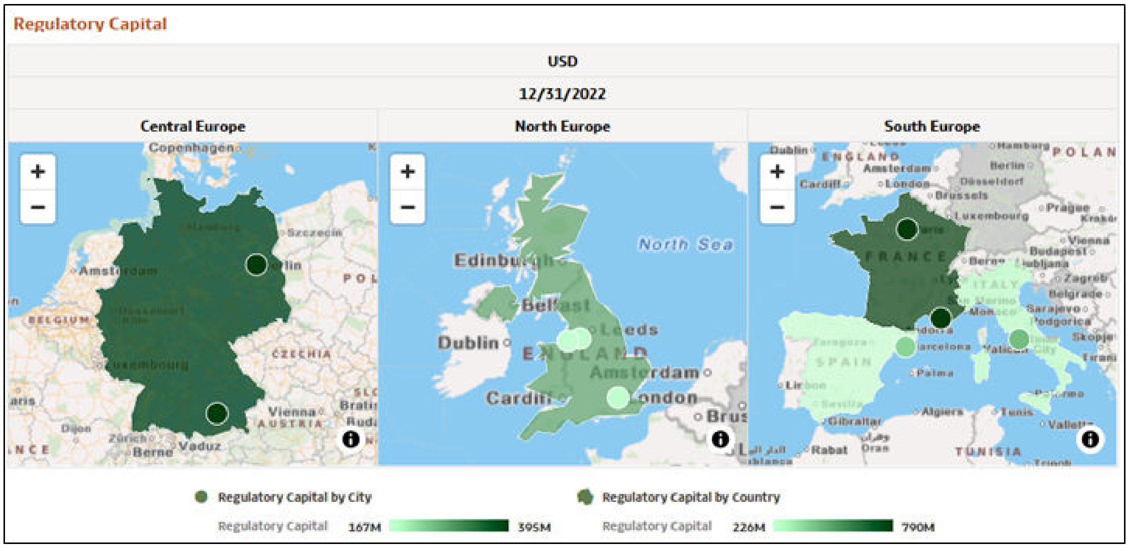
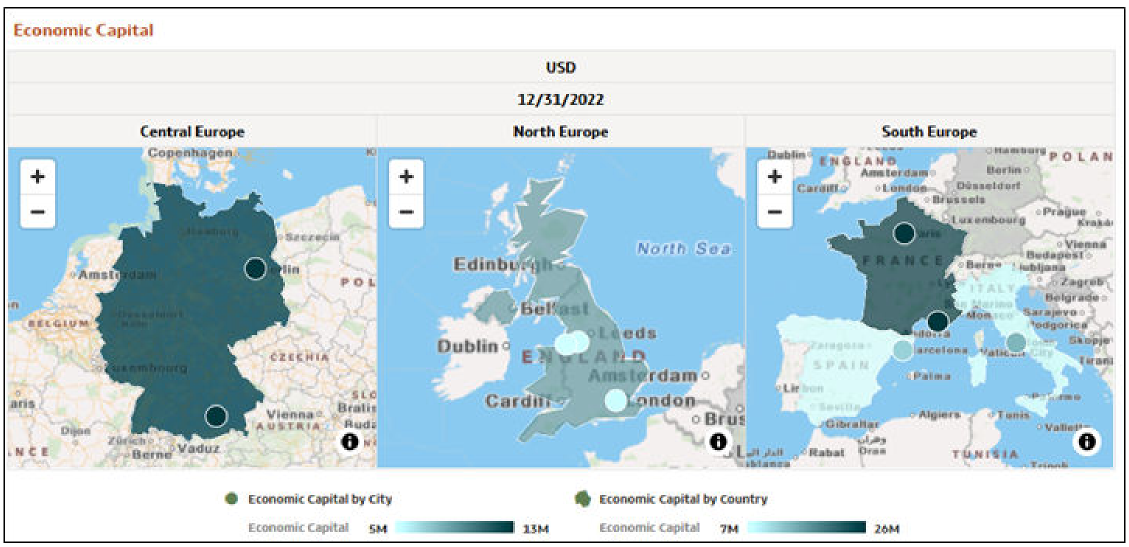


Figure 9-209   Economic Capital



9.7.4 Key Performance Metrics Tab

The Key Performance Metrics canvas within Geography Profitability provides a map based depiction of profitability measures as follows:

