Oracle® Financial Services
Profitability Analytics Cloud Service User Guide

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1

Get Help

Topics:

1.1 Get Help in the Applications

Use help icons to access help in the application.

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

1.1.1 Additional Resources

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

1.2 Learn About Accessibility

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

1.3 Get Support

You can get support at My Oracle Support.

For accessibility support, visit Oracle Accessibility Learning and Support.

1.4 Get Training

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

1.5 Join Our Community

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

1.6 Share Your Feedback

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

You can email your feedback to My Oracle Support.

Thanks for helping us improve our user assistance!

1.7 Before You Begin

See the following Documents:

- See What's New
- Getting Started with Profitability Analytics Cloud Service

2
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 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.

2.2 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.

2.3 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.

3

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 3-1   Illustration of the Cloud Subscription Workflow
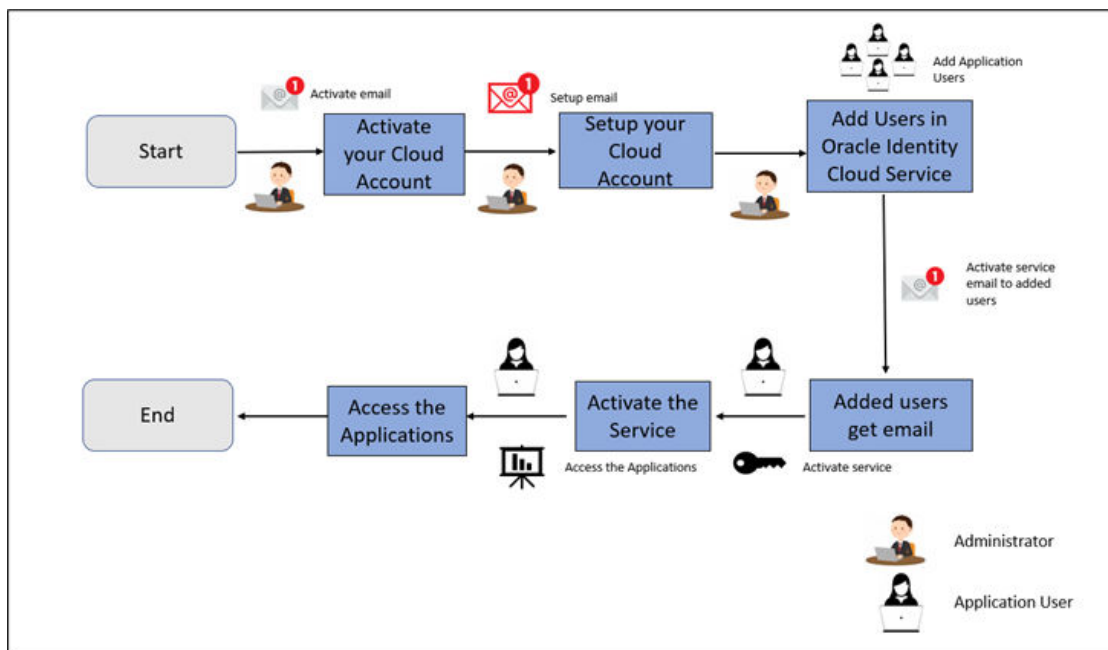
This topic describes the set of actions that can be performed by:

- 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

3.1 Create and Activate New Cloud Account

If you are a new Oracle Cloud Applications User, you will receive a Welcome to Oracle Cloud email that asks you to activate your Cloud Account. Follow the instructions in the email to create and activate your new Cloud Account.

You will then receive a follow-up email with the information you need to sign in and start using your Cloud Applications.

As an Administrator, to create and activate your new Cloud Account, perform the following steps:

1. Click **Create New Cloud Account** in the email.

2. Complete the **New Cloud Account Information** to sign up.

Figure 3-2   New Cloud Account Information page

3. Enter the following details:

   • **First Name** and the **Last Name**.

   • **Email**: Provide the same email address which you had given to receive the Welcome email. Instructions to log into your new Oracle Cloud Account will be sent to this email address.

   • **Password** to access the New Cloud Account.
     Re-enter the Password for confirmation. Make a note of the credentials. The same is required to log in after receiving the Activation email.

   • **Tenancy Name**: New Tenancy name to be associated with the Cloud Account.

   • **Home Region**: Select your Home Region, where the Identity Resources and Account are located. Check the service availability before selecting the Home Region.

4. Click **Create Tenancy**.

5. The **New Cloud Creation Confirmation** screen is displayed.

   After successful activation, you'll receive a **Setup Complete** email.

3.1.1 Add to an Existing Cloud Account

As an Administrator, if you already own a Cloud Account and need to use the another Cloud Service, perform the following steps:

1. In the Welcome email, click **Add** to existing cloud account option.

2. Perform the steps as mentioned in the Access the Oracle Identity Cloud Service Console section.

3.2 Access the Cloud Account

As an Administrator, to access the Cloud Account:

1. In the **Setup Complete** email, click **Sign In**.

2. Enter the Username and Password to access the **Oracle Cloud Console URL**. Use the same Username and Password that you provided during activation setup.

3. Reset the Password.

4. Re log in to **Oracle Cloud Infrastructure Classic Console** using the new Password.

5. Navigate to the **Oracle Cloud Infrastructure Classic Console** where the Application URLs are displayed.

3.3 Create an Environment

After logging into the Oracle Cloud Infrastructure Classic Console, you can create one or multiple instances that can be used by different user groups.

To create an instance, follow these steps:

1. Log into Oracle Cloud Infrastructure Classic Console.
   Under **My Applications**, you will see the list of environments (instances) provisioned for the one or mutliple cloud applications. The following details are provided for each environent:

   • **Name**: The given name to the cloud application's instance.

   • **Type**: The type of the instance.

   • **Lifecycle status**: The status of the instance.

   • **Region**: The region from where this instance is active.

   • **Application URL**: The URL to access the instance.

2. To create a new environment, click **Create environment**.
   This screen displays a list of Cloud Services to which the customer has subscribed and the Region from where these services are operated.

> **✎ Note:**
>
> If **Region** selection drop-down is displayed, then you must select the appropriate Region as follows.
>
> - US East (Ashburn) for United States of America
> - Japan East (Tokyo) for Japan
> - Australia east (Sydney) for Australia

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

3. Under **Environment Details**, enter the following information:

    - **Name**: The name of the new environment or instance.

    - **Instance type**: Select from the following options:

        - **Production**: An environment that will be tagged as Production and can be used for Production activities.

        - **Non-production**: An environment that will be tagged as Non-production and which will be used for testing and development purposes. For example, a sandbox environment.

    - **Admin email**: The email ID with which you have logged into 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 Admin.

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

After the environment becomes active i.e., the **State** column displays Active, you can click on name link to open the **Environment details** page, and view the details. Under **Environmant Information**, click the Service console URL to create users and groups.

3.4 Access the 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 lifecycle 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, you need to navigate to the **Oracle Identity and Access Management (IAM)** Console.

To access the **IAM** Console, perform the following steps:

1. Browse to Cloud.Oracle.com.

   The Oracle Cloud Infrastructure console is the console where the information about your cloud order is available. You need to access the service link from the console to start using your 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. Select the **Identity domain** from the drop-down list and click **Next**.

   The IAM login page is displayed.

5. Log in with your User Name and Password.

As an Administrator, you can create users to have 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.

3.5 Activate Application User Account

After an Application User is provisioned by their Administrator, they will receive an Account Activation email.

As an Application User, perform the following steps to login and activate your account:

1. Open the email you received from Oracle Cloud.

2. Review the information about your service in the email.

3. Click **Activate Your Account**. You will be prompted to change your Password on the initial login.

4. Enter your new credentials in the **Reset Password** window to activate your account. After the Password is successfully reset, the **Congratulations** window is displayed.

5. Access the Application URL that your Application Administrator shared with you.

6. Enter your credentials to sign into your account. The Welcome page is displayed.

3.6 Configuring Session Timeout

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

Let us understand how session timeouts work. When you sign in using your credentials, you're authenticated to use the application, and a session is established. During this session, you don't need to re-authenticate. 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 leaving your application idle for a period longer than

the timeout period. In such cases, you're 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 UIs that open in separate windows or tabs.

This table lists the various types of session timeouts you may experience. After the specified duration, your session expires, and you need to sign in again to continue your work.

Timeout Type	Description	Configurable	Timeout Duration
Session Lifetime Timeout	After you are authenticated in the application, if you are actively working on it, your 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	This type of timeout considers the duration you leave your application idle/ inactive. After this duration, System automatically terminates the session, and you are signed out of the session.	No	60 Minutes
Browser Inactivity Timeout	This type of timeout considers the duration you leave your browser idle. After this duration, your session is terminated by the System, which automatically	No	60 Minutes

3.6.1 How to configure Session Lifetime Timeout?

You can configure the Session Lifetime Timeout using your Identity Domain Settings in OCI Console. You need to have the Security Administrator Role mapped to you, to access and modify the settings.

To configure the session timeout:

1. Login 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 3-3   Session Settings

4

System Administration

This chapter covers the following topics:

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

4.1 Users and Roles

Understand the following terms before you begin performing User Management.

- **Users**: Customers create users in Identity and Access Management (IAM) and can do the following:
  - Map them to existing groups
  - Create new groups to map them

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

  - **Groups**: Groups are seeded (available out-of-the-box) by your Cloud Service. Customers can also create new groups in IAM. After groups are created, they are synced from IAM to the Cloud Service. Groups are mapped to roles using the Cloud Service by the same user that was created using IAM.

  - **Roles**: Roles are seeded by the Cloud Service. Customers 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. Customers cannot create new functions; however, they can only use the existing functions.

4.1.1 View List of Application Users

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.

Select the Username in the Users Summary page and then select Details to view the User ID and Username of the selected User.

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

The search result displays the names that consist of your search string in the list of available users.

You can use the navigation buttons at the bottom of this page to move around in 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 of decrease the number of entries.

Also, you can enter the page number in the **View Bar Control** and jump to the page you want.

4.1.2 Create Application Users

After you sign in to your IAM console, one of your first tasks 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 team 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, perform the following steps:

1. In the IAM Console, click the **Profile** icon and select **Identity domain** to add the Application Users.

2. In the **Identity Domain** left pane, click **Users** and select **Create user**.

3. Enter the following details:

   To have the user sign in with their email address:

   • Leave the **Use the email address as the username** check box selected.

   • In the **Username / Email** field, enter the email address for the user account.

   Or

   To have the user sign in with their user name:

   • Clear the **Use the email address as the username** check box.

   • In the **First name** and **Last name** fields, enter the user name that the user is to use to sign in to the Console.

Figure 4-1   Add User Details

> **Note:**
>
> Ensure that you restrict the User Name to the following:
>
> a.   Do not enter your Email ID as the Username and do not select the **Use the email address as the username** check box.
>
> b.   Enter a maximum of 20 characters.
>
> c.   Enter Alphanumeric Characters.
>
> d.   Enter only Hyphen (-) and Underscore (_) Special Characters.

4.   In the **Groups (Optional)** section, select the user groups according to your user-specific groups or access.

> **Note:**
>
> After a user sign in to the PBSM 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 the **Assign User to Groups** Window 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.

5.   To create an Identity Administrator or Authorizer user, assign the users to the following:

- **IDNTY_ADMIN**: You can use this option to create an Administrator User.

- **IDNTY_AUTH**: You can use this option to create an Authorizer User.

Figure 4-2   Assign Users to Groups Window

6. Click **Create**.

For Bulk User Creation, you can batch import User Accounts using a comma-separated values (.CSV) file.

4.1.3 Create a User Group

You can create groups to manage user access to applications and resources.
A group has no permissions until you do one of the following:

- Write at least one policy that gives that group permission to either the tenancy or a compartment. When writing the policy, you can specify the group by using either the unique name or the group's OCID.

- Assign the group to an application.

To create a User Group in IAM Console, perform the following steps:

1. In the IAM Console, click the **Profile** icon and select **Identity domain** to add a User Group.

2. In the Identity Domain left pane, click **Groups** and select **Create group**.

Figure 4-3   Identity Domain

3. Enter the following details:

    •   The name of the group. This field is mandatory.

    •   Description for the group.

4. To allow users to request access to this group, select **User can request access**.

5. To add users to the group, select the check box for each user that you want to add to the group.

6. Click **Create**.

4.1.4 Add User to Group

To add a User to Group in IAM Console, perform the following steps:

1. In the IAM Console, click the **Profile** icon and select **Identity domain: Default** to add the User Group.

2. In the Identity Domain left pane, click **Groups** and select the group for which you want to add the users.

Figure 4-4   Groups in Default Domain

3. Click **Assign user to groups**.

4. To add users to the group, select the check box for each user that you want to add to the group.

5. Click **Add**.

4.1.5 Import Application Users

If you are an Administrator, you can batch import User Accounts using a Comma-separated Values (.CSV) file.

> **Note:**
>
> Before you can import user accounts, you must create a CSV file that is properly formatted for the import process.

To import user accounts, perform the following steps:

1. In the IAM Consoleleft pane, click Users and select More Actions drop down and select Import Users.

2. In the **Import Users** dialog box, click **Browse** to locate and select the CSV file that contains the user accounts to import.

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

3. Verify that the path and name of the .CSV file that you selected appear in the **Select a file to import** field.

4. Click **Import**.

   > **Note:**
   >
   > If a user account is missing a required value, such as the user's first name, last name, or username, then Oracle Identity Cloud Service cannot import it. If Oracle Identity Cloud Service cannot import a User Account, then it evaluates the next account in the CSV file.

After Oracle Identity Cloud Service evaluates all User Accounts, the **Jobs** page displays the accounts you have imported. You can also get information related to the successful imports and imports that did not happen due to system errors.

4.2 User Groups

User Groups are seeded (available out-of-the-box) by the Cloud Service. Customers can also create new groups in IAM. After groups are created, they are synced from IAM to the Cloud Service. Groups are mapped to roles using the Cloud Service by the same user that was created using IAM.

4.2.1 Map Application with the User

To map the application to a User Group, log in to IAM and follow these steps:

1. Search for the **Domain**.

2. Select the **Default Domain** and then from the LHS menu, select **Oracle Cloud Services**.

   The screen displays the various Oracle Cloud Services.

3. Select the Cloud Services you are subscribed to like, **PBSMCS xxxx-prd** and **PBSMCS xxxx-nprd**.

   Where **Description** is mentioned as PBSM Cloud Service.

4. From the LHS menu, select **Users**.

5. Click **Assign Users**, and then select the user.

6. Click **Assign**.

4.2.2 Map Application with the Groups

To map the application to a User Group, log in to IAM and follow these steps:

1. Search for **Domain**.

2. Select the **Default Domain** and then from the LHS menu, select **Oracle Cloud Services**.

   The screen displays the various Oracle Cloud Services.

3. Select the Cloud Services you are subscribed to like, **PBSMCS xxxx-prd** and **PBSMCS xxxx-nprd**

   Where **Description** is mentioned as PBSM Cloud Service.

4. From the LHS menu, select **Groups**.

5. Click **Assign Groups**, and then select the relevant **Group**.

6. Click **Assign**.

4.2.3 Map Users to Groups

If you are an Administrator and want to map a User to a User Group, log in to IDCS and follow these steps:

1. Select the **User Name** in the **Users Summary** page.

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 the Unmap action requires authorization, see the Unmap User from Group section for details.

> **Note:**
>
> User-Group mapping changes from IDCS 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 IDCS 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 the Assign User to Groups Window. 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 Page.

5. Select a **User Group**.

> **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.
> 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 Process.

6. Click **Map**.

> **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.
> 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 Process.

4.2.4 Unmap User from Groups

To authorize the unmapping of a User to a User Group, log in to IAM and follow these steps:

1. Click **Unmapped Groups**.

2. Click the User Group Name to select the User Group.

3. Click **Authorize** to authorize the unmapping.

Or

Click **Reject** to cancel the Authorization Request.

4.2.5 Create a User Group

You can create groups to manage user access to applications and resources.
A group has no permissions until you do one of the following:

- Write at least one policy that gives that group permission to either the tenancy or a compartment. When writing the policy, you can specify the group by using either the unique name or the group's OCID.

- Assign the group to an application.

To create a User Group in IAM Console, perform the following steps:

1. In the IAM Console, click the **Profile** icon and select **Identity domain** to add a User Group.

2. In the Identity Domain left pane, click **Groups** and select **Create group**.

Figure 4-5   Identity Domain

3. Enter the following details:

   - The name of the group. This field is mandatory.

   - Description for the group.

4. To allow users to request access to this group, select **User can request access**.

5. To add users to the group, select the check box for each user that you want to add to the group.

6. Click **Create**.

4.3 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.

4.3.1 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.

4.3.2 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 4-1   User Personas and Tasks

IDCS Administrator	PACS Application Administrator	PACS BI Analyst and PACS Data Analyst	PACS Auditor
Create Users	Admin Privileges for all modules	Manage PACS Data	Review PACS Data Integrity
Map Users to OOB User Groups	Manage Run Chart and Batches	Create new reports if required of existing RPD	Review Process Logs
Create User Groups and Roles	Set Preferences	Manage Dimensions	View Reports
Map Roles to User Group	Manage Setup Configurations	View OOTB Reports for Management Reporting and Profitability Insights	
Map Functions to Roles			

> **Note:**
>
> - User-Group mapping changes from IDCS 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.

4.3.2.1 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.

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	Perform Application Administrator activities	User Group with Administration Roles across all Service Features
Business Users	Access to the Application to perform tasks	User Group with Business Tasks' Roles across all Service Features

4.3.2.2 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:

- Profitability Analytics Administrator
- Profitability Analytics Application Analyst
- Profitability Analytics Application Auditor
- PA BI Data Steward
- PA BI Analyst
- PA BI Auditor
- PA BI LOB Head

In addition to this, Custom User Roles can be created and managed as per requirement.

The user roles Profitability Analytics Application Administrator, Profitability Analytics Application Analyst, and Profitability Analytics Application Auditor 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 Screens and Edit-specific Screens. Similarly, an Admin Persona can view and edit all PA Screens. These different Persona tasks are facilitated by the User Roles. Thus, these three User Roles facilitate the accesses and activities for the corresponding User Groups that are mentioned in the below table.

The User Roles of - PA BI Data Steward, PA BI Analyst, PA BI Auditor and PA BI LOB Head - are seeded BI Roles to be used for the users to access the Analytics Menu in the PA Application. These four roles are created to facilitate Analytics access for four 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.

4.3.2.3 User Groups and Activities

The following table provides the information on the User Groups and related activities.

User Groups	Activities
PA Application Administrator	• Admin Privileges for all modules • Manage Runchart and Batches • Set Preferences • Manage Set Up Configurations
IDCS Administrator	• Create Users • Map Users to the Instance

User Groups	Activities
PA Application Analyst	• Set User and Application Preferences • Set Setup Parameters • Currency and Rate Management • Dimension Management • Data Management: Metadata and Data Loaders • Data Model Extension • Create Filters and Expressions • Create Table Drivers • Create and Execute Allocation Rules • Create and Execute Allocation Models • Schedule Batch Processes • View Allocation Executions • View Profitability Analytics Reports
PA Application Auditor	• View privileges for all application-specific modules: • Review/Analyze Results • Review Process Logs • View Reports

In addition to this, the following user groups are also seeded viz – PA Authorizer, PA BI Analyst and PA Data Analyst. User roles can be mapped to these groups for efficient management of application. Custom User Groups can also be created and managed as per requirement.

4.3.2.4 User Groups and User Role Mapping

The following table lists the seeded mapping of User Groups to the User Roles.

User Group	Mapped User Role
Profitability Analytics Application Administrator	Profitability Analytics Application Administrator
Profitability Analytics Application Analyst	Profitability Analytics Application Analyst
Profitability Analytics Application Auditor	Profitability Analytics Application Auditor

The BI User Roles of PA BI Data Steward, PA BI Analyst, PA BI Auditor, PA BI LOB Head are not mapped OOTB to any seeded User Group but can be mapped to any User Group to provide the Analytics access to users under than User Group. Customers can custom User Groups and map the seeded or Custom User Roles as it suites the requirement.

5

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

5.1 Components of Dimension Management

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

- Members
- Attributes
- Hierarchy

5.2 Object Security

Object Security is implemented for Hierarchy, Filter, and Expressions objects.

There are some Seeded User Groups and Seeded User Roles mapped to those User Groups. If you are using the Seeded User Groups, the restriction on accessing objects depends on the associated User Groups.

For creating/editing/copying/removing an object in Dimension Management Module, your User Group should have been mapped to the folder in case of public or shared folder, or you should have been 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 Window, your User Group should have ACCESS Role mapped. 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.

