

Nasdaq Calypso

Rate Reset and Price Fixing Version 18

Revision 1.0 February 2024 Approved



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Document History

Revision	Published	Summary of Changes
1.0	February 2024	First revision for version 18.

The following windows allow setting rates and fixing prices:

- The Rate Reset window allows resetting floating rates.
- The FX Rate Reset window allows fixing FX rates for FX NDF trades and FX trades that have central rate fixings.
- The Price Fixing window allows fixing prices for commodity resets and equity derivatives trades.



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1. Rate Reset

The Rate Reset window allows resetting floating rates. This is a two-step process:

- You first review and enter the reset rates
- Then you apply the rates to the corresponding flows

You can also use the RATE_RESET scheduled task.

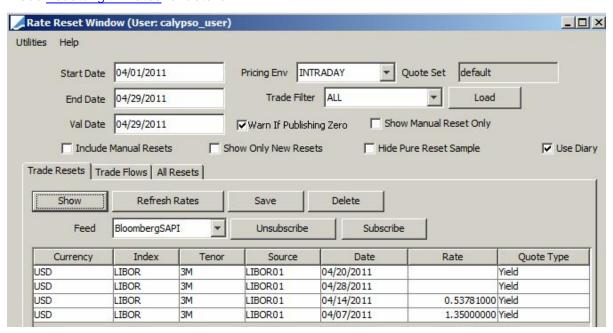
1.1 Resetting a Rate

From the Calypso Navigator, navigate to **Trade Lifecycle > Reset > Rate Reset** (menu action reporting.RateResetFrame).

When you open the Rate Reset window, the Trade Resets panel is selected by default. It allows setting rates for trades that require rate reset.

To set reset rates rate indices regardless of whether it is used in a trade or not, select the All Resets panel.

► See Resetting All Rates for details.



» Enter selection criteria and click **Load** to load trades that require rate reset during the selected period. You would typically load the trades that require rate reset today.

Note that when the first reset is set on a trade, the corresponding cashflow will not appear in the Rate Reset window.

"Use Diary" option - See "Using the Diary Engine" below for details.



The following indicators apply to flows displayed in the Trade Flows panel:

- "Warn If Publishing Zero" Check to get a warning upon publishing rates set to 0. Uncheck otherwise.
- "Show Manual Reset Only" Check to display only flows that were reset manually in the trade windows (customized cashflow). In order to display manual resets, you also need to check "Include Manual Resets".
 Uncheck otherwise.
- "Use Fallback Rates" Set to true to use fallback rates on the Fallback Observation Date for Libor trades that will not be migrated by the Libor cessation date It only applies if the rate index is defined with IndexCalculator = FallbackISDA. Please refer to Calypso Getting Started documentation for complete details on setting up the rate index for fallback pricing and resetting.
 - The checkboxes Show Manual Reset Only, Include Manual Resets, and Use Diary should be unchecked when Use Fallback Rates is checked. When Use Fallback Rates is checked, the All Resets tab is disabled.
- "Include Manual Resets" Check to display flows that were reset manually in the trade windows (customized cashflow) in addition to flows that need reset. Uncheck otherwise.
- "Show Only New Resets" Check to display only flows that have not yet been reset.
- "Hide Pure Reset Sample" Check to only display simple flows and not compounded flows. Uncheck otherwise.
- » Click **Show** to display the rates that need to be reset.

If the rates are already populated, they will appear. You can click **Refresh Rates** to get the latest rates.

To subscribe to a source feed, click **Subscribe**. The rates will be populated accordingly.

Or you can enter the rates directly.

» Click **Save** to save the rates.

The rates can be viewed in the trades' cashflows.

Notional	Rate	Interest Amt	Spread	Reset	Fwd Begin	Fwd End	Pmt Begin	Pmt End
97,500.00	3.22000	776.15	0.00000	01/30/2007	02/01/2007	05/01/2007	02/01/2007	05/01/2007

Using the Diary Engine

The Diary engine allows recording trade lifecycle events such as rate resets for all the trades in the system.

If the Diary engine is configured to subscribe to trade events, the "Use Diary" checkbox is checked by default. In that case, the system only loads trades that have diary entries, for optimization purposes. This requires the Diary engine to be running.

▶ Refer to Calypso Trade Diary documentation for details on running the Diary engine.

You can clear the checkbox if you do not want to use the Diary engine.

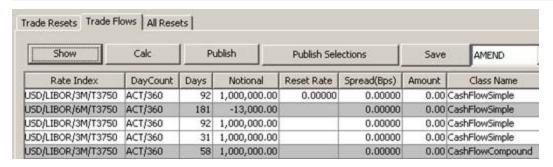
1.2 Applying a Reset Rate

Select the Trade Flows panel and click **Show** to display the actual flows that need reset.





[NOTE: Trade flows highlighted in gray, correspond to customized trade flows]



» Click **Calc** to apply the rates to the flows. The rate amount will be calculated.

For a specific reset, or a manual reset, the rate is retrieved from the trade.

» Click **Publish** to update the corresponding transfers.

The system publishes RATE_RESET events. The Transfer engine subscribes to these events to modify the corresponding transfers (make sure that the step PENDING - AMEND - PENDING is configured in the transfer workflow). The Message engine subscribes to these events to generate Rate Reset notices (provided message configurations are defined). The Accounting engine subscribe to these events to generate rate reset postings.

You can also select a set of flows and click Publish Selections.

When the environment property CHECK_SAME_USER_RATE_RESET_PUBLISH is set to true, a user is not allowed to publish a rate that he or she has saved. Another user must publish the rates.

[NOTE: The Save button and action are used for terminating conditional trades only. This applies to flexible and chooser cap floors once they reach their number of uses – See Resetting Flexible and Chooser Cap Floors for details]

1.3 Resetting Flexible and Chooser Cap Floors

1.3.1 Flexible Cap Floor

When resetting a flexible cap floor, you will notice that the Exercise box is checked by default, and you should keep it this way. As long as the number of uses is not reached, the Terminable column indicates "No".



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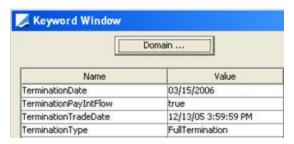


» Publish the rates, then select an action (AMEND, UPDATE, or a custom action) and click **Save**. The number of uses will be updated on the trade.

After the number of uses has been reached, the Terminable column will indicate "Yes".



» After you have published the rates, select an action (AMEND, UPDATE, or a custom action) and click Save to terminate the cap floor. The trade will move to status TERMINATED and the termination keywords will be populated.

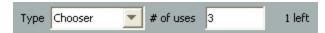


1.3.2 Chooser Cap Floor

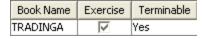
When resetting a chooser cap floor, you can decide if you want to use the cap floor or not. As long as the number of uses is not reached, the Terminable column indicates "No".



» Publish the rates. If you want to exercise the cap floor, check the Exercise checkbox, select an action (AMEND, UPDATE, or a custom action) and click **Save**. The number of uses will be updated on the trade.



After the number of uses has been reached, the Terminable column will indicate "Yes".



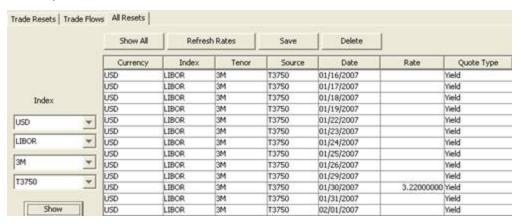
» Publish the rates. If you want to exercise the cap floor, check the Exercise checkbox, select an action (AMEND, UPDATE, or a custom action) and click Save. The trade will move to status TERMINATED and the termination keywords will be populated.





1.4 Resetting all Rates

To reset or review all rates defined in the system, regardless of whether they are used in trades or not, select the All Resets panel.



- » Select a rate index from the Index field, and click **Show**. You can enter the rate for every day within the selected period.
- » You can also click **Show All** to display all rate indices defined in the system.

1.5 Utilities Menu

The menu items of the Utilities menu are described below.

Menu Items	Description
Configure Columns	To open the Configure Columns window that allows you to select what columns you want to display, and to specify the order in which you want to display the columns.
Configure Sort	To open the Selector window that allows you to select sort columns and the sort order. Only columns that have been selected for display can be used for sorting.
Sort	To sort according to the selected sort configuration.
Export to HTML	To export the panel currently selected to an HTML file.
Export to Excel	To export the panel currently selected to an Excel file.



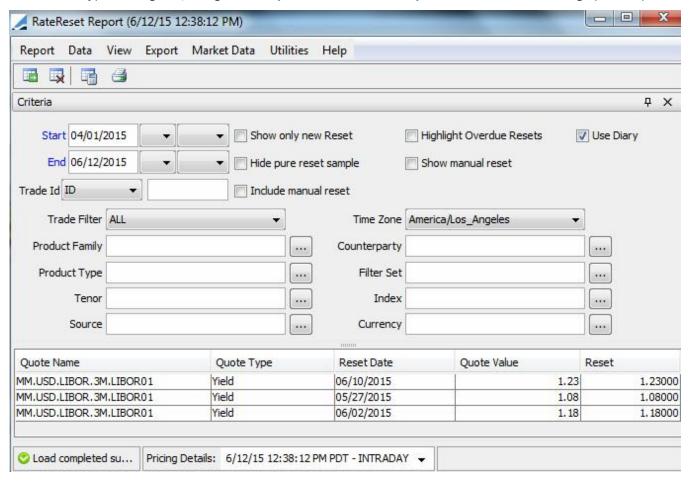
Menu Items	Description
Print	To print the panel currently selected.
Print Landscape	To print the panel currently selected.
Ensure Postings	This menu item operates as a checkbox.
Loaded	Check to ensure that all postings for the selected trades are pre-loaded in the Data Server so that the accounting matching process is faster. This only applies if you generate postings for RATE_RESET events.
Close	To close the Rate Reset window.
Secondary Market	This menu item operates as a checkbox.
Processing	Check to enable processing for secondary market products. Rate reset is done by position rather than by trade. A PSEventCARateReset is generated per position. The flows in the Trade Flows panel correspond to positions.
	Otherwise, secondary market products will be reset trade by trade.



2. Rate Reset Report

This document describes how to use the Rate Reset report. The Rate Reset report displays upcoming resets for a single day or over a period.

From the Calypso Navigator, navigate to Reports > Rate Reset Reports > Rate Reset to bring up the report.



[NOTE: The columns can be configured. Sort columns, subheadings and subtotals have to be explicitly specified. See Help > Menu Itemsfor details]

- » You can change the pricing details at the bottom of the window By default, the pricing environment comes from the User Defaults, and the valuation date is the current date and time.
- » You can check / uncheck View > Show Frame > Criteria to display / hide the search criteria.
- » Specify search criteria as applicable and click 🛅 to load the corresponding trades that need to be reset.

[NOTE: The Start and End dates are mandatory]

- "Use Diary" option See "Using the Diary Engine" below for details.
- "Show Only New Reset" Check to display only flows that have not yet been reset.



- "Hide Pure Reset Sample" Check to only display simple flows and not compounded flows. Uncheck otherwise.
- "Highlight Overdue Resets" Check to highlight flows for which the reset is overdue.
- "Show Manual Reset" Check to display only flows that were reset manually in the trade windows (customized cashflow). In order to display manual resets, you also need to check "Include Manual Reset".
 Uncheck otherwise.
- "Include Manual Reset" Check to display flows that were reset manually in the trade windows (customized cashflow) in addition to flows that need reset. Uncheck otherwise.
- » You can select a template, and click to display the number of objects that will be loaded from the database, before loading the report.
- » You can click do print the report results.
 - Note that for the Pivot view and the Aggregation view, the print icon is disabled.
 - You can use [Ctrl+P] or [Ctrl+L] to print the report, or you can export the report to Excel and print it from there.

Using the Diary Engine

The Diary engine allows recording trade lifecycle events such as rate resets for all the trades in the system.

If the Diary engine is configured to subscribe to trade events, the "Use Diary" checkbox is checked by default. In that case, the system only loads trades that have diary entries, for optimization purposes. This requires the Diary engine to be running.

Refer to Calypso Trade Diary documentation for details on running the Diary engine.

You can clear the checkbox if you do not want to use the Diary engine.

Rate Reset Report Results

The information displayed in this report matches the data displayed in the Rate Reset Window for the same date.

You can click any column heading to sort the results based on that column.

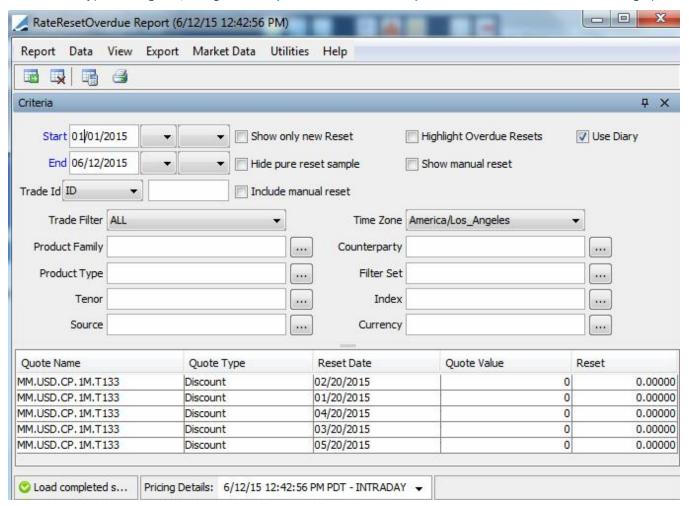
You can right-click any row to invoke the functions of the report menus. See **Help > Menu Items** for details.



3. Rate Reset Overdue Report

This document describes how to use the Rate Reset Overdue report. The Rate Reset Overdue report displays reset rates that have not been set for a single day or over a period.

From the Calypso Navigator, navigate to Reports > Rate Reset Reports > Rate Reset Overdue to bring up the report.



[NOTE: The columns can be configured. Sort columns, subheadings and subtotals have to be explicitly specified. See Help > Menu Itemsfor details]

- » You can change the pricing details at the bottom of the window By default, the pricing environment comes from the User Defaults, and the valuation date is the current date and time.
- » You can check / uncheck View > Show Frame > Criteria to display / hide the search criteria.
- » Specify search criteria as applicable and click 🛅 to load the corresponding trades that need to be reset.

[NOTE: The Start and End dates are mandatory]

"Use Diary" option - See "Using the Diary Engine" below for details.



- "Show Only New Reset" Check to display only flows that have not yet been reset.
- "Hide Pure Reset Sample" Check to only display simple flows and not compounded flows. Uncheck otherwise.
- "Highlight Overdue Resets" Check to highlight flows for which the reset is overdue.
- "Show Manual Reset" Check to display only flows that were reset manually in the trade windows (customized cashflow). In order to display manual resets, you also need to check "Include Manual Reset".
 Uncheck otherwise.
- "Include Manual Reset" Check to display flows that were reset manually in the trade windows (customized cashflow) in addition to flows that need reset. Uncheck otherwise.
- » You can select a template, and click to display the number of objects that will be loaded from the database, before loading the report.
- » You can click do print the report results.
 - Note that for the Pivot view and the Aggregation view, the print icon is disabled.
 - You can use [Ctrl+P] or [Ctrl+L] to print the report, or you can export the report to Excel and print it from there.

Using the Diary Engine

The Diary engine allows recording trade lifecycle events such as rate resets for all the trades in the system.

If the Diary engine is configured to subscribe to trade events, the "Use Diary" checkbox is checked by default. In that case, the system only loads trades that have diary entries, for optimization purposes. This requires the Diary engine to be running.

▶ Refer to Calypso Trade Diary documentation for details on running the Diary engine.

You can clear the checkbox if you do not want to use the Diary engine.

Rate Reset Overdue Report Results

You can click any column heading to sort the results based on that column.

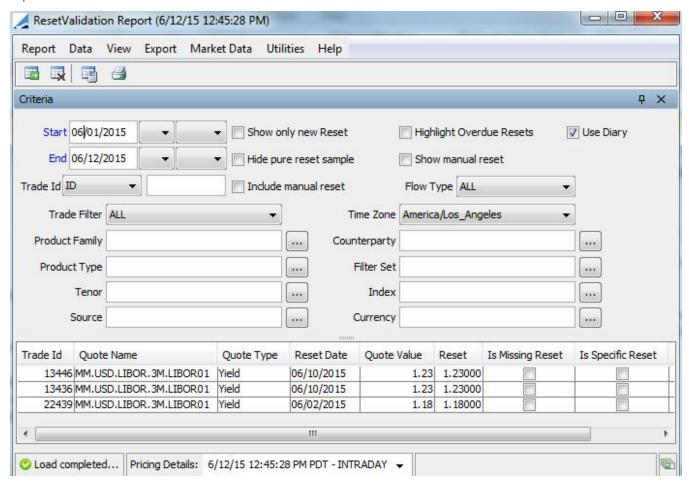
You can right-click any row to invoke the functions of the report menus. See **Help > Menu Items** for details.



4. Rate Reset Validation Report

This document describes how to use the Rate Reset Validation report. The Validation Report displays information related to rate reset that have been entered and authorized through the Rate Reset process.

From the Calypso Navigator, navigate to **Reports > Rate Reset Reports > Rate Reset Validation** to bring up the report.



[NOTE: The columns can be configured. Sort columns, subheadings and subtotals have to be explicitly specified. See Help > Menu Itemsfor details]

- » You can change the pricing details at the bottom of the window By default, the pricing environment comes from the User Defaults, and the valuation date is the current date and time.
- » You can check / uncheck View > Show Frame > Criteria to display / hide the search criteria.
- » Specify search criteria as applicable and click 🖬 to load the corresponding trades that have been reset.

[NOTE: The Start and End dates are mandatory]

- "Use Diary" option - See "Using the Diary Engine" below for details.



- "Show Only New Reset" Check to display only flows that have not yet been reset.
- "Hide Pure Reset Sample" Check to only display simple flows and not compounded flows. Uncheck otherwise.
- "Highlight Overdue Resets" Check to highlight flows for which the reset is overdue.
- "Show Manual Reset" Check to display only flows that were reset manually in the trade windows (customized cashflow). In order to display manual resets, you also need to check "Include Manual Reset". Uncheck otherwise.
- "Include Manual Reset" Check to display flows that were reset manually in the trade windows (customized cashflow) in addition to flows that need reset. Uncheck otherwise.
- » You can select a template, and click to display the number of objects that will be loaded from the database, before loading the report.
- » You can click do print the report results.
 - Note that for the Pivot view and the Aggregation view, the print icon is disabled.
 - You can use [Ctrl+P] or [Ctrl+L] to print the report, or you can export the report to Excel and print it from there.

Using the Diary Engine

The Diary engine allows recording trade lifecycle events such as rate resets for all the trades in the system.

If the Diary engine is configured to subscribe to trade events, the "Use Diary" checkbox is checked by default. In that case, the system only loads trades that have diary entries, for optimization purposes. This requires the Diary engine to be running.

▶ Refer to Calypso Trade Diary documentation for details on running the Diary engine.

You can clear the checkbox if you do not want to use the Diary engine.

Rate Reset Validation Report Results

You can click any column heading to sort the results based on that column.

You can right-click any row to invoke the functions of the report menus. See **Help > Menu Items** for details.



5. FX Rate Reset

The FX Rate Reset window allows fixing FX rates for FX NDF trades and FX trades that have central rate fixings. This is a two-step process:

- You first review and enter the FX rates
- Then you apply the rates to the corresponding flows

You can also use the FX_RATE_RESET scheduled task.

You can run the FX Rate Reset report to display FX reset requirements for today - From the Calypso Navigator, navigate to Reports > Rate Reset Reports > Rate Reset Report (menu action reporting.ReportWindow\$FXRateReset).

5.1 Setup Requirements

5.1.1 Workflow

Configure RATERESET as a workflow Action, if not already configured. To do this, add RATERESET to the *tradeAction* domain value.

Be sure that the task PENDING - AMEND - PENDING is configured in the transfer workflow.

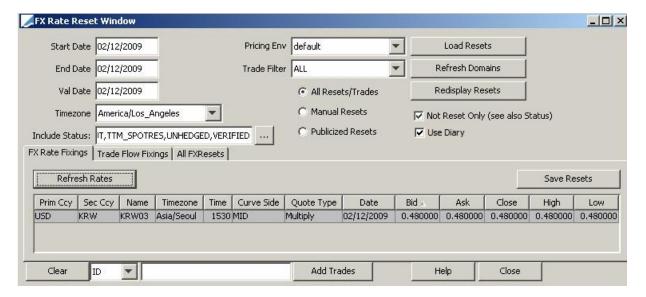
5.1.2 Events

Make sure that the following engines subscribe to PSEventFXRateReset: Accounting engine, Diary engine, Message engine, Position engine, and Transfer engine.

5.2 Setting FX Rates

From the Calypso Navigator, navigate to **Trade Lifecycle > Reset > FX Rate Reset** to reset today's FX rates.





- » Select a pricing environment and a trade filter.
- » Click **Load Resets** to display the FX rates that need to be fixed today.

"Use Diary" option - See "Using the Diary Engine" below for details.

The FX Rate Fixings panel displays the rates that require resetting.

- » Enter the rates.
- » Click Save Resets.

The rates can be viewed in the trades' cashflows.



Forward Starting FX Options

If the calculated strike for Fwd Starting FX options is manually amended, the trade keyword "FXResetInput" is set to "Manual".

Using the Diary Engine

The Diary engine allows recording expected trade lifecycle events such as FX rate resets for all the trades in the system.



If the Diary engine is configured to subscribe to trade events, the "Use Diary" checkbox is checked by default. In that case, the system only loads trades that have diary entries, for optimization purposes. This requires the Diary engine to be running.

▶ Refer to Calypso Trade Diary documentation for details on running the Diary engine.

You can clear the checkbox if you do not want to use the Diary engine.

5.3 Applying FX Rates

Select the Trade Flow Fixings panel.



- » Select the trades you want to reset, and click **Calculate** to compute the settlement amount.
 - The application automatically checks the "Need Save" and "Need Publish" checkboxes.
- » You can select an action to apply to the trades, it is AMEND by default.
 - You can set the default action in domain "fxRateResetAction" FXRESET for example.
 - You can click **Set All** to apply the action to all trades.
- » Click **Publish** to update the corresponding transfers.
 - The system publishes FX_RATE_RESET events. The Transfer engine subscribes to these events to modify the corresponding transfers (make sure that the step PENDING AMEND PENDING is configured in the transfer workflow). The Message engine subscribes to these events to generate FX Rate Reset notices (provided message configurations are defined). The Accounting engine subscribe to these events to generate rate reset postings.

You can also select a set of flows and click Publish Selections.

When the environment property CHECK_SAME_USER_RATE_RESET_PUBLISH is set to true, a user is not allowed to publish a rate that he or she has saved. Another user must publish the rates.

» Click Save Trades to amend the trades.

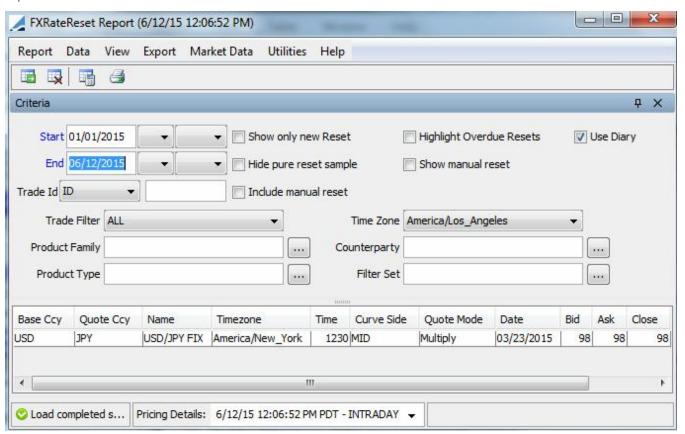
You can view the updated transfers in the BO Browser.



6. FX Rate Reset Report

This document describes how to use the Rate Reset report. The FX Rate Reset Report displays FX reset requirements for a single day or over a period.

From the Calypso Navigator, navigate to **Reports > Rate Reset Reports > FX Rate Reset Report** to bring up the report.



[NOTE: The columns can be configured. Sort columns, subheadings and subtotals have to be explicitly specified. See Help > Menu Itemsfor details]

- » You can change the pricing details at the bottom of the window By default, the pricing environment comes from the User Defaults, and the valuation date is the current date and time.
- » You can check / uncheck View > Show Frame > Criteria to display / hide the search criteria.
- » Specify search criteria as applicable and click 🛅 to load the corresponding trades that need to be reset.

[NOTE: The Start and End dates are mandatory]

- "Use Diary" option See "Using the Diary Engine" below for details.
- "Show Only New Reset" Check to display only flows that have not yet been reset.



- "Hide Pure Reset Sample" Check to only display simple flows and not compounded flows. Uncheck otherwise.
- "Highlight Overdue Resets" Check to highlight flows for which the reset is overdue.
- "Show Manual Reset" Check to display only flows that were reset manually in the trade windows (customized cashflow). In order to display manual resets, you also need to check "Include Manual Reset".
 Uncheck otherwise.
- "Include Manual Reset" Check to display flows that were reset manually in the trade windows (customized cashflow) in addition to flows that need reset. Uncheck otherwise.
- » You can select a template, and click to display the number of objects that will be loaded from the database, before loading the report.
- » You can click do print the report results.
 - Note that for the Pivot view and the Aggregation view, the print icon is disabled.
 - You can use [Ctrl+P] or [Ctrl+L] to print the report, or you can export the report to Excel and print it from there.

Using the Diary Engine

The Diary engine allows recording trade lifecycle events such as rate resets for all the trades in the system.

If the Diary engine is configured to subscribe to trade events, the "Use Diary" checkbox is checked by default. In that case, the system only loads trades that have diary entries, for optimization purposes. This requires the Diary engine to be running.

▶ Refer to Calypso Trade Diary documentation for details on running the Diary engine.

You can clear the checkbox if you do not want to use the Diary engine.

FX Rate Reset Report Results

The information displayed in this report matches the data displayed in the FX Rate Reset Window for the same date.

You can click any column heading to sort the results based on that column.

You can right-click any row to invoke the functions of the report menus. See **Help > Menu Items** for details.

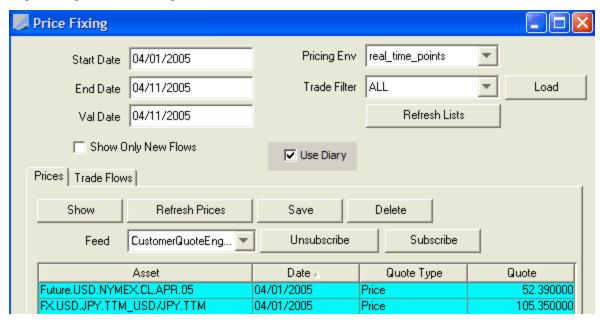


7. Price Fixing

Use the price fixing process to fix prices and apply them to the cashflows. This applies to commodity resets, and equity derivatives trades.

Note that you can also set the FX quotes required in the price fixing of cross-currency trades, and the price fixing of precious metal trades.

From the Calypso Navigator, navigate to **Trade Lifecycle > Reset > Price Fixing** (menu action reporting.PriceFixingFrame).



The Price Fixing Window contains two panels. The Prices panel gives you a summary of all the Prices in the system for your chosen period. The Trade Flows panel shows you only the cashflows for which saved trades require Prices within your specified period.

To work in the spreadsheet tables, click any row to highlight it, and double-click any cell to edit it. Rows that you have edited but not saved will be shown in blue-green. Rows that you have saved will be shown in yellow.

• Prices Panel — Set the criteria in the top of the window and click **Load**. The Prices panel displays all of the prices and FX quotes that require setting, according to the criteria that you specified. You can get the price from a feed or enter it manually.

"Use Diary" option - See "Using the Diary Engine" below for details.

Select the feed from the drop-down menu and click Subscribe.

Enter the price in the Quote field. Click **Save** to save the price to the quote set.

Trade Flows — Calculate and apply the amount for the cashflows.

Click **Show** to display the flows requiring resetting.



Click Calc to calculate the amount of the cashflows.

Click **Publish** to apply the prices to the cashflows. This also generates payments and advices for approval in the Task Station.

Click **Publish Selections** to apply the prices to the selected flows only.

Using the Diary Engine

The Diary engine allows recording expected trade lifecycle events such as price fixings for all the trades in the system.

If the Diary engine is configured to subscribe to trade events, the "Use Diary" checkbox is checked by default. In that case, the system only loads trades that have diary entries, for optimization purposes. This requires the Diary engine to be running.

▶ Refer to Calypso Trade Diary documentation for details on running the Diary engine.

You can clear the checkbox if you do not want to use the Diary engine.

[NOTE: You may also set up and run the PRICE_FIXING scheduled task]