Figure 9-210   Net Interest Margin

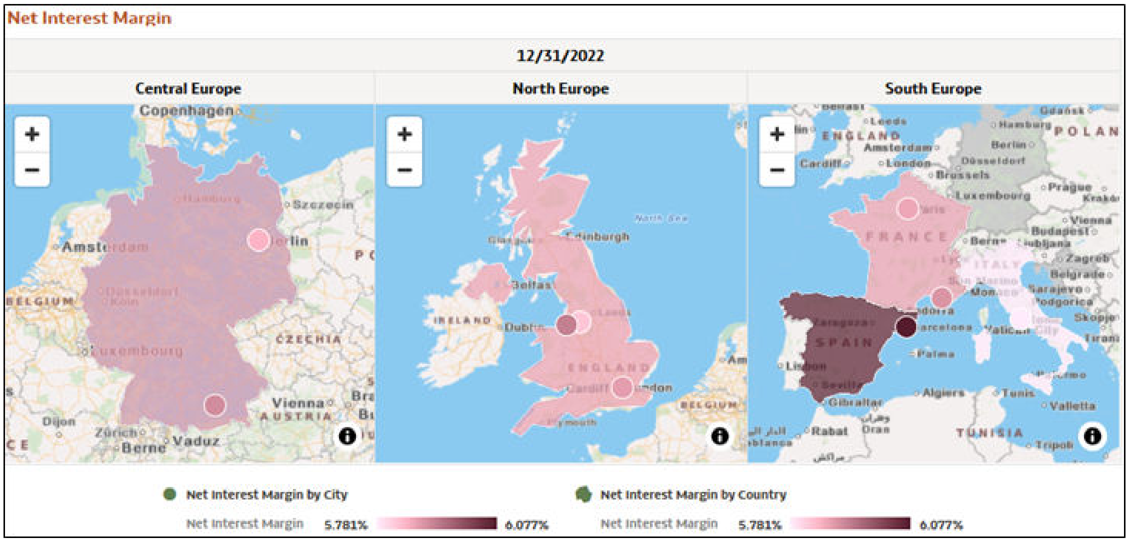


Figure 9-211   Return on Total Assets

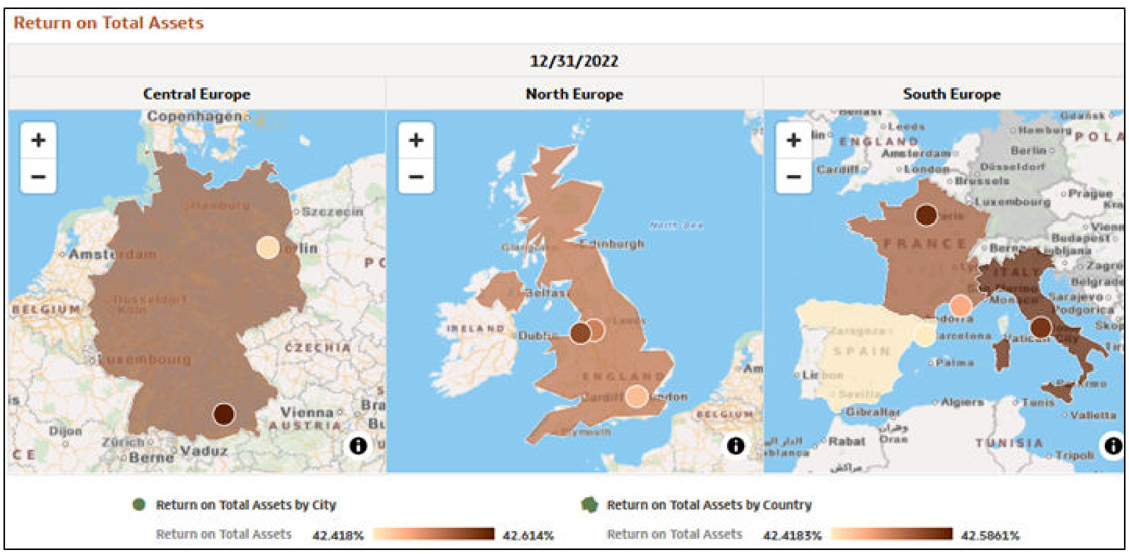


Figure 9-212 Risk-Adjusted Return on Capital

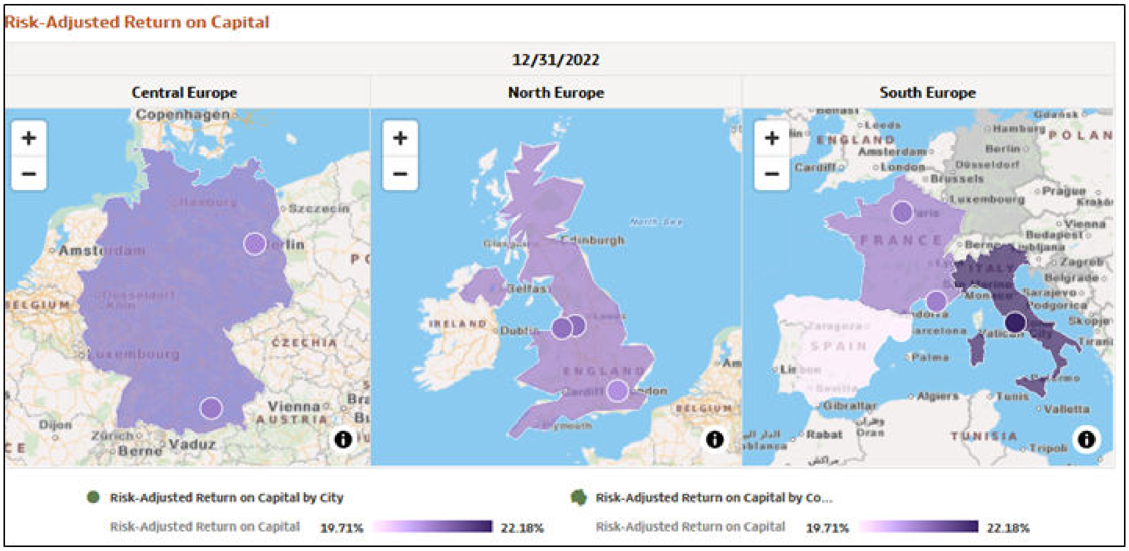
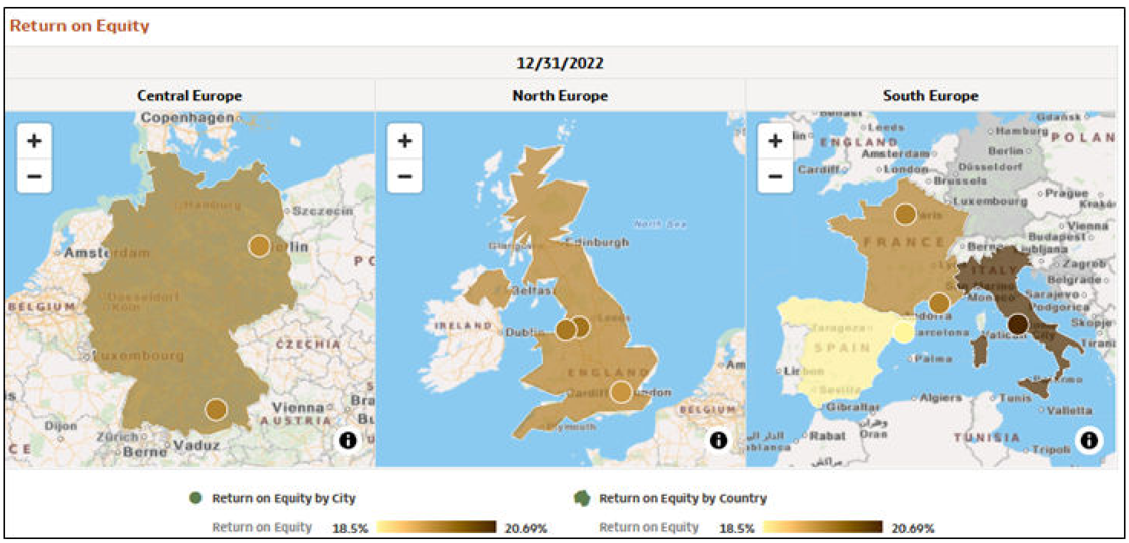


Figure 9-213 Return on Equity



9.7.5 Other Ratios

The Other Ratio's canvas within Geography Profitability provides a map based depiction of profitability measures as follows:

Figure 9-214 Net Fee Income

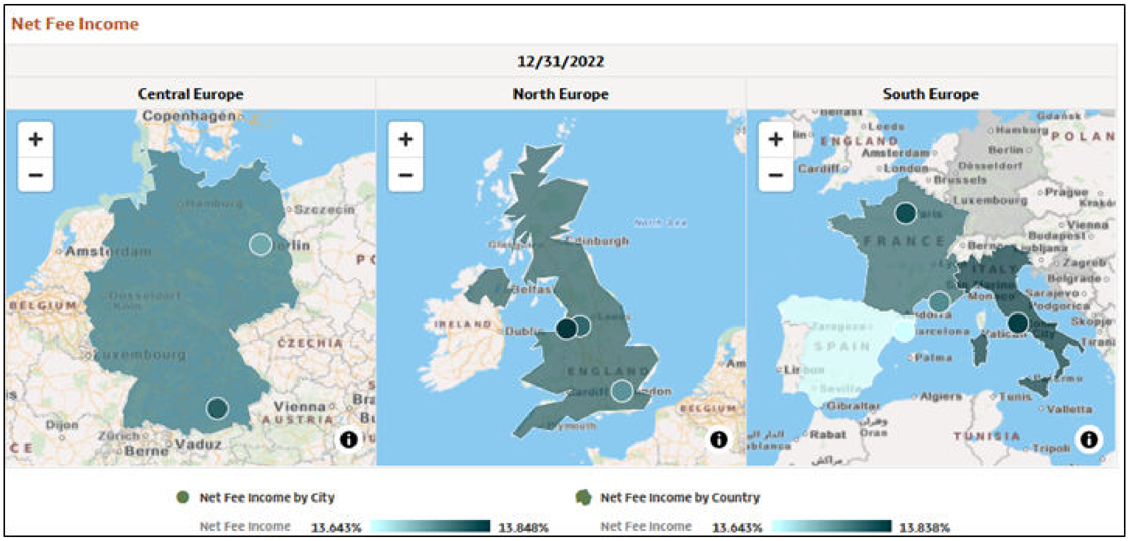


Figure 9-215 Gross Interest Income

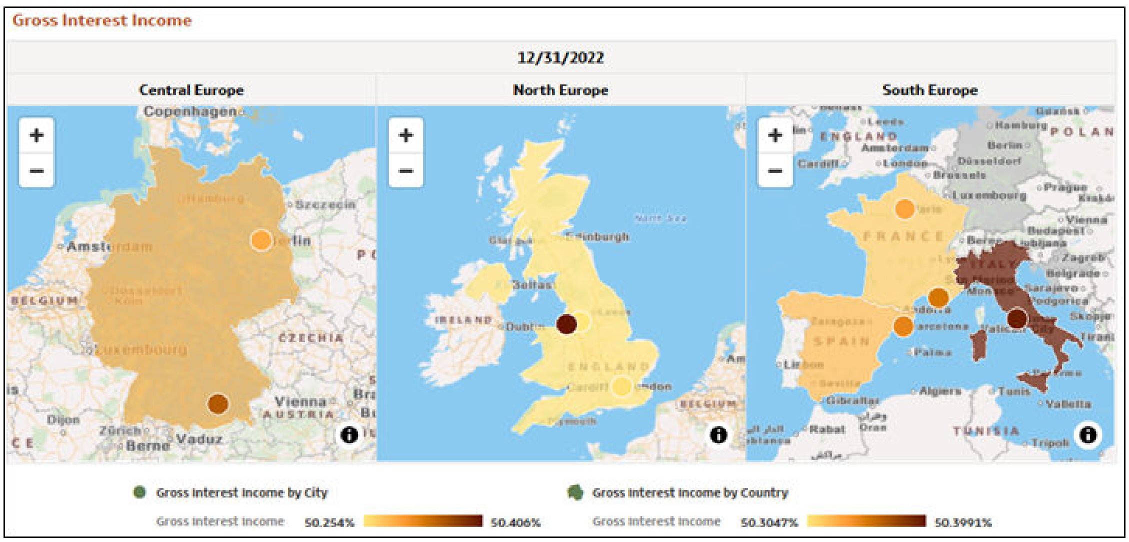


Figure 9-216   Interest Coverage Ratio

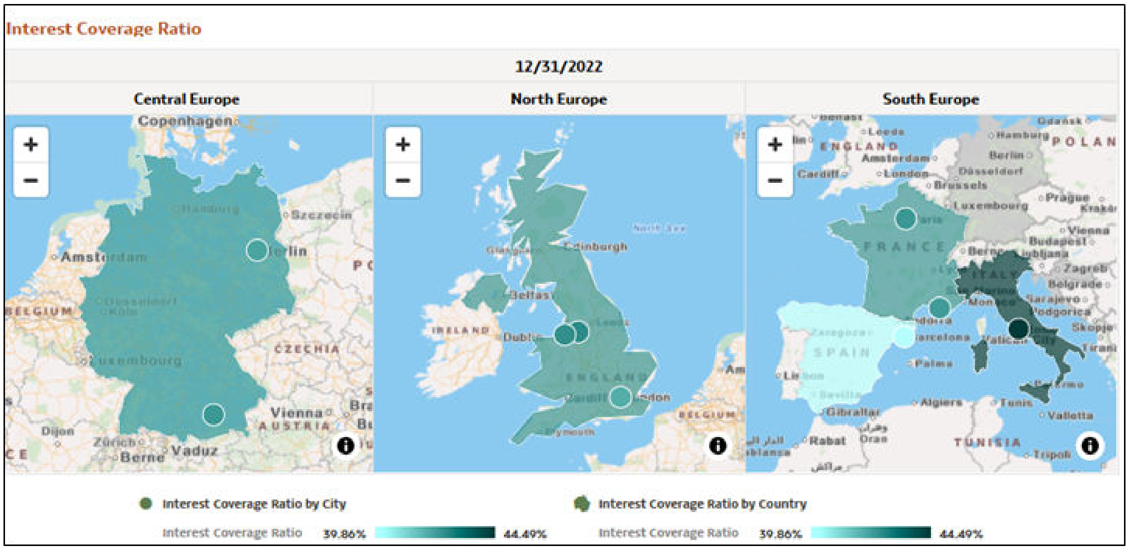
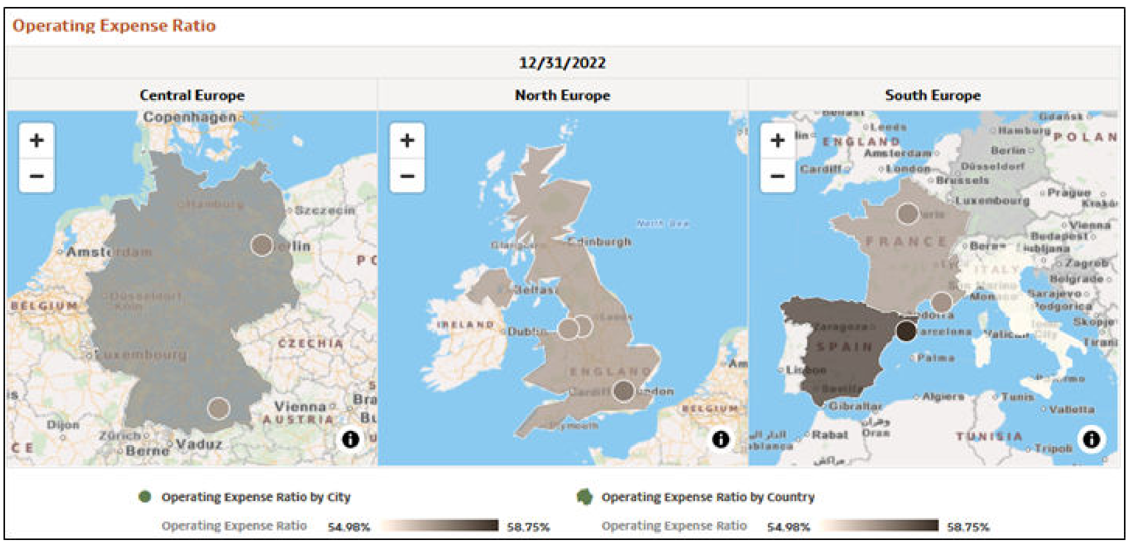


Figure 9-217   Operating Expense Ratio



9.8 Custom Metrics

To access the Custom Metrics report, select **Analytics** from the LHS Menu, and then select **Custom Metrics**.

Custom Metrics Analysis

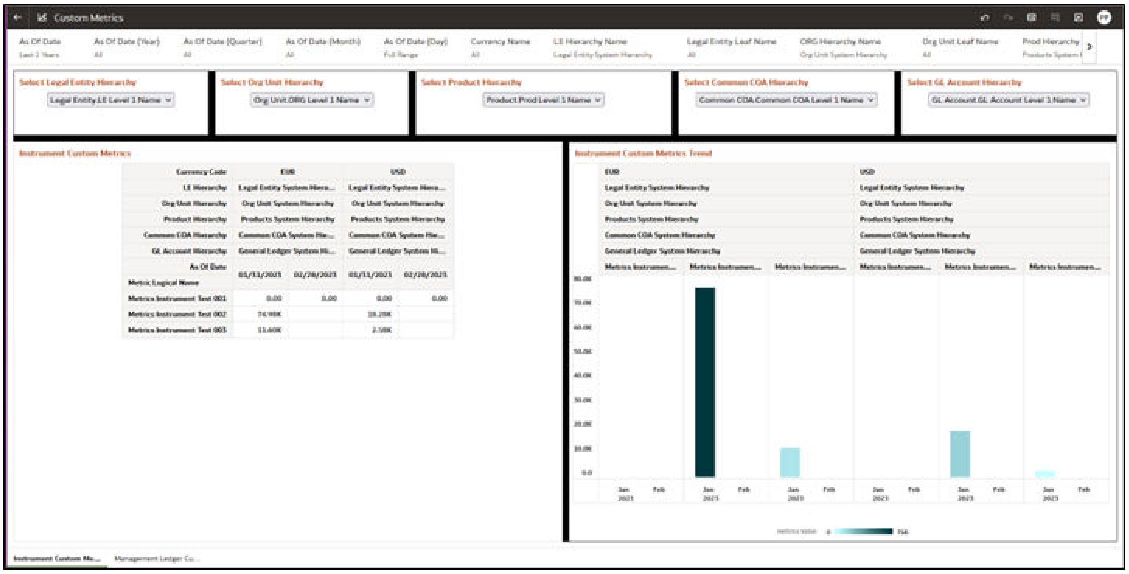
To feed the Custom Metrics to the below sub sections, refer to the *Oracle Financial Services Profitability Analytics Cloud Service Dataflow* document available at Doc ID: 2869409.1:

For the Custom Report refer to the following Data Flow sub-sections:

- Instrument Custom Metrics

- Management Ledger Custom Metrics

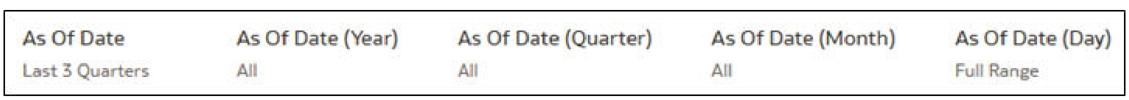
Figure 9-218 Custom Metrics Canvas



9.8.1 Report Filters

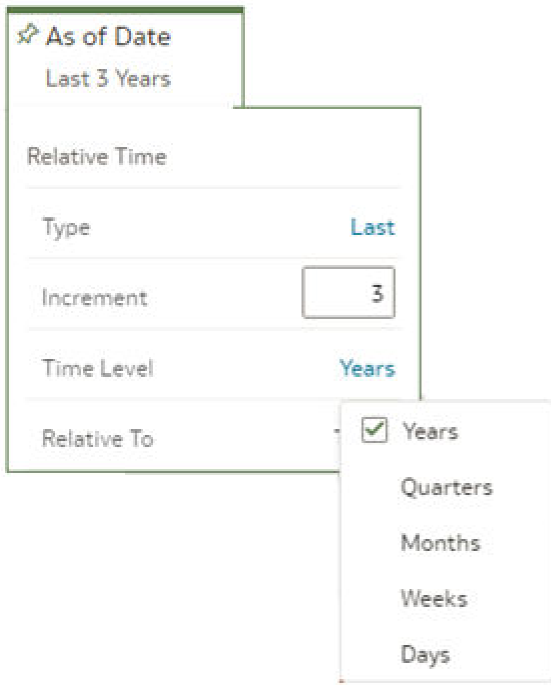
You can use a series of canvas level pinned Prompts to filter the data according to Functional Key Attributes as follows:

Figure 9-219 Canvas Prompt Filters for Time Dimension



As of Date: You can use this filter to isolate a selected time frame for the analysis. The following screen shot displays the possible options that this filter provides against the Time Dimension.

Figure 9-220 Filter Date



Additional Filters for the Time Dimension are as follows:

- As of Date
- As of Date (Year)
- As of Date (Quarter)
- As of Date (Month)
- As of Date (Day)

Figure 9-221 Key Processing Dimensions Prompt Filters

Figure 9-222 Key Processing Dimensions Prompt Filters

- **Legal Entity Hierarchy Name:** Note that this is a mandatory filter for the group filtering on Legal Entity Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select “LE Hierarchy Name” must be selected with only a single value simultaneously.

- **Legal Entity Leaf Name:** You can use this filter to select the Legal Entity Leaf Name that is related to the underlying Management Ledger data.
- **Org Unit Hierarchy Name:** This is a mandatory filter for the group filtering on Org Unit Key Processing Dimension. As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select "Org Unit Hierarchy Name" must be selected with only a single value simultaneously.
- **Org Unit Leaf Name:** You can use this filter to select the Org Unit Leaf Name corresponding to the hierarchy.
- **Product Hierarchy Name:** Note that this is a mandatory filter for the group filtering on Product Key Processing Dimension.
  As the Application supports the creation of multiple hierarchies for the same Dimension of analysis, and to avoid displaying results from multiple Dimension Hierarchies at the same time, a mandatory driver to select "Prod Hierarchy Name" must be selected with only a single value simultaneously.
- **Product Leaf Name:** You can use this filter to select the Product Leaf Name corresponding to the hierarchy.
- **Currency Code**: You can use this filter to select a specific Currency Code to be applied to the underlying management ledger data.
- **Scenario Name**

9.8.2 In canvas Variable Prompts

Figure 9-223 In-canvas Prompt Filters - Instrument

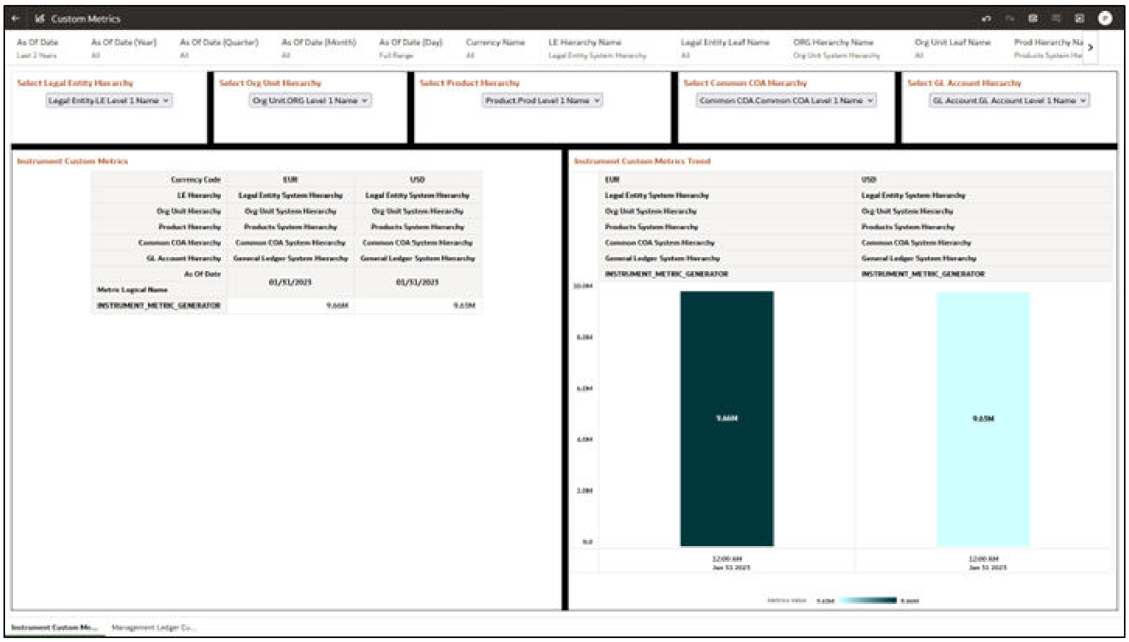
- **Select Legal Entity Hierarchy**: You can use this filter to select the LE Level Name pertaining to the LE Hierarchy level, for rolling up the results on the underlying Legal Entity Leaves that are part of the selected hierarchy.
- **Select Org Unit Hierarchy**: You can use this filter to select the Org Unit Level Name pertaining to the Org Unit Hierarchy level, for rolling up the results on the underlying Org Unit Leaves that are part of the selected hierarchy.
- **Select Product Hierarchy**: You can use this filter to select the Product Level Name pertaining to the Product Hierarchy level, for rolling up the results on the underlying Product Leaves that are part of the selected hierarchy.
- **Select Common COA Hierarchy**:
- **Select GL Account Hierarchy**:
- **Figure 9-224 In-canvas Prompt Filters - Instrument**

Select Time Level:

- **Select Legal Entity Hierarchy**: You can use this filter to select the LE Level Name pertaining to the LE Hierarchy level, for rolling up the results on the underlying Legal Entity Leaves that are part of the selected hierarchy.
- **Select Org Unit Hierarchy**: You can use this filter to select the Org Unit Level Name pertaining to the Org Unit Hierarchy level, for rolling up the results on the underlying Org Unit Leaves that are part of the selected hierarchy.
- **Select Product Hierarchy**: You can use this filter to select the Product Level Name pertaining to the Product Hierarchy level, for rolling up the results on the underlying Product Leaves that are part of the selected hierarchy.

9.8.3 Instrument Custom Metrics Canvas

Figure 9-225 Canvas Instrument Custom Detail



This report shows details of the Metric Logical Name across the dimensions by currency code in the period selected.