5.3 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.

5.3.1 Member Summary Page

To access the Member Summary Page, complete the following procedure.

1. From the left menu, click **Common Object Maintenance.**

2. Select Dimension Management and select **Member**.
   The **Member Summary Page** containing the following details is displayed.

Figure 5-1   Member Summary Page

The Member Summary Page provides the list of Member definitions with the following details:

Table 5-1   Field Description

Field	Description
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	• **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.
Action	Click to View, Edit, Copy or Delete a Member Definition.

5.3.2 Creating Member Definitions

To create a Member Definition in the Members Page, complete the following steps.

1. To create a Member definition, click the Add ([icon]) in the Member Summary Page. The Add Member Definition Page is displayed.

Figure 5-2   Add Member Definition Page
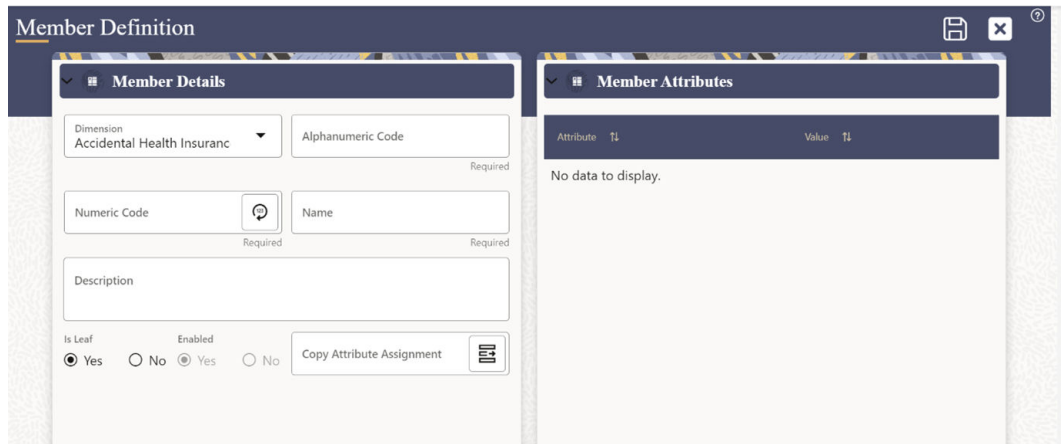
2. Enter the **Member Details** as described in the following table:

Table 2: Field Description
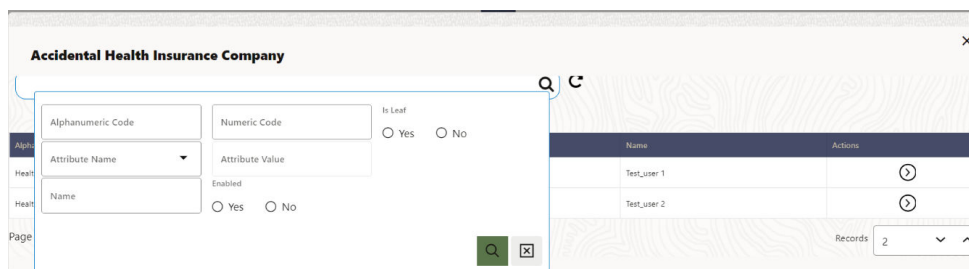
Field	Description
Dimension	Select the Dimension to be associated with the new Member.
Alphanumeric Code	The Alphanumeric Code to be assigned to the new Member Definition.
	Note: You can enter up to 100 characters. We recommend using only Underscore ("_") as a special character.
Numeric Code	The Numeric Code to be assigned to the new Member Definition.
	You can enter the value manually or click Generate (), to auto-generate a unique code.
	If you enter the value manually, the system will verify if the value is unique and assigns it.
	Note: You can enter any number between 0 and 999,999,999.
Name	The unique Member Definition Name.
	Note: You can enter up to 100 characters. All characters are allowed except " & ' and " ' ".
Description	A brief description about the Member Definition.
	Note: You can enter up to 100 characters. All characters are allowed except " & ' and " ' ".

Field	Description
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 and can be edited only after the Member is created. 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.
Copy Attribute Assignment	Attach an existing attribute to this new Member Definition.

3. Click **Copy Attribute Assignment** (⊟⃗).

   The **Attributes Page** associated with the selected Dimension is displayed. This field can be left blank so that the Member Attributes Panel can be filled in without considering the values already assigned.

   Figure 5-3   Copy Attribute Assignment Window

   Click **Search** (🔍) button to search for a specific Member based on Alphanumeric Code, Numeric Code, Name, Description, Enabled status, Is Leaf status, Attribute Name, or Attribute Value. You can also enter any of these parameters as Keywords in the Search field and click **Search** ().

4. Locate the Attribute to be copied and click (⊘) and select **Copy**, located under **Actions**.

5. Click **Save** (⊟).

5.3.3 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** button (⊙). The following Options are displayed:

Table 3: Action Details

Action	Description
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 Details.

5.3.3.1 Viewing Member Definition Details

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** button (⊙).
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.

5.3.3.2 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** button (⊙).
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**.

5.3.3.3 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** button (   ).
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**.

5.3.3.4 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 button (   ).
2. Click the **Delete** button.

    The Member Definition is deleted after confirmation.

5.4 Attributes

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

5.4.1 Attribute Summary Page

To access the Attribute Summary Page, complete the following procedure:

1. From the left menu, click **Common Object Maintenance.**
2. Select Dimension Management and select **Attribute**.

The **Attribute Summary Page** containing the following details is displayed.

Figure 5-4   Attribute Summary Page

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

Table 4: Field Description

Field	Description
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	• **Yes** – Attribute Value is mandatory for the Dimension Member. • **No** - The Attribute value is optional for the Dimension Member.
Seeded	• **Yes** - This Attribute is seeded by the service. • **No** - The Attribute is created by the user.
Action	Click to View, Edit, Copy or Delete an Attribute Definition.

5.4.2 Creating Attribute Definition

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

1. Click the **Add** ( ) button in the Attribute Summary Page.

   The **Add Attribute Definition** Page is displayed.

Figure 5-5   Add Attribute Definition Page

2. Enter the Attribute Details as described in the following table:

Table 5: Field Description

Field	Description
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 the value manually or click Generate (), to auto-generate a unique code.
	If you enter the value manually, the system will verify if the value is unique and assigns it.
	Note: You can enter any number between 0 and 999,999,999.
Name	The unique Attribute Definition Name.
	Note: 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.
	Note: You can enter up to 100 characters. We recommend using only Underscore ("_") as a special character.
Description	A brief description about the Attribute Definition.
	Note: You can enter up to 100 characters. All characters are allowed except " & ' + @ and ~.
Attribute Properties	

Field	Description
Data Type	Select the Data Type as Date, Dimension, Number, or String from the drop-down list.
	If Number is selected as the Data Type:
	Enter a Scale value >= 0. If it is left as 0, values for this attribute will be limited to Integers. If you wish to enable decimal entries for this attribute, 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	Select the Dimension to be associated with the new Attribute Definition.
	This field is enabled only if the Data Type is set to Dimension.
Default Value	The Default Value is set based on the selected Data Type. The Default Value is mandatory if this attribute is set as a Required Attribute.
	• If Dimension is set as the Data Type, select the Default Value from the drop-down list of members mapped to the selected Dimension.
	• If NUMBER is selected as the Data Type, enter a Numeric Value in the Default Value field, and it must be consistent with the Scale you have defined.
	• If DATE is selected as the Data Type: Click button to select a valid date as the Default Value from the calendar.
	• If STRING is selected as the Data Type: Enter the Alphanumeric Value in the Default Value field.
	The Maximum characters allowed in Default Value field for String Data Type is 1000.
Required Attribute	• **Yes** - This Attribute is mandatory for the associated Dimension Members.
	• **No** - This is an optional Attribute for the associated Dimension Members.
	Note: This field is disabled in Add and Edit Modes if any members already exist for the Dimension on which this attribute is defined.
Seeded Value	• **Yes** – This is selected only when the attribute is seeded out of box by the Cloud Service.
	• **No** – Always select this when you are creating a new attribute.

3. Click **Save** ( ).

5.4.3 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** button(). The following Options are displayed.

Table 6: Action Details

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.

5.4.3.1 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 Window:

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

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

5.4.3.2 Modifying Attribute Definition

You can 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 Window follow these steps:

1. Highlight the Attribute Definition and click the **Action** button ( ).
2. Click the **Edit** button.

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

   Edit the required information and click Save.

5.4.3.3 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. The Write Role should be mapped to your User Group.

To copy an existing Attribute Definition in the Attributes Window:

1. Highlight the Attribute Definition and click the Action button (⬤).
2. Click the **Copy** button.

   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**.

5.4.3.4 Deleting Attribute Definition

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

5.5 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.

5.5.1 Hierarchy Summary Page

To access the Hierarchy Summary Page, complete the following procedure.

1. From the left menu, click **Common Object Maintenance.**
2. Select Dimension Management and select **Hierarchy**.

Figure 5-6   Hierarchy Summary Page

The Hierarchy Summary Page provides the list of Member Definitions with the following details:

Table 7: Field Description

Field	Description
Name	The unique Hierarchy Name.
Description	The brief description about the Hierarchy.
Folder	The folder in which the Hierarchy is stored.
Dimension	The Dimension associated with the Hierarchy.
Tag	Tags are labels that help to simplify the data search and locate the required details.
Action	Click to View, Edit, Copy or Delete a Hierarchy Definition.

5.5.2 Creating Hierarchy Definitions

To create a Hierarchy Definition in the Hierarchy Summary Page, complete the following steps.

1. To create a Hierarchy definition, click the **Add** button in the Hierarchy Summary Page.
   The **Add Hierarchy Definition** Page is displayed.

Figure 5-7   Add Hierarchy Definition Page

Enter the **Hierarchy Details** as described in the following table:

Table 5-2   Field Description

Field	Description
Basic Details	
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 ~.
Hierarchy Sub Type	This is defaulted to 'Member Based' in PBSM and you cannot change it.
Folder	Select the Folder in which the Hierarchy is to be stored.
Based On	
Dimension	Select the Dimension to be associated with the new Hierarchy Definition.
Start Date	The date from which this Hierarchy will be activated. By default the Start Date is set to the current System Date.

Table 5-2   (Cont.) Field Description

Field	Description
Data Grid	
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 Results	The search results based on the specific keyword entered to search a Member is populated.

Figure 5-8   Hierarchy Grid
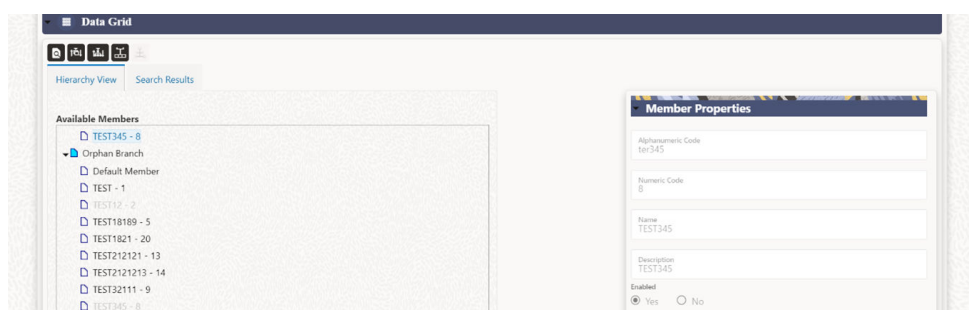
To Add a Child to the Hierarchy:

a. Right-click in the **Hierarchy View** tab.

b. Select **Add Child** option and the **Add Member Page** are displayed.

c. Select the required Member and click **Move**, 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** to move all Members listed in the Show Members pane, to the Selected Members pane. Click **Fetch from DB** to select all nodes/ members in the server.

   • Select a member and Click **Remove** 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 **Remove all**.

   • 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 **OK**. The selected Member is displayed as Child under **Data Grid** panel in the **Hierarchy View** tab.

2. **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**, to move the Member to the Selected Members panel.
The Member is displayed in the **Selected Members** panel.

    c. Click **OK**. The selected Member is added as **Sibling** below the **Parent** under Data Grid Panel in the **Hierarchy View** Tab.

3. **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**, to move the Member to the Selected Members panel.
The Member is displayed in the **Selected Members** panel.

    c. Click **OK**. The selected Member is displayed as Leaf below the Parent or Sibling under **Show Hierarchy** Panel in the Hierarchy View Tab.

4. **To define Level Properties:**

    a. Right-click the Parent or Child and select **Level Properties**. The details are displayed in the Member Properties Panel.

    b. Enter the valid **Name** and **Description** in the respective fields.

    c. Click **OK** and the Levels defined are displayed in the drop-down in **Initial Level Display** field in **Data Grid** in **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 to collapse the members under a node.

- Click to expand a branch or collapse a branch.

- Click or to focus or unfocus a selected node except the Root Node.

- Click to sort the list in ascending or descending order.

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

5.5.3 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 the

Action button( ). The following options are displayed.

Table 9: Action Details

Field	Description
View	View the **Hierarchy Details** for a specific Member Definition.
Edit	Edit the **Hierarchy Details** for a specific Member Definition.
Copy	Copy the Hierarchy Definition details and create another Hierarchy Definition by changing the unique values like Name, Description and so on.
Delete	Edit the Hierarchy Definition Details.

5.5.3.1 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 the **Action** button ( ).

2. Click the **View** button.

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

5.5.3.2 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** button ( ).

2. Click the **Edit** button.

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**.

5.5.3.3 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 the **Action** button ( ).
2. Click the **Copy** button.

   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**.

5.5.3.4 Deleting Hierarchy Definition Details

To delete a Hierarchy Definition:

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

   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.

5.6 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.

6

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.

6.1 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 6-1   Analytics Home Page

6.2 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 6-2   Create Data Set Screen
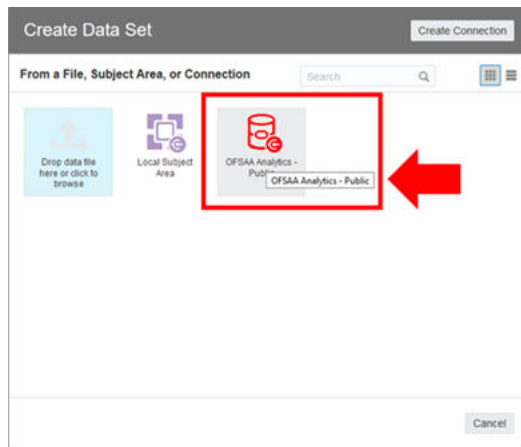
2. After selecting the Database Connector, you must select the Database Schema named OFSAA_ANALYTICS_PUB to proceed to the next step of Database Object Selection.

Figure 6-3   Add Data Set
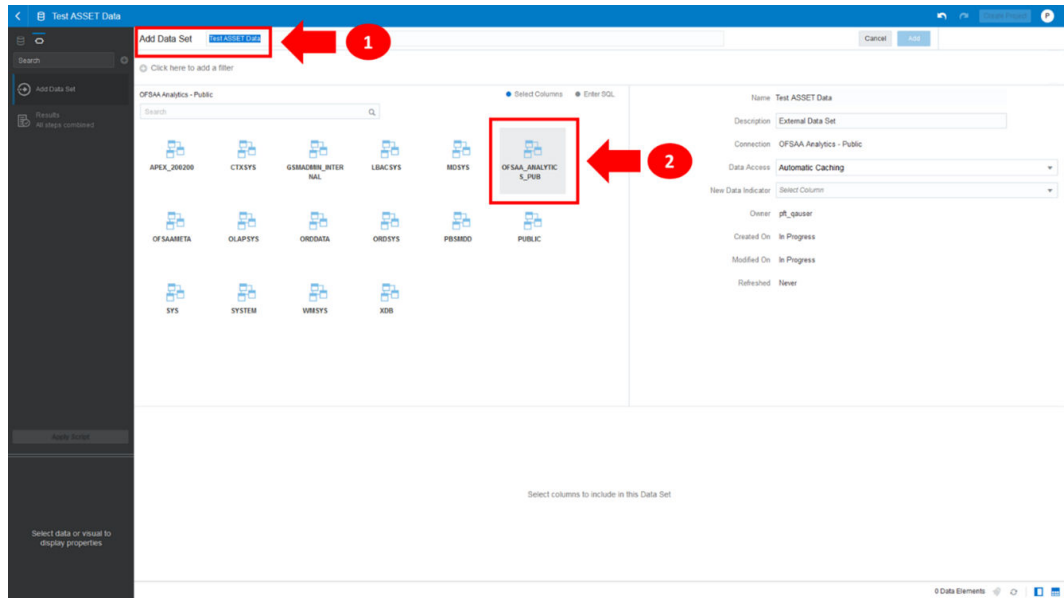
3. Provide a meaningful name to the Data Set, which will be generated from this process and be used for the SQL Query Analysis.

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 6-4   Add Data Set – Search from the List
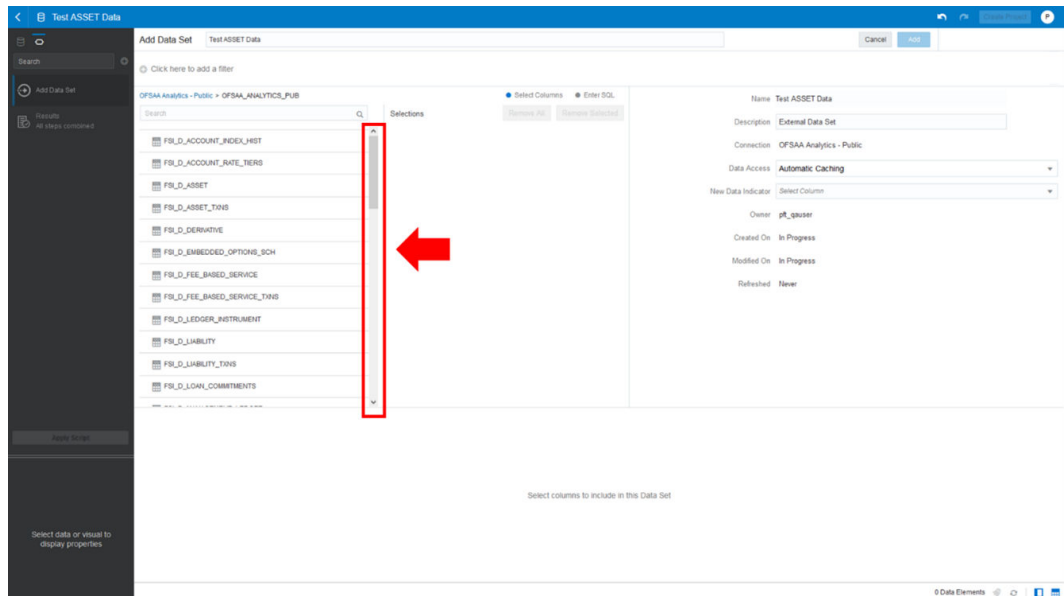
Or

Type the Database Object Name to filter the list with Description.

Figure 6-5   Add Data Set – Search by Name
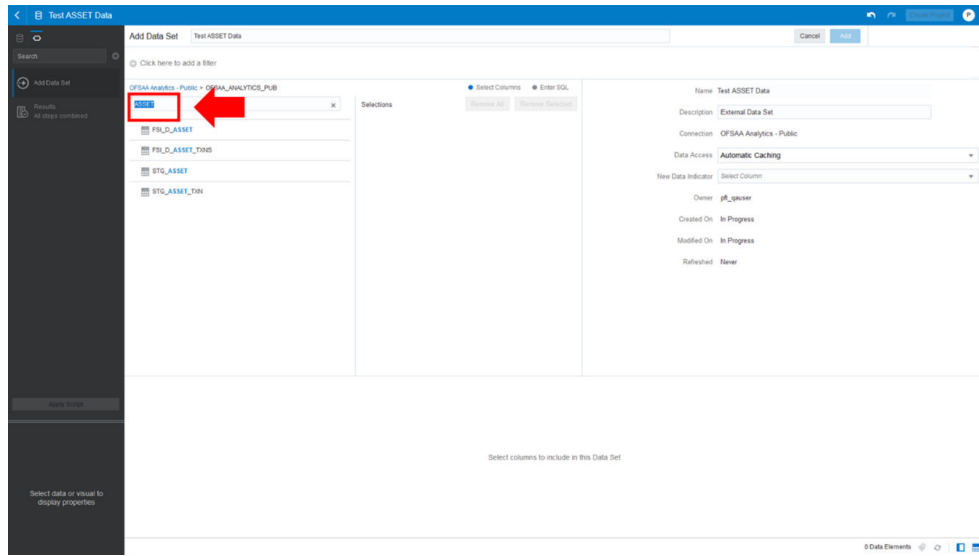
After you select the Object that want, you can proceed to the next step.

