

Oracle Financial Services

Static Deterministic Process



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Contents

1 Get Help

1.1	Get Help in the Applications	1-1
1.2	Learn About Accessibility	1-1
1.3	Get Support	1-1
1.4	Get Training	1-1
1.5	Join Our Community	1-2
1.6	Share Your Feedback	1-2
1.7	Before You Begin	1-2

2 Static Deterministic Process

2.1	Static Deterministic Process Summary page	2-1
2.2	Search Static Deterministic Process	2-3
2.3	Create Static Deterministic Process	2-3
2.4	Executing Static Deterministic Process	2-12
2.4.1	Using Static Deterministic Process UI	2-12
2.4.2	Using Scheduler Service	2-13
2.5	View Static Deterministic Process Log	2-13

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.

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

Static Deterministic Process

This module discusses the procedure for creating and executing a Static Deterministic Process (existing business only). When all the required assumptions are defined, The processing performs the Static Cashflow Calculations and generates an aggregated result set. The process allows you to perform the following tasks:

- Determine the source data that you want to process and the modeling horizon
- Specify the calculation elements; Valuation, Income Simulation, Interest Rate and Liquidity Gaps
- Include the market rate forecast and behavioral assumptoins
- Define your output dimensions for aggregation, and/or output raw cashflows

Execute the Cash Flow Process and generate results.

Topics:

- [Static Deterministic Process Summary page](#)
- [Search Static Deterministic Process](#)
- [Create Static Deterministic Process](#)
- [Execute Static Deterministic Process](#)
- [View Static Deterministic Process log](#)

2.1 Static Deterministic Process Summary page

This page is the gateway to all Static Deterministic Processes and related functionality. You can navigate to other pages relating to Static Deterministic Process from this point.

The Static Deterministic Process Summary page displays the following columns:

Table 2-1 Static Deterministic Process – Fields and Descriptions

Column	Description
Name	Displays the Static Deterministic Process's short name.
Balance Sheet Source	Displays the instrument table selection for processing of data.
Last Run Date	Displays the Date and Time when Static Deterministic Process was run last.
Last Run By	Displays the Name of the user who last runs the Static Deterministic Process.
Reporting Currency	Displays the currency for consolidated results to be aggregated.
Folder	Displays the Folder name where the Static Deterministic Process is saved.

Table 2-1 (Cont.) Static Deterministic Process – Fields and Descriptions

Column	Description
Status	Displays the status of the Static Deterministic Process.
Action	Displays the list of actions that can be performed on the Static Deterministic Process . For more information, see Static Deterministic Process – Icons and Descriptions .

Figure 2-1 Static Deterministic Process Summary

ORACLE

Asset Liability Management Cloud Service

US-English

ALMQA ALMQA

Static Deterministic Process Summary

Folder: ALMSEG

Field Search

<input type="checkbox"/>	Name	Balance Sheet Source	Last Run Date	Last Run By	Reporting Currency	Folder	Status	Action
<input type="checkbox"/>	aggregation execution	Data Table	2023-01-04 14:23:30	ALMQA	US Dollar	ALMSEG	FAILED	...
<input type="checkbox"/>	Consolidation Process	Data Table	2023-01-04 13:45:55	ALMQA	US Dollar	ALMSEG	FAILED	...
<input type="checkbox"/>	discount method SDP	Data Table			US Dollar	ALMSEG	INCOMPLETE	...
<input type="checkbox"/>	SDP run execution	Data Table	2023-01-02 05:53:36	Sreedutt	US Dollar	ALMSEG	FAILED	...
<input type="checkbox"/>	SDP1	Data Table	2023-01-02 06:15:44	Sreedutt	None	ALMSEG	FAILED	...

The Action column on the Static Deterministic Process Summary page offers several actions that allow you to perform different functions. The following actions are available for the Static Deterministic Process.

Table 2-2 Static Deterministic Process – Icons and Descriptions

Column	Description
Refresh	Click Refresh to refresh the Summary page.
Add	Click Add icon to build a new Static Deterministic Process.
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 one rule at the same time.
Help	Click Help icon to view the Static Deterministic Process help.
View/Edit	Click on the Action icon against the Process Name and select View/Edit to view or edit the contents of a Static Deterministic in Read/Write format.
Save As	Click on the Action icon against the Process Name and select Save As to create a copy of an existing Static Deterministic Process.
Delete	Click on the Action icon against the Process Name and select Delete to delete an existing Static Deterministic Process.

Table 2-2 (Cont.) Static Deterministic Process – Icons and Descriptions

Column	Description
Run	Click on the Action icon against the Process Name and select Run to execute an existing Static Deterministic Process. After clicking Run, the Run Parameter Execution window is displayed. Select As of Date (Execution Date) and Legal Entity, and then click Ok. For more information, see Executing Static Deterministic Process section.
Execution Details	Click on the Action icon against the Process Name and select Executin Details to view execution details of the Static Deterministic Process.
Dependency Check	Reserved for future use.

2.2 Search Static Deterministic Process

Search for a Static Deterministic Process to perform any of the following tasks:

- View
- Edit
- Copy (Save As)
- Delete

Prerequisites

Predefined Static Deterministic Process

Procedure

To search the Static Deterministic Process , follow these steps:

1. Navigate to the Static Deterministic Process Summary page.
2. Enter the Name, Folder, Description, or Reporting Currency in Search Criteria.
3. Click the Search.

Only Static Deterministic Process that match the search criteria are displayed.

2.3 Create Static Deterministic Process

To create a new Static Deterministic Process, perform the following steps:

1. Navigate to the **Static Deterministic Process** Summary page.
2. Click Add . The **Create Static Deterministic Process** page is displayed.
3. Enter the details in the **Process Details** section.

Figure 2-2 Static Deterministic Process

01 Process Details Cancel Apply

Process Details Balance Sheet Selection Calculation Elements Markets And Behaviors Output Preferences Freeze Process

Let's give a name and do access management
Unique Name for the process will help to refer it later, in case you would like to come back and perform some operation on the same process.

Name Folder

Description

Access Type
☐ Read Only ☒ Read/Write
 Reporting Currency

Table 2-3 List of process details used for Creating Static Deterministic Process

Parameter	Description
Name	Enter the name of the Static Deterministic Process.
Folder	Select the Folder where the Static Deterministic Process needs to be saved.
Description	Enter the description of the Static Deterministic Process.
Access Type	Select the Access Type as Read-Only or Read/Write.
Reporting Currency	Select the currency for consolidation of results
Currency Provider	This field will be active once you select Reporting Currency. Select the Currency Provider as Default.

- Click **Apply** to navigate to the **Balance Sheet Selection** section.

Figure 2-3 Balance Sheet Selection

Process Details Balance Sheet Selection Calculation Elements Markets And Behaviors Output Preferences Freeze Process

Please select a balance sheet structure
Choose your balance sheet time periods and how you want to arrange your balance sheet for processing. You can also apply additional filters.

Select Time Bucket Rule
 Folder Time Bucket

Select a Balance Sheet Source

- Enter the Balance Sheet Structure details as shown in the following table:

Table 2-4 List of Balance Sheet Structure details used for Creating Static Deterministic Process

Parameter	Description
Time Bucket Rule Folder	Select the Folder from which you want to apply Time Bucket Rule.
Time Bucket Rule	Chose the time horizon/aggregation for process
Balance Sheet Source	Select the Balance Sheet Source from Balance Sheet Source drop-down list.

After selecting the Balance Sheet Source, Data Source details block is activated.

Figure 2-4 Data Source details of Balance Sheet Selection

Process Details Balance Sheet Selection Calculation Elements Markets And Behaviors Output Preferences Freeze Process

Please select the data source for processing

Select Data Source

Required

Apply Data Filter

Filter: ALMSEG

Filter

Apply Currency Filter

Currency Filter

Enter the Data Source details of Balance Sheet.

Table 2-5 Data Source details used for Creating Static Deterministic Process

Parameter	Description
Data Source	This field allows you to select the Instrument tables that must be included in a Static Deterministic Process. For example, Asset, Derivative, and so on.
Data Filter Folder	Select the Folder from which you want to apply Data Filter.
Data Filter	This field allows you to select a subset of data for processing by selecting a filter. You can select a filter that was previously created, or define a new filter on the fly.
Currency Filter	Optionally apply a currency filter on the selected data.

- Click **Apply** to navigate to the **Calculation Elements** section.

Figure 2-5 Calculation Elements

7. Enter the **Calculation Elements** details as shown in the following table:

Table 2-6 List of Calculation Elements details used for Creating Static Deterministic Process

Parameter	Description
Market Valuation	Select the Market Value, YTM, Duration, DV01/PV01 option if you want to perform present value (MV) calculatons. Discount method is required. You can select from predefiend rules, or create one on the fly.
Discount Method Folder	Select the folder from where discount rules are saved.
Discount Method	Select Discount Method you want to be applied to the process. refer to Discount Method section to set up Discount Method Rules. Also, following options are available when you click Action button next to Discount Method.

Figure 2-6 Discount Method

Repricing Gap

Click on Repricing Gap if you want to include Interest Rate gap risk measures. Note, this requires a time bucket with IR Gap buckets defined.

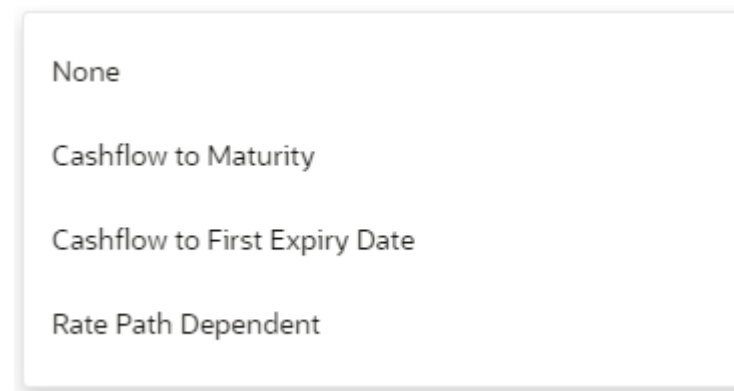
Table 2-6 (Cont.) List of Calculation Elements details used for Creating Static Deterministic Process

Parameter	Description
Include Non- Rate Sensitive Bucket	<p>Include Non Rate Sensitive Bucket check-box gets enabled when 'Repricing Gap' is selected. The Attribute of product dimension 'Interest Rate Sensitivity Category' identifies products as Interest Rate sensitive or Non Interest Rate sensitive. Once 'Include Non Rate Sensitive Bucket' is enabled, reprice gap output of Products which are mapped as Non Interest Rate sensitive, would move into Non Interest Rate Sensitive bucket.</p> <p>For more information on Non Interest Rate Sensitive Bucket, see Time Buckets If 'Include Non Rate Sensitive Bucket' is not enabled, engine will ignore 'Interest Rate Sensitivity Category' product attribute, and would treat all products as Interest Rate Sensitive. Reprice Gap output would move into respective Reprice Gap buckets.</p>
Calculate Margin Cash Flow After Initial Reprice	<p>If 'Calculate Margin cashflows as After Initial Reprice' is enabled, the engine will use the margin of adjustable rate instruments to continue generating interest cash flows after a gap repricing event up until total runoff occurs.</p>
Liquidity Gap	<p>Select the Liquidity Gap if you want to include liquidity gap risk measures. Note, this requires a time bucket with LR gap buckets defined.</p>
Enable Holiday Calendar	<p>If you enable Holiday Calendar cash flow dates falling on a holiday get adjusted as per defined conventions. Holiday calendar criteria is defined on the instruments.</p>

Table 2-6 (Cont.) List of Calculation Elements details used for Creating Static Deterministic Process

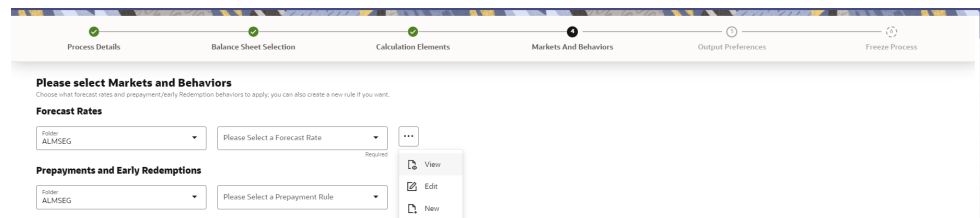
Parameter	Description
Embedded Option Decisioning	<p>If your processed data contains fixed rate bonds with embedded embedded options, you can chose the bahavior of the option to force it to maturity of the insuruemnt, force it to first option expiry date, or let it be rate path dependent.</p> <p>This drop-down has following options:</p>

Figure 2-7 Embedded Option Decisioning



- Click **Apply** to navigate to the **Markets and Behaviors** section.

Figure 2-8 Markets and Behaviors



- Enter the **Calculation Elements** details as shown in the following table:

Table 2-7 List of Market and Behavior details used for Creating Static Deterministic Process

Parameter	Description
Forecast Rates	Select the Folder and Forecast Rates Rule you want to be applied to the process. See Forecast Rate Scenarios to define rate scenarios.
Prepayment Rules and Early Redemptions	Select the Folder and Prepayment Rule you want to be applied during cash flow calculation. See Prepayment , to set up Prepayment Methods. This is an optional step.

Figure 2-9 Forecast Rates

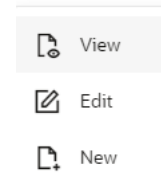
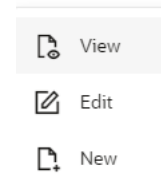


Figure 2-10 Prepayment Rules



- Enter the following details in **Other Behavioral Characteristics** sub-section of **Market and Behaviors** section.

Figure 2-11 Other Behavioral Characteristics

Other Behavioral Characteristics

Hierarchy:

<input type="checkbox"/> Product %	Currency %	Model With Gross Rates %	Interest Credited %	Currency Gain/Loss %
No data to display.				

Table 2-8 Product Characteristics details used for Creating Static Deterministic Process

Parameter	Description
Product Hierarchy Folder	You can specify additional processing parameters at a product-currency level. Select the Folder from the Product Hierarchy Folder list.
Product Hierarchy	Select the Product Hierarchy on which you want to specify parameters. To add a Product Hierarchy, follow these steps: <ol style="list-style-type: none">Click Open Hierarchy Browser button next to the Hierarchy field.Select one or more products using the corresponding check-box and click Done.

11. After clicking **Add**, the list of product is displayed with the following details:

Table 2-9 Product details used for Creating Static Deterministic Process

Parameter	Description
Product	Shows the selected product details.
Currency	Shows the currency of the selected product.
Interest Credited	Yes or No status of Interest Credited. This option shows the interest payments to be capitalized as principal on simple or non-amortizing instruments.
Model With Gross Rates	If the institution has outsourced loan serving rights for some of the assets (most typically mortgages), the rates paid by customers on those assets (gross rates) are greater than the rates received by the bank (net rates). For these instruments, both a net and gross rate is calculated within the cash flow engine and both gross and net rate financial elements are the output. The gross rate is used for prepayment and amortization calculations. The net rate is used for income simulation and the calculation of retained earnings in the auto-balancing process.
Currency Gain/Loss	If you are consolidating to a reporting currency, select one of the following methods Historical, Temporal or Current Rate. See Currency Gain Loss Basis for more details.

12. Click **Apply** to navigate to the **Output Preferences** section.

Figure 2-12 Output Preferences

13. Enter the **Output Preferences** details shown in the following table.

Table 2-10 List of Output Preferences details used for Creating Static Deterministic Process

Parameter	Description
Output Dimensions	Start by typing any key processing dimension in the text box. A list of KPD's will appear and you can select up to 10 for consolidation.
Detailed Cash Flow	<p>Check the box to record the instrument detail cash flows occurring for the desired number of records processed. For each record, daily cashflow and market value results are written to the FSI_ALM_CASHFLOW_OUTPUT_HIST and FSI_ALM_CASHFLOW_DYN_MV_OUTPUT_HIST tables.</p> <p>Select the desired number of Records in the dialog box or select all records to be output. NOTE - the number of records output directly impact processing time. It is recommended to use this as an audit function only, with few records chosen.</p>
Forecast Interest Rates	Select the Interest Rate Curves for which you want the engine to write forecasted interest rates in the database table.

Table 2-10 (Cont.) List of Output Preferences details used for Creating Static Deterministic Process

Parameter	Description
Forecast Exchange Rate	Select the Exchange Rates for which you want the engine to write forecasted exchange rates in the database table.
Forecast Economic Indicators	Select the Economic Indicators for which you want the engine to write forecasted interest rates in the database table.

14. Click **Apply** to navigate to the **Freeze Process** section.

Figure 2-13 Freeze Process

15. Verify the changes and click **Save**.

2.4 Executing Static Deterministic Process

You can execute Static Deterministic process using following methods:

- [Static Deterministic Process UI](#)
- [Scheduler Service](#)

2.4.1 Using Static Deterministic Process UI

To execute the Static Deterministic process, follow these steps:

1. Navigate to the Static Deterministic Process Summary page.
2. Search for a Static Deterministic Process.
3. Click in the Action column and select Run to execute an existing Static Deterministic Process. The Run Parameter Execution window is displayed.

4. Select the As of Date (Execution Date) and Legal Entity, and then click Ok.
5. The Static Deterministic Run Confirmation page is displayed. The status of the process is displayed in the Status column. After completion of the process, you can navigate to the Execution Details page by selecting the Execution Details option under the Action column.

2.4.2 Using Scheduler Service

To execute the Static Deterministic Process, follow these steps:

1. Navigate to Operations and Processes menu, and select Scheduler.
2. Define a new batch.
3. Enter the Batch Name and Description, and then Save the batch.
4. To add a task, navigate to Define Task.
5. Select the Batch from Batch drop-down list on Define Task window.
6. Click the Add button.
7. Define the task with below details:
 - Task Code: This can be same as the Process ID of ALM Static Deterministic Process or something else.
 - Task Name: This can be same as name of the ALM Static Deterministic Process or something else.
 - Task Description: This can be same a name of the ALM Static Deterministic Process or something else.
 - Task Type: REST
 - Component: ALM Static Deterministic Process
 - Process Name: Select one value from the list.
 - Legal Entity Hierarchy: Select one value from the list.
 - Legal Entity: Select one value from the list.
8. Save and Execute the batch with Batch ID and MIS Date.

For more information, see the [Scheduler Service](#).

2.5 View Static Deterministic Process Log

To view the execution details of the Static Deterministic Process, follow these steps:

1. Navigate to the Static Deterministic Process Summary page.
2. Search for a Static Deterministic Process.
3. Click on the Action icon against the Process Name and select Execution Details. The **Execution Details** window is displayed.
4. Click any **Execution ID** to view the log details. The **Log Viewer** window shows the complete details of process along with Batch Run ID information.