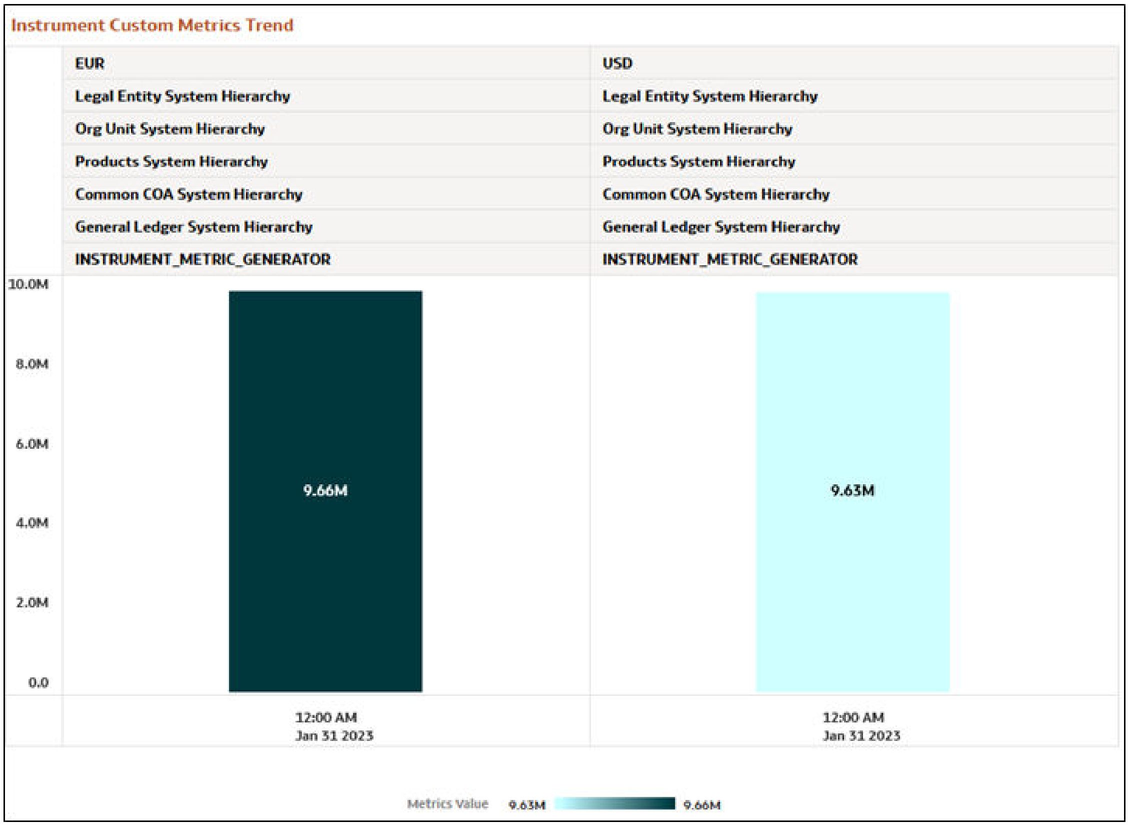
Figure 9-226 Instrument Custom Metrics Analysis

Instrument Custom Metrics

Currency Code	EUR	USD
LE Hierarchy	Legal Entity System Hierarchy	Legal Entity System Hierarchy
Org Unit Hierarchy	Org Unit System Hierarchy	Org Unit System Hierarchy
Product Hierarchy	Products System Hierarchy	Products System Hierarchy
Common COA Hierarchy	Common COA System Hierarchy	Common COA System Hierarchy
GL Account Hierarchy	General Ledger System Hierarchy	General Ledger System Hierarchy
Metric Logical Name	01/31/2023	01/31/2023
INSTRUMENT_METRIC_GENERATOR	9.66M	9.63M

This report shows details of Instrument Custom Metrics Trend across the dimensions by currency code in the period selected.

Figure 9-227 Canvas Instrument Custom Metrics Trend



9.8.4 Management Ledger Custom Metrics Canvas

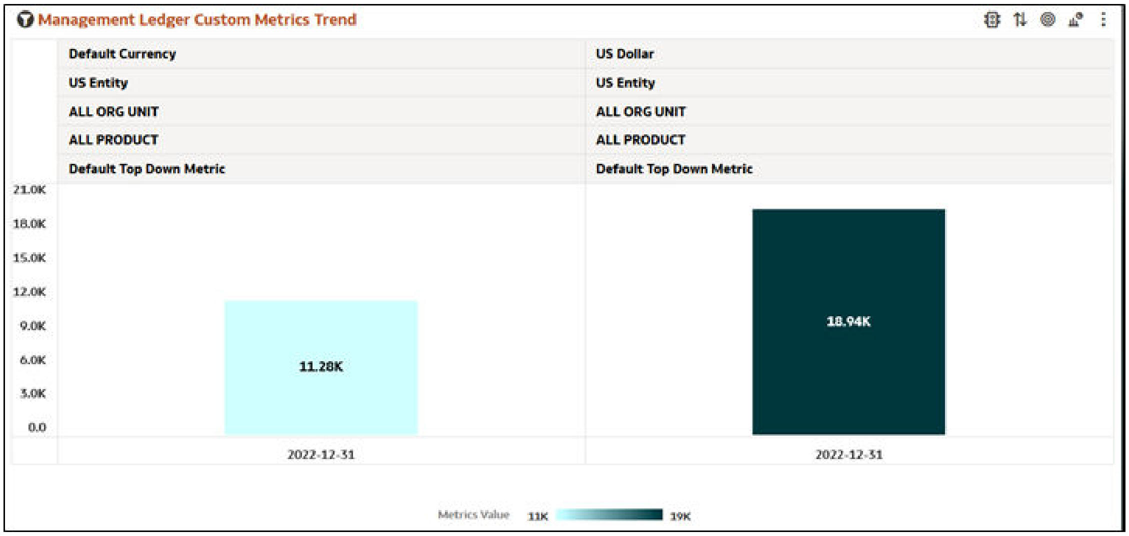
Figure 9-228 Management Ledger Custom Metrics Analysis

Management Ledger Custom Metrics

Currency Name	Default Currency	US Dollar
Legal Entity Hierarchy	US Entity	US Entity
Org Unit Hierarchy	ALL ORG UNIT	ALL ORG UNIT
Product Hierarchy	ALL PRODUCT	ALL PRODUCT
Time	2022-12-31	2022-12-31
Metric Logical Name		
Default Top Down Metric	11.28K	18.94K

This report shows details of Management Custom Metrics Trend across the dimensions by currency code in the period selected.

Figure 9-229   Canvas Management Custom Metrics Trend



9.9 Creating Adhoc Reports and Analysis

The Profitability and Balance Sheet Management Ad-hoc Analysis is provided inside a Shared Folder. Users can use this folder for saving any ad-hoc reports which need to be shared across respective teams. When any patch is applied these reports will not be replaced or purged.

9.9.1 Amend Out-of-the-Box Reports

A user with DV Content Author privileges will have access to amend and save the out-of-the-box reports.

To amend and save the reports:

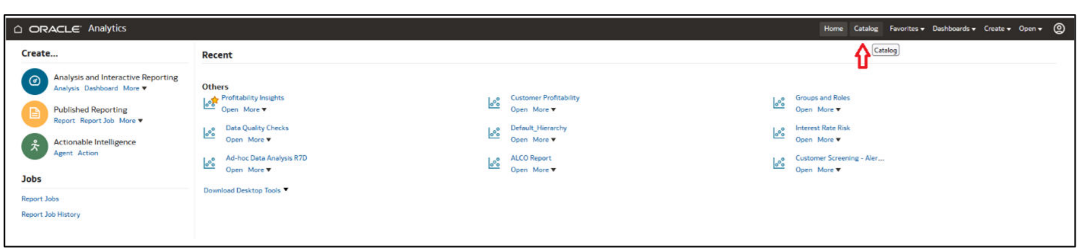
1. To open the ORACLE Analytics page, from the **Home Page**, select **Home Page**, and then from the **Page Menu** on the top-right corner, select **Open Classic Home**.
   A new window will open with Classic Home.

   Figure 9-230   Classic Home Page

2. Click **Catalog**.

   Figure 9-231   Catalog

3. Navigate to **Shared Folders** and select the dashboard and subsequently the report from the available list that you want to edit and right click on your mouse. You will find the Copy option as indicated in the below illustration.