5.   You search the Columns that are available for the selected Database Object by scrolling.

Figure 6-6   Add Data Set – Search Columns
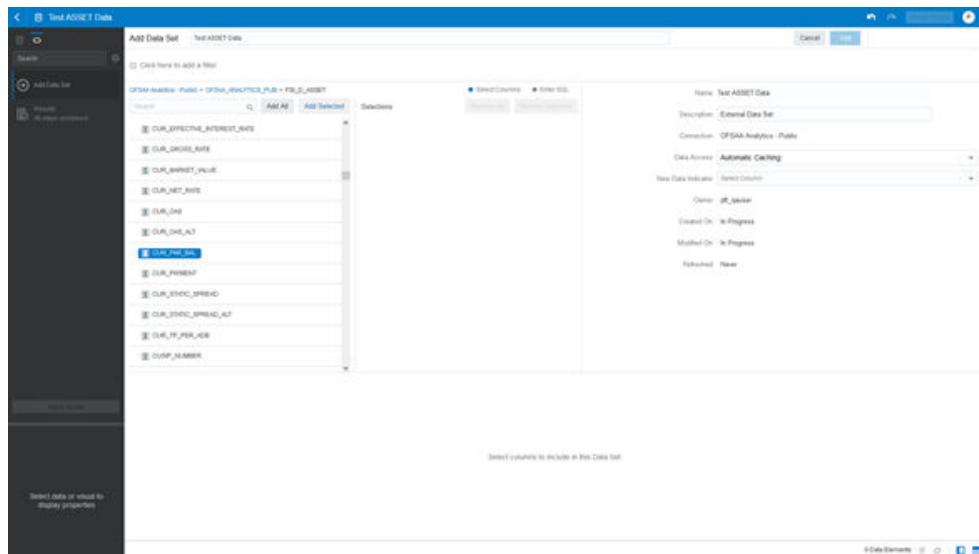
6.   Add the Database Object Column as required.

Figure 6-7   Add Data Set – Adding the Database Object Column
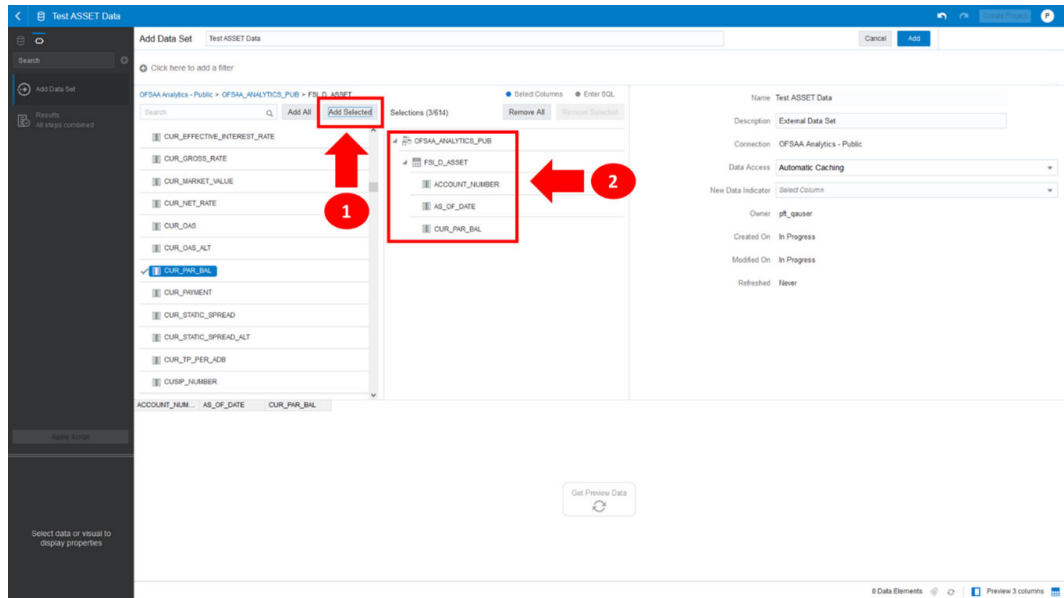
7. Click Get Preview Data to display the retrieved Data Results.

Figure 6-8   Data Results
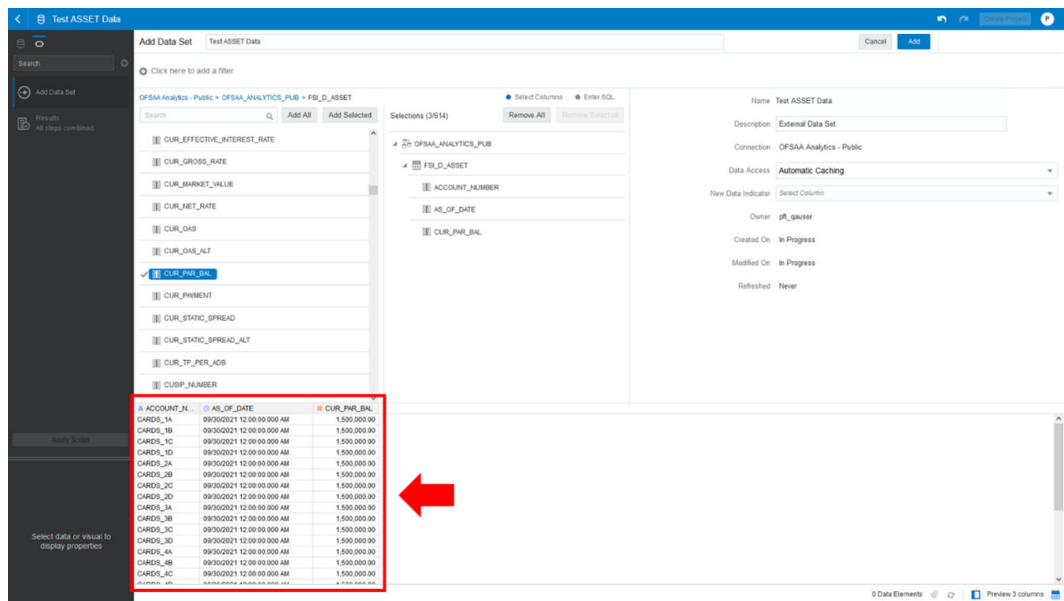
8. In addition, you can switch to the Enter SQL Pane Editor. You can change the auto-generated SQL Query at any time and click Get Preview Data to retrieve the results based on the modified SQL Query.

Figure 6-9   Data Results based on modified SQL Query
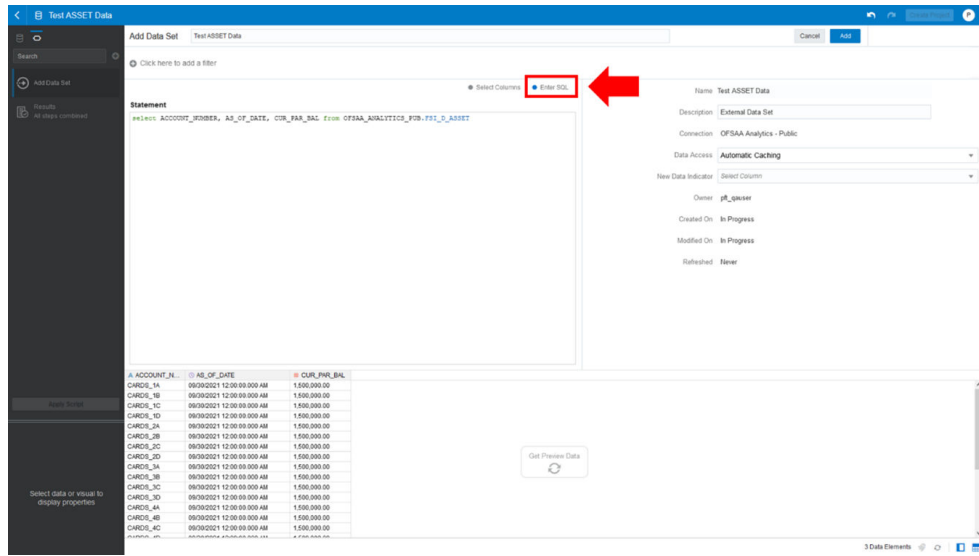
9. Click **Add** to save the SQL Data.

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 6-10   Data Set Options
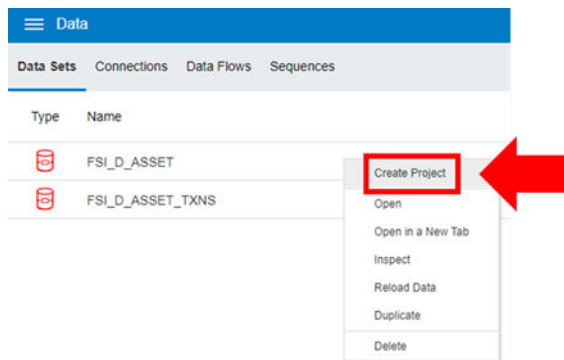
12. In the menu that is displayed, click **Create Project**.

6.3 Management Reporting

To access the PA Management Reporting canvas, select Analytics from the LHS Menu, and then select Management Reporting.

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.

6.3.1 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
- Defined Org Unit

6.3.1.1 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 6-11   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 6-12   As of Date Selection
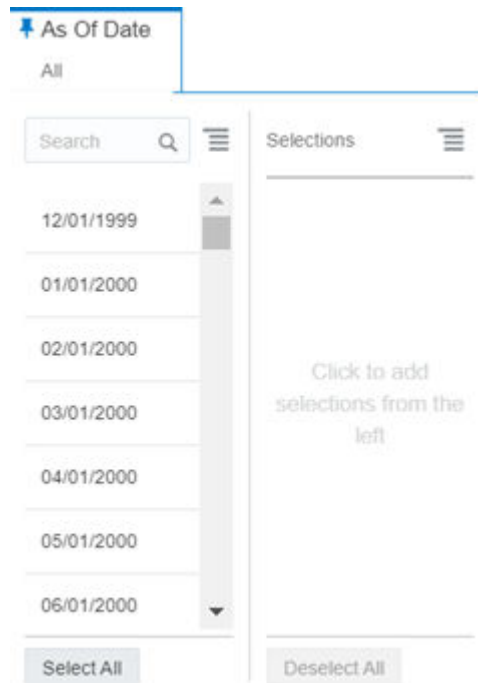
- Additional Filters for the Time Dimension as follows:

    – Year

    – Quarter of Year

    – Month of Year

Figure 6-13   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:** This filter is 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, you must select the Leaf Name with only a single value simultaneously to see results at leaf level.

- **Legal Entity Leaf Name:** You can use this filter to select the Legal Entity Leaf Name corresponding to the hierarchy.

- **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 Leaf Name with only a single value simultaneously to see data at the leaf level.

- **Org Unit Leaf Name:** You can use this filter to select the Org Unit Leaf Name corresponding to the hierarchy.

- **Product Hierarchy Name:** This filter is 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, you must select the Leaf Name with only a single value simultaneously to view results at leaf level.

- **Product Leaf Name:** You can use this filter to select the Product Leaf Name corresponding to the hierarchy.

6.3.1.2 In canvas Variable Prompts

Figure 6-14   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 6-15   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.

6.3.1.3 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 6-16   Data Action configuration in Top Down Summary canvas
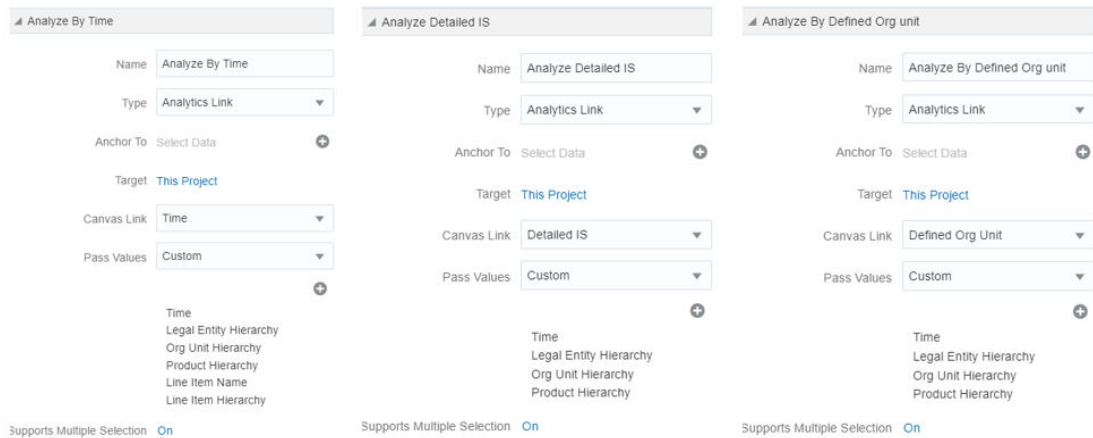
From every chart available in "Top Down Summary", except for "Net Interest Income" and "Net Interest Margin" charts, you can select a value, and then navigate to the Time, Detailed Income Statement and Defined Org Unit canvas.

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 6-17   Data Action configuration in Time canvas
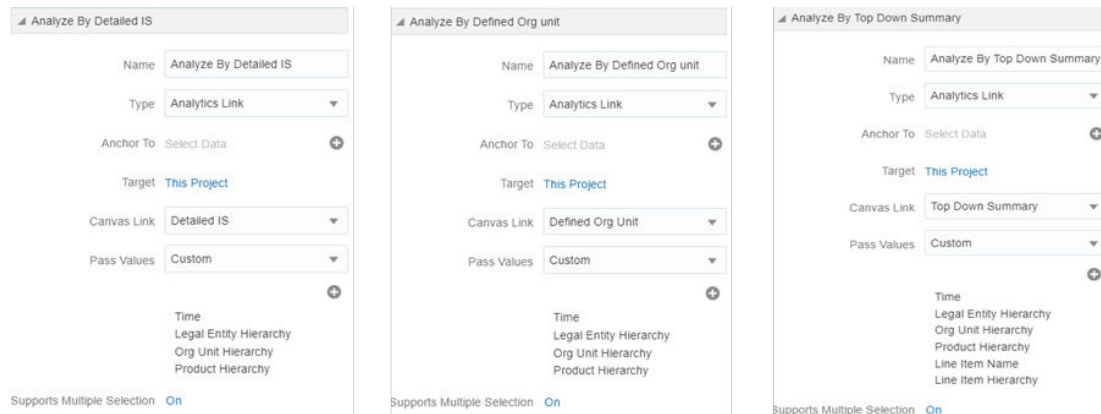
From every chart available in the Time canvas, you can select a value, and then navigate to the Top Down Summary, Detailed Income Statement and Defined Org Unit canvas.

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.
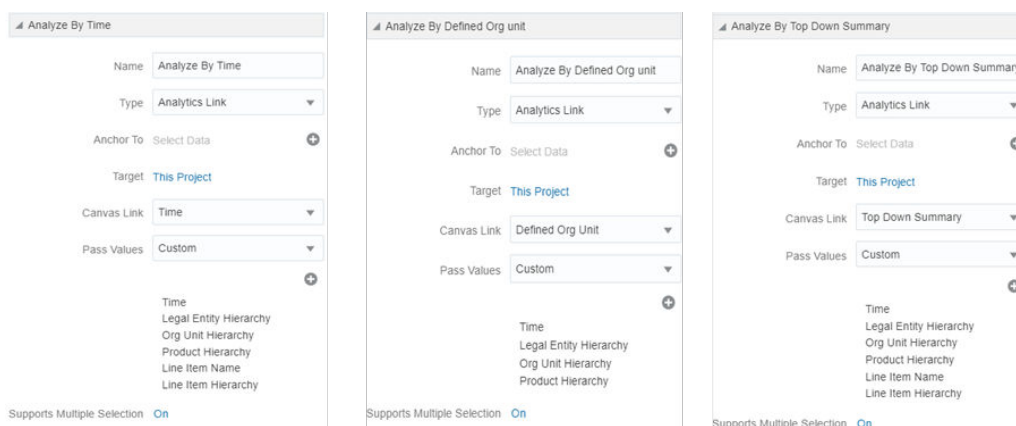
Figure 6-18   Data Action configuration in Detailed Income Statement canvas

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 6-19   Data Action configuration in Defined Org Unit canvas
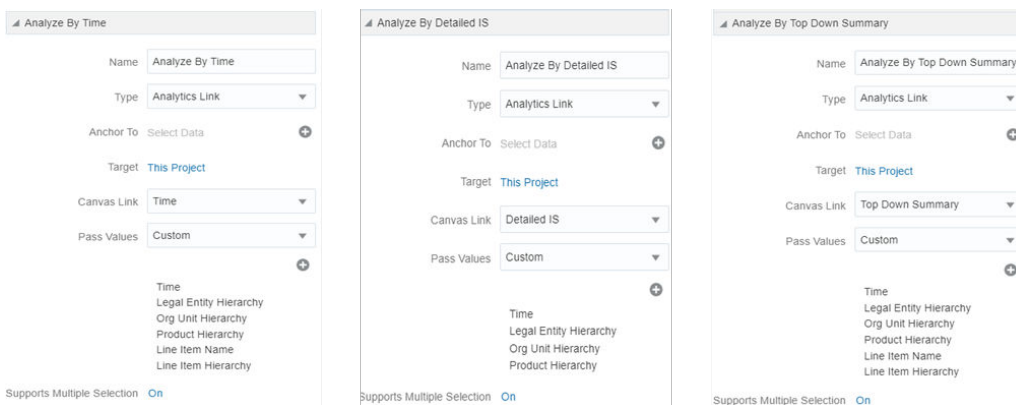
From every chart available in the Defined Org Unit canvas, you can select a value, and then navigate to the Time, Detailed Income Statement or Top Down Summary canvas.

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.

