



MotiveWave™  
What's New in Version 6 Beta 3

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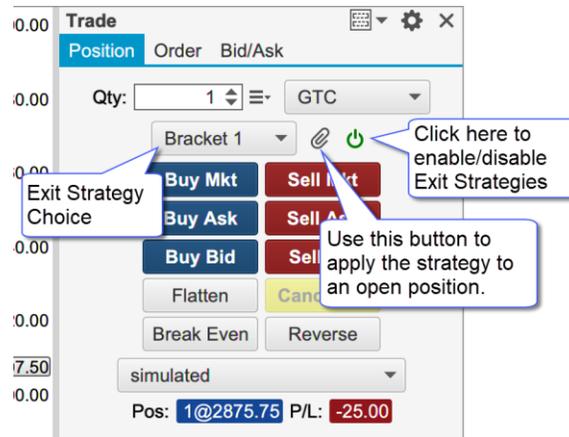
# 1 Introduction

Welcome to MotiveWave™ version 6 Beta 3! We are excited to launch our third beta of version 6 to give you a preview of some of the features we are adding. **Note:** since this is a beta version there may be some issues with the new features. Please report any issues or enhancement suggestions to [support@motivewave.com](mailto:support@motivewave.com)

## 2 Exit Strategies

Exit strategies define how an existing position will be closed using a combination of one or more orders. This new feature replaces the existing Entry/Exit Strategies in previous versions of MotiveWave™.

The Exit Strategy control can be found in the **Trade Panel** as well as the **DOM Panel**. In the screen shot below, the Exit Strategy control is shown in the **Position** tab of the Trade Panel.



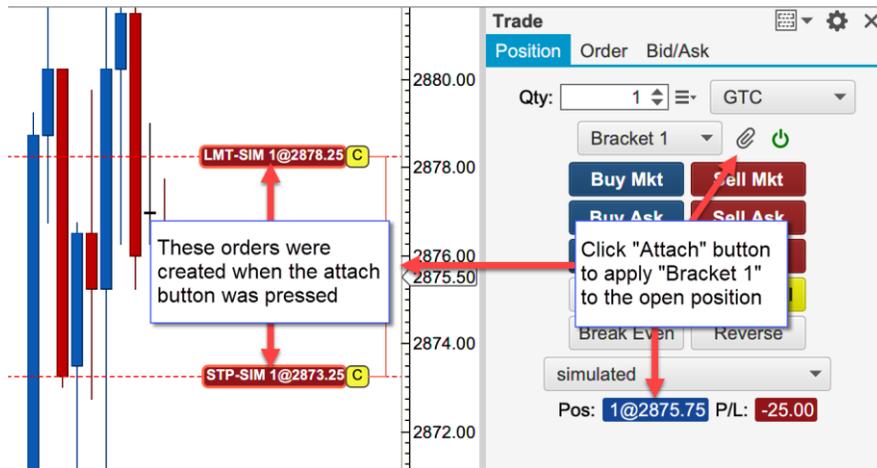
### 2.1 Executing Exit Strategies

Exit Strategies are applied when clicking on one of the entry order buttons in the panel. Use the green power button in the right-hand side of the control to disable this feature (disabled by default). For example, in the screen shot below if you click on the **Buy Mkt** button, the **Bracket 1** strategy will automatically be applied once the market order is filled.



### 2.2 Apply Strategy to Existing Position

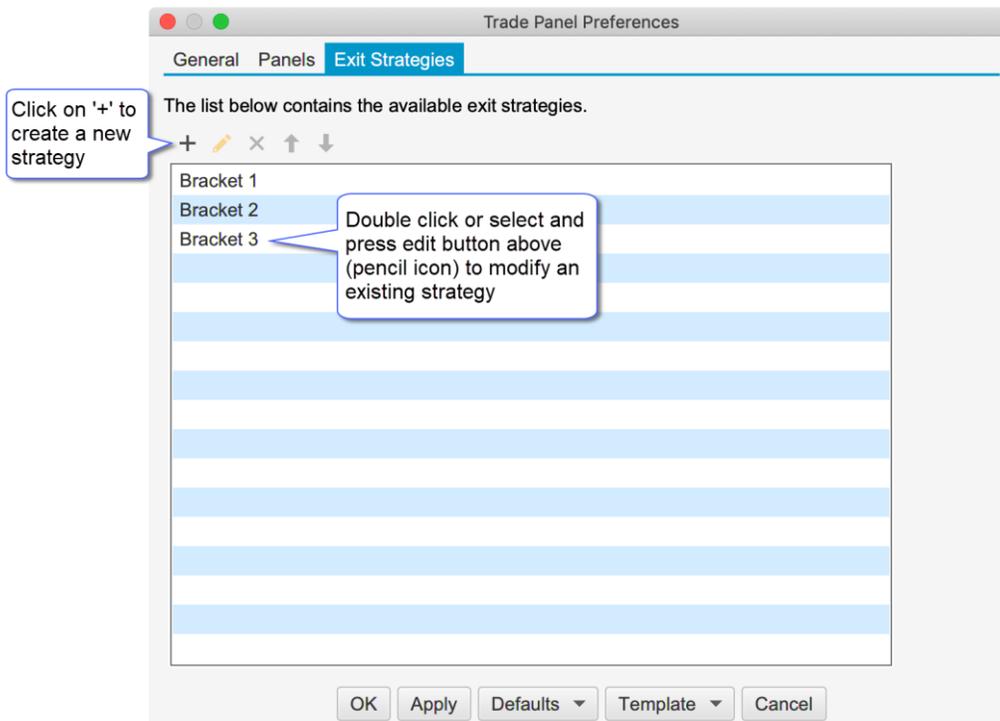
In the case where a position already exists, you can press the attach button (paper clip) to apply the selected strategy to the open position. In the screen shot below the **Bracket 1** strategy has been applied to the existing open position (1@2875.75). This created two orders: a stop and a limit submitted as OCO (One Cancels Other).



## 2.3 Configuring Exit Strategies

Exit Strategies may be configured from Trade Panel settings or from the DOM Panel settings (see Exit Strategies tab).

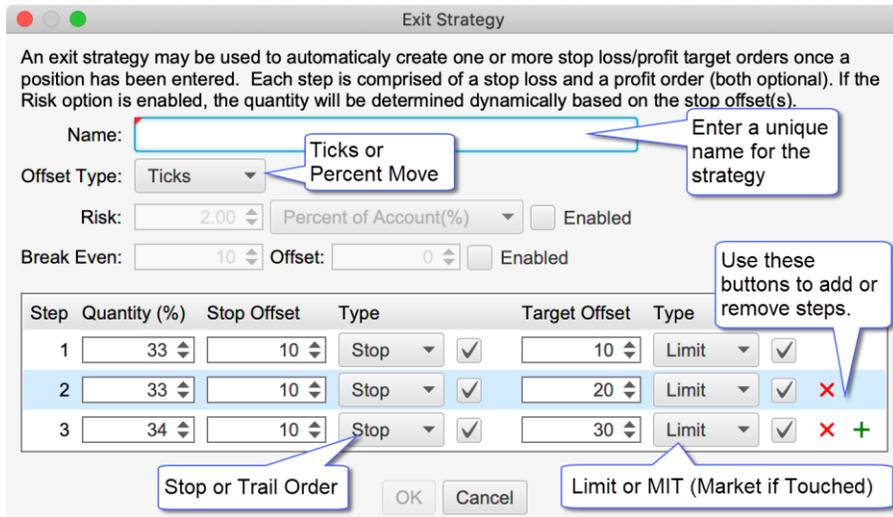
Click on the + button to create a new strategy. Existing strategies may be modified by double clicking on them. Three default strategies are available (which may be modified). These strategies implement 1, 2 and 3 bracket orders (stop loss + limit).



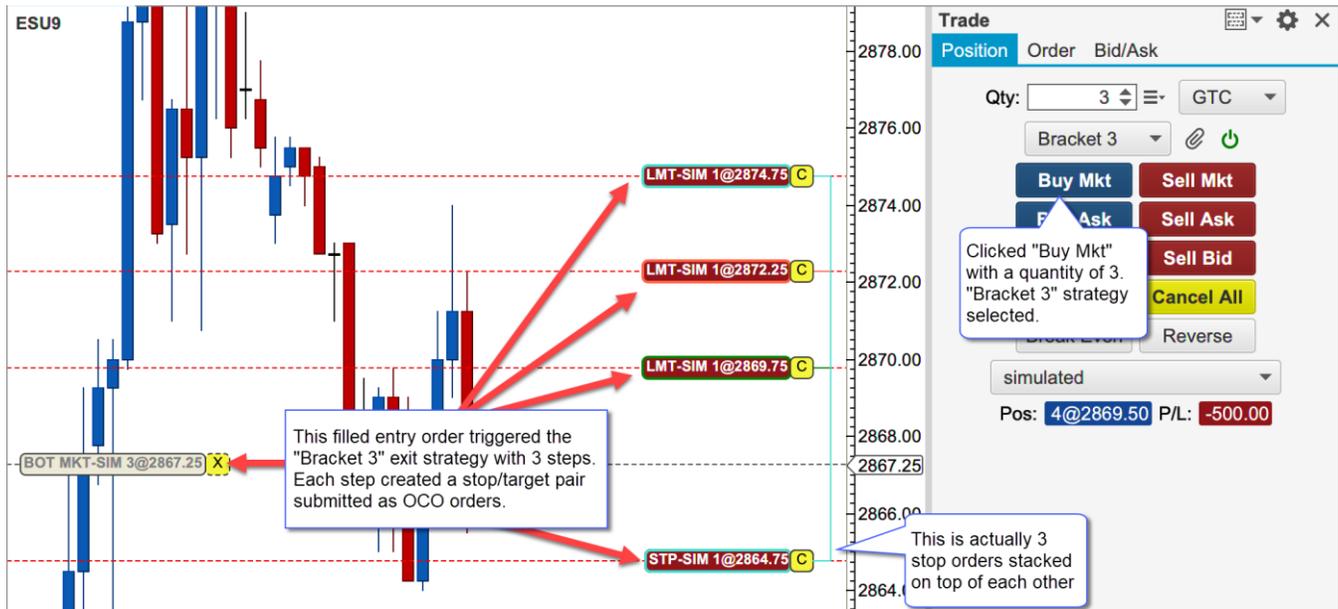
The following dialog is displayed when modifying or creating a new strategy. This dialog has the following options:

1. **Name** – Each strategy must have a unique name
2. **Offset Type** – Defines the type of offset used (see Stop Offset and Target Offset). There are two options:
  - a. **Ticks** – use a specific number of ticks (minimum price movement for an instrument) from the entry price.

- b. **Percent** – use a percent of the average entry price. This is often used for stocks. For example, if you set an offset of 1 percent and your average entry on a stock was \$10, then the offset would be  $\$10 \times 0.01 = 0.10$ .
- 3. **Risk** – Use these options to automatically set the size (quantity) based on a risk value. There are two risk options that may be used:
  - a. **Percent of Account (%)** – Dynamically calculates the maximum loss based on a percentage of current account balance.
  - b. **Fixed Amount** - Sets the maximum stop loss to the given amount.
- 4. **Break Even** – Sets the number of ticks/percent for the trade to move in a positive (profit) direction before moving the stop loss to break even.
  - a. **Offset** - An additional offset may be specified to set the stop loss above/below the entry price (often used to account for commissions and or spreads).
- 5. **Step Table** – Use this table to define the number of steps (order levels) in this strategy. Each step may have a stop loss and/or target (profit) orders. If both a stop and target order are defined for a step, these orders are submitted as an OCO (one cancels other) order. When one of the orders gets filled the other will be cancelled.
  - a. **Quantity (%)** – This defines the size (quantity) of the order as a percentage of the entry quantity. Quantities are rounded to the minimum step size for the instrument. If all of the steps add up to 100% of the entry quantity then the remaining quantity is assigned to the last step.
  - b. **Stop Offset** – Offset from the average entry price where the stop/trail order will be placed. For a buy (long) position this will be the avg entry – stop offset. For a sell (short) position this will be the entry + stop offset.
  - c. **Type (Stop Loss)** – Two options are available for the stop loss order:
    - i. **Stop** – Regular stop order. When the stop price is hit the order will be filled at market price
    - ii. **Trail** – Trailing stop order. The order will follow the price to maintain a maximum of the stop offset away.
  - d. **Check Box** – Use this option to enable or disable the stop order for this step
  - e. **Target Offset** – Offset from the average entry price where the target order will be placed. For a buy (long) position this will be the avg entry + target offset. For a sell (short) position, this will be the avg entry – target offset.
  - f. **Type (Target)** – Two options are available for the target order:
    - i. **Limit** – Limit order. This type of order guarantees the fill price but does not guarantee that the order will be filled when the target price is reached (limit orders are typically filled in the order that they are received by the broker).
    - ii. **MIT** – Market if Touched order. This type of order guarantees that the order will be filled when the price is reached. However, the fill price is not (filled at market price).
  - g. **Check Box** – Use this option to enable or disable the target order for this step.
  - h. **'+' or 'x' button** – use these buttons to add or remove steps.



The screen shot below shows the **Bracket 3** strategy executed from the **Buy Mkt** button in the Trade Panel. Three stop/target order pairs were created using the offsets defined above (10 ticks for each stop and 10, 20, 30 ticks for the target orders). Offsets are placed from the average entry price for the filled market order.