Figure 9-232 Copy Option

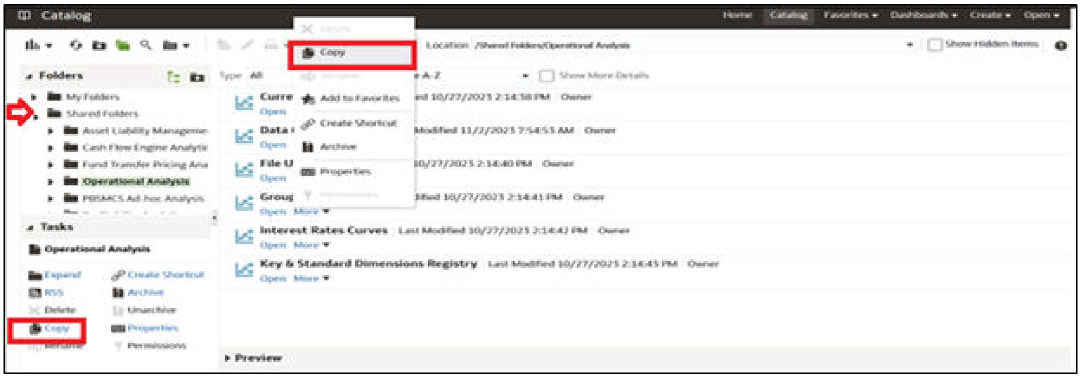
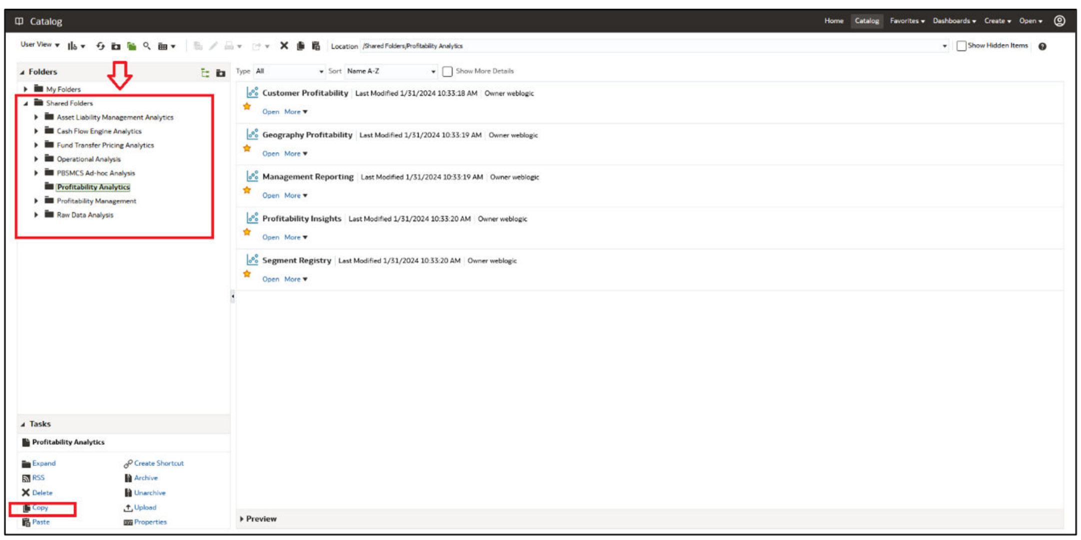
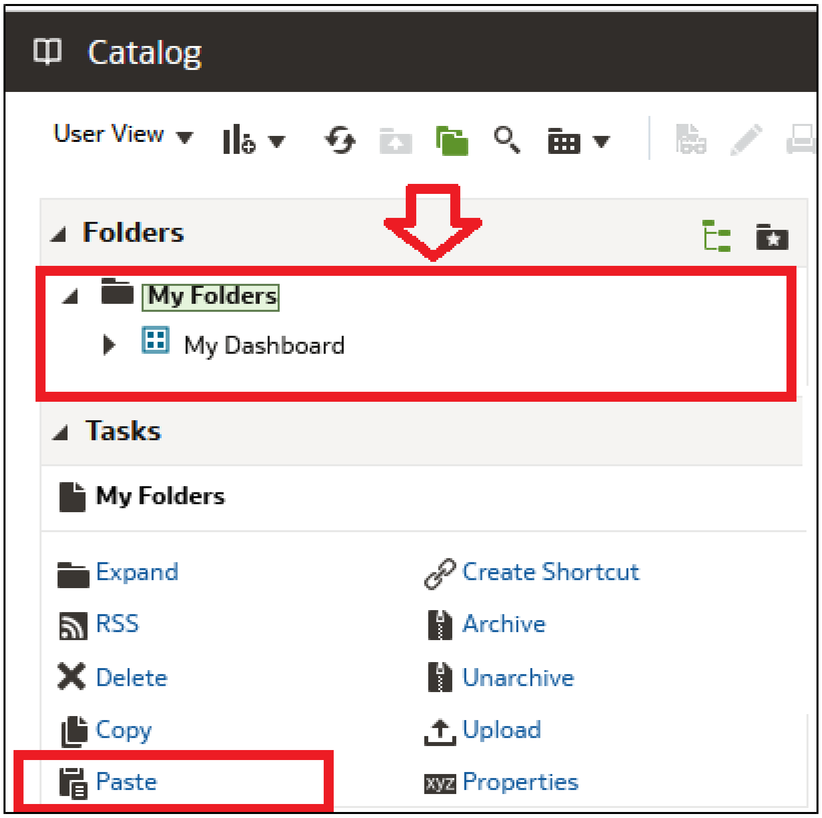


Figure 9-233 Folders



4. Navigate to **My Folders**.

Figure 9-234 My Folders

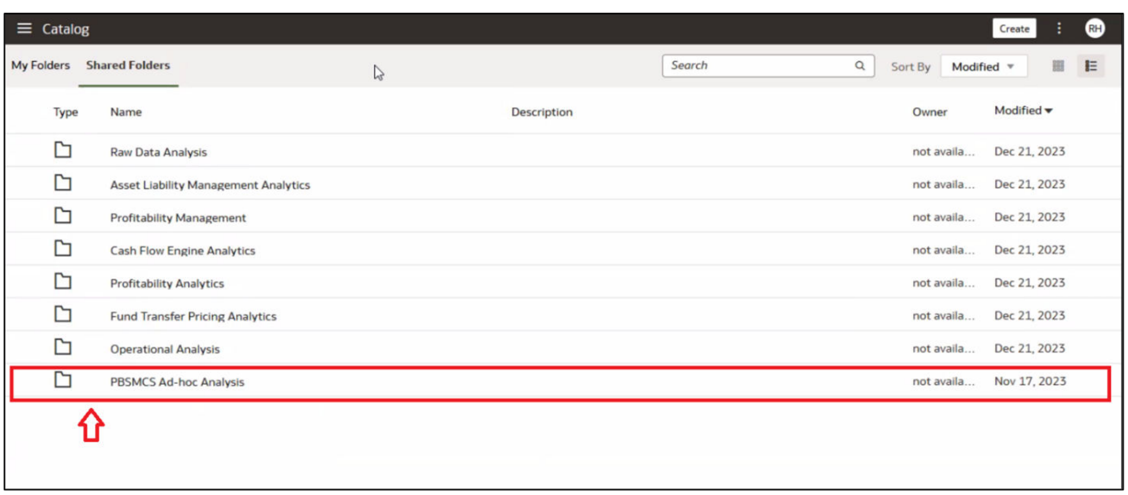


5. Paste the report.
   You will be able to edit the Report which is saved inside My Folder.

9.9.2 Ad-hoc Analysis Folder

This Folder can be used by the customers to share the reports across the organization.

Figure 9-235 Ad-hoc Analysis folder



The out-of-the-box reports can be edited and saved inside Adhoc analysis folder. The reports inside these folders will not be updated or refreshed when any provisioning happens.

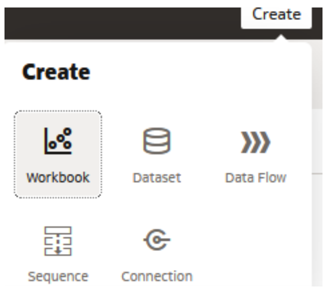
9.9.3 Working with Out-of-the-Box Subject Area

A user with DV Content Author credentials will have access to create new reports. The DV Consumer will have Read Only access.