6.3.1.3.1 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 6-20   Use Data Action to Navigate to Defined Org Unit from Top Down Summary
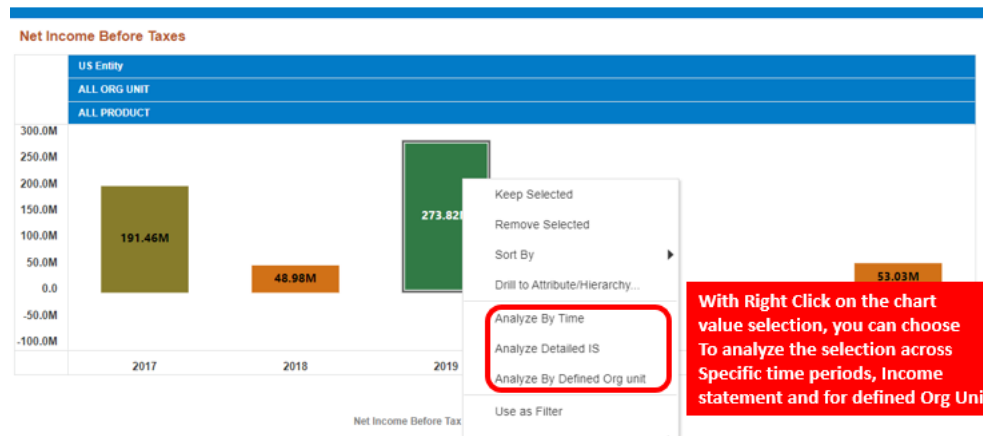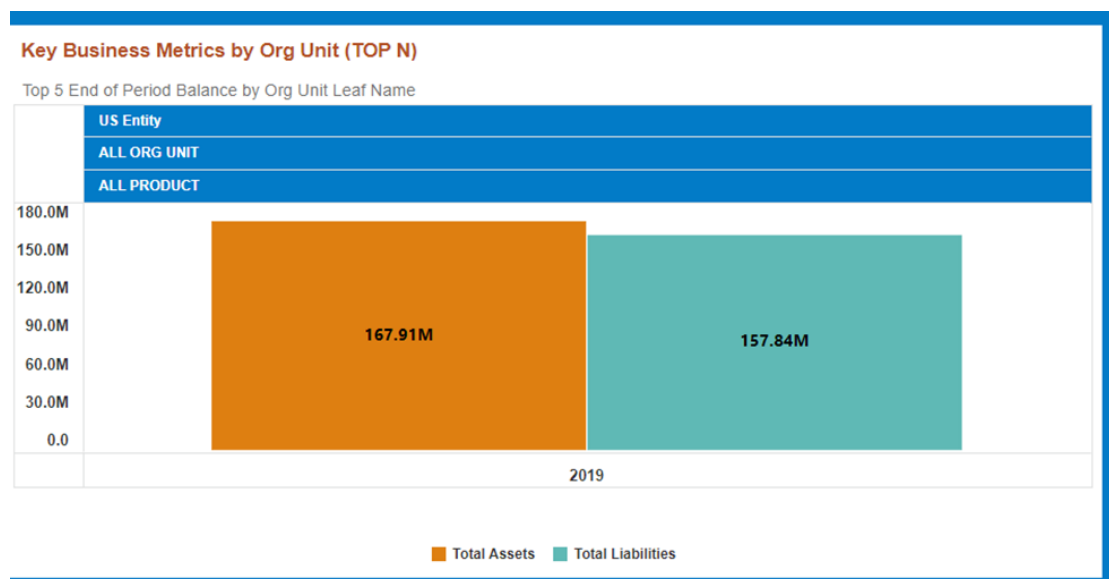

Figure 6-21   Result of Data Action Navigation
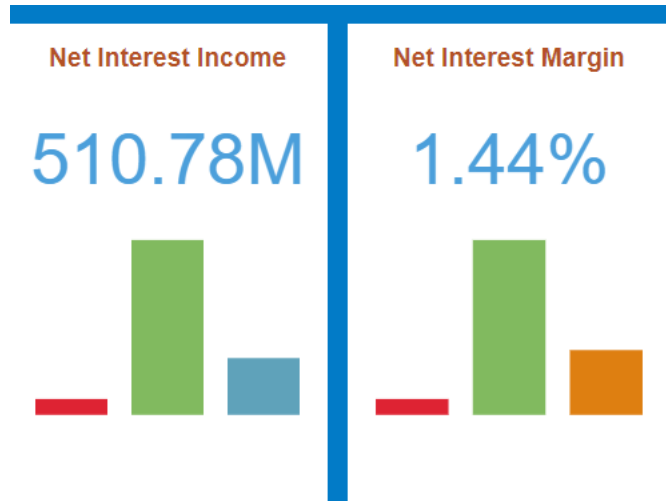

6.3.1.4 Top Down Summary

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 6-22   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.
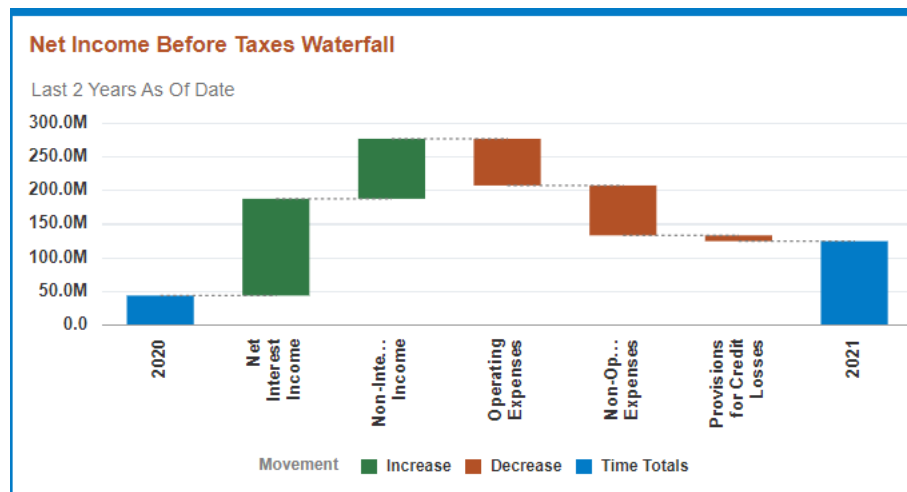
Figure 6-23   Income Statement

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 6-24   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 6-25   Net Income Before Taxes
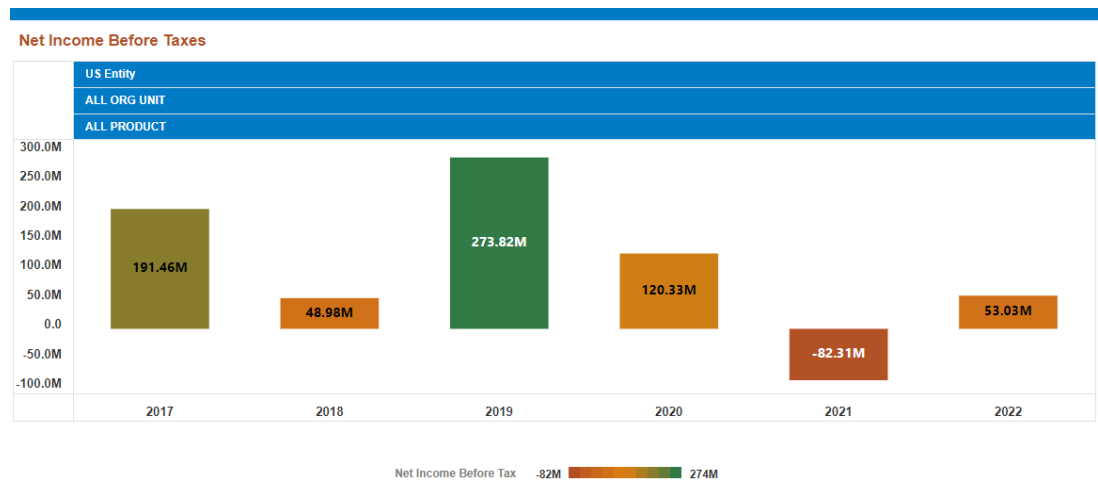
Net Income Before Taxes Growth Rates: The chart displays the relative percentage variation of NIBT that is calculated over the previous period available as per the selection.

Figure 6-26   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.
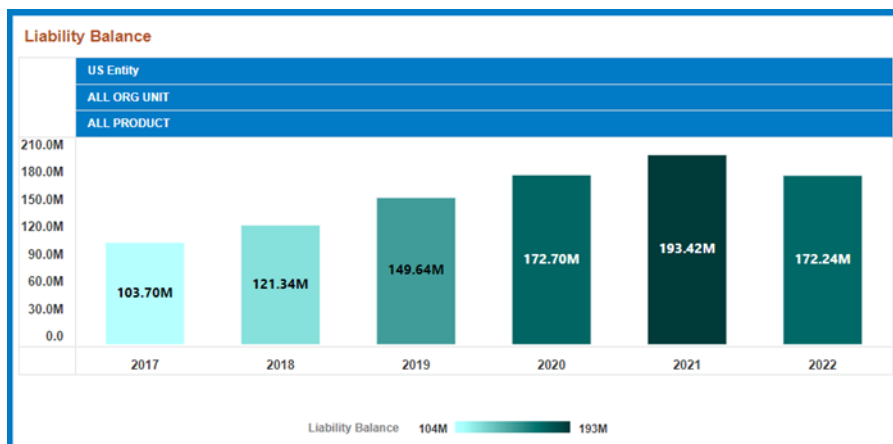
Figure 6-27   Asset Balance

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 6-28   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 6-29   Asset and Liability Balance Growth Rates
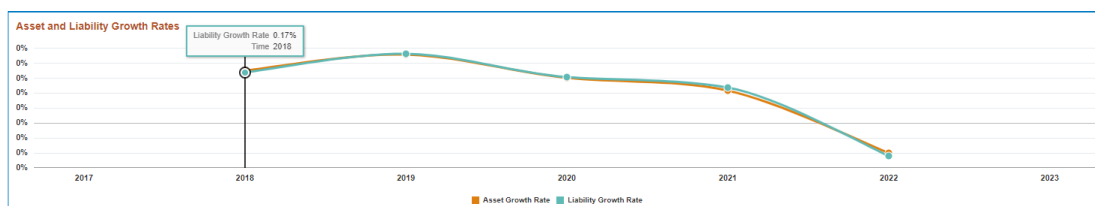
6.3.1.5 Time

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.

You can use a series of Report Prompts, as previously described, to filter the data.

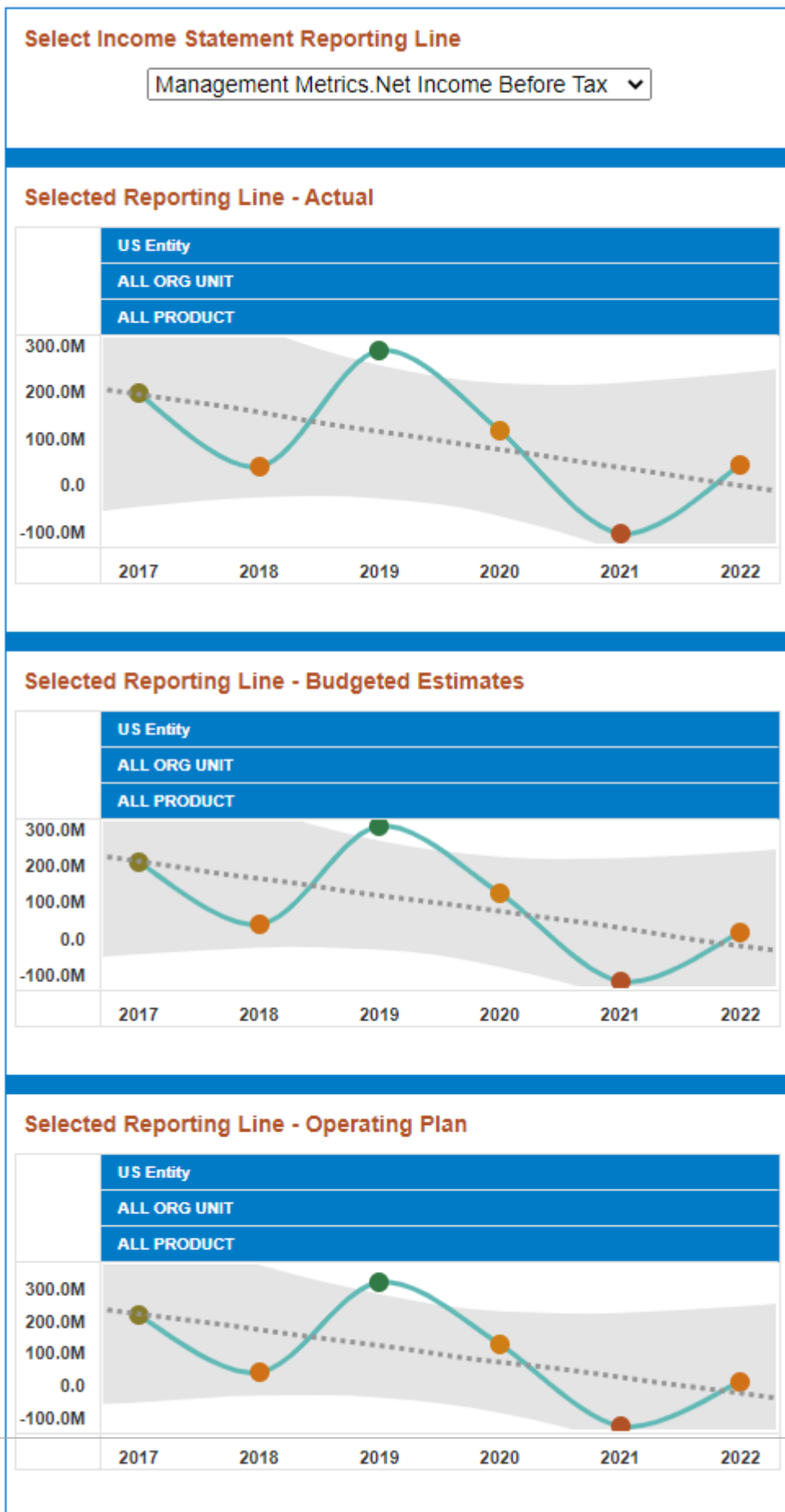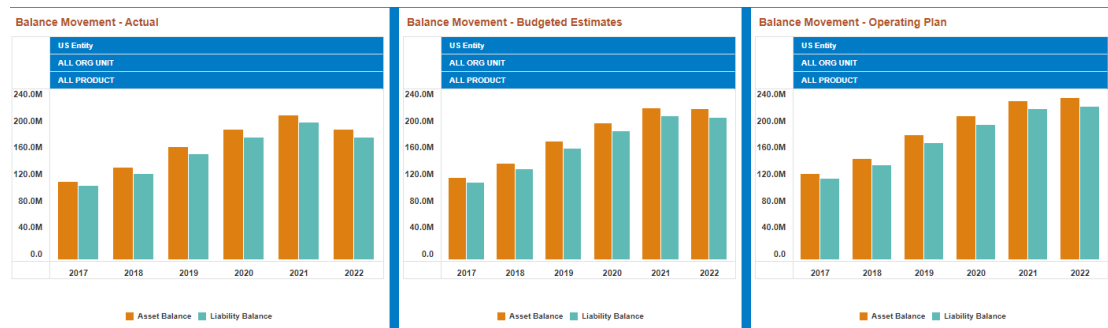**Figure 6-30   Selected Income Statement Reporting Lines**

Figure 6-31   Overall Balances

- **Key Performance Metrics:** The following Key Performance Metrics can be observed from these set of charts.

  – **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 6-32   Key Performance Metrics
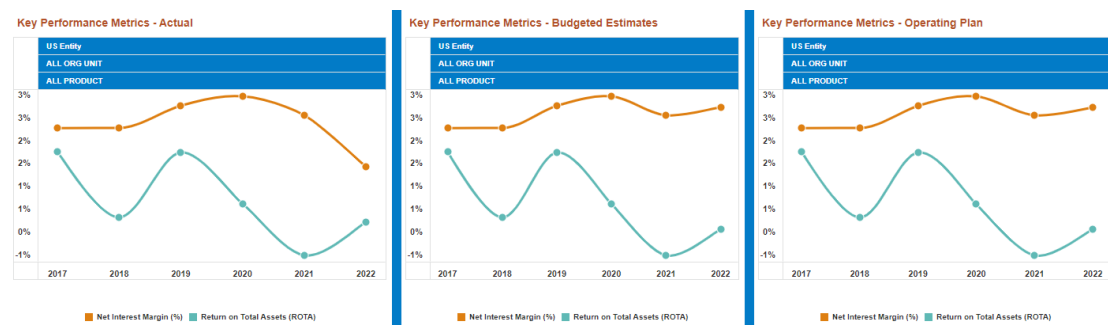
The canvas displays the comparisons of the following scenarios:

- **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.

6.3.1.6 Detailed IS

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 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 6-33   Detailed IS Report Default

6.3.1.7 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.

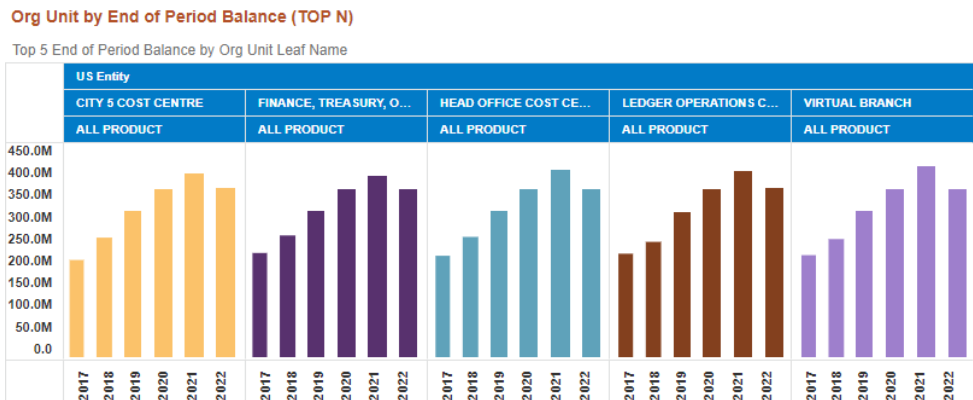**Figure 6-34   Org Unit wise contribution for Reporting Line (TOP N)**

- **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 6-35   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.

Figure 6-36   Key Business Metrics by Org Unit (TOP N)

- **Key Performance Metrics by Org Unit (TOP N); the same is available for bottom view**
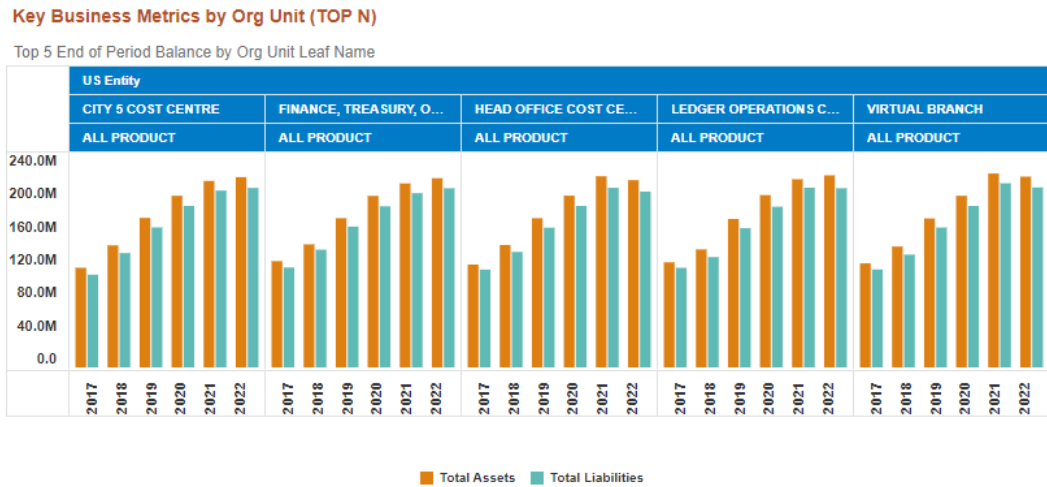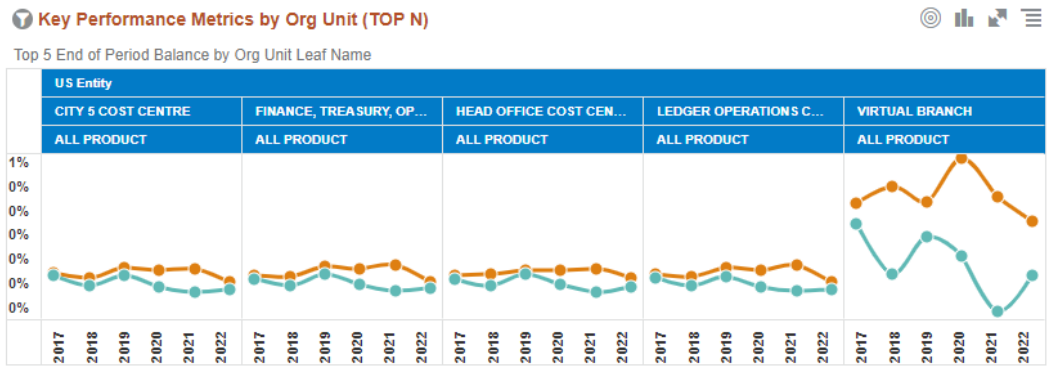 The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides selected KPI's like NIM and ROTA of these Org Units.

Figure 6-37   Key Performance Metrics by Org Unit (TOP N)

6.4 Profitability Analytics

To access the Processing Analytics report, select **Analytics** from the LHS Menu, and then select **Profitability Analytics**.

Profitability Analytics provide a comprehensive view of financial performance across multiple dimensions, including – but not limited to – Product, Line of Business, Region, and Organization, all aggregated up from the Instrument level.

6.4.1 Instrument Level Aggregation and Insights

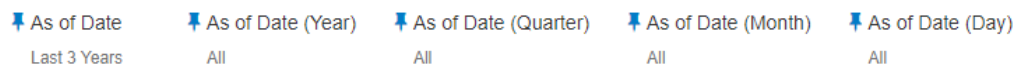The Profitability Analytics report is arranged as a set of reports, classified into the following:

- Org Unit

- Product

- Region

- Other Insights

6.4.1.1 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 6-38   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 Years	All	All	All	All

- **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 6-39   As of Date Selection
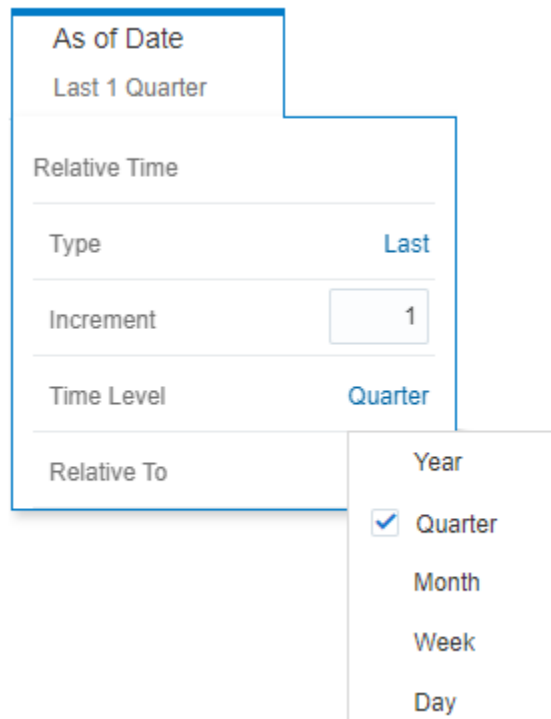
- Additional Filters for the Time Dimension as follows:

  – **As of Date (Year)**

- **As of Date (Quarter)**
- **As of Date (Month)**
- **As of Date (Day)**

Figure 6-40   Key Processing Dimensions Prompt Filters

LE Hierarchy Name	Legal Entity Leaf Name	ORG Hierarchy Name	Org Unit Leaf Name	Prod Hierarchy Name	Prod Leaf Name	Geography Hierarchy Name	Geography Leaf Name
All	All	All	All	All	All	All	All

- **Legal Entity Hierarchy Name:** This filter is 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, you must select the Leaf Name with only a single value simultaneously to see results at leaf level.