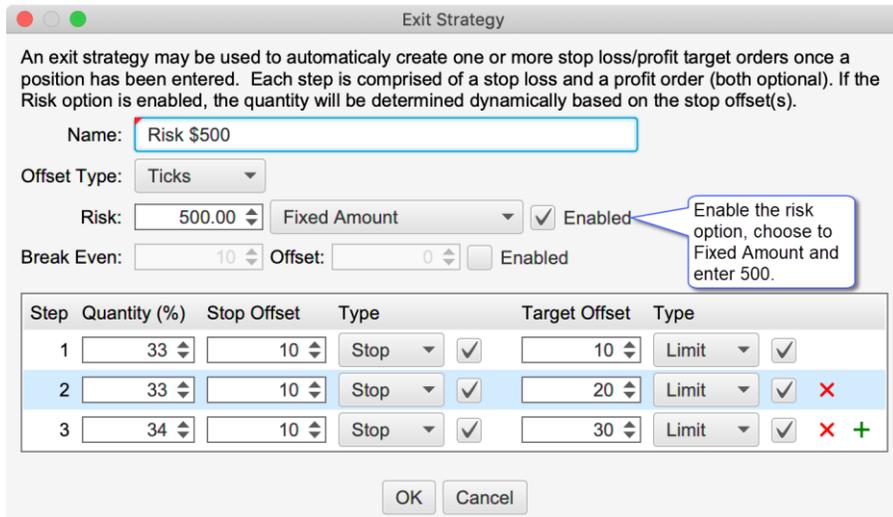


## 2.4 Risk Based Strategies

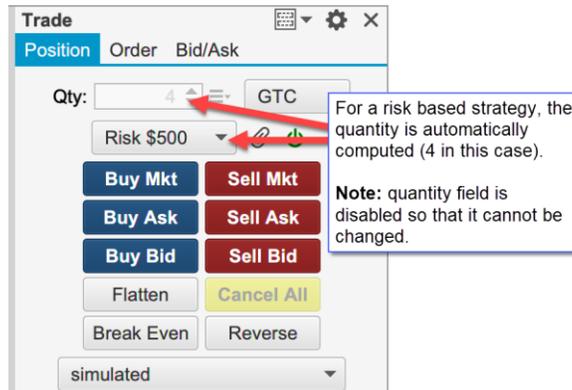
Risk based Exit Strategies are useful for controlling the amount of capital at risk during a trade (see Risk field in the Exit Strategy dialog in the previous section). The risk is controlled by automatically choosing the quantity when placing an entry order. There are two types of risk-based strategies:

1. **Percent of Account** – The amount at risk is a percentage of the active account balance. For example, if you had an account balance of \$50K and the risk setting for the strategy was 2%, then the amount at risk would be  $50K \times 0.02 = \$1000$ .
2. **Fixed Amount** – With this option you can specify exactly how much money you want to risk in a trade (ie: \$500).

The example below displays the settings for an Exit Strategy that risks a maximum of \$500.

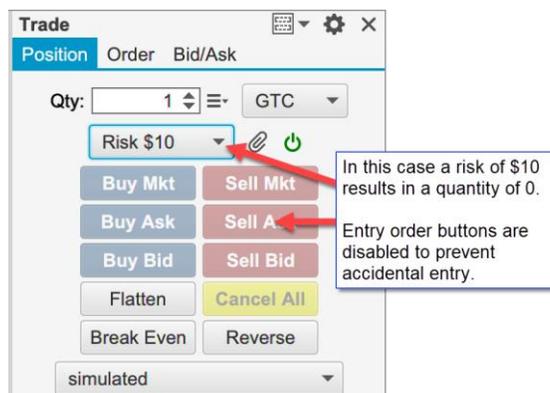


The quantity will be automatically computed when a risk-based strategy is chosen. The quantity field is also disabled so that it cannot be changed. In the screen shot below the “Risk \$500” strategy that we defined above has been chosen. Using the stop offsets in the strategy, a quantity of 4 is computed and set in the Qty field.



Depending on the instrument you are trading (and your stop offset settings), it may not be possible to set a quantity that will match exactly the risked amount. In cases like these the quantity value will be rounded down to the nearest valid quantity.

If the risk amount is too low, the quantity may work out to 0. In this case the order entry buttons will be disabled to prevent placing an order since the maximum risk amount cannot be met.



### 3 Trade Panel

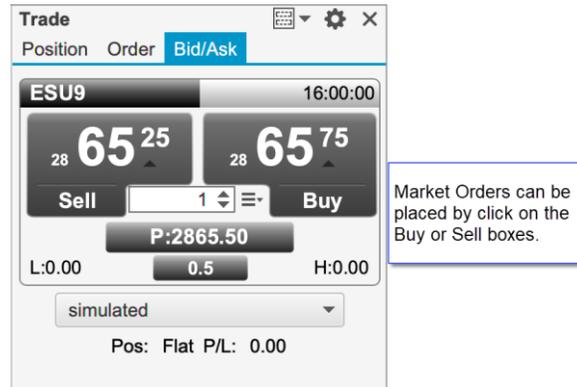
**Note:** Customizable features (including defaults and templates) are only available in the Professional Edition and above. Editions below this will use the default trade panel layout.

#### 3.1 Default Layout

The default layout is very similar to the layout in previous versions of MotiveWave™. This layout consists of three tabs:

1. **Position** – Used to create and manage open positions. Several new buttons have been added to this layout. A Time in Force choice and Exit Strategy control have also been added.
2. **Order** – Use this tab to place and modify existing orders. Stop/Tail and Limit orders can also be attached for a stop loss and profit target.
3. **Bid/Ask** – This tab contains a buy/sell box for quickly placing market orders.

The image shows two screenshots of the Trade Panel interface. The top screenshot shows the 'Position' tab selected, with annotations pointing to 'Customizable Tabs', 'Templates', and 'Widgets'. A callout box says 'Click here to customize the layout.' pointing to a gear icon. The bottom screenshot shows the 'Order' tab selected, with annotations pointing to the 'Order Ticket Form' and 'Use these fields to attach a stop/limit to the entry order (bracket orders, submitted as OCO)'. The interface includes fields for Quantity, Type, Expires, and checkboxes for Limit, Stop, and Trail orders, along with Submit and Cancel buttons.

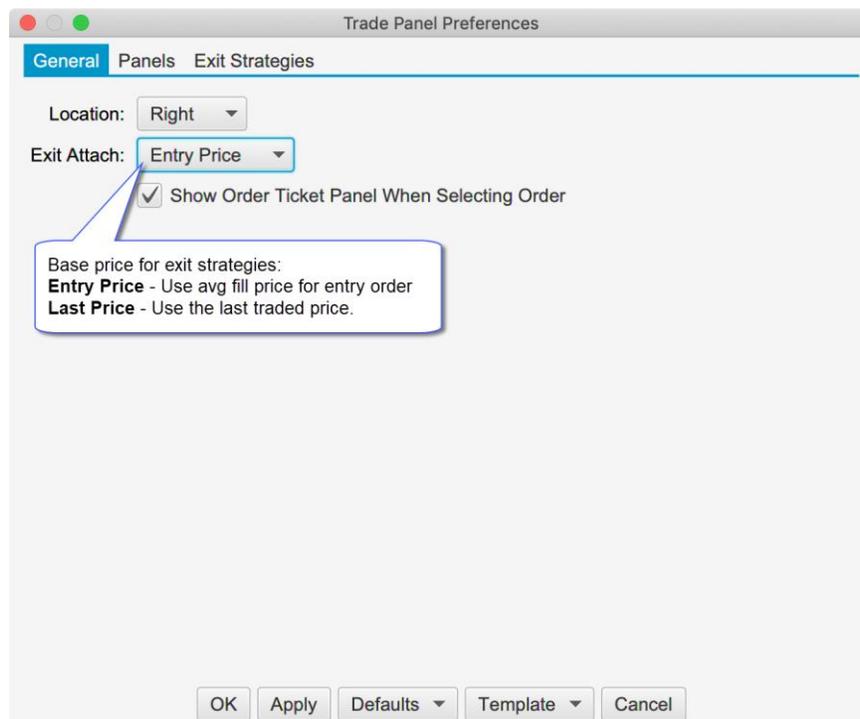


### 3.2 Trade Panel Preferences

Click on the preferences icon (gear) in the top right corner of the Trade Panel to modify the preferences.

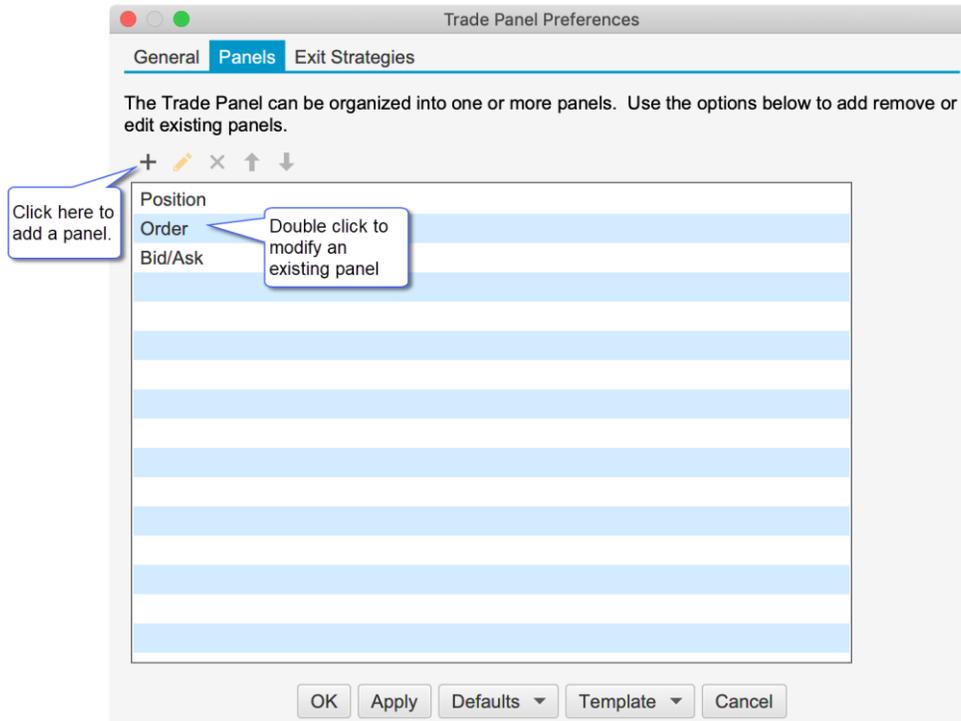
The General tab contains the following options:

1. **Location** – Left or Right side of the chart
2. **Exit Attach** – Determines the base price for computing offset values in the Exit Strategies:
  - a. **Entry Price** – Average Entry Price for the Position. this is the same as the average fill price for an entry order.
  - b. **Last Price** – Last traded price
3. **Show Order Ticket Panel When Selecting an Order** – If this is checked, the Order tab will be shown when an order is selected in the chart. The order ticket form will be filled with the order properties.



#### 3.2.1 Customizing the Layout

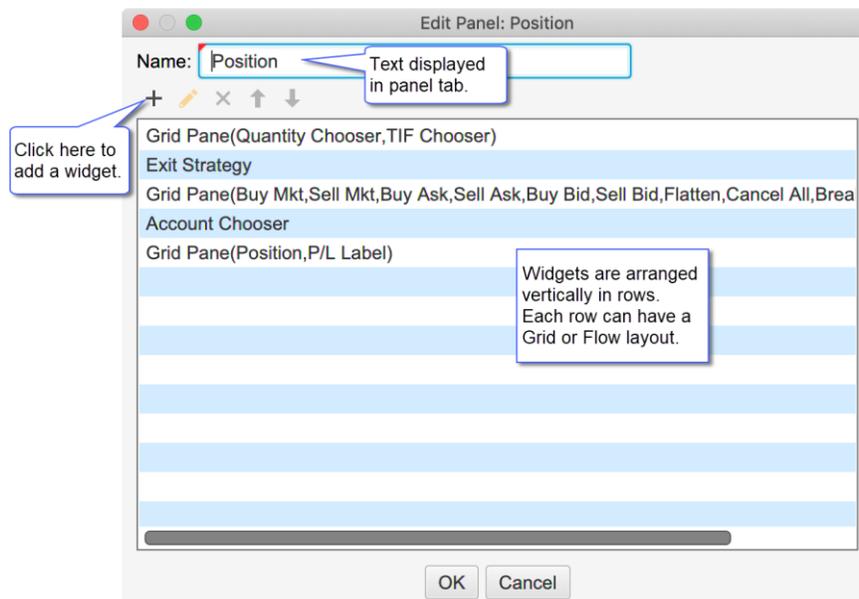
The layout of the Trade Panel can be customized from the Panels tab. Existing panels can be modified or deleted. New panels can be added by clicking on the + button.



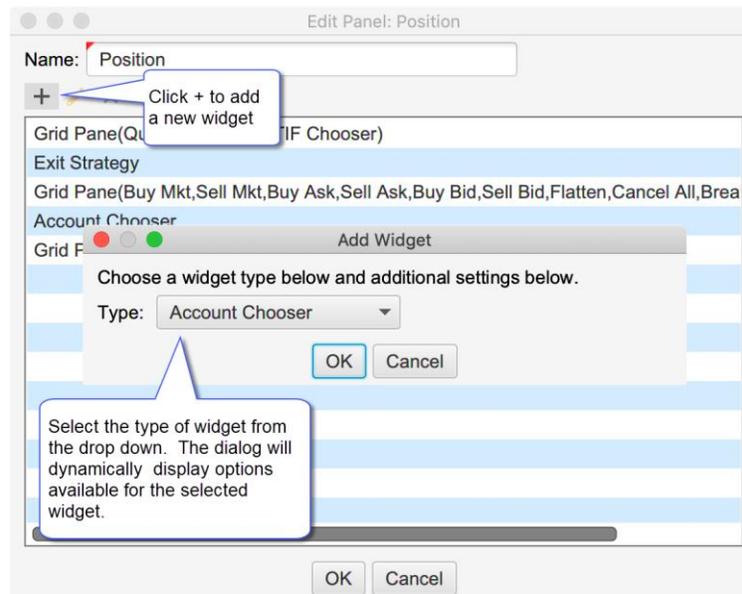
The Edit Panel dialog contains a table of widgets (form controls). Each row in the table represents a row in the panel (arranged vertically). Optionally a row can have one of the following layouts:

1. **Grid** – Widgets within the grid are centered in the row with a fixed number of columns. Optionally a widget may span multiple columns.
2. **Flow** – Widgets are arranged from left to right in a row. If there is not enough space, the widgets are wrapped around to the next line.

The screen shot below shows the Edit Panel dialog for the existing Position panel. Rows may be added to the layout by clicking on the + button. Existing rows may be modified or removed by selecting and pressing the edit/delete buttons.



The screenshot below shows how to add a new widget to a panel. The vertical order of the widgets can be adjusted by dragging them up/down or selecting and using the up/down arrow buttons.



