

Oracle Financial Services Discount Methods

User Guide

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ORACLE
Financial Services

Discount Methods

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Document Control

Version Number	Revision Date	Change Log
1.0	June 2022	Created the first draft of the document
2.0	September 2022	Updated the document for Summary UI changes.

Table of Contents

- 1 Get Help 5
 - 1.1 Get Help in the Applications 5
 - 1.1.1 Additional Resources 5
 - 1.2 Learn About Accessibility 5
 - 1.3 Get Support..... 5
 - 1.4 Get Training..... 5
 - 1.5 Join Our Community 6
 - 1.6 Share Your Feedback 6
 - 1.7 Before You Begin 6
- 2 Discount Methods 7
 - 2.1 Navigation Path in UI..... **Error! Bookmark not defined.**
 - 2.2 Discount Method Summary Page 8
 - 2.3 Search Discount Method Rule..... 10
 - 2.4 Create Discount Method Rule 10
 - 2.5 Discount Method Examples..... 14
 - 2.6 Spot Input..... 15
 - 2.7 Spot Interest Rate Code 15
 - 2.8 Forecast Remaining Term..... 15
 - 2.9 Forecast Original Term 15
 - 2.10 View and Edit Discount Method Rule 16
 - 2.11 Copy Discount Method Rule..... 16
 - 2.12 Delete Discount Method Rule 16

1 Get Help

Topics:

- [Get Help in the Applications](#)
- [Learn About Accessibility](#)
- [Get Support](#)
- [Get Training](#)
- [Join Our Community](#)
- [Share Your Feedback](#)
- [Before You Begin](#)

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 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](#)
- [Get started with Cash Flow Engine Cloud Service](#)
- [Take a quick tour](#)

2 Discount Methods

This module describes the procedure for working with and managing Discount Method Rules. Discount Method Rules allow users to define the method for discounting projected Cash Flows for market value and duration calculation purposes. For each combination of product and currency, you can choose one of the following discount methods:

- Spot Input
- Spot Interest Rate Code
- Forecast (Original Term)
- Forecast (Remaining Term)

The following table describes the methods and rate choices:

Table 1: List of Discount Methods

Method	Single Rate	Yield Curve
Spot Input	Discounts all cash flows by the Input Rate	Not applicable
Spot Interest Rate Code	Not applicable	Discounts each Cash Flow period by the equivalent term rate on the base Yield Curve chosen (the Yield Curve as of the start date). The term is defined by the remaining term of the cash flow. Refer Note
Forecast (Original Term)	Not applicable	Discounts each Cash Flow period by the Forecasted Value of the point on the yield curve corresponding to each transaction record's original term (fixed rate instrument) or repricing term (variable rate instrument). Refer Note
Forecast (Remaining Term)	Not applicable	Discounts each Cash Flow period by the Forecasted Value of the point on the Yield Curve corresponding to the remaining term until each cash flow. Refer Note
Effective Interest Rate	Effective Interest Rate (EIR) of account is used as discount rate.	Not applicable

NOTE

In the case of Spot Interest Rate Code, if term point is not available, engine will use linear interpolation to determine the interest rate to discount cashflows.

When Discounting method of Forecast (Original Term) and Forecast (Remaining Term) is used, if term point is not available, engine will use Interpolation method defined for Interest rate code within Forecast Rate Rule. If Interpolation method defined in Forecast rate rule is Linear, engine will use Linear Interpolation. If Interpolation Method is cubic, engine will use Cubic Interpolation to determine interest rate to discount Cash Flows.

Topics:

- [Navigation Path in UI](#)
- [Discount Method Rule Summary Page](#)
- [Search Discount Method Rule](#)
- [Create Discount Method Rule](#)
- [View and Edit Discount Method Rule](#)
- [Copy Discount Method Rule](#)
- [Delete Discount Method Rule](#)

2.1 Discount Method Summary Page

This page is the gateway to all Discount Method Rules and related functionality. You can navigate to other pages relating to Discount Method Rules from this point. The Discount Method **Summary** Page displays the following columns.