- **Legal Entity Leaf Name:** You can use this filter to select the Legal Entity Leaf Name corresponding to the hierarchy.

- **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 Leaf Name with only a single value simultaneously to see data at the leaf level.

- **Org Unit Leaf Name:** You can use this filter to select the Org Unit Leaf Name corresponding to the hierarchy.

- **Product Hierarchy Name:** This filter is 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, you must select the Leaf Name with only a single value simultaneously to view results at leaf level.

- **Product Leaf Name:** You can use this filter to select the Product Leaf Name corresponding to the hierarchy.

- **Geography Hierarchy Name:** This filter is for the group filtering on Geography 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 Leaf Name with only a single value simultaneously to view results at leaf level.

- **Geography Leaf Name:** You can use this filter to select the Geography Leaf Name corresponding to the hierarchy.

Figure 6-41   Simple Dimensions Prompt Filters

Currency Code	Account Officer Name	Customer Type Name
All	All	All

- **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 6-42   Standard Dimensions Prompt Filters

- **Branch Leaf Name:** You can use this filter to select a specific Branch value at leaf level related to the underlying instrument tables accounts.
- **Geography Leaf Name:** You can use this filter to select a specific Geography 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.

6.4.1.2 In canvas Variable Prompts

Figure 6-43   In-canvas Prompt Filters for Org Unit

Figure 6-44   In-canvas Prompt Filters for Product

Figure 6-45   In-canvas Prompt Filters for Region

Figure 6-46   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.

6.4.1.3 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 6-47   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.
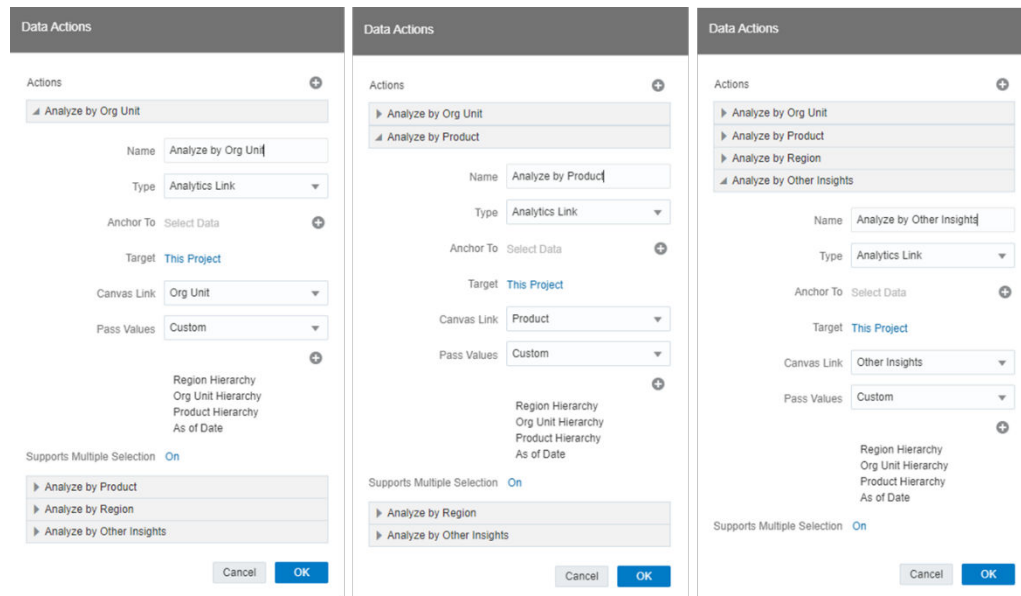
In order to do so, with a right click on the chart selection, the data action option (Analyze) will appear for you to be able to pass on the data filters to the canvas that you select.

Figure 6-48   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.

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 6-49   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 6-50   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.

6.4.1.4 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.

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 6-51   Org Unit Wise contribution for Reporting Line (TOP N)

**Org Unit Wise contribution for Reporting Line (TOP N)**

Top 5 Reporting Line by Org Unit Leaf Name

Org Unit Hierarchy	USD		
	01/31/2022	02/28/2022	03/31/2022
	Reporting Line	Reporting Line	Reporting Line
ALCO COST CENTRE	4.97M	5.01M	5.18M
CITY 1 BRANCH	5.18M	5.06M	5.05M
CITY 5 COST CENTRE	4.98M	4.94M	5.04M
HEAD OFFICE BRANCH	5.01M	5.11M	5.09M
HEAD OFFICE COST CENTRE	5.02M	4.94M	5.20M

- **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 6-52   Org Unit by End of Period Balance (TOP N)
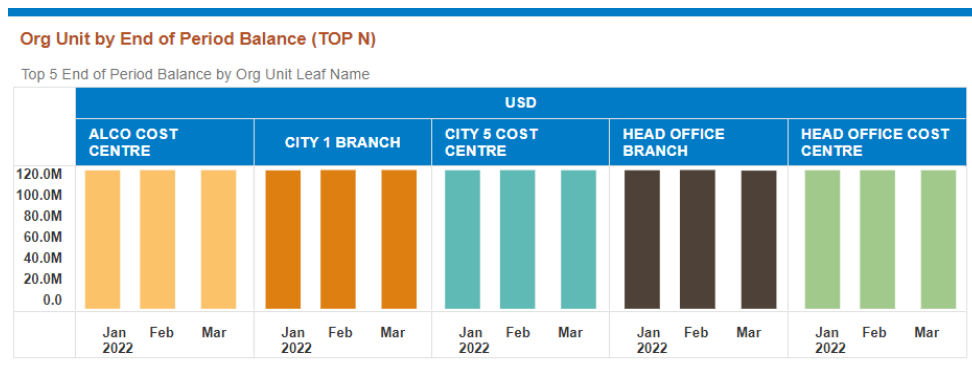
Org Unit by End of Period Balance (TOP N)

Top 5 End of Period Balance by Org Unit Leaf Name

- **Key Business Metrics by Org Unit (TOP N); the same is available for bottom view:**
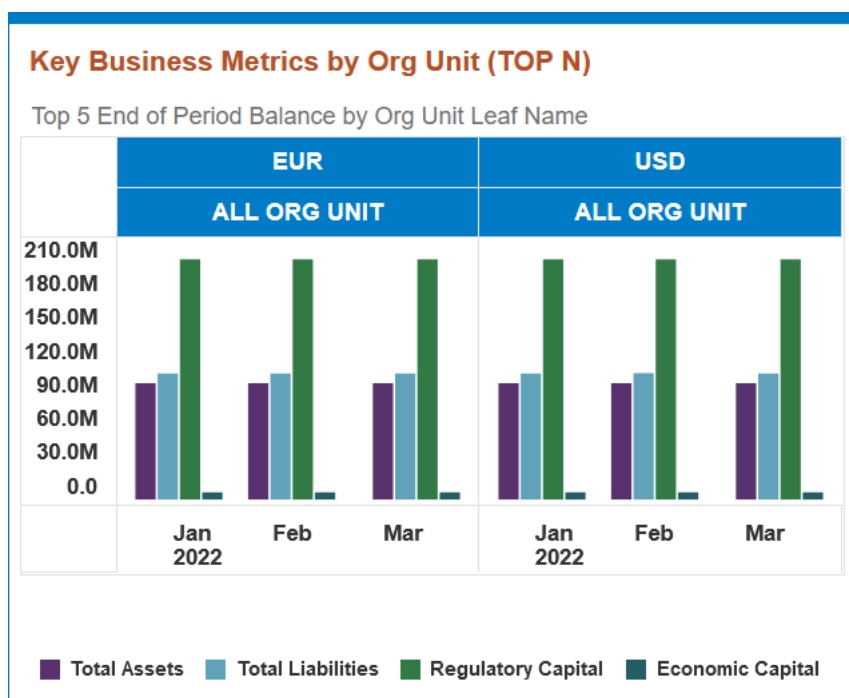 The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides the breakup between Asset and Liability Balances along with Regulatory and Economic Capital.

**Figure 6-53   Key Business Metrics by Org Unit (TOP 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 6-54   Key Performance Metrics by Org Unit (TOP N)
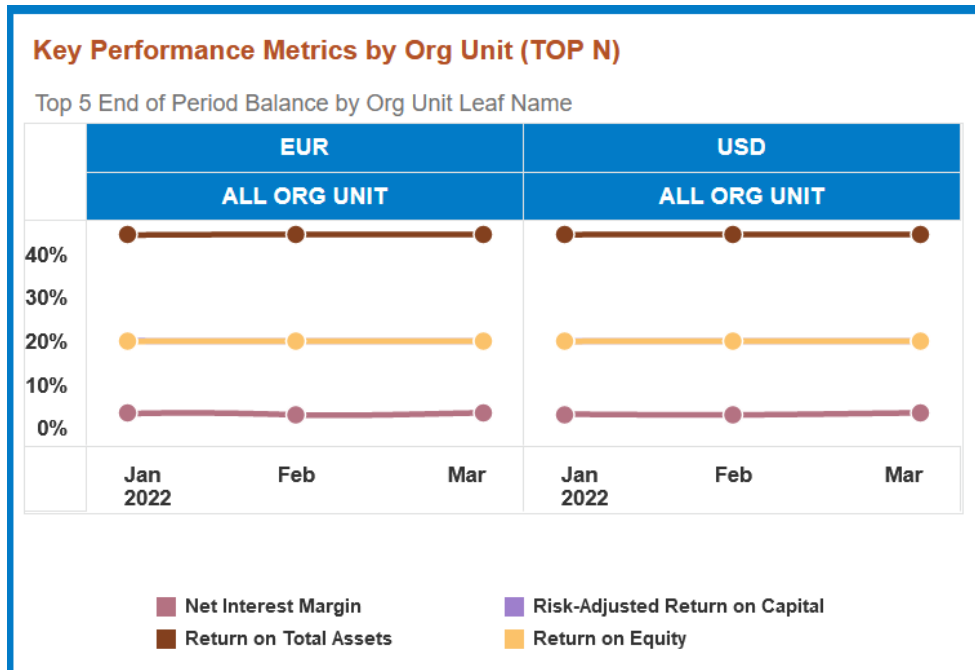
- – **Net Interest Margin:** NIM is usually Net Interest Income expressed as a percentage that is, it is the net interest income a bank or financial institution earns in percentage terms on the average interest-earning assets in a specified period.

- – **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 6-55   Other Ratios by Org Unit (TOP N)
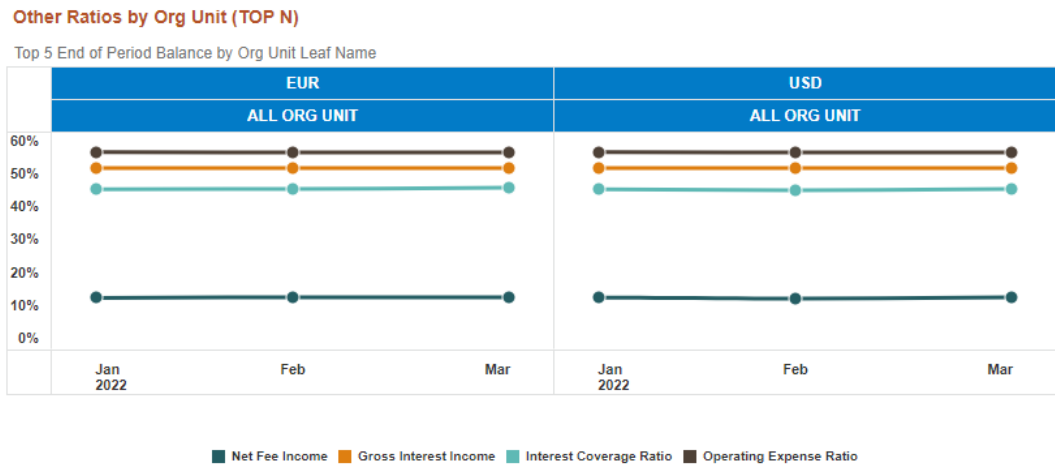
– **Net Fee Income:** Net Fee Income is the revenue generated by the bank from fees and commissions less the waivers expressed as a percentage of Total End of Period Balances.

– **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.

6.4.1.5 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 6-56   Product wise contribution for Reporting Line (TOP N)

Product Wise contribution for Reporting Line (TOP N)

Top 5 Reporting Line by Prod Leaf Name

	USD		
	01/31/2022	02/28/2022	03/31/2022
Product Hierarchy	**Reporting Line**	**Reporting Line**	**Reporting Line**
FX Interbank Spot_Sold	8.12M	8.03M	8.13M
Interbank Lending	8.08M	8.07M	8.06M
Trade Refinance	8.01M	7.99M	8.08M
Treasury Notes	8.02M	8.07M	8.06M
Vostro Account Class	8.00M	7.98M	8.10M

- **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 6-57   Product by End of Period Balance (TOP N)

Products by End of Period Balance (TOP N)
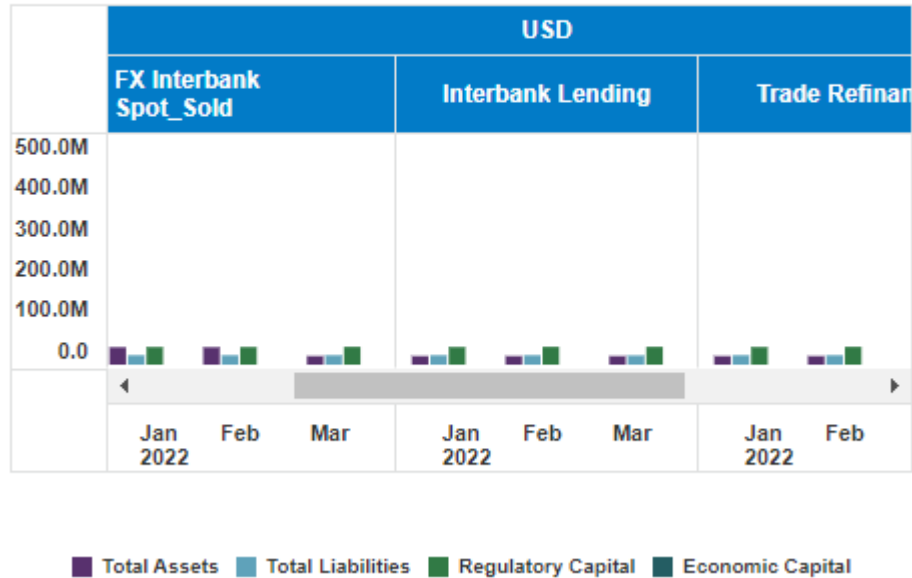
Top 5 End of Period Balance by Prod Leaf Name
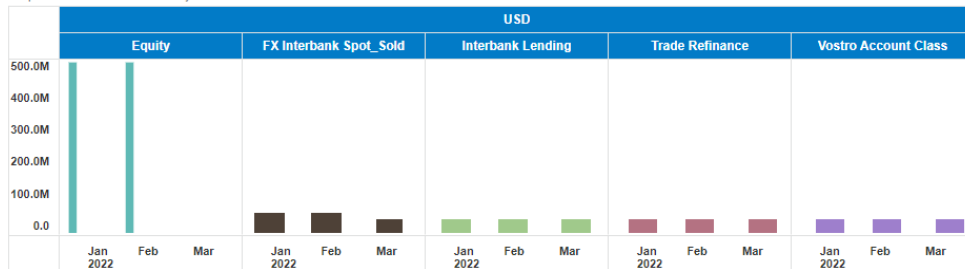
- **Key Business Metrics by Products (TOP N); the same is available for bottom view:** The chart displays the Top N (N selected from the chart prompt) and bottom N organization units sorted in a descending order by End of Period Balances and provides the breakup between Asset and Liability Balances along with Regulatory and Economic Capital.

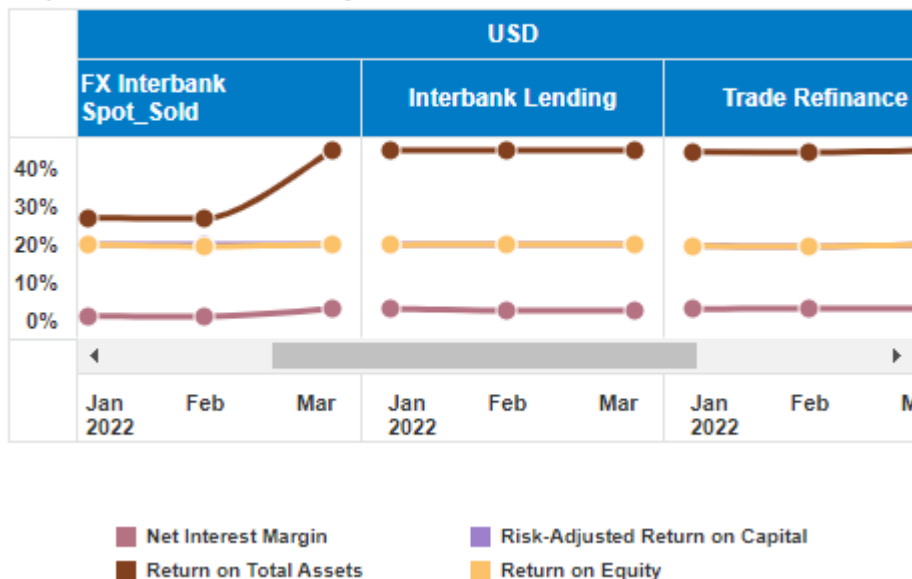**Figure 6-58   Key Business Metrics by Products (TOP N)**

- **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 6-59   Key Performance Metrics by Products (TOP 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 6-60   Other Ratios by Products (TOP N)
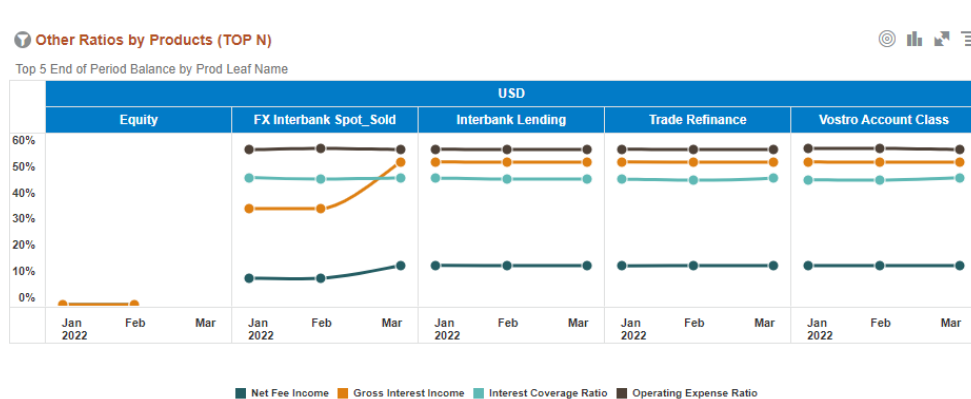
6.4.1.6 Region

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 6-61   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 6-62   Regions by End of Period Balance
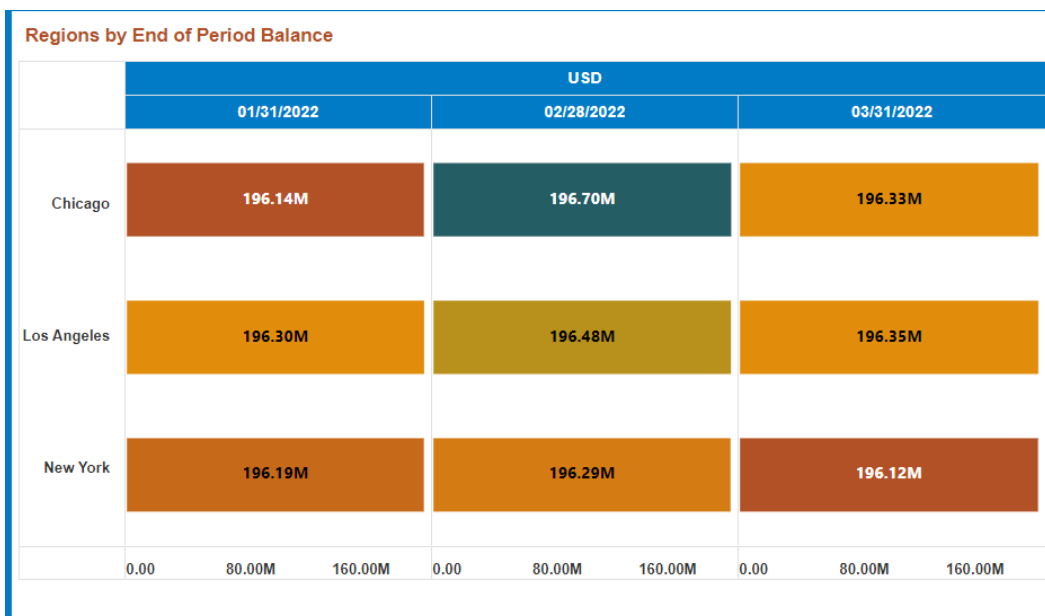
- **Region Wise Contribution for Reporting Line:** The chart displays the value of the reporting line for the selected combination of reporting line, leveraging the Select Income Statement Reporting Line variable prompt, and region hierarchy, as described earlier in how to leverage Select Region hierarchy.

