Oracle Financial Services
Time Buckets

ORACLE®

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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.

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 also available in this guide.

1.3 Get Support

You can get support at My Oracle Support.

For accessible 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 did 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

Refer to following Documents:

- See What's New

2
Time Buckets

The Time Bucket Rules allow users to create the time bucket definitions used for computing and outputting aggregated cash flows across time. The Time Bucket Rules determine the granularity of cash flow output and can be set at any frequency through a combination of daily, monthly, and yearly buckets. Time Buckets can be defined for the following types of ALM output:

- **Income Simulation**
  Income Simulation Buckets allow you to specify the time periods used for storing and reporting results. These bucket definitions set the modeling horizon for date-related business rule assumptions. When you change the number or frequency of the modeling buckets, existing business rules are affected.

  Be cautious when changing Time Bucket definitions when known dependencies exist.

  You can specify any combination of days, months, and years when setting up the buckets. Although all Oracle ALM cash flows are generated daily, they are aggregated into defined income simulation buckets when results are stored. Reports access information from the income simulation buckets and let you aggregate buckets. For example, you can define monthly income simulation buckets but generate a quarterly income statement. On the other hand, you cannot generate a weekly balance sheet if all income simulation buckets are monthly.

  If you want to use different configurations of income simulation buckets, such as all monthly or all quarterly, you should create a separate Time Bucket rule for each and use an appropriate naming convention to identify these characteristics. All date-related assumption rules should be defined and used in the context of a single set of Income Simulation buckets or a single Time Bucket Rule.

  Income Simulation Bucket definitions are referenced by all bucket based forecast business rules, including Forecast Rates, Forecast Balances, Pricing Margins and Maturity Mix Rules, and also by ALM Deterministic Processes during ALM Engine processing.

- **Interest Rate GAP**
  Interest Rate GAP Buckets allow you to define Interest Rate (repricing) GAP buckets including a catch all bucket to move reprice gap output for Non Interest Rate Sensitive products. From this screen, you can also define Dynamic Start Dates (as of date is always the initial start date), which allows you to generate both static and dynamic GAP simulations.

  With this Dynamic Start Date capability, users can also define forward start dates for computing dynamic market valuations. The Dynamic Start Date capability allows you to consider the amortization of existing business and any new business assumptions that are applicable between the current as of date and the future dated – Dynamic Start Date. You must set up Income Simulation Buckets before defining Interest Rate GAP Buckets.

  Only Interest Rate GAP financial elements are impacted by the Interest Rate GAP bucket definitions. The Interest Rate GAP financial elements range from FE660 to FE700.

- **Liquidity GAP**

Liquidity GAP Buckets are similar to Interest Rate GAP Buckets. The only difference is that Liquidity Bucket definitions impact only the Liquidity Runoff financial elements, which range from FE 1660 to 1717.

This module describes the procedure for working with and managing the Time Bucket Rules.

Topics

- Time Bucket Summary Page
- Search Time Bucket
- Create Time Bucket
- View and Edit Time Bucket
- Copy Time Bucket
- Delete Time Bucket

2.1 Time Bucket Summary Page
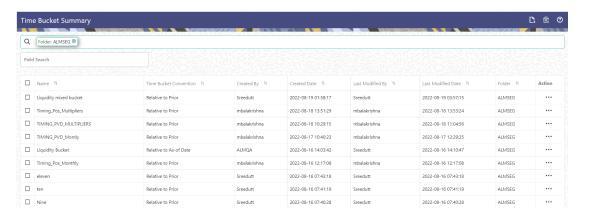
The Time Bucket Summary page displays the following information.

Table 2-1   Time Bucket Summary – Fields and Descriptions

Column	Description
Name	Displays the Time Bucket's Name.
Time Bucket Convention	Displays the Time Bucket Convention.
Created By	Displays the Name of the user who created the Time Bucket.
Created Date	Displays the Date and Time at which the Time Bucket was created.
Last Modified By	Displays the Name of the user who last modified the Time Bucket.
Last Modified Date	Displays the Date and Time when Time Bucket was modified last.
Folder	Displays the folder location where Time Bucket is saved.
Action	Displays the list of actions that can be performed on the Time Bucket. For more information, see Time Bucket – Icons and Descriptions.

Figure 2-1   Time Bucket Summary Page

The Action Column on Time Bucket Summary page offers several actions that allow you to perform different functions. The following options are available for the Time Bucket Summary page.

Table 2-2   Table: Time Bucket – Icons and Descriptions

Fields	Description
Add	Click Add icon to build a new Time Bucket.
Multiple Delete	Select one or more rules in the table and then click the Delete icon at the top right of the summary page to delete more than Time Bucket Rules at the same time.
View/Edit	Click on the Action icon against the Time Bucket Rule Name and select View/Edit to view or edit the contents of a Time Bucket rule in read/write format. Depending on user privileges the rule will open in either View or Edit Mode.
Save As	Click on the Action icon against the Time Bucket Rule Name and select Save As to create a copy of an existing Time Bucket Rule.
Delete	Click on the Action icon against the Time Bucket Rule Name and select Delete to delete an existing Time Bucket Rule.