Table: Discount Method Rule summary– Fields and Descriptions

Columns	Description
Name	Displays the Discount Method Rule's short name. Mouse over the Name field to view the Code and Description details.

Columns	Description
Dimension	Displays the Dimension used to define Discount Method Rule.
Hierarchy	Displays the Hierarchy used to define Discount Method Rule.
Folder	Displays the Folder name where the Discount Method rule is saved.
Last Modified By	Displays the Name of the user who last modified the Discount Method Rule.
Last Modified Date	Displays the Date and Time when Discount Method was modified last.
Access Type	Displays the access type of rule. It can be Read-Only or Read/Write.
Action	Displays the list of actions that can be performed on the Discount Method Rule. For more information, see Discount Method Rule – Icons and Descriptions .

Figure 1: Discount Method Rule Summary Page

Discount Method Rule Summary


Folder: CFSESEG




Field Search

<input type="checkbox"/>	Name	Dimension	Hierarchy	Folder	Last Modified Date	Last Modified By	Access Type	Action
<input type="checkbox"/>	SPOT_IRC1	Product	Dim_product_hier	CFSESEG	15/09/2022 13:54:07	CFETEST	Read/Write	...
<input type="checkbox"/>	SPOT_IRC	Product	Dim_product_hier	CFSESEG	15/09/2022 13:49:12	CFETEST	Read/Write	...
<input type="checkbox"/>	BPR_MV	Product	Dim_product_hier	CFSESEG	15/09/2022 12:27:44	MBALAKRISHNA	Read/Write	...

The Action column on the Discount Method Rule Summary Page offers several actions that allow you to perform different functions. The following actions are available for the Discount Method Rules.

Table: Discount Method rule – Icons and Descriptions

Fields	Description
Add	Click Add icon at the top right of the Summary Page to build a new Discount Method Rule.
Multiple Delete	Select one or more rules in the table and then click the (-) icon at the top right of the summary page to delete more than one rule at the same time.
View/Edit	Click  in the Action column and select View/Edit to view or edit the contents of a Discount Method Rule in read/write format. Depending on user privileges the rule will open in either View or Edit mode.

Fields	Description
Save As	Click  in the Action column and select Save As to create a copy of an existing Discount Method Rule.
Delete	Click  in the Action column and select Delete to delete an existing Discount Method Rule.
Dependency Check	Click  in the Action column and select Dependency Check to generate a report on all rules that utilize your selected Discount Method Rule.

2.2 Search Discount Method Rule

Search for a Discount Method Rule to perform any of the following tasks:


- View
- Edit
- Copy
- Delete
- Refresh

Prerequisites

Predefined Discount Method rule

Procedure

To search for a new Discount Method Rule, follow these steps:

1. Navigate to the **Discount Method Rule Summary** page.
2. Enter the **Code, Name, Description, Dimension, Hierarchy, and Folder** of the Discount Method rule and click **Search**  .
3. Only Discount Method Rules that match the search criteria are displayed.

2.3 Create Discount Method Rule

You create a Discount Methods rule to assign Discounting Methods to your products. To create a Discount Method Rule, follow these steps:

1. Navigate to the **Discount Methods Rule Summary** page.
2. Click **Add**. The Discount Method Rule Page is displayed.

Figure 2: Discount Method Rule

As Of Date : (09-10-2015) Discount Method Rule Save Cancel

Name Required Folder CFESEG

Description Access Type ☐ Read Only ☒ Read/Write

Product Folder CFESEG Currency US Dollar Hierarchy Dim_product_hier

Assumption Browser Assumption List

Product	Method	Conditional Assumption	Status	Action
▶ All Products				...

> Audit Trail

3. Enter the following details:

Table: Discount Method Details

Fields	Description
Name	Enter the name of the Discount Method Rate Rule.
Description	Enter the description of the Discount Method Rule. This is an optional field.
Folder	Select the Folder where the Discount Method Rule needs to be saved.
Access Type	Select the Access Type as Read-Only or Read/Write.