**Figure 6-63   Region Wise Contribution for Reporting Line**
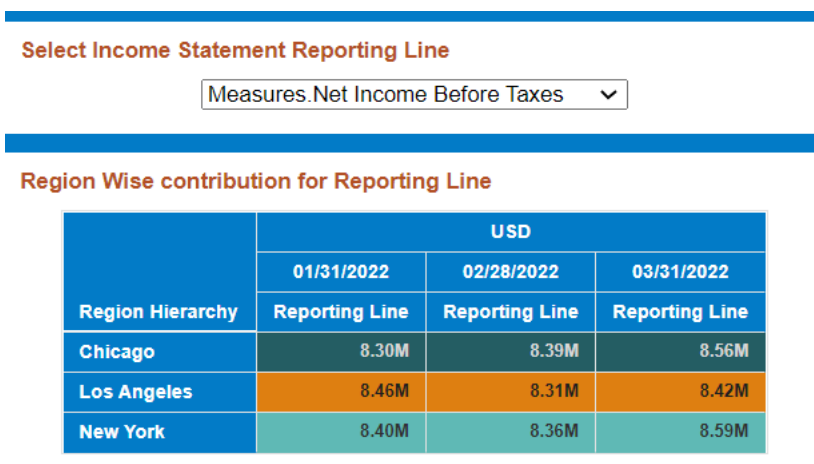
- **Key Business Metrics by Region:**The chart displays the key Business Metrics – Total Assets, Total Liabilities, Economic Capital, and Regulatory Capital for the selected Region hierarchy.

Figure 6-64   Key Business Metrics by Region
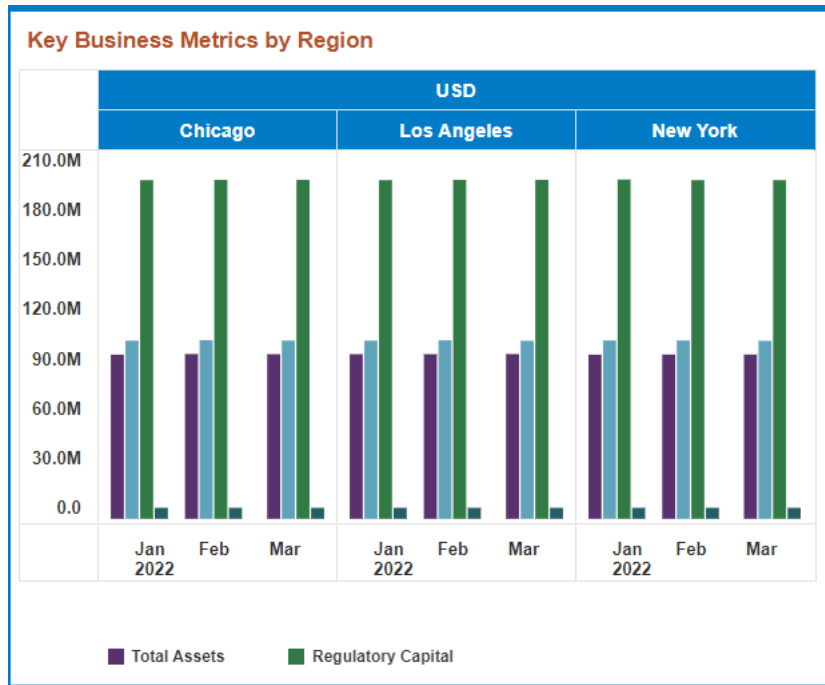
- **Key Performance Metrics by Region:** The chart displays the key Business Metrics – Net Interest Margin, Return on Total Assets, Risk Adjusted Return on Capital, and Return on Equity for the selected Region hierarchy.

Figure 6-65   Key Performance Metrics by Region
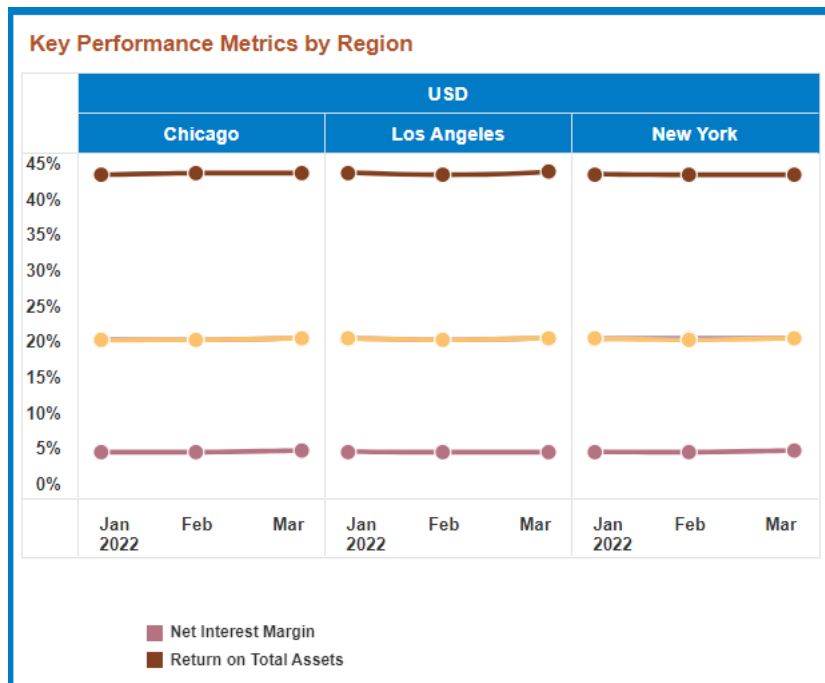
- **Other Ratios by Region:** The chart displays business metrics like Net Fee Income, Gross Interest Income, Interest Coverage Ratio and Debt coverage ratio, all expressed as percentages for the selected region hierarchy.

**Figure 6-66   Other Ratios by Region**
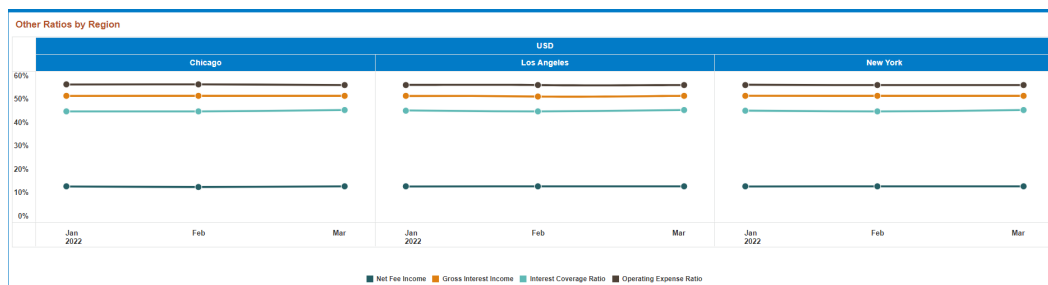
6.4.1.7 Other Insights

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.
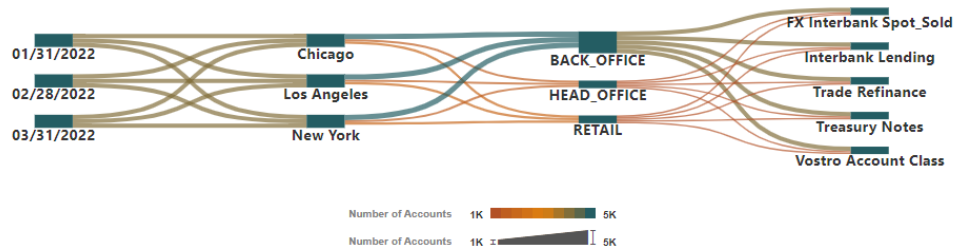
Figure 6-67   Number of Accounts and Customers Distribution
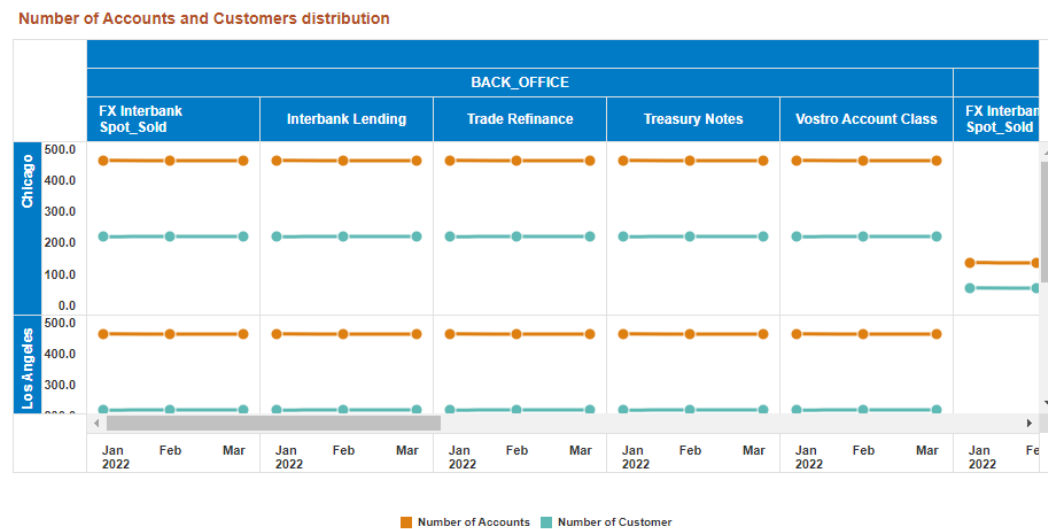
- **Number of Accounts dissemination by Geography, Org Unit and Product:** As the name implies, this chart provides a breakup of the number of accounts by Region, Org Unit and Product.

Figure 6-68   Number of Accounts dissemination by Geography, Org Unit and Product

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 6-69   Number of Customers dissemination by Geography, Org Unit and Product

Number of Customers dissemination by Geography, Org Unit and Product

7
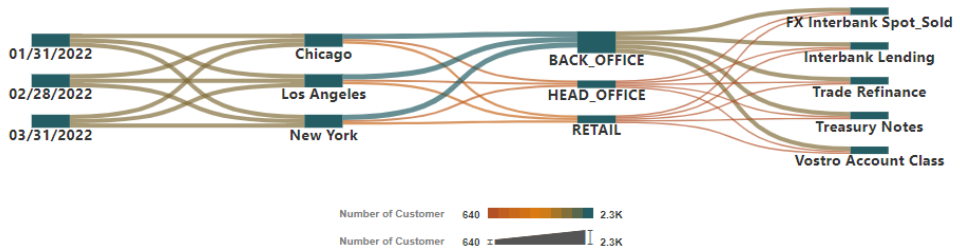
Setup Configurations

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. The following sections are part of this menu.
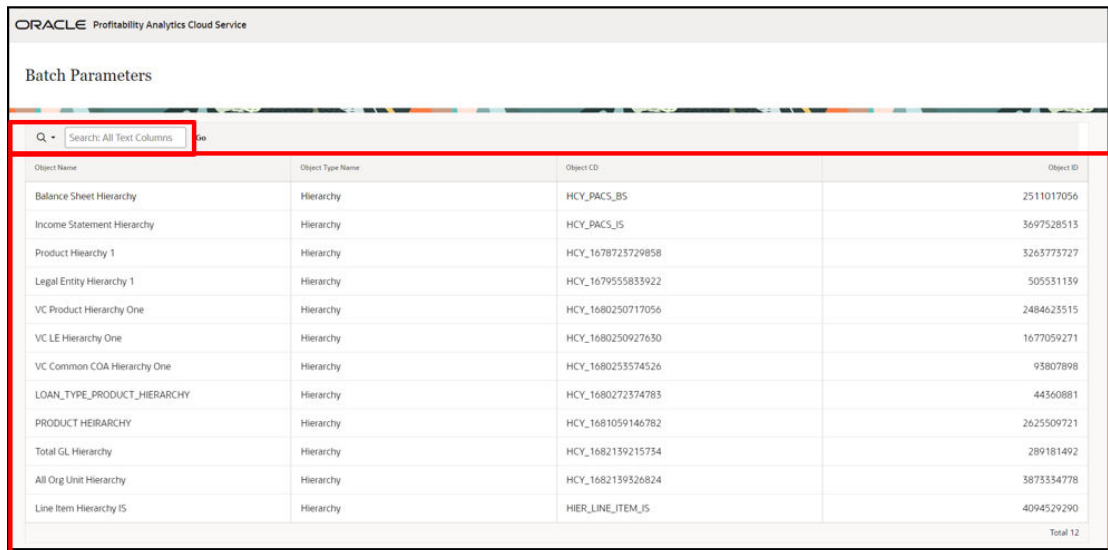
Topics:

- Batch Parameters
- Financial Element Mapping
- Segmentation Mapping

7.1 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 7-1   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.

7.2 Financial Element Mapping

The Financial Element Mapping user interface allows you to map the Financial Elements with the Portfolio Instrument columns.

7.2.1 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 7-2   Financial Elements Summary Screen

7.2.1.1 Search

There are two Search options provided to search the Financial Element Mapping on the summary page.

Figure 7-3   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 7-4   Field Search

7.2.1.2 Financial Element Mapping Summary Table

This section of the screen presents a table containing the already created Financial Element Mappings.

Figure 7-5   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.

7.2.2 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 7-6   Financial Element Mapping – Add

2. Click **Add** to open the Financial Element Mapping Definition screen.

   Figure 7-7   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 7-8   Financial Element Mapping – Filter Formula
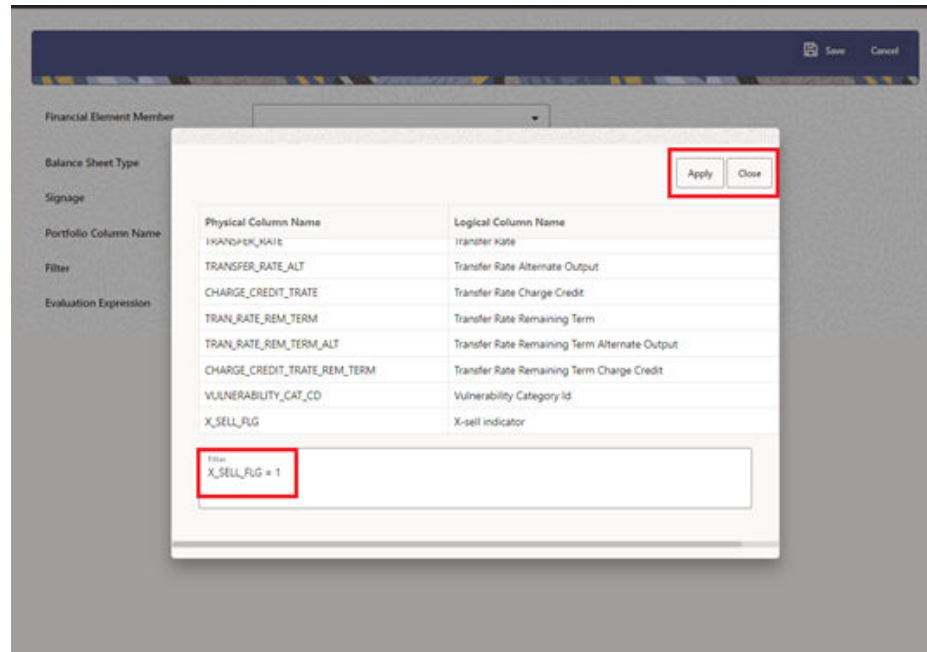
- **Evaluation Expression**: By clicking on the three right hand side dots, the user can select one or more portfolio columns to be used to compute a calculation, leveraging math operators as "+", "-", "*", "/" and "%", and apply the resulting formula to the underlying accounts for this mapping. For example, **MARKETING_EXP + MANAGEMENT_FEES - MAIL_ORIGINATION_EXP**.

Figure 7-9   Financial Element Mapping – Evaluation Expression
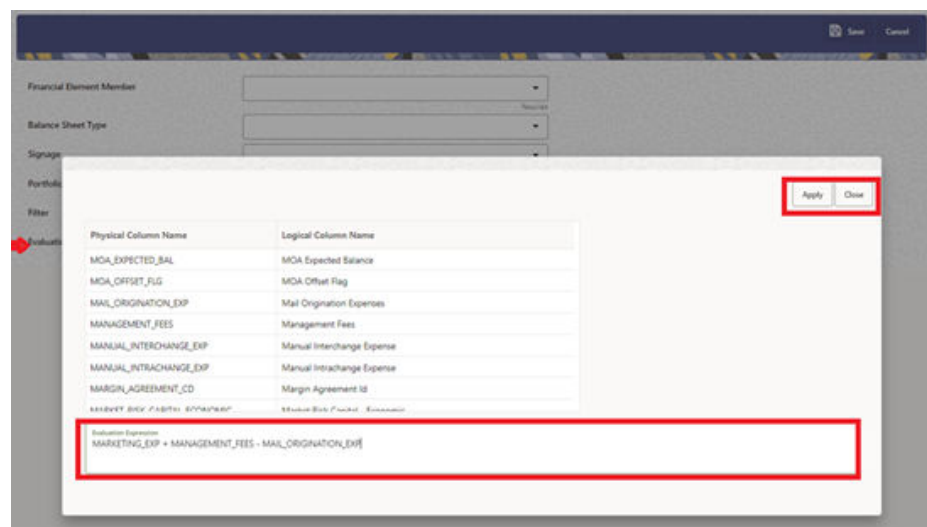
4. Click **Apply**.

7.2.3 Propagate the Mappings

To propagate the mappings, follow these steps:

Click the **Run** button on the top right-hand side as shown below:

Figure 7-10   Propagate the Mappings

7.3 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.

7.3.1 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 7-11   Segmentation Mapping Summary Screen - Title Bar

The Action icons are as follows:

Figure 7-12   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.

7.3.1.1 Search

There are two Search options provided to search the Segmentation Mapping on the summary page.

Figure 7-13   Summary Screen Search Option Collapsed
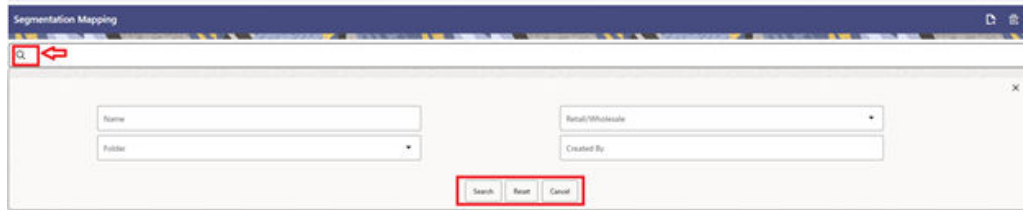
To search the Segmentation Mapping, follow these steps:

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 7-14   Segmentation Mapping- Field Search

7.3.1.2 Segmentation Mapping Summary Table

This section of the screen presents a table containing the already created Segmentation Mappings.