2.2 Search Time Bucket

Search for a Time Bucket to perform any of the following tasks:

• View

• Edit

• Copy

• Delete

Prerequisites

Predefined Time Bucket

Procedure

To search for a Time Bucket Rule, follow these steps:
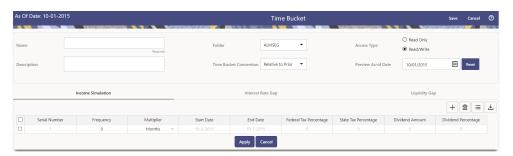
1. Navigate to the Time Bucket Summary page.

2. Enter the Code, Name, Folder, and/or Description of the Time Bucket and click Search.

3. Only Time Bucket Rules that match the search criteria are displayed.

2.3 Creating Time Bucket Rules

You create Time Bucket Rules to specify the time periods used for storing and reporting ALM results. To create a new Time Bucket Rule, follow these steps:

1. Navigate to the Time Buckets Summary page.

2. Click **Add** to create a new Time Bucket Rule.

Figure 2-2   Creating Time Bucket Rule

3. Enter the Name and Description of Time Bucket.

4. Select the Folder and Access Type.

5. Select **Time Bucket Convention** as **Relative to Prior** or **Relative to As-of Date** option.

    •   **Relative to Prior:** This convention means that all time bucket points are relative to the period that preceeded them, with the first time bucket relative to the currently active as-of date. This convention supports the stub-to feature for time buckets.

    •   **Relative to As-of-Date:** This convention means that all time bucket points are relative to the curently active As-of Date. This means that each new time bucket point entered must be greater in time than the one preceeding it by at least one day. The stub-to time bucket feature is not available with this convention.

6. You must have an Active Time Bucket Rule at all times. If you wish to Activate a particular Time Bucket Rule, then select **Relative to As-of- Date** option.

7. You can Preview As-of Date by using **Preview As-of Date** option.

8. Define the Time Bucket Rule. For more information, see Defining Time Bucket Rules

2.4 Defining Time Bucket Rules

The definition of a Time Bucket Rule is part of the Create or Edit Time Buckets Rule Process. When you click Save in the Create Time Buckets Rule Process, the rule is saved and the Time Buckets Rule Summary page is displayed. However, Time Bucket assumptions may not have been defined at this point. You must define the Time Bucket assumptions before clicking Save.

In the Time Bucket Details screen, you have three tabs available for creating Time Bucket definitions.

- Income Simulation Buckets (required)
- Interest Rate GAP Buckets, including Non Interest Rate Sensitive Bucket (required only if Repricing Gap is selected during processing). For Non Interest Rate Sensitive Bucket, both Repricing Gap and Include Non Rate Sensitive Bucket are required selections.)
- Liquidity GAP Buckets (required only if Liquidity Gap is selected during processing)

Prerequisites

Performing basic steps for creating or editing a Time Bucket rule. For more information, see the Creating Time Bucket Rules

To define the Time Bucket Rule, follow these steps:

1. In the **Income Simulation** tab, follow these steps:

Figure 2-3   Income Simulation Buckets

    a. Click **Add Rows** and enter the desired number of rows corresponding to the number of Income Simulation Buckets required to create.
You can select a pre-defined number of rows from the list. For example, 3, 5, 10, or you can enter the exact number of rows required to add. The maximum number of buckets you have under any tab is 240.

    b. Under Frequency, enter a numeric value. For example 1. The Frequency column displays the duration of the multiplier. The frequency in conjunction with the multiplier displays the duration of the buckets. The frequency can be any number from 1 to 999.

    c. Under Multiplier, select an appropriate value from the list. The Multiplier column includes Daily, Monthly, Yearly, or stub-to (Relative to Prior convention) options.

> **Note:**
>
> Limit the definition of Income Simulation buckets to the date range that is relevant to your reporting requirement. It is not necessary to create catch all buckets at the end of the series. When large buckets are created, for instance, 99 Years, this can result in the following error:
>
> INSERT Oracle Error: ORA- 01426: numeric overflow
>
> Driver
>
> Function: drv_oci::Execute()

You may also select a Stub-to time bucket breakpoint in months or years when the time bucket convention is Relative to Prior. When applying a stub-to month or stub-to year it is not necessary to specify a time bucket frequency or multiplier as the application will automatically calculate the amount of time necessary to close the period.

> **Note:**
>
> Whenever the currently active as-of date changes this may also automatically change the size of any stub-to time buckets. These changes may impact processing output.

   d. Continue adding frequencies and multipliers as needed. After you fill in the frequencies and multipliers, the start and end dates are calculated automatically based on the As-of-Date, defined in your Application Preference settings.

   e. Select **Save** if you are finished.

2. Otherwise, navigate to the Interest Rate GAP Buckets tab. After defining Income Simulation buckets, navigate to the **Interest Rate GAP Buckets** tab. This tab provides two important inputs. The first is the ability to define Interest Rate GAP Buckets and optionally add a Non Interest Rate Sensitive Bucket for Non Rate Sensitive products. The second capability allows you to define one or more Dynamic Start Dates. The following steps explain how to complete each of these setup tasks.