To work with OOTB Subject Area:

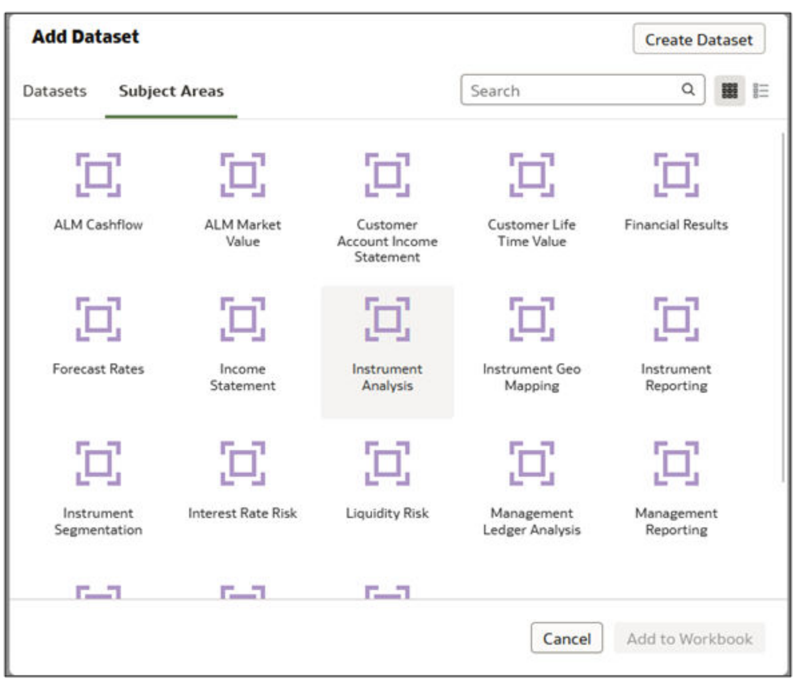
1. To open the ORACLE Analytics page, from the **Home Page**, select **Home Page**.
2. Click the **Create** button and select **Workbook** as shown below.

   Figure 9-236 Create

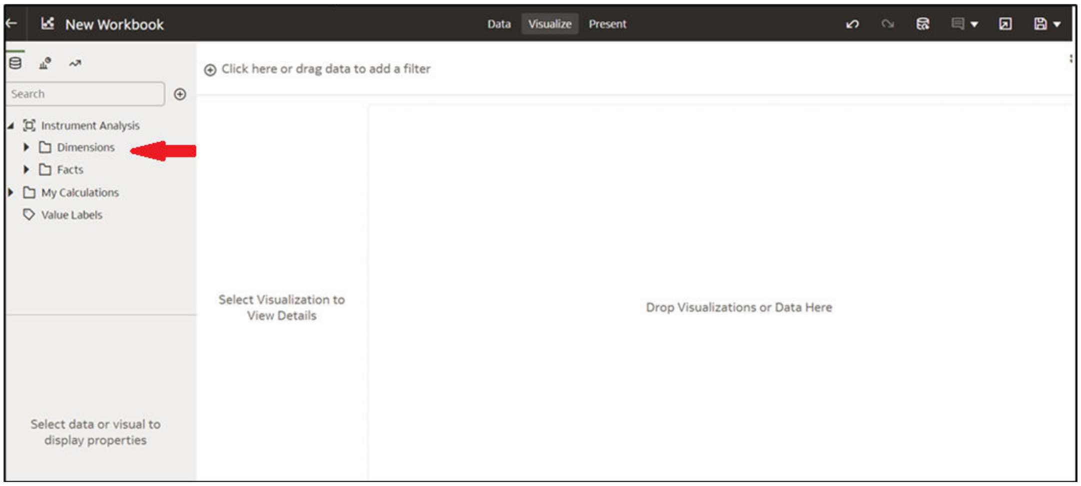
   This opens the Add Dataset window.
3. Select the **Subject Areas** tab. You will find all the relevant subject areas listed as follows.

   Figure 9-237 Subject Areas

4. You can double click to select a particular Subject Areas and a new canvas will open up with the elements of the selected subject area.

Figure 9-238   New Workbook



5. Expand the **Dimensions** and **Facts** and drop the relevant items on to the canvas. By default the best visualization/ chart type for the given data is displayed.

10 Technical Documents

This chapter covers the following topics:

- Run Chart
- Data Flow
- Customer Master Loader
- Customer Hierarchy Loader
- Reporting Data Model

10.1 Run Chart

Run Chart allows to understand the sequence of tasks to be performed to ensure valid Data Flow in the product. It contains the details about Data Loading for all mandatory tables for the product and the sequence of execution of Seeded Tasks or Batches.

For the Profitability Analytics Cloud Service Run Chart, see the Doc ID: 2869409.1 under the Profitability Analytics Cloud Service Technical Documents header.

10.2 Data Flow

Data Flow is a visual representation of the Run Chart. It allows to understand the sequence of tasks including functional and logical processing steps at a high level.

For downloading the Profitability and Balance Sheet Management Cloud Service Data Flow, refer to the Doc ID: 2869409.1 to retrieve the Profitability and Balance Sheet Management Cloud Service Glossary of the Reporting Data Model (RPD Subject Areas).

10.3 Customer Master Loader

The Customer Master Loader allows the user to load the Customer Master Information required by the Profitability Analytics Cloud Service to enrich the demographics at the account-level. To load the Customer Master Data, you need to use the Data Loader service. First you need to upload the data, and then run a Batch to propagate the data into the processing Processing Layer.

To load the data, follow these steps:

1. Navigate to **Profitability Management Cloud Service**. From the LHS menu, select **Data Management Tools**, select **Data File Administration**, and then select **File upload and download** to display the File Upload/Download screen.
   The File Upload/Download screen displays the list of files that are uploaded to the Object Store. The list displays the following details for each file:
   - **File ID**: The unique file id. This is auto generated during upload.
   - **Prefix**: The prefix added to the file name.
   - **File Name**: The name of the uploaded file.

- **Stripe Name**: The unique identifier for storing the files.
- **Uploaded Date**: The file upload date.
- **Download File**: Click the Download icon to download a copy of the file.
- **Delete**: Click Delete to delete the uploaded file.

2. Click **Drag and Drop** to browse and select a file for upload from the local directory. You can also browse to the local directory from the File Explorer and select file and drop it here.

   The File Upload/Download service supports upload of TXT, DAT, and CSV format files.

   Name of the Data File must follow the format as given below:

   - A prefix as **input_yyyymmdd** where the date format is related to the As of Date of Interest (i.e., 02-May-2023 becomes 20230502).
   - A suffix as **_STG_CUSTOMER_MASTER.dat**.
   - An example of a Data File Name could be: **input_20230502_STG_CUSTOMER_MASTER.dat**.

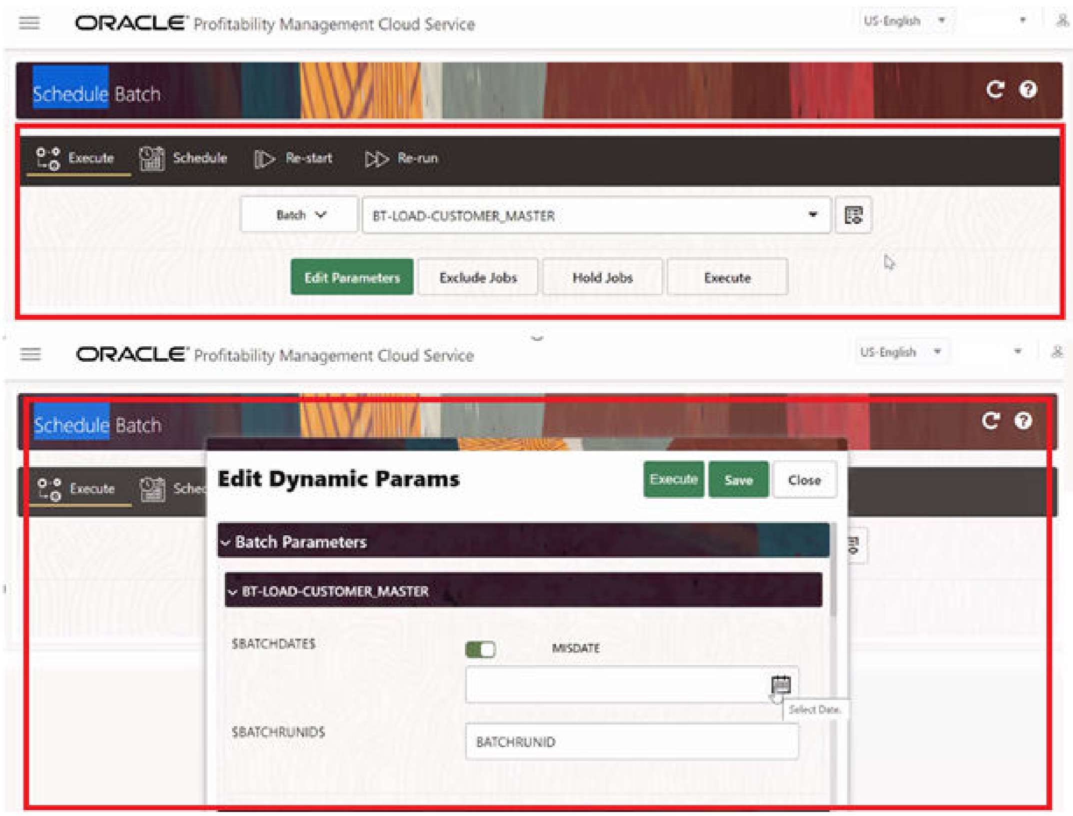
   > **Note:**
   >
   > The file name is case-sensitive.