Figure 7-15   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 7-16   Save As Dialog Box
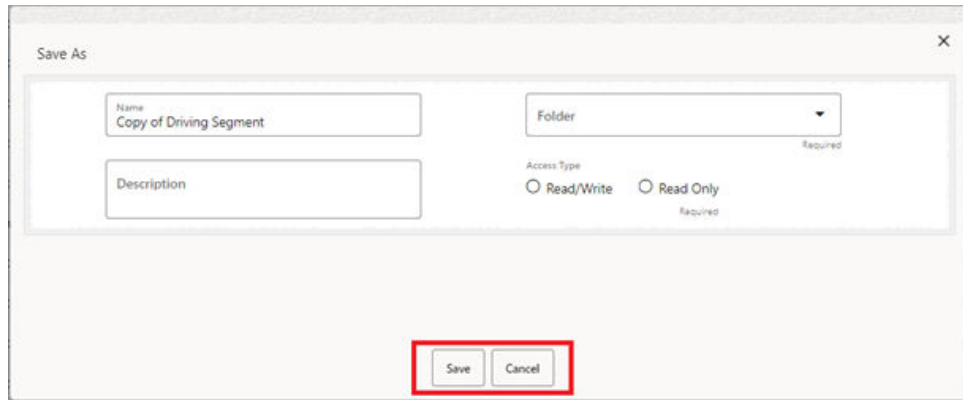
- **Delete**: Click Delete to delete the Segmentation Mapping you have selected.

7.3.2 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 7-17   Segmentation Mapping – Add

2. Click **Add** to open the Segmentation Mapping Definition screen.

Figure 7-18   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.
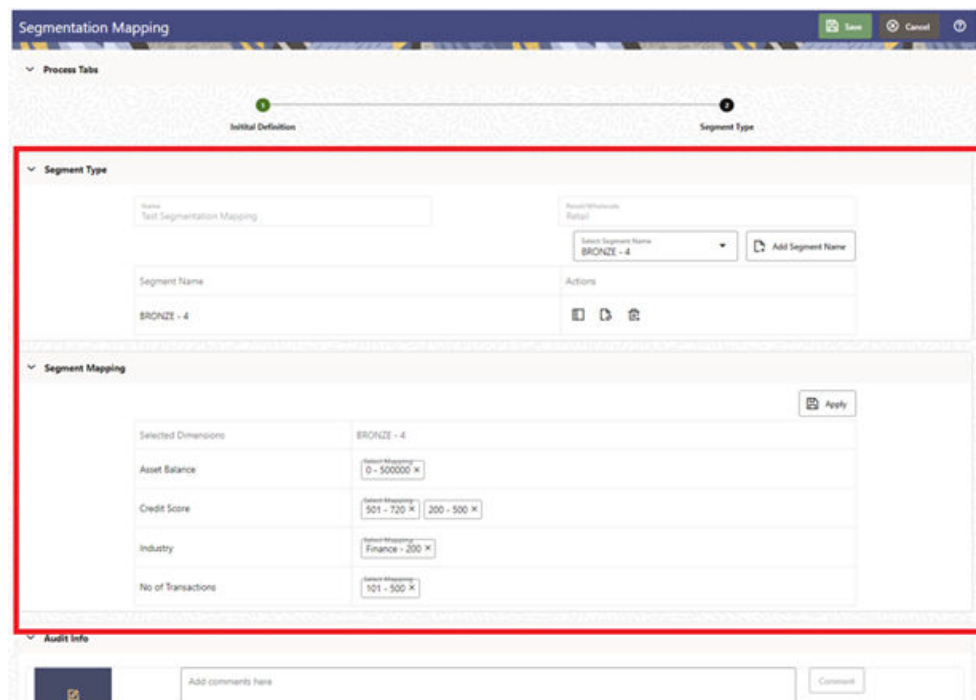
    •   **Retail Customer Dimensions**:

        –   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 7-19   Segmentation Mapping - Segment Type

Figure 7-20   Segmentation Mapping - Segment Type
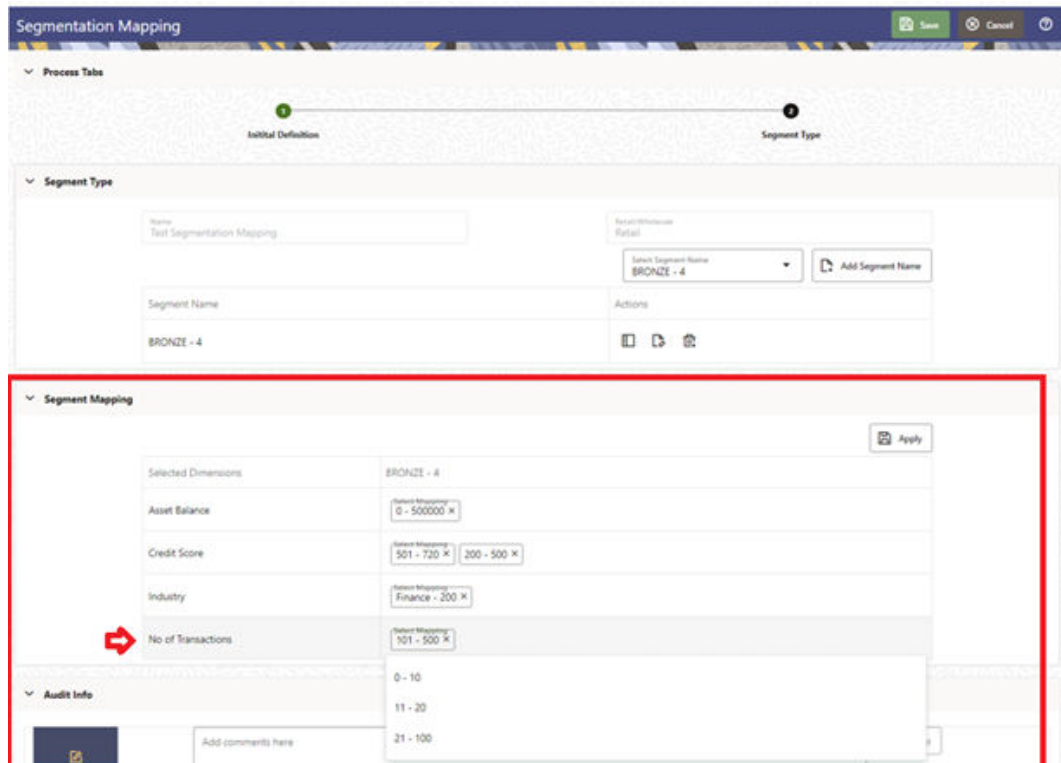
5. Click **Add Segment Name** after selecting your Segment Name. You can select multiple Segment Names and add them to your Segment Name list.
   At this point, the **Actions** menu is activated. You can select to do the following actions to the Segment Name/s you added:

   - 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 7-21   Segmentation Mapping
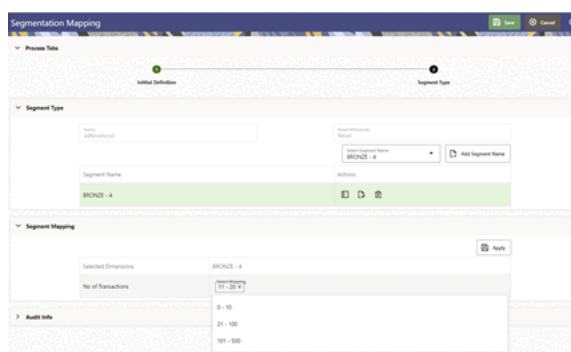
7. Click **Apply**. Repeat the steps for assigning the new Dimension Name values to the other Segments available in your list.
A confirmation message *Mapping is applied* is displayed.

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.

8

Scheduler Service

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.

The Scheduler Service contains a graphical user interface and a single point of control for the definition and monitoring of background executions.

Following are the concepts or terminologies in the Scheduler Service:

- **Batch**: Date and time-based execution of the background tasks based on a defined period during which the resources were available for batch processing.

- **Task:** A batch job is a piece of a program meant to meet specific and business-critical functions. The program is a RESTful API used in a batch.

- **Task Dependency**: When the batch job is submitted, it is moved to the job queue until the system is ready to process. The system process the job based on chronological order or priority in case if more jobs are required to be executed in the job queue.

- **Schedule**: Batch jobs are used to automate the tasks that require to be performed on a regular basis but don't necessarily need to occur during the day or have an employee interacted with the system are batch schedule. Jobs that happen on a regular basis are incorporated into batch schedules.

- **Monitor**: The Scheduler Service enables you to monitor your executions by using a web-browser. It provides real-time feedback on the status of the current encoding job and lists the jobs pending in the batch. You can Cancel or Restart the service when required.

8.1 User Roles

The User Roles and Privileges for Scheduler Service are available in the Users and User Privileges Guide.

8.2 Features in Scheduler Service

The following are the features in the Scheduler Service:

- Use the **Define Batch** feature to create a new batch, modify the batch details, and delete the unwanted batches.

- Use the **Define Task** feature to create tasks for the batches.

- Use the **Schedule Batch** feature to execute a Batch instantaneously and schedule batches.

- Use the **Monitor Batch** feature to track the execution of the batches to view the real time status.

- Use **Scheduler Service Dashboard** to monitor the various activities.

Click the following links for more details:

8.3 Define Batch

Batch is a process of execution of the Date and time-based background tasks based on a defined period during which the resources were available for Batch Processing.

Batch Group is a process of grouping the batches that are required to be execute together for execution of the Date and time-based background tasks based on a defined period during which the resources were available for Batch Processing.

To navigate to the Define Batch Page, complete the following procedure:

1. From the left menu, click **Common Object Maintenance.**

2. Select Operations and select **Define Batch**.

The **Define Batch Page** containing the following details is displayed.

Figure 8-1   Define Batch Page
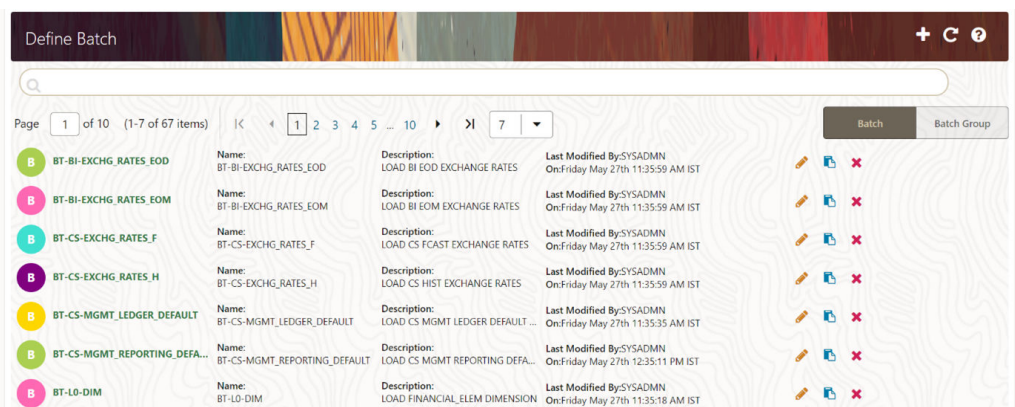
The Define Batch Page displays the details of all existing Batch like Batch ID, Batch Name, Batch Description, Last Modified By and Last Modified Date. You can also create a Batch Group and execute the Batch Group which has the list of batches that you have selected and grouped.

Table 8-1   Field Description

Field	Description
Batch ID	The Alphanumeric Code assigned to a specific Batch.
Name	The unique Batch Name.
Description	The brief description of the Batch.

Table 8-1   (Cont.) Field Description

Field	Description
Last Modified	The last modified By User, Date and Time details.

8.3.1 Creating a Batch

You can create a new batch in the Define Batch Page, and schedule and monitor the batch that you created.

1. To create a new Batch, click the Add ( ) button in the Define Batch Page.

   The **Create Batch Page** is displayed.

Figure 8-2   Create Batch Page

Enter the **Batch Information** as described in the following table:

Table 8-2   Field Description

Field	Description
Batch Details	

Table 8-2 (Cont.) Field Description

Field	Description
Code	The Unique Alphanumeric Code assigned to the Batch. **NOTE:** • The Batch Name should be unique across the Information Domain. • The Batch Name must be alphanumeric and should not start with a number. • The Batch Name should not exceed 60 characters in length. • The Batch Name should not contain any special characters except "_".
Batch Name	The Batch Name is generated based on the values provided by you. **NOTE:** • The Batch Name should be unique across the Information Domain. • The Batch Name should be Alphanumeric and should not start with a number. • The Batch Name should not exceed 60 characters in length. • The Batch Name should not contain any special characters except "_".
Batch Description	Enter a description for the Batch based on the Batch Name. **NOTE:** The Batch Description should be Alphanumeric. The allowed special characters are_.:- and <blank space>, along with spaces and alpha-numeric. It should not exceed 200 characters in length.
Service URL Name/ Service URL	• Select the Service URL Name from the drop-down list, if it is available. The Service URL is displayed in the **Service URL** field. • To add a new service URL, enter a name to identify it in the **Service URL Name** field and enter the proper URL in the **Service URL** field. You can give partial URL here and the remaining URL in the Task Service URL.

2. Adding Batch Parameters

Figure 8-3 Adding Batch Parameters Window
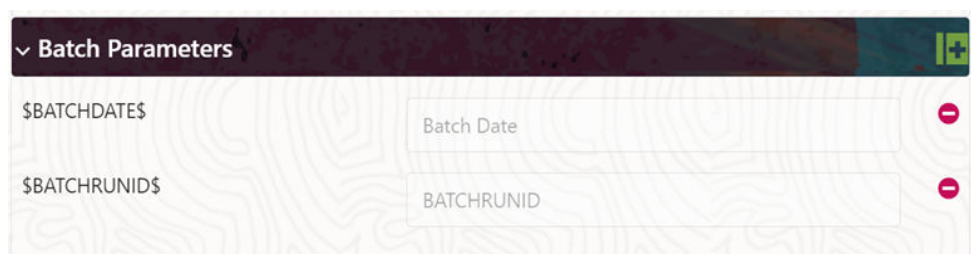
From the Batch Parameters pane, click () to add a new Batch Parameter. By default, $FICMISDATE$ and $BATCHRUNID$ are added as Batch Parameters.

> ✐ **Note:**
>
> Enclose the Parameter Value for a Run time with $ symbol. For example, $paramName$

a. Enter the Parameter Name in the **Param Name** field.

b. Enter the Parameter Value in the Param **Value** field.You can delete a parameter by clicking **Delete** corresponding to the parameter.

3. Adding Header Parameters

Figure 8-4   Adding Header Parameters Window
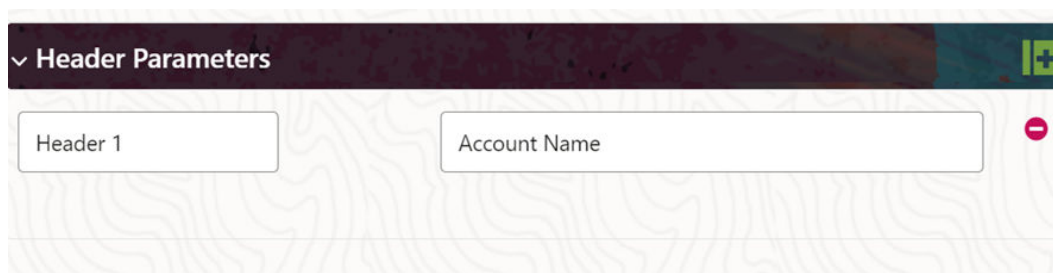
4. Click **Save**. The new Batch is created and displayed in the Define Batch Page.

8.3.2 Editing a Batch

The **Edit Batch** option allows you to edit the Batch details such as Batch Description, Service URL Name and Service URL and also add a new Batch Parameter.

Seeded batches cannot be edited.

1. In the **Define Batch** Page, click (✐) corresponding to the Batch you want to modify.

   The Edit Batch Page is displayed.

2. Modify the required **Batch** details.

   For more information, see Create a Batch section.

3. Click **Save**.

   The edited batch is saved and displayed in the Define Batch Page.

8.3.3 Copying a Batch

The Copy Batch option allows you to copy a Batch that you want to clone or create instances in the system from the Define Batch Window.

To copy a Batch, perform the following steps:

1. In the Define Batch Page, click () corresponding to the Batch that you want to copy. The Copy Batch Page is displayed.

2. Specify the Batch details as you want to clone and copy the existing batch.

For more information, see Create a Batch section.

3. Click **Save**.

The copied batch is saved and displayed in the Define Batch Page.

8.3.4 Deleting a Batch

The Delete Batch option allows you to delete a Batch that are no longer required in the system from the Define Batch Page.

Seeded batches cannot be deleted.

To delete a Batch, perform the following steps:

1. From the Define Batch Page, click (✖) corresponding to the Batch you want to delete.

2. Click **OK** in the confirmation dialog box to confirm deletion. If the batch has any active schedules a warning is displayed. On confirmation, all schedules of the batch are also deleted.

8.3.5 Creating a Batch Group

You can create a new Batch Group in the Define Batch Page and schedule and monitor the Batch Group that you created.

To create a new Batch Group, perform the following steps:

1. In the **Define Batch** Page, click ().

The **Create a New Batch** Page is displayed.

2. Select **Batch Group** option.

3. Specify the following fields:

   • Name

   • Description

   • Add Batches

   > ✎ **Note:**
   >
   > The Add Batches is a multi-select field, you can select the batches that you want to add to the group using this field.

4. Click **Save**.

The new Batch Group is created and displayed in the Define Batch Window.

8.3.6 Editing a Batch Group

The Edit Batch Group option allows you to edit the Batch Group details such as Batch Group Name, Added Batches, and Batch Group Description.

To modify a Batch Group, perform the following steps:

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Define Tasks

1. In the **Define Batch** Page, click **Batch Group** option to list the Batch Groups.

2. Click ( ) corresponding to the Batch Group you want to modify. The **Edit Batch** Page is displayed.

3. Modify the required Batch Group details.

   For more information, see Create a Batch Group section.

4. Click **Save**.

   The edited Batch Group is saved and displayed in the **Define Batch Page**.

8.3.7 Copying a Batch Group

The Copy Batch option allows you to copy a Batch that you want to clone or create instances in the system from the Define Batch Page.

To copy a Batch Group, perform the following steps:To copy a Batch Group, perform the following steps:

1. In the **Define Batch** Page, click **Batch Group** option to list the Batch Groups.

2. Click ( ) corresponding to the Batch Group that you want to copy.

   The **Copy Batch** Page is displayed.

3. Specify the Batch Details as you want to clone and copy the existing batch.

   For more information, see Create a Batch Group Section.

4. Click **Save**.

   The copied Batch Group is saved and displayed in the Define Batch Window.

8.3.8 Deleting a Batch Group

The Delete Batch option allows you to delete a Batch that are no longer required in the system from the Define Batch Window.

To delete a Batch Group, perform the following steps:

1. From the **Define Batch** Page, click **Batch Group** option to list the Batch Groups.

2. Click ( ) corresponding to the Batch Group you want to delete.

3. Click **OK** in the confirmation dialog to confirm deletion.

8.4 Define Tasks

The Define Tasks Page displays the list of tasks associated with a specific Batch Definition. You can create new tasks, edit the existing tasks or delete unwanted tasks. You can also specify task precedence for each task in Task Precedence Window and click the **Add or Remove Precedence** () icon to Schedule the batch.

To navigate to the Define Batch Page, complete the following procedure:

1. From the left menu, click **Common Object Maintenance.**

2. Select Operations and select **Define Task**.
   The **Define Task Page** containing the following details is displayed.

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You can select the Batch/Batch Group and select a particular Batch or Batch Group to view the list of tasks associated with that Batch or Batch Group.

8.4.1 Managing Tasks for a Batch or a Batch Group

Batch is a process of execution of the Date and time-based background tasks based on a defined period during which the resources were available for Batch Processing.

Batch Group is a process of grouping the batches that are required to be execute together for execution of the Date and time-based background tasks based on a defined period during which the resources were available for batch processing. You can perform the following operation for the batch based on the task.

You can perform the following operation for the Batch or a Batch Group based on the task.

- Add a Task
- Modify a Task
- Define Task Precedence
- Delete a Task
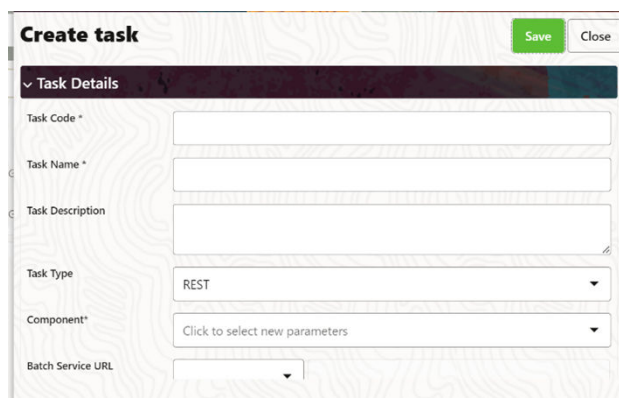
8.4.2 Adding a Task

Adding a new task option allows you to add new tasks to a selected Batch Definition.

