



# Nasdaq Calypso

## Pricing Sheet Setup Guide

### Version 18

Revision 2.0

September 2024

Approved

Copyright © September 2024, Nasdaq, Inc. All rights reserved. All content in this document is owned, or licensed, by Nasdaq, Inc. or its affiliates ('Nasdaq'). Unauthorized use is prohibited without written permission of Nasdaq. While reasonable efforts have been made to ensure that the contents of this document are accurate, the document is provided strictly "as is", and no warranties of accuracy are given concerning the contents of the information contained in this document, including any warranty that the document will be kept up to date. Nasdaq reserves the right to change details in this document without notice. To the extent permitted by law no liability (including liability to any person by reason of negligence) will be accepted by Nasdaq or its employees for any direct or indirect loss or damage caused by omissions from or inaccuracies in this document. The Pricing Sheet window allows capturing and pricing trades using predefined strategies.

### Document History

Revision	Published	Summary of Changes
1.0	February 2024	First revision for version 18.
2.0	September 2024	Second revision for version 18 - Updated Strategy Persistence Options.

**This document guides you through the setup of the Pricing Sheet.**

# Table of Contents

<b>1. Pricing Sheet Setup Guide Overview</b>	<b>5</b>
<b>2. Pricing Sheet Access Permissions</b>	<b>7</b>
<b>3. Out-of-the-box Strategies</b>	<b>9</b>
<b>4. Configuring Profiles</b>	<b>16</b>
<b>4.1 Profile Configuration</b>	<b>16</b>
4.1.1 Products	17
4.1.2 Properties	18
4.1.3 Layout Panel	20
4.1.4 Display Groups Panel	21
4.1.5 Pricer Measures	22
4.1.6 Users Panel	23
<b>4.2 Profile Administration</b>	<b>24</b>
4.2.1 Profiles Panel	24
4.2.2 Strategies Panel	26
<b>5. Capturing Trades</b>	<b>28</b>
5.1 "Trade" Properties	29
5.2 Manipulating Strategy Templates	35
5.3 "Product: Amount" Properties	36
5.4 "Product: Style" Properties	36
5.5 "Product: Info" Properties	40
5.6 "Product: Rate" Properties	41
5.7 "Product: Barrier" Properties	45
5.8 "Product: Trigger" Properties	47
5.9 "Product: Payment" Properties	50
5.10 "Product: Settlement" Properties	54
5.11 "Date" Properties	55
5.12 "Market Data" Properties	57
5.13 "Price" Properties	58
5.14 "Solver" Properties	61
5.15 "Dealt Data" Properties	62
5.16 "Keyword" Properties	63
5.17 "Pricer" Properties	63
5.18 "Product: Cliquet" Properties	64

5.19 "Product: Chooser" Properties .....	64
5.20 "Product: Commodity" Properties .....	64
5.21 Cash Settle Info .....	65
5.22 Trade Drilldown .....	69
<b>6. Setting User Preferences .....</b>	<b>71</b>
6.1 Defaults Panel .....	71
6.2 Pricer Measures Panel .....	76
6.3 Cash Flows Panel .....	78
6.4 Toolbar Panel .....	78
6.5 Display Panel .....	79
6.6 Open Trades Panel .....	80
<b>7. Setting Global Preferences .....</b>	<b>82</b>
7.1 Default Strategy Tab .....	82
7.2 Ad Hoc Strategy Persistence .....	82
<b>8. Building Custom Strategies .....</b>	<b>84</b>
8.1 Creating Custom Strategies .....	84
8.2 Leg Links .....	85
8.3 Strategy Attributes .....	86
8.4 Fee Configuration .....	89
8.5 Strategy Persistence .....	90
8.6 Strategy Templates .....	92
8.7 Pricing Script Trade in the Pricing Sheet .....	94
8.7.1 Trading with the Pricing Script in the Pricing Sheet .....	95
8.7.2 Pricing Script Lifecycle Events .....	97
8.8 Exotic Structure Trades in the Pricing Sheet .....	97
8.9 Sample Usage .....	98

# 1. Pricing Sheet Setup Guide Overview

The Pricing Sheet window allows capturing and pricing trades using predefined strategies.

The Pricing Sheet window may contain multiple pricing sheets. Each pricing sheet may contain multiple trades based on the selected strategy. Pricing Sheets are created on-the-fly, however the configuration is stored by profile for a set of users or user groups.

► See [Out-of-the-box Strategies](#) for information on the types of trades supported in the pricing sheet.

**[NOTE: The configuration of profiles is completely independent from the actual trade capture, and needs to be performed prior to capturing and pricing trades]**

## Before you Begin

- Define access permissions as needed from the Calypso Navigator using **Configuration > User Access Control > Access Permissions**.  
► See [Access Permissions](#) for details.
- Set the 5PM rule on books and pricing environments as needed.  
► Please refer to Calypso 5PM Rule documentation for details.
- Define your pricing environment.  
Define curves and volatility surfaces as needed.  
For real-time market data, you need to use a Market Data Server.  
► Please refer to Calypso Market Data Server documentation for details.

## Pricing Sheet Setup Quick Reference

**Step 1** - Click **Pricing Sheet** in the Calypso Navigator to bring it up - The menu action is "pricingSheet.PricingSheetWindow".

**Step 2** - Configure profiles.

The profile drives which strategies you can use, and how.

► See [Configuring Profiles](#) for details.

**Step 3** - Set user preferences.

► See [Setting User Preferences](#) for details.

**Step 4** - Set global preferences.

► See [Setting Global Preferences](#) for details.

**Step 5** - Use predefined strategies to capture and price trades.

► Please refer to Calypso Pricing Sheet Usage documentation for details.

## 2. Pricing Sheet Access Permissions

The following access permission functions are specific to the pricing sheet.

**[NOTE: In order to capture trades, you also need "All trade windows" access permissions]**

► Refer to Calypso Access Permissions documentation for complete setup details.

### ***PricingSheetMarketData***

Permission to:

- Change the selected Pricing Env
- Access Market Data-related windows
- Edit spot quote
- Edit real-time parameters

### ***PricingSheetAccessBackOffice***

Permission to access Audit and BO Browser.

### ***PricingSheetLegDetailsEditable***

Permission to modify the actual property values in the Leg Details window.

### ***PricingSheetProfileAdminAccess***

Permission to access the Profile Administration window.

### ***PricingSheetProfilePropertiesConfigAccess***

Permission to access the Profile Configuration window - Properties, Menu, Layout panels.

### ***PricingSheetProfileUsersConfigAccess***

Permission to access the Profile Configuration window - Users panel.

### ***PricingSheetSettingAccess***

Permission to access Global Preferences.

### ***PricingSheetStrategyBuilderAccess***

Permission to access the Strategy Builder.

### ***PricingSheetUserPreferencesAccess***

Permission to access User Preferences.

 **[NOTE: The access permission function PricingSheetConfigAccess is not used]**



## 3. Out-of-the-box Strategies

The following table describes strategies that you can capture out-of-the-box using the Pricing Sheet window. All pre-configured strategy attribute and persistence can be modified using the Strategy Builder to suit business needs.

► Refer to Calypso documentation Building Custom Strategies for details.

Strategy behavior upon saving can also be controlled with default settings.

### Commodities and Commodity Option Trades

Strategies	Description
Commodity Forward	A contract to buy or sell a fixed quantity and quality of a particular commodity for delivery at a fixed date in the future at a fixed price.
Commodity Option	A strip of Cash settled Asian or Average Rate Options. The payoff depends on an average of Reference Prices relative to a fixed Strike.
Commodity Swap	An exchange of payments between two parties.
Commodity Swaption	An option on an underlying commodity swap

### Credit Derivatives

Strategies	Description
CDS SNAC (single name)	Swap protection over credit events against premium.
CDS Index	CDS on an index.
CDS Index Option	Option that makes a payoff in the event a default occurs on the index.
CDS Index Option Tranche	Option that makes a payoff in the event a default occurs on the index tranche.
Asset Swap	Swap bond coupons against interest rate payments.

### Equities and Equity Option Trades

Strategies	Description
Equity	Trade equities.
Equity Forward	An OTC trade between two parties to buy or sell an asset at a specified price on a forward date. The underlying can be an equity, an equity index, or a basket.
Equity Swap	The Equity Swap strategy in the Pricing Sheet defines a performance leg with an equity or equity index and the funding leg with a floating rate index or a fixed rate.
Portfolio Swap	A Portfolio Swap helps standardize the handling of equity swaps. The underlying specifics of the agreement are defined by the Portfolio Swap Contract.

Strategies	Description
Equity Structured Options	An Option is an agreement between two parties to exchange one or more cash flows based on a Payout. The Payout formula typically refers to Underlyings. Equity Structured Options as a whole includes the individual strategies Equity Vanilla, Equity Barrier, Equity Digital, Equity Asian/Lookback, Equity Cliquet, Equity Chooser, Equity Compound, Equity FwdStart, Equity Variance Swap, and Equity Variance Option.
Correlation Swap	An OTC transaction between two parties to exchange the difference between a "Strike Correlation" and the "Realized Correlation".

### Exchange Traded Fund (ETF)

Strategies	Description
ETF	ETF trade.

### Fixed Income

Strategies	Description
Bond	G10 Government bonds. Inflation bonds (excluding BRL).
Treasury Lock	A Treasury Lock is a customized agreement that fixes the yield, clean price, or dirty price of a specific treasury bond on a specific date in the future.
Inflation Lock	An inflation lock is a customized agreement that fixes the yield or price on a specified inflation bond at a specific date in the future. Inflation locks are only supported for the Israeli CPI market.

### FX

Strategies	Description
FX	FX spot and forwards. Non deliverable FX forwards.
Simple Transfer	Simple transfer.

### FX Options

Strategies	Description
Accrual	<p>Accruals are products for which the holder will receive a fraction of forwards (physical), or a fraction of currency amount (cash).</p> <p>Accruals also allow defining Fader options where the notional of the vanilla is determined on the expiry date rather than by a predefined value.</p>
Asian	The payout is based on the average price of the underlying currency during the specified period.
Barrier	<p>A Barrier Option is similar to Vanilla, but it has one or two barrier prices:</p> <ul style="list-style-type: none"> <li>Single Barrier - Greater than or less than the strike.</li> <li>Double Barrier - One price is greater than the strike; the other is less.</li> </ul> <p>There are two types of barriers:</p> <ul style="list-style-type: none"> <li>Knock-In - The price of the underlying currency reaching the barrier activates this option.</li> <li>Knock-Out - Starts as a Vanilla option, but terminates at any time during the option period if the price of the underlying currency reaches the barrier. Payout is an FX Spot deal.</li> </ul> <p>The option pays out if it is knocked-out.</p>
Broker Butterfly Broker Strangle	"Broker" strategies are quoted with the same volatility on all legs, giving them different strikes for a given delta.
Butterfly	Simultaneous purchase or sale of an at-the-money Straddle against an opposite Strangle.
Compound	FX option on a vanilla FX option.
Condor	Simultaneous purchase or sale of one Strangle and the opposite of another Strangle.
Digital	<p>The payout is pre-determined at the beginning of the contract, and is paid according to whether the spot rate touches (or does not touch) the trigger level.</p> <p><b>Digital</b></p> <ul style="list-style-type: none"> <li>One Touch (OT) - If at any time before expiration spot trades at or beyond the trigger, then the payout is generated, else the option expires worthless.</li> <li>Double One Touch (DOT) - If at any time on or before expiration spot trades at or below the low trigger or if at any time on or before expiration spot trades at or above the high trigger, then the payout is generated, else the option expires worthless.</li> <li>No touch (NT) - If at any time on or before expiration spot trades at or beyond the trigger the option expires worthless else the payout is generated</li> <li>Double No Touch (DNT) - If at any time on or before expiration spot trades at or</li> </ul>

Strategies	Description
	<p>below the low trigger or if at any time on or before expiration spot trades at or above the high trigger, then the option expires worthless, else the payout is generated</p> <ul style="list-style-type: none"> <li>One Touch No Touch (OTNT) - If at any time on or before expiration spot trades at or through the knockout trigger the option expires worthless, else if at any time on or before expiration spot trades at or through the knock in trigger a Digital No Touch is generated.</li> </ul> <p><b>Partial Digital</b></p> <ul style="list-style-type: none"> <li>One Touch (OT) - If at any time during the observation period spot trades at or beyond the trigger, then the payout is generated, else the option expires worthless.</li> <li>Double One Touch (DOT) - If at any time during the observation period spot trades at or below the low trigger or if at any time during the observation period spot trades at or above the high trigger, then the payout is generated, else the option expires worthless.</li> <li>No touch (NT) - If at any time during the observation period spot trades at or beyond the trigger the option expires worthless else the payout is generated.</li> <li>Double No Touch (DNT) - If at any time during the observation period spot trades at or below the low trigger or if at any time during the observation period spot trades at or above the high trigger, then the option expires worthless, else the payout is generated</li> </ul>
Digital (at Expiry)	<p>Trigger is active only on the day of Expiry. Payout is generated based on the Spot on Expiry date and Trigger Type:</p> <ul style="list-style-type: none"> <li>ABOVE – If spot trades above the trigger level</li> <li>BELOW – If spot trades below the trigger level</li> <li>IN – If the spot trades within the two trigger levels</li> <li>OUT – If the spot trades outside the two trigger levels</li> </ul>
Digital with Barrier	<p>A digital with barrier is a digital at expiry (or European binary) with barrier. NOTE: Underlying Digital at expiry only supports ABOVE and BELOW as trigger type.</p>
Forward Starting	<p>The strike is determined at a later date. Like a standard option, a Forward Start option is paid for in the present; however the strike price is not fully determined until an intermediate date before expiration. This date is called the fixing date.</p> <p>The fixing process is done using the scheduled task FXOPTION_RATE_RESET.</p>
Lookback	<p>The payout is based on either a fixed or floating strike:</p> <ul style="list-style-type: none"> <li>Fixed Strike — Call pays the maximum of the rate during the option life, minus the strike; put pays the strike minus the minimum rate during the option life.</li> </ul>

Strategies	Description
	<ul style="list-style-type: none"> <li>Floating Strike — Call pays the rate at expiry minus the minimum of the rate during the option life; put pays the maximum rate during the option life, minus the rate at expiry.</li> </ul>
Reversal	Simultaneous purchase of a call and sale of a put (or the opposite), both of which are out-of-the-money.
Spread	Simultaneous purchase of one call and sale of another with the same expiration and different strikes (the same strategy applies to puts).
Straddle	Simultaneous purchase or sale of both a call and a put, with the same expiration date and strike.
Strangle	Simultaneous purchase or sale of both a call and a put with the same expiration date but different strikes, both of which will be out-of-the-money.
Vanilla	A Vanilla option is a usual option with no special features. The option can be either European or American.
Volatility Forward	Forward contract in which the buyer agrees to pay an ATM straddle at a pre-specified date in the future at the current forward price, which is the price at which the market believes would prevail at maturity.
FX Averaging Forward	Forward contract for currencies. The amount is based on the difference between the strike price and the calculated average price of the underlying FX spot rate within an agreed time period and multiplied by an agreed amount. Reset dates are generated in regular intervals, or can be customized, and different weights can be assigned to the prices on each reset date.
FX Swap	FX swap.
FX Variance Swap	Agreement between counterparties to swap a fixed rate of FX variance and a realized rate of FX variance over a set period of time
FX Variance Option	Capture options on swaps that reference realized FX variance. Captured the same way as FX Variance Swaps with the addition of the Put/Call property.

### IRD Trades

Strategies	Description
Cap	Borrower and lender agree that the borrower will pay no more than a specified maximum interest rate to the lender with respect to floating interest rate funds.
Collar	A simultaneous purchase of a cap with the sale of a floor, or a simultaneous purchase of a floor with the sale of a cap.
Corridor	Combination of two caps, one purchased by a borrower at a set strike and the other sold by the borrower at a higher strike to, in effect, offset part of the premium of the first cap.

Strategies	Description
Fixed Rate	Structured flow, can be fixed or floating.
Floating Rate	
Islamic MM	Islamic Money Market.
FRA	Interest rate Forward Rate Agreements.
SpreadCap	A Cap having a floating rate index which is the difference (spread) between two floating indices.
SpreadCollar	A Collar having a floating rate index which is the difference (spread) between two floating indices.
Swap	<p>Vanilla Interest Rate swap and Inflation swap.</p> <p>Non-deliverable swaps - An agreement between two parties to exchange a stream of interest payments and the notional principal in one major currency for another non-deliverable currency.</p> <p>Cancelable swaps - Contains an underlying interest rate swap with the option to cancel it on one or more cancellation dates.</p> <p>Quanto swaps - The Quanto swap is an interest rate swap where the currency of the notional on the floating leg differs from the currency of the reference index.</p> <p>Brazilian swaps - Swap trade with Brazilian conventions.</p> <p>Brazilian Inflation swaps - Inflation swaps are based on inflation indices with Brazilian conventions.</p> <p>Capped swaps.</p> <p>Islamic swaps.</p> <p>Swap Butterfly.</p> <p>Swap Steepener.</p> <p>Exotic Swap.</p> <p>Fixed Payment Swap - Provides a property for entering a fixed amount on the fixed leg to be paid at the end of the period, rather than using a rate and notional to calculate payments.</p> <p>Performance Swap - A set of future cash flows are exchanged between two counterparties. The primary leg can be a single asset only, with a bond or market index underlying. The secondary leg is currently limited to swaps.</p>
Swaption	Vanilla interest rate swaption.
Listed FRA	A Forward Rate Agreement with a standardized contract that allows it to be listed on and cleared by an exchange.

## Listed Derivatives

Strategies	Description
Future Bond	Listed futures based on Future contracts.
FRC	Brazilian Structured Flows.
Future FX	Simultaneous exchange of a spot for futures at an agreed upon price.
Future MM	Future Money Market trade.
Future Equity	Listed futures based on Future contracts.
Future Equity Index	Listed futures based on Future contracts.
Future Commodity	Listed futures based on Future contracts.
Future Swap	A listed future that uses a swap for its underlying.
Future Option Bond	Option on a Future Bond.
Future Option FX	Listed futures based on Future contracts.
Future Option MM	Option on a Future Money Market.
Future Option Equity	Option on Future Equity.
Future Option Equity Index	Option on an Future Equity Index.
Future Option Commodity	Option on a Future Commodity.
ETO Equity	Option on cash Equity
ETO Equity Index	Option on a cash Equity Index.
ETO FX	Option on FX.
Listed FRA	A Forward Rate Agreement with a standardized contract that allows it to be listed on and cleared by an exchange.
Future Forward Start FX	Involves the trading of the first available maturity date of US Dollar Contract (basis month) and adding or subtracting a number of points from the FX spot rate, represented by the Central Bank of Brazil's PTAX rate.

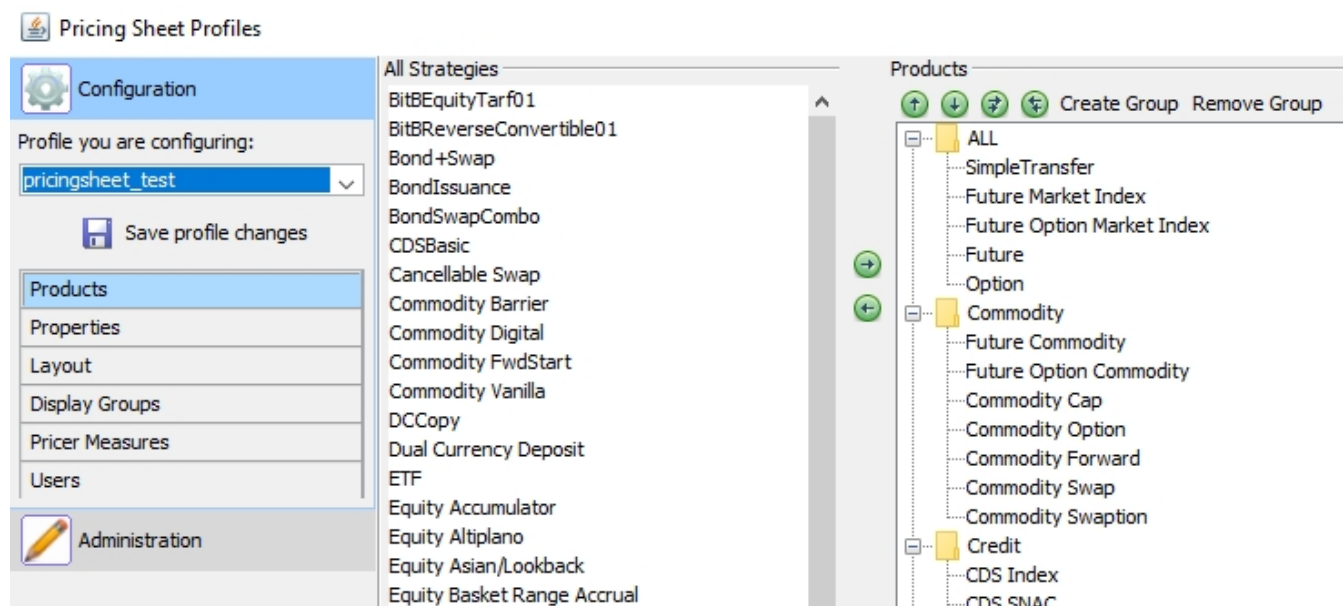
## 4. Configuring Profiles

Prior to capturing any trade, you need to define profiles - A profile drives the strategies of a user.

Choose **Configuration > Profile Configuration** to configure profiles, it brings up the Pricing Sheet Profiles window.

A default profile is available. It contains default configuration for all strategies provided out-of-the-box: pricingsheet\_default.

It cannot be modified but it can be saved as a new profile if you want to modify it.



Pricing Sheet Profiles window

The Pricing Sheet Profiles window contains 2 tabs:

- The Configuration tab to configure profiles: strategies and users.
- The Administration tab to create profiles, and copy profiles configurations and strategies.

The panels are described below.

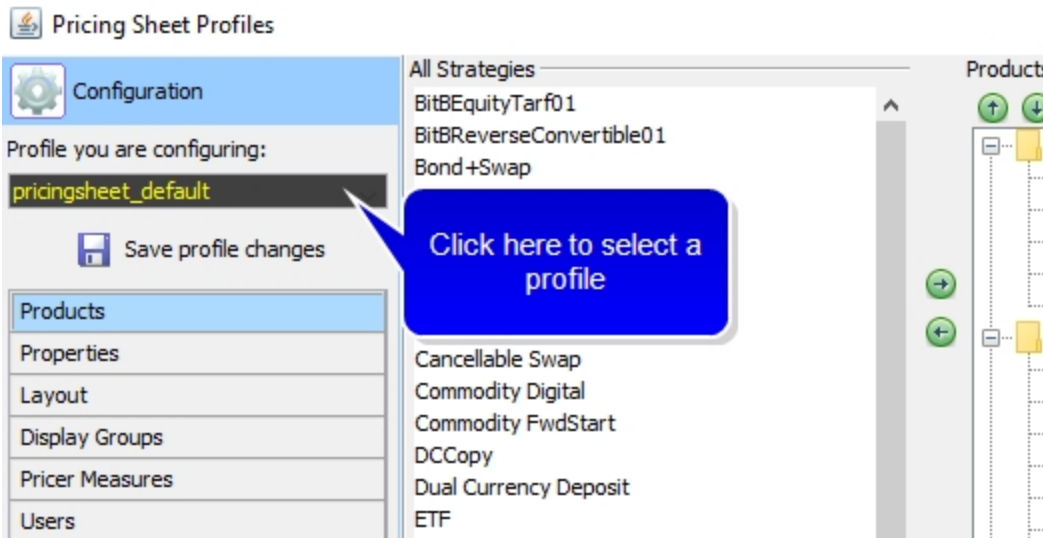
### Contents

- [Profile Configuration](#)
- [Profile Administration](#)

### 4.1 Profile Configuration

Once you have created a profile in the Administration tab, you can configure the profile in the Configuration tab.