4. Select a **Product Hierarchy**. You can define methodologies at any level of the hierarchical product dimension. The hierarchical relationship between the nodes allows inheritance of methodologies from Parent Nodes to Child Nodes. Enter the following details for **Product Hierarchy** selection:

Table: Product Hierarchy Details section


Fields	Description
Folder	Select the Folder where Product Hierarchy is previously created
Hierarchy	Select the Hierarchy of the product
Currency	Select the Currency.

5. Navigate to **Assumption Browser** Section to define the Discount Method for your product-currency combination.

TIP

Node Level Assumptions allow you to define assumptions at any level of the Product dimension Hierarchy. The Product

dimension supports a hierarchical representation of your chart of accounts, so you can take advantage of the parent-child relationships defined for the various nodes of your product hierarchies while defining rules. Children of parent nodes on a hierarchy automatically inherit the assumptions defined for the parent nodes. However, assumptions directly defined for a child take precedence over those at the parent level.

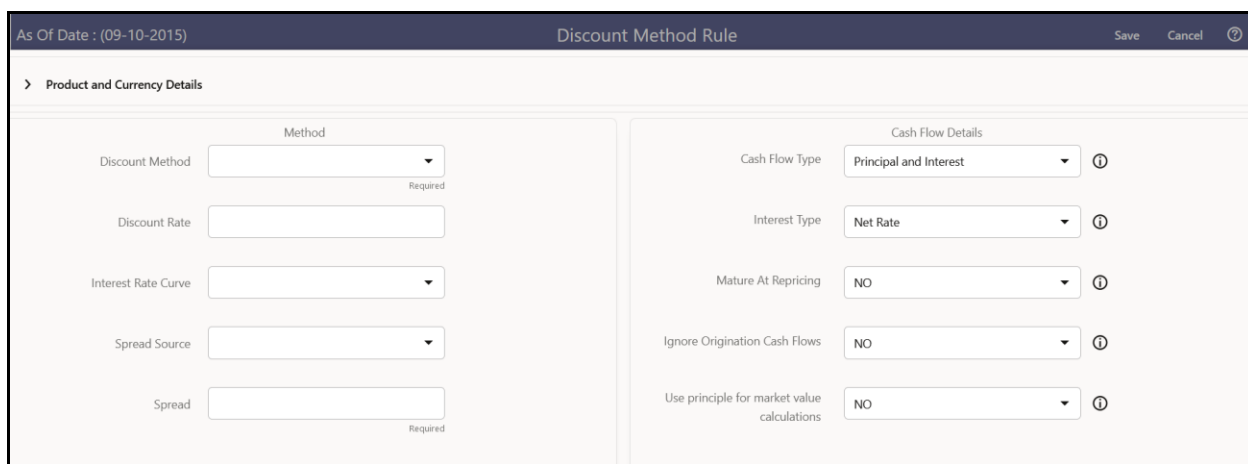
- Select the product(s) and the currency for which you want to define a discount method(s).
- Select the Add  icon to launch the Discount Method Details Window..

NOTE

Using the Default Currency to setup assumptions can save data input time. At Run Time, the calculation engine uses assumptions explicitly defined for a Product Currency combination. If assumptions are not defined for a currency, the engine uses the assumptions defined for the product and the default currency. If the assumptions are the same across some or all currencies for a specific product, you can input assumptions for the Default Currency. Be careful using this option on screens where an Interest Rate Code is a required input. In most cases, you will want to use a currency specific discount curve for discounting instruments within each specific Base Currency. The Default Currency option, if used will apply a selected Interest Rate Code across all currencies.