### 3.2.1.1 Widgets

A widget is a generic name for a control, button, label or layout/formatting that can be added to a panel. The following widgets are currently supported:

#### Controls

Controls are used to execute actions or set properties. The following controls are currently supported:

1. **Account Chooser** – Selects the active account for the chart. This account will be used for placing, modifying or cancelling active orders.
2. **Buy/Sell Box** – Buy/Sell box for placing market orders. This control also contains a quantity chooser and labels for display information such as Day High/Low/Last Price etc.
3. **Exit Strategy** – Selector for the active exit strategy and buttons for attaching to an existing position and enabling/disabling the control
4. **Order Ticket** – Order ticket form. This may be used to create new orders or modify/cancel existing orders
5. **Quantity Chooser** – Allows you to set the quantity for placing an order.
6. **Quantity Selector** – Contains preset quantities (in horizontal tab format) for quickly selecting a quantity for order placement.
7. **TIF Chooser** – Selects the Time in Force attribute for placing new orders.

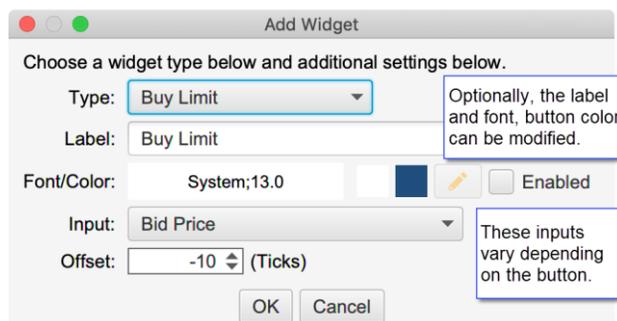
#### Buttons

Buttons are used to execute an action such as placing or cancelling an order. The label, font and color can be customized for any button. Some buttons include additional parameters (such as offset) for customizing the behavior.

1. **Break Even** – Creates a stop or limit order at the break-even price for an open position (stop if you are showing a profit, limit if showing a loss).
2. **Breakout** – Creates two stop orders above and below the current market price with the given offset. When one of the orders is filled the other is canceled (OCO orders). This may be used to enter the market in the direction of trend when it breaks out of a fixed range.

3. **Break Down/Fade Up** – Creates a sell stop order below the market and a sell limit above the market with the given offset. These orders are submitted as OCO (One Cancels Other)
4. **Break Up/Fade Down** - Creates a buy stop order above the market and a buy limit below the market with the given offset. These orders are submitted as OCO (One Cancels Other)
5. **Buy Ask** – Submits a buy limit order at the ask price. Optionally an offset may be set to place the order a given number of ticks below the ask.
6. **Buy Bid** – Submits a buy limit order at the bid price. Optionally an offset may be set to place the order a given number of ticks below the bid.
7. **Buy Limit** – Submits a buy limit order at a given number of ticks from the input value (Bid Price, Ask Price, Last Price, Day High, Day Low, Open or Previous Close)
8. **Buy MIT** – Similar to Buy Limit, but places a Market If Touched order instead.
9. **Buy Mkt** – Places a Buy Mkt order
10. **Buy Stop** – Similar to Buy Limit, but places stop order instead.
11. **Cancel All** – Cancels all active orders for the given instrument and account.
12. **Cancel Buys** – Cancels all active buy orders for the given instrument and account.
13. **Cancel Sells** – Cancels all active sell orders for the given instrument and account.
14. **Fade** – Creates a Sell Limit above the market and Buy Limit below the market using a given number of offset ticks (submitted as OCO orders). This may be used to trade an instrument that is range bound (stays within a given price range).
15. **Flatten** – Closes an open position at market price (for the given instrument and account).
16. **Flatten All** – Same as Flatten, but also cancels active orders.
17. **Reverse** – Closes an open position and opens a new position in the opposite direction (with the same quantity).
18. **Sell Ask** – Similar to Buy Ask, but submits a Sell order instead.
19. **Sell Bid** – Similar to Buy Bid, but submits a Sell order instead.
20. **Sell Limit** – Similar to Buy Limit, but submits a Sell order instead.
21. **Sell MIT** – Similar to Buy MIT, but submits a Sell order instead.
22. **Sell Mkt** – Similar to Buy Mkt, but submits a Sell order instead.
23. **Sell Stop** – Similar to Buy Stop, but submits a Sell order instead.

The screen shot below shows an example of a button dialog. The available parameters (such as input or offset) will be different depending on which button is selected.



## Labels

Labels display live information:

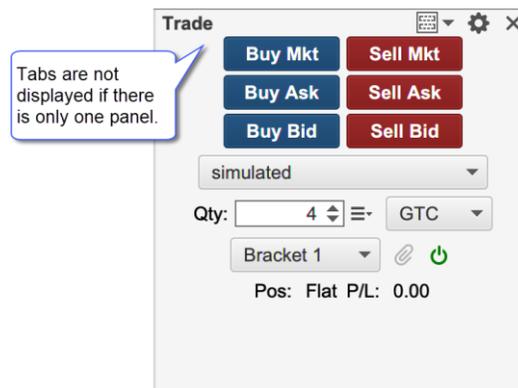
1. **P/L Label** – Current Profit/Loss for the given instrument and account.
2. **Position** – Current open position and entry price for the given instrument and account.
3. **Spread** – Difference between the best bid and best ask prices for the given instrument.

## Formatting

Formatting widgets are useful for controlling how the other widgets are arranged on the panel:

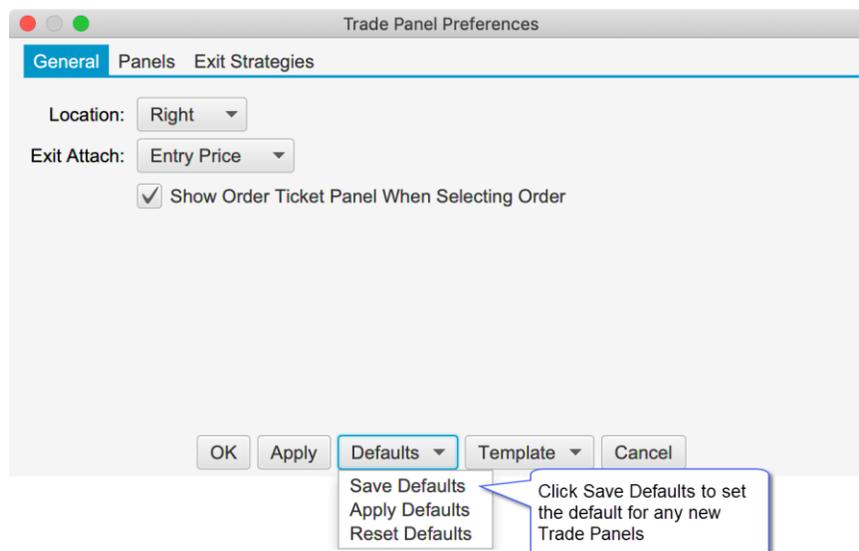
1. **Flow Pane** – Contains a set of widgets that are arranged from left to right. When there is no more room to display on the current row, the remaining widgets are wrapped onto the next line.
2. **Grid Pane** – Contains a set of widgets that are arranged in a grid with a fixed number of columns. The number of rows depends on how many widgets are in the pane.
3. **Horizontal Spacer** – Adds horizontal space between widgets
4. **Divider** – Draws a horizontal divider (typically displayed on a single row)
5. **Vertical Spacer** – Adds vertical space between rows.

The screen shot below shows an example of customizing the trade panel. In this case there is only one panel, so the tabs are not displayed.



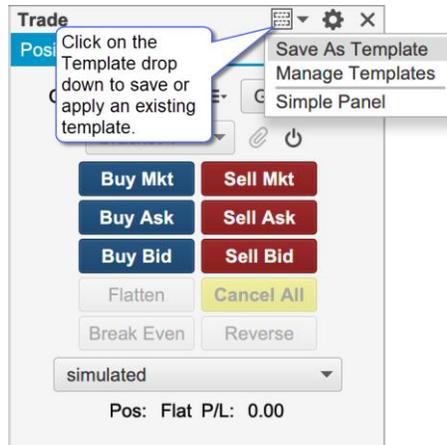
## 3.3 Defaults

When the trade panel is modified, the changes are only applied to the active trade panel within the chart. The default layout can be modified from the Preferences Dialog (click on the gear icon in the top right corner of the trade panel). At the bottom of the dialog, click on the Defaults button. This will set the default for any new Trade Panels that are created (but will not affect existing Trade Panels).

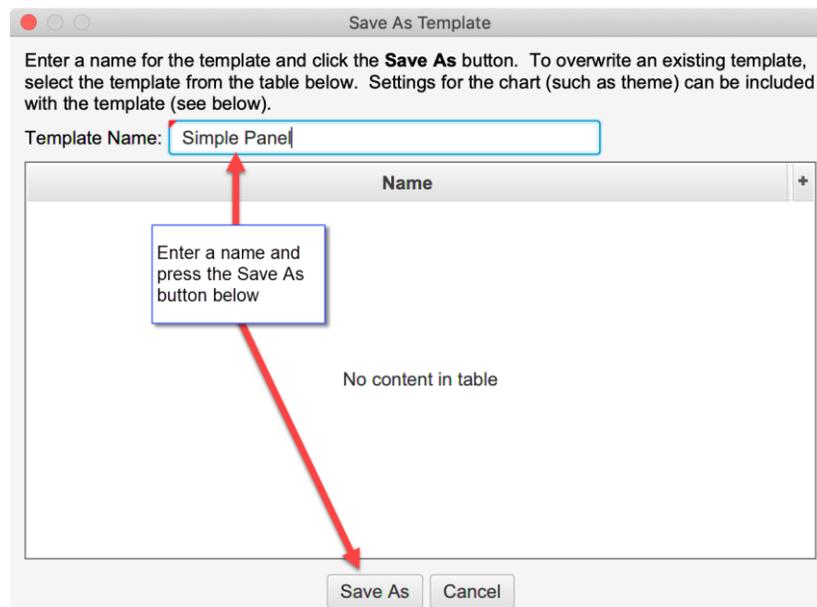


### 3.4 Templates

Templates can be very useful for creating and applying multiple layouts. If you are trading different instruments you may want to have one or more Trade Panel layouts. From the template drop down button at the top of the Trade Panel there are options to Save, Manage or apply templates (there is also a Template button at the bottom of the Trade Panel Preferences dialog).



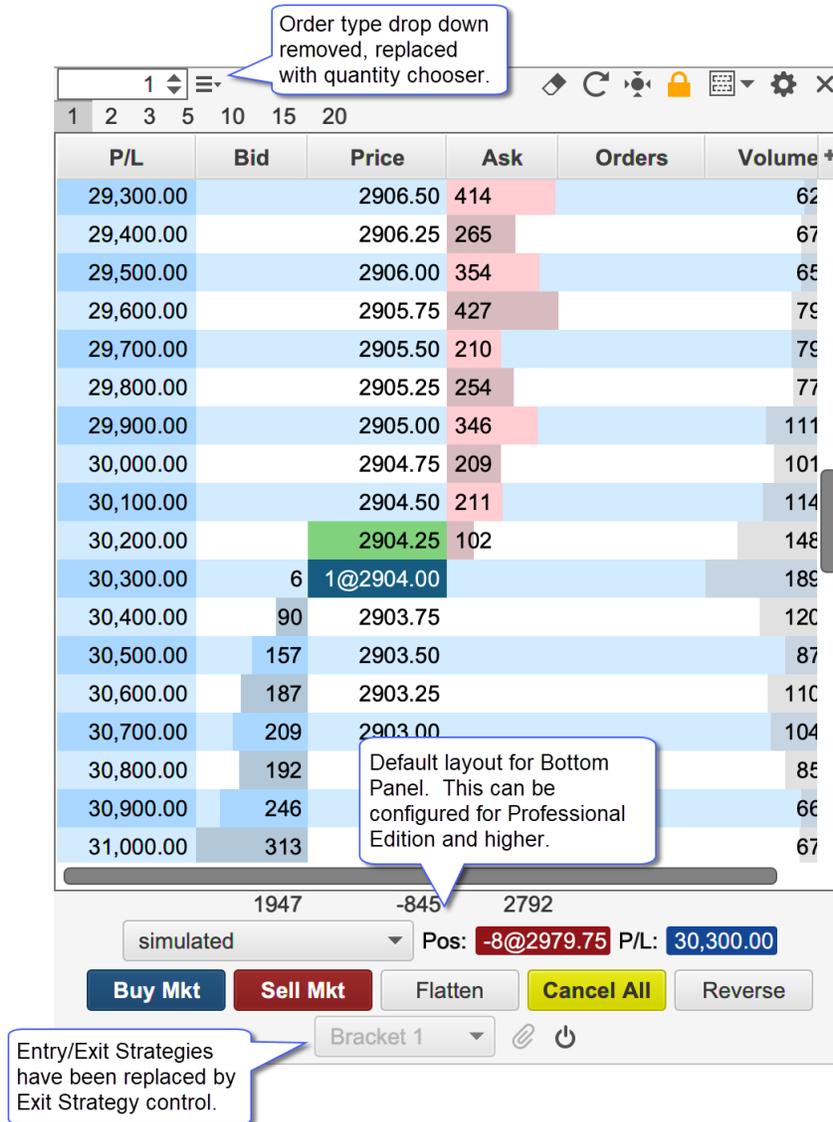
In the screen shot below we are saving the customized Trade Panel that we created in a previous section as "Simple Panel". This new template can then be applied to another trade panel by selecting it in the Templates button drop down.



## 4 DOM Enhancements

### 4.1 Default DOM Layout

The default layout for the DOM has changed in Beta 3 (see screen shot below). The order type chooser has been removed (this functionality is covered by the Exit Strategy feature). The Entry/Exit strategy option has been replaced by the Exit Strategy control (see bottom of DOM).