To add new task, perform the following steps:

1. Click Define Tasks from the Header panel.

   The Define Task Page is displayed.

2. Select the Batch for which you want to add new task from the Select drop-down list.

3. Click **Add** ( ). The **Create a New Task** Page is displayed.

Figure 8-5   Create Task Page

4. Enter the details as tabulated:

Table 8-3   Field Description

Field	Description
Task Code	
Task Name	Enter the task name.
	NOTE:
	• The Task Name must be alphanumeric and should not start with a number.
	• The Task Name should not exceed 60 characters in length.
	• The Task Name should not contain any special characters except underscore (_).
Task Description	• Enter the Task Description along with spaces and Alphanumeric. No special characters are allowed in Task Description.
	• Words like Select From or Delete From should not be entered in the Description.
Task Type	Select the task type from the drop-down list.
Batch Service URL	Select the required Batch Service URL from the drop-down list.
	This can be blank and you can provide the full URL in the **Task Service URL** field.
Task Service URL	Enter task service URL if it is different from Batch Service URL.

5. From the Task Parameters Pane, by default, all Batch Level Parameters are added and enabled as task parameters.

   a. Enter the Parameter name in the **Param Name** field.

   b. Enter the Parameter value in the **Param Value** field.

   You can delete a parameter by clicking corresponding to the parameter.

6. Click **Save**.

8.4.3 Modifying a Task

Modifying a Task option allows you to modify the details of existing tasks of a Batch Definition such as Task Description, Task Type, Batch Service URL and Task Service URL. You can also add a new task parameter and enable or disable already existing task parameters.

To modify a Task, perform the following steps:

1. From the **Define Task** Page, select the Batch whose task details you want to modify, from the Select drop-down list.

2. Click **Edit** ( ) corresponding to the Task whose details you want to modify. The Edit Task Page is displayed.

3. Modify the required Task Details.

   For more information, see Add a Task Section.

4. Click **Save**.

8.4.4 Define Task Precedence

Task Precedence indicates the execution-flow of a Batch. Task Precedence Value facilitates you 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 does not have a precedence defined and hence will be executed simultaneously, during the Batch Execution. However, Task 4 has a precedence value as Task 1 which indicates that, Task 4 is executed only after Task 1 has been successfully executed.

You can set Task precedence between Tasks or define to run a Task after a set of other tasks. However, multiple tasks can be executed simultaneously, and cyclical execution of tasks is not permitted. If the precedence for a Task is not set, the Task is executed immediately on Batch Execution.

To define the task precedence in the Define Task Page, perform the following steps:

1. Click **Add or Remove Precedence** ( ) button corresponding to the task for which you want to add precedence task.
   The Task Precedence Mapping Window is displayed.

   > ✎ **Note:**
   >
   > The **Task Precedence** option is disabled if a batch has only one task associated.

   a. Select the batch that you want to execute before the current task, from the Available Tasks pane and click ( ).

   b. To select all the listed batches, click ( ).

   c. To remove a batch, select the task from the Selected Tasks Pane and click ( ).

   d. To remove all the selected batches, click ( ).

2. Click **Save** to update Task Precedence in the batches.

3. Click **Preview** to view the Precedence information.

8.4.5 Deleting a Task

You can remove a task from a Batch Definition which are no longer required in the system by deleting it from the Define Task Window.

To delete a Task, perform the following steps:

1. From the Define Task Page, select the Batch whose task details you want to delete from the Select drop-down list.

2. Click **Delete** ( ) corresponding to the Task you want to delete.

3. Click **OK** in the confirmation dialog to confirm deletion.

8.5 Schedule Batch

The Schedule Batch Page facilitates you to run, schedule, re-start, and re-run the batches in the Scheduler Service. After you upload the data in the required format into the Object Storage, you must load the data into the system using the Scheduler Service. You can schedule them to run in a required pattern and view the Run Time Status of the scheduled services using the Monitor Batch Feature.

Batch is a process of execution of the Date and Time-based background tasks based on a defined period during which the resources were available for batch processing.

You can perform the following operation for the batch:

- Execute a Batch
- Schedule a Batch
- Re-start a Batch
- Re-run a Batch
- Edit Dynamic Parameters
- Task Definition of a Batch

8.5.1 Execute a Batch and Batch Group

The Execute Batch option allows you to run a batch instantaneously. To execute a Batch/Batch Group, perform the following steps:

1. Click **Schedule Batch** from the Header panel.

   The Schedule Page is displayed.

2. Select Batch or Bath Group to execute, from the drop-down list.

3. Select the Batch /Batch Group Name from the Select Name drop down menu. For example, AMLDataLoad.

4. Click **Execute**.

   The **Execution Schedule** Page is displayed.

Figure 8-6   Execution Schedule Page
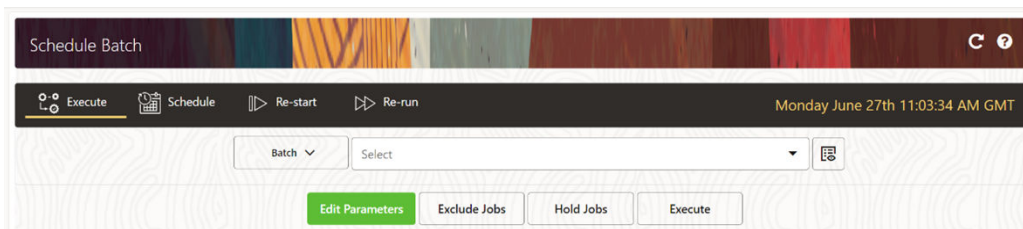
5. If you want to exclude/include some tasks, click **Exclude Tasks**.

6. If you want to hold/release some tasks, click **Hold Tasks**.

7. If you want to edit the dynamic parameters of the batch, click **Edit Dynamic Parameters**.

8. Click **Execute**.

The Batch is executed, and the associated unique execution ID is displayed.

9. Schedule a Batch/Batch Group

You can schedule a Batch/Batch Group to run just for Once, Daily, Weekly, Monthly, or Cron Expression for scheduling the batches. You can also have a user defined schedule to schedule and run a batch.

8.5.2 Schedule Once

To schedule a Batch /Batch Group to run once, perform the following steps:

1. Click **Schedule Batch** from the Header panel.

   The Schedule Batch Page is displayed.

2. In the **Schedule Batch** Page, click **Schedule Once** ( ).

3. Select Batch or Bath Group to execute, from the drop-down list.

4. Select the Batch /Batch Group Name.

5. Select the Batch or Batch Name you want to schedule for once from the Select drop down menu.

6. Enter a Schedule Name.

7. Select the Start Date on which you want to run the Batch.

8. Click Run Time and select the time at which you want to run the Batch.

9. Click **Schedule**.

8.5.3 Daily Batch Scheduling

To schedule a Batch to run daily, perform the following steps:

1. Click **Schedule Batch** from the Header panel. The Schedule Batch Page is displayed.

2. In the Schedule Batch Page, click **Daily** ( )

3. Select the **Batch /Batch Group Name**.

4. Select the Batch or Batch Name you want to schedule daily from the Select drop down menu.

5. Enter a **Schedule Name**.

6. Select the **Start Date** from which you want to run the Batch.

7. Select the **End Date** till which you want to run the Batch.

8. Select the **Time** at which you want to run the Batch daily.

9. Click **Schedule**.

8.5.4 Weekly Batch Scheduling

To schedule a Batch to run weekly, perform the following steps:

1. Click **Schedule Batch** from the Header panel.

The Schedule Batch Page is displayed.

2. In the Schedule Batch Page, click **Weekly** (![icon]).

3. Select the Batch /Batch Group Name.

4. Select the Batch or Batch Name you want to schedule daily from the Select drop down menu.

5. Enter a Schedule Name.

6. Select the Start Date from which you want to run the Batch.

7. Select the End Date till which you want to run the Batch.

8. Select the Time at which you want to run the Batch every week.

9. Select the days on a week you want to run the Batch from the Select Days of the Week multi-select drop down menu.

10. Click **Schedule**.

8.5.5 Monthly Batch Scheduling

To schedule a Batch to run weekly, perform the following steps:

1. In the Schedule Batch Page, click **Monthly** (![icon]).

2. Select the Batch /Batch Group Name.

3. Select the Batch or Batch Name you want to schedule daily from the Select drop down menu

4. Enter a Schedule Name.

5. Select the Start Date from which you want to run the Batch.

6. Select the End Date till which you want to run the Batch.

7. Select the Time at which you want to run the Batch every Month.

8. Select the months in a year you want to run the Batch from the Select Months of the Year multi-select drop down menu.

9. Select the day of the month that you want to run the Batch from the Select Day of the Month drop down menu.

10. Click **Schedule**.

8.5.6 Schedule Cron Expression

To run a Batch in a user-defined schedule, you can have custom schedule with the help of Cron Expression. A Cron Expression is a string comprised 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. For more information, click the icon next to the Cron Expression field.

To schedule a Batch based on Cron Expression, perform the following steps:

1. In the Schedule Batch Page, click **Cron Expression** (![icon]).

2. Select the Batch /Batch Group Name.

3. Select the Batch or Batch Name you want to schedule from the Select drop down menu.

4. Enter a Schedule Name.

5. Enter the Cron Expression for your schedule.

   For more information about the Cron Expression, click Information icon next to the Cron Expression field.

6. Click **Schedule**.

8.5.7 Re-start a Batch

You can re-start a Batch which has not been executed successfully or which has been explicitly interrupted, or cancelled, or put on hold during the execution process. By re-starting a Batch, you can continue Batch execution directly from the point of interruption or failure and complete executing the remaining tasks.

To re-start a batch, perform the following steps:

1. Click **Schedule Batch** from the Header panel.

   The Schedule Page is displayed.

2. From the **Schedule** Page, select Re-start tab.

3. Select the Batch /Batch Group Name.

4. Select the Batch or Batch Name you want to schedule daily from the Select drop down menu.

5. Select the **Batch Run ID**.

6. Click **Re-start**.

8.5.8 Re-run a Batch

You can re-run a Batch which has previously been executed. Re-run Batch facilitates you to run the Batch irrespective of the previous execution state. A new Batch Run ID is generated during the Re-run process and the Batch is executed as similar to the new Batch Run.

To re-run a batch, perform the following steps:

1. Click **Schedule Batch** from the Header panel.

   The **Schedule Batch** Page is displayed.

2. In the **Schedule Batch** Page, select **Re-run** tab.

3. Select the Batch /Batch Group Name.

4. Select the Batch or Batch Name you want to re-run from the Select Name drop down menu.

5. Select the **Batch Run ID**.

6. Click **Re-run**.

8.5.9 Edit Dynamic Parameters

Dynamic Parameters facilitate you to modify the dynamic parameters for the batch.

You can change the Param Value from the Edit Dynamic Params Page and save the changes to the Batch. The Edit Dynamic Parameters option is available in all the tab in the Schedule Batch Page.

To edit the dynamic parameters for a batch, perform the following steps:

1. In the **Schedule Batch Page**, click **Edit Dynamic Parameters**.
   The Edit Dynamic Params Page is displayed.

2. In the Edit Dynamic Params Page, modify the values as required.

3. Click **Save**. The modified parameters are applied to the Batch.

8.5.10 Task Definitions of a Batch

You can modify the Task Definition state in the Batch Execution Page to exclude or hold the defined task in a Batch from execution. The excluded tasks are therefore assumed to have completed execution and get excluded during the Batch Run.

While executing or scheduling a Batch from the Schedule Batch Page, you can:

• Exclude a task or include the excluded task.

• Hold a task or release the held task.

8.6 Monitor Batch

The Monitor Batch enables you to view the status of executed Batch along with the tasks details. You can track the issues if any, on regular intervals and ensure smoother Batch Execution. A visual representation as well as tabular view of the status of each Tasks in the Batch is available.

To monitor a batch, perform the following steps:

1. Click **Monitor Batch** from the Header panel.
   The **Monitor Batch Page** is displayed.

Figure 8-7   Execution Schedule Page
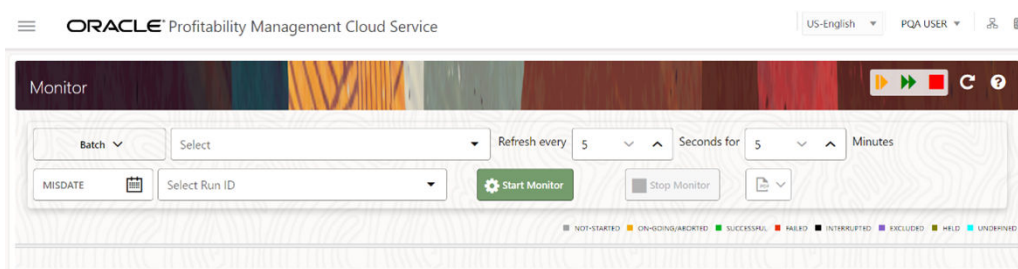
2. Select the Batch/Batch Group from the Select drop-down and then select the Batch Run ID from the Run ID drop-down.

3. Click **Start Monitor**.
   The results are displayed in **Visualization** and **List View** tabs. Details of these tabs are as follows:

   The **Visualization** tab displays the details in the form of a chart represented with the following details:

- **Batch Status**: Displays the batch status, the different batch status are NOT-STARTED, ON-GOING, SUCCESSFUL, FAILED, INTERRUPTED, EXCLUDED, HELD, and UNDEFINED.

- **Batch Start Time**: Displays the Batch Start Time details.

- **Batch End Time**: Displays the Batch End Time details.

- **Task Details**: Mouse-over the task to display its status and details.

The List View tab displays the details in a tabular form with the following details:

- **Batch Status**: Displays the batch status, the different Batch Status are NOT-STARTED, ON-GOING, SUCCESSFUL, FAILED, INTERRUPTED, EXCLUDED, HELD, and UNDEFINED.

- **Batch Start Time**: Displays the Batch Start Time details.

- **Batch End Time**: Displays the Batch End Time details.

- **Task Details**: Mouse-over the task to display its status and details.

- **More Information**: The message returned by the Rest Service.

If you wish to stop the monitoring, select Stop Monitor. You can also specify the Start and Stop Monitor options along with refresh interval in the Refresh every second and minute fields.

> **Note:**
>
> - You can select the refresh interval and the duration for the auto refresh.
>   The refresh interval is defaulted to 5 seconds and duration is defaulted to 5 minutes.
>
>   That is, the refresh happens every 5 seconds for next 5 minutes.
>
> - Range of interval input must be between 5 to 60 seconds and range of duration.
>
> - Input should be between 5 to 180 minutes.
>
> - You can use the Stop Monitor Button to stop the auto refresh.

4. To restart the Batch /Batch Group, select **Restart**.

5. To rerun the Batch/Batch Group, select **Rerun**.

6. To interrupt the Batch /Batch Group, select **Stop**.

7. In the Log Viewer pop-up the log information is displayed. You can click the **Download** icon to download the log or click the **Close** icon to close the log information.
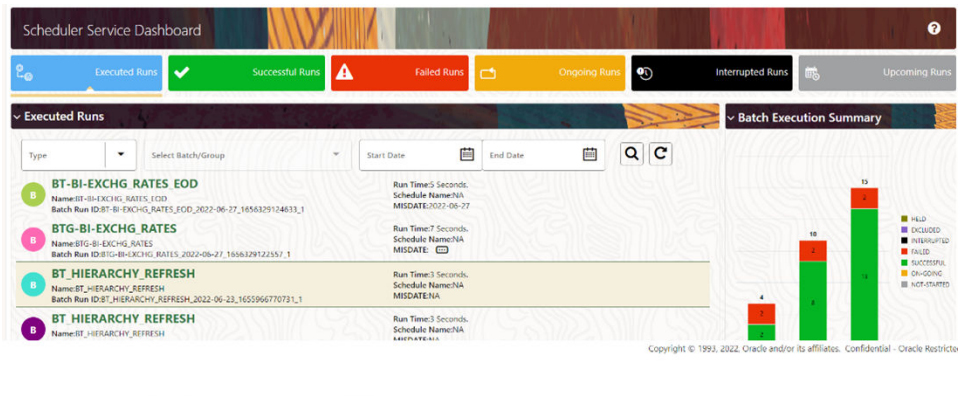
8.7 Scheduler Service Dashboard

To access the Scheduler Service Dashboard, complete the following steps:

1. From the left menu, click **Common Object Maintenance**.

2. Select Operations and select Dashboard.

The Scheduler Dashboard containing the following details is displayed.

Figure 8-8   Scheduler Service Dashboard

In the Scheduler Service Window, you can view the following details:

The Executed Runs, Successful Runs, Failed Runs, Ongoing Runs, Interrupted Runs, and Upcoming Runs tabs. You can click the tabs to view the details of the Batches based on their status. For example, click Ongoing Runs to view the details of the batches that are currently running.

The Batches that were executed within the last 7 or 30 days contain details such as Batch Name, Batch Run ID, and Run Time. Click 30 days to view the batches that were executed within the last 30 days. You can click the icon corresponding to a Batch to monitor it.

The Batch Execution Summary Pane displays the count of total batches executed that were executed within the last 7 days, 30 days, and 120 days. Additionally, you can see the separate count of successful batches, failed batches, interrupted batches, on-going batches, and the batches which are yet to start, by hovering your mouse the batches.

9
Technical Documents

This chapter covers the following topics:

- Run Chart
- Data Flow
- Customer Master Loader

9.1 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 MOS Doc ID 2901994.1 under the Profitability Analytics Runchart header.

9.2 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 Analytics Cloud Service Data Flow, see the MOS Doc ID 2901994.1 under the Profitability Analytics Data Flow header.

9.3 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 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-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 9-1   Menu Scheduler – Schedule Batch and Edit Parameters
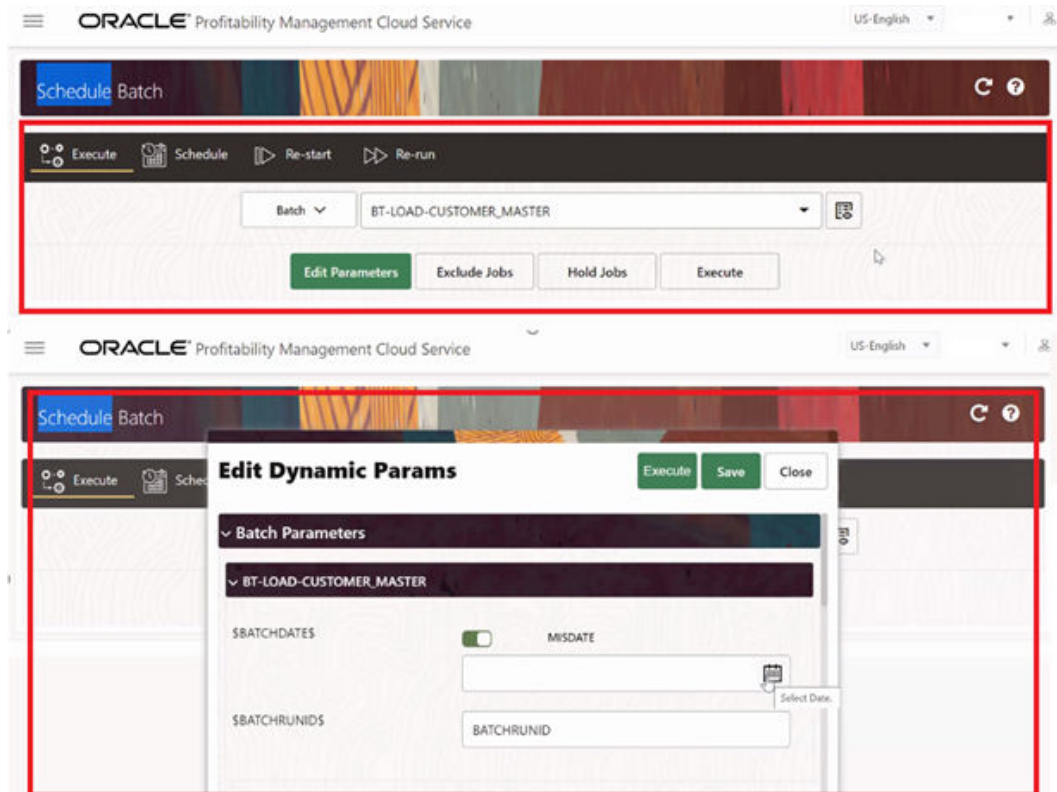
6. From the LHS menu, navigate to **Operations and Processes**, select **Scheduler**, and then select **Execute Batch**.

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