6. Navigate to **Discount Method** Section.

Figure 3: Discount Method Section



As Of Date : (09-10-2015) Discount Method Rule Save Cancel

> Product and Currency Details

Method

Discount Method Required

Discount Rate

Interest Rate Curve

Spread Source

Spread Required

Cash Flow Details

Cash Flow Type ⓘ

Interest Type ⓘ

Mature At Repricing ⓘ

Ignore Origination Cash Flows ⓘ

Use principle for market value calculations ⓘ

7. Enter the following details:

Table: Discount Method Section

Fields	Description
Discount Method	Select the Discount Method from Discount Method List
Discount Rate	Enter Discount Rate if Spot Input Method is selected
Interest Rate Curve	<p>From Interest Rate Code List, select an appropriate Interest Rate Code.</p> <p>The list of Interest Rate Codes depends on the selected currency. If the selected currency is the default currency, all Interest Rate Codes appear. For other currency selections, the list of interest rate codes includes only interest rate codes whose reference currency is the same as the selected currency.</p>
Spread Source	<p>You can optionally choose to add a spread of margin over the Interest Rate derived from IRC. Spread can be defined in the Discount Method Rule or it can be given along with Instrument record.</p> <p>You can select source of the spread as Discount Rule or Account Data if method is Spot IRC, Forecast (Original Term) and Forecast (Remaining Term).</p>
Spread	<p>When Discount Rule is selected as Spread Source then you can specify the amount of spread/margin here.</p> <p>Type the percentage difference (+ or -) between the selected rate index and the value you want to use for the discount rate(s) within market value calculations.</p> <p>Input a Rate Spread, type 1.0000.</p> <p>A spread of 1% returns a discount rate of 1.00% above the reference interest rate. Type a negative number for a spread below the reference interest rate.</p>

8. Navigate to **Cash Flow Details** section. The **Cash Flow Definition Details** Section is used in unique instances to specify the portion of the Cash Flow that is used to calculate a Market Value.
9. Enter the following details:

Table: Cash Flow Details Section

Fields	Description
--------	-------------

Fields	Description
Cash Flow Type	<ol style="list-style-type: none"> 1. Interest Only - ignores all principal runoff for market value purposes. Use this option for Off-balance sheet items where principal is equal to Notional Principal and is therefore not a true Cash Flow. 2. Principal & Interest - calculates principal and interest both for Market Value purposes. 3. Principal Only - ignores all interest rate Runoff for market value purposes.
Interest Type	<p>The Cash Flow Interest Type determines which interest component is included in the cash flow definition. The Cash Flow Interest Type can be one of three values:</p> <ul style="list-style-type: none"> • Net Rate • Gross Rate <p>For typical processing, you will use the Net Rate for the interest component of the cash flow. Special processing objectives, such as valuation of the funding center, may require you to use the other cash flow interest types.</p>
Mature at Repricing	Calculates a market value and YTM for a given transaction up to the repricing date. For market value and YTM purposes the transaction is assumed to mature on the repricing date. Duration is always calculated to the next reprice date, not to maturity, regardless of the mature at repricing selection.
Ignore Origination Cash Flows for Forward-Starting Instruments	This feature allows the cash flow engine to ignore the origination Principal Cash Flows of any forward-starting instrument. The corresponding market value, duration, convexity and yield calculations will not reflect the Origination Amount. Origination principal Cash Flow will still be reported.
Use Principal in Market Value Calculations (Off-Balance Sheet Only)	This feature allows the Cash Flow Engine to consider principal in the calculation of market value, duration, convexity and yield calculations, even if principal is not actually exchanged.

10. Click **Apply**.

2.4 Discount Method Examples

The following examples assume the Interest Rate has a format of zero-coupon yield with annual compounding. The instrument used in each example is an annual-pay, 2-year instrument originated on the As_of_Date. See the Oracle Financial Services Cash Flow Engine Reference Guide for details on discount factor derivation used in Cash Flow Calculations.

2.5 Spot Input

In the Spot Input Method, the discount factor does not vary with Forecast Rate - interest rate scenarios. The discount factor calculations assume the input interest rate to reflect a format of zero coupon yield, annual compounding, and actual/actual accrual basis.

Spot Input Rate = 6.00%

The formula for the market value of the account, for any rate scenario, is:

Market Value = Cash Flow1/ (1 + 0.06) + Cash Flow 2 / ((1 + 0.06)^2)

Cash Flow1 is the cash flow at the end of year 1. Cash Flow2 is the Cash Flow at the end of year 2.