> **Note:**
>
> The Interest Rate GAP Bucket can be defined from Bucket count 1 till Bucket count 239 in all dynamic start dates. The last time series time bucket in all Dynamic Start Dates will default to 99 years as a catch all bucket. This is used to verify the total runoff for reporting requirements.

In the **Interest Rate GAP Buckets** tab, follow these steps:

Figure 2-4   Interest Rate GAP Buckets

a.   Click **Add Rows** corresponding to the Default Dynamic Start Date and enter the desired number of rows for your Interest Rate GAP Buckets.

> **Note:**
>
> The product dimension Attribute Interest Rate Sensitivity Category identifies products as Interest Rate sensitive or Non Interest Rate sensitive. Once a product is mapped as Non Interest Rate sensitive, you must enable Include Non Interest Rate Sensitive Bucket in Process Rules. This moves reprice gap output from Non Interest Rate Sensitive products into Non Interest Rate Sensitive Bucket.

b.   Follow steps a— d described above under Income Simulation Buckets, to complete the setup of your Interest Rate GAP Buckets and Non Interest Rate Sensitive Bucket for the default Dynamic Start Date.

c.   If you would like to define additional – forward dated, Dynamic Start Dates, Click **Add Dynamic Start Date** to add one or more parent nodes to the bucket hierarchy.

d.   For each additional Dynamic Start Date row, enter the Frequency and Multiplier to determine future start date(s).

e.   Click **Add Rows** corresponding to each new Dynamic Start Date and repeat the Interest Rate GAP Bucket definition steps previously described to complete the setup.

3.   After defining Interest Rate GAP Buckets, navigate to the Liquidity Buckets tab. This tab has the same structure as the Interest Rate GAP Buckets tab. It allows you to define the Liquidity GAP Buckets for the Default Dynamic Start Date and also allows you to add one or more additional Dynamic Start Dates. The use of Dynamic Start Dates will allow you to forecast your liquidity position as of some future point in time, considering all relevant assumptions, including amortization, prepayments, early withdrawals, and rollovers.

> **Note:**
>
> By default, the last time series time bucket in all Dynamic Start Dates will default to 99 years as a catch all bucket. This is used to verify the total runoff for reporting requirements.

In the **Liquidity Buckets** tab, follow these steps:

Figure 2-5   Liquidity Buckets

a. Click **Add Rows** corresponding to the Default Dynamic Start Date and input the desired number of rows for your Liquidity Buckets.

b. Follow steps b– d described under Income Simulation Buckets, to complete the setup of your Liquidity Buckets for the Default Dynamic Start Date.

c. If you would like to define additional – forward dated, Dynamic Start Dates, Click **Add Dynamic Start Date** to add one or more parent nodes to the bucket hierarchy.

d. If needed, enter the Frequency and Multiplier for the new Dynamic Start Date to determine the future start date.

e. Click **Add Rows** corresponding to the new Dynamic Start Date and repeat the Liquidity GAP Bucket definition steps previously described.

f. Click **Save** once you have completed the setup for all bucket types.

> ✎ **Note:**
>
> Each time you change the As of Date in your Application Preferences window, all Time Bucket Rule Buckets Start Date and Bucket End Date updated automatically.

Excel Export functionality is used for adding/editing time bucket information.

2.5 View and Edit Time Bucket

You can view existing Time Bucket, and you can edit existing Time Bucket Rules, provided you have Read/Write privileges.

To view and edit a Time Bucket, follow these steps:

1. Navigate to the Reference Data and select Time Bucket.

2. Search for Time Bucket. For further information, see the Searching for Rules section.

3. Click on the Action icon against the Rule Name and select View/Edit to open the rule you want to update.

4. Update the details, if required.

5. Click **Save.**

2.6 Copy Time Bucket

You can copy Time Bucket to avoid having to enter data multiple times. This saves time and effort and also reduces mistakes.

To copy a Time Bucket, follow these steps:

1. Navigate to the **Reference Data** and select **Time Bucket**.

2. Search for a Time Bucket.
   For more information, see the Searching for Rules section.

3. Click on the Action icon against the Rule Name and select Save As to duplicate the rule.

4. Enter a unique code.

5. Enter a unique name.

6. Enter a brief description.

7. Click the **Save** button.

2.7 Delete Time Bucket

You can delete Time Bucket Rules that are no longer required.

> **Note:**
>
> An Time Bucket cannot be retrieved after deletion.
>
> Restrictions on deleting Time Bucket Rules are:
>
> • You cannot delete Time Bucket Rules if you have only Read privileges. Only users with Read/Write privileges and Time Bucket owners can delete Time Buckets.
>
> • You cannot delete a Time Bucket that has a dependency.

To delete a Time Bucket, follow these steps:

1. Navigate to the **Reference Data** and select **Time Bucket**.

2. Search for Time Bucket.

3. Click on the Action icon against the Rule Name and select Delete.