P/L	Bid	Price	Ask	Orders	Volume +
29,300.00		2906.50	414		62
29,400.00		2906.25	265		67
29,500.00		2906.00	354		65
29,600.00		2905.75	427		79
29,700.00		2905.50	210		79
29,800.00		2905.25	254		77
29,900.00		2905.00	346		111
30,000.00		2904.75	209		101
30,100.00		2904.50	211		114
30,200.00		2904.25	102		148
30,300.00	6	1@2904.00			189
30,400.00	90	2903.75			120
30,500.00	157	2903.50			87
30,600.00	187	2903.25			110
30,700.00	209	2903.00			104
30,800.00	192				85
30,900.00	246				66
31,000.00	313				67

simulated Pos: -8@2979.75 P/L: 30,300.00

Buy Mkt Sell Mkt Flatten Cancel All Reverse

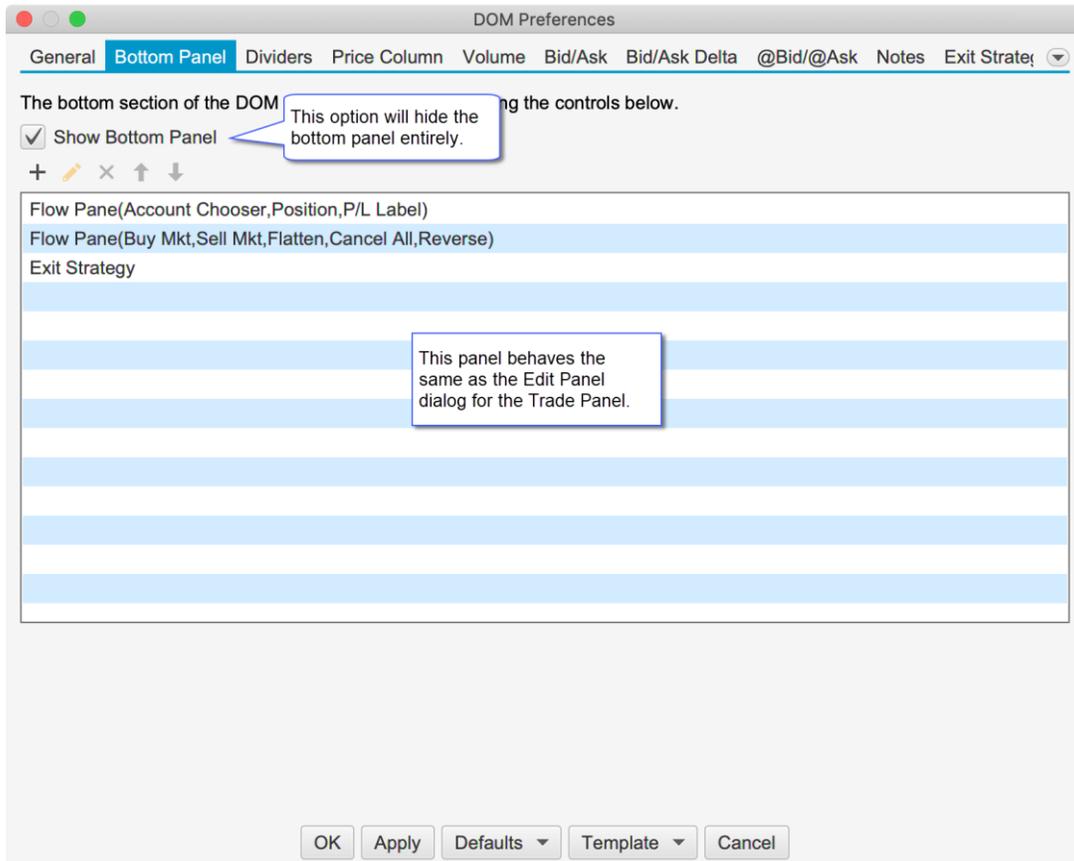
Bracket 1

### 4.2 Bottom Panel

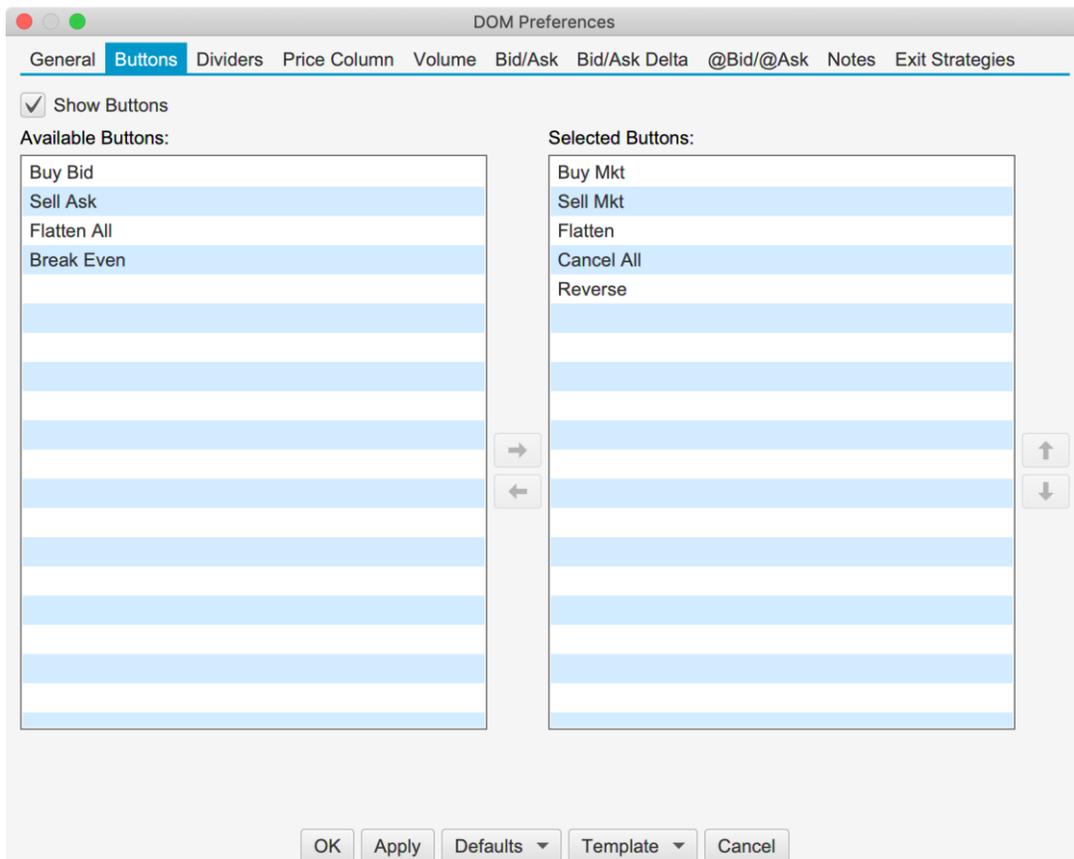
**Note:** This feature is only available in the Professional Edition and higher. Lower editions will be limited to the default layout.

Similar to the Trade Panel, but bottom section of the DOM panel can be customized. This can be done from the Bottom Panel tab in the DOM Preferences dialog (click on gear icon at the top right of the DOM panel).

This panel behaves the same as the Edit Panel dialog in the Trade Panel see [Customizing the Layout](#) section.



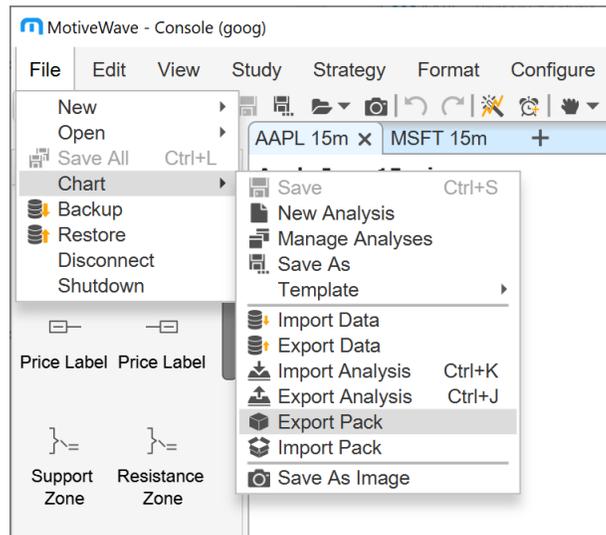
If you have an edition below the Professional Edition, you can still customize the buttons that are displayed at the bottom of the panel (see below):



## 5 Analysis Packs

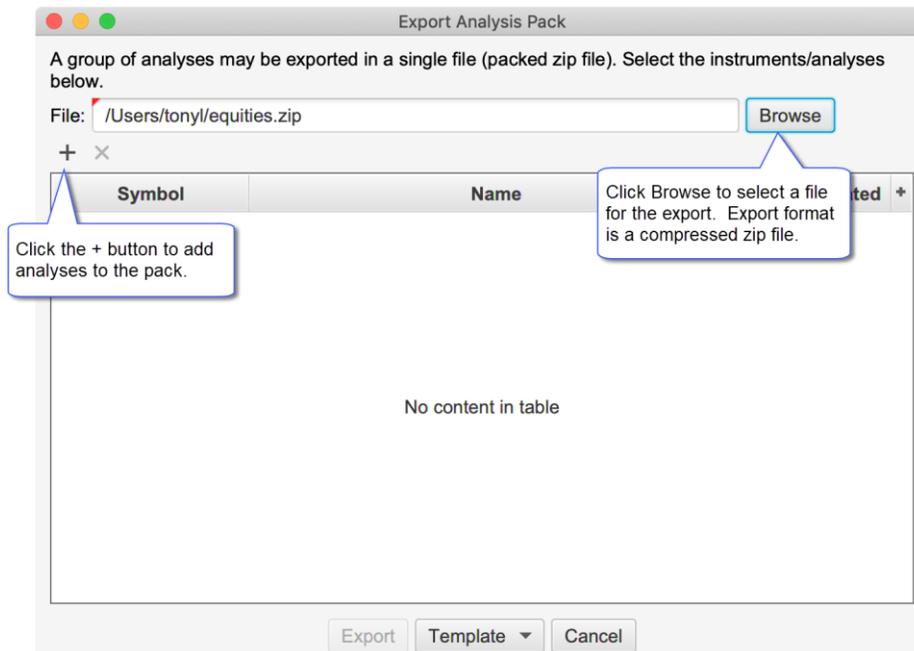
The Analysis Packs feature provides a more convenient method for sharing or transferring a set of analyses from one computer to another. This is similar to the import/export analysis feature but allows you to include multiple analyses across one or more instruments.

The Export/Import Pack options can be found under the **File -> Chart** menu of the Console menu bar:

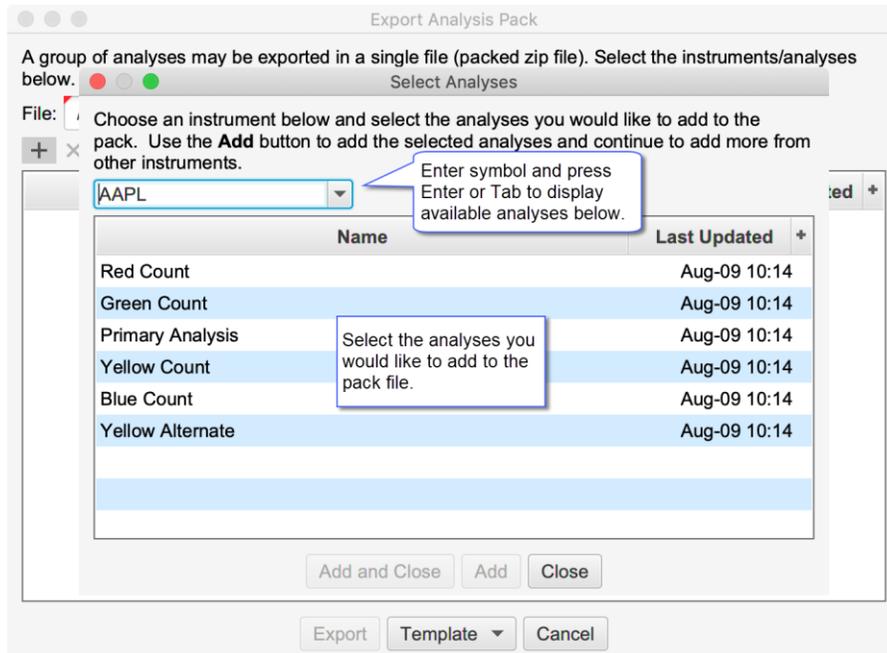


### 5.1 Exporting a Pack

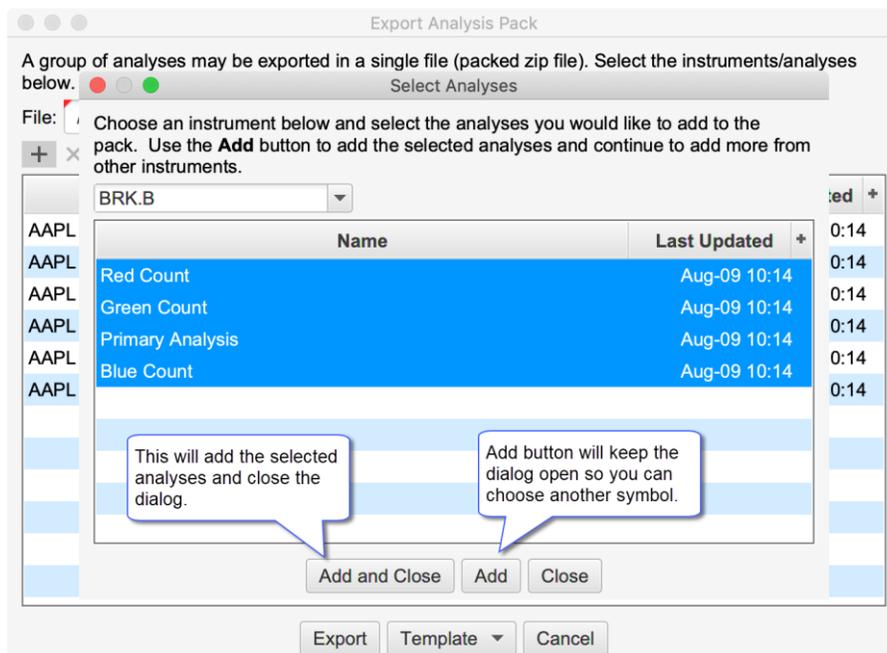
Use the **Export Analysis Pack** dialog (see below) to select a set of analyses and create a pack file. The pack file is a compressed zip file. Click on the + button to select analyses to add to the pack.