2.6 Spot Interest Rate Code

In the Spot Interest Rate Code Method, the discount factor depends on the term of the Cash Flow, but does not vary with interest rate scenario.

Interest Rate Code = Treasury Yield Curve

The formula for the Market Value of the account, for any rate scenario, is:

Market Value = Cash Flow1/ (1 + 1 Year Treasury) + Cash Flow2/ ((1 + 2 Year Treasury)^2)

Cash Flow1 is the Cash Flow at the end of year 1. Cash Flow2 is the Cash Flow at the end of year 2. The values for 1 Year Treasury and 2 Year Treasury reflect the values from the Historical Interest Rate Data, beginning with the As_of_Date.

2.7 Forecast Remaining Term

The Forecast Remaining Term Method uses forecasted Interest Rate Data to determine the discount factor.

Interest Rate Code = Treasury Yield Curve

The formula for the market value of this account is:

Market Value = Cash Flow1/ (1+ 1Year Treasury Rate at the 1 year point in the forecast) + Cash Flow2/ ((1+ 2 Year Treasury Rate at the 2 year point in the forecast)^2)

Cash Flow1 is the Cash Flow at the end of year 1. Cash Flow2 is the cash flow at the end of year 2. The values for 1 Year Treasury and 2 Year Treasury reflect the scenario specific values from the forecast rates - interest rate data. Cash Flow1 is discounted at the 1 year Treasury rate, from the 1 year point of the forecast and Cash Flow2 is discounted at the 2 year Treasury rate, from the 2 year point of the forecast.

2.8 Forecast Original Term

The Forecast Original Term Method uses the forecasted Interest Rate Data to determine the discount factor.

Interest Rate Code = Treasury Yield Curve

The formula for the market value of the account is:


Market Value = Cash Flow1/ (1+ 2 Year Treasury Rate at the 1 year point in the forecast) + Cash Flow2/ ((1+ 2 Year Treasury Rate at the 2 year point in the forecast)^2)

Cash Flow1 is the Cash Flow at the end of year 1. Cash Flow2 is the cash flow at the end of year 2. Note that Cash Flow1 is discounted at the 2 year Treasury rate. The 2 Year rate is used with this method, because the Forecast Original Term method always uses the term equivalent to the original term of the instrument.

2.9 View and Edit Discount Method Rule

You can view existing Discount Method Rule, and you can edit existing Discount Method Rules, provided you have read/write privileges.


To view and edit a Discount Method Rule, follow these steps:

1. Navigate to the **Discount Method Summary page**.
2. Search for a Rule. For further information, see the [Searching for Rules](#) Section.
3. Click  in the **Action** column and select **View/Edit** to open the rule you want to update.
4. Update the rule details.
5. Click **Apply** or **Save**, depending on the rule type.

2.10 Copy Discount Method Rule

You can copy Discount Method Rules to avoid having to enter data multiple times. This saves time and effort and also reduces mistakes.

To copy a Discount Method Rule, follow these steps:

1. Navigate to the **Discount Method Summary page**.
2. Search for a Rule.
For more information, see the [Searching for Rules](#) Section.
3. Click  in the **Action** column and select **Save As** to duplicate the rule.
4. Select a folder where you want to save the rule copy.
5. Enter a unique name for the new rule.
6. (Optional) Enter a brief description of the rule.
7. Select the access type.
8. Click the **Save** button.

2.11 Delete Discount Method Rule

You can delete Discount Method Rules that are no longer required.


NOTE

A Discount Method Rule cannot be retrieved after deletion

Restrictions on deleting Discount Method Rules are:

- You cannot delete Discount Method Rules if you have only Read privileges. Only users with read/write privileges and pattern owners can delete Discount Method Rules.
- You cannot delete a Discount Method Rule that has a dependency.

To delete a Discount Method Rule, follow these steps:

1. Navigate to the **Discount Method Summary page**.
2. Search for a Rule.
For more information, see the [Searching for Rules](#) section.
3. Click  in the **Action** column and select **Delete**.

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