   For a sample customer master loader, click input_YYYYMMDD_STG_CUSTOMER_MASTER.dat.

   For more information about File Upload and Download, see File Upload and Download.

3. After selecting the file to upload, click **Upload**. The UI displays a confirmation message *Upload successful*.
4. From the LHS menu, navigate to **Operations and Processes**, select **Scheduler**, and then select **Schedule Batch**.
5. Select the **Batch** that is a seeded batch labeled as **BT-LOAD-CUSTOMER-MASTER** and click **Edit Parameters**. In the Dynamic Parameters pop-up window, change the date to the relevant As-of-Date, and then save the batch.

Figure 10-1 Menu Scheduler – Schedule Batch and Edit Parameters



6. From the LHS menu, navigate to **Operations and Processes**, select **Scheduler**, and then select **Execute Batch**.
7. From the LHS menu, navigate to **Operations and Processes**, select **Scheduler**, and then select **Monitor Batch**.
8. Select the **Batch** and then select the **MISDATE** and the **Batch name**. There may be multiple executions of the Customer Master Loader batch. Select the latest execution and click **Start Monitor**.
   The UI displays the Status of the batch.

For more details about Scheduler processes, see the following links:

- Schedule Batch
- Monitor Batch

10.4 Customer Hierarchy Loader

The Customer Hierarchy Loader allows the user to load the Customer Hierarchy Information required by the Profitability Analytics Cloud Service to enrich the demographics at the account-level. To load the Customer Hierarchy Data, you need to use the Data Loader service. First you need to upload the data, and then run a Batch to propagate the data into the processing Processing Layer.

To load the data, follow these steps:

1. Navigate to **Profitability Management Cloud Service**. From the LHS menu, select **Data Management Tools**, select **Data File Administration**, and then select **File upload and download** to display the File Upload/Download screen.

The File Upload/Download screen displays the list of files that are uploaded to the Object Store. The list displays the following details for each file:

- **File ID**: The unique file id. This is auto generated during upload.
- **Prefix**: The prefix added to the file name.
- **File Name**: The name of the uploaded file.
- **Stripe Name**: The unique identifier for storing the files.
- **Uploaded Date**: The file upload date.
- **Download File**: Click the Download icon to download a copy of the file.
- **Delete**: Click Delete to delete the uploaded file.

2. Click **Drag and Drop** to browse and select a file for upload from the local directory.
   You can also browse to the local directory from the File Explorer and select file and drop it here.

   The File Upload/Download service supports upload of TXT, DAT, and CSV format files.

   Name of the Data File must follow the format as given below:

   - A prefix as **input_yyyymmdd** where the date format is related to the As of Date of Interest (i.e., 02-May-2023 becomes 20230502).
   - A suffix as **_STG_CUSTOMER_HIERARCHY.dat**.
   - An example of a Data File Name could be: **input_20230502_STG_CUSTOMER_HIERARCHY.dat**.

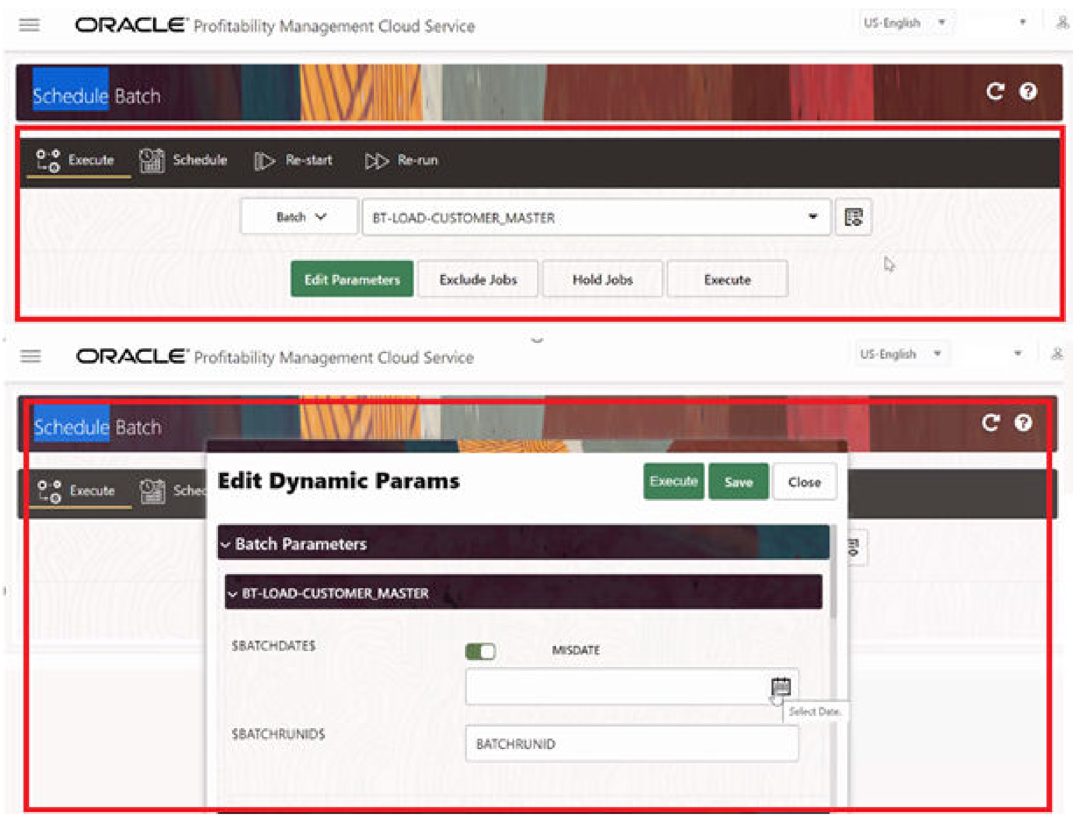
   > **Note:**
   >
   > The file name is case-sensitive.

   For a sample Customer Hierarchy Loder file, click input_YYYYMMDD_STG_CUSTOMER_HIER.dat

   For more information about File Upload and Download, see File Upload and Download.

3. After selecting the file to upload, click **Upload**.
   The UI displays a confirmation message *Upload successful*.
4. From the LHS menu, navigate to **Operations and Processes**, select **Scheduler**, and then select **Schedule Batch**.
5. Select the **Batch** that is a seeded batch labelled as **BT-LOAD-CUSTOMER_HIER** and click **Edit Parameters**. In the Dynamic Parameters pop-up window, change the date to the relevant As-of-Date, and then save the batch.

Figure 10-2 Menu Scheduler – Schedule Batch and Edit Parameters



6. From the LHS menu, navigate to **Operations and Processes**, select **Scheduler**, and then select **Execute Batch**.
7. From the LHS menu, navigate to **Operations and Processes**, select **Scheduler**, and then select **Monitor Batch**.
8. Select the **Batch** and then select the **MISDATE** and the **Batch name**. There may be multiple executions of the Customer Hierarchy Loader batch. Select the latest execution and click **Start Monitor**.
   The UI displays the Status of the batch.

For more details about Scheduler processes, see the following links:

- Schedule Batch
- Monitor Batch

10.5 Reporting Data Model

Please refer to the Doc ID: 2869409.1 to retrieve the Profitability and Balance Sheet Management Cloud Service Glossary of the Reporting Data Model (RPD Subject Areas).