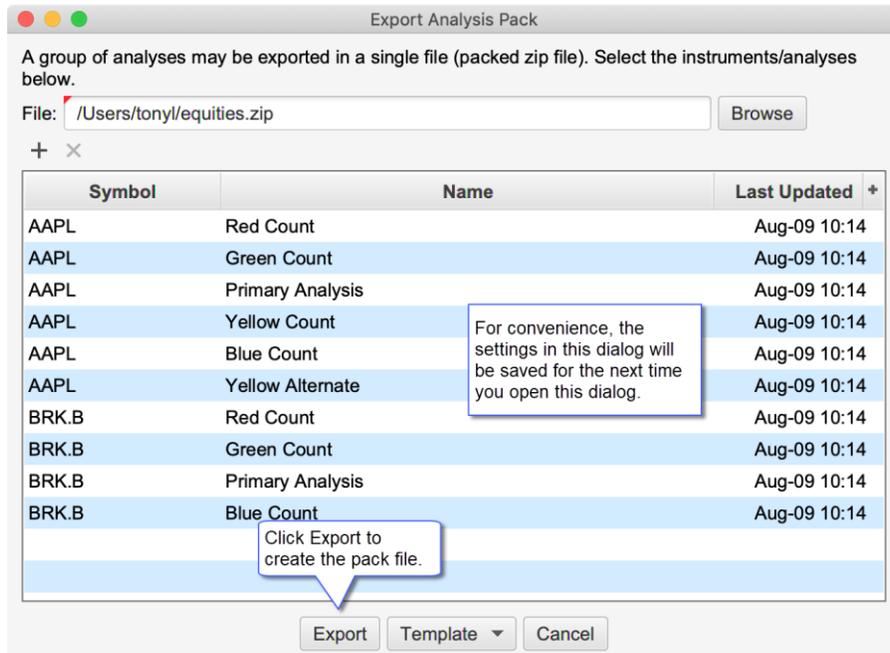
When you click on the + button the **Select Analyses** dialog will be displayed (see below). Type the symbol in the input box and press **Enter** or **Tab** to display the available analyses. Select the analyses you would like to include and press the **Add and Close** or the **Add** button.



For convenience, the **Add** button will keep the dialog open so you can choose another symbol. When you are finished, click **Add and Close** to dismiss this dialog.

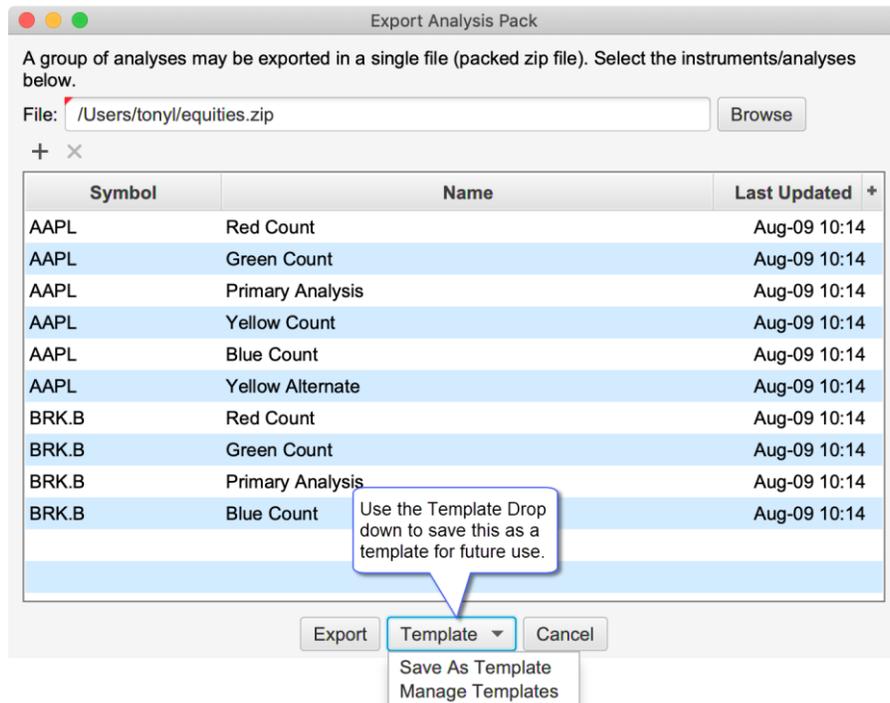


When you have completed selecting all of the analyses for the pack, click on the **Export** button at the bottom of the **Export Analysis Pack** dialog. For convenience all of the settings in this dialog will be saved for the next time you use it.

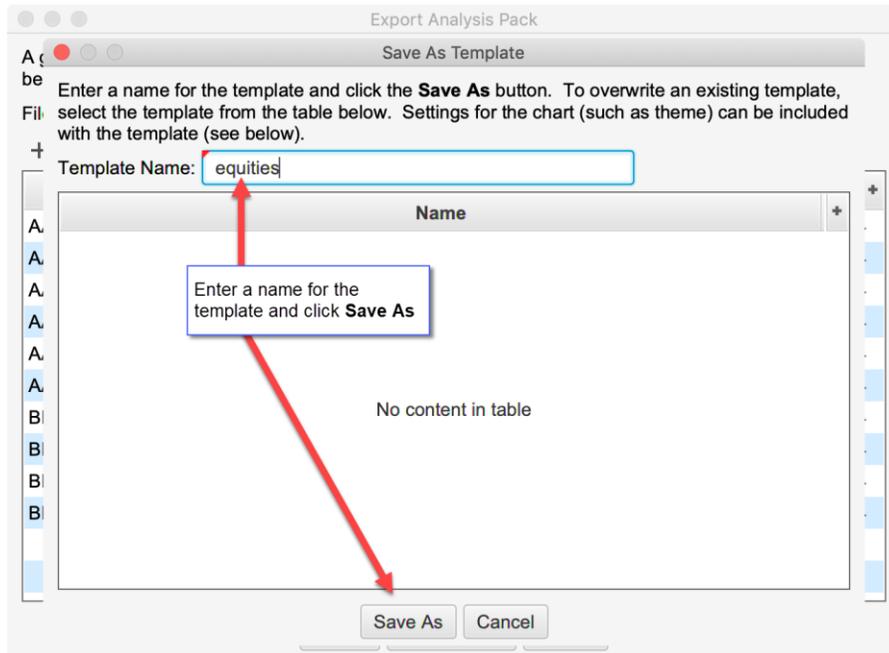


### 5.1.1 Export Templates

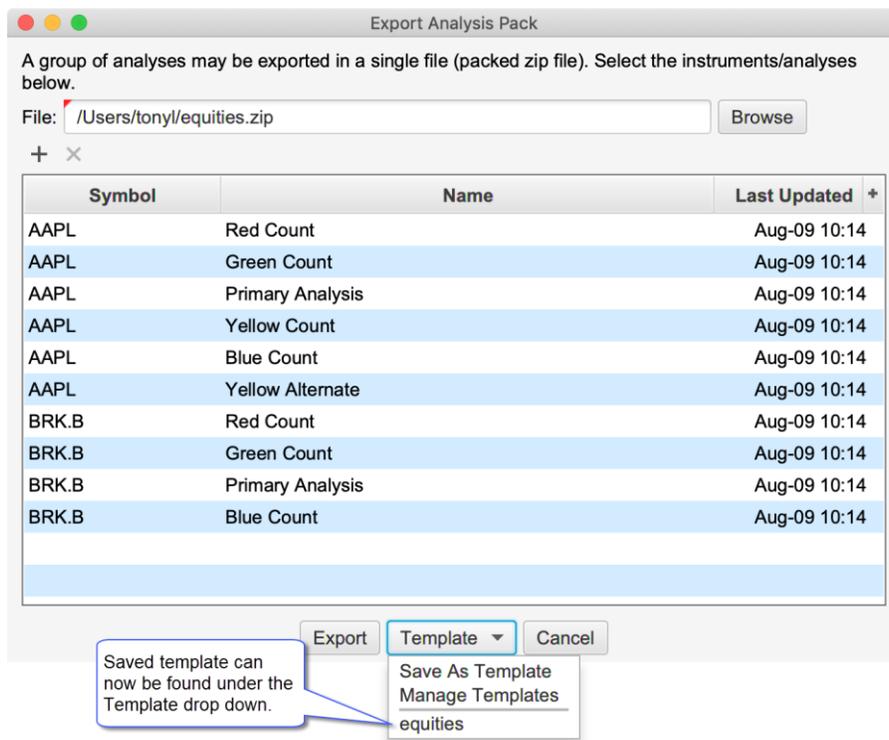
Templates are useful in cases where you frequently export different sets of analyses to one or more users or transfer files between computers.



This will launch the Save As Template dialog. Enter a name for the template and click the Save As button (see below).



The template can then be applied by choosing it from the Template drop down at the bottom of the dialog.



## 5.2 Importing a Pack

Use the **Import Analysis Pack** dialog to import analyses from a pack into your workspace. A prefix can optionally be added to each analysis. This can be useful to identify where the analyses came from or to avoid naming conflicts with existing analyses in your workspace. You can selectively choose which analyses to import. By default, all will be selected.

Import Analysis Pack

A group of analyses may be imported from a pack (zip) file. Select the pack from by pressing the browse button below. Select the analyses you would like to import and press the **Import** button below.

Optionally, a prefix may be added to the beginning of the each analysis name to separate them from existing analyses.

File:

Prefix:

Overwrite Existing Analyses

Optionally add a prefix to each analysis name to avoid name conflicts with existing analyses

Click the Browse button to locate the pack file.

Symbol	Name	Last Updated
BRK.B	Red Count	Aug-09 10:14
BRK.B	Green Count	Aug-09 10:14
BRK.B	Primary Analysis	Aug-09 10:14
BRK.B	Blue Count	Aug-09 10:14
AAPL	Red Count	Aug-09 10:14
AAPL	Green Count	Aug-09 10:14
AAPL	Primary Analysis	Aug-09 10:14
AAPL	Yellow Count	Aug-09 10:14
AAPL	Blue Count	Aug-09 10:14
AAPL	Yellow Alternate	Aug-09 10:14

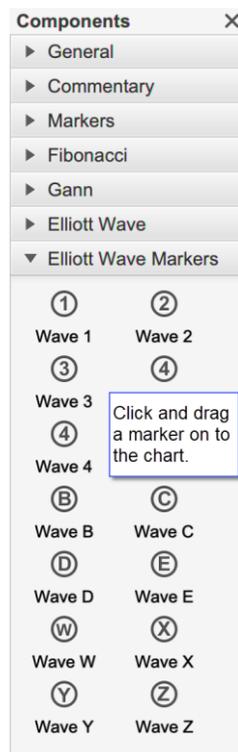
Select the analyses you would like to import from the Pack (all selected by default)

## 6 Elliott Wave Enhancements

### 6.1 Elliott Wave Markers

Elliott Wave markers are a simpler version of the Elliott Wave components and may be used to place an Elliott Wave label on the chart. This can be useful for showing an alternative wave count on the same chart as the primary count.

The labels use the same degree label formatting as the Elliott Wave components. These labels also use the same rules for hiding waves above or below a specified degree.



The degree of the label can be chosen from the right click (context) menu or from the Properties dialog (double click on the marker).

Labels use the same degree formatting as the Elliott Wave components.

Rules for hiding waves also apply to the EW labels

Wave degree can be modified from this menu

PL	Session PL	Total PL	Marg
.00		-985.79	

- Edit
- Format
- Visibility
- Template
- Degree
  - Increase Degree ⌘+
  - Decrease Degree ⌘-
  - Primary
  - Intermediate
  - Minor
  - Minute
  - Minuette
  - Subminuette
  - Micro
  - Submicro
  - Miniscule
  - Nano
  - Subnano
  - Pico
  - Supermillennium
  - Millennium
  - Submillennium
  - Grand Supercycle
  - Supercycle
  - Cycle
- Wave Type
- Hide Waves
- Lock Component
- Hide Component
- Properties

FOUR (Submicro) Properties

General | Format | Visibility

Use the options below to change the display of the component.

Degree: Submicro

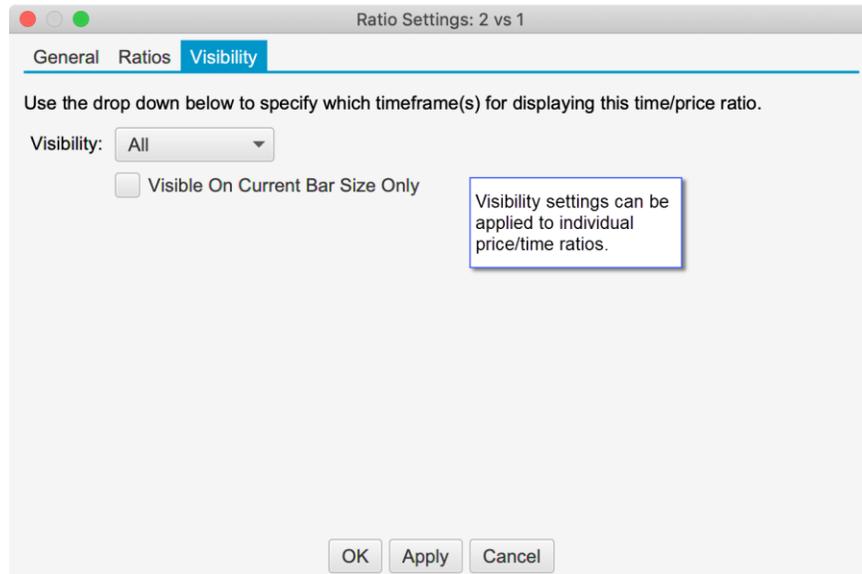
Wave Type: (4)

Wave Type and Degree can be chosen here.