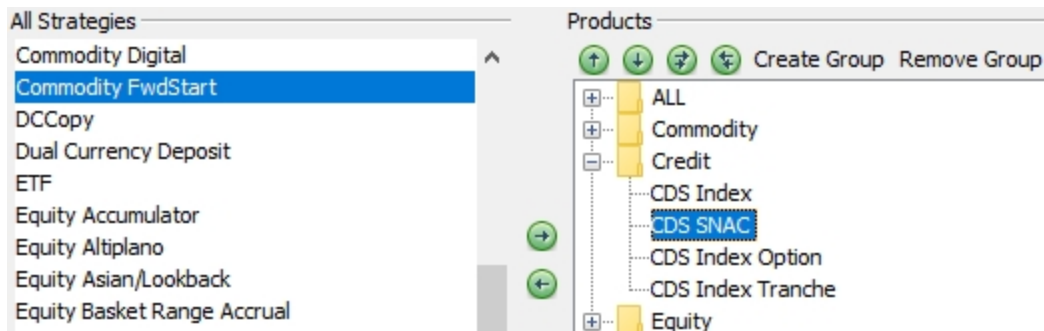


#### Pricing Sheet Profiles window - Profile Configuration


- » Select a profile and go through the various configuration panels: Properties, Menu, Layout, Display Groups and Users - The panels are described below.
- » Then click **Save profile changes** to save the profile configuration.

### 4.1.1 Products

Select the Products panel to determine which strategies this profile can use.




#### Profile Configuration - Products panel

To add a strategy to a group, select a strategy from the "All Strategies" column, and select a group from the "Products" column, and click  to make it available for selection within that group. Repeat as needed for other strategies.

To remove a strategy from a group, select the strategy from the Products column, and click .

Once a strategy is in the Products column, you can sort the strategy by clicking  or .



To create a group, click **Create Group**. You will be prompted to give it a name. Then, move strategies to that group from the "All Strategies" column as described above.


You can indent or outdent groups and strategies using the  and  arrows.

To remove a group, click **Remove Group**.

### 4.1.2 Properties

Select the Properties panel to select the properties that will be displayed for each strategy.

Product: Cap
☒ Visible Only


Copy From:

<input checked="" type="checkbox"/> (All)		1
<input checked="" type="checkbox"/> Trade	Strategy Name	Cap
<input checked="" type="checkbox"/> Product : Info	Template (Common)	
<input checked="" type="checkbox"/> Product : Style	Trade Id (Common)	-130
<input checked="" type="checkbox"/> Product : Amount	Status (Common)	NONE
<input checked="" type="checkbox"/> Product : Payment	Action (Common)	NEW
<input checked="" type="checkbox"/> Product : Settlement	Book (Common)	TEST_FLOW_NYC

#### Profile Configuration - Properties panel

All properties can be made visible under "Common". This will make them visible for all strategies that use these properties.

The left-most panel can be used to filter the properties that appear in the right panel. Uncheck the property categories that you wish to hide.

You can also make properties visible and editable per strategy.

This also applies to custom strategies.

#### Search


You can click any cell in the defined properties to search existing properties.

trade	1/5	▽ △ X	1
Strategy Name			Cap
Template (Common)			
Trade Id (Common)			-146
Status (Common)			
Action			
Book (Common)			V_NYC
Counterparty			
Trade Comment			
Notional			0.00
Product Type (Common)			CapFloor
Product Subtype (Common)			Standard
Notional Ccy			USD
Buy/Sell			Buy
Amortization			Bullet
Option Type			Cap
Leg Type			Cap
Trade Date			09/01/2020

Typed Search

Red text denotes "no match" for properties. If a match is found, the window jumps to the location.

## Visible / Invisible

To make properties visible, select a strategy or "Common", select one or multiple properties and choose  > **Make Visible**. The visible properties will appear in the pricing sheet for the corresponding strategies.

► See [Strategy Properties](#) for a complete description of all properties.

Visible properties appear in black, and non visible properties appear in gray. "(Common)" next to a property indicates that this property has been made visible under "Common".

Attempting to make properties visible that are not relevant to any of the chosen products in a given profile will result in a warning message listing those properties. Those properties will not be visible in the pricing sheet, even though they are visible in the profile configuration view.


## Filter

You can click **Filter** to display only certain categories of properties: Trade properties, Product properties, Date properties, Market Data properties, etc.

You can add pricer parameters to the Pricing Sheet and make them visible/editable. Pricer parameters are displayed using the "Pricer Params" checkbox on the filter drop down. If a parameter is not available, add it to the "PricingSheetPricerParams" domain.

You can check the "Visible Only" checkbox to view only visible properties.

## Editable / Not Editable


For each strategy, you can also make the properties not editable by choosing  > **Make uneditable**. They are editable by default. They will appear with a gray background if they are not editable. You can always make them editable again if needed.

... Extra Day in First Period	<input type="checkbox"/>
... Extra Day in Last Period	<input type="checkbox"/>
Exclude First	<input type="checkbox"/>
Stub Type	NONE
Stub Tolerance	5

### Copy From:







The "Copy From:" drop down enables a user to copy configured properties from out of the box defined strategies to custom strategies. To use this function:

- » Select a strategy from the "Custom" folder in the strategy drop down.
- » Click the drop down field.
- » Select the strategy to copy to the custom strategy.

 **[NOTE: Only applicable strategy properties will be available to add to a custom strategy, e.g. a custom Swap strategy will only display out of the box Swap strategy properties]**

### 4.1.3 Layout Panel

Select the Layout panel to define the look and feel of the properties.

Sort						Display Group: Sales	Color: 	Both
	Display Name	Auto Ex...	Display ...	Color	Font			
Template			Detail					
Trade Id			Main					
Status			Detail					
Action			Detail					
Bundle ID			Detail					


Profile Configuration - Layout panel



**TIP:** To quickly locate a specific property, highlight any row and begin typing the property name. The highlighted row moves to the first property that matches the entered text.








You can set the following parameters:

- Order - You can move the properties using the up and down arrows, or by dragging and dropping. You can select multiple properties and move them together.
- Display Name - Enter a free form name. If value exists in this column, name will be displayed in the Pricing Sheet using this profile. If no name exists, the profile will use the default name.

- Auto Expand - For properties that have show a "+" next to them in the pricing sheet (sometimes referred to as parent groups), checking Auto Expand will cause their child properties to display by default.
- Display Group - You can group multiple properties into a display group and then either show or hide groups of properties in strategy legs. Upon trade capture, you can choose which groups of properties you want to display by clicking  in the Toolbar and selecting or clearing the checkbox for a display group in the list that appears. By default, the "None" group is selected. All properties associated with the "None" group are displayed upon trade capture.  
To set a display group, select one or multiple properties, and select a display group. You can add groups to the domain "PricingSheetPropertyDisplayGroups".
- Color - Select one or multiple properties, and double-click the color bar to pick a color for the property's background.
  - You can set the color to apply to the Property Name, Trade Legs, or Both by using the dropdown next to the color dropdown.

#### 4.1.4 Display Groups Panel

A user can configure custom icon buttons for a toolbar configuration. Display Groups can also be Configured in User Preferences.

Display				
Icon	Type	Tooltip	Behavior	Toolbar/Sidebar Visibility
	Property Toggle	Fields: Main	Main;	Both
	Measure Macro	Fields: Sales		Both
	Property Toggle	Fields: Pricing	Pricing;	Both
	Measure Toggle	Fields: Det		
				
				
				

Configure Property  
or Measure

Configure window (Display Panel)

**Step 1** - Configure an icon. A user can configure the color of the icon by double clicking and selecting a color from a chooser pallet.

**Step 2** - Select Measure or Property for the type of icon. A Toggle icon allows you to automatically turn behaviors on or off by clicking the button, while a Macro icon will show a pop up where you can select the behaviors that you wish to display.

**Step 3** - Enter a free-form Tooltip message that will pop out when a cursor hovers over the icon.

**Step 4** - Select the behavior attached to the icon. Double-clicking in the row field will enable a selection box.

If choosing Measure from the Type column, Default, Base, Specific, FX2, Favorite, Detailed Data selection checkboxes will be displayed.

If choosing Property from the Type column, None, Detailed Data, Detail 1, Detail 2, Detail 3, Entity, Market Data, Pricer Data, Reference and Solver selection checkboxes will be displayed.

**Step 5** - Click **Save profile changes** when you are done.

### 4.1.5 Pricer Measures

Select the Pricer Measures panel to select which pricer measures you want to display.

**[NOTE: Only the pricer measures defined in domain "PricingSheetMeasures" are available for selection - You can add pricer measures to that domain as needed.]**

**The following pricer measures are not supported in the Pricing Sheet: CA\_NOTIONAL, CA\_QUANTITY, CA\_PV, CA\_COST]**

Available Pricer Measures:


- ACCRUAL
- ACCRUAL\_FIRST
- ACCRUAL\_PAYMENT
- ACCRUAL\_PAYMENT\_FIRST
- ACCUMULATED\_ACCRUAL
- BP\_VOL
- CASH
- CASH\_DELTA
- CUMULATIVE\_CASH
- CUR\_NOTIONAL\_PAY
- CUR\_NOTIONAL\_REC
- DELTA\_01
- DELTA\_01\_INFLATION
- DELTA\_PCT
- DELTA\_RISKY\_PRIM
- DELTA\_RISKY\_SEC
- DVEGA\_DRD
- DVEGA\_DRF

Display Group: Favorite
Color: [Color Box]


Selected Pricer Measures:

Name	Display G...	Additional...	Display U...	Significa...	Color
NPV	Pricing		Full Display	0	[Light Blue]
PV	Pricing		Full Display	0	[Light Blue]
PV01	Greeks		Full Display	0	[Yellow]
DELTA	Greeks		Full Display	0	[Yellow]
GAMMA	Greeks		Full Display	0	[Yellow]
THETA	Greeks		Full Display	0	[Yellow]
VEGA	Greeks		Full Display	0	[Yellow]
FWD_DELTA	Greeks-2		Full Display	0	[Olive]
MOD_DELTA	Greeks-2		Full Display	0	[Olive]
MOD_GAM...	Greeks-2		Full Display	0	[Olive]
MOD_VEGA	Greeks-2		Full Display	0	[Olive]
DVEGA_D...	Greeks-2		Full Display	0	[Olive]
DVEGA_D...	Greeks-2		Full Display	0	[Olive]
DDELTA_D...	Greeks-2		Full Display	0	[Olive]
RHO	Greeks-2		Full Display	0	[Olive]
RHO2	Greeks-2		Full Display	0	[Olive]
B/E_Rate	Risk		Full Display	0	[Green]
IMPLIEDV...	Risk		Full Display	0	[Green]

Configure window (Pricer Measures panel)

**Step 1** - Select a pricer measure from the left-hand side, and click  to make it available for computing.

**Step 2** - Set the following parameters as applicable:

- "Display Group" - You can group multiple pricer measures together into a display group and then either show or hide the group of measures in strategy legs. Choose which groups of pricer measures you want to display by clicking  in the Toolbar and selecting or clearing the checkbox for a display group in the list that appears. You can add display groups to the domain "PricingSheetPricerMeasureDisplayGroups" as needed.
- "Additional Currencies" - By default, the pricer measures are computed based on the risky currency defined in the currency pair - However, you can select additional currencies in which you want to compute the pricer measures.
- "Display Units" - Set to display the value precision in the selected measure. Set to "Full Display", "Integers", "K (thousands)", "M (millions)", "B (billions)".
- "Significant Figures" - Set number of digits displayed by the measure.
- "Color" - Double-click the color bar to pick a color for the pricer measure's background.

**Step 3** - Click **Apply** when you are done.

### Summing Pricer Measures Across Asset Classes

To allow pricer measures to be summed across asset classes, add them to the domain "PricingSheetMeasures.CrossAssetSummable".

### FX Spot Delta

The pricer measure "FX Spot Delta" is only available in the pricing sheet.


It shows the total amount of FX Delta needed to Spot Hedge (Delta Hedge as of Spot Date) the trade. This is potentially different from the DELTA pricer measure because of the effect of any FX Delta incurred by the fees.

## 4.1.6 Users Panel

Select the Users panel to determine which users have access to this profile.

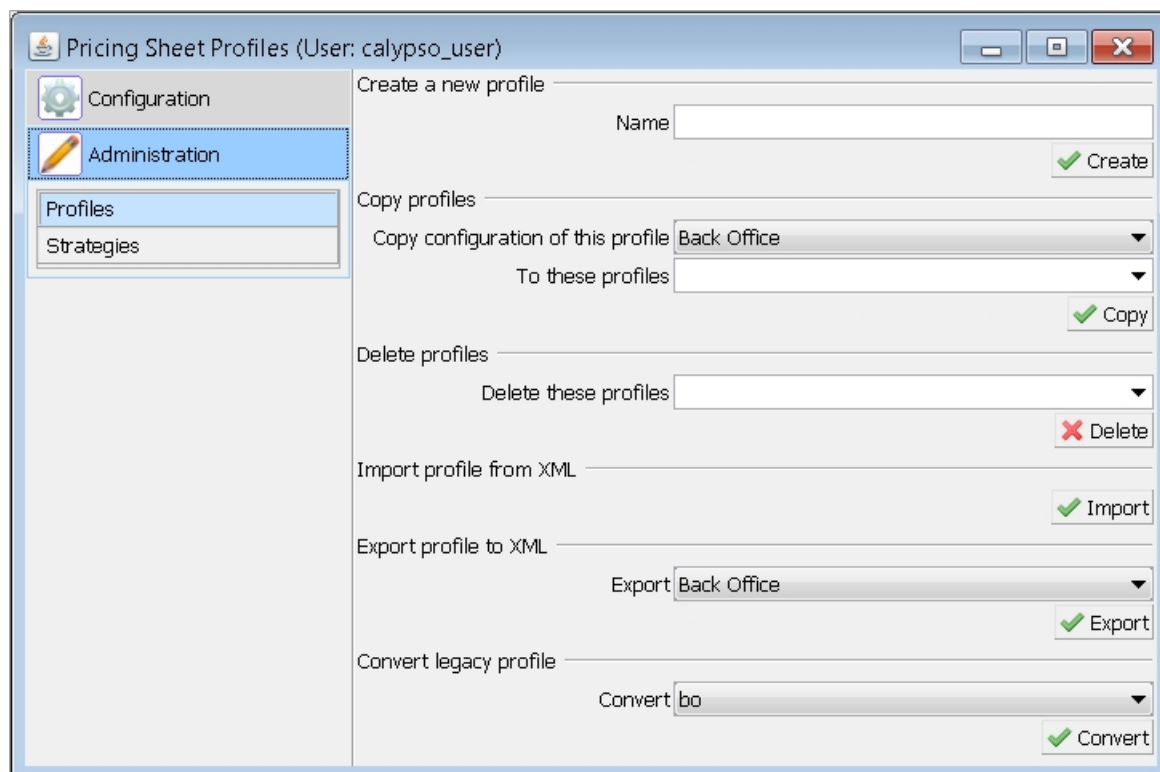


Profile Configuration - Users panel

Select one or multiple users or user groups from the left-hand side, and click  to allow those users to have access to this profile.

## 4.2 Profile Administration

Click the Administration tab to create profiles, and copy profiles configurations and strategies.



The screenshot shows the 'Pricing Sheet Profiles (User: calypso\_user)' window with the 'Administration' tab selected. The left sidebar contains 'Configuration', 'Administration', 'Profiles', and 'Strategies'. The main area has several sections:


- Create a new profile:** A text input for 'Name' and a green 'Create' button.
- Copy profiles:** A section with a dropdown for 'Copy configuration of this profile' (currently 'Back Office') and a dropdown for 'To these profiles'. It includes a green 'Copy' button.
- Delete profiles:** A dropdown for 'Delete these profiles' and a red 'Delete' button.
- Import profile from XML:** A green 'Import' button.
- Export profile to XML:** A dropdown for 'Export' (currently 'Back Office') and a green 'Export' button.
- Convert legacy profile:** A dropdown for 'Convert' (currently 'bo') and a green 'Convert' button.

Pricing Sheet Profiles window - Profile Administration

### 4.2.1 Profiles Panel

#### Creating a Profile

To create a profile, enter a profile name in the "Create a new profile" area, and click **Create**.

 **[NOTE: After adding a new profile, make sure the appropriate user(s) or user group(s) is added for profile access. Once the user is given access to the new profile, the profile is made available for selection in the Active Profile list (Configuration > Active Profile). See Users Panel above for details]**

#### Copying Profile Configurations



You can use this function when you create a new profile to copy the configuration from an existing profile. You can then adjust the configuration as needed.

Select a source profile and a list of target profiles in the "Copy profiles" area, and click **Copy**.

### *Deleting Profiles*

Select a list of profiles from the "Delete profiles" area, and click **Delete**.

### *Exporting Profiles to XML*


Select a profile and click **Export**. You will be prompted to enter a file name.

An XML file containing the selected profile will be created. You can import this profile in another environment.

### *Importing Profiles from XML*

Click **Import**. You will be prompted to select an XML file that contains a profile that you have exported.

### *Converting legacy profiles*

 **[NOTE: This step is highly recommended if users have upgraded to v13 SP2 Pricing Sheet from any older version]**

Creating or modifying a profile in a Calypso version older than v13 SP2 requires a user to convert the file using this function. Click **Convert** after selecting a profile from a drop down to convert it.


## 4.2.2 Strategies Panel

Copy strategy properties

Copy the property configuration of these strategies


From this profile

To these profiles


 Copy

Delete strategies

Delete these strategies


 Delete

Import strategies from XML

 Import

Export strategies to XML

Export

 Export

Profile Administration - Profiles panel

### Copying Strategies

You can use this function when you want to copy strategies from one profile to a set of other profiles.

Select the strategies you want to copy, a source profile and a list of target profiles in the "Copy strategy properties" area, and click **Copy**.

### Deleting Strategies

Select a list of strategies from the "Delete strategies" area, and click **Delete**.

### Exporting Custom Strategies to XML

Select a set of custom strategies and click **Export**. You will be prompted to enter a file name.

An XML file containing the selected strategies will be created. You can import these custom strategies in another environment.

► See [Building Custom Strategies](#) for information on creating custom strategies.

### *Importing Custom Strategies from XML*

Click **Import**. You will be prompted to select an XML file that contains the custom strategies that you have exported.

► See [Building Custom Strategies](#) for information on creating custom strategies.

## 5. Capturing Trades

This document describes all strategy properties based on their category (filter category in Profile Configuration ), and how to capture trades using these properties.

Some properties are common to all types of strategies, they are described below.

---



### Contents

- [Trade Properties](#)
  - [Manipulating Strategy Templates](#)
  - [Product: Amount Properties](#)
  - [Product: Style Properties](#)
  - [Product: Info Properties](#)
  - [Product: Rate Properties](#)
  - [Product: Barrier Properties](#)
  - [Product: Trigger Properties](#)
  - [Product: Payment Properties](#)
  - [Product: Settlement Properties](#)
  - [Date Properties](#)
  - [Market Data Properties](#)
  - [Price Properties](#)
  - [Solver Properties](#)
  - [Dealt Data Properties](#)
  - [Keyword Properties](#)
  - [Pricer Properties](#)
  - [Product: Cliquet Properties](#)
  - [Product: Chooser Properties](#)
  - [Product: Commodity Properties](#)
  - [Cash Settle Info](#)
  - [Trade Drilldown](#)
-

## 5.1 "Trade" Properties

"Trade" properties apply to all types of strategies. They allow the trades to be saved in the system with the minimum required information.

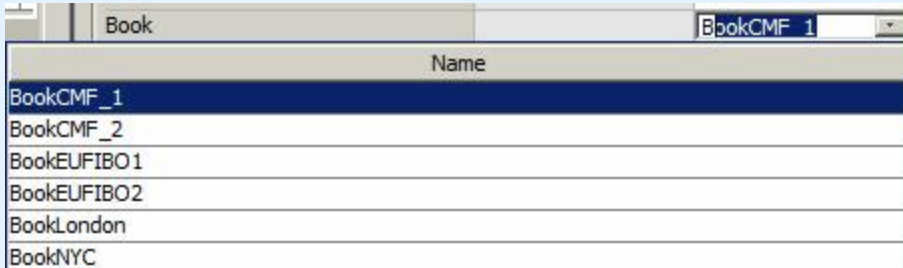
They can be made visible under "Common" if you want to display them for all strategies.


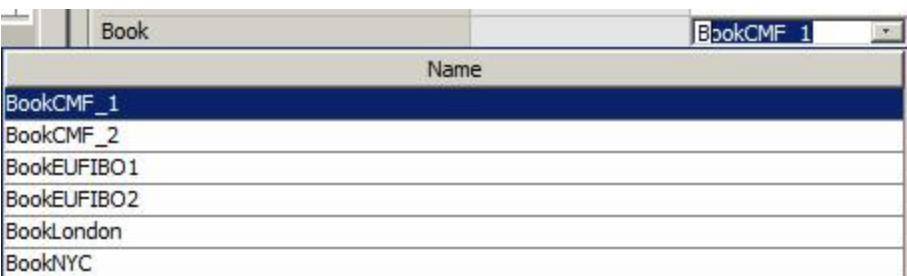
Strategy Name	<b>Vanilla</b>
Price	<b>Price</b>
Save	<b>Save</b>
Solve	<b>Don't Solve</b>
Template	
Internal Reference	
External Reference	FXD_SAMPLETRAD...
Trade Id	1402
Trade Version	1
 Bundle ID	
Status	VERIFIED
Action	FO_AMEND
Sales Person	NONE
Trader	NONE
Book	FXD_Sample_Trades
Counterpart Role	CounterParty
Counterparty	CP
Internal Book	
Mirror Trade Id	
Broker	
Prime Broker	
Market Type	
Stepin Transferor	
Subsidiary	
Calc Agent	
Trader Mirror	
Trade Comment	
 CSA Id	

### Sample Trade properties

Properties	Description
Strategy Name	This property is always displayed. Select an out-of-the-box strategy or a custom strategy to capture the corresponding trade.
Price	This property is common to all trades and set to Price by default. The settings are as follows: <ul style="list-style-type: none"> <li>Price - Allows the trade to be priced.</li> <li>Don't Price - Prevents the trade from being priced.</li> </ul>
Save	This property is common to all trades. Its default behavior can be configured on the Defaults tab in <b>Configuration &gt; User Preferences</b> with the "Default behavior for Save field on executed trades" option. The settings on the pricing sheet are as follows:

Properties	Description
	<ul style="list-style-type: none"> <li>Save - Allows the trade to be saved.</li> <li>Don't Save - Prevents the trade from being saved.</li> </ul>
Solve	<p>This property is always displayed, and is not set by default.</p> <p>To activate the solving capability, set it to Solve. It can only be set to Solve on Active trades.</p>
Reserve	<p>This property is always displayed, and it is set to Don't Reserve by default.</p> <p>The property provides support for trade reservation in the case of a single trade or multiple trades.</p> <ul style="list-style-type: none"> <li>"Reserve" - Allows a trader to put a trade in a certain status that impacts the limit even though the trade is in pre-deal status. When a trade is saved, the trade keyword "LimitReserved" is set to Yes.</li> <li>"Don't Reserve" - When a trade is saved, the trade keyword "LimitReserved" is set to No.</li> </ul> <p>The trade keyword "LimitReserved" is utilized with this feature so that the Limits engines can determine whether or not to process a trade.</p>
Template	<p>Select a strategy template as needed to populate default values into the strategy. You can only select templates created for this type of strategy.</p> <p>You can create strategy templates using <a href="#">Configuration &gt; Manage Strategy Template</a>.</p> <p>► See <a href="#">Manipulating Strategy Templates</a> for details.</p> <p><b>📘 [NOTE: The selected template is not stored with the trade, it is only selected to populate default values]</b></p>
Internal Reference	Enter a user-defined trade identifier as needed, for tracking purposes.
External Reference	Enter a user-defined trade identifier as needed, for tracking purposes.
Trade Id	Displays the unique ID given by the system upon saving.
Trade Version	<p>Displays the trade version given by the system upon saving, "0" is the first version of the trade. The trade version is incremented when data are amended on the trade provided the Audit mode is enabled.</p> <p>► Refer to Calypso Trade Version documentation for details.</p>
Bundle ID	<p>Displays the bundle ID created upon saving if any.</p> <p>You can also display the following properties:</p> <ul style="list-style-type: none"> <li>Bundle Type - Displays the bundle type selected upon saving if any. You can also select a bundle type to associate the trade with an existing bundle.</li> <li>Bundle Name - Displays the bundle name create upon saving if any. You can also select a bundle name to associate the trade with an existing bundle.</li> </ul>
Status	Displays the workflow status of the trade.

Properties	Description
Action	<p>Displays the action currently performed on the trade based on the workflow configuration. You can select a different action as needed, it will be applied to the trade upon saving.</p> <p>Note that actions related to trade lifecycle processes are prevented by default. The actions Allocate, Terminate, Exercise, and Trigger can be applied from the Processing menu.</p> <p>Other trade lifecycle actions have to be applied from their dedicated windows and processes.</p>
Sales Person	<p>Select a sales representative. Sales representatives are created in the "salesPerson" domain. It defaults to the sales representative selected in the User Defaults.</p> <p>This is mandatory for capturing sales fees.</p>
Trader	<p>Select a trader - Traders are created in the "trader" domain. It defaults to the trader selected in the User Defaults.</p>
Book	<p>The default trading book can be set in the User Defaults attribute "Pricing Sheet Default Book".</p> <p>You can select another book as needed. Type in a few letters, and all books that start with those letters will appear. You can select a book from the list.</p>  <p>The Search can be configured from the Calypso Navigator using <a href="#">Configuration &gt; User Access Control &gt; User Settings</a> under Preferences &gt; Trade Capture &gt; Book Search:</p> <ul style="list-style-type: none"> <li>• Favorites Only</li> <li>• Favorites Then All</li> <li>• All (default)</li> </ul> <p>For reference, favorite books are set from the Calypso Navigator under <a href="#">Configuration &gt; Favorites &gt; Books</a>.</p>
Counterpart Role	<p>The counterpart role defaults to CounterParty but you can double-click to select another role as needed. For External trades, the role set will be the role set in the for the Premium in Trade Details &gt; Trade Fess.</p>
Counterparty	<p>Type in a few letters, and all counterparties that start with those letters will appear. You can select a counterparty from the list.</p>

Properties	Description
	 <p>The Search can be configured from the Calypso Navigator using <a href="#">Configuration &gt; User Access Control &gt; User Settings</a> under Preferences &gt; Trade Capture &gt; Counterparty Search.</p>
Internal Book	<p>Type in a few letters, and all books that start with those letters will appear. You can select an internal book from the list to capture an internal mirror trade.</p>  <p>The Search can be configured from the Calypso Navigator using <a href="#">Configuration &gt; User Access Control &gt; User Settings</a> under Preferences &gt; Trade Capture &gt; Book Search:</p> <ul style="list-style-type: none"> <li>• Favorites Only</li> <li>• Favorites Then All</li> <li>• All (default)</li> </ul> <p>For Internal Trades (trades with an internal book), the trade counterparty is set to the processing org of the internal book for the role CounterParty. Therefore, the processing org must have the role CounterParty.</p> <p>For reference, favorite books are set from the Calypso Navigator using <a href="#">Configuration &gt; Favorites &gt; Internal Books</a>.</p>
Mirror Trade ID	Displays the mirror trade ID.
Broker	<p>Select a broker as needed. A broker is a legal entity of role Broker.</p> <p>Only favorite brokers can be selected. Favorite brokers are selected from the Calypso Navigator using <a href="#">Configuration &gt; Favorites &gt; Brokers</a>.</p>
Prime Broker	<p>Select a prime broker as needed. A prime broker is a legal entity of role PrimeBroker.</p> <p>Only prime brokers associated with the selected counterparty in the legal entity attribute PrimeBrokerList can be selected. You can define multiple prime brokers in the legal entity PrimeBrokerList separated by ";" (semicolons).</p>
Market Type	Select a Market Type as needed: None, Primary, Re-Issue, Secondary, When-Issued.
Stepin Transferor	Type in a few letters, and legal entities that start with those letters will appear. You can select a legal entity of role step-in transferor from the list.



Properties	Description
	The step-in transferor is a transferor from a Step-In Novation done through DTCC.
Subsidiary	Type in a few letters, and legal entities that start with those letters will appear. You can select a legal entity of role subsidiary from the list.
Calc Agent	Type in a few letters, and legal entities that start with those letters will appear. You can select a legal entity of role calculation agent from the list.  The calculation agent is the party who acts as the referee in the event of a disagreement about a deal's rate reset or other payment detail. The calculation agent will be designated in a legal agreement such as an ISDA agreement.
Trader Mirror	Displays the name of the trader associated with the mirror trade book.
Trade Comment	Enter a comment as applicable.
Reset Swap	For details on Reset Swap properties, see "Reset Swap" Properties in Pricing Sheet <i>Capturing IRD Trades</i> documentation.
Fwd Start Notional Adjustment	For details on Fwd Start Notional Adjustment properties, see "Fwd Start Notional Adjustment" Properties in Pricing Sheet <i>Capturing IRD Trades</i> documentation.
CSA Id	Displays the ID of the collateral agreement associated with the selected counterparty and book's processing org, if any.  Collateral agreements are created from the Calypso Navigator using <b>Configuration &gt; Fees, Haircuts, &amp; Margin Calls &gt; Margin Call</b> .  You can also display the following properties: <ul style="list-style-type: none"> <li>• Collateral Policy - Displays the currency policy of the collateral agreement.</li> <li>• Eligible Currencies - Displays the list of eligible currencies of the collateral agreement.</li> </ul> Discount curves can be associated with trades based on the collateral currency. ▶ Refer to Calypso CSA Details documentation for setup details.
Manual Reset	Used for equity resets. Provides a field for manually entering a value for the initial fixing.
Initial Reset	Used for equity resets. Allows you to choose an observation source for the initial fixing.
Equity Reset	Used for equity resets. Allows you to choose an observation source for the final fixing. For the equity ScriptableOTCProduct, this property alone is used for choosing the observation source for the multiple resets that are used.
CCP/Clearing Broker Combos	Enter a list of clearing brokers, separated by commas.
CCP/Clearing Broker	Enter the clearing broker.
Product Code	You can enter product code values for OTC trades, provided you have defined "OTC" product codes, like MiFID codes for example.  "OTC" product codes are created using <b>Configuration &gt; Product &gt; Code</b> (menu action <code>product.ProductCodeWindow</code> ) with "OTC" checked.

Properties	Description
	Note that this property does not display non OTC product codes. Non OTC product codes are defined and displayed at the product level (Bond products for example).
Negotiated Price	Negotiated Price is a sub-property under the expandable Notional property. Used for Swap trades that use ZC for the payment frequency. To enable this property so that the user can enter a negotiated price, the payment frequency for the swap must be ZC, and the parameter "Discount" in Default configurations (Configuration > User Preferences > Defaults > Swap) must be set to True. See "Defaults Panel" in <i>Setting User Preferences</i> documentaiton.
Fixed Amount	Used with Fixed Payment Swap to indicate a payment amount for the fixed leg that will be paid at the end of the period.
Reset Date Rule	Reset Date Rule
Rate Factor Rounding/Rate Factor Decimals	<p>Both properties are sub-properties of Rate. They can be used on both fixed and float legs of a Swap. The Rate Factor Rounding property provides standard rounding methods found in Calypso: NONE, NEAREST, UP, DOWN. The Rate Factor Decimals property allows for specifying decimal precision for the first setting.</p> <ul style="list-style-type: none"> <li>Fixed Leg - When Calc Method is EXP, rounding = <math>(1 + \text{fixed rate})^{\text{daycount fraction}}</math>, then taken to the number of decimal places specified. When Calc Method is NONE, rounding = <math>\text{fixed rate} * \text{daycount fraction}</math>, then taken to the number of decimal places specified.</li> <li>Floating Leg - Uses multiplicative spread factor rounding. This is available under the following conditions: compounding = true, compounding method = Flat, Calc Method = EXP, multiplicative spread = true. Rounding = <math>(1 + \text{spread})^{\text{daycount fraction}}</math>, then taken to the number of decimal places specified.</li> </ul>
Reset Date Rule Payment Date Rule Coupon Date Rule	<p>These properties allow for using date rules to determine a period.</p> <ul style="list-style-type: none"> <li>Reset Date Rule - Determines the reset dates of the cashflows. A sub-property under the expandable Reset Frequency property.</li> <li>Payment Date Rule - Determines the payment dates of the cashflows. A sub-property under the expandable Payment Date Roll property.</li> <li>Coupon Date Rule - Determines the interest dates of the cashflows.</li> </ul> <p>These properties correspond to those found on the Date Rules tab of the product details window accessed from the trade window.</p>
Average Price	<p>Supported for Future and Future Option trades.</p> <p>Select the Average Price checkbox to preserve the trade price without rounding, regardless of the Quote Type or Quote Decimals specified on the given Future Option contract. Any trade price based calculations, including Nominal and relevant pricer measures, will use the full decimals of the trade price.</p>

Properties	Description
Standard Fixed Coupon	<p>Used in CDS Index Tranche trades.</p> <p>When selected, the associated "Spread" property becomes a drop-down listing standard SNAC coupon values. These values can be defined using the domain <i>CreditDefaultSwapCoupon.SNAC</i>.</p> <p>► For details on using domains, see "Defining Domain Data" in Calypso <i>Getting Started</i> documentation.</p> <p>When the checkbox is cleared, the "Spread" property becomes a text field that allows the user to enter any value for the spread.</p>

## 5.2 Manipulating Strategy Templates

To create a strategy template, select a strategy in the Pricing Sheet and set the properties as needed.

Then choose **Configuration > Manage Strategy Template**.



### Sample Strategy Template

- » Enter a template name and select whether the template is private or public.  
Other users will not be able to use your private templates.
- » Select whether the dates should be saved as absolute dates or relative dates (they are relative to the valuation date).
- » Then click **Save as New** to save the template.

The property values will be used as default values when the template is selected in the Pricing Sheet.

To store trade keywords with the template, add the keyword names to the domain "tradeTmplKeywords".

Example:



You can select the template from the Template field for the same type of strategy used to create the template.

To modify an existing template, select a template in the pricing sheet, and modify the values of the properties as needed.

Then choose **Configuration > Manage Strategy Template**.



#### Sample template modification

- » Select "Update Existing" from the Operation field and click **Update Existing**.

To delete an existing template, choose **Configuration > Manage Strategy Template**.

- » Select "Delete" from the Operation field and select a template.
- » Then click **Delete**.

Only the user who created a template (whether it is public or private) can delete it.

## 5.3 "Product: Amount" Properties

"Product: Amount" properties apply to all types of strategies.

They can be made visible under "Common" if you want to display them for all strategies.

Strike		1.3800
Notional		1,000,000.00
Ccy1 Amount		1,000,000.00
Ccy2 Amount		1,380,000.00

#### Sample Product Amount properties

Properties	Description
Notional	Enter the notional amount.
Ccy1 Amount	Enter / displays the notional in primary currency if applicable.
Ccy2 Amount	Displays / enter the notional in quoting currency if applicable.
Settle Amount	Displays the trade settlement amount computed by the system.

## 5.4 "Product: Style" Properties

"Product: Style" properties apply to all types of strategies.

Properties	Description
Trade Type	<p>The trade type: "On Market" or "Off Market".</p> <ul style="list-style-type: none"> <li>Off Market allows the addition of Sales Margin in terms of bp or a dollar amount, which will be represented as a Sales Margin fee.</li> <li>On Market includes the use of an off-market-rate swap, indicated by [om] in the Rate property.</li> </ul>
Product Type	Displays the product type based on the selected strategy.
Product Subtype	<p>The product subtype is set by the system based on the type of trade being captured. You can however define product subtypes as needed in the domain "&lt;product type&gt;.subtype". You can set pricers and market data by product subtype.</p>
Constants	Displays any value used in solving that is entered manually like Strike, etc.
Ccy Pair	<p>Displays the currency pair when each leg is in a different currency. The default currency pair is set in <a href="#">Configuration &gt; User Preferences</a>.</p> <p>You can select another currency pair as needed.</p>
Notional Ccy	Select the currency of the notional.
Strike Ccy	Enter the strike currency.
Quanto Ccy Pair	<p>Only applies to "Self Quanto" or "Quanto" set as a Settle Type.</p> <p>Displays the currency pair used in the Quanto. This is Settlement Ccy/Secondary Ccy in the defined currency pair. The currency pair is defined from the Calypso Navigator in <a href="#">Configuration &gt; Definitions &gt; Currency Definitions</a>.</p>
Buy/Sell	Select the direction of the trade: Buy or Sell.
Put/Call	Displays /select the option direction for the primary currency.
Ccy2 Put/Call	Displays / select the option direction for the quoting currency.
Compound Put/Call	Select the direction of the compound option for the primary currency.
Pay/Receive	Select the direction of the trade leg from the book's perspective.
Notional Exchange	Select Initial, Final, Amortization or any combination of the three to indicate that the notional amount will be exchanged, otherwise there is no exchange of notional.
Amortization	The amortization of the notional defaults to Bullet.
Option Type	Select the option type: Cap, Floor, Collar, Corridor.
Exercise Type	Select the exercise type.
Settle Type	<p>Select the settlement type at exercise. The application may automatically select it based on the product type.</p> <ul style="list-style-type: none"> <li>Cash - For cash settlement (exercise against a fee).</li> <li>Physical - For physical settlement (exercise against the underlying product) - A trade on the underlying product is automatically created.</li> </ul>

Properties	Description
	<ul style="list-style-type: none"> <li>Cleared Physical Settlement</li> </ul> <p>You can also set the following properties:</p> <ul style="list-style-type: none"> <li>End Settlement Date - The end settlement date.</li> <li>Settlement Lag - A number of lag days, months or years, and Business or Calendar. This is the offset between the expiration date and the delivery date. Examples: 3D Business, 2M Calendar, 1Y Business, etc.</li> <li>Settlement Holidays - The holiday calendar.</li> <li>Settlement Date Roll - The date roll convention.</li> <li>Expiration Time Zone - The timezone of the expiration times.</li> <li>Expiration Time - The expiration time.</li> <li>Earliest Exercise Time - The earliest exercise time.</li> <li>Latest Exercise Time - The latest exercise time.</li> <li>Automatic Exercise - A checkbox to allow automatic exercise.</li> <li>Threshold - User-specified threshold in percentage to trigger the automatic exercise.</li> <li>Partial/Multiple Exercise (European swaptions only) - A checkbox to allow partial exercise.</li> <li>Min Notional - User-specified minimum notional that can be partially exercised.</li> <li>Max Notional - User-specified maximum notional that can be partially exercised.</li> </ul>
Leg Type	Select the leg type: Fixed or Float.
Fixed Swap Tenor	<p>Enter the fixed tenor of the swap for Fixed Tenor Swaptions.</p> <p>The swap starts on the option's delivery date and ends on the option's delivery date + fixed tenor.</p> <p>The system currently only supports the pricing of European Fixed Tenor Swaptions.</p>
Location	Select the location for commodities.
Allocated	Displays "Allocated" if the trade has been allocated using the Allocation process, or "Unallocated" otherwise.
Observation Type	<p>For Accrual and Accumulator options, the choices are:</p> <ul style="list-style-type: none"> <li>Cash Accrual</li> <li>FX Accrual</li> <li>Vanilla Fade In - Each time the spot condition is met on a fixing date, a portion of the notional is paid. That is, on expiry date the notional is: <math>\frac{n}{N} \times \text{"notional amount"}</math>.</li> <li>Vanilla Fade Out - Each time the spot condition is met on a fixing date, a portion of the notional is deducted from the maximum that can be used. That is, on expiry date the</li> </ul>

Properties	Description
	<p>notional is: "notional amount" - ("n/N" x "notional amount").</p> <p>Where:</p> <ul style="list-style-type: none"> <li>"notional amount" is the notional amount</li> <li>n is how many times the spot satisfies the predefined condition (whether it is meant to be above/below a predetermined trigger, or inside/outside a predetermined range) on the predefined fixing dates</li> <li>N is the number of fixings dates over the life of the option</li> </ul>
Strike Type	Select the strike type: Fixed, Forward Start, Average or Lookback.
Rate Type	Select the rate type: Market, Average or Lookback.
Range Style	<p>Select Single for single range, or Multiple for multiple ranges.</p> <ul style="list-style-type: none"> <li>For Single range, you can capture the range in the Trigger properties.</li> <li>For Multiple range, right-click the trade and choose "Supplemental" to define the ranges.</li> </ul>
Known 1st Range	<p>Select Yes if the first range is known for a resetting range, or No otherwise.</p> <p>If Yes, you can specify the first range in Trigger and Trigger2.</p>
Flexo FX Source	<p>Only applies to the "Flexo" Settle Type.</p> <p>Choose the FX rate source for Flexo type trades.</p>
Initial FX Spot	Enter the FX spot trade between the two currencies.
Principal Adjustment	<p>If there is notional exchange, you can also specify notional adjustments at every coupon period based on FX rates.</p> <p>Select None, Pay (adjustments on the Pay leg), or Rec (adjustments on the rec leg).</p> <p>You can also set the following properties:</p> <ul style="list-style-type: none"> <li>FX Reset - Select the FX rate reset to determine the FX rates for the adjustments. FX rate resets are defined from the Calypso Navigator using <b>Configuration &gt; Foreign Exchange &gt; FX Rate Definitions</b>.</li> <li>Adjust First - Check to adjust the first cashflow.</li> <li>FX Reset Use Index Reset Date - Check to set the FX reset date to the index reset date. It is the payment begin date otherwise.</li> </ul> <p>If "FX Reset Use Index Reset Date" is not checked, you can set the FX Reset Lag and FX Reset Holidays as needed.</p>
Call Type	<p>Select "Cancellable" for a cancellable swap, or select "None".</p> <p>For a Cancellable swap, you can set the following properties:</p> <ul style="list-style-type: none"> <li>Buy/Sell - Select Buy or Sell, the direction of the trade from the book's perspective.</li> </ul>

Properties	Description
	<ul style="list-style-type: none"> <li>Exercise Type - European or American</li> <li>Expiry Date - The expiration date. If a non-business day is entered, it will automatically move to the previous business day. For European, the trade can only be canceled on the expiration date.</li> <li>First Exercise Date - The first exercise date. For American, the trade can be canceled between the First Exercise Date and the Expiry Date.</li> <li>Delivery Date - The delivery date defaults to the spot date for the selected currency. It can be modified as needed.</li> <li>Settlement Lag - The number of lag days. Whether the lag days are business days or calendar days can also be selected.</li> <li>Settlement Holidays - User selects from the holiday calendar.</li> <li>Expiry Time - The expiration time.</li> <li>Earliest Exercise Time - The earliest exercise time.</li> <li>Latest Exercise Time - The latest exercise time.</li> <li>Expiry Timezone - The corresponding timezone and holiday calendars to the Expiry Time.</li> <li>Fee Type - A fee type</li> <li>Fee Currency - The fee currency</li> <li>Fee - The fee amount / percentage</li> </ul>
Custom Cashflows	Displays "true" if the cashflows have been customized, or "false" otherwise.
Exchange	Select the Exchange where the contract is quoted.
Contract Size	Displays the contract size.
Quantity	Enter the traded quantity.
Contract	Select the contract.
Contract Underlying	Select the expiration date of the underlying future contract.
Contract Date	Select the expiration date.
Payout	Displays the Pricing Script payout selected in the strategy.

## 5.5 "Product: Info" Properties

"Product: Info" properties apply to all types of strategies.



Product ID Type		BB_CALC_TYP
Product ID		102
Underlying		BondT 2 3/4 02/15/...
Current Notional		

#### Sample Product Info properties

Properties	Description
Product ID Type	<p>Select the product ID type to choose from when entering values in the Product ID field.</p> <p>A default search type can be configured in <a href="#">Configuration &gt; User Preferences</a> under the Defaults tab. Select the default search type from the Default Bond Product ID type drop down.</p> <p>Setting this in the trade leg specifically will override the value set in the defaults.</p>
Product ID	Enter the bond product identifier.
Underlying	Displays the Bond Product details for the selected bond product. To select a bond product double-click in this field to bring up the Search Bonds window.
Current Notional	Displays the current nominal.

## 5.6 "Product: Rate" Properties

"Product: Rate" properties apply to all types of strategies.

Properties	Description
Quanto Factor	<p>Only applies to "Self Quanto" or "Quanto" set as a Settle Type. Not available with Digital and Digital with Barrier strategies.</p> <p>Enter the rate between the quoting currency and the primary currency if the settlement currency is the primary currency.</p> <p>You can enter "k" to populate it with the strike rate, "s" for spot rate, or enter a fixed rate. The trade keyword "QuantoSource" will be populated accordingly.</p>
Strike	<p>Enter the strike.</p> <p>The following FX Delta shortcuts are also available. Add the shortcut to the Strike property field and press Enter.</p> <ul style="list-style-type: none"> <li>You can enter "atm" to solve for an at-the-money forward. This gives the at-the-money strike for the given currency pair and tenor. The premium in Delta convention and the Delta-neutral-or-atm-forward convention are taken from the vol surface. This is the most commonly used shortcut because it produces the "at-the-money" strike whether it's Delta neutral or ATMF.</li> <li>You can enter "atms" to solve for an at-the-money spot. This gives the strike equal to the current spot rate.</li> <li>You can enter "atmf" to get the strike equal to the current outright forward.</li> </ul>

Properties	Description
	<ul style="list-style-type: none"> <li>You can enter "dn" to set the strike to the ATM delta neutral strike generated from the supplied vol surface and expiry date.</li> <li>You can use the strike to solve for a Delta by entering "&lt;delta value&gt;d", for example "25d".</li> <li>When "&lt;delta value&gt;s" is entered (e.g., 10s), this gives the 25-spot-delta strike, with premium-in-delta coming from the vol surface.</li> <li>When "&lt;delta value&gt;f" is entered (e.g., 10f), this gives the 25-forward-delta strike, with premium-in-delta coming from the vol surface.</li> <li>One percentage strike shortcut: "&lt;delta value&gt;%s" gives the strike equal to spot plus &lt;delta value&gt;%. Also, "-&lt;delta value&gt;%s" gives the strike equal to spot minus &lt;delta value&gt;%.</li> </ul> <p><b>Rounding</b></p> <p>Any system generated strike (solver, shortcut entry) will respect the currency pair rounding settings. If the user manually enters a strike, it will only be rounded based on the constraints of the currency rounding of the amounts that the strike generates.</p> <p>Example: Ccy1 amount is 10,000.00 and a strike is entered as 1.234567.</p> <ul style="list-style-type: none"> <li>If ccy rounding of Ccy2 is 2dp then Ccy2 amount would be 12345.67. The strike does not need to be rounded.</li> <li>If ccy rounding of Ccy2 is 0dp (JPY for example) then Ccy2 amount would be 12346 and the strike would need to be rounded to 1.2346.</li> </ul> <p>The shortcut used will not be persisted if the trade is saved. <b>EX:</b> Entering "atms" in this field will calculate the at-the-money-strike and will appear as "&lt;strike value&gt; [atms]" when pricing. If the trade is saved, the value is saved, but the shortcut used will not be saved.</p>
Strike %	Displays the percentage of strike with respect to "in-the-money" forward: $[(FX\ Fwd - Strike) / FX\ Fwd] * 100$ .
Strike Inverse	Displays 1/Strike for an inverted trade.
Compound Strike	Enter/displays the price of the underlying option as a percentage of the underlying primary amount.
Compound Strike Amount	<p>Compound Strike Amount = Compound Strike * Ccy 1 Amount / 100.</p> <p>You can also enter a compound strike amount and the Compound Strike will be updated accordingly.</p> <p>When exercising the compound option, the compound strike amount will be passed to the created plain vanilla as PREMIUM fee.</p>
Formula Strike	Displays the formula captured in the Strike property.
Vega	Displays what the Vega would be in a Vanilla option from the trade date to the number of days calculated from the difference of the Expiry Date and the Fixing Date of the Volatility






Properties	Description
	Forward option.
VF Vol at Trade Expiry	Displays the volatility at trade expiration (from the market data).
VF Vol at Straddle Expiry	Displays the volatility at underlying expiration (from the market data).
VF Implied Forward Vol	Displays the implied forward volatility.
Agreed Forward Volatility	Enter the forward volatility agreed to on the trade date. The price that is agreed upon to buy the ATM straddle. It defaults to the calculated implied forward volatility. However, you can modify the value.
Rate	Enter the fixed rate for fixed rates, or the spread over the rate value for floating rates as needed.
Fixed Coupon Rate	For a fixed trade, enter the fixed rate.
Settlement Source	Only applies if Settle Type is Physical NDF, Self Quanto, Quanto, or Flexo. Select an FX Rate Definition to fix the FX rates. FX Rate Definitions are configured from the Calypso Navigator using <b>Configuration &gt; Foreign Exchange &gt; FX Rate Definitions</b> .
Settlement Source Time	Displays the fixing time of the selected fixing source.
Settlement Source Quote Side	Displays the quote side of the selected fixing source.
Settlement Source Fixing Rate	Displays the fixing rate of the selected fixing source, if any on the fixing date and if there is only one fixing date.
Observation Source	Select an FX Rate Definition to fix the FX rates. FX Rate Definitions are configured from the Calypso Navigator using <b>Configuration &gt; Foreign Exchange &gt; FX Rate Definitions</b> . Then right-click the FX Rate Definition and choose "Supplemental" to define the accrual details.
Observation Source Time	Displays the fixing time of the selected fixing source.
Observation Source Quote Side	Displays the quote side of the selected fixing source.
Observation Fixing Rate	Displays the fixing rate of the selected fixing source, if any on the fixing date and if there is only one fixing date.
Reset Source	Select "Not resetting" for non-resetting ranges, or select the FX Rate Definition that will be used to fix the rates. FX Rate Definitions are configured from the Calypso Navigator using <b>Configuration &gt; Foreign Exchange &gt; FX Rate Definitions</b> . Then right-click the FX Rate Definition and choose "Supplemental" to define the fixing schedule.

Properties	Description
Reset Source Time	Displays the fixing time of the selected fixing source.
Reset Source Quote Side	Displays the quote side of the selected fixing source.
Reset Fixing Rate	Displays the fixing rate of the selected fixing source, if any on the fixing date and if there is only one fixing date.
Rate Index Factor	Enter the index factor as needed for floating rates to multiply the rate value.
Rate Index	<p>Select the rate index for floating rates.</p> <p>You can set additional properties:</p> <ul style="list-style-type: none"> <li>Reset Timing - Select "At Start" or "In Arrears".</li> <li>Reset Lag - Enter the number of days between the actual reset date and the reset date as defined by the reset timing, and specify Business or Calendar. The Reset Lag will persist in terms of days. Entering "30D" and saving will be displayed as "1M" on retrieval. Entering "d" for days, "w" for weeks, "m" for months and "y" for years as a tenor (EX: 1m b = -1M Business) will be saved as days. If not tenor is entered, the system will use days by default.</li> <li>Reset Holidays - Select the reset calendars.</li> <li>Reset Date Roll - Select the reset date roll.</li> <li>Spread as Multiplier - Check this checkbox to have a multiplicative spread rather than an additive spread.</li> <li>Manual First Rate - Enter the first reset rate, if any.</li> <li>Specify Initial Inflation - Select "None", "Initial Level Date" or "Initial Level".</li> <li>Initial Level Date - Enter the initial level date.</li> <li>Initial Level - Enter the initial level.</li> <li>Inflation Calculation Method - Select the calculation method: <ul style="list-style-type: none"> <li>IndexLevel - Index levels are not interpolated between publication dates.</li> <li>Interpolated - Daily index levels are interpolated between reference dates. Select the interpolation method from the Inflation Interpolated Method field.</li> </ul> </li> <li>Inflation Interpolated Method - Only appears for the Interpolated calculation method. The only option is "Weighted".</li> <li>Rate Rounding - Select the rate's rounding method to override the default value from the rate index.</li> <li>Rate Decimals - Enter the number of decimal places to override the default value from the rate index.</li> <li>Sample Timing - Select the sample timing: "At Start" or "In Arrears".</li> </ul>

Properties	Description
	<ul style="list-style-type: none"> <li>Convert Basis - Check this checkbox to check whether the reference index and the trade have the same daycount convention. If not, the rate's daycount convention is converted to the trade's daycount convention.</li> <li>Rate Interpolation - Select "Interpolate" to interpolate the fixing rate. The rate is interpolated using the tenors specified in "Interpolate Tenor 1" and "Interpolate Tenor 2".</li> <li>Manual Initial Fixing - Provides options to manually control the behavior of the initial rate reset. Use the drop-down to select either 1st Rate or Init Fixing Date. <ul style="list-style-type: none"> <li>1st Rate - When selected, this enables the Manual First Rate property. You can then manually enter a rate for the first fixing.</li> <li>Init Fixing Date - When selected, this enables the Initial Fixing Date Roll, Initial Fixing Holidays, and Initial Fixing Lag properties. These properties allow you to specify the date roll convention, the holiday schedule for the fixing, and lag settings.</li> </ul> </li> </ul> <p>When NONE is selected (default), the system uses the normal reset process for fixings.</p>
Reset Frequency	<p>Select the reset frequency to sample resets at a frequency different from the payment frequency. Otherwise, the resets are sampled at the payment frequency.</p> <p>When the sampling frequency is more frequent than the payment frequency, you can define the weight of the resets, and the duration of the sampling period.</p> <ul style="list-style-type: none"> <li>Reset Weighting - Select "Equal", "Weighted" or "Simple".</li> <li>Reset Day of Week - For Weekly, you can set the Reset Day of Week.</li> <li>Reset Day of Month - For Monthly, you can set the Reset Day of Month.</li> <li>Reset Cutoff Lag - The cutoff lag.</li> <li>Reset Duration: <ul style="list-style-type: none"> <li>Match - Rates are sampled over the entire averaging period.</li> <li>Custom - Rates are sampled over a user-defined period.</li> </ul> </li> <li>Custom Sample Period - Define the number of days of the sampling period.</li> <li>Reset Stub - Select "Start" or "End".</li> </ul>
Reset Date	<p>Only applies to Physical NDF settle type.</p> <p>Displays "Delivery Date - Number of lag days defined in the FX Rate Definition".</p> <p>It is based on the FX Rate Definition selected in Settlement Source.</p> <p>It can be modified as needed.</p>

## 5.7 "Product: Barrier" Properties

"Product: Barrier" properties apply to all types of strategies.

Barrier Type		UI
Barrier Description		Up In
Barrier		1.3500
Barrier2		
 Barrier Start Date		10/17/2013
... Barrier Start Time		Option Cut
 Barrier End Date		10/17/2013
... Barrier End Time		Option Cut
 Barrier2 Start Date		
 Barrier2 End Date		
 Rebate		1,000.00
... Rebate Ccy		EUR
... Rebate Timing		Expiry
Barrier Duration		PARTIAL

### Sample Product Barrier properties

Properties	Description
Barrier Duration	<p>Select the duration type:</p> <ul style="list-style-type: none"> <li>EXPIRY - The barrier is only observed on the expiry date. You can define multiple volatilities. The VOLATILITY1 and VOLATILITY2 pricing parameters correspond to the volatilities for the upper and lower barriers. Enter the volatility for the barrier if desired. Otherwise, the pricer uses the volatility from the surface if you do not specify one in the pricing parameters. To use the same volatility as the strike, manually enter that value in the pricing parameters.</li> <li>FULL - The barrier is observed throughout the life of the option. The start date of the observation is the trade date; the end date of the observation is the expiry date.</li> <li>PARTIAL - Enter the start and end dates for the observation, which can be less than the life of the option. Enter values for Barrier/Barrier2 Start and Barrier/Barrier2 End dates.</li> <li>MULTI_PERIOD - The barrier is observed over multiple periods. Right-click a barrier trade and choose "Supplemental" from the popup menu.</li> </ul>
Barrier Description	Displays the description of the barrier type.
Barrier Type	<p>Select the type of barrier:</p> <ul style="list-style-type: none"> <li>UI - Up In</li> <li>DI - Down In</li> <li>UO - Up Out</li> <li>DO - Down Out</li> <li>DKI - Up In Down In</li> <li>DKO - Up Out Down Out</li> <li>KIKO (UI) - KIKO Up In Down Out - Knock into a UI barrier option</li> <li>KIKO (DI) - KIKO Up Out Down In - Knock into a DI barrier option</li> </ul>

Properties	Description
Barrier	Strike rate for the single barrier, or upper barrier for a double barrier.
Barrier Start Date	For a partial barrier: the start date of the barrier observation. You can also set the Barrier Start Time.
Barrier End Date	For a partial barrier: the end date of the barrier observation. You can also set the Barrier End Time.
Barrier2	Strike rate for the lower barrier.
Barrier2 Start Date	For a partial double barrier: the start date of the second barrier observation. You can also enter the Barrier2 Start Date.
Barrier2 End Date	For a partial double barrier: the end date of the second barrier observation. You can also set the Barrier2 End Time.
Rebate	Enter a rebate amount, if applicable. You can also set the following properties: <ul style="list-style-type: none"> <li>Rebate Ccy - Select the currency for the rebate. <ul style="list-style-type: none"> <li>Primary Currency - Asset-or-Nothing</li> <li>Secondary Currency - Cash-or-Nothing</li> <li>Quanto Currency - When Settle Type is specified as Quanto and the Settle Ccy property is populated with a third currency, the Rebate Ccy can also be set as the Quanto currency.</li> </ul> </li> <li>Rebate Timing - Select Expiry (rebate at expiration), or INSTANT (rebate when the barrier is hit).</li> </ul>
Barrier Monitoring	Enter the barrier monitoring type, CONTINUOUS or CLOSING.

## 5.8 "Product: Trigger" Properties

"Product: Trigger" properties apply to all types of strategies.

Trigger Description		One Touch Down
Trigger Type		OT DN
Trade Term		1D
Expiry Date		10/16/2013
Expiry Delivery Link		On
Trigger		1.3000
Trigger2		
Settle Ccy		EUR
Observation Source		
Expiry Cut		NYC 10:00
Trigger Duration		PARTIAL
Trigger Included		
Trigger2 Included		
Trigger Spread		
Trigger2 Spread		
Trigger Start Date		10/17/2013
Trigger End Date		10/16/2013
Trigger2 Start Date		
Trigger2 End Date		
Payout Type		Expiry

#### Sample Product Trigger properties

Properties	Description
Trigger Duration	<p>Select the duration type:</p> <ul style="list-style-type: none"> <li>EXPIRY — The trigger is only observed on the expiry date. You can define multiple volatilities. The VOLATILITY1 and VOLATILITY2 pricing parameters correspond to the volatilities for the upper and lower triggers. Enter the volatility for the digital if desired. Otherwise, the pricer uses the volatility from the surface if you do not specify one in the pricing parameter. To use the same volatility as the strike, manually enter that value in the pricing parameter(s).</li> <li>FULL — The trigger is observed throughout the life of the option. The start date of the observation is the trade date; the end date of the observation is the expiry date.</li> <li>PARTIAL — Enter the start and end dates for the observation, which can be less than the life of the option. Enter values for Trigger/Trigger2 Start and Trigger/Trigger2 End dates.</li> </ul>
Trigger Description	Displays the description of the trigger type.
Trigger Type	<p>Select the trigger type.</p> <p><b>For Digital options, the choices are:</b></p> <ul style="list-style-type: none"> <li>OT UP - One Touch Up</li> <li>OT DN - One Touch Down</li> <li>NT UP - No Touch Up</li> <li>NT DN - No Touch Down</li> </ul>



Properties	Description
	<ul style="list-style-type: none"> <li>• DOT - Double One Touch</li> <li>• DNT - Double No Touch</li> <li>• OTNT (UI) - One Touch No Touch UI</li> <li>• OTNT (DI) - One Touch No Touch DI</li> </ul> <p><b>For Digital With Barrier options, the choices are ABOVE or BELOW.</b></p> <p><b>For Accrual options and Accumulator options, the choices are:</b></p> <ul style="list-style-type: none"> <li>• ABOVE - Payout occurs when the spot rate is above the trigger.</li> <li>• BELOW - Payout occurs when the spot rate is below the trigger.</li> <li>• IN - Payout occurs when the spot rate is within in the trigger range.</li> <li>• OUT - Payout occurs when the spot rate is out of the trigger range.</li> </ul>
Payout Type	Select Instant (payout when the trigger is hit) or Expiry (payout at expiration).
Trigger	<p><b>Digital and European Binary options:</b></p> <p>Enter the strike rate for the single trigger, or upper trigger for a double digital.</p> <p><b>Accrual and Accumulator options:</b></p> <p>Enter the trigger for ABOVE and LOW options, or low trigger for a range.</p>
Trigger Start Date	Enter the start date of observation for a partial digital.
Trigger End Date	Enter the end date of observation for a partial digital.
Trigger Spread	In case of resetting range, enter the upper spread for single range.
Trigger Included	<p><b>Accrual options:</b></p> <p>For ABOVE and BELOW accruals, select Yes to monitor the trigger, or No otherwise.</p> <p><b>Range Accruals:</b></p> <p>Select Yes to monitor the upper value of the range, or No otherwise.</p>
Trigger2	<p><b>Digital and European Binary options:</b></p> <p>Enter the strike rate for the lower trigger.</p> <p><b>Accrual options and Accumulator options:</b></p> <p>Enter the high trigger for a range.</p>
Trigger2 Start Date	Enter the start date of second trigger observation for a double partial digital.
Trigger2 End Date	Enter the end date of second trigger observation for a double partial digital.
Trigger2 Spread	In case of resetting range, enter the lower spread for single range.
Trigger2 Included	<p><b>Range Accruals:</b></p> <p>Select Yes to monitor the lower value of the range, or No otherwise.</p>

## 5.9 "Product: Payment" Properties

"Product: Payment" properties apply to all types of strategies.

Payment Frequency		QTR
Payment Day Count		ACT/360
<input checked="" type="checkbox"/> Payment Date Roll		MOD_FOLLOW
Exclude First		
<input checked="" type="checkbox"/> Cash Settle Method		
<input checked="" type="checkbox"/> Stub Type		NONE
<input checked="" type="checkbox"/> Compounding Type		None
Initial Comp Calc Notional		
Previously Accrued Interest		
Interest Amount		
Factor		
Strike Included		

### Sample Product Payment properties

Properties	Description
Payment Frequency	Select the payment frequency.
Payment Day Count	Select the payment daycount.
Payment Date Roll	<p>Select the payment date roll, when the payment date falls on a non business day.</p> <p>You can also set the following properties:</p> <ul style="list-style-type: none"> <li>Payment Timing - Select "At Start" or "In Arrears".</li> <li>Payment Interest Calculation <ul style="list-style-type: none"> <li>For payment timing "In Arrears", select EXP for an exponential interest calculation, or NONE otherwise.</li> <li>For payment timing "At Start", select DISC for discounting, or NONE otherwise.</li> </ul> </li> <li>Payment Accrual - Select the adjustment method of the accrual period: <ul style="list-style-type: none"> <li>ADJUSTED - Adjusts the period's end date if it falls on a non-business day, according to the payment date roll convention. Rolling the end date adjusts the period length, so a rolled date changes the interest amount.</li> <li>UNADJUSTED - Does not adjust the period's end date for non-business days.</li> <li>MAT_UNADJUSTED - Adjusts the period's end date if it falls on a weekend unless it is the last period (maturity), in which case it is not adjusted. Thus the adjustment method may affect intermediate interest amounts, but it does not change the maturity date.</li> <li>FRN - Adjusts the period's end date for non-business days to the next business day unless the next business day is in the following month, in which case it uses the preceding business day.</li> </ul> </li> </ul>

Properties	Description
	<ul style="list-style-type: none"> <li>Payment Holidays - Select the payment calendars to determine business days for the cashflow payment date (accrual start date).</li> <li>Settle Holidays - Select the settlement calendars to determine business days for the cashflow settlement dates.</li> <li>Payment Lag - Enter the number of days between the interest date and the payment date, and specify Business or Calendar.  The Payment Lag will persist in terms of days. Entering "30D" and saving will be displayed as "1M" on retrieval. Entering "d" for days, "w" for weeks, "m" for months and "y" for years as a tenor (EX: 1m b = -1M Business) will be saved as days.</li> <li>Payment Day - Select to enter payment details. This makes a field available next to the Day label where you can specify which day the payment should take place. For example, enter "5" to specify that the payment date occurs on the 5th of the month following the swap end date.</li> <li>Payment Roll Day - Select a date roll adjustment to adjust the date, or none otherwise. <ul style="list-style-type: none"> <li>DAY - Enter a fixed day of the month to which the date will be rolled. For example, entering "5" forces the payment date to be on the fifth calendar day of the month. Entering "31" indicates the last day of the month, even for months with fewer than 31 days - The selection changes to EOM.</li> <li>IMM - The payment date is rolled according to the IMM_WED date roll convention by default. If the date roll convention is IMM_MON, then the payment date is rolled according to the IMM_MON date roll convention.</li> <li>EOM - The last day of the month, regardless of the number of days in the month.</li> </ul> </li> <li>Payment Rounding - Select the rounding method.</li> <li>Payment Begin Date Roll - Select a date roll for the start date.</li> <li>Payment Begin Holidays - Select a holiday calendar for the start date.</li> <li>Payment End Date Roll - Select a date roll for the end date.</li> <li>Payment End Holidays - Select a holiday calendar for the end date.</li> <li>Extra Day in First Period - Check to add a day to the first payment period. The system uses the daycount (nominator+1)/denominator on the first cashflow - For example ACT+1/360.</li> <li>Extra Day in Last Period - Check to add a day to the last payment period. The system uses the daycount (nominator+1)/denominator on the last cashflow - For example ACT+1/360.</li> </ul>
Exclude First	Check to exclude the first caplet from the cashflows.
Cash Settle Method	Only applies to cash settlement.  Select the settlement method to compute the settlement amount.

Properties	Description
	<p>[NOTE: If you have defined cash settlement defaults (CSD), it will pick up the settlement method from the CSD defined for the agreement specified in domain "CashSettleDefaultsAgreements" / rate index / currency - It is ANY by default.</p> <p>For example, ANY is defined in domain "CashSettleDefaultsAgreements", and you have a CSD defined for ANY / LIBOR / USD. If the trade is LIBOR / USD and settles in Cash, then the settlement method from the CSD will be set on the trade by default]</p> <p>You can set additional properties:</p> <ul style="list-style-type: none"> <li>Valuation Date - Defaults to the Expiration Date.</li> <li>Valuation Lag - Enter the number of days between the valuation date and the cash settle payment date.</li> <li>Valuation Holidays - Select the holiday calendar.</li> <li>Cash Settle Payment Date - Defaults to the Delivery Date.</li> <li>Cash Settle Currency - Select the currency of the settlement amount.</li> <li>Rate Source - You can select a rate source or none (empty). Rate sources are defined in the "RateSource" domain.</li> </ul> <p>If you select none, you have to select a set of reference banks in Ref Bank 1, Ref Bank 2, Ref Bank 3, Ref Bank 4, Ref Bank 5 - Legal entities of role ReferenceBank.</p> <p>If you select OTHER_SOURCE, you need to select a rate index in Cash Settle Rate Index.</p> <ul style="list-style-type: none"> <li>Quotation Rate - Select the instance of the quotation rate that you want to use: MID, BID, or ASK.</li> <li>Settle Rate - Displays the settlement rate used to compute the settlement amount for the cash settlement methods "Par Yield Curve - Adj." and "Par Yield Curve - Unadj."</li> </ul> <p>In the Option Exercise Window, there is a Settlement Rate field. You can get the value from the pricing environment by clicking <b>Price</b>, or you can enter a value. If you enter a rate, it will be displayed here.</p> <ul style="list-style-type: none"> <li>Cash Settle Location - Select the ISDA location.</li> </ul>
Stub Type	<p>Select the stub period, if applicable, or none.</p> <p>You can also set the following properties:</p> <ul style="list-style-type: none"> <li>Stub Tolerance - Enter the number of days of stub tolerance.</li> <li>Stub First Date - Enter the end date of the first period for SPECIFIC FIRST and SPECIFIC BOTH.</li> <li>Stub Last Date - Enter the start date of the last period for SPECIFIC LAST and SPECIFIC BOTH.</li> <li>Stub Full Coupon Date - Enter the full coupon date for FULL COUPON.</li> <li>First Stub Interpolation - Select Interpolate to interpolate on the first period, or none</li> </ul>

Properties	Description
	<p>otherwise.</p> <p>► Choose <a href="#">Help &gt; View Help</a> for complete details.</p> <ul style="list-style-type: none"> <li>First Stub Tenor 1 - Select the first index tenor for interpolation of the first period.</li> <li>First Stub Tenor 2 - Select the second index tenor for interpolation of the first period.</li> <li>Last Stub Interpolation - Select Interpolate to interpolate on the last period, or none otherwise.</li> </ul> <p>► Choose <a href="#">Help &gt; View Help</a> for complete details.</p> <ul style="list-style-type: none"> <li>Last Stub Tenor 1 - Select the first index tenor for interpolation of the last period.</li> <li>Last Stub Tenor 2 - Select the first index tenor for interpolation of the last period.</li> <li>Interpolated Rate Rounding - Select the stub rate's rounding method.</li> <li>Interpolated Rate Decimals - Enter the number of decimal places for interpolated rate rounding.</li> <li>Interpolation Style - Select the interpolation style: <ul style="list-style-type: none"> <li>Index Based - The DateRoll, the holidays and the daycount are coming from the rate index.</li> <li>Product Payment - The DateRoll, the holidays and the daycount are coming from the coupon panel.</li> </ul> </li> </ul> <p>► Choose <a href="#">Help &gt; View Help</a> for complete details.</p>
Compounding Type	<p>Select the compounding type, if applicable, or none.</p> <p>You can also set the following properties:</p> <ul style="list-style-type: none"> <li>Compounding Frequency - Select the compounding frequency. The compounding frequency must be more frequent than the payment frequency.</li> </ul> <p>When you select a DLY compounding frequency for a rate index that is not setup for daily compounding, the DailyCompound calculator is used.</p> <ul style="list-style-type: none"> <li>Compounding Spread - Enter the spread.</li> <li>Compounding Stub - Enter the stub period on compounding period if any. Only applies to LUN(R), BIWK(R), WK(R) compounding frequencies.</li> <li>Use Rest Period Dates - Check to compound trades based on the reset dates rather than the payment dates.</li> </ul>
Initial Comp Calc Notional	<p>Compounding trades only.</p> <p>When doing a partial termination, the PRINCIPAL transfer takes into account the part of interest that is not capitalized.</p> <p>On the new trade, you can adjust the initial compounding notional as needed.</p>
Previously Accrued	Compounding trades only.

Properties	Description
Interest	Displays the amount of interest that is not capitalized on the new trade resulting from a partial termination.
Interest Amount	Displays the interest amount of a zero coupon Fixed Rate upon pricing.
Factor	Bond futures only. Displays the cheapest to deliver factor.
Strike Included	You can set the following properties:  Physical Delivery Holidays - Select the calendar(s) the application uses to determine the business days.  Physical Delivery Lag - Specify lag days from the end date of the payment period (in business or calendar days) for the actual payment to take place. By default, business days are used to calculate the payment date. To specify calendar days, double-click the Bus label to toggle to Cal.  Physical Delivery Day - Number of delivery days.

## 5.10 "Product: Settlement" Properties

"Product: Settlement" properties apply to many types of strategies. Only relevant settlement fields will be editable for each property.

Properties	Description
Settle Ccy	Displays the settlement currency.
Calculation Ccy	Select the intermediate currency to convert notional currency to settle currency. Enter: <ul style="list-style-type: none"> <li>• Calculation FX Rate</li> <li>• Calculation FX Source</li> <li>• Calculation FX Reset Lag</li> <li>• Calculation FX Reset Holidays</li> </ul>
Next Coupon	Displays the date for the next coupon payment.
Settlement Amount	Displays the settlement amount in the settlement currency.
Settlement Principal	Displays the settlement principal.
Settlement Accrual	Displays the settlement accrual.
Accrual Days	Accrual Days displays the number of days accrued in a bond's current coupon period (Settlement Date - current coupon Start Date). This property is used with strategies that include an underlying bond.

## 5.11 "Date" Properties

"Date" properties apply to all types of strategies. Only relevant date properties will be available for applicable strategies.

Properties	Description
Trade FX Date	Displays the trade date adjusted by the 5pm rule if set.
Trade Date	Displays the valuation date set in the Pricing window of the pricing sheet by default. You can modify as needed. ▶ See <i>Using the Pricing Sheet</i> documentation for details.
Trade Time	Displays the valuation time set in the Pricing window of the pricing sheet. You can modify as needed. ▶ See <i>Using the Pricing Sheet</i> documentation for details.
Settlement Date	Select the settlement date.
Start Date	Enter the start date.
End Date	Enter the end date.
Expiry Date	Enter the expiration date.
Expiry	Displays expiration date details.
Expiry Cut	Displays the default expiry timezone. The default expiry timezone is set in the Defaults panel under <b>Configuration &gt; User Preferences</b> .
Expiry Delivery Link	Select one of four options in the list: <ul style="list-style-type: none"> <li>On - Links the delivery date to the expiration date using the default set for the currency pair, so that when one is updated, the other one is updated accordingly.</li> <li>Off - The delivery date and expiration are independent of each other.</li> <li>Equal - The delivery date and expiration date are made to equal each other.</li> <li>T+1 - The delivery date follows one day after the expiry date.</li> </ul>
Compound Expiry Date	Enter the expiry date of the compound option.
Compound Expiry	Displays details about the "Compound Expiry Date".
Compound Expiry Cut	Displays the default expiry timezone for the compound option. The default expiry timezone is set in the Defaults panel under <b>Configuration &gt; User Preferences</b> .
Compound Term	Displays the "Compound Expiry Date" as a tenor.
Compound Delivery Date	Enter the delivery date of the compound option.
Compound Delivery	Displays details about the "Compound Delivery Date".

Properties	Description
Delivery Date	The delivery date of the option. You can modify as needed.
Delivery	Displays details on the delivery date.
Alternate Delivery Date	<p>Used for FX, FX Forward, and FX Swap strategies.</p> <p>The Alternate Delivery Date allows you to settle the secondary currency in an FX trade on a different date from the Trade Date. When a date is entered in this field, the secondary currency will be settled on the entered date and the primary currency is settled on the Trade Date. For a swap trade, the near leg Alternate Delivery Date should not be before the Trade Date, and the far leg Alternate Delivery Date shouldn't be before the near leg Delivery Date.</p> <p>► For further details on this property, see "Alternate Settle Date" in the Calypso <i>Deal Station Trade Entry</i> documentation.</p>
Trade Term	Displays the expiry date as a tenor.
First Exercise Date	Enter the first date the option can be exercised for American options.
Reset Effective Date	Enter the date at which the strike will be known.
VF Straddle Expiry Date	Enter the expiration date of the underlying option (straddle).
VF Straddle Term	Displays the "VF Straddle Expiry Date" as a tenor.
VF Straddle Cut	Select the expiry timezone for the expiration date of the underlying option (straddle). Expiry timezones are created from the Calypso Navigator using <a href="#">Configuration &gt; Definitions &gt; Expiry Time Zone</a> .
Fixings	<p>Displays the number of fixings for averaging the rate or strike.</p> <p>You can also view the following properties:</p> <ul style="list-style-type: none"> <li>• Schedule Start Date - The schedule start date.</li> <li>• Schedule End Date - The schedule end date.</li> <li>• Schedule 2 Start Date - The schedule start date.</li> <li>• Schedule 2 End Date - The schedule end date.</li> <li>• Payment Frequency Type - The payment frequency type.</li> <li>• Fixing Policy - The fixing policy.</li> <li>• Fixing Frequency - The fixing frequency.</li> <li>• Fixing Calender - The fixing calendar.</li> <li>• Fixing Time Zone - The global time that the commodity reset is expected to be known. This can be, but doesn't have to be, the time zone of the actual exchange or publication.</li> <li>• Fixing Time - The global time that the commodity reset is expected to be known.</li> <li>• First Contract - Only available to payment frequency types FutureContractFND or FutureContractLTD.</li> </ul>



Properties	Description
	<p>Displays the first underlying futures contracts that will be used as fixing references.</p> <ul style="list-style-type: none"> <li>Last Contract - Only available to payment frequency types FutureContractFND or FutureContractLTD.</li> </ul> <p>Displays the last underlying futures contracts that will be used as fixing references.</p> <ul style="list-style-type: none"> <li>Intraday Policy - The Intraday Policy to be used.</li> <li>DST Name - The daylight savings.</li> </ul>
Cash Date	Enter the cash date.
Effective Date	Enter the effective date.

## 5.12 "Market Data" Properties

"Market Data" properties apply to all types of strategies. Only relevant market data field will be editable for each property.

Volatility		
FX Spot		1.4200
Location Spread		
Adjusted FX Spot		1.4200
Fwd Points		0.00
FX Fwd		1.420000
Ccy 1 Rate		0.301114
Ccy 2 Rate		0.307436

### Sample Market Data properties

Properties	Description
Credit Spread (5Y)	<p>Enter a credit spread value for a 5 year tenor.</p> <ul style="list-style-type: none"> <li>Recovery Rate - Enter the recovery rate. This value will be used if no recovery rate for the counterparty is found.</li> </ul>
Volatility	Displays the volatility based on the market data associated with the selected pricing environment. You can modify this value.
FX Spot	Displays the spot rate from the quote set associated with the selected pricing environment. You can modify this value.
Location Spread	Displays the commodities location spread.
Adjusted FX Spot	Displays the spot adjusted of location spread.
Fwd Points	<p>Displays the forward points based on the market data associated with the selected pricing environment. You can modify this value.</p> <p>You can compute forward points on-the-fly based on "Ccy 1 Rate" or "Ccy 2 Rate".</p>

Properties	Description
	<p>You can also compute "Ccy 1 Rate" based on forward points - Choose <a href="#">Configuration &gt; Rate Triangulation &gt; Adjust Ccy 1 Rate</a>. It will keep "Ccy 2 Rate" constant.</p> <p>Or you can compute "Ccy 2 Rate" based on forward points - Choose <a href="#">Configuration &gt; Rate Triangulation &gt; Adjust Ccy 2 Rate</a>. It will keep "Ccy 1 Rate" constant.</p>
FX Fwd	Displays the forward rate based on FX Spot and Fwd Points.
Ccy 1 Rate	Displays the interest rate of the primary currency based on the market data associated with the selected pricing environment. You can modify this value.
Ccy 2 Rate	Displays the interest rate of the quoting currency based on the market data associated with the selected pricing environment. You can modify this value.
Spot	Fixing price. Displays the closing rate of the underlying.
Spot Reference	Displays the fixing price. Spot Rate as effective date.

## 5.13 "Price" Properties

Price properties apply to all types of strategies. Only relevant price properties will be available for applicable strategies.

Properties	Description
Exercise Fee Type	For Swaptions, select a premium fee type: Amount or %.
Exercise Fee	For Swaptions, enter the premium fee amount or %.
Premium Date	Displays the premium payment date. The system uses the spot date by default. You can change this to a forward date. If you use a forward date, the application adjusts the premium amount using the discount curve from the selected pricing environment.
Pricing Model	<p>Select the pricer used to price the trade. It defaults to the pricer set in the pricer configuration.</p> <p>You can also specify pricing parameters associated with the selected pricing model.</p>
Pricer Override	<p>The Pricer Override allows overriding the default pricer coming from the pricer configuration in a persistent fashion. This trade will always be priced using the new pricer.</p> <p>You can select a pricer-override key provided you have created override keys in the Pricer Configuration.</p>
Market Data Item Override	<p>The Market Data Item Override allows overriding the default market data coming from the pricer configuration in a persistent fashion. This trade will always be priced using the new market data.</p> <p>You can select a market data-override key provided you have created override keys in the Pricer Configuration.</p>
Price Format	Select the currency and unit amount of the prices.

Properties	Description
	The unit amount defaults to the price format specified under <a href="#">Configuration &gt; User Preferences</a> .
Model Premium	Displays the theoretical premium computed by the pricer.
Model Price	<p>Displays the unit amount of model premium based on the selected Price Format.</p> <p>You can also view the following properties:</p> <ul style="list-style-type: none"> <li>• Model Ccy1 %</li> <li>• Model Ccy1 Pips</li> <li>• Model Ccy2 %</li> <li>• Model Ccy2 Pips</li> </ul> <p>If the Rate Side is Bid/Ask, you will see Bid/Ask prices displayed instead of the mid price.</p>
Trader Premium	Displays the theoretical premium computed by the pricer. You can modify its value.
Trader Price	<p>Displays the unit amount of trader premium based on the selected Price Format.</p> <p>You can also view the following properties:</p> <ul style="list-style-type: none"> <li>• Trader Ccy1 %</li> <li>• Trader Ccy1 Pips</li> <li>• Trader Ccy2 %</li> <li>• Trader Ccy2 Pips</li> </ul> <p>If the Rate Side is Bid/Ask, you will see Bid/Ask prices displayed instead of the mid price.</p>
Customer Premium	<p>Displays the premium amount such that Customer Premium = Sales Premium + Trader Premium.</p> <p>Displays the customer premium such that:</p> <ul style="list-style-type: none"> <li>• Customer Premium = Trader Premium + Sales Premium (Sell)</li> <li>• Customer Premium = Trader Premium - Sales Premium (Buy)</li> </ul> <p>The customer premium is the actual fee that will be paid/received.</p> <p><b>Sub-properties for FX Options</b></p> <p>The Customer Premium property for FX Options includes two sub-properties for specifying a third-party legal entity, or beneficiary, as the recipient. This allows for successful generation of new transfers to the beneficiary from the Pricing Sheet strategy.</p> <p><b>Premium Legal Entity</b> - Select a legal entity as the recipient for the premium. Legal entities are those defined in the Legal Entity window.</p> <p><b>Premium Legal Entity Role</b> - Select a role for the legal entity. Legal entity roles are the same options provided in the "Role(s)" field of the Legal Entity window.</p>

Properties	Description
Customer Price	<p>Displays the unit amount of customer premium based on the selected Price Format.</p> <p>You can also view the following properties:</p> <ul style="list-style-type: none"> <li>• Customer Ccy1 %</li> <li>• Customer Ccy1 Pips</li> <li>• Customer Ccy2 %</li> <li>• Customer Ccy2 Pips</li> </ul> <p>If the Rate Side is Bid/Ask, you will see Bid/Ask prices displayed instead of the mid price.</p>
Customer Fee Ccy	Select the currency of the customer premium. It can be different from the primary and quoting currencies.
Customer Fee	<p>Displays the customer premium in customer fee ccy.</p> <p>You can also display:</p> <ul style="list-style-type: none"> <li>• Customer Fee FX Rate - You can edit the FX rate between the fee currency and the currency of the Price Format as needed.</li> <li>• Customer Fee Ccy Pair - Displays the currency pair between the fee currency and the currency of the Price Format.</li> <li>• Customer Fee FX Spot Rate To Base - Displays the FX rate between the fee currency and the base currency of the pricing environment.</li> </ul>
Sales Price	Displays the unit amount of sales premium based on the selected Price Format.
Sales Premium	Displays the Sales Fee in premium currency.
Sales Fee	<p>This property is only enabled if a Sales Person is selected. Enter the sales fee amount.</p> <p>Upon saving, a fee is created. The fee type depends on the product types: FXOPT_MARGIN for FX options, SPOT_MARGIN and FAR_MARGIN for FX, and CA_SALES_MARGIN for all other product types.</p> <p>► Please refer to Calypso Fees documentation for configuring sales margins.</p> <p>You can also display:</p> <ul style="list-style-type: none"> <li>• Sales Fee Date - The date of the sales fee.</li> <li>• Sales Fee Ccy - The default sales fee currency, if any. The default sales fee currency is set in the Defaults panel under <b>Configuration &gt; User Preferences</b>. Another sales fee currency can be entered as needed.</li> <li>• Sales Fee FX Rate - The FX rate between the premium currency and the sales fee currency in case they differ. It is automatically populated if a real-time feed is setup. If the FX rate between the premium currency and the sales currency changes, user can elect to recompute the premium or the sales fee using the parameter "On Sales Fee FX Rate change" in the Defaults panel under <b>Configuration &gt; User Preferences</b>.</li> </ul> <p>The MarginFXRate trade keyword stores the rate used in the conversion.</p>

Properties	Description
Sales Location	<p>You can select the location of the sales representative. The sales location is a legal entity of role SalesLocation. The sales fee is paid to that legal entity if selected.</p> <p>If the sales location is not selected, the sales fee is paid to the counterparty of the trade if the domain "DefaultSalesMarginFeeLE" contains the value "UseTradeCptyAsDefault".</p> <p>Otherwise, it is paid to the "NONE" counterparty.</p>
Modified Strike	Displays the strike.
Negotiated Price Type	Displays the negotiated price type.
Clean Price	Enter the clean price (value of bond - accrued interest).
Dirty Price	Enter the dirty price (value of bond + accrued interest).
Gross Price	Displays inflation adjusted price. This value is for Inflation Bonds only.
Yield	Enter the yield to maturity based on bond inputs.

## 5.14 "Solver" Properties

"Solver" properties apply to all types of strategies. They are only populated when solving is applied, and are not editable.

Solve	Solve
Solve Variable	Strike
Solve Marking	Active
Solve Variable Result	1.3479
Solve Target	Leg EUR DELTA_PCT
Solve Target Value	-10.0000
Solved Target Value	-10.0069
Solve Distribution	Don't use distribution
Solve Strike Shortcut	
Distributed Target Value	-10.0000

### Sample Solver properties

Properties	Description
Solve Variable	Displays the property to solve for.
Solve Marking	<p>Displays "Solve" for custom solving.</p> <p>► Refer to Calypso Solving documentation for complete details on using the solving capabilities.</p>
Solve Variable Result	Displays the value of the solved property.
Solve Target	Displays the target property.
Solve Target Value	Displays the target value that you want to obtain.

Properties	Description
Solved Target Value	Displays the computed target value.
Solve Distribution	Displays the distribution method selected when solving for multiple trade.
Solve Strike Shortcut	Displays the solving shortcut applied to the Strike if any.
Solve Rate Shortcut	Displays the solving shortcut applied to the Rate if any.
Distributed Target Value	Displays the distributed target value when solving for multiple trades.

## 5.15 "Dealt Data" Properties

"Dealt Data" properties apply to all types of strategies. They are only populated on saved trades, and are not editable.

Dealt Spot Date	03/06/2012
Dealt Fwd Rate	1.41964
Dealt Fwd Points	-3.55000
Dealt Ccy1 Rate	0.64420
Dealt Ccy2 Rate	0.55720
Dealt Spot Rate	1.4200
Dealt Location Spread	
Dealt Volatility	10.10000
Dealt Model Price	-0.16176
Dealt Model Premium	
Dealt Pricing Model	FXOptionVanilla

### Sample Dealt Data properties

Properties	Description
Deal Spot Date	Displays the spot date saved with the trade.
Dealt Fwd Rate	Displays the forward rate saved with the trade.
Dealt Fwd Points	Displays the forward points saved with the trade.
Dealt Ccy1 Rate	Displays the interest rate of the primary currency saved with the trade.
Dealt Ccy2 Rate	Displays the interest rate of the quoting currency saved with the trade.
Dealt Spot Rate	Displays the spot rate saved with the trade.
Dealt Location Spread	Displays the commodities location spread.
Dealt Volatility	Displays the volatility saved with the trade.
Dealt Model Price	Displays the model price saved with the trade.
Dealt Model Premium	Displays the model premium saved with the trade.
Dealt Pricing Model	Displays the pricing model saved with the trade.

## 5.16 "Keyword" Properties

"Keyword" properties apply to all types of strategies.

Properties	Description
@<trade keywords>	<p>These properties refer to trade keywords. The list of available keywords depends on which keywords are defined in your system.</p> <p>Enter values for trade keywords as needed.</p> <p>When you add a trade keyword to domain "PricingSheetKeyword.Boolean", it will appear as a checkbox in the pricing sheet.</p> <p>When you add a trade keyword to domain "PricingSheetKeyword.Date", it will allow selecting a date from a calendar.</p> <p>► Refer to Calypso System Keywords documentation for a description of out-of-the-box keywords.</p>

## 5.17 "Pricer" Properties

"Pricer" properties apply to FX Option strategies.

Properties	Description
Pricer.<property>	These properties display values computed by the pricers.
Pricer.Spot	Spot rate used for pricing the option.
Pricer.Pts	FX forward points for the Delivery Date from discount curves/FX curve. Is based on FX_POINTS=true/false.
Pricer.Fwd	FX forward rate for the Delivery Date.
Pricer.SpotDf1	Ccy1 df (Spot Date, Valuation Date).
Pricer.SpotDf2	Ccy2 df (Spot Date, Valuation Date).
Pricer.Df1	Ccy1 df (Delivery Date, Valuation Date).
Pricer.Df2	Ccy2 df (Delivery Date, Valuation Date).
Pricer.SpotDate	Spot Date based on the currency pair, pricing environment, time zone, Day Change Rule, and system date/time.
Pricer.PrimDepoRt	Ccy1 forward rate (Spot Date to Delivery Date) with DCF as per currency default with no compounding up to one year - beyond one year, compounded annually.
Pricer.SecDepoRt	Ccy2 forward rate (Spot Date to Delivery Date) with DCF as per currency default with no compounding up to one year - beyond one year, compounded annually.
Pricer.ATMVOL	ATM vol interpolated from the FX vol surface that respects the market conventions as defined in the surface. This is computed for display only and is not used in the pricer calculations.

Properties	Description
Pricer.RRVol	The volatility of the 25 delta call minus the volatility of the 25 delta put of a RR: $V_{rr} = V_{call} - V_{put}$ .
Pricer.BFVol	The average of the volatility of the 25 delta call and the volatility of the 25 delta put minus the ATM vol: $V_{bf} = 0.5 * (V_{call} + V_{put}) - V_{atm}$ .
Pricer.STVol	The average of the volatility of the 25 delta call and the volatility of the 25 delta put: $V_{st} = 0.5 * (V_{call} + V_{put})$ .
Pricer.TimeToExp	(Expiry Date – Spot Date)
Pricer.FXDate	Valuation Date for the currency pair, taking into consideration the Valuation Date/Time and the Day Change Rule specified in the pricing environment.
Pricer.ValDatetime	The Valuation Date/Time based on the Time Zone specified in the pricing environment.

## 5.18 "Product: Cliquet" Properties

"Product: Cliquet" properties apply to all types of strategies.

Properties	Description
Participation	Enter the percentage of the return to return to the user.
Initial Coupon	Enter the Initial Coupon. It is used as a base coupon that period returns are added to.
Global Cap	The maximum return for the payoff.
Global Floor	The minimum return for the payoff.
Local Cap	The maximum return for any given reset period.
Local Floor	The minimum return for any given reset period.

## 5.19 "Product: Chooser" Properties

"Product: Chooser" properties apply to all types of strategies.

Properties	Description
Compound Settlement Type	Enter Cash or Physical.

## 5.20 "Product: Commodity" Properties

"Product: Commodity" properties apply to all types of strategies.



Cheapest to Deliver		
Delivery Location		
Quantity Units		Tonnes
Quote Units		Tonnes
Price Underlying		
Total Quantity		0
Custom FX Rounding Decimals		
Underlying		LME_Aluminium_Ca...

#### Sample Product Commodity properties

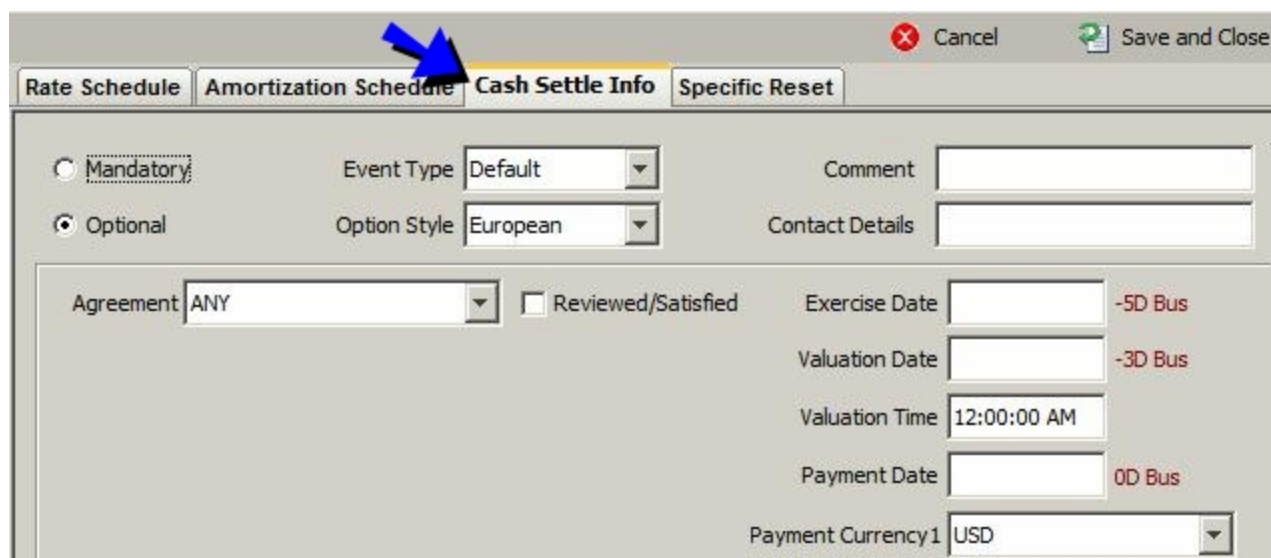
Properties	Description
Averaging Method	Select a method for averaging the rates used in fixing. ► Please refer to Calypso Commodity Averaging Methods documentation for more details.
Averaging Rounding Method	Select the rounding method.
Cheapest to Deliver	Enter the cheapest to deliver amount.
Delivery Location	This is the delivery location for storage based commodities. It is populated from the CommodityLocation domain value. The pricer recognizes the delivery location and prices the forward according to the relevant location differentials.
Quantity Units	Unit of measure that the quantity represents. You can use a different unit type than the unit in the product definition. The quantity unit defaults to the unit defined in the commodity definition. If a unit other than the default unit is chosen, the application requires a conversion definition to correctly convert the units for the cashflows. Commodity positions are always kept in the default unit in the Position Keeper.  Define the conversion definition in the Calypso Navigator using <a href="#">Configuration &gt; Commodities &gt; Commodity Conversion</a> .
Quote Units	The commodity unit in which the reference price is quoted, i.e. USD/Barrel.
Price Underlying	Price of the underlying product.
Total Quantity	Displays the total quantity units over the life of the trade.
Custom FX Rounding Decimals	When populated, FX rates will be rounded to a custom number of decimal points; otherwise, default rounding from the currency pair definition will be applied.
Custom Price Rounding	Enter the number of decimals to use when calculating the settlement price. Using this property at the trade level overrides the setting at the commodity level.

## 5.21 Cash Settle Info

Cash Settle Info allows defining a termination schedule (or break clauses) for a trade.

You can specify default cash settlement values by agreement / rate index / currency from the Calypso Navigator using [Configuration > Interest Rates > Cash Settlement Defaults](#).

Right-click a trade and choose "Supplemental" to determine cash settle info.



If cash settlement defaults have been created for the selected agreement / rate index / currency, the "Early Termination" section will be used as default values for Cash Settlement details.

- » Enter the fields described below as needed then click **Save and Close**. You can define multiple settlement details for different dates.

Note that terminations are not enforced based on cash settlement details. The termination dates are for information purposes. However, if you terminate a trade at a specified date, the cash settlement details will be used to compute the settlement amount.

Fields	Description
Mandatory / Optional	Click the Mandatory or Optional radio button as needed.
Event Type	<p>Select the event type that triggers the cash settlement.</p> <p>The event type is populated for SwapsWire trades.</p> <p>Custom default values can be populated based on the event type. Refer to the <i>Calypso Developer's Guide</i> for details. You can register new event types in the domain "cashSettleEvent".</p>
Comment	Enter a free form comment related to the event.
Option Style	<p>Only applies to optional cash settlements. Select the option style: European, American, or Bermudan.</p> <ul style="list-style-type: none"> <li>• Exercise Date = Effective date of the exercise.</li> <li>• Valuation Date and Time = Valuation date and time used to determine the cash settlement amount.</li> <li>• Payment Date = Payment date of the cash settlement amount.</li> </ul>

Fields	Description
	<p><b>European</b></p> <p>» Enter the exercise date, valuation date, valuation time, payment date, and payment currency. You can double-click the label that appears to the right of the dates to modify the lag. It brings up the OptionCalcDialog. See OptionCalcDialog below for details.</p>
	<p><b>American</b></p> <p>» Enter the first exercise date, valuation date, valuation time, payment date, payment currency, and last expiration date. You can double-click the label that appears to the right of the dates to modify the lag. It brings up the OptionCalcDialog. See OptionCalcDialog below for details.</p>
	<p><b>Bermudan</b></p> <p>» Generate a termination schedule by entering the From and To dates, selecting a frequency (Frq), holiday calendars, and clicking <b>Generate</b>.</p> <p>Note that the values for the dates default from the trade's start and end dates. If you enter a date shortcut (for example, 2y) in the To field, the application calculates the date from the value entered in the From field.</p> <p>See also legal agreement attribute "BermudanTradeDate" for defaults.</p> <p>The frequency and holiday calendars default to the payment details of the trade. The holiday calendars for the Exercise Date and Valuation Date also default to the payment details.</p>
	<p><b>OptionCalcDialog</b></p> <p>» Select the holiday calendar.</p> <p>» Enter a number of lag days, months or years in the Offset field.</p> <p>Days lag "D" can be business days or calendar days. Double-click the Bus label to switch to Cal as needed.</p> <p>For months lag "M" and years lag "Y", the system uses calendar days only.</p> <p>The "No Tenor" checkbox only applies to days lag, when you enter more than 31 days. If you check the "No Tenor" checkbox, the offset will be not be converted to a tenor.</p> <p>Otherwise it will be converted to a tenor. Note that the conversion is for display only. The system always stores 35D.</p> <p>» For European options only, enter the exercise fee.</p> <p>For American and Bermudan options, you can enter the exercise fee in the Ex Schedule panel.</p> <p>For Bermudan options, select the frequency of the exercise dates.</p>
Contact Details	Enter free form contact information as needed.

Fields	Description
Agreement	<p>You can select an agreement type, or ANY.</p> <p>It defaults to the agreement type defined in domain "CashSettleDefaultsAgreements".</p> <p>If cash settlement defaults exist for the selected agreement, rate index and currency, they will be loaded.</p> <p>If a legal agreement of specified type is defined between the counterparty and the processing organization for the specified currency and product type, it can also drive default values on the settlement details.</p> <p><b>[NOTE: The legal agreement CANNOT be defined as "Master"]</b></p> <p><b>Attribute <i>TERMINATION_APPENDIX_MID</i></b></p> <p>The attribute <i>TERMINATION_APPENDIX_MID</i> drives the following default values:</p> <ul style="list-style-type: none"> <li>Quotation Rate <ul style="list-style-type: none"> <li>If <i>TERMINATION_APPENDIX_MID</i> = Yes or not set, it is set to MID.</li> <li>If <i>TERMINATION_APPENDIX_MID</i> = No, it is set to BID/ASK.</li> </ul> </li> <li>Exercise Party Pays <ul style="list-style-type: none"> <li>If <i>TERMINATION_APPENDIX_MID</i> = Yes or not set, it is set to False (unchecked).</li> <li>If <i>TERMINATION_APPENDIX_MID</i> = No, it is set to True (checked).</li> </ul> </li> </ul> <p><b>Attributes <i>CASH_SETTLE_MANDATORY_DATEROLL</i> and <i>CASH_SETTLE_OPTIONAL_DATEROLL</i></b></p> <p>The attributes <i>CASH_SETTLE_MANDATORY_DATEROLL</i> (mandatory agreement) and <i>CASH_SETTLE_OPTIONAL_DATEROLL</i> (optional agreement) drive the default value of the Date Roll conventions (Ex Date and Pay Date).</p> <p>You can create domains "laAdditionalField.CASH_SETTLE_MANDATORY_DATEROLL" and "laAdditionalField.CASH_SETTLE_OPTIONAL_DATEROLL" to hold the possible values.</p> <p><b>Attribute <i>BermudanTradeDate</i></b></p> <p>The attribute "BermudanTradeDate" controls the Bermudan "From Date". If true, the From Date is the Trade Date, otherwise, it is the start date of the swap.</p>
Reviewed / Satisfied	<p>This checkbox appears checked when the trade has been reviewed from the Calypso Navigator in <b>Trade Lifecycle &gt; Termination &gt; Cash Settlement</b> (menu action <code>reporting.CashSettlementWindow</code>).</p> <p>For the Bermudan option style, the Reviewed/Satisfied checkbox can be set for each date.</p>
Ex Date Convention	<p>Select the date roll convention to be applied when the termination date falls on a non-business day.</p> <p>Date roll conventions are described in the Calypso Navigator under <b>Help &gt; Date Roll Conventions</b>.</p>

Fields	Description
	See legal agreement attributes CASH_SETTLE_MANDATORY_DATEROLL and CASH_SETTLE_OPTIONAL_DATEROLL for defaults.
Pay Date Convention	<p>Select the date roll convention to be applied when the payment date falls on a non-business day.</p> <p>Date roll conventions are described in the Calypso Navigator under <a href="#">Help &gt; Date Roll Conventions</a>.</p> <p>See legal agreement attributes CASH_SETTLE_MANDATORY_DATEROLL and CASH_SETTLE_OPTIONAL_DATEROLL for defaults.</p>
Earliest Exercise Time	<p>Enter the earliest time on termination date when the option can be exercised.</p> <p>Defaults to Cash Settlement Defaults if any.</p>
Expiration Time	<p>Enter the time at which the trade is terminated.</p> <p>Defaults to Cash Settlement Defaults if any.</p>
Cash Settle Method	<p>Select a cash settlement method to compute the settlement amount.</p> <p>Defaults to Cash Settlement Defaults if any.</p>
Rate Source	<p>You can select a rate source or none (empty). You can add rate sources to the "RateSource" domain.</p> <p>If you select none, you have to select a set of reference banks.</p> <p>» You can select a legal entity of role ReferenceBank.</p> <p>If you select OTHER_SOURCE, you need to select a rate index from the Rate Index field.</p>
Quotation Rate	<p>Select the instance of the quotation rate that you want to use: MID, BID, or ASK.</p> <p>See legal agreement attribute TERMINATION_APPENDIX_MID for defaults.</p>
Exercise Party Pays	<p>Check to indicate that the exercising party pays the settlement amount, otherwise the exercising party receives the settlement amount.</p> <p>See legal agreement attribute TERMINATION_APPENDIX_MID for defaults.</p>
Location	<p>Select a location.</p> <p>Defaults to Cash Settlement Defaults if any, or to the currency's location otherwise.</p>

## 5.22 Trade Drilldown

Most types of trades that can be captured in the Pricing Sheet can also be captured in native trade windows. When drilling down to such a trade from a report, the native trade window will usually be invoked by default.

To invoke the Pricing Sheet by default instead, you need to define a Trade Window Configuration using [Configuration > User Access Control > Trade Window Configuration](#) (menu action `refdata.TradeWinConfigWindow`) from the Calypso Navigator.

You can modify an existing configuration or create a new configuration.

- » Select the product type, the product subtype, and enter the class name `pricingSheet.PricingSheetWindow` to invoke the Pricing Sheet by default.
- » Then associate the configuration with your Calypso user name under **Configuration > User Access Control > User Defaults** in the Trade Window Config field.

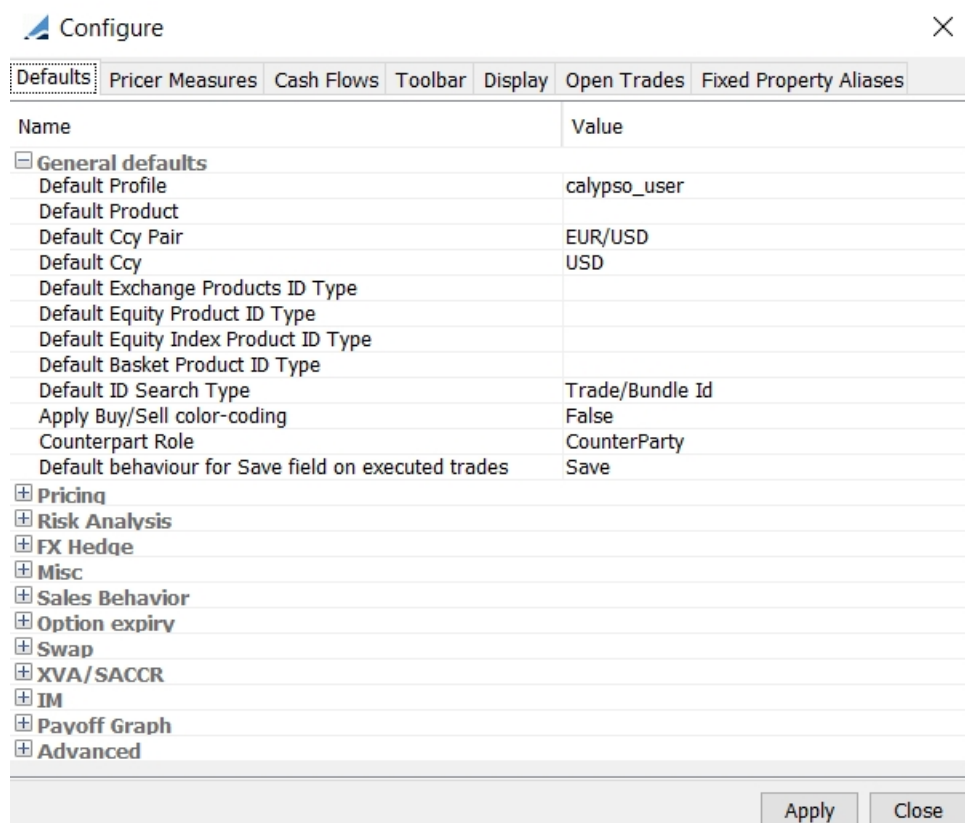
You need to restart the Calypso Navigator in order for the change to take effect.

## 6. Setting User Preferences

Choose **Configuration > User Preferences** to set user preferences: general defaults, pricer measures, trade events columns, toolbar and display icons.

### 6.1 Defaults Panel

Select the "Defaults" panel to make settings for general default values.



Name	Value
<b>General defaults</b>	
Default Profile	calypso_user
Default Product	
Default Ccy Pair	EUR/USD
Default Ccy	USD
Default Exchange Products ID Type	
Default Equity Product ID Type	
Default Equity Index Product ID Type	
Default Basket Product ID Type	
Default ID Search Type	Trade/Bundle Id
Apply Buy/Sell color-coding	False
Counterpart Role	CounterParty
Default behaviour for Save field on executed trades	Save
<b>Pricing</b>	
<b>Risk Analysis</b>	
<b>FX Hedge</b>	
<b>Misc</b>	
<b>Sales Behavior</b>	
<b>Option expiry</b>	
<b>Swap</b>	
<b>XVA/SACCR</b>	
<b>IM</b>	
<b>Payoff Graph</b>	
<b>Advanced</b>	

Configure window (Defaults panel)

**Step 1** - You can select default values for the following parameters:

#### General Defaults

- "Default Profile" - Select the default profile.
- "Default Ccy Pair" - Select the default currency pair for the pricing sheets.
- "Default Ccy" - Select the default currency for cash legs.
- "Default Exchange Products ID Type" - Select the default security code to be displayed for exchange trade products.

- "Default Bond Product ID Type" - Select the default security code to be displayed for bond product trades.
- "Default Equity Product ID Type" - Select the default security code to be displayed for equity product trades.
- "Default Equity Index Product ID Type" - Select the default security code to be displayed for equity index product trades.
- "Default Basket Product ID Type" - Select the default security code to be displayed for basket product trades.
- "Default ID Search Type" - Select the default ID search type for search fields.
- "Apply Buy/Sell color-coding" - Select "True" to show Buy property in green, and Sell in red. Select "False" for no color-coding.
- "Counterpart Role" - Provides a way to set the default role for the counterparty of a trade. The roles found in the drop-down list are the same as those found in the Legal Entity window.
- "Default behavior for Save field on executed trades" - "Save" for default setting that allows for saving. "Don't Save" for default setting that prevents saving.

## Pricing

- "Use Real Time Market Data on startup" - Select True or False.
- "Default Rate Sides" - The following options are available for the default setting:
  - Choice - No spread is applied.
  - Closing Price - Pricing Sheet uses the close sides of the quote set and the volatility surface to price deals.
  - Bid/Ask - Pricing Sheet uses the bid and ask sides of the quote set for spot, forwards, interest rates, and the volatility surface to price deals.
  - Bid/Ask Vol - Pricing Sheet uses the bid and ask sides of the volatility surface and the mid values of the quote set to price deals.
  - Bid/Ask Spot - Pricing Sheet uses the bid and ask sides of the quote set for spot, and the mid value of the volatility surface and other quotes to price deals.
  - Bid/Ask Spot/Fwd - Pricing Sheet uses bid and ask sides of the quote set for spot and forwards, and the mid value of the volatility surface and other quotes to price deals.
- "Default pricing output conventions" - Select the way to display the pricer measures.
  - "1-way" to display pricer measures for mid and close quotes (default).
  - "2-way" to display pricer measures for bid and ask rates, provided you select the Rate Sides "Bid/Ask," "Bid/Ask-Vol," "Bid/Ask-Spot," or "Bid/Ask-Spot/Fwd".
- "Default Price Format" - "Ccy1 %", "Ccy2 pips", or "Non-risky".
- "Default Price Rounding (FX Options)" - Enter a value to round to for Vanilla and Barrier trades. It only applies upon pricing. The value is divided by 100 when loaded to a pricing sheet and it relates to pips, e.g. 0.25 is rounded to the nearest quarter pip. If set to 0, no rounding will be applied.
- "Default Price Rounding For Digitals (FX Options)" - Enter a value to round to for Digital and Digital with a Barrier trades. It only applies upon pricing. The value is NOT divided by 100 when loaded, it relates in terms of percentage points, e.g. 0.25 is rounded to the nearest quarter percent. If set to 0, no rounding will be applied.



**NOTE:** The recommended setting for both rounding (FX Options and FX Options with Digitals) methods is 0.25.

- "Default Rounding Method (FX Options)" - Select a method for default rounding where applicable.  
Neutral Rounding - Rounded to the nearest "Round Price To" setting, with half rounding up to infinity.  
Wide Rounding - Rounded to positive infinity. This reduces negative premiums and increases positive premiums.  
Narrow Rounding - Rounded to negative infinity. This increases negative premiums and reduces positive premiums.

**NOTE:** It is recommended that the "Wide Rounding" setting not be used.

- Default Decimal Precision (Clean Price / Dirty Price) - Enter the rounding precision for decimals when pricing with clean/dirty price.
- Default Decimal Precision (Yield) - Enter the rounding precision for decimals when pricing with yield.
- Default Decimal Precision (Asset Swap Spread) - Enter the rounding precision for decimals when pricing with spread.

## Risk Analysis

- "Always Run Rate Delta Analysis" - True or False. When true, Rate Delta analysis is always run.
- "Rate Delta use Generate dependents" - True or False. When true, dependent curves and volatility surfaces (including forecast curves with underlying discount curves) are generated. When False, the shifts are applied to market data that are needed for pricing only.

## FX Hedge

- "Rounding Increment" - This is an integer. Default is 100,000.

After the hedge notional is calculated, but before the hedge trade is added to the Pricing Sheet, the Notional of the hedge trade is rounded to the nearest multiple of the Rounding Increment, with halves rounded in toward zero.

The currency's Decimals setting is also taken into account – the Rounding Increment should be multiplied by 10 to the power of 2, minus the Decimals setting for the hedge trade Notional CCY – that is,  $10^{2-\text{Decimals}}$ .

Example: USD typically has a Decimals setting of 2; JPY has a Decimals setting of 0. If the Rounding Increment is set to 100,000, then USDJPY hedge trades with a notional in USD would be rounded to the nearest  $100,000 * 10^{2-2} = 100,000$  dollars; JPYKRW trades with a notional currency of JPY would be rounded to the nearest  $100,000 * 10^{2-0} = 10,000,000$  yen.

**[NOTE: If the total hedge Delta is less than half the Rounding Increment, a hedge trade is not created (e.g., when the resulting hedge rounds to zero).]**

- "Delta Type" - Select either Black-Scholes or Smile.
  - Black-Scholes: The hedge notional is calculated using the FX spot Delta Pricing Sheet measure when available. Otherwise, it uses DELTA.
  - Smile: The hedge notional is calculated using MOD\_DELTA when available. Otherwise, it uses the FX spot Delta Pricing Sheet measure first, or DELTA when FX spot Delta is not available.

## Misc

- "Premium Update Mode" - Select the premium to be adjusted when another premium is modified: "Sales Premium" or "Trader Premium".

See "Premium Update Mode" below for details.

### Sales Behavior

- "Sales Fee Ccy" - Select the default sales fee currency. In addition to individual currency codes, the drop-down also provides a blank option that can be selected to avoid overriding the premium currency of FX/FXOption trades where in some cases the two may be different.
- "Sales Fee Date" - Select the default sales fee date: Premium Date or Trade Date.
- "On Sales Fee FX Rate change" - Select "Recalculate Sales Fee" or "Recalculate Sales Premium".
- "Save as Sales Trades by default" - True or False. When True, the trade keyword "ScratchPadTrade" is set to true - This keyword can be used in the workflow configuration to set a specific status. Otherwise, the system assigns the trade status based on the default workflow.
- "Create Upfront Fee" - True or False. When True, the premium fee is automatically included in the trade.

### Option expiry

- "Default Expiry Cut" - Select "Use Pricing Sheet Expiry Cut" to use the expiry time zone set below, or "Use Surface Expiry Cut" to use the expiry time zone set on the FX volatility surface.
- "Pricing Sheet Expiry Cut" - Select the expiry time zone as needed (expiry time zones are created from the Calypso Navigator using [Configuration > Definitions > Expiry Time Zone](#)).
- "Local Convention Holiday for Expiry Date" - You can select "local" holiday calendars per currency. If a "local" holiday calendar is defined for any currency of the selected currency pair, it will be taken into account when computing the expiration date.

### Swap

- Allow Cash Flow Overlapping Period - Default is False. When set to True, it allows cashflow dates to overlap or have gaps.
- Automatically Adjust stubs - Default is False. When set to True, the strategy will automatically adjust stub details corresponding to the Stub Type when making changes to trade timing. Automatic adjustments are supported for Swap, Swaption, and Cap/Floor.  
  
The setting is initially carried over from the trade window when applicable. But once it is set in User Preferences, the setting becomes independent from the trade window.
- Discount - Default is False. When set to True, this enables the Negotiated Price sub-property (under the expandable Notional property) if the payment frequency is for the Swap is ZC. This is the equivalent of selecting "Discount" in the Swap menu of the Swap trade window.

### XVA/SACCR

These properties are used by the XVA and Monte Carlo PFE module to compute XVA and MC PFE measures.

- ▶ Please refer to Calypso XVA documentation for XVA setup and usage details.
- ▶ Please refer to Calypso Monte Carlo PFE documentation for MC PFE setup and usage details.
- "Default Mode"

- "Default Credit Spread (5Y)"
- "Default Recovery Rate (%)"
- "XVA Analysis Config"
- "MCPFE Analysis Config"
- "Scenario Set Config" - Base is the default. The incremental gets evaluated against the base run for the selected scenario set. If not selected, the incremental gets evaluated against the base run with no scenario set.

## IM

These properties are used by the Margin Engine to compute Initial Margin on what-if trades.

► Please refer to Calypso Margin Engine documentation for complete setup and usage details.

- "Default IM Mode" - Select "IM Sheet Mode" or "IM Strategy Mode" to enable IM calculations. Sheet mode calculates incremental IM for all strategies on the active sheet collectively. Strategy mode calculates incremental IM for all strategies independently.  
If "Default IM Mode" = Off, there is no IM computation.
- "CCP/CB Pricer Measure Display"
- "Default CCP/Clearing Broker"

## Payoff Graph

These properties are used to configure the Payoff Chart default settings.

- "Graph Limit (Percent)" - The entered value is used to calculate the lower and upper limits of the underlying (x-axis) for the graph plot. A typical value is around 20 to 30 percent.
- "Include Premium" - True/False. The default setting is to either include or exclude premium/fees in the graph. True to include fees by default.
- "Buy/Sell Lock" - True/False. If True, the Buy/Sell Direction drop-down in the graph window is disabled and locked in the default setting described below.
- "Buy/Sell Direction" - Same As Pricing Sheet/Opposite To Pricing Sheet. This can be used to set the default direction of the graph. If "Buy/Sell Lock" above is set to False, the direction can still be changed manually using the drop-down in the chart window.

## Advanced

- "Use Dispatcher" - Select a dispatcher to use for grid calculation.
- "Copy Allocations while Performing Copy Operations" - When On, child trades are copied when trades with allocations are copied. Otherwise, only the parent trades are copied.
- "Allocated Trade Loading Style" - Choose how to load allocated trades in the Pricing Sheet. Can be set to:
  - Trade Style - Displays previous version of trade so that the notional and fees appear as they do on the original trade.
  - Report Style - Displays the current version of the trade (as they appear in the database) with 0 values for notional and fees.

- "Always use Bulk Termination Window" - Set to True to default to the Bulk Termination window. If set to False and a single trade is selected for termination, the Single Trade Termination window will appear. If False and multiple trades are selected for termination, Bulk Termination window will appear. If False and a single FX product is selected for termination, the FX Termination window will appear.
- Default Listed Product Strategy - Select Specific or Generic.
  - For Specific, you can capture listed derivatives trades using specific strategies based on the type of the listed derivatives: Future Bond, Future MM, Future Option Bond, etc.
  - For Generic, you can capture listed derivatives trades using the strategies Future (for Future trades) or Option (for Future Option and ETO trades). It is mandatory to select Generic for ETD Clearing.
- "Cowbell" - More or Less. **Not Used.**

**Step 2** - Click **Apply** to set the preferences.

### Premium Update Mode

When Sales Premium (SP) is not computed (no sales fee), there is no premium update requirement.

Trader Premium (TP) = Customer Premium (CP).

When Sales Premium is computed:

- $CP = TP + SP$  (Sell)
- $CP = TP - SP$  (Buy)

The Premium Update Mode setting determines which premium is adjusted when another premium (TP, SP, CP) is modified.

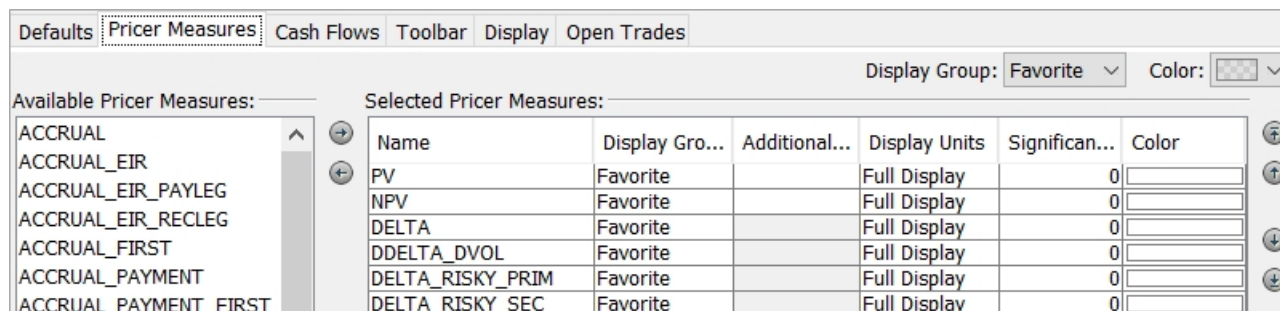
- If **Premium Update Mode = Sales Premium**, Sales Premium is adjusted when Trader Premium is modified (and Customer Premium is not adjusted), or Customer Premium is modified (and Trader Premium is not adjusted).  
If Sales Premium is modified, Customer Premium is adjusted.
- If **Premium Update Mode = Trader Premium**, Trader Premium is adjusted when Customer Premium is modified (and Sales Premium is not adjusted), or Sales Premium is modified (and Customer Premium is not adjusted).  
If Trader Premium is modified, Customer Premium is adjusted.

## 6.2 Pricer Measures Panel

Select the Pricer Measures panel to select which pricer measures you want to display.

**[NOTE: Only the pricer measures defined in domain "PricingSheetMeasures" are available for selection - You can add pricer measures to that domain as needed.]**

**❗ The following pricer measures are not supported in the Pricing Sheet: CA\_NOTIONAL, CA\_QUANTITY, CA\_PV, CA\_COST]**




Name	Display Gro...	Additional...	Display Units	Significan...	Color
PV	Favorite		Full Display	0	
NPV	Favorite		Full Display	0	
DELTA	Favorite		Full Display	0	
DDELTA_DVOL	Favorite		Full Display	0	
DELTA_RISKY_PRIM	Favorite		Full Display	0	
DELTA_RISKY_SEC	Favorite		Full Display	0	

Configure window (Pricer Measures panel)

**Step 1** - Select a pricer measure from the left-hand side, and click  to make it available for computing.

**Step 2** - Set the following parameters as applicable:

- "Display Group" - You can group multiple pricer measures together into a display group and then either show or hide the group of measures in strategy legs. Choose which groups of pricer measures you want to display by clicking  in the Toolbar and selecting or clearing the checkbox for a display group in the list that appears. You can add display groups to the domain "PricingSheetPricerMeasureDisplayGroups" as needed.
- "Additional Currencies" - By default, the pricer measures are computed based on the risky currency defined in the currency pair - However, you can select additional currencies in which you want to compute the pricer measures.
- "Display Units" - Set to display the value precision in the selected measure. Set to "Full Display", "Integers", "K (thousands)", "M (millions)", "B (billions)".
- "Significant Figures" - Set number of digits displayed by the measure.
- "Color" - Double-click the color bar to pick a color for the pricer measure's background.

**Step 3** - Click **Apply** when you are done.

## Summing Pricer Measures Across Asset Classes

To allow pricer measures to be summed across asset classes, add them to the domain "PricingSheetMeasures.CrossAssetSummable".

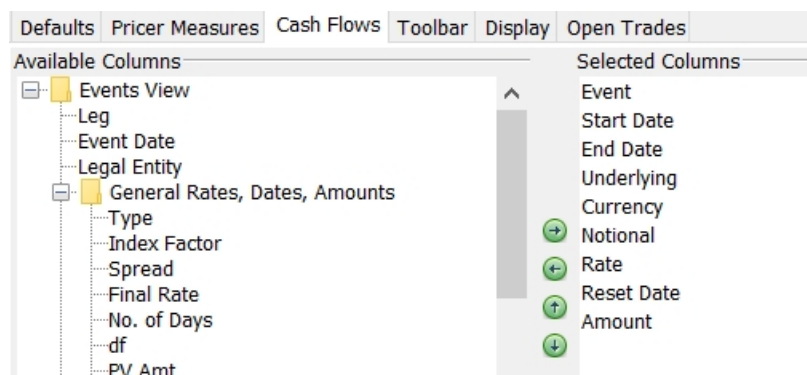
## FX Spot Delta

The pricer measure "FX Spot Delta" is only available in the pricing sheet.

It shows the total amount of FX Delta needed to Spot Hedge (Delta Hedge as of Spot Date) the trade. This is potentially different from the DELTA pricer measure because of the effect of any FX Delta incurred by the fees.

## 6.3 Cash Flows Panel

Select the Cash Flows panel to select which columns you want to display in the Trade Cash Flows panel.



[Configure window \(Events panel\)](#)

**Step 1** - Select a column from the left-hand side, and click  to make it available for display.

**Step 2** - Click **Apply** when you are done.

## 6.4 Toolbar Panel

Select the icons that appear on the Pricing Sheet toolbar. Some icons will have a shortcut configured.

Defaults Pricer Measures Cash Flows Toolbar Display Open Trades			
Main Toolbar			
Icon	Shortcut	Description	Displayed
		Sidebar Show/Hide	<input checked="" type="checkbox"/>
		Transpose	<input checked="" type="checkbox"/>
	ctrl E	Cash Flows	<input checked="" type="checkbox"/>
	ctrl P	Payoff	<input checked="" type="checkbox"/>
		Display Properties	<input checked="" type="checkbox"/>
		Display All Groups	<input checked="" type="checkbox"/>

[Configure window \(Toolbar panel\)](#)

**Step 1** - For each icon, select the "Displayed" checkbox to display the icon in the toolbar, or clear the checkbox to remove the icon from the toolbar.

- The "Shortcut" column shows shortcut keys available for a particular icon.

- For the "Copy - Close Out" and "Copy - Back To Back" icons, the drop-down lists beside the descriptions provide a way to set the default action for the icon, such as "Copy Add" or "Copy Reverse."

		Copy - Close Out		Copy Add	<input checked="" type="checkbox"/>
		Copy - Back To Back		Copy Add - BTB	<input checked="" type="checkbox"/>





These preferred actions persist on the Toolbar when the Pricing Sheet is open, although other actions remain available for selection by using the down arrow beside the icon.

► For details on these actions, see "Adding and Removing Trades" in *Using the Pricing Sheet* documentation.

**Step 2** - Click **Apply** when you are done.

## 6.5 Display Panel

You can configure custom icons that allow for toggling a display group of properties or pricer measures in the pricing sheet. The Macro option for the icon allows for toggling multiple display groups of properties or pricer measures.

Defaults	Pricer Measures	Cash Flows	Toolbar	Display	Open Trades
Display					
Icon	Type	Tooltip	Behavior	Toolbar/Sidebar Visibility	
	Measure Toggle		Favorite;	Both	
					
					
					

Configure window (Display Panel)

**Step 1** - Configure an icon. A user can specify a color for the icon by clicking the icon in the first column and using the arrow to open the color palette.

**Step 2** - Select a function for the icon: Measure Toggle, Measure Macro, Property Toggle, Property Macro.

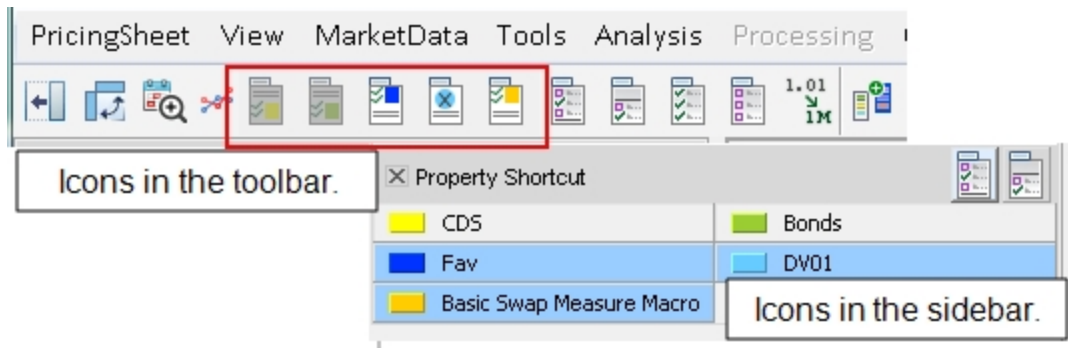
- Measure Toggle - This function is used for toggling a display group of pricer measures.
- Measure Macro - This function is used for toggling multiple display groups of pricer measures at once.
- Property Toggle - This function is used for toggling a display group of properties.
- Property Macro - This function is used for toggling multiple display groups of properties at once.

**Step 3** - Enter a free-form Tooltip message that will appear when hovering the cursor over the icon.

**Step 4** - In the Behavior column, select a display group or groups to associate with the icon. When either the Property Macro or Measure Macro function is selected, you can choose more than one display group to toggle. For either of the Toggle functions, select only one display group.

For properties, you can add display groups to the domain "PricingSheetPropertyDisplayGroups", and for pricer measures you can add display groups to the domain "PricingSheetPricerMeasureDisplayGroups". These domain values determine which display groups are available as options in the Behavior column.

**Step 5** - Specify whether the icon appears in the toolbar, the sidebar, or both.



**Step 6** - Click **Apply** when you are done.

## 6.6 Open Trades Panel

Select the Open Trades panel to select how trades are opened, and if the user is prompted upon the opening of trades.

Defaults	Pricer Measures	Cash Flows	Toolbar	Display	Open Trades
				Default	Prompt User
Open Trades in New Sheet				Yes	Yes
Open All Trades in a Bundle				Yes	Yes
Open Bundles in Separate Sheets				Yes	Yes
Reload Trade if already open				Yes	Yes
Apply Exclude Trade Status Filter				None	Yes


[Configure window \(Open Trades Panel\)](#)

**Step 1** - In the "Default" column:

- "Open Trades in a New Sheet" - Select "Yes" to open trades in a new tab. Select "No" to open trades in the current tab.
- "Open All Trades in a Bundle" - Select "Yes" to load all trades in the bundle. Select "No" to load only the trades specified.



- "Open Bundles in Separate Sheets" - Select "Yes" to open each bundle in a new separate tab. Select "No" to open all trades in the current tab.
- "Reload Trade if already open" - Select "Yes" to reload currently opened trades. Select "No" to display a list of currently opened trades without reloading.
- "Apply Exclude Trade Status Filter" - Click to select trade statuses to filter out of being loaded into the Pricing Sheet.

Select a trade status from the left-hand side, and click  to exclude trades with that status from being loaded into the Pricing Sheet.

Select "None" to load all trades, regardless of status.

Click **OK** when finished.

**Step 2** - In the "Prompt User" column, select "Yes" to prompt the user with a message asking if they want to perform the action. Select "No" to apply the value in the "Default" column without prompting the user.

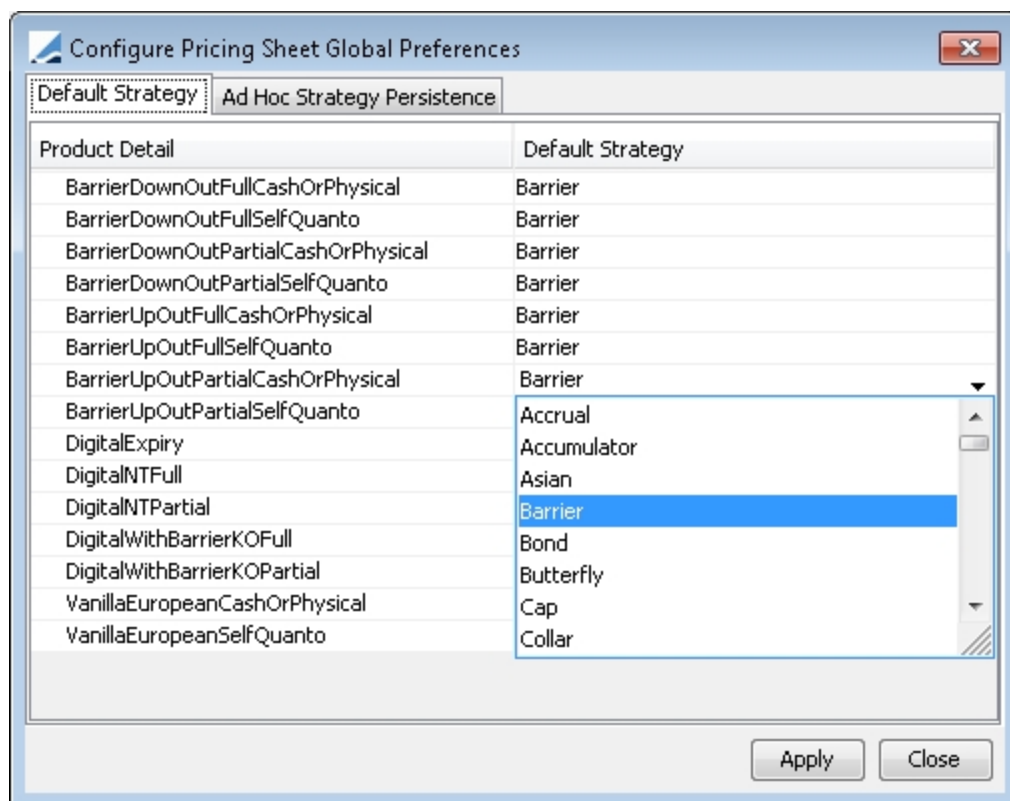
**Step 3** - Click **Apply** when you are done.

## 7. Setting Global Preferences

Choose **Configuration > Global Preferences** to associate FX Option subtypes with strategies. This is used when an FX Option is opened from a report.

You can also define default values for the Strategy Persistence Panel of the Strategy Builder.

### 7.1 Default Strategy Tab



- » For a given FX Option subtype, select the default strategy.
- » Then click **Apply**.

### 7.2 Ad Hoc Strategy Persistence

Allows setting default values for the Strategy Persistence panel in the Strategy Builder.

Default Strategy	Ad Hoc Strategy Persistence	
	Default	User Editable
Save an Ad Hoc strategy collection using...	Separate Strategy Defaults	No
Bundle Type	ETF Subscription	No
Use Bundle Confirm	No	No
Create Mirror Bundle if all Internal Trades	No	No
Trade Events stay in Bundle	No	No
Mirror Bundle Same as origin trade	No	No

- » Set each default and user permission as needed.
- » Then click **Apply**.

► Please refer to Calypso Strategy Builder documentation for details.

Type	Default and Description
Save an Ad Hoc strategy collection using...	Select the default behavior "One new Bundle for all" or "Separate Strategy Defaults". <ul style="list-style-type: none"> <li>"One new Bundle for all" adds the trades to a bundle</li> <li>"Separate Strategy Defaults" saves each trade separately</li> </ul>
Bundle Type	Specify the default bundle type as needed.
Use Bundle Confirm	Select Yes to enable one confirmation message for the bundle instead of a separate message for each underlying trade.
Create Mirror Bundle if all Internal Trades	Select Yes to create a mirror trade bundle of specified type, and add the mirror trades to that bundle. The name of the mirror bundle will be created by the system as "Mirror Bundle <bundle name>".  This only applies if all the trades/legs are internal trades/legs
Trade Events stay in Bundle	Select Yes to keep trade events on underlying trades in one bundle. Trade events from physical option exercise or partial termination will be included in the trade bundle.
Mirror Bundle Same as origin trade	Only applies if "Create Mirror Bundle if all Internal Trades" is Yes.  Select Yes to add the mirror trades to the same bundle as the original trades instead of the mirror trade bundle.  You also need to add the value "MirrorBundle to the domain "TradeBundleAttributes".

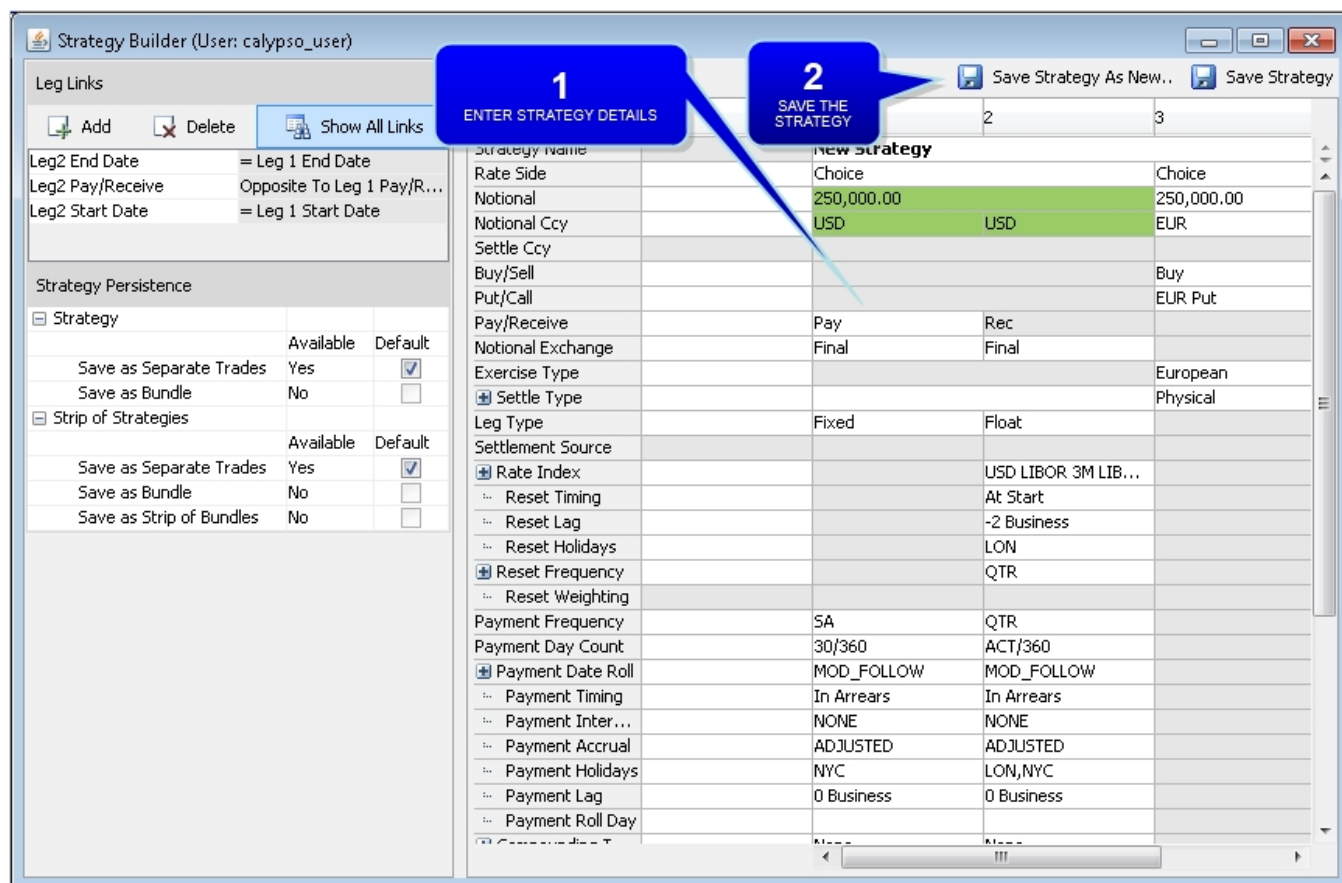
## 8. Building Custom Strategies

A custom strategy is a set of trades and properties that you want to associate together, and have the ability to reuse.

Choose **Configuration > Strategy Builder** to build custom strategies.

You can also use this window to specify strategy persistence settings for out-of-the-box strategies.

### 8.1 Creating Custom Strategies



The screenshot shows the 'Strategy Builder' window for user 'calypso\_user'. It features a 'Leg Links' section on the left with 'Add', 'Delete', and 'Show All Links' buttons. Below this is the 'Strategy Persistence' section with checkboxes for 'Strategy' and 'Strip of Strategies', each with 'Save as Separate Trades', 'Save as Bundle', and 'Save as Strip of Bundles' options. The main area is a table for configuring strategy details. Two callouts are present: '1 ENTER STRATEGY DETAILS' pointing to the 'Strategy Name' field, and '2 SAVE THE STRATEGY' pointing to the 'Save Strategy' button. The table contains the following data:

Property	Value 1	Value 2	Value 3
Strategy Name	new strategy		
Rate Side	Choice	Choice	
Notional	250,000.00	250,000.00	
Notional Ccy	USD	USD	EUR
Settle Ccy			
Buy/Sell			Buy
Put/Call			EUR Put
Pay/Receive	Pay	Rec	
Notional Exchange	Final	Final	
Exercise Type			European
Settle Type			Physical
Leg Type	Fixed	Float	
Settlement Source			
Rate Index		USD LIBOR 3M LIB...	
Reset Timing		At Start	
Reset Lag		-2 Business	
Reset Holidays		LON	
Reset Frequency		QTR	
Reset Weighting			
Payment Frequency	SA	QTR	
Payment Day Count	30/360	ACT/360	
Payment Date Roll	MOD_FOLLOW	MOD_FOLLOW	
Payment Timing	In Arrears	In Arrears	
Payment Inter...	NONE	NONE	
Payment Accrual	ADJUSTED	ADJUSTED	
Payment Holidays	NYC	LON, NYC	
Payment Lag	0 Business	0 Business	
Payment Roll Day			

#### Strategy Builder

The Strategy Builder appears like a blank pricing sheet.

- » A custom strategy is composed of multiple legs from existing strategies. Add as many legs as needed by selecting existing strategies.

The values you set for the properties will be used as default values.

- » Then click **Save Strategy** - You will be prompted to name the strategy. To capture a trade using that newly created strategy, you need to add it to your profile under **Configuration > Profile Configuration** so that it is available for

selection in a pricing sheet. The custom strategy will also appear under Properties, so that you can adjust the list of properties for that strategy.

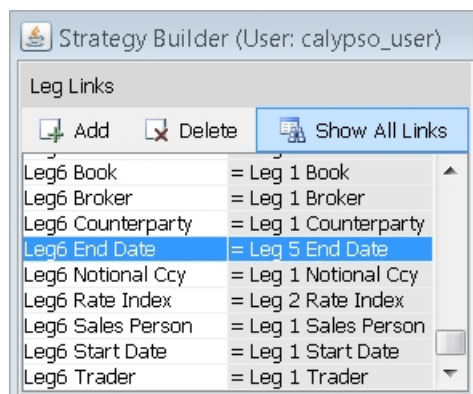
- » You can load an existing strategy, modify the properties as needed, and click **Save Strategy as New**. You will be prompted to supply a name for the strategy.

You can also link properties between the legs of a strategy, and specify additional parameters. See below for details.

## 8.2 Leg Links

You can specify leg links for custom strategies.

To add a leg link, use the **Add** button in the Leg Links window. You can delete pre-configured links for a strategy with the **Delete** button. You can click the **Show All Links** button to view any associated links of the strategy.



### Leg Links window

To add a leg link to a strategy, click **Add** and:

- » Select the legs to be effected by the link.
- » Select the properties to drive the links.
- » Enter the applicable operator from the Operator drop down. Operator selection will depend on the driver properties selected.

**EX:** Selecting Settle Type as the property for leg links will only display "=" for the Operator as no other choice would be logical.

- » Click **Add Link** to save it to the strategy.

If a single leg, e.g. "Leg 1", property is linked by an attribute, then select "Leg 1" for the Driven and the Driver Leg fields.

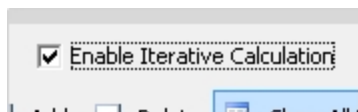
**NOTE:** Both driver and driven legs must be defined. You can then select "Constant" or "Strategy Attribute" from the Operand drop down. If "Strategy Attribute" is selected, defined strategy attributes will appear in Amount drop down. The value defined in the attribute will added to the leg. If "Constant" is selected, the amount and units must be entered. The constant value will be added to the leg.

If two legs, e.g. "Leg 1 and Leg 2" are selected for a link, select the driver and driven properties to link the legs. Driven Property selection display will depend on Driver Property selection. Enter the Operator value available in the drop down. The drop down value will be dependent on the property selection.

► See the Strategy Attributes section below.

### **Enable Iterative Calculation**

A user can enable multiple calculation passes when using the "Price" function.



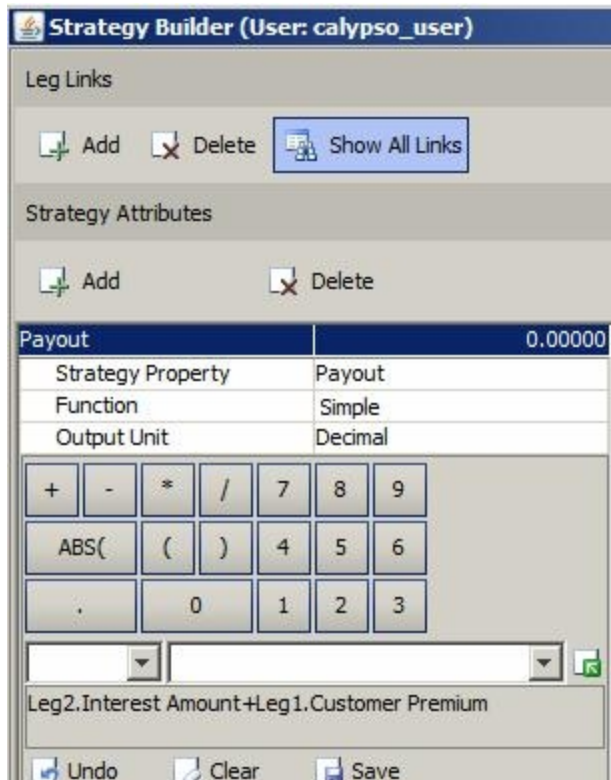
Checkbox in "Leg Link" panel

This function makes solving premium dependent structures such as dual currency deposits in one action. This function may cause significant performance issues. The checkbox should only be ticked when pricing premium dependent structures (structures with an embedded option where the premium feeds back into another part of the structure).


## **8.3 Strategy Attributes**

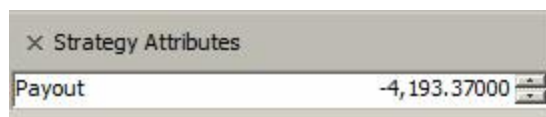
You can specify strategy attributes for custom strategies.

### **Simple Attributes**



### Strategy Attributes - Simple



- » Click **Add** to add an attribute, and give it a name in "Strategy Property".
- » Select the function "Simple". Then select the output unit.
- » Then enter the formula to compute the attribute. To do so, select an amount from one of the legs, and click  to insert the amount in the formula. Then select an operator and another amount. Repeat until the formula is complete and click **Save**.



### User Editable Attributes

A user can define an attribute and set it to "User Editable". This will allow a user to input a value to drive other fields.



Strategy Attributes

 Add
  Delete

Notional	
Strategy Property	Notional
Function	User_editable
Output Unit	Percentage

Value :

.03

 Clear
  Save

### Strategy Attributes - User Editable



- » Click **Add** to add an attribute, and give it a name in "Strategy Property".
- » Select the function "User\_editable". Then select the output unit.
- » Then select the parameters to compute the value:
  - The location can be any leg selected in the strategy, or the strategy itself (to select strategy attributes).
  - The value is a property of the selected leg.
- » Then click **Save**. Strategy attributes appear in the Strategy Attributes window.

Attributes may have to be added to and made editable in a particular strategy in order to be used.

### Yield Attributes

A yield attribute can be used to build a dual currency deposit from a vanilla option and a fixed rate cashflow to reflect the enhanced coupon.


Strategy Attributes

 Add
  Delete

Enhanced Int Amt EUR 0.00

Enhanced Coupon	
Strategy Property	Enhanced Coupon
Function	Yield
Output Unit	Percentage

Inputs	Location	Value
Start Date	Leg1	Start Date
End Date	Leg1	End Date
Notional	Leg1	Notional
Interest	Strategy	Enhanced Int Amt
Day Count	Leg1	Payment Day Count

 Save

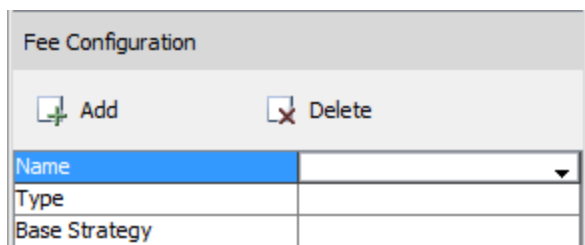
### Strategy Attributes - Yield



- » Click **Add** to add an attribute, and give it a name in "Strategy Property".
- » Select the function "Yield". Then select the output unit.
- » Then select the parameters to compute the yield:  
The location can be any leg selected in the strategy, or the strategy itself (to select strategy attributes).  
The value is a property of the selected leg.
- » Then click **Save**.

## 8.4 Fee Configuration

You can define Fees for each product in a Strategy.



The screenshot shows the 'Fee Configuration' panel. It has a title bar 'Fee Configuration' and two buttons: 'Add' (with a green plus icon) and 'Delete' (with a red X icon). Below the buttons is a table with three rows: 'Name' (with a dropdown arrow), 'Type', and 'Base Strategy'.

Fee Configuration	
<div> <span>+ Add</span> <span>✖ Delete</span> </div>	
Name	<input type="text"/>
Type	<input type="text"/>
Base Strategy	<input type="text"/>

Fee Configuration panel

- » Click **Add** to add a fee.
- » Enter a name for the fee.
- » Select the fee type.
- » Select the products to apply the fees.
- » Then click **Save**. The new Fee appears as a property in the Pricing Sheet.

Note that in order to see the Fee in the Pricing Sheet, first you need to make the new Fee property visible using **Configuration > Profile Configuration**.

The new Fee property will be displayed with the amount.

Fees have the following secondary properties:

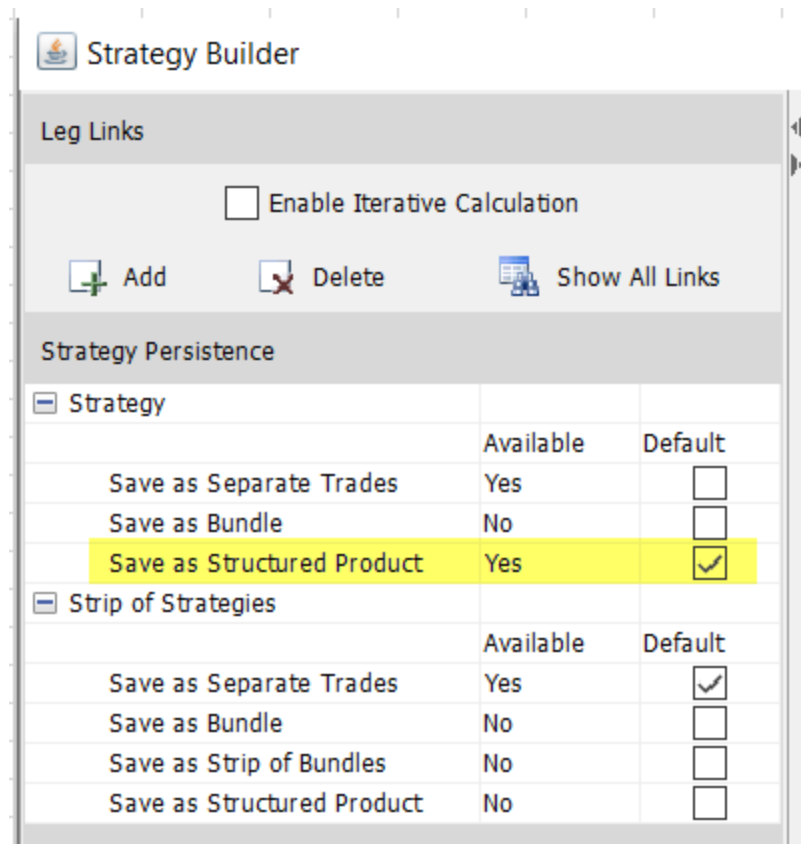
- Fee Legal Entity - Select a legal entity.
- Fee Calculation Method - Displays the calculation method.
- Fee Calculation Input - Input to the fee calculation method.
- Fee Date - The fee date.
- Fee Start Date - The fee start date.
- Fee End Date - The fee end date. Must be later than the Fee Start Date.

- Fee Known Date - The fee known date. Must be earlier than the Fee Date.
- Fee Description - The fee description.

## 8.5 Strategy Persistence

The Strategy Persistence panel allows controlling how strategies (both custom and out-of-the-box) are saved. Defaults values can be set for this panel in Global Preferences.

► See [Setting Global Preferences](#) for details.



The screenshot shows the 'Strategy Builder' window. The 'Leg Links' section has an 'Enable Iterative Calculation' checkbox and buttons for 'Add', 'Delete', and 'Show All Links'. The 'Strategy Persistence' section contains two expandable tables. The first table, 'Strategy', has columns 'Available' and 'Default'. The 'Save as Structured Product' row is highlighted in yellow and has 'Yes' in the 'Available' column and a checked checkbox in the 'Default' column. The second table, 'Strip of Strategies', also has 'Available' and 'Default' columns. The 'Save as Separate Trades' row has 'Yes' in 'Available' and a checked checkbox in 'Default'. The 'Save as Bundle' row has 'No' in 'Available' and an unchecked checkbox in 'Default'. The 'Save as Strip of Bundles' row has 'No' in 'Available' and an unchecked checkbox in 'Default'. The 'Save as Structured Product' row has 'No' in 'Available' and an unchecked checkbox in 'Default'.

Strategy Persistence		
<b>Strategy</b>		
	Available	Default
Save as Separate Trades	Yes	<input type="checkbox"/>
Save as Bundle	No	<input type="checkbox"/>
Save as Structured Product	Yes	<input checked="" type="checkbox"/>
<b>Strip of Strategies</b>		
	Available	Default
Save as Separate Trades	Yes	<input checked="" type="checkbox"/>
Save as Bundle	No	<input type="checkbox"/>
Save as Strip of Bundles	No	<input type="checkbox"/>
Save as Structured Product	No	<input type="checkbox"/>

### Strategy Persistence Panel

- » You can elect to save the trades of a strategy as separate trades or as a bundle. The fields are described below.

**NOTE:** If you have defined strategy attributes, you must save the strategy as a bundle.

- » You can also elect to save strips of strategies as separate trades, as a bundle, or as a strip of bundles.

### Important Note

When you select Default for a given option, that option will be used when saving the trades by default. To change the default value upon saving, the fields need to be configured as available and user editable, and the user needs to use the Advanced Save to change the settings as needed.

### Persistence Options Description

Bundle Options	Description
Save as Separate Trades	Select Yes to allow saving strategies as separate trades. Can be set as Default.
Save as Bundle	Select Yes to allow saving strategies as bundles. If yes, additional properties are displayed. Can be set as default.
Save as Structured Product	This will help to create multilegged strategy to save as a single trade id. If the strategy is saved as Structured Product, it will create single trade. Currently only Equity Options are supported as sub type of structured product.
Save as Strip of Bundles	Select Yes to allow saving strips of strategies as a strip of bundles. If yes, additional properties are displayed. Can be set as default.
Bundle Type	Only applies if "Save as Bundle" or "Save as Strip of Bundles" is Yes. Select a bundle type - Bundles types can be added to domain "bundleType". The bundle name will be created by the system as "<bundle type>-<bundle number>" - The bundle number is given by the system.
Use a Bundle Confirm	Only applies if "Save as Bundle" or "Save as Strip of Bundles" is Yes. Select Yes to generate a single confirmation for all the trades in the bundle rather than individual confirmations per trade. This requires additional settings. ► Refer to Calypso Trade Bundle documentation for complete setup details.
Create Mirror Bundle if all Internal Trades	Only applies if "Save as Bundle" or "Save as Strip of Bundles" is yes, and all the trades/ legs are internal trades/legs. Select Yes to create a mirror trade bundle of specified type, and add the mirror trades to that bundle. The name of the mirror bundle will be created by the system as "Mirror Bundle <bundle name>".
Mirror Bundle Same as original	Only applies if "Create Mirror Bundle if all Internal Trades" is Yes. Select Yes to add the mirror trades to the same bundle as the original trades instead of the mirror trade bundle. You also need to add the value "MirrorBundle" to the domain "TradeBundleAttributes".
Trade Events Stay in Bundle	Only applies if "Save as Bundle" or "Save as Strip of Bundles" is Yes. Check to keep trades issued from trade lifecycle actions into the same bundle as the original

Bundle Options	Description
	trades (like an option trade and a physical exercise).

Sample trade saved as structured product is shown below:

Pricing Sheet 1 [18240701/APL\_6125\_MS/calypso\_user]

PricingSheet View MarketData Tools Analysis Processing Configuration Help

Hide Sidebar Transpose Cash Flows Payoff Chart Properties Measures Show Groups Hide Groups Significant Digits Copy Add Reverse Copy Add Reverse - BTB Insert Leg Remove Legs Select Legs Select Focused Select Pattern Market Data mgr Refresh Quotes Refresh Mkt Data Refr All Rep

Market Data

Default Rate Sides	Choice
AMZN	220.000000000000
AMZN Div Curve	DERIVED_AMZN
AMZN USD Vol	EQD_VOL
USD LIBOR 3M Curve	ZC USD Libor 3M/6M

Pricing

Valuation Date	06/20/2024
Valuation Time	7:54:18 AM
Pricing Env	OFFICIAL
Output 1 or 2 way	1-way

Solver

Show Trials Solve F9 Apply

Leg Solving not available

Strip Generator

Generate F11 Apply Clear

Legs to strip None

Leg Links

Show All Links

Leg 1 Details

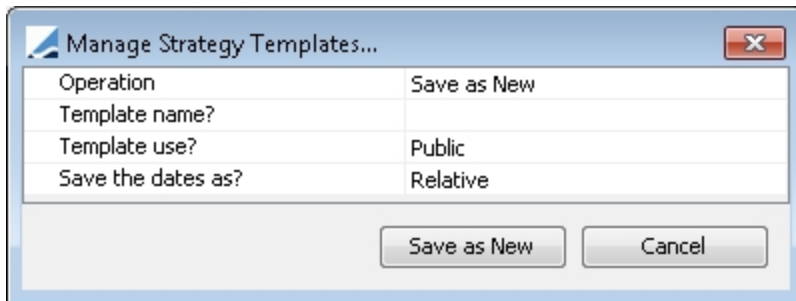
	Totals	1	2	3
Strategy Name		STRUCTURED_PRODUCT	Enter Strategy...	
Price		Price	Price	
Save		Save	Save	
Solve		Don't Solve	Don't Solve	
Book		APL-6125_MS_1	APL-6125_MS_1	
Counterparty Role		CounterParty	CounterParty	
Counterparty		CP	CP	
Buy/Sell		Buy	Sell	
Put/Call		Call	Call	
Strike		165.00000	175.00000	
Notional		120,000	120,000	
Notional Ccy		USD	USD	
Expiry Date		07/01/2025	07/01/2025	
Expiry		TUE 376d 1Y+11	TUE 376d 1Y+11	
Delivery Date		07/03/2025	07/03/2025	
Quantity		1,000	1,000	
Exercise Type		European	European	
Settle Type		Cash	Cash	
Settle Ccy		USD	USD	
Volatility		13.01506	13.01506	
Pricing Model		Black1FAlyticV...	Black1FAlyticVan...	
Premium Date		06/05/2024	06/05/2024	
Price Format		USD	USD	
VEGA	USD	-72.03	42.34	-114.37
GAMMA	USD	-529.86	311.47	-841.33
RHO	USD	-65.68	1,634.99	-1,700.67
THETA	USD	1.99	-12.54	14.53
IMPLIEDVOLATILITY			13.01506	13.01506
NPV	USD	9,426.56	59,666.90	-50,240.35
DELTA	USD	3,188.37	216,525.69	-213,337.32
PV	USD	9,426.56	59,666.90	-50,240.35
CASH	USD	0.00	0.00	0.00
CUMULATIVE CASH	USD	40.00	-1,210.00	1,250.00

## 8.6 Strategy Templates

A user can create templates from strategies to load to the Pricing Sheet for quick trading. Click [Configuration > Manage Strategy Templates](#) to open a template definition window.

To define a strategy template, select the strategy in the Pricing Sheet to build the template on. All values defined in the strategy will be saved to the template. Any leg in the defined strategy can be selected.

**EX:** A SwapSteepener strategy has 4 legs in the Pricing Sheet. Selecting leg 2 will select the entire strategy for a saved template.



#### Manage Strategy Templates window

**Step 1** - Enter the Operation type from a drop down.

"Save as New" will prompt a user to enter a template name, template use value and date specification. Click **Save as New** after field definitions are chosen.

"Delete" will prompt a user to enter a template name to delete from a drop down list of defined names. Select the desired template and click **Delete**

"Update Existing" will prompt a user to enter a template name from a drop down to update. Using this function will update an existing template name with values from the selected strategy. Click **Update Existing** after the template is chosen.

**Step 2** - Enter the template name.

This is a free form value when saving as new, and a drop down when updating or deleting a template.

**Step 3** - Enter the Template use setting. This function only applies when defining a new template.

Set to "Public" to make the template available to all users in the system.

Set to "Private" to make the template available to users with the private access permissions.

**Step 4** - Enter the Date definition. This function only applies when defining a new template.

Set to "Absolute" to lock the defined dates to the strategy template. Defined dates will always be loaded when the template is selected.

Set to "Relative" to the default date (today) loaded to the Pricing Sheet. The Start/End/Expiry dates will remain the same in the template. Opening a template with this setting will load the default date.

Template names will appear in the "Template" property row for the selected strategy. To load the template once the strategy has been added to the Pricing Sheet, double-click the Template cell under the strategy and select the desired template name from the drop-down list. Strategy template names will also appear for selection in the Pricing Grid under the selected product in the "Template" field.

To store trade keywords with the template, add the keyword names to the domain "tradeTplKeywords".

► Refer to Calypso's Pricing Grid documentation for more details.

## 8.7 Pricing Script Trade in the Pricing Sheet



A user can build a strategy using a Pricing Script.

 **[NOTE: Only Calypso-approved pricing scripts are supported]**

► Please refer to Calypso Pricing Script documentation for details on creating pricing scripts.

A base strategy is provided in the Strategy Builder when selecting a Script strategy. You can choose Pricing Script (single leg) or Pricing Script Swap (two legs).


The payout is selected from the Payout property.

	1
Strategy Name	<b>Pricing Script</b>
Rate Side	Choice
Notional	1,000,000.00
Product Subtype	Example FX TARF
Notional Ccy	USD
Buy/Sell	Buy
 Settle Type	
Payout	Example FX TARF
 AccrualSchedule	

**SAMPLE  
PAYOUT**

- » Select the a Payout definition from the dropdown.
- » Configure the strategy attributes as desired.
- » Name the strategy by clicking **Save Strategy as New**.

After the strategy has been defined, it can be added in Configuration > Profile Configuration.

 Save Strategy

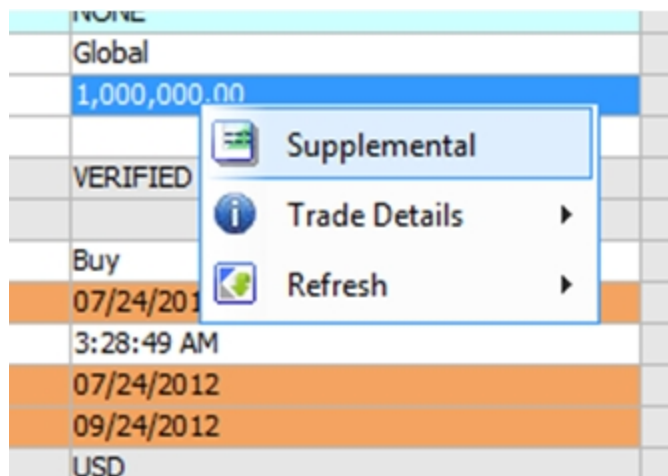
	1	2
	<b>Pricing Script Swap</b>	
	0.00	
	ScriptableOTCProduct	
	USD	
	<div style="position: relative;"> <div style="position: absolute; top: -20px; left: 0; background-color: blue; color: white; padding: 2px 5px; font-weight: bold;">                         Saved script name                     </div> <div style="border: 1px solid orange; padding: 2px;">                         24/2012 /26/2012                     </div> </div>	
	SwapWOKIKOFixedPhysical04	
	<div style="display: flex; justify-content: space-around;"> <input type="checkbox"/> <input type="checkbox"/> </div>	
	07/24/2012-07/24/...	
	07/24/2012	
	07/24/2012	

### 8.7.1 Trading with the Pricing Script in the Pricing Sheet

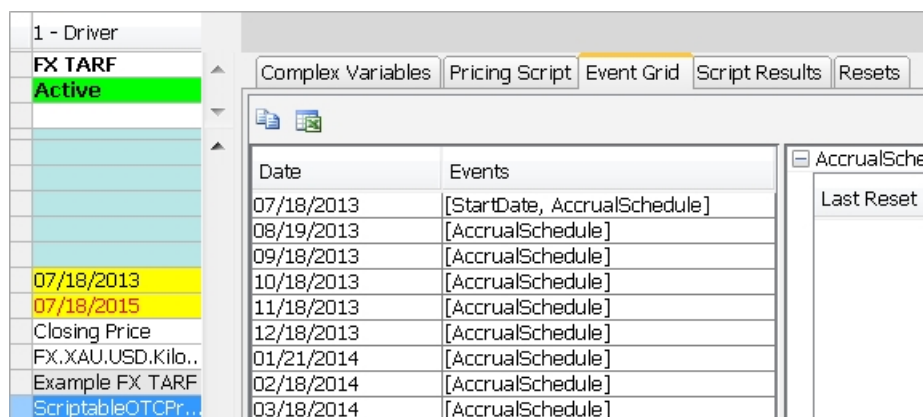
A user will be able to price and save trades using the saved strategy. Configure the user layout as needed.

	1	2
	<b>PS_SwapWOKIKOFixedPhysical04b</b>	
	Active	
	ScriptableOTCProduct	
	FO_AMEND	
	4206	
	NONE	
	Global	
	1,000,000.00	
	VERIFIED	
	Buy	
	07/24/2012	
	3:28:49 AM	
	07/24/2012	
	09/24/2012	
	USD	
	SwapWOKIKOFixedPhysical04	
	Basket.basket USD IBM GE F	
	BlackNFMonteCarloExotic	

Entering trade details and right clicking the trade will allow a user to choose the Supplemental panel. Trade details are available here.



The supplemental panel displays five tabs:



#### Supplemental tab for FX TARF SCOT trade

The Pricing Script tab will display the payout formula currently in use. This panel is cannot be edited.

The Event Grid tab will display all event dates by defined event. It will also display the Accrual schedule and the product start date.

The Script Results tab will display measure results by trade date and time.

The Resets tab will display any resets associated with the trade.

The Complex Variables tab will allow a user to enter variables that cannot be displayed in the Pricing Sheet.

**EX:** Basket underlyings have input variables that cannot be entered in the Pricing Sheet. These values can be entered in the Supplemental panel.



InitialFixing		
KI	07/24/2012 - 09/24/2012	
Start Date	07/24/2012	
End Date	09/24/2012	

» Enter basket variables in the Complex Variables tab.

KI_BarrierAmount	KO_BarrierAmount	StrikeAmount	InitialFixing
Component	Value		
F	9.33		
GE	20		
IBM	190		

Cashflows for Pricing Script trades are displayed on the Events panel.

## 8.7.2 Pricing Script Lifecycle Events

Lifecycle events available for Pricing Script trades in the Pricing Sheet are:

- Physical Delivery
- Knock Out
- Knock In
- Redemption
- Structured Event

## 8.8 Exotic Structure Trades in the Pricing Sheet

The Pricing Sheet supports pricing and saving exotic structures. You can define exotic payout formulas and add them to a Exotic Swap or Exotic Structured Flow strategy in the Strategy Builder. Swaps will have two configurable legs while a structured flow will have one.

Define exotic structures from the Calypso Navigator in **Configuration > Product > Exotic Type Creator**. The exotic leg type will be available for selection in the Leg Type attribute.

Strip generation is not supported for exotic type strategies.

	Totals	1	2
Strategy Name		<b>Exotic Swap</b>	
Rate Side		Choice	
Notional		0.00	
Product S		Exotic	
Notional C		USD	USD
Pay/Recei		Pay	Rec
Notional Ex		None	None
Leg Type		testexPPP	Float
Rate Index			USD LIBOR 3M L...
Reset Timing			At Start
Reset Lag			-2D Business
Reset Holidays			LON
Reset Frequency			QTR
Reset Weighting			
Payment Frequency		SA	QTR
Payment Day Count		ACT/360	ACT/360
Payment Date ...		MOD_FOLLOW	MOD_FOLLOW
Payment Timing		In Arrears	In Arrears
Payment Inter...		NONE	NONE
Payment Acc		ADJUSTED	ADJUSTED
Payment Ho		NYC	LON, NYC
Payment La		0D Business	0D Business
Payment Rc		2	
Compounding ...			None
Compounding ...			
Call Type		Cancellable	
Buy/Sell		Buy	
Exercise Type		European	
eXSP Variables		Variables Not Set	

### Example Exotic Swap

- » Define an exotic structure.
- » Select the exotic structure type in the Strategy Builder.
- » Select the exotic definition from the Leg Type dropdown.
- » Configure additional attributes as needed.
- » Name and Save the strategy.
- » Add it to the user profile menu in Configuration > Profile Configuration.

Variables are set on eXSP strategies in Supplemental Panel of the Pricing Sheet. If variables are not set, the strategy will display a "Variables Not Set" message for the attribute.

## 8.9 Sample Usage

The following example shows how to define an interest rate swap butterfly in the Pricing Sheet.

- Choose **Help > View Help** in the Pricing Sheet for complete details.