OK Apply Defaults Template Cancel

## 6.2 Ratio Visibility

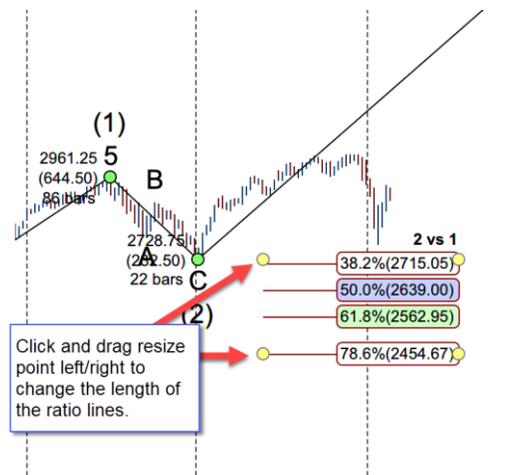
The visibility for individual price and time ratios can be set from the Ratio Properties dialog (double click on a ratio label). This will hide or show ratios depending on the selected bar size for the chart.



### 6.3 Left Adjust for Ratio Lines

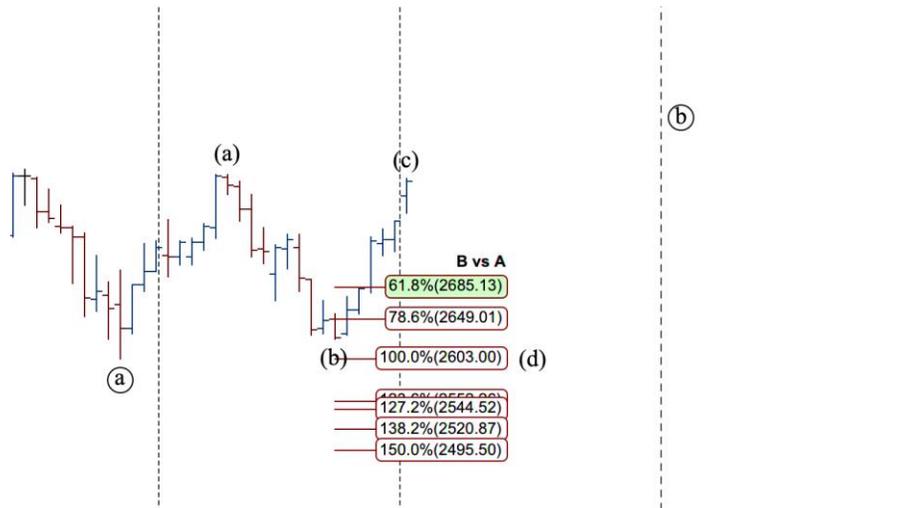
The left side of ratio lines can now be adjusted using the mouse. Two yellow resize points are available on the left side of the ratio lines that can be dragged left or right.

**Note:** this feature also exists on other ratio components (such as retracements, extensions and expansions).



### 6.4 Wave B vs A for Triangles

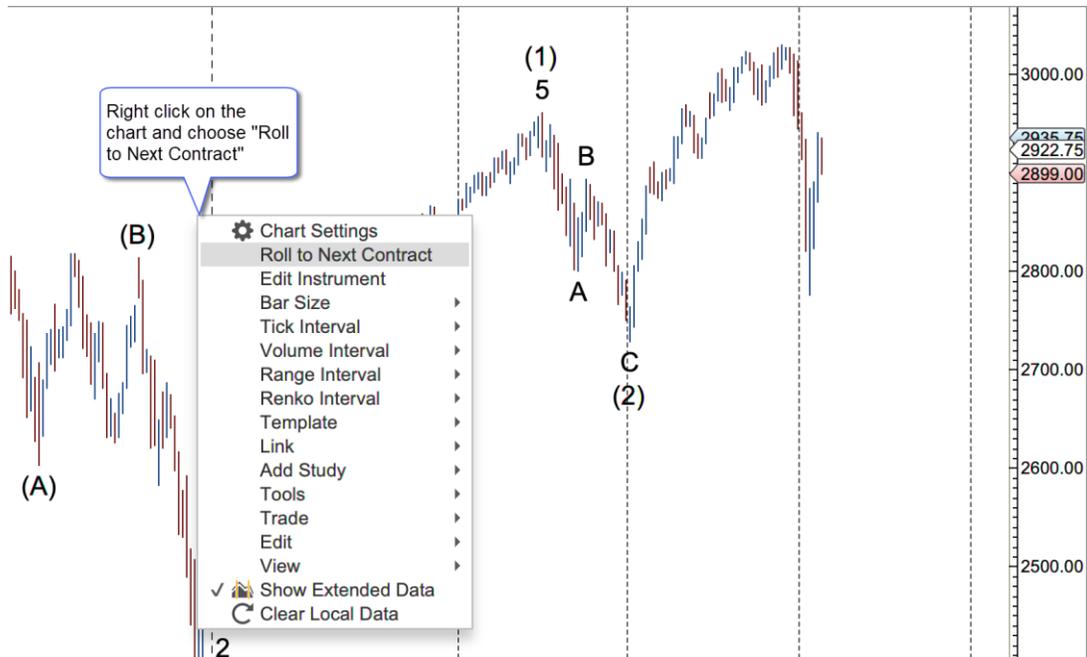
The price wave ratio B vs A has been added for triangle patterns. The main purpose of this ratio is to monitor a developing triangle that may turn into an ABC correction.



## 7 Roll Futures Contract

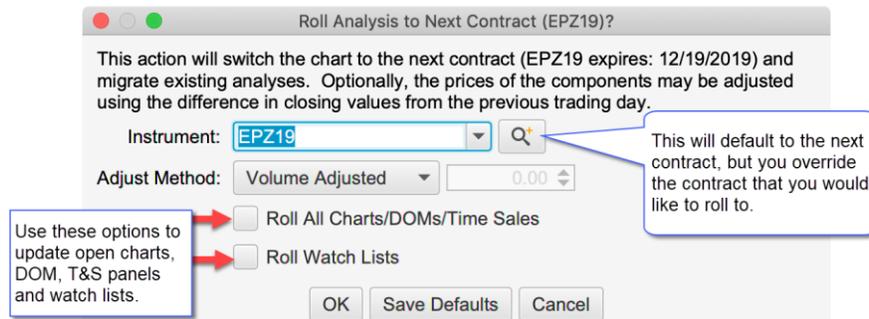
This option is useful when the front contract for a futures contract changes. This feature will copy existing analysis files and optionally adjust the prices to the front contract. Open charts, watchlists and Depth of Market panels can also be updated to the new contract.

Right click on the chart and choose **Roll to Next Contract** to open the dialog.



The dialog in the screen shot below presents the options for rolling to the next contract:

1. **Instrument** – This field will default to the next contract. If you want to skip a contract (or migrate to a similar instrument) you can type the symbol or use the search button.
2. **Adjust Method** – Use this field to adjust the prices for each of the components in the analysis. This has the following options:
  - a. **Volume Adjusted** – Automatically calculates the price adjustment by analyzing the volume between the contracts.
  - b. **Unadjusted** – No price adjust is made
  - c. **Specific Amount** – Enter a specific amount for the price adjustment
3. **Roll All Charts/DOMs/Time Sales** – Updates the symbol for any open charts, Depth of Market panels or Time & Sales panels
4. **Roll All Watch Lists** – Looks for all occurrences of the symbol in watch lists (or quote sheets) and replaces them with the new symbol.



## 8 Other Enhancements

This section describes other minor enhancements that have been added in Beta 3.

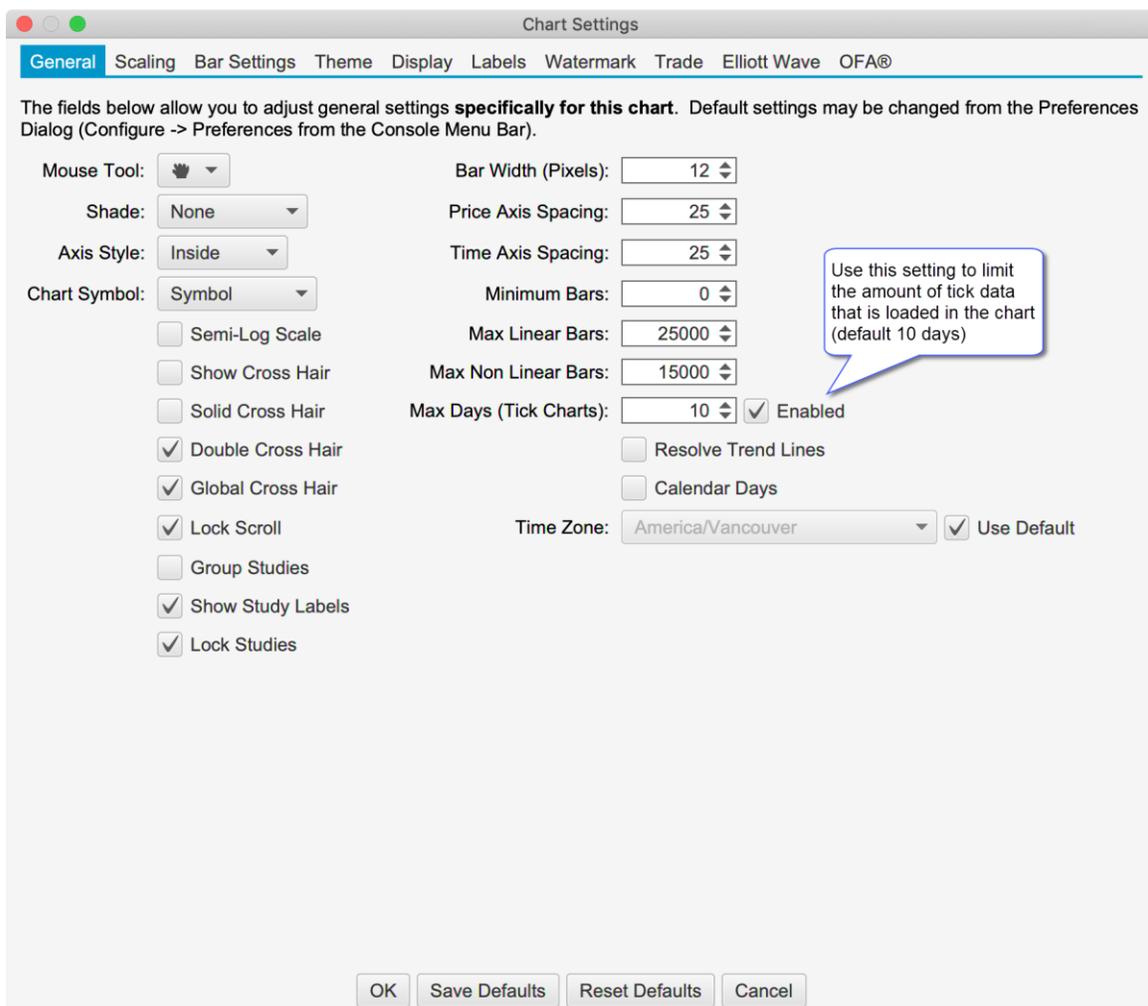
### 8.1 Tick Data Performance

Significant enhancements have been made to the loading and processing of tick data. In some cases, multiple concurrent requests for tick data are combined into a single fetch operation.

### 8.2 Non-Linear Bars

The approach to building non-linear bars (Tick, Renko, Range, Point & Figure, etc) has been re-written to be more consistent and efficient.

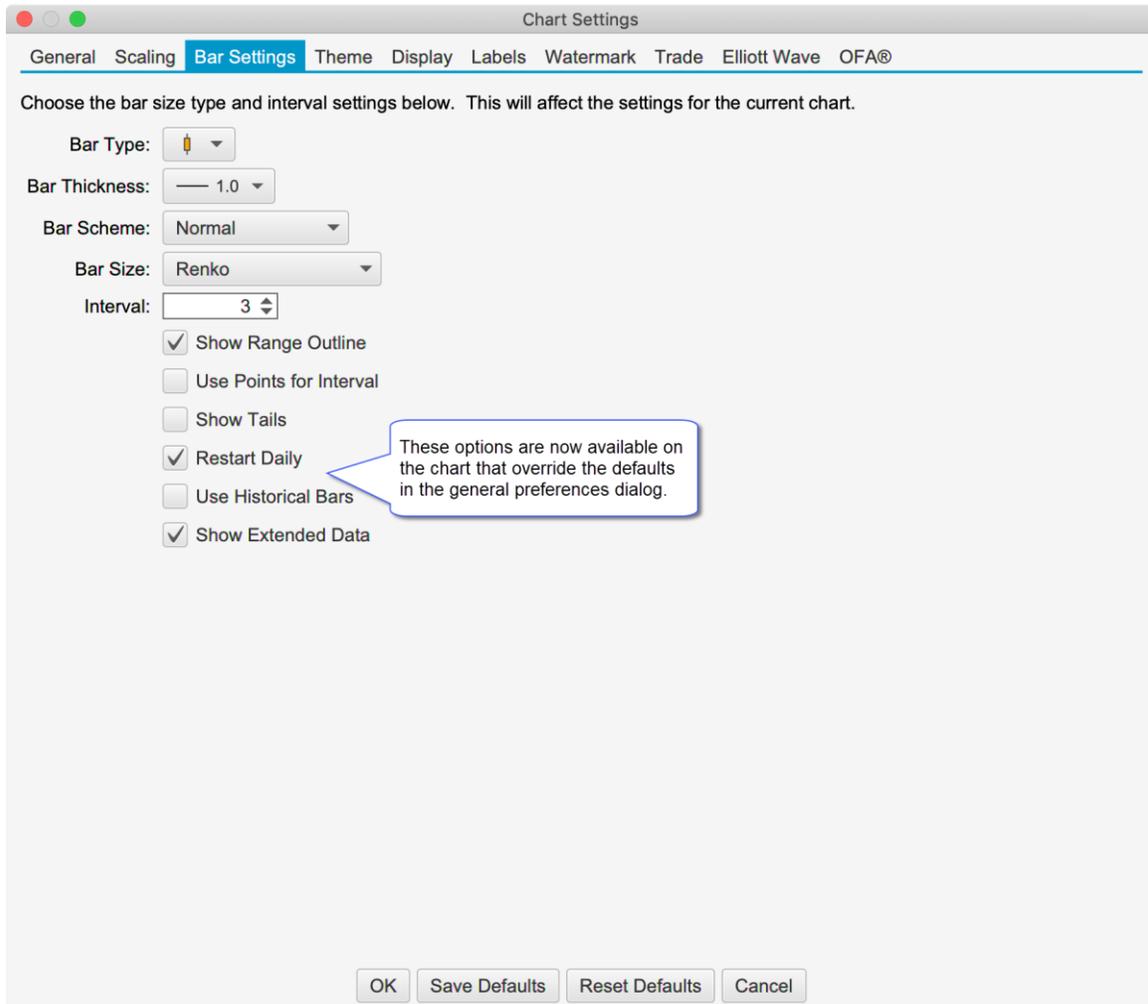
The maximum number of days of tick data (default 10 days) can be controlled from the Chart Settings dialog (see General Panel).



Two additional parameters have been added to the Bar Settings panel for Non-Linear bars:

1. **Restart Daily** – Restarts the calculation of the bars each day.
2. **Use Historical Bars** – Builds bars using historical minute bars (instead of tick data).

These settings are specific to the chart as opposed to the global settings in the general preferences dialog (Configure -> Preferences from the Console menu bar Historical Data -> Tick Charts).



### 8.3 SDK Enhancements

The methods: `getBars(...)` and `forEachBar(...)` in the **Instrument** interface now support non-linear bars.

### 8.4 Studies

#### 8.4.1 DOM History Study

Significant enhancements have been added to the DOM History study to improve the performance and add more coloring options. This dialog has the following options:

1. **Max Depth Levels** – Maximum number of levels to display for history (default 50). This is mostly relevant for Rithmic™ (which supports unlimited depth levels) but will apply to future brokers/data services that provide more than 10 levels of depth.
2. **Min Qty** – Minimum quantity for displaying a depth level.
3. **Max History** – Maximum number of bars for displaying the history
4. **Extend Latest DOM** – Extends the latest DOM levels to the end of the chart.
5. **Gradient Colors** – This field is the same as in previous versions of MotiveWave, but is also the default colors to use if none of the color levels apply (see below)
6. **Level 1 – 5** – These fields allow you to customize how the DOM history is colored for specify quantity ranges. If none of these levels apply, then the default Gradient Colors are used.

DOM History

Displays a historical view of the DOM depth at the end of each price bar.

General
Options

Max Depth Levels:   Show All

Min Qty:   Enabled

Max History:   Enabled

Extend Latest DOM

Gradient Colors:

Level 1:	<input type="text" value="0"/>	<span style="background-color: #00ff00; border: 1px solid #ccc; padding: 2px 10px;"></span>	<span style="background-color: #ff0000; border: 1px solid #ccc; padding: 2px 10px;"></span>	<input type="checkbox"/> Gradient	<input checked="" type="checkbox"/> Enabled
Level 2:	<input type="text" value="100"/>	<span style="background-color: #00ff00; border: 1px solid #ccc; padding: 2px 10px;"></span>	<span style="background-color: #ff0000; border: 1px solid #ccc; padding: 2px 10px;"></span>	<input type="checkbox"/> Gradient	<input checked="" type="checkbox"/> Enabled
Level 3:	<input type="text" value="200"/>	<span style="background-color: #00ff00; border: 1px solid #ccc; padding: 2px 10px;"></span>	<span style="background-color: #ff0000; border: 1px solid #ccc; padding: 2px 10px;"></span>	<input type="checkbox"/> Gradient	<input checked="" type="checkbox"/> Enabled
Level 4:	<input type="text" value="400"/>	<span style="background-color: #00ff00; border: 1px solid #ccc; padding: 2px 10px;"></span>	<span style="background-color: #ff0000; border: 1px solid #ccc; padding: 2px 10px;"></span>	<input type="checkbox"/> Gradient	<input checked="" type="checkbox"/> Enabled
Level 5:	<input type="text" value="800"/>	<span style="background-color: #00ff00; border: 1px solid #ccc; padding: 2px 10px;"></span>	<span style="background-color: #ff0000; border: 1px solid #ccc; padding: 2px 10px;"></span>	<input type="checkbox"/> Gradient	<input checked="" type="checkbox"/> Enabled

### 8.4.2 VWAP Study

The VWAP (Volume Weighted Average Price) study has been re-written to use historical tick data (instead of bar data). Optionally, ticks can be generated from historical minute bars (see Use Historical Bars option below).

Volume Weighted Average Price (VWAP)

This study calculates the average weighted price by volume for the day.

General
Options

Maximum Bars:   Show All

Use Historical Bars

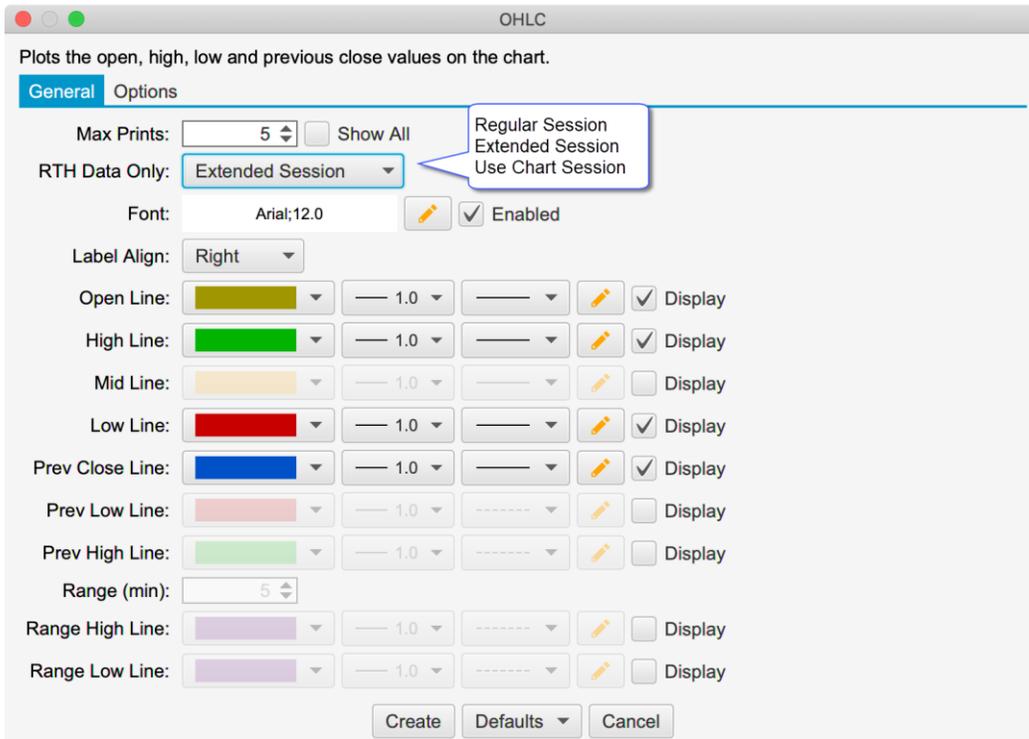
Timeframe:   Use Series Bar Size

Line:

Indicator:    Line  Display

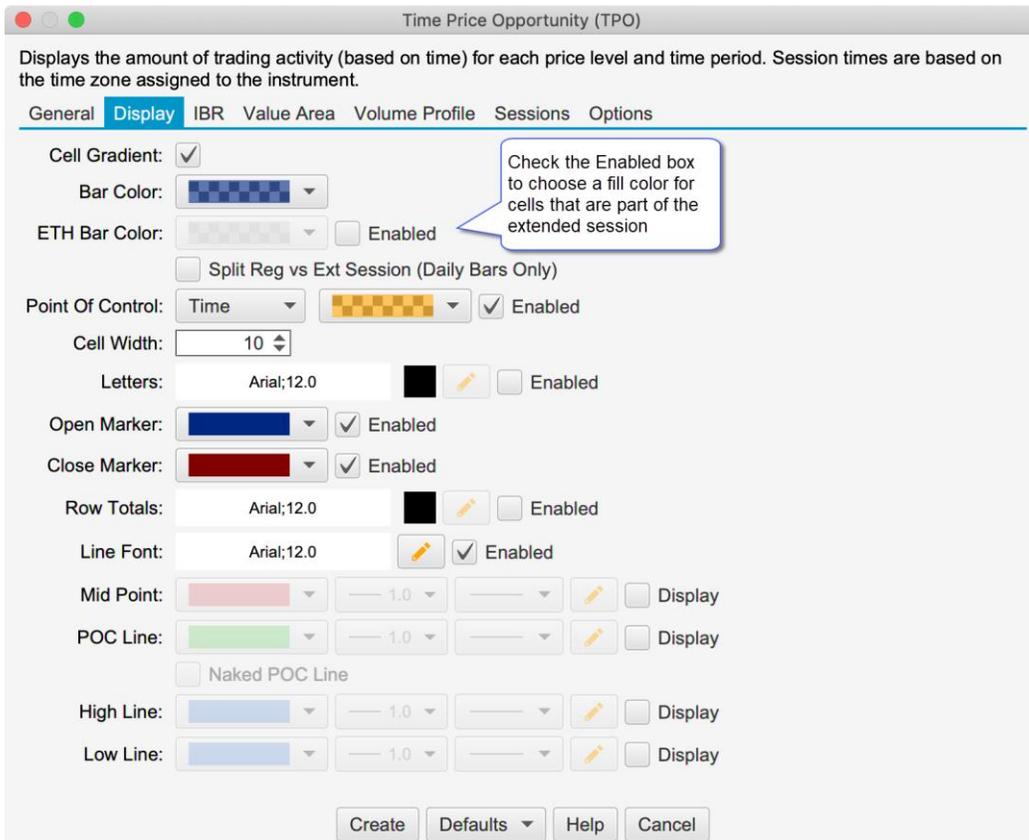
### 8.4.3 OHLC Study

Calculation for open, high, low and previous close lines can use regular trading hours, extended hours or inherit the chart setting.



### 8.4.4 TPO Study

An additional option has been added to the TPO study to change the background color for cells that are part of the extended session (see screen shot below).



### 8.4.5 Pivot Points Study

Standard pivots have been added to the Pivot Points study. This uses the following calculation:

$$\text{Pivot Point (P)} = (\text{High} + \text{Low} + \text{Close})/3$$

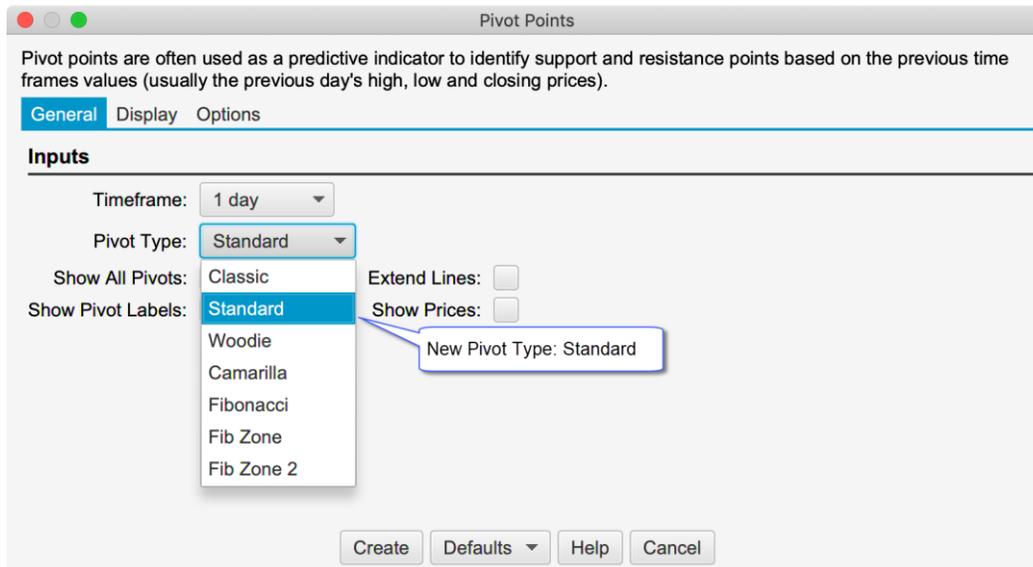
$$\text{Resistance 1 (R1)} = (\text{P} \times 2) - \text{Low}$$

$$\text{Resistance 2 (R2)} = \text{P} + (\text{High} - \text{Low})$$

$$\text{Support 1 (S1)} = (\text{P} \times 2) - \text{High}$$

$$\text{Support 2 (S2)} = \text{P} - (\text{High} - \text{Low})$$

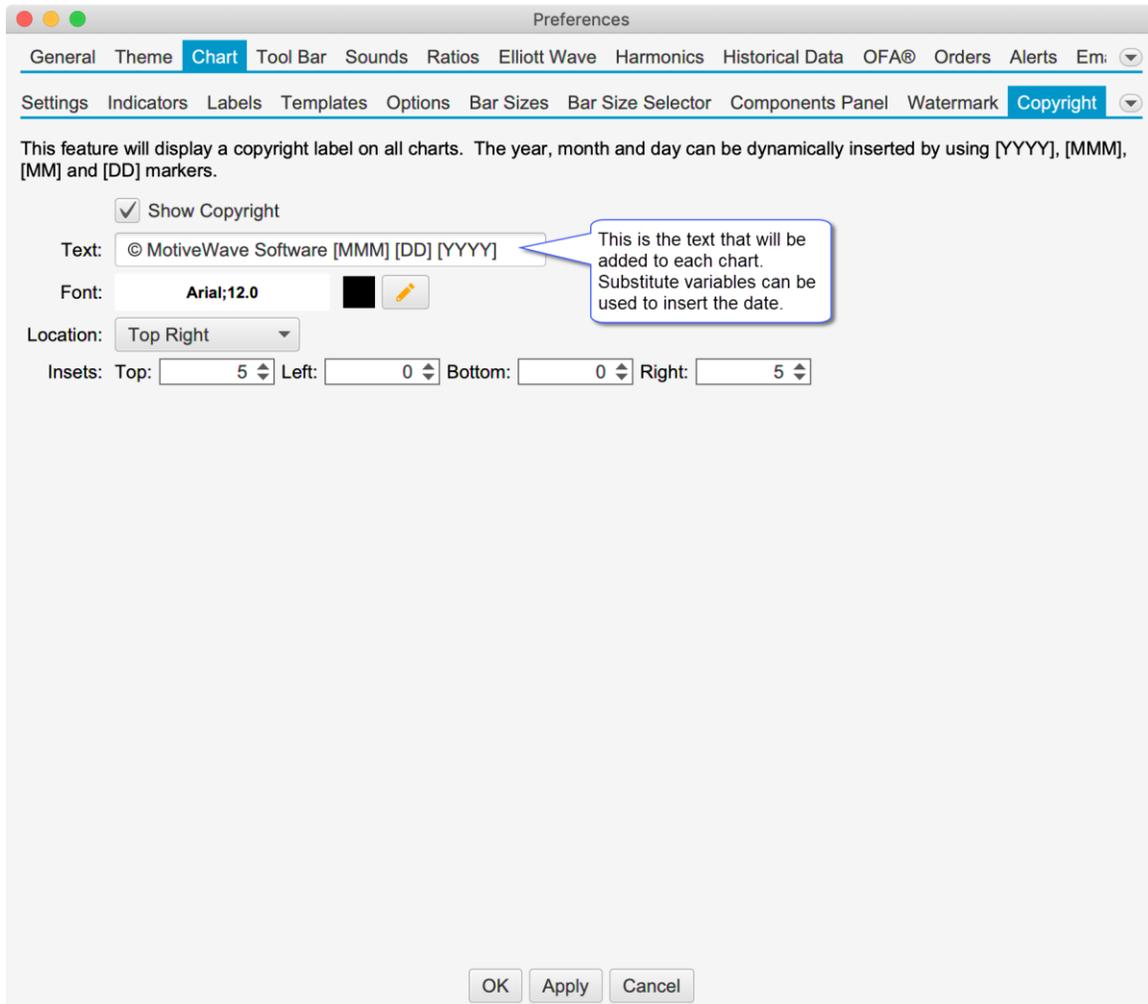
The standard option can be found in the Pivot Type drop down:



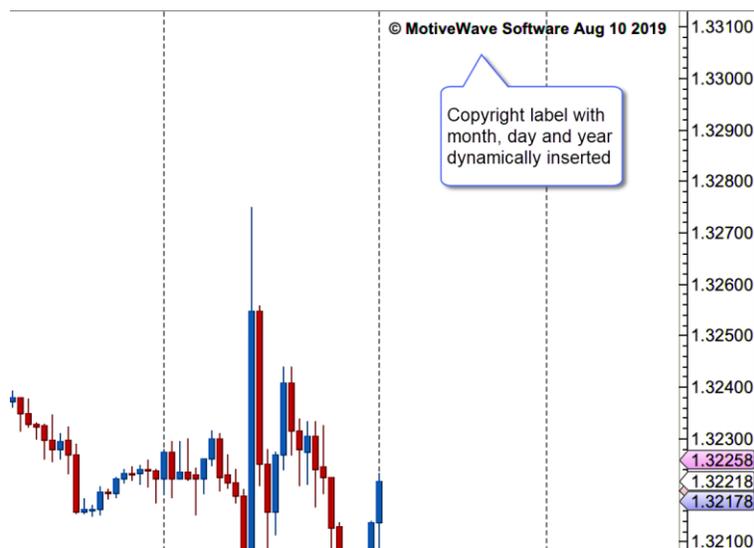
### 8.5 Copyright Watermark

Note: this feature is only available in Professional Edition and above.

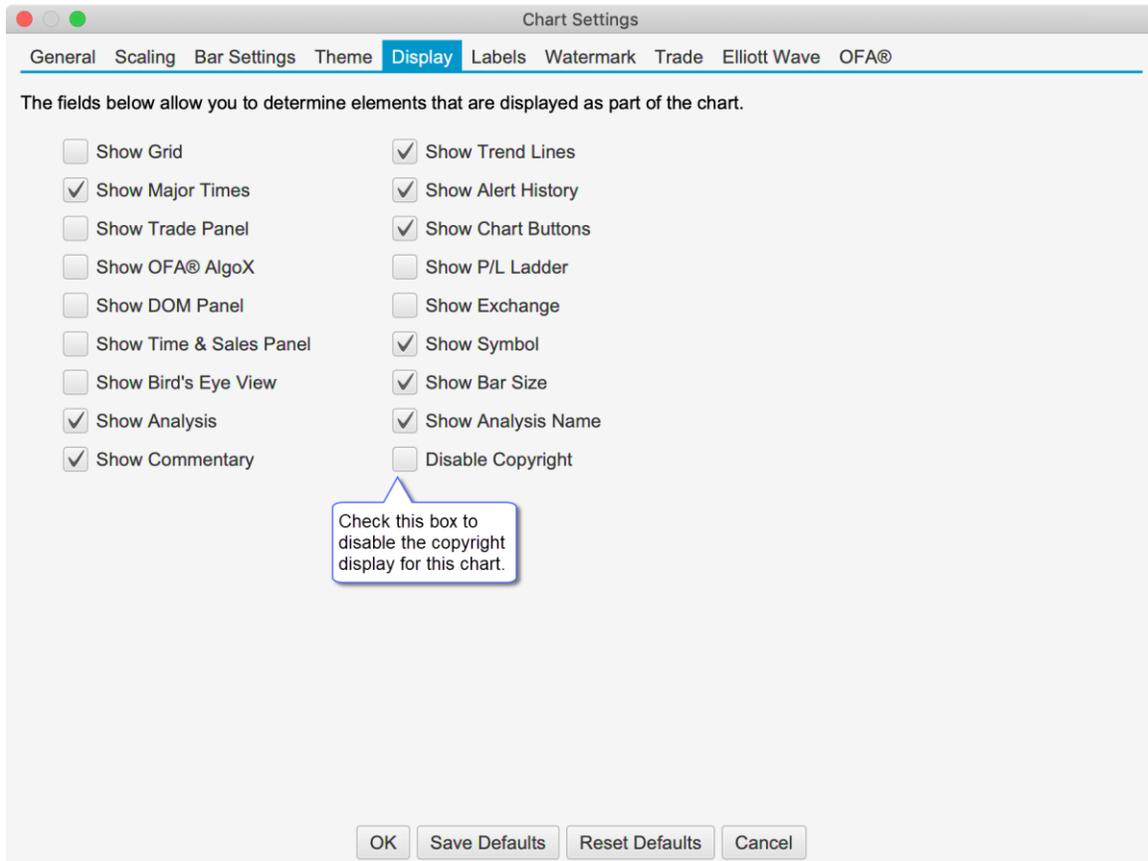
This feature is similar to the Watermark feature, but displays a copyright notice at a specific location on the chart. Day, month and year can optionally be inserted using the variables **[DD]**, **[MMM]** and **[YYYY]**. This feature is in the **General Preferences** dialog (**Configure** -> **Preferences** from the Console menu bar, click on **Chart**, then on **Copyright**).



The screen shot below shows the copyright statement on a chart (top right corner):

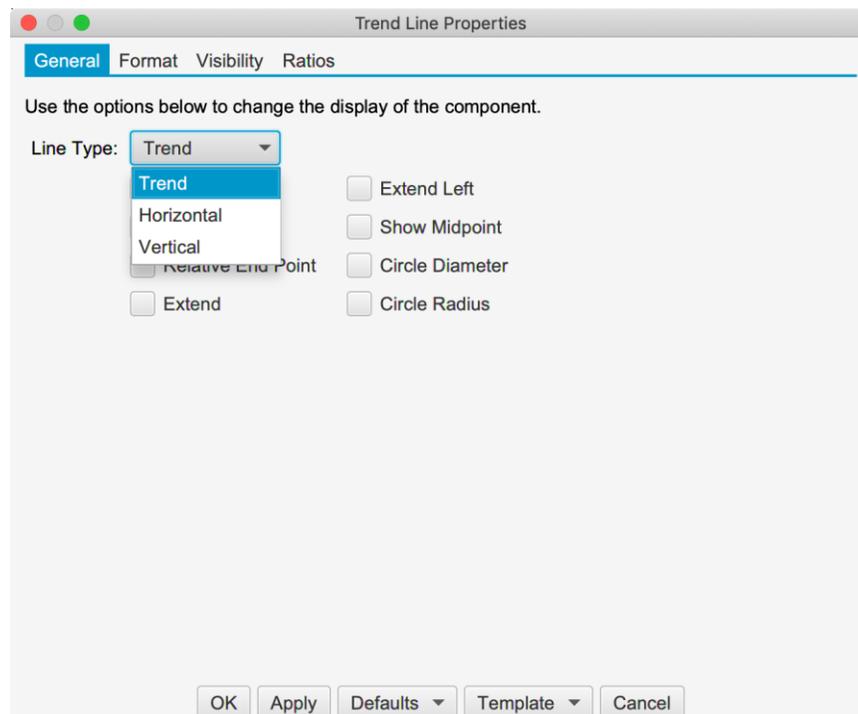


The copyright display can also be selectively disabled for a chart from the **Chart Settings** dialog (right click on chart and choose **Chart Settings**, see Display tab). Check the **Disable Copyright** box and press the **OK** button.



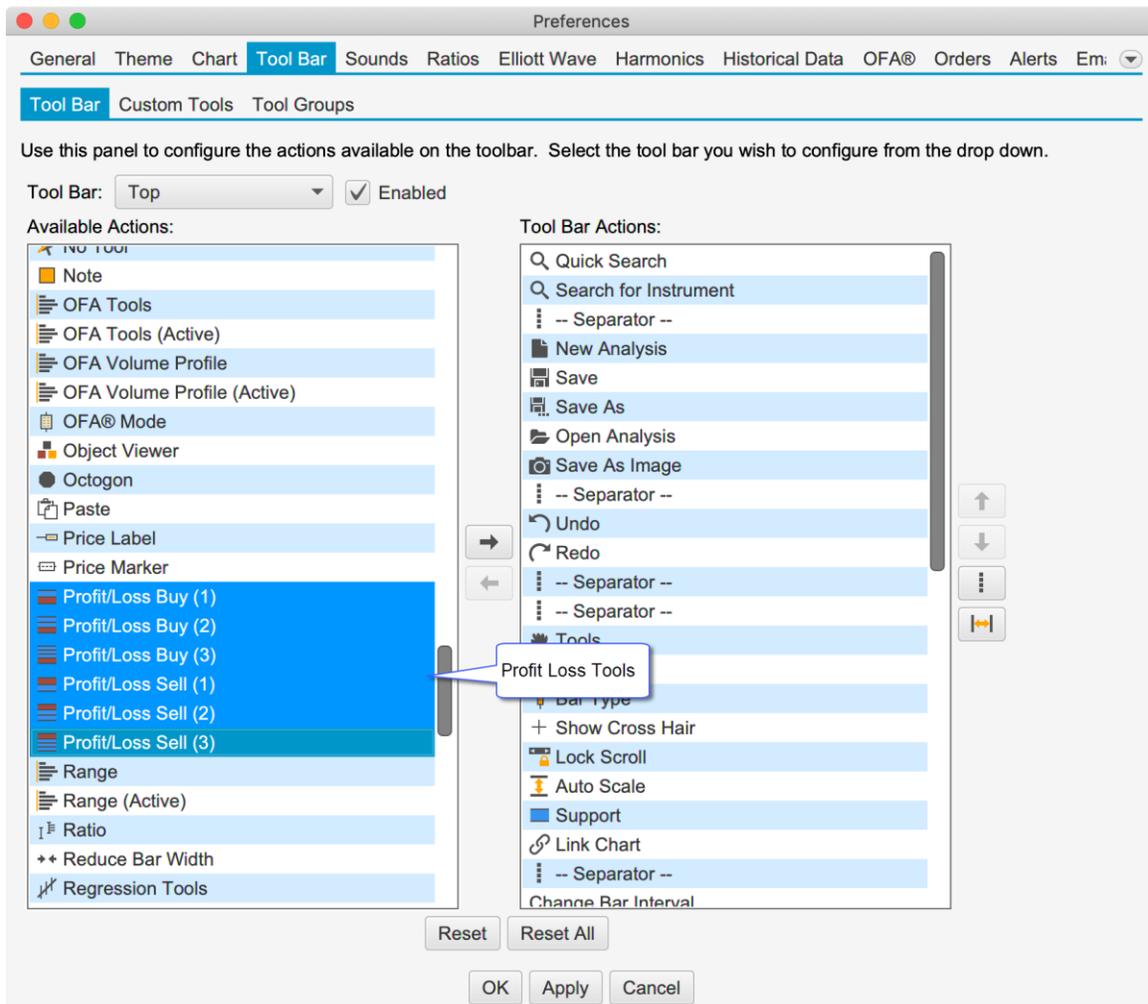
## 8.6 Trend Line Type

A Line Type option has been added to the Trend Line component (see Properties dialog). This option will allow you to set a trend line to be Horizontal or Vertical. The main purpose of this feature is to enable the creation of a custom horizontal or vertical line tool (see Custom Tools feature).



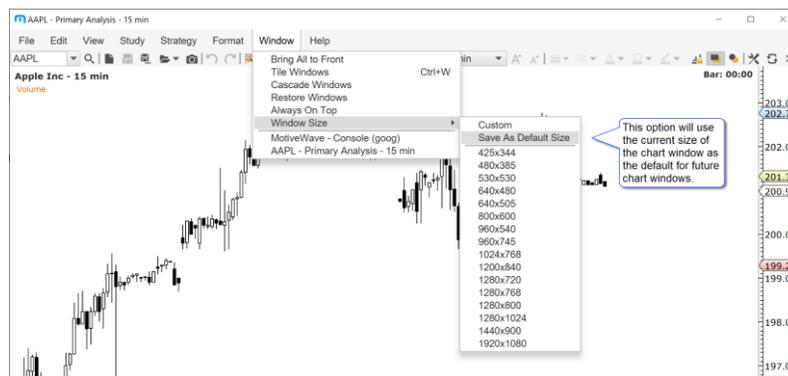
## 8.7 Profit Loss Mouse Tools

Mouse tools have been added for each of the Profit/Loss Calculator components introduced in Beta 1. These tools can be added to the tool bar from the General Preferences dialog (Configure -> Preferences from the Console menu bar).



## 8.8 Chart Window Default Size

A default size can be applied to a chart window when they are created or popped out from the console.



## **8.9 Save As Image Types**

Two additional images types have been added to the Save As Image action: GIF and JPG. The last saved type will be used as the default for future Save As Image actions.

## **8.10 Java Update**

Updated to the latest version of Java and JavaFX